

**City of Ottawa**

**2025 Area-Specific Development  
Charges Background Study for Water  
and Wastewater Treatment**

**Village of Greely - Shadow Ridge  
and Lakeland Meadows**

**November 30, 2025**

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## **EXECUTIVE SUMMARY**

### **A. 2025 Village of Greely – Shadow Ridge and Lakeland Meadows**

The area-specific development charge (ASDC) rates listed within this study are based on updates to the various assumptions included within the R.V. Anderson Associates Limited Memorandum (RVA Memo). The revisions presented in this amendment, relate to the updated development-related costs and growth forecasts required to upgrade both communal drinking water and wastewater systems to service both Shadow Ridge and Lakeland Meadows developments located within the Village of Greely. The technical review of the proposed drinking water treatment and storage infrastructure as well as wastewater treatment approach were completed under previous assignments.

Specifically, the communal water and wastewater facilities will service parts of Lot 8 and 9 Concession IV, Osgood, within the Village of Greely. An overview of the development area is provided below in Figure 1. This shows the “Benefitting Area” to indicate the specific location in which the ASDC will apply once the by-law is approved. Consistent with the methodology presented as part of this study, the underlying assumptions used to calculate the development charge rates utilize the same approach presented in previous background studies.

As part of this ASDC background study, the RVA Memo was intended to provide revised estimates of the forecasted capital cost to implement water and wastewater treatment for input to the ASDC to allow the pending development approvals process to proceed. The City and developers, however, still must fulfill the requirements of the planning and municipal class Environmental Assessment (EA) process, prior to proceeding with implementation of the preferred water and wastewater servicing and treatment solutions. Additional options for servicing will be reviewed through the EA process and the preferred detailed design solution for these communities may differ from that presented within this document.

### **B. Calculated ASDC Rates**

A summary of the calculated residential development charge rates, ASDC and city-wide, by development type are shown below in Tables 3 and 4.

## **C. Policy Considerations**

### **1. Consideration of Area Rating**

As required by the *Development Charges Act (DCA)*, consideration was given to the use of area rating. In line with the City's historical practice, water and wastewater servicing expansions identified within the Rural area are deemed to provide a localized community-specific benefit and are, therefore, recovered on an area-specific basis.

### **2. Local Service Guidelines**

The City has Local Service Guidelines related to growth-related infrastructure. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the DC calculation. Functions or services deemed to be local in nature are not included in the determination of the development charge rates. The provision of local services is a direct developer funding responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer.

### **3. Draft ASDC By-law**

The draft ASDC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*.

## **D. Cost of Growth Analysis**

Long-term operating impacts and asset management requirements have been examined as part of this DC Study. It is expected that the City will incur increased operating costs as additional infrastructure has yet to be constructed. It is recognized that the increase in funding associated with new development is anticipated to partially or fully offset the increased costs identified, depending on the nature of the new development.

The calculated provisions identified are financially sustainable, as it is expected that the increased capital asset management requirements can be absorbed over the long-term.

Importantly, the City's ongoing review of asset management policies and long-range financial planning analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

## **E. Consultation on ASDC Background Study**

Prior to the release of the ASDC Background Study consultation occurred with the representatives of the development industry and stakeholders concerning the Shadow Ridge and Lakeland Meadows developments located within the Village of Greely. Council must also hold a statutory public meeting in accordance with the *DCA*. Any person who attends such a meeting may make representations related to the proposed by-law.

# **I INTRODUCTION**

## **A. Background**

The City of Ottawa has historically established ASDC for infrastructure where the costs are more localized and do not provide a benefit external to the defined area. For infrastructure that is intended to meet the increase in need for service arising from development on a broader basis a city-wide development charge is calculated. This study deals specifically with developments located within the Village of Greely (herein referred to as the “Village”). The City’s previous ASDC Background Studies also provide an analysis that supports the area-specific development charge methodology and calculated rates being imposed within the various existing locations.

The installation of this infrastructure is part of the overall servicing plan for the Shadow Ridge and Lakeland Meadows communities located within the Village. Developers have agreed to fund upfront the overall costs of the proposed treatment facilities. As a result, the City will be seeking to enter into a financial agreement to offset these upfront capital expenditures once the final EA servicing studies are completed.

Additional time, however, to assess the final infrastructure needs arising from growth will be based on these EA studies. The eventual repayment of the funding for the final servicing options for constructing the upgrades to both the communal drinking water and wastewater systems will be based on actual development charge collections. Revenues produced by ongoing development activity within the benefitting area will be paid on a quarterly basis based on actual ASDC payments received.

## **B. Calculation Assumptions**

For construction of the seventy-nine units to proceed, there is a requirement to provide base construction and costing adjustments for the additional treatment facilities needed to fund both the communal drinking water and wastewater systems to service future development in Shadow Ridge and Lakeland Meadows developments. Within the RVA Memo, assumptions concerning the existing risk factors were reviewed and applied where appropriate to the base construction cost estimates on an infrastructure component basis. Risk factor markup was selected based on known and unknown conditions and reviewed collaboratively with the City and stakeholders. The development forecast assumptions have been updated to reflect forecasted growth resulting in the required application of residential ASDC rates to fund approximately 95% of the overall costs.

## **C. Study Structure**

This study includes a summary of the detailed calculation inputs used to arrive at the proposed ASDC rates. An overview of the tables included in this study is provided below:

### **Table 1: Projected Growth to Build-Out (Development Forecast)**

Table 1 provides a summary of the residential forecast within the two developments. The forecast identifies the total anticipated projected increases in population, which has been subsequently allocated 100% to residential unit types.

### **Table 2: Development-Related Capital Program**

Table 2 identifies the recoverable capital costs required to service development occurring within the benefitting area. The table provides the identified development charge recoverable costs, available project balances, ineligible costs not included in the calculation and any existing reserve fund balances.

### **Table 3: Summary of Unadjusted Residential Development Charges**

Table 3 summarizes the residential development charge calculations. The process used to calculate the various residential rates is the same as those used in previous studies. Furthermore, allocation of costs between the various unit types (single/semi-detached, multiple/row/ mobile dwelling, apartment types) are based on the 2021



The *DCA* requires that a development forecast be prepared, which identifies the anticipated amount, type, and location of development. In line with historical practice, the development forecast for each area-specific charge is based on the future development potential. The 2025 development forecast identifies the projected amount of residential population growth over the entire planning period. A summary for this amendment is shown as **Table 1**.

| Table 1<br>Residential Development Forecast Summary |         |               |                |            |       |
|---|---------|---------------|----------------|------------|-------|
|   | Singles | Semi-Detached | Rows/Townhomes | Apartments | Total |
| Unit Growth   | 609     | 97            | 498            | -          | 1,204 |
| Population in New Units                             | 1,704   | 216           | 1,051          | -          | 2,972 |

## B. Development-related Capital Program

The development-related capital program includes area-specific water and wastewater servicing for two developments within the Village. The expenditure forecast is a point-in-time analysis and may be subject to future revisions based on development timing, scope, and overall capital project costs. Various risk factors have been reviewed and applied where appropriate to the base construction cost estimates on an infrastructure component basis. Contingency range for Class C estimates used by the City Asset Management Branch is between 20% to 30%. For this study, a contingency of 25% was selected based on the information available and degree of confidence in the estimates.

### 1. Identification of Capital Costs

Based on the current average cost calculations, the growth-related infrastructure will provide services to accommodate 1,204 units of future residential development occurring over the planning period. The anticipated development of 1,125 residential units located within the Village has no service capacity and requires the full provision of future water and wastewater infrastructure. In addition, seventy-nine of the residential units will fund, upfront, the costs of connecting to existing services as well as the proposed ASDC. Therefore, the per unit value of the services to future development is higher, based on a 95% DC eligible cost allocation, than the per unit value to existing development. In addition, developers have agreed to fully fund, without reimbursement, the cost of all future EA studies. As a result, the cost of these studies has not been incorporated into the calculation of the ASDC rates over the planning period. The project cost estimates contained within the RVA Memo include adjustments to the previous cost estimates based on construction inflation and the addition of risk and contingency markups applied to base infrastructure estimates for input to the ASDC calculations. It is difficult to provide



projected cost estimates and associated funding allocations prior to the completion of the various EA studies. The overall costing approach, however, utilized in this ASDC amendment are in line with the City's historical practices.

## **2. Deductions for Ineligible Costs**

Conforming with the conditions of the *DCA*, deductions have been made to the identified gross capital project costs. This includes adjustments for capital grants, subsidies, or other contributions as required by the *DCA* and the portion of projects that confer benefits to existing (BTE) residents. In this case there is a 5% non-growth-related allocation to increase the level of service for existing development. The BTE cost attribution must be funded from non-development related sources.

The preferred servicing solutions have not yet been determined through a master servicing study or environmental assessment process. The BTE allocation will be revisited in a future ASDC update based on the details of the infrastructure design once the ultimate solution is selected. The City will review various methods and guidelines during this process for selecting an approach with respect to revising the BTE deductions including a calculation-based approach such as a flow ratio once more detailed information becomes available in the future.

There are a variety of funding tools available to pay for this mandatory deduction such as user fees, utility rates and frontage charges. In addition, no definition has been enacted at this time by the Province as guidelines to determining the overall required BTE allocation.

## **3. Adjustments for Uncommitted Excess Capacity**

There is a requirement in the *DCA* to reduce the applicable development charge by the amount of any "uncommitted excess capacity" that is available for a service. Such capacity is available to partially meet the future servicing demands. Individual projects that have been previously identified are related to the increase in need for servicing arising from development occurring within the benefitting area. As such, no uncommitted excess capacity has been determined.

## **4. Adjustments for Prior Growth**

Consistent with the City's historical practice, any existing reserve fund balances have been incorporated into the rate calculation. In this case there are no existing reserve fund balances available to be applied.

## **5. Post Period Benefit**

No post-period allocations have been made for the provision of either the Water or Wastewater infrastructure.

## **6. Legislated Discount**

In accordance with the *DCA*, growth-related infrastructure is no longer subject to the statutory ten per cent adjustment and no such deduction has been made to the infrastructure identified in the capital program.

## **C. Attribution to Types of Development**

The next step in the determination of the ASDC is the allocation of development-related net eligible capital costs between residential and non-residential uses. The capital costs in this case are allocated one hundred per cent to residential use. These costs allocations and DC rate calculations are presented in **Tables 2A and 2B**.

The ASDC results in properties within the benefitting area absorbing the actual servicing cost, with no impact on the balance of the City. For this to occur only those new residential dwelling units require the services will result in the payment of the ASDC, in most cases, at building permit issuance. It is recommended that this collection practice be applied to the recovery of area-specific growth-related costs within the Village.

This aligns with the City's practice in which the application of wastewater and water development charges is determined based on specific servicing applicability within the Rural area.

## **D. Calculation of Development Charges**

### **1. Residential and Non-residential Allocations**

In accordance with the methodology used in past ASDC studies, an average cost methodology has been used to calculate development charges for the Village.

## **III SUMMARY OF CAPITAL COSTS AND CALCULATED RATES**

## A. Summary of DC Eligible and Ineligible Costs

Tables 2A and 2B below provide a summary of the DC eligible and ineligible costs servicing growth until ultimate build-out.

Table 2A  
Development-Related Capital Program  
Wastewater Treatment System  
Arer-Specific Development Charges within Village of Greely

| Item Number | Project Description   | Gross Capital Cost Estimate | BTE % | Ineligible Costs                |                                   | Total DC Eligible Costs | DC Eligible Costs |                     | 100%                | 0%                    |
|-------------|---|-----------------------------|-------|---------------------------------|-----------------------------------|-------------------------|-------------------|---------------------|---------------------|-----------------------|
|             |   |                             |       | Benefit to Existing Development | Grants, Subsidies & Contributions |                         | Prior Growth      | Growth Cost         | Residential Share   | Non-Residential Share |
|             | Reserve Fund Balance  | \$0                         |       | \$0                             | \$0                               | \$0                     | \$0               | \$0                 | \$0                 | \$0                   |
| 10ASG1      | Wastewater Treatment System - Shadow Ridge and Lakeland Meadows | \$27,372,422                | 5%    | \$1,368,621                     | -                                 | \$26,003,801            | -                 | \$26,003,801        | \$26,003,801        | \$0                   |
|             |   |                             |       |                                 |                                   |                         |                   |                     |                     |                       |
|             |   |                             |       |                                 |                                   |                         |                   |                     |                     |                       |
|             | <b>Total</b>  | <b>\$27,372,422</b>         |       | <b>\$1,368,621</b>              | <b>\$0</b>                        | <b>\$26,003,801</b>     | <b>\$0</b>        | <b>\$26,003,801</b> | <b>\$26,003,801</b> | <b>\$0</b>            |

Note: Front-ended growth-related capital works are eligible to receive payments based on actual collections

| Residential Calculation             |         |              |
|-------------------------------------|---------|--------------|
| Residential Share of Eligible Costs | 100.00% | \$26,003,801 |
| Population Growth to Build-Out      |         | 2,972        |
| Unadjusted Per Unit Charge          |         | \$8,750      |

Table 2B  
Development-Related Capital Program  
Water Treatment System  
Arer-Specific Development Charges within Village of Greely

| Item Number | Project Description  | Gross Capital Cost Estimate | BTE % | Ineligible Costs                |                                   | Total DC Eligible Costs | DC Eligible Costs |                     | 100%                | 0%                    |
|-------------|--|-----------------------------|-------|---------------------------------|-----------------------------------|-------------------------|-------------------|---------------------|---------------------|-----------------------|
|             |  |                             |       | Benefit to Existing Development | Grants, Subsidies & Contributions |                         | Prior Growth      | Growth Cost         | Residential Share   | Non-Residential Share |
|             | Reserve Fund Balance                                       | \$0                         |       | \$0                             | \$0                               | \$0                     | \$0               | \$0                 | \$0                 | \$0                   |
| 11ASG1      | Water Treatment System - Shadow Ridge and Lakeland Meadows | \$34,773,427                | 5%    | \$1,738,671                     | -                                 | \$33,034,756            | -                 | \$33,034,756        | \$33,034,756        | \$0                   |
|             |  |                             |       |                                 |                                   |                         |                   |                     |                     |                       |
|             |  |                             |       |                                 |                                   |                         |                   |                     |                     |                       |
|             | <b>Total</b>   | <b>\$34,773,427</b>         |       | <b>\$1,738,671</b>              | <b>\$0</b>                        | <b>\$33,034,756</b>     | <b>\$0</b>        | <b>\$33,034,756</b> | <b>\$33,034,756</b> | <b>\$0</b>            |

Note: Front-ended growth-related capital works are eligible to receive payments based on actual collections

| Residential Calculation             |         |              |
|-------------------------------------|---------|--------------|
| Residential Share of Eligible Costs | 100.00% | \$33,034,756 |
| Population Growth to Build-Out      |         | 2,972        |
| Unadjusted Per Unit Charge          |         | \$11,115     |

## B. 2025 Calculated ASDC Rates

Tables 3 provides a summary of the calculated residential ASDC rates. The proposed ASDC rate of \$55,423 per single and semi-detached dwelling.

### C. Summary of Calculated ASDC and Current City-Wide Rates

**Table 4** provides a summary of calculated and current city-wide rates that were implemented in various 2024 DC By-laws. As stated in Section 1 of this report, the draft ASDC that are proposed reflect revised cost assumptions concerning the recovery of growth-related infrastructure costs for upgrades to both the communal drinking water and wastewater systems to serve existing and future development in Shadow Ridge and Lakeland Meadows developments. An overall development charge rate of \$99,959 per single and semi-detached is being proposed.

**TABLE 4**  
**Summary of Calculated and Current City-wide Rates**

|                   | Residential Charge By Unit Type  |                                   |                                  |                                  |                 |
|-------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|-----------------|
|                   | Singles & Semi-Detached Dwelling | Multiple, Row and Mobile Dwelling | Apartment Dwelling (2+ bedrooms) | Apartment (less than 2 bedrooms) | Dwelling Room   |
| <b>Calculated</b> | \$55,423                         | \$41,915                          | \$38,339                         | \$25,824                         | \$19,865        |
| <b>Current</b>    | \$44,536                         | \$35,012                          | \$24,207                         | \$17,208                         | \$13,293        |
| <b>Total</b>      | <b>\$99,959</b>                  | <b>\$76,927</b>                   | <b>\$62,546</b>                  | <b>\$43,032</b>                  | <b>\$33,158</b> |

## **IV DEVELOPMENT CHARGE POLICY CONSIDERATIONS**

### **A. Consideration of Area Rating**

As required by the *DCA*, consideration was given to the use of area rating. Consistent with the City's historical practice, the infrastructure identified for various specific areas are deemed to provide a localized benefit and is, therefore, recovered for on an area-specific basis. This practice is aligning with the ASDC calculated for the Village.

For growth-related infrastructure that is intended to meet the increase in need for service arising from development on a broader basis, a city-wide development charge is calculated.

### **B. Local Service Guidelines**

The City has Local Service Guidelines related to infrastructure. The purpose of establishing these definitions is to determine the growth-related capital costs for inclusion in the development charges calculation for the City of Ottawa. Functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is a direct developer funding responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer. Local Service Guidelines for infrastructure is based on the City's prevailing practices.

### **C. Draft ASDC By-law**

The draft ASDC By-law will be made available under separate cover at least two weeks in advance of the statutory public meeting in accordance with the requirements of the *DCA*. Once the City conducts the public process and passes a new by-law, the emphasis shifts to implementation matters. These include notice of passage, potential appeals, complaints, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and the funding of growth-related recoverable costs.

## **V COST OF GROWTH ANALYSIS**

This section provides an examination of the long-term capital and operating costs as well as the asset management related annual provisions for the capital facilities and infrastructure to be included in the by-law. This examination is required as one of the provisions of the *DCA*.

### **A. Asset Management Plan Requirements**

The *DCA* now requires that municipalities complete an Asset Management Plan before passing a ASDC By-law. A key function of the Asset Management Plan (AMP) is to demonstrate that all assets proposed to be funded under the by-law are financially sustainable over their full life cycle.

#### **1. Calculated Annual Provision**

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserve funds or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are, therefore, not eligible for funding through development charge revenues or other developer contributions.

Based on the information obtained from City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions from the required annual capital provision. In calculating the annual provisions, several assumptions are made to account for inflation and interest.

#### **2. Assets are Deemed to be Financially Sustainable**

The City has internal asset management policies and practices which are supported through the City's Comprehensive AMP, long range financial plan and annual budgeting exercises.

The assets identified in this ASDC Study are deemed to be financially sustainable as it is expected that the increased capital asset management funding needs can be absorbed by the tax and user rate base over the long-term. Importantly, the City's ongoing review of asset management policies will allow staff to continue to monitor and implement mitigating measures should the program become less financially sustainable.

## **B. Long-Term Capital and Operating Impacts**

The City will incur increased operating costs once the infrastructure is constructed. Increases in user rate revenues associated with new development are anticipated to offset partially or fully operating costs, depending on the nature of the new development. The financial plan analysis indicates that the City's user rates have been structured to align with current and anticipated operating expenditures. Importantly, Council is required to review and adopt operating budgets on an annual basis which ensures the financial sustainability of the program.