



Town of Whitecourt


Off-Site Levy Rates Review





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1 Background

The Town of Whitecourt (the Town) is a growing, dynamic community of 10,574 residents (2013 Municipal Census), with a surrounding population of approximately 4,300 people. Whitecourt is the largest urban centre in Alberta between Edmonton and Grande Prairie. The Town has projected a 25 year population growth of 1.82% (as per the 2015 Municipal Development Plan), resulting in a projected total population of 17,208 by the year 2040.

To accommodate and facilitate future growth, a number of infrastructure and land use planning initiatives have been undertaken. These initiatives have identified, quantified, and laid out the key transportation networks, potable water supply facilities, and sanitary sewer services required to service the future industrial, commercial and residential developments. While most of the development will be initiated and undertaken by the private sector, the Town provides overall coordination for these developments. Much of this coordination activity is directed to help ensure that the transportation and utility services required by development in the Town is constructed and available when required.

To cover the costs of the infrastructure required for new development, the Town has implemented and managed an Off-Site Levy Bylaw (OSL), which was last updated in 2008. The collection and use of OSLs helps ensure that the Town has the appropriate funds for the construction of new water, sanitary and transportation facilities required for future development. The funds allow for infrastructure to be constructed in a timely manner, while meeting the Town's objective of development paying the cost of development.

1.1 Infrastructure Improvements

Under the Municipal Government Act (MGA), the Town is permitted to impose off-site levy charges to recover the cost of infrastructure projects. The OSL is intended to recover all or part of the capital cost of the following:

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

Alberta Bill 21 was passed in December 2016 which amended the MGA to allow municipalities to also collect OSLs for recreation facilities, fire halls, police stations, and libraries. The Town has not included these facilities in the current or proposed OSL project list.

1.2 Introduction

Opus Stewart Weir has been engaged by the Town of Whitecourt to update and review the rates of the OSL. With the help of Town staff, OPUS undertook a review of the off-site infrastructure requirements and associated costs. Using reports from AECOM and Stantec, the Town developed cost estimates for this review. These included estimates for water treatment plant capacity upgrades, waste water treatment plant capacity upgrades, headworks and bio-solids handling/disposal upgrades, and

roadway infrastructure. All estimates included engineering and contingency. The Town also supplied the proposed development area to be included in the OSL. This report outlines the results of the review and updating of the levies to 2017. This 2017 review includes revisions to the OSL calculation methodology.

1.3 References

- Town of Whitecourt – Design Standard for Local Improvement
- Town of Whitecourt Off-Site Levy Bylaw – Bylaw No. 1435
- Town of Whitecourt Municipal Development Plan – Bylaw No. 1505
- Council Planning Report, January 19-21, 2017
- Town of Whitecourt – Off-Site Levy Rates Review Report - AECOM, October 2013
- Town of Whitecourt Water Treatment Plant Expansion Study – Stantec, Nov. 2003
- Town of Whitecourt Overall Water Study – Stantec, Oct. 21, 2014
- Town of Whitecourt Wastewater Treatment Plant Master Plan – Stantec, Nov. 30, 2016

2 Methodology

The Town of Whitecourt collects OSLs for projects that are required for growth, and that benefit the community as a whole. These projects include water/wastewater treatment plant capacity upgrades, widening of arterial roadways, and arterial traffic signals. Projects that benefit only a portion of the community (i.e. lift stations or local roadways) are negotiated with Developers as site specific costs/requirements at the time of subdivision and/or development and are not funded through OSLs.

To complete this OSL review, the Town has undertaken various studies and planning exercises to understand the water, wastewater, and road projects and costs anticipated to be required to accommodate the Town's growth over the next 25 years. These projects and associated costs will be discussed further in Section 3.

2.1 Off-Site Levy Development Lands

The Town has identified projected development areas for the next 25 years. Figure 1 classifies this land into industrial, commercial, and residential areas. The anticipated development areas are shown as orange for industrial growth, green for commercial growth, and yellow for residential growth. The total area of land forecasted for development in this off-site levy review is 397.49 ha. Approximately 161.16 ha is anticipated to be residential development, with the remainder for non-residential development.

2.2 Financial Assumptions

For this review, costs were determined based on the previously mentioned construction cost estimates. Amounts currently in off-site levy reserves as well as any off-site levy funds previously paid towards these projects were then deducted from these estimates to determine the final amounts required to be collected from OSLs.

The OSL project costs have been based on estimates that are current as of the date of this bylaw review. It is recognized, however, that construction costs fluctuate and will result in different project costs in the year of actual construction. To help mitigate these changes, and as required by the 2016 Municipal Governance Act, the off-site levies and costs will be reviewed and an updated report submitted to Council annually.

The annual report is to include:

- Projects constructed during the previous calendar year, and their final costs;
- Updated construction cost estimates for projects yet to be constructed and an explanation of adjustments, including any unrecorded grants or other sources of funding received for the projects;
- Amount collected in Off-Site Levy Fees in the previous calendar year;
- Specifics of the total value of Off-Site Levy Fees being held by the Town of Whitecourt to December 31 of the previous calendar year, interest earned and commitments for future expenditures of such monies; and
- Updated Off-Site Levy Rate Schedules.

The Town has committed to a review of the Bylaw every five years. At that time, the updated projects, population, dwelling unit and land development projections for the upcoming 25 years; and updated residential/non-residential and redevelopment rates based on the building permit information will be incorporated.

2.3 Levy Calculation

The total amount required from off-site levies to sustain growth over the next 25 years was equally divided over the projected land development area. As such, the cost of these improvements are spread uniformly across the development area so that all parties are assessed on the basis of a uniform rate, often referred to as a “postage stamp rate.” In this manner, all developable lands share equally in the cost of the improvements.

2.4 Levy Application

The off-site levies are still proposed to be collected at the time of development permit. Residential projects will continue to be charged on a per dwelling unit basis. One change, however, is that non-residential developments are proposed to be charged based on land area rather than building footprint. This is primarily due to legislative requirements only allowing the municipality to collect OSLs once per property. The residential redevelopment rate, based on building permit applications, has also been included in the calculations for this reason.

2.5 Residential Growth Assumptions

As with the current levy, the costs for residential development were further broken down from the calculated per hectare rate and distributed across the projected dwelling unit developments.

Residential development has been divided into two types for the purposes of the OSL:

- **Average Volume Developments** – includes single family homes, manufactured homes, duplex, triplex, and fourplex developments, but excludes row housing
- **Higher Volume Developments** – includes any development with 5 or more units, including row-housing

Based on 2013 census information and the 2015 Municipal Development Plan projected growth rate of 1.82% and average of 2.6 people per dwelling unit, the Town anticipates that 2325 new dwelling units will be created by 2040 to meet the population growth (see Table 5 in Appendix A).

Using development permit data collected between 2006-2015, the Town anticipates that 75% of the new dwelling units, or about 1,744 units, will be average volume development. The remaining 25% is anticipated to be higher volume developments, or about 581 units. This data also indicated that 3.6% of the average volume development permits were redevelopments (i.e. there was a previous structure on the property) and 22% of the higher volume developments were redevelopments. With these ratios, this leaves 1,681 average volume developments and 453 higher volume developments projected dwelling units from which to collect the required OSLs from within this study window.

3 Infrastructure Projects

The Town has provided a list of road, water, and wastewater infrastructure projects to be included in the OSL as shown in Tables 1, 2 and 3, and Figure 2 of Appendix A. A brief description, cost estimate, and amount to be recovered from OSLs is provided in the sections below. It should be noted that several of these projects have already been completed and were listed in the previous bylaw, however are still serving future developments and therefore still being collected for under this new bylaw. The sections below describe the OSLs that have already been collected and applied to these projects, and outline how the final OSL remaining to be collected has been calculated.

All of the previously completed and/or new proposed infrastructure projects listed in these documents have been reviewed and accepted by Whitecourt Town Council as appropriate for the collection of OSLs.

3.1 Water

An upgrade to the Town's Water Treatment Plant (WTP) was identified in a report completed by Stantec Consulting in 2003. This report included various project components and associated cost estimates. From this report, it was determined that approximately 10% of the project costs were to meet Alberta Environment (AENV) standards, 20% for maintenance, and 70% for capacity upgrades.

These upgrades were completed in 2011 to service all new development lands. A Provincial Grant was received for the project. Of the remaining project cost, 70% is proposed to come from off-site levies to reflect that approximately 70% of the costs were to meet capacity upgrades. The current reserve balances and off-site levies previously applied to the project will be deducted from the OSL portion of the project cost. The final capital cost for OSL in association with the water infrastructure is \$1,471,045.30, as detailed in Table A below, and is to be spread uniformly across the developable lands.

Table A: Cost Summary for Water System

DESCRIPTION	WATER SYSTEM
Construction Cost for W1 (Water Treatment Plant)	\$10,478,112
Grants Received from Government	\$3,694,773
Project Cost After Deducting Grants	\$6,783,339
OSL Portion	70%
Total Capital Cost for Water OSL	\$4,748,337.30
December 31, 2016 OSL Water Reserve Balance	\$1,174,964
Water Off-Site Levies Previously Applied to Projects	\$2,102,328
Balance of Capital Cost for Water OSL	\$1,471,045.30

The WTP now has a capacity of 15 000 m³/day and is expandable to 18 000 m³/day. Based on current consumption rates, it is estimated to serve a population of 19,000. Based on growth projections, the Town's population will not reach this threshold within the 25 year timeframe of this review. Therefore, no new capital upgrades/projects have been included in the off-site levy project list.

The Town also provides water services to rural areas within Woodlands County. Rural counterparts pay a fixed fee for water that encompasses future capacity for their needs and is therefore not included in the off-site levy amounts.

3.2 Wastewater

There are two projects included in the OSL calculation under the wastewater category. Project S1 included a capacity upgrade in 2000, and project S2 involves future headworks upgrade and bio-solids handling and disposal.

3.2.1 S1 Wastewater Treatment Plant Capacity Upgrades

In 2000, the Town undertook a Wastewater Treatment Plant (WWTP) capacity upgrade to accommodate growth with a total actual construction cost of \$ 3,117,447. The Town received grant funding in the amount of \$904,605, and contributed \$509,121 from existing off-site levy reserves. This project (S1) benefits all of the new lands equally and the remaining amount is to be recovered from OSLs uniformly across the developable lands. This data can be seen further in Table 3 in Appendix A and is summarized in Table B below.

3.2.2 S2 Wastewater Treatment Plant Headworks and Bio-solids Handling and Disposal

In 2016, the Town of Whitecourt commissioned Stantec Consulting Ltd. to provide a master plan study of the Town's Wastewater Treatment Plant (WWTP). According to Stantec's report, the WWTP requires upgrades to meet future treatment needs over the next 40 years. The master plan study recommends the following projects:

- Headworks upgrade: Includes fine screens, grit removal, and grit washing equipment. (Estimated cost is \$5,300,000)
- Bio-solids handling and disposal: Involves replacing the ponds with a mechanical dewatering system. (Estimated cost is \$2,500,000)

A secondary treatment expansion and upgrade was also proposed as part of the Stantec report, however is not anticipated to be required within the 25 year window of this review and is therefore not included in the project list.

The total estimated cost of the WWTP headworks and bio-solids handling and disposal project (S2) is \$7,800,000 as shown in Table B. These improvements are proposed to service all of the new development lands and therefore the costs are spread equally over the projected areas.

Table B: Cost Summary for Wastewater System

DESCRIPTION	WASTEWATER SYSTEM
Construction Cost = S1 (\$3,117,447) + S2 (\$7,800,000)	\$10,917,447
Grants Received from Government	\$904,605
Project Cost After Deducting Grants	\$10,012,842
OSL Portion	100%
Total Capital Cost for Wastewater OSL	\$10,012,842
December 31, 2016 Wastewater OSL Reserve Balance	\$1,387,788
Wastewater Off-Site Levies Previously Applied to Projects	\$509,121
Balance of Capital Cost for Wastewater OSL	\$8,115,933

The Town also provides wastewater services to rural areas within Woodlands County, however a fixed fee is charged that encompasses future capacity for their needs. Therefore, these future projects are not included in the off-site levy amounts.

3.3 Transportation

The majority of the off-site levy projects for the Town of Whitecourt are transportation related. These transportation projects can be broken down into two main categories: Roadways and Traffic Signals

3.3.1 Roadways

In Whitecourt, most roadway costs are paid for by the Developer. Typically, a Developer is required to construct a 2-lane roadway into their development at his/her own cost. Where a 4-lane arterial roadway is required for future growth, based on the Town's transportation plans, the Town funds the additional 2-lane widening costs through off-site levies.

Several of these arterial roadway projects have been completed (projects R1-R6), however are still listed on the off-site levy project spreadsheet as the Town front-ended the costs and is still collecting back from benefitting developments for the work. Where the roadway had already been constructed to 2-lanes and it was being further widened to a 4-lane arterial road, 100% of the costs were tagged to off-site levies. Where the roadway had not yet been constructed, the cost to widen the road by the additional 2 lanes was determined to be 12.5% to be funded by off-site levies.

One of the completed roadway projects includes the 47th Street rail crossing (Project R3). This rail crossing was a requirement from CN in order to proceed with this section of roadway across their

tracks. As this roadway was required for future growth and the rail crossing was outside of the scope of what would normally be required from a developer it is funded 100% from off-site levies.

The Town has since identified several new arterial roadways (R7-R11) that will be required to accommodate future growth within the municipality over the next 25 years. Roadway cost estimates were reviewed by AECOM in 2013 and confirmed by municipal staff this year. These new estimates calculate the cost to widen a 2-lane road to a 4-lane arterial to be 9.33% of the total project cost.

One project of note is the completion of 33rd Street (project R8). This project is only proposed as a 2-lane roadway within the 25 year review timeline. Per the above mentioned theory, a developer would usually be required to install the roadway to a 2-lane standard at his/her own cost. Approximately 40% of this roadway, however, traverses a steep escarpment where development will not occur. Therefore 40% of this project is proposed to be fully funded by off-site levies as the roadway is needed for future development, however cannot be imposed on a specific development.

These road projects and costs that are to be funded by off-site levies can be found in Table 1 and Figure 2 in Appendix A and are summarized as follows:

COMPLETED ROAD PROJECTS					
PROJECT	DESCRIPTION	COST	GRANT	OSL %	COST TO OSL
R1 – Mink Creek Road (55 Ave to 55 Ave)	Constructed as a full 4-lane roadway.	\$ 5,270,000		12.5%	\$ 658,750
R2 – 47 Street (49 Ave to 50 Ave)	2-lane road widened to 4-lanes.	\$ 713,534	\$ 478,068	100% (after Grant)	\$ 235,466
R3 – 47 Street Rail Crossing	Construction of a pedestrian overpass.	\$ 864,892	\$ 79,825	100% (after Grant)	\$ 785,067
R4 – 49 Avenue (49 Street to 47 Street)	2-lane road widened to 4-lanes.	\$ 207,310		100%	\$ 207,310
R5 – Mink Creek Road (55 Ave to the Meadows)	Constructed as a full 4-lane roadway.	\$ 3,118,626		12.5%	\$ 389,828
R6 – Dahl Drive (52 Ave to 55 Ave)	Roadway widened to 4-lanes.	\$ 1,040,938		100%	\$ 1,040,938
FUTURE ROAD PROJECTS					
PROJECT	DESCRIPTION	COST	GRANT	OSL %	COST TO OSL
R7 – 52 Avenue (Staples entrance to 33 Street)	To be constructed as a 4-lane road.	\$ 8,891,015		9.3%	\$ 829,532
R8 – 33 Street (41 Avenue to Flats Road)	To be constructed as a 2-lane road.	\$ 9,724,565		40%	\$ 3,889,826
R9 – 49 Avenue (47 Street to Dahl Drive)	Widening of Road from 2 to 4-lanes.	\$ 255,035		100%	\$ 255,035
R10 – Mink Creek Road (Meadows to McIlwaine Dr.)	To be constructed as a 4-lane road.	\$ 4,521,582		9.3%	\$ 421,864
R11 – McIlwaine Dr. (Mink Creek Road to 52 Ave)	To be constructed as a 4-lane road.	\$ 2,214,016		9.3%	\$ 206,568
TOTAL					\$ 8,920,184

3.3.2 Traffic Signals (TS)

Traffic signals are required to accommodate traffic generated throughout the community as a result of growth and are therefore funded 100% by off-site levies. The costs of these improvements are therefore spread uniformly across the developable lands.

The 2008 off-site levy included the costs for three sets of traffic signals (TS1-TS3) which have been completed. Again, these projects are still listed in the off-site levy bylaw as benefitting developments and are still contributing to the infrastructure costs.

Three new traffic signals have been identified to accommodate future traffic needs. The proposed traffic signals at Highway 43 and 33 Street are anticipated to be completed as a 50/50 partnership with Alberta Transportation because they are on a provincial highway. The total estimated cost is \$675,000, half of which (\$337,500) is to be recovered from OSLs.

The traffic signals and associated costs that are to be funded by off-site levies can be found in Table 1 and Figure 2 in Appendix A and are summarized as follows:

Completed Traffic Signals			
Project	Cost	OSL %	Cost to OSL
TS1 - Dahl Drive & 41 Avenue	\$ 250,182	100%	\$ 250,182
TS2 - Dahl Drive & 55 Avenue	\$ 409,174	100%	\$ 409,174
TS3 - Dahl Drive & 49 Avenue	\$ 259,380	100%	\$ 259,380
Future Traffic Signals			
Project	Cost	OSL %	Cost to OSL
TS4 - Highway 43 & 33 Street	\$ 675,000	50%	\$ 337,500
TS5 - 52 Ave & Mcllwaine Dr	\$ 472,500	100%	\$ 472,500
TS6 - Mink Creek Road & Mcllwaine Dr.	\$ 472,500	100%	\$ 472,500
TOTAL			\$ 2,201,236

Table C summarizes all of the transportation projects applicable to the OSL less any reserve balances and off-site levies previously applied to those projects. The information is also detailed in Table 1 of Appendix A.

Table C - Cost Summary for Transportation Projects

Description	Transportation: Roadways & Traffic Signals (TS)
Construction Cost = Roadways (\$8,920,182) + Traffic Signals (\$2,201,236)	\$ 11,121,420
December 31, 2016 Transportation OSL Reserve Balance	\$ 106,499
Transportation Off-Site Levies Previously Applied to Projects	\$ 1,118,421
Balance of Capital Cost for Transportation OSL	\$ 9,896,500

3.4 Storm Water Management

There are no completed or proposed stormwater projects anticipated to be funded from OSLs at this time.

4 OSL Conclusion and Recommendation

Table D provides a summary of the cost estimates for all infrastructure described in Section 3. The estimated total cost, including contingency and engineering, is \$19,483,478.

The levies were calculated by dividing the total cost for water, wastewater, and transportation projects by the total 25 year development area (397.49 hectares). Table D shows the breakdown of the levy by infrastructure type. The information is also detailed in Table 4 of Appendix A. The combined levy totals \$49,016/hectare for all types of development.

Table D: Distribution Summary

INFRASTRUCTURE PROJECT	FINAL COST	COST PER HECTARE	OSL %
Water	\$1,471,045	\$3,701	7%
Wastewater	\$8,115,933	\$20,418	42%
Transportation	\$9,896,500	\$24,897	51%
Total	\$19,483,478	\$49,016	100%

While it is proposed that this standard rate be used for all non-residential developments, developers requested that the Town further break down the residential levy into a per dwelling unit charge similar to the current levy. To do this, the cost per hectare was divided over the projected number of dwelling units in the residential areas to create a per unit residential charge. The residential dwelling units have been divided into two categories, as noted in Section 2.5:

- **Average Volume Developments** – includes single family homes, manufactured homes, duplex, triplex, and fourplex developments, but excludes row housing
- **Higher Volume Developments** – includes any development with 5 or more units, including row-housing

Considering land base, the 2006-2015 permit data shows that 89.5% of the developed residential lands within that time were average volume developments and 10.5% was higher volume developments, per the definitions above. These ratios have been used to calculate land based charges for average and higher volume residential developments.

With 161.16 Ha of residential land anticipated to be available for development within the next 25 years and the total cost per hectare required in this off-site levy study at \$49,016/Ha it was calculated that \$7,070,000 is required to be collected from new average volume developments and \$829,351 from new higher volume developments.

For the average volume developments, there are 1,681 new units anticipated in the 25 year timeframe to generate the required \$7,070,000 in OSL funds. The off-site levy rate is thus \$4,206/unit for new average volume development dwelling units.

For the higher volume developments, there are 453 new units anticipated in the 25 year timeframe to generate the required \$829,351 in OSL funds. The off-site levy rate is thus \$1,831/unit for new average volume development dwelling units.

4.1 Final Off-Site Levy Rates

Table E outlines the final off-site levy calculations for residential and non-residential developments.

Table E: Final Off-Site Levy Rates

DEVELOPMENT TYPE	OFF-SITE LEVY RATE
RESIDENTIAL	PER DWELLING UNIT
Average Volume Development Dwelling Units (including single family homes, manufactured homes, duplex, triplex, and fourplex developments, excluding row housing)	\$4,206
Higher Volume Development Dwelling Units (any development with 5 or more units, including row-housing)	\$1,831
NON-RESIDENTIAL	PER HECTARE
by Area	\$49,016

APPENDIX A

**Table 1
Town of Whitecourt OSL 2017
Traffic Signal**

Project No	Intersection	2017 Capital Cost Estimate	Engineering (10%)	Contingency (25%)	2017 Total Capital Cost Estimate	Status (Completed/Progress)	Completion Year	Construction Cost	Grants	Project Cost after Grant	Offsite Levy Percentage	Offsite Levy Total	Comments
TS1	Traffic signal at Dahl Drive and 41 Avenue	N/A	N/A	N/A	N/A	Completed	2009	\$ 250,182		\$ 250,182	100%	\$ 250,182	Full cost from offsite levies
TS 2	Traffic signal at Dahl Drive and 55 Avenue	N/A	N/A	N/A	N/A	Completed	2014	\$ 409,174		\$ 409,174	100%	\$ 409,174	Full cost from offsite levies
TS 3	Traffic signal at Dahl Drive and 49 Avenue	N/A	N/A	N/A	N/A	Completed	2011	\$ 259,380		\$ 259,380	100%	\$ 259,380	Full cost from offsite levies
TS 4	Traffic signals at Hwy 43 and 33 Street (Cost Share with Province)	\$ 500,000	\$ 50,000	\$ 125,000	\$ 675,000	Proposed	2017	N/A	\$ 337,500	\$ 337,500	100%	\$ 337,500	Partnership with Alberta Transportation is assumed to be 50/50 on this project. 100 % of the Town's share will come from offsite levies.
TS 5	Traffic signals at 52 Avenue and McIlwaine Drive	\$ 350,000	\$ 35,000	\$ 87,500	\$ 472,500	Proposed	2023	N/A		\$ 472,500	100%	\$ 472,500	Full cost from offsite levies
TS 6	Traffic signals at Mink Creek Road and McIlwaine Drive	\$ 350,000	\$ 35,000	\$ 87,500	\$ 472,500	Proposed	2020	N/A		\$ 472,500	100%	\$ 472,500	Full cost from offsite levies
Total												\$ 2,201,236	

**Table 2
Town of Whitecourt OSL 2017
Road / Street Projects**

Project No	Road Section	Type	Length (KM)	Unit Cost (per KM)	2017 Capital Cost Estimate	Engineering (10%)	Contingency (25%)	2017 Total Capital Cost Estimate	Status (Completed/Progress)	Completion Year	Construction Cost	Grants	Project Cost after Grant	Offsite Levy Percentage	Offsite Levy Total	Comments
R1	Mink Creek Road - Arterial Share Existing (55 Avenue to 55Avenue) 4-lane constructed initially and recouped 2 m widening costs afterwards.	Urban Arterial	1.45		N/A	N/A	N/A	N/A	Completed	2001	\$ 5,270,000		\$ 5,270,000	12.5%	\$ 658,750	The roadway was first constructed as a 4-lane roadway. The 2m cost difference between a 2-lane (13m) carriageway and a 4-lane (15m) roadways to be recouped from offsite levies.
R2	47 Street Widening (49 Avenue to 50 Avenue)	Urban Arterial	0.185		N/A	N/A	N/A	N/A	Completed	2012	\$ 713,534	\$ 478,068	\$ 235,466	100%	\$ 235,466	Full cost to widen the existing road (minus grants) to come from offsite levies.
R3	47 Street Rail Crossing	Urban Arterial	0.185		N/A	N/A	N/A	N/A	Completed	2012	\$ 864,892	\$ 79,825	\$ 785,067	100%	\$ 785,067	Full cost (minus grants) to come from offsite levies.
R4	49 Avenue 2 m Widening - Arterial Share (49 Street to 47 Street) 4-Lane Constructed Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	0.37		N/A	N/A	N/A	N/A	Completed	2011	\$ 207,310		\$ 207,310	100%	\$ 207,310	Full cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R5	Mink Creek Road - Arterial Share East Flats (55 Avenue to Meadows) 4-Lane Constructed Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	0.56		N/A	N/A	N/A	N/A	Completed	2010	\$ 3,118,626		\$ 3,118,626	12.5%	\$ 389,828	Full cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R6	Dahl Drive Widening (52 Avenue to 55 Avenue)	Urban Arterial	0.29		N/A	N/A	N/A	N/A	Completed	2014	\$ 1,040,938		\$ 1,040,938	100%	\$ 1,040,938	The roadway was first constructed as a 4-lane roadway. The 2m cost difference between a 2-lane (13m) carriageway and a 4-lane (15m) roadways to be recouped from offsite levies.
R7a	52 Avenue - Arterial Share (Staples to River Valley Trailer Park) 4-Lane Constructed Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	0.24	\$ 2,308,829	\$ 554,119	\$ 55,412	\$ 138,530	\$ 748,061	Proposed	2017	N/A		\$ 748,061	9.3%	\$ 69,794	Project is developer driven and will likely be completed in phase. Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R7b	52 Avenue - Arterial Share (River Valley Trailer Park to 1/4 SEC) 4-Lane Constructed Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	0.85	\$ 2,308,829	\$ 1,962,505	\$ 196,250	\$ 490,626	\$ 2,649,381	Proposed	2022	N/A		\$ 2,649,381	9.3%	\$ 247,187	Project is developer driven and will likely be completed in phase. Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R7c	52 Avenue - Arterial Share (River Valley Trailer Park to 1/4 SEC) 4-Lane Constructed Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	0.68	\$ 2,308,829	\$ 1,570,004	\$ 157,000	\$ 392,501	\$ 2,119,505	Proposed	2027	N/A		\$ 2,119,505	9.3%	\$ 197,750	Project is developer driven and will likely be completed in phase. Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R7d	52 Avenue - Arterial Share (McIlwaine Drive to 33 Street) will be constructed 4 Lane Initially and Recouped 2 m Widening Costs Afterwards.	Urban Arterial	1.082	\$ 2,309,898	\$ 2,499,310	\$ 249,931	\$ 624,827	\$ 3,374,068	Proposed	2035	N/A		\$ 3,374,068	9.3%	\$ 314,801	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R8a	33 Street Extension (41 Avenue to 52 Avenue) - 13 m wide, 2-Lane Road	Urban Arterial	1.93	\$ 2,308,776	\$ 4,455,938	\$ 445,594	\$ 1,113,984	\$ 6,015,516	Proposed	2022	N/A		\$ 6,015,516	40%	\$ 2,406,206	Road to initially be constructed as a 2-lane carriageway (the construction of the road to 4 lanes is not within the 25 year window). Approximately 40% of this roadway is along the hillside where development will not occur and therefore this portion of the work will be tagged to offsite levies as it is a general public benefit to accommodate future growth.
R8b	33 Street Extension (52 Avenue to Mink Creek Road) - 13 m wide, 2-Lane Road	Urban Arterial	0.81	\$ 2,308,776	\$ 1,870,109	\$ 187,011	\$ 467,527	\$ 2,524,647	Proposed	2027	N/A		\$ 2,524,647	40%	\$ 1,009,859	Road to initially be constructed as a 2-lane carriageway (the construction of the road to 4 lanes is not within the 25 year window). Approximately 40% of this roadway is along the hillside where development will not occur and therefore this portion of the work will be tagged to offsite levies as it is a general public benefit to accommodate future growth.

**Table 2
Town of Whitecourt OSL 2017
Road / Street Projects**

Project No	Road Section	Type	Length (KM)	Unit Cost (per KM)	2017 Capital Cost Estimate	Engineering (10%)	Contingency (25%)	2017 Total Capital Cost Estimate	Status (Completed/Progress)	Completion Year	Construction Cost	Grants	Project Cost after Grant	Offsite Levy Percentage	Offsite Levy Total	Comments
R8c	33 Street Extension (Mink Creek Road to Flats Road) - 13 m wide, 2-Lane Road	Urban Arterial	0.38	\$ 2,308,776	\$ 877,335	\$ 87,733	\$ 219,334	\$ 1,184,402	Proposed	2035	N/A		\$ 1,184,402	40%	\$ 473,761	Road to initially be constructed as a 2-lane carriageway (the construction of the road to 4 lanes is not within the 25 year window). Approximately 40% of this roadway is along the hillside where development will not occur and therefore this portion of the work will be tagged to offsite levies as it is a general public benefit to accommodate future growth.
R9	49 Avenue 2m Widening - Arterial Share (47 Street to Dahl Drive)	Urban Arterial	0.411	\$ 459,647	\$ 188,915	\$ 18,891	\$ 47,229	\$ 255,035	Proposed	2018	N/A		\$ 255,035	100%	\$ 255,035	This is an existing 2 - lane roadway. The cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) to be recouped from offsite levies.
R10a	Mink Creek Road (Meadows to Mcllwaine Drive) will be constructed 4 lanes initially and Recouped 2m Widening Costs Afterwards.	Urban Arterial	0.28	\$ 2,309,876	\$ 646,765	\$ 64,677	\$ 161,691	\$ 873,133	Proposed	2016	N/A		\$ 873,133	9.3%	\$ 81,463	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R10b	Mink Creek Road (Mcllwaine Drive to 1/4 SEC) will be constructed 4 lanes initially and Recouped 2m Widening Costs Afterwards.	Urban Arterial	0.33	\$ 2,309,876	\$ 762,259	\$ 76,226	\$ 190,565	\$ 1,029,050	Proposed	2022	N/A		\$ 1,029,050	9.3%	\$ 96,011	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R10c	Mink Creek Road (1/4 SEC to 33 Street) will be constructed 4 lanes initially and Recouped 2m Widening Costs Afterwards.	Urban Arterial	0.84	\$ 2,309,876	\$ 1,940,296	\$ 194,030	\$ 485,074	\$ 2,619,399	Proposed	2027	N/A		\$ 2,619,399	9.3%	\$ 244,390	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R11a	Mcllwaine Drive - Arterial Share (Mink Creek Road to School Entrance) will be constructed 4 lanes initially and Recouped 2m Widening Costs Afterwards.	Urban Arterial	0.43	\$ 2,309,876	\$ 993,247	\$ 99,325	\$ 248,312	\$ 1,340,883	Proposed	2016	N/A		\$ 1,340,883	9.3%	\$ 125,105	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
R11b	Mcllwaine Drive - Arterial Share (School Entrance to 52 Avenue) will be constructed 4 lanes initially and Recouped 2m Widening Costs Afterwards.	Urban Arterial	0.28	\$ 2,309,876	\$ 646,765	\$ 64,677	\$ 161,691	\$ 873,133	Proposed	2022	N/A		\$ 873,133	9.3%	\$ 81,463	Cost to widen the road from a 2-lane (13m) carriageway to a 4-lane (15m) roadways to be recouped from offsite levies.
Total															\$ 8,920,184	

**Table 3
Town of Whitecourt OSL 2017
Water and Wastewater Projects**

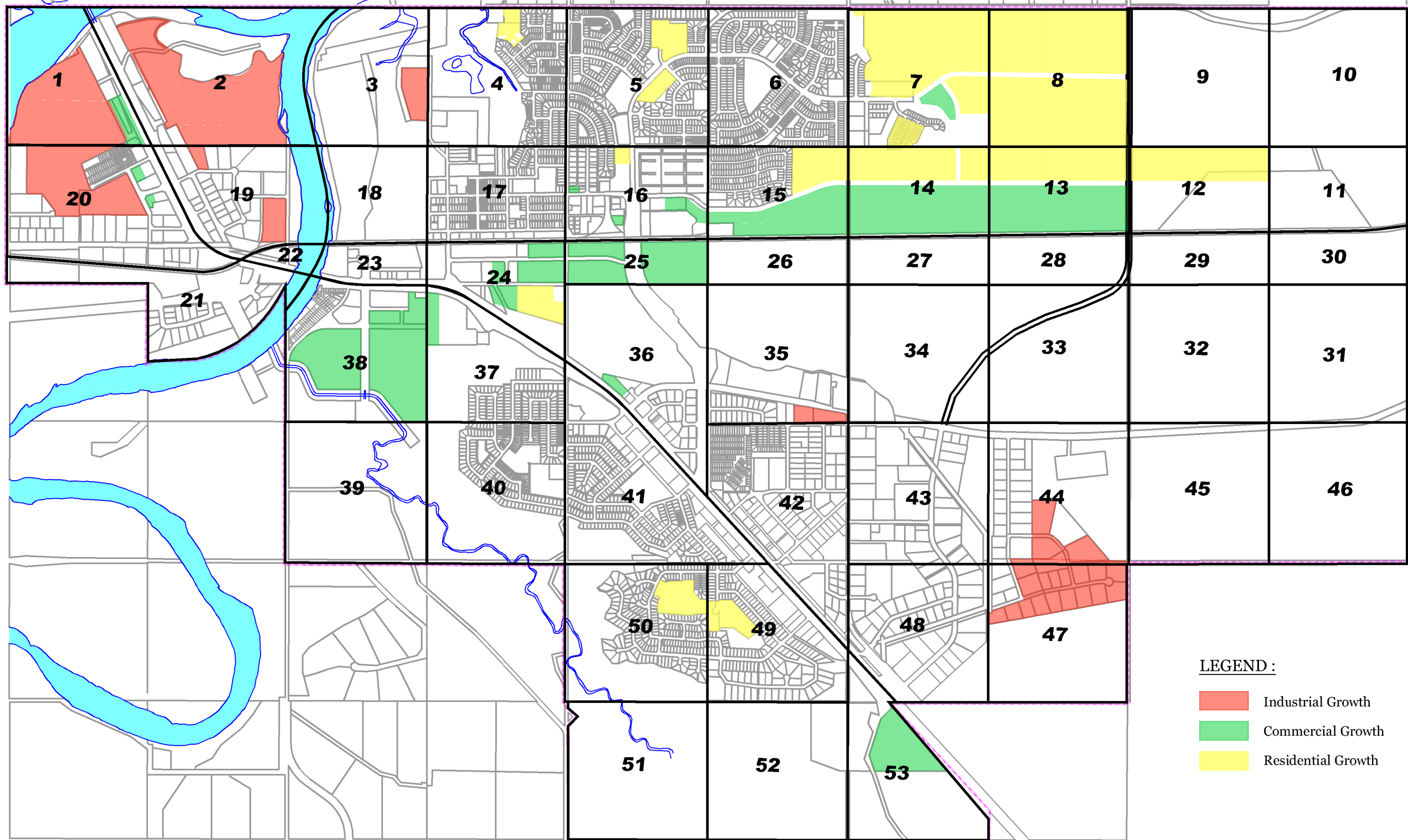
Project No	Description	2017 Capital Cost Estimate	Engineering (10%)	Contingency (25%)	2017 Total Capital Cost Estimate	Status (Completed/Progress)	Completion Year	Construction Cost	Grants	Project Cost after Grant	Offsite Levy Percentage	Offsite Levy Total	Comments
WATER PROJECTS													
W1	Water Treatment Plant Capacity Upgrade	N/A	N/A	N/A	N/A	Completed	2011	\$ 10,478,112	\$ 3,694,773	\$ 6,783,339	70%	\$ 4,748,337	Project was estimated to serve a population of 19,000. 70% of the total project was for capacity upgrades and is to be recouped through offsite levies. No new upgrades are proposed within 25 years window.
												Water Total	\$ 4,748,337
WASTEWATER PROJECTS													
S1	Wastewater Treatment Plant Capacity Upgrade	N/A	N/A	N/A	N/A	Completed	2000	\$ 3,117,447	\$ 904,605	\$ 2,212,842	100%	\$ 2,212,842	Capacity upgrade was done to accommodate growth. Full cost of this project is to be recouped through offsite levies.
S2	Headworks and Biosolids Handling / Disposal Upgrade	\$ 5,778,000	\$ 577,800	\$ 1,444,500	\$ 7,800,000	Proposed	2018/2026	N/A		\$ 7,800,000	100%	\$ 7,800,000	The project includes the addition of fine screens, grit removal and washing systems, influent pump upgrades in 2018 and the conversion to mechanical dewatering of biosolids in 2026.
												Wastewater Total	\$ 10,012,842

Table 4
Town of Whitecourt OSL 2017
Cost Summary

Item No	Description	2017 Capital Cost Estimate for OSL	December 31, 2016 OSL Reserve Balance	Offsite Levies Applied to Projects	2017 Balance of Capital Cost for OSL
1	Water Projects	\$ 4,748,337	\$ 1,174,964	\$ 2,102,328	\$ 1,471,045
2	Wastewater Projects	\$ 10,012,842	\$ 1,387,788	\$ 509,121	\$ 8,115,933
3	Traffic Signal Projects (TS1 to TS6)	\$ 2,201,236	\$ 106,499	\$ 1,118,421	\$ 9,896,500
4	Road Project Projects (R1 to R11)	\$ 8,920,184			
Estimated OSL Capital Costs		\$ 25,882,599	\$ 2,669,251	\$ 3,729,870	\$ 19,483,478

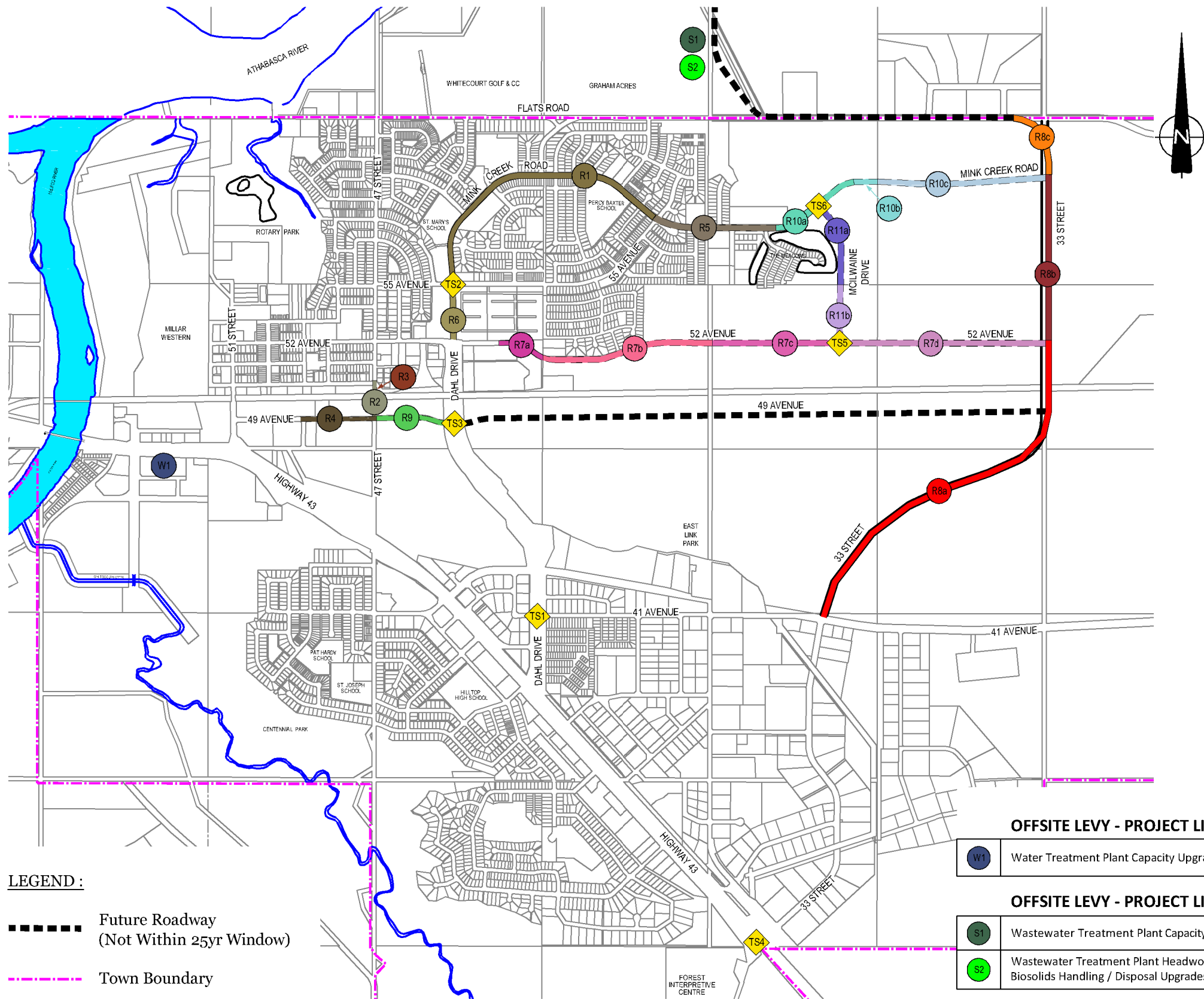
Table 5
Town of Whitecourt OSL 2017
Population and Dwelling Unit Projections Over 25 Years
Based on Capital Plan Projection Estimate of 1.82% per year.

Sl. No	Year	Population (1.82% growth rate)	Dwelling Units (Avg. 2.6 people per household)	Difference in Dwelling Units from 2016
	2013	10,574	4,066.92	
	2014	10,766	4,140.94	
	2015	10,962	4,216.31	
1	2016	11,162	4,293.04	
2	2017	11,365	4,371.18	78.13
3	2018	11,572	4,450.73	157.69
4	2019	11,783	4,531.74	238.69
5	2020	11,997	4,614.21	321.17
6	2021	12,215	4,698.19	405.15
7	2022	12,438	4,783.70	490.66
8	2023	12,664	4,870.76	577.72
9	2024	12,894	4,959.41	666.37
10	2025	13,129	5,049.67	756.63
11	2026	13,368	5,141.57	848.53
12	2027	13,611	5,235.15	942.11
13	2028	13,859	5,330.43	1,037.39
14	2029	14,111	5,427.45	1,134.40
15	2030	14,368	5,526.22	1,233.18
16	2031	14,630	5,626.80	1,333.76
17	2032	14,896	5,729.21	1,436.17
18	2033	15,167	5,833.48	1,540.44
19	2034	15,443	5,939.65	1,646.61
20	2035	15,724	6,047.75	1,754.71
21	2036	16,010	6,157.82	1,864.78
22	2037	16,302	6,269.89	1,976.85
23	2038	16,598	6,384.01	2,090.96
24	2039	16,901	6,500.19	2,207.15
25	2040	17,208	6,618.50	2,325.46



LEGEND :

- Industrial Growth
- Commercial Growth
- Residential Growth



OFFSITE LEVY - PROJECT LIST (TRAFFIC SIGNALS)

TS1	Traffic Signals at Dahl Drive and 41 Avenue
TS2	Traffic Signals at Dahl Drive and 55 Avenue
TS3	Traffic Signals at Dahl Drive and 49 Avenue
TS4	Traffic Signals at Hwy 43 and 33 Street (Cost Shared with Province)
TS5	Traffic Signals at 52 Avenue and McIlwaine Drive
TS6	Traffic Signals at Mink Creek Road and McIlwaine Drive

OFFSITE LEVY - PROJECT LIST (ROADS)

R1	Mink Creek Road - Arterial Share Existing (55 Avenue to 55 Avenue) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R2	47 Street Widening (49 Avenue to 50 Avenue)
R3	47 Street Rail Crossing
R4	49 Avenue 2m Widening - Arterial Share (49 Street to 47 Street) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R5	Mink Creek Road - Arterial Share East Flats (55th Avenue to Meadows) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R6	Dahl Drive Widening (52 Avenue to 55 Avenue)
R7a	52 Avenue - Arterial Share (Staples to RiverValley Trailer Park) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R7b	52 Avenue - Arterial Share (RiverValley Trailer Park to 1/4 SEC) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R7c	52 Avenue - Arterial Share (1/4 SEC to McIlwaine Drive) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R7d	52 Avenue - Arterial Share (McIlwaine Drive to 33 Street) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R8a	33 Street Extension (41 Avenue to 52 Avenue - 13m Wide, 2 Lane Road)
R8b	33 Street Extension (52 Avenue to Mink Creek Road) - 13m Wide, 2 Lane Road
R8c	33 Street Extension (Mink Creek Road to Flats Road) - 13m Wide, 2 Lane Road
R9	49 Avenue 2m Widening - Arterial Share (47 Street to Dahl Drive)
R10a	Mink Creek Road (Meadows to McIlwaine Drive) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R10b	Mink Creek Road (McIlwaine Drive to 1/4 SEC) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R10c	Mink Creek Road (1/4 SEC to 33 Street) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R11a	McIlwaine Drive - Arterial Share (Mink Creek Road to School Entrance) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards
R11b	McIlwaine Drive - Arterial Share (School Entrance to 52 Avenue) 4-Lane Constructed Initially and Recouped 2m Widening Costs Afterwards

OFFSITE LEVY - PROJECT LIST (WATER)

W1	Water Treatment Plant Capacity Upgrades
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OFFSITE LEVY - PROJECT LIST (SANITARY)

S1	Wastewater Treatment Plant Capacity Upgrades
S2	Wastewater Treatment Plant Headworks and Biosolids Handling / Disposal Upgrades

LEGEND :
 - - - - - Future Roadway (Not Within 25yr Window)
 - · - · - · Town Boundary



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