
Subject: 2019 Capital Budget

Report to: Budget Review Committee

Report date: ~~Thursday, January 10, 2019~~ **Thursday, February 14, 2019**

Recommendations

1. That the 2019 Capital Budget for the Niagara Regional Departments and Agencies, Boards and Commissions of ~~\$273,939,966~~ **\$274,283,966** as per **Appendix 1** to Report CSD 1-2019, **BE APPROVED IN PRINCIPLE** pending final by-law approval anticipated to be on February 28, 2019 and subject to approval of the Niagara Regional Transit separate levy being considered with the 2019 operating budget;
2. That financing in the amount of ~~\$248,911,706~~ **\$249,255,706** gross and ~~\$227,101,255~~ **\$227,445,255** net **BE INITIATED** upon approval of the 2019 Capital Budget and **BE ALLOCATED** to the projects as summarized in **Appendix 2** to Report CSD 1-2019; and
3. That the necessary by-laws **BE PREPARED** and **PRESENTED** to Council for consideration to coincide with the approval of the operating budget.

Key Facts

- The 2019 capital budget totals ~~\$273.94~~ **\$274.28** million and includes ~~168~~ **167** projects of which 161 with an estimated cost of ~~\$248.94~~ **\$249.25** million are supported by a full capital data sheet and are proposed to be initiated concurrently with the approval of the 2019 Capital Budget (Appendix 2). Six capital projects totalling \$25.03¹ million will be brought forward for initiation at a later date once further information is available (Appendix 3). Budget detail including data sheets can be accessed through the eScribe meeting site under 2019 Budget Detail.
- The proposed 2019 Capital Budget can not be funded within 2% guidance as a result of significant one-time projects. A separate levy of 2.3% will be requested to support Niagara Regional Transit (NRT) operating and capital costs, of which 0.4% (\$1.388 million) is to support the debt charges for NRT capital.
- In 2020, the Capital Budget will require an additional separate levy to support Long Term Care Redevelopment. The total 2019 Capital Budget and 9-year capital forecast is currently estimated to be \$2.7 billion (Appendix 4).
- Should the operating budget deliberation not approve the amounts in excess of guidance; a deferral or reduction of \$13.9 million or 5.1% of the 2019 gross levy capital program to be within 2% guidance will be required.

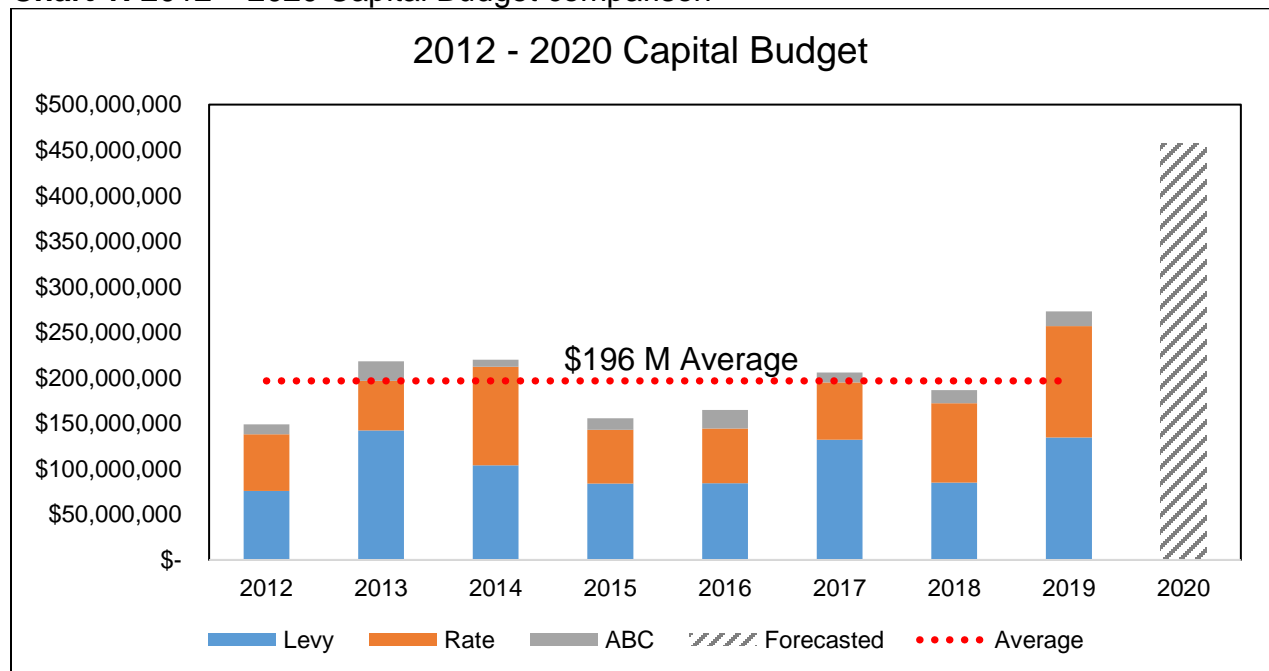
¹ On January 17 2019 Council approved CL-C-2019 – NRH-2-2019 which initiated the project J_200001031.

- Niagara Regional Housing budget has been approved by the Board. Niagara Regional Police Services Capital Budget is a draft subject to board approval on January 16th.
- **This report was revised to accommodate for the Project J_20001038: Transportation Infrastructure Means Protection following the recommendations from PHD 03-2019 and BRC-C 1-2019.**

Financial Considerations

The proposed 2019 Capital Budget of ~~\$273.94~~ **\$274.28** million (~~\$151.59~~ **\$151.93** million levy capital budget and \$122.35 million rate capital budget) is included in Appendix 1. The 2019 capital budget is the Region's largest request to date.

Chart 1: 2012 – 2020 Capital Budget comparison



The 2019 Capital Budget being presented is fully funded as a result of the following:

- Review of existing projects to either reduce budgets or close projects. These efforts totaled to \$8 million from 35 projects.
- Use of capital reserves, including drawing down the General Capital Levy and Infrastructure Deficit Reserve
- Increase in gross debt charges of no more than 2% per year, in order to balance the impact of debt charges on the operating budget (subject to Council's approval).
- Total consolidated authorized debt (Regional and Local), throughout 2019 and forecast period, to remain below 118% of Niagara Region's operating revenues. If the ratio of issued debt to operating revenue surpasses 120% or total consolidated debt surpasses \$1 billion (determined by Standard and Poor's (S&P)), there is a risk of downgrade in the Region's credit rating.
- The total debt charges, throughout 2019 and forecast period, are projected to remain below 11% of the Niagara Region's own source revenues based on forecasted debt issuances. The maximum ratio of debt charges to own source revenue (annual repayment limit – ARL) set by the Province is 25%.
- Debt financing is applied to projects/assets that have a longer life span (i.e. 30 years). Debt terms do not exceed the expected useful life of the asset.
- Maximizing the usage of the development charges for growth related projects.
- Departmental leadership in collaboration with the Corporate Leadership Team also reviewed the 2019 capital request and prioritized projects based on criteria such as: alignment to AMP, supporting growth, council priorities, project risk, operating benefits and ability to leverage external financing.

A reconciliation to incorporate the recommendations of PHD 3-2019 and BRC-C 1-2019 are as follows:

| Description | Gross Request | Reserve | Development Charges | Debt, Federal Gas Tax and other |
|--|----------------------|----------------------|---------------------|---------------------------------|
| Original Gross Request | \$273,939,966 | \$132,387,466 | \$57,031,300 | \$84,521,200 |
| Deferral and reductions: | | | | |
| J_20000929 Geneva/Carlton | (1,000,000) | (500,000) | (500,000) | - |
| J_20000927 Thorold Yard Upgrades | (1,500,000) | (960,000) | (540,000) | - |
| J_20000912 Roads Resurfacing | (1,156,000) | (1,040,000) | (115,600) | - |
| Additions | | | | |
| J_20001038 Transpt. Infra. Means Prot. | 4,000,000 | 4,000,000 | - | - |
| Revised Gross Request | \$274,283,966 | \$133,887,066 | \$55,875,700 | \$84,521,200 |

The funding sources for the Capital Budget are shown in Table 1.

Table 1: 2019 Capital Funding Sources

| | Levy | Rate | Total |
|---------------------------------|-----------------------|----------------------|------------------------|
| Regional Funding: | | | |
| Reserves* | \$ 44,627,066 | | \$128,678,466 |
| | \$ 46,126,066 | \$84,052,400 | \$130,179,066 |
| Infrastructure Deficit Reserves | 3,708,000 | | 3,708,000 |
| Debentures | 27,774,804 | 33,110,000 | 60,884,804 |
| | 77,109,870 | | 193,272,270 |
| | 77,609,470 | 117,162,400 | 194,771,870 |
| External Funding: | | | |
| Area Municipalities | 3,025,000 | | 3,025,000 |
| Federal Gas Tax | 10,300,000 | 3,000,000 | 13,300,000 |
| Other External | 2,511,396 | 4,800,000 | 7,311,396 |
| | 15,836,396 | 7,800,000 | 23,636,396 |
| Development Charges | 38,469,200 | | 57,031,300 |
| | 37,313,600 | 18,562,100 | 55,875,700 |
| Total | \$130,415,466 | | \$273,939,966 |
| | \$130,759,466 | \$143,524,500 | \$274,283,966 |

* The environmental centre expansion project, \$21.17M is a project managed by the Facilities division but funded by the Rate programs

The budget provides for the full cost of the projects however actual cash flows may extend over multiple years. The operating budget impact of the 2019 Capital Budget is provided for at the time the capital budget is approved. This is to ensure that no capital project approved in one year will pre-encumber a future budget year or Council. For projects that include debt as a funding source, it is necessary for the operating budget to support the implied debt charges (interest and principal payments) at the time of capital budget approval. Debt financing is not issued until the project is substantially complete which may create a timing difference and any resulting variance is held in the capital levy reserve. The timing differences present an opportunity to reinvest these capital levy dollars in future infrastructure.

9 Year Forecast Financing Strategy

Key assumptions used in building the 2020-2028 forecast include:

- Interest rates on issued debentures averaged 3.20% for the July 2018 25-year debenture issuance. Interest rate assumptions used in the forecast are based on the general economic forecast that interest rates will begin to rise from a low of 2.5% for 5-year debt in 2019 to a high of 5.25% for 30-year debt in 2028.
- The 10-year Water and Wastewater financial plan prepared to comply with the Safe Drinking Water Act which requires a combined rate increase of 5.20% per year.
- Significant use of capital reserves as shown in the forecast of capital reserve balances in Appendix 5.

The current 10-year infrastructure deficit is estimated at \$481 million. The forecast does not assume the usage of debt to fund the infrastructure deficit. This amount changes every year due to the timing of projects and new funding assumptions.

Some examples of changes from the prior year forecast are:

- The 10-year Water and Wastewater financial plan will utilize \$112 million of debt to address the Municipal water licensing program
- External grant funding estimated at \$80 million required but unconfirmed for construction of new South Niagara Falls Wastewater Treatment Plant as per Master Plan.
- Forecasted future Long Term Care Campus of \$98 million in 2028

Debt Strategy

Debt is an important capital financing tool to assist in funding capital projects. The projects that are being financed through \$60.9 million in debt are shown in Table 2 and will be leveraging debt for the following reasons:

- Large project costs are spread out over their useful life
- Infrastructure costs will be paid by future beneficiaries of the asset
- Historical budget increases for reserve contributions to sustain existing infrastructure have not been adequate.

Table 2: 2019 Debt-financed Projects

| Project | Debt | Funding | Council Priority |
|-------------------------------------|-----------------------|-----------------|----------------------------------|
| Niagara Regional Transit | \$11.9 million | Separate levy | Moving People and Goods |
| Water and Wastewater Infrastructure | \$33.1 million | Within guidance | Advance Organization Excellence |
| Niagara Regional Housing | \$10.2 million | Within guidance | Building a Labour-ready forecast |
| Various Bridge Reconstruction | \$5.7 million | Within guidance | Moving People and Goods |
| Total | \$60.9 million | | |

Debt financing of \$60.9 million is proposed to balance the 2019 Capital Budget. The impact of the request will place Niagara below the average of comparable Regions in 4 of the 6 debt metrics identified in Table 3. The information on the Financial Information Return below represents actual debt issued with the exception of the S&P ratio.

Table 3: Debt Metrics

| Metric | Current State | Proposed with 2019 Budget | Average of Comparable Regions* |
|--|---------------|---------------------------|--------------------------------|
| Debt as a % of Operating Revenues | 37.0% | 44.0% | 57.0% |
| Debt as a % of Reserves & Reserve Funds | 86.0% | 101.0% | 85.0% |
| Debt per Capita | \$ 754.95 | \$ 887.63 | \$ 1,148.51 |
| Debt per Household | \$ 1,742.96 | \$ 2,049.28 | \$ 3,553.93 |
| S&P Ratio of Total Region and lower tier Debt to Operating Revenue** | 81.0% | 89.0% | 70.5% |
| Annual Repayment Limit (ARL) | 8.0% | 8.0% | 9.3% |

Source: Ministry of Municipal Affairs Financial Information Return

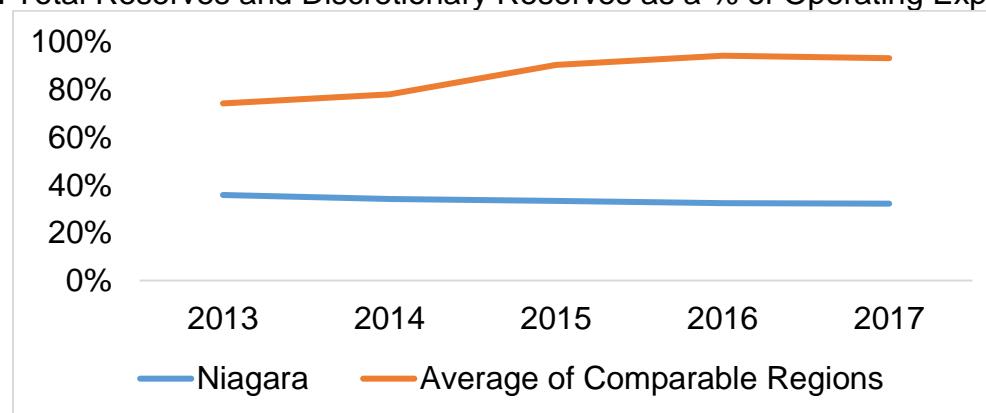
* The comparable regions are Durham, Halton, Peel, York and Waterloo

**Waterloo does not use S&P as their credit agency and thus was not included for this analysis

Reserve Strategy

Each year the Ministry of Municipal Affairs and Housing reviews a number of financial metrics for all municipalities. One of these metrics is “Total Reserves and Discretionary Reserves as a % of Operating Revenues”. Chart 2 demonstrates that Niagara Region’s reserve levels are lower than its provincial comparators. Niagara Region has maintained its reserves at relatively the same levels for the six-year period from 2013 to 2017 therefore the use of debt to finance capital is necessary to support our asset management plan. The forecasted 10-year reserve balance is provided in Appendix 5.

Chart 2: Total Reserves and Discretionary Reserves as a % of Operating Expenses



Source: Ministry of Municipal Affairs Financial Information Return

* The comparable regions are Durham, Halton, Peel, York and Waterloo

1% Infrastructure Deficit Reduction Reserve

As part of the 2017 budget, Council approved the creation of an Infrastructure Deficit Reduction (IDR) reserve through a 1% increase on the levy. The establishment of the IDR reserve was the first step in a long-term capital financing strategy to reduce the infrastructure funding gap. In accordance with the requirements of the Asset Management Plan (AMP) discussed below, the Region is proposing the use of the IDR reserve as a funding source of the 2019 Capital Budget. To support growth in the region, staff recommends using the IDR to fund the Region's share (non-growth related portion) on projects as provided in Appendix 6.

Analysis

The proposed projects in the 2019 Capital Budget are based on information contained in the Asset Management Plan, updated based on current condition assessments, age-based analysis, employee identified concerns, current service standards and the Transportation Master Plan, Water Wastewater Master Servicing Plan, and Municipal Comprehensive Review and staff capacity to complete current and previously approved projects.

Supporting Growth

In the 2019 Capital Budget, ~~\$57~~ **\$56** million or 20.9% of the gross request has been identified as growth related eligible to be financed through development charges (DCs) under the current DC background study. The 5-year historical average of DC usage has been approximately \$20 million. The 10-year forecast will be utilizing on average \$47 million. Based on the current projection Wastewater development charge reserves will be fully utilized over the forecast period. This is reflective of the investment in growth. The following projects supporting job creation and attraction of new residents are funded with development charges:

Table 4: Highest Growth projects

| Project | Gross Budget | Population Affected and Job's created | Supports GO |
|--|---------------------|--|--------------------|
| Martindale Road Reconstruction* | \$16.1 million | 4,200 | Yes |
| Casablanca Boulevard Widening* | \$10.0 million | 6,620 | Yes |
| Grimsby Water Treatment Plant System Storage | \$11.5 million | 38,400 | No |
| Thorold Stone Road Extension* | \$6.0 million | 3,010 | Yes |

* Source: St. Catharines Secondary Plan, Grimsby Secondary plan and the Niagara Falls Station Area plan

Status of Previously Approved Capital (Work in progress)

Each years' capital budget request is cognizant of the capacity and resources available to manage both the existing capital projects as well as those proposed. Due to the multi-year nature of many capital projects there is always some approved capital budget for future year cash flow of the projects as noted below however the unspent amount is relatively stable reflective of an average three year life cycle for large capital projects from design through to construction completion. The increase in 2018 is related primarily to a number of large water and wastewater projects that were delayed for a number of unforeseen circumstances however significant progress has been made in Q4 of 2018.

- Q3 2018 – 37% budget remaining on \$1,116 million approved budget
- Q3 2017 – 33% budget remaining on \$1,053 million approved budget
- Q3 2016 – 30% budget remaining on \$926 million approved budget

The above prior year budgets would have included budget estimates for the NRPS D1 Facility and Burgoyne Bridge projects. Additional forthcoming requests as described in the following reports have not been included in the proposed 2019 Capital Budget as they are anticipated to be accommodated through the Capital Variance Project:

- CSD 13-2019: Niagara Regional Police Services 1 District Facility requesting \$3,795,841
- ~~PHD 3-2019: Burgoyne Bridge requesting an additional amount to be determined for safety barriers~~

Staff continue to review existing projects on a quarterly basis for timely closure and/or identification of excess funding. In addition, there has been collaboration with the Project Management office to implement project best practices and techniques across the organizations.

Asset Management Plan

In 2017, the Region completed and Council approved a comprehensive Asset Management Plan. This AMP is a long range planning document that supports the Region's vision and priorities to sustain Niagara's infrastructure.

The detailed information available in this AMP was utilized in the 2019 budget cycle to validate all proposed capital projects identified as the replacement of existing assets, as summarized in Appendix 7. In the current year, 60% (2018 – 49%) of the projects are directly attributable to the AMP.

The AMP identified a \$73 million annual gap between what the Region's 10-year capital budget plan and the required investment to sustain the Region's assets.

The \$73 million annual gap was mainly caused by Water and Wastewater's asset portfolio and will be addressed in the 10-year Water and Wastewater financial plan. In order to alleviate pressures on the rate from the AMP, the plan will spread the backlog of projects over 50 years and propose a funding strategy.

Risks

The risks associated with the proposed capital and financing strategy are:

- Increasing use of debt and reserves will result in an increase in the Region's net-debt position. This may reduce the Region's financial flexibility and could lead to higher borrowing costs.
- Any use of regional sources of funding to growth related projects further erodes the ability to sustain the service level of current infrastructure.
- The Region retained an external project management consultant, which provided a detailed analysis on assessing the ability of current project managers and support resources in select departments. One of the finding was that divisions do not have adequate labour resources to complete open projects. There is an ongoing project with the development of the Project Management Centre of excellence to address this finding.
- The Region continues to increase the alignment of the Capital budget with the asset management plan. If the Region deviates from the asset management plan, this may result in deferred investment, equipment failure, reactive capital spending and higher costs.

Alternatives Reviewed

No alternatives were reviewed.

Relationship to Council Strategic Priorities

The 2019 Capital Budget supports an environment that contributes to economic prosperity. See Appendix 8 for a list of projects aligned to Council's Strategic Priorities summarized as follows.

- 60% - investment in organizational excellence is primarily focused on the sustainment of existing infrastructure and service levels.
- 34% - investment in moving people and goods is focused on the creation of new infrastructure to support growth and provide additional capacity and enhancements to the existing levels of service.
- 5% - investment in building a labour ready workforce and is focused on increasing access to affordable housing which is an important factor in obtaining employment.

Other Pertinent Reports

| | |
|----------------------|---|
| AC-C 22 – 2018 | Regional Debt Risk Management Framework |
| BRC-C 1 -2019 | Funding for Barriers |
| CSD 21 – 2017 | Asset Management Plan |
| CSD 35 – 2018 | 2019 Budget Planning |
| CSD 36 – 2018 | PM Resource Assessment Report |
| CSD 51 – 2018 | Asset Management Governance |
| CSD 63 – 2017 | Regional Development Charges and Proposed By-law |
| PDS 37 – 2016 | Niagara 2041 Growth Strategy - Local Municipal Growth Allocations |
| PHD 3 – 2019 | Preventing Deaths by Suicide on Public Infrastructure |
| PW 22 – 2017 | 2016 Water & Wastewater Master Servicing Plan Update |
| TSC-C 3 – 2017 | Niagara Region Transportation Master Plan |

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Appendices

| | |
|------------|--|
| Appendix 1 | REVISED 2019 Capital Budget Summary by Department with Funding |
| Appendix 2 | REVISED 2019 Capital Projects Initiated Concurrent with Budget Approval |
| Appendix 3 | 2019 Capital Projects for Future Initiation |
| Appendix 4 | REVISED 2019 – 2028s Capital Budget and Nine Year Forecast |
| Appendix 5 | Forecasted Capital Reserve Balances |
| Appendix 6 | Projects Allocated 1% Infrastructure Deficit Reduction Funding |
| Appendix 7 | REVISED Alignment with the Asset Management Plan |
| Appendix 8 | REVISED Alignment with Council Strategic Priorities |
| Appendix 9 | Treasurer's Certificate |

2019 Capital Budget Summary by Department with Funding

CSD 1-2019 **REVISED**
February 14, 2019
Appendix 1 **REVISED**

| Program | Gross Capital Request | Reserves | Debt | Development Charges | Federal Gas Tax | Local Area Municipality | Other External |
|-------------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|----------------------|
| Community Services | 1,807,816 | 1,807,816 | - | - | - | - | - |
| Corporate Services | 26,776,500 | 26,776,500 | - | - | - | - | - |
| Enterprise Resource Mgmt Serv | 100,000 | 100,000 | - | - | - | - | - |
| Niagara Regional Housing | 13,915,419 | 1,522,285 | 10,206,838 | 674,900 | - | - | 1,511,396 |
| NRPS | 3,088,500 | 3,088,500 | - | - | - | - | - |
| Planning & Development | 685,000 | 685,000 | - | - | - | - | - |
| Public Health Emergency Serv | 2,201,231 | 2,201,231 | - | - | - | - | - |
| | 103,018,000 | 33,330,734 | 17,567,966 | 37,794,300 | 10,300,000 | 3,025,000 | 1,000,000 |
| Public Works - Levy | 103,362,000 | 34,830,334 | 17,567,966 | 36,638,700 | 10,300,000 | 3,025,000 | 1,000,000 |
| Waste Management | 6,825,000 | 6,604,900 | - | 220,100 | - | - | - |
| Wastewater Operations | 52,391,000 | 24,158,000 | 19,226,000 | 6,007,000 | 3,000,000 | - | - |
| Water Operations | 63,131,500 | 32,112,500 | 13,884,000 | 12,335,000 | - | - | 4,800,000 |
| Grand Total | 274,283,966 | 133,887,066 | 60,884,804 | 55,875,700 | 13,300,000 | 3,025,000 | 7,311,396 |

2019 Capital Projects Initiated Concurrent with Budget Approval

| Program | Project ID | Project Name | Gross Capital Request | Reserves | Debt | Development Charges | Federal Gas Tax | Local Area Municipality | Other External |
|-------------------------------------|------------|--|-----------------------|-----------|------------|---------------------|-----------------|-------------------------|----------------|
| Community Services | J_20000922 | LTC Homes - 2019 Bed Replacement | 75,000 | 75,000 | - | - | - | - | - |
| | J_20000923 | LTC Homes - 2019 Capital Improvements/Replacements | 327,389 | 327,389 | - | - | - | - | - |
| | J_20000924 | LTC Homes - 2019 Machinery/Equipment | 434,277 | 434,277 | - | - | - | - | - |
| | J_20000925 | LTC Homes - 2019 Resident Care Equipment | 469,300 | 469,300 | - | - | - | - | - |
| | J_20000926 | LTC Homes - 2019 Roof Replacement | 501,850 | 501,850 | - | - | - | - | - |
| Community Services Total | | | 1,807,816 | 1,807,816 | - | - | - | - | - |
| Corporate Services | J_20000504 | iDarts Upgrade | 20,000 | 20,000 | - | - | - | - | - |
| | J_20000931 | Print Shop-Printing Press | 40,000 | 40,000 | - | - | - | - | - |
| | J_20000933 | 2019 Annual Application Lifecycle Replacement | 300,000 | 300,000 | - | - | - | - | - |
| | J_20000935 | 2019 IT Asset Replacement | 2,288,000 | 2,288,000 | - | - | - | - | - |
| | J_20000939 | 2019 Annual - Code and Legislative Compliance Program | 100,000 | 100,000 | - | - | - | - | - |
| | J_20000941 | 2019 Annual - Energy Conservation Program | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000942 | Bldg Int-2019 Region HQ-Space Acc | 100,000 | 100,000 | - | - | - | - | - |
| | J_20000937 | Online Development Planning Portal Phase 1 | 750,000 | 750,000 | - | - | - | - | - |
| | J_20000938 | Project/Portfolio Management Software | 250,000 | 250,000 | - | - | - | - | - |
| | J_20000981 | Asset Management Software | 250,000 | 250,000 | - | - | - | - | - |
| | J_20000980 | 19-Bldg Ext-NR Thorold Patrol Yard Roof Design | 20,000 | 20,000 | - | - | - | - | - |
| | J_20000943 | Bldg Int-NRHQ-Emergency PA System & Fire Alarm System | 700,000 | 700,000 | - | - | - | - | - |
| | J_20000977 | 19-Bldg Ext-NR-SAE0 Niagara Falls Roof | 290,000 | 290,000 | - | - | - | - | - |
| | J_20000976 | 19-Bldg Site-250 Thorold Road Life Cycle Renewal | 220,000 | 220,000 | - | - | - | - | - |
| | J_20000979 | 19-Bldg Ext-NRPS-Gun Range Roof Design | 71,500 | 71,500 | - | - | - | - | - |
| Corporate Services Total | | | 5,599,500 | 5,599,500 | - | - | - | - | - |
| Enterprise Resource Mgmt Serv | | | 100,000 | 100,000 | - | - | - | - | - |
| | J_20000945 | 2019 Misc Levy Properties | | | | | | | |
| Enterprise Resource Mgmt Serv Total | | | 100,000 | 100,000 | - | - | - | - | - |
| Niagara Regional Housing | J_20000680 | NRH - Multi-Residential Intensification - Niagara Falls | 810,000 | 135,100 | - | 674,900 | - | - | - |
| | J_20000918 | NRH - 2019 Annual Unit Capital Program | 5,355,404 | 413,704 | 4,630,719 | - | - | - | 310,981 |
| | J_20000919 | NRH - 2019 - Annual Emergency Capital Program | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000920 | NRH - 2019 - Annual Grounds Capital Program | 912,842 | 70,517 | 789,318 | - | - | - | 53,007 |
| | J_20000921 | NRH - 2019 Annual Building Capital Program | 5,535,913 | 427,649 | 4,786,801 | - | - | - | 321,463 |
| Niagara Regional Housing Total | | | 12,814,159 | 1,246,970 | 10,206,838 | 674,900 | - | - | 685,451 |
| NRPS | J_20000997 | NRPS - Annual Vehicle Replacements (2019) | 1,400,000 | 1,400,000 | - | - | - | - | - |
| | J_20000998 | NRPS - Annual IT & Network Equipment Replacement (2019) | 700,000 | 700,000 | - | - | - | - | - |
| | J_20001009 | NRPS - RTOC CCTV Equipment (2019) | 45,000 | 45,000 | - | - | - | - | - |
| | J_20001000 | NRPS - CEW Replacements (2019) | 24,000 | 24,000 | - | - | - | - | - |
| | J_20001001 | NRPS - Armoured Rescue Vehicle (2019) | 300,000 | 300,000 | - | - | - | - | - |
| | J_20001002 | NRPS - Bomb Suit Replacements (2019) | 30,000 | 30,000 | - | - | - | - | - |
| | J_20001003 | NRPS - Forensic Scanner (2019) | 75,000 | 75,000 | - | - | - | - | - |
| | J_20001004 | NRPS - Drug & Expl. Detection Equip. (2019) | 40,000 | 40,000 | - | - | - | - | - |
| | J_20001005 | NRPS - Fraud Unit Scanner (2019) | 6,000 | 6,000 | - | - | - | - | - |
| | J_20001006 | NRPS - SIS Investigative Software (2019) | 8,500 | 8,500 | - | - | - | - | - |
| | J_20001007 | NRPS - Respiratory Protection Systems (2019) | 36,000 | 36,000 | - | - | - | - | - |
| | J_20000999 | NRPS - NG 911 Equipment Replacement (2019) | 400,000 | 400,000 | - | - | - | - | - |
| | J_20001008 | NRPS - Prisoner Restraint Systems (2019) | 24,000 | 24,000 | - | - | - | - | - |
| NRPS Total | | | 3,088,500 | 3,088,500 | - | - | - | - | - |
| Planning & Development | | | 685,000 | 685,000 | - | - | - | - | - |
| | J_20000515 | Civic Park and International Plaza | | | | | | | |
| Planning & Development Total | | | 685,000 | 685,000 | - | - | - | - | - |
| Public Health Emergency Serv | J_20000891 | 2019 Annual - EMS - Ambulance and Equipment Replacement | 2,201,231 | 2,201,231 | - | - | - | - | - |
| Public Health Emergency Serv Total | | | 2,201,231 | 2,201,231 | - | - | - | - | - |
| Public Works - Levy | J_10RC0627 | Rd Rehab - RR38 Martindale Rd - QEW to Fourth Reconstruction | 16,100,000 | 2,115,000 | - | 11,985,000 | - | 2,000,000 | - |
| | J_10RC1329 | Cpcty Imprv - Casablanca Blvd Widening - Livingston to QEW | 10,000,000 | 1,500,000 | - | 8,500,000 | - | - | - |
| | J_10RC1554 | Cpcty Imprv - Glendale Ave Interchange at QEW | 6,000,000 | 900,000 | - | 5,100,000 | - | - | - |
| | J_10RC1566 | Struc Rehab - St. Paul W CNR Bridge - Bridge Replacement | 750,000 | - | 562,500 | 187,500 | - | - | - |
| | J_10RC1567 | Rds Rehab - Riverside Dr. Reconstruction - Prince Charles Dr. to Lincoln | 3,950,000 | 3,060,000 | - | 340,000 | - | 550,000 | - |
| | J_20000319 | St. Davids Road East (from Hwy 406 to Collier Rd) | 5,168,000 | 4,376,200 | - | 516,800 | - | 275,000 | - |
| | J_20000494 | IMT - Capital Acquisition | 13,900,000 | 2,064,534 | 11,835,466 | - | - | - | - |
| | J_10RC0816 | Cpcty Imprv-Recon RR 57 (Thorold Stone Rd) ext east of Stanley Ave | 6,000,000 | 900,000 | - | 5,100,000 | - | - | - |
| | J_20000141 | Int Imprv RR 20 - Industrial Park Dr to Townline Rd (Phase 3) | 3,000,000 | 500,000 | - | - | 2,500,000 | - | - |
| | J_20000658 | Struc Rehab - Mewburn Road @ CNR Tracks | 2,000,000 | - | 300,000 | 1,700,000 | - | - | - |

| | | | | | | | | | |
|----------------------------------|------------|---|--------------------|-------------------|-------------------|-------------------|-------------------|------------------|----------|
| | J_20000660 | Rd Rehab - RR56 Burleigh Hill - Glendale Ave to St. David's Rd | 1,800,000 | 1,620,000 | - | 180,000 | - | - | - |
| | J_20000663 | Struc Rehab - 20 Mile Arch - (Str. 081210) - Replace | 4,520,000 | - | 4,520,000 | - | - | - | - |
| | J_20000664 | Struc Rehab - Hydro Canal Bridge North (Str. 020230) | 350,000 | - | 350,000 | - | - | - | - |
| | J_20000681 | Int Improv RR20 - S Grimsby Rd 5 to Griffin St (Phase 2) | 3,600,000 | 400,000 | - | - | 3,000,000 | 200,000 | - |
| | J_20000913 | Rds Equip Prgm - Equipment Upg | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000915 | Rds Fac Prgm - Patrol Yard Imprv | 1,000,000 | 640,000 | - | 360,000 | - | - | - |
| | J_20001038 | Transportation Infrastructure Means Protection | 4,000,000 | 4,000,000 | - | - | - | - | - |
| | J_20000904 | Annual - Guide Rail Improvement Program | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000909 | Annual - Railway Crossing Improvement Program | 100,000 | 100,000 | - | - | - | - | - |
| | J_20000911 | Annual - Storm Sewers & Culvert Program | 1,000,000 | 1,000,000 | - | - | - | - | - |
| | J_20000905 | Annual - Illumination Installation & Upgrade Program | 750,000 | 675,000 | - | 75,000 | - | - | - |
| | J_20000910 | Annual - Traffic Signal Program | 2,100,000 | 1,890,000 | - | 210,000 | - | - | - |
| | J_20000895 | Int Imprv - RR 24 Victoria Ave at RR 63 Canboro Road, WL and RR27 East Main at RR84 Moyer, WE | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000896 | Rds Rehab - RR 43 Bridge St - Victoria Ave to Erie | 500,000 | 500,000 | - | - | - | - | - |
| | J_20000897 | Rds Rehab RR20 - Griffin St South to Industrial Park Rd (Phase 4) | 500,000 | 450,000 | - | 50,000 | - | - | - |
| | J_20000898 | Rds Rehab - RR 72 Louth St -RR 81 St. Paul West to Crestcomb | 500,000 | 300,000 | - | 200,000 | - | - | - |
| | J_20000899 | Struc Rehab - Seventh St Bridge (034205) | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000900 | Rds Rehab - RR 81 Main St - Oakes Rd N to Casablanca Blvd | 250,000 | 225,000 | - | 25,000 | - | - | - |
| | J_20000906 | Annual - Engineering for Future Projects | 400,000 | 400,000 | - | - | - | - | - |
| | J_20000908 | Annual - Miscellaneous Road Properties | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000912 | Rds Rehab - Roads Resurfacing | 8,844,000 | 3,159,600 | - | 884,400 | 4,800,000 | - | - |
| | J_20000914 | Struc Rehab - Engineering Studies for Future Bridge Projects | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000916 | Ann_Prog-2019 Crack Sealing | 250,000 | 250,000 | - | - | - | - | - |
| | J_20000917 | Struc Rehab - Structural Rehabilitation Program- Construction | 1,000,000 | 1,000,000 | - | - | - | - | - |
| | J_20000907 | Annual - Fleet Vehicle & Equipment Replacement Program | 800,000 | 800,000 | - | - | - | - | - |
| | J_20000928 | Int Impr - RR100 Four Mile Creek @ York Rd, NOTL | 250,000 | 125,000 | - | 125,000 | - | - | - |
| | J_20000930 | Rds Fac Prog-Traf Cntrl Cntr | 250,000 | 250,000 | - | - | - | - | - |
| | J_20000936 | Annual - 2019 Survey Equipment Replacement | 30,000 | 30,000 | - | - | - | - | - |
| | J_20000666 | Multi-Use Path- Sir Isaac Brock Way, Merrittville to 406 | 250,000 | 250,000 | - | - | - | - | - |
| Public Works - Levy Total | | | 101,112,000 | 34,680,334 | 17,567,966 | 35,538,700 | 10,300,000 | 3,025,000 | - |
| Waste Management | J_10GL1515 | Mountain Road - End Use Works | 200,000 | 200,000 | - | - | - | - | - |
| | J_20000170 | Mountain Road - Leachate Collection System | 110,000 | 110,000 | - | - | - | - | - |
| | J_20000172 | NR-12 - Cell # 4 | 1,430,000 | 1,430,000 | - | - | - | - | - |
| | J_10GL1218 | Glenridge - Leachate Collection System Upgrades | 910,000 | 910,000 | - | - | - | - | - |
| | J_20000601 | Line 5 - LCS Improvements | 910,000 | 910,000 | - | - | - | - | - |
| | J_20000885 | 2019 Misc. Enhancements & Replacements | 150,000 | 150,000 | - | - | - | - | - |
| | J_20000886 | 2019 Property Acquisition | 110,000 | 110,000 | - | - | - | - | - |
| | J_20000713 | Bridge Street - Reuse Centre | 180,000 | 66,600 | - | 113,400 | - | - | - |
| | J_10GL1216 | Pumping Station Upgrades - NR-12 & Park Rd | 770,000 | 770,000 | - | - | - | - | - |
| | J_20000171 | NR-12 - Drop-Off Depot Improvements | 180,000 | 123,300 | - | 56,700 | - | - | - |
| | J_20000883 | NR-12 - Stormwater Management Pond Upgrades | 605,000 | 605,000 | - | - | - | - | - |
| | J_20000887 | Mountain Road - Constructed Wetland | 110,000 | 110,000 | - | - | - | - | - |
| | J_20000892 | Recycle-2019 Loader Replace | 300,000 | 300,000 | - | - | - | - | - |
| | J_20000894 | Recycle-2019 Build & Equip | 110,000 | 110,000 | - | - | - | - | - |
| | J_10GL1325 | Quarry Road - Site Improvements | 250,000 | 250,000 | - | - | - | - | - |
| Waste Management Total | | | 6,325,000 | 6,154,900 | - | 170,100 | - | - | - |
| Wastewater Operations | J_20000484 | Bender Hill Pump Station Upgrade | 711,000 | - | 711,000 | - | - | - | - |
| | J_20000692 | Mewburn Pump Station Upgrade | 235,000 | 235,000 | - | - | - | - | - |
| | J_20000711 | East Side Pump Station Forcemain Replacement | 400,000 | - | 400,000 | - | - | - | - |
| | J_20000475 | Stevensville-Douglastown Lagoons Upgrade | 4,000,000 | 4,000,000 | - | - | - | - | - |
| | J_20000192 | Riverview Pump Station Upgrade | 1,185,000 | 1,185,000 | - | - | - | - | - |
| | J_10SW1528 | WWTP Upgrade - NOTL Lagoon Decommissioning | 12,000,000 | - | 8,400,000 | 3,600,000 | - | - | - |
| | J_10SW1230 | Lakeside Pump Station Upgrade | 2,000,000 | 2,000,000 | - | - | - | - | - |
| | J_10SW1264 | Woodsview Pump Station Upgrades | 3,000,000 | 3,000,000 | - | - | - | - | - |
| | J_20000724 | South Niagara Falls Wastewater Treatment Plant | 2,400,000 | - | 1,440,000 | 960,000 | - | - | - |
| | J_20000864 | 19-Replacement of Vac-Truck | 500,000 | 500,000 | - | - | - | - | - |
| | J_20000870 | 19-Generator Replacement Program | 360,000 | - | 360,000 | - | - | - | - |
| | J_20000872 | 19-Master Meter Replacement | 600,000 | 600,000 | - | - | - | - | - |
| | J_20000873 | 19-Security Improvement Program | 240,000 | 240,000 | - | - | - | - | - |
| | J_20000874 | 19-Chemical System Upgrade | 900,000 | 900,000 | - | - | - | - | - |
| | J_20000875 | 19-Boiler Replacement Program | 900,000 | 900,000 | - | - | - | - | - |
| | J_20000877 | 19-Odour Control System Program | 240,000 | 240,000 | - | - | - | - | - |
| | J_20000879 | 19-Out Station Kiosk Program | 300,000 | 300,000 | - | - | - | - | - |
| | J_20000880 | 19-WWTP Digester & Sludge Management Program | 2,050,000 | 2,050,000 | - | - | - | - | - |
| | J_20000866 | 19-Decomission Old Central PS | 90,000 | 63,000 | - | 27,000 | - | - | - |
| | J_20000881 | 19-Dain City Pump Station Forcemain Replacement | 5,775,000 | - | 2,775,000 | 3,000,000 | - | - | - |
| | J_20000857 | 19-Dain City Pump Station Upgrade | 295,000 | 295,000 | - | - | - | - | - |
| | J_20000860 | 19-Welland WWTP Ugrade - Phase 2 | 2,400,000 | 2,400,000 | - | - | - | - | - |
| | J_20000861 | 19-Seaway WWTP Electrical Upgrade | 295,000 | - | 295,000 | - | - | - | - |
| | J_20000869 | 19-Seaway WWTP Influent Channel | 295,000 | - | 295,000 | - | - | - | - |
| | J_20000862 | 19-Replace Carleton Pump Station Forcemain | 150,000 | - | 150,000 | - | - | - | - |
| | J_20000854 | 19-Hunters Pointe Pump Station Upgrade | 170,000 | 34,000 | - | 136,000 | - | - | - |
| | J_20000858 | 19-Renown Pump Station Upgrade | 300,000 | - | 300,000 | - | - | - | - |
| | J_20000856 | 19-Lake Street PS Upgrade | 840,000 | 168,000 | - | 672,000 | - | - | - |
| | J_20000859 | 19-Decomissioning of Biggar Lagoons | 340,000 | 238,000 | - | 102,000 | - | - | - |
| | J_20000868 | 19-Garner Rd W&WW Storage Facility Upgrade | 590,000 | 590,000 | - | - | - | - | - |

| | | | | | | | | | |
|------------------------------------|------------|---|--------------------|--------------------|-------------------|-------------------|-------------------|------------------|------------------|
| | J_20000853 | Biosolids Management - Replacement of Rotating Assembly and Components for Centrifuge | 1,560,000 | 1,560,000 | - | - | - | - | - |
| | J_10SW1513 | WWTP Upgrade Prgm - Garner Road Access & Lagoon Improvements | 2,300,000 | - | 2,300,000 | - | - | - | - |
| | J_20000684 | MCC Upgrade Wastewater Program | 1,800,000 | - | 1,800,000 | - | - | - | - |
| | J_20000197 | Tupper Dr Trunk Sewer Rehab | 2,660,000 | 2,660,000 | - | - | - | - | - |
| | J_10SW1527 | Master Meter Replacement - Merrit Meadows | 510,000 | - | - | 510,000 | - | - | - |
| Wastewater Operations Total | | | 52,391,000 | 24,158,000 | 19,226,000 | 6,007,000 | 3,000,000 | - | - |
| Water Operations | J_10CW1302 | Grimsby System Storage | 11,550,000 | - | 1,155,000 | 10,395,000 | - | - | - |
| | J_20000458 | WTP Upgrade - Rosehill New Intake | 1,750,000 | 1,750,000 | - | - | - | - | - |
| | J_20000468 | Niagara Street Transmission Main Crossing Welland River | 3,555,000 | - | 3,555,000 | - | - | - | - |
| | J_20000625 | Decommissioning of St. David's Standpipe | 325,000 | 325,000 | - | - | - | - | - |
| | J_20000614 | New Fort Erie ET | 300,000 | - | 150,000 | 150,000 | - | - | - |
| | J_20000619 | New Pelham ET | 1,185,000 | - | 592,500 | 592,500 | - | - | - |
| | J_20000623 | New Barrick Road Watermain | 1,700,000 | - | 850,000 | 850,000 | - | - | - |
| | J_20000615 | DeCew Falls Bypass Channel Weir Upgrade (Middle Res) | 150,000 | - | 150,000 | - | - | - | - |
| | J_10CW1408 | Welland WTP - Transmission Main Crossing (Welland Canal) | 4,620,000 | - | 4,620,000 | - | - | - | - |
| | J_20000836 | 19-Generator Replacement Program | 150,000 | - | 150,000 | - | - | - | - |
| | J_20000837 | 19-Master Meter Replacement | 115,000 | 115,000 | - | - | - | - | - |
| | J_20000838 | 19-Reservoir & Storage Program | 600,000 | 600,000 | - | - | - | - | - |
| | J_20000839 | 19-Security Improvement Program | 150,000 | 150,000 | - | - | - | - | - |
| | J_20000840 | 19-Hardware & Software Upgrade | 230,000 | 230,000 | - | - | - | - | - |
| | J_20000842 | 19-Optimize Maintenance Syst. | 340,000 | 340,000 | - | - | - | - | - |
| | J_20000845 | 19-Four new trucks | 345,000 | 345,000 | - | - | - | - | - |
| | J_20000464 | Niagara Falls WTP Raw Water Intake | 4,800,000 | - | - | - | - | - | 4,800,000 |
| | J_20000849 | 19-Lundy's Lane Watermain Repl | 1,000,000 | - | 1,000,000 | - | - | - | - |
| | J_20000847 | Decomissioning of Ridgeway Standpipe | 425,000 | 297,500 | - | 127,500 | - | - | - |
| | J_20000833 | 19-St. Davids Rd Main Phase 1 | 775,000 | - | 775,000 | - | - | - | - |
| | J_20000844 | 19-DeCew High Lift Pump Sizing | 90,000 | - | 90,000 | - | - | - | - |
| | J_20000834 | 19-DeCew WTP Valve House Rehab | 90,000 | - | 90,000 | - | - | - | - |
| | J_20000851 | DeCew Falls Low Lift Booster Station Upgrade | 361,500 | - | 361,500 | - | - | - | - |
| | J_20000852 | 19-DeCew UV Upgrade | 600,000 | 600,000 | - | - | - | - | - |
| | J_20000848 | Watermain - Port Robinson System Interconnect | 440,000 | - | 220,000 | 220,000 | - | - | - |
| | J_20000841 | 19-House Demolition | 60,000 | 60,000 | - | - | - | - | - |
| | J_20000460 | WTP Upgrade - Niagara Falls Lead Abatement & Filter Repairs - Plant 1 & 2 | 5,200,000 | 5,200,000 | - | - | - | - | - |
| | J_20000612 | 2018 WTP Upgrade - GAC Replacement | 500,000 | 500,000 | - | - | - | - | - |
| | J_10CW1516 | WTP Upgrade Prgm - DeCew WTP Waste Optimization | 600,000 | 600,000 | - | - | - | - | - |
| | J_20000185 | WTP Upg - DeCew Plant 3 | 21,000,000 | 21,000,000 | - | - | - | - | - |
| | J_20000982 | 19-St.Davids Rd Main Phase 2 | 125,000 | - | 125,000 | - | - | - | - |
| Water Operations Total | | | 63,131,500 | 32,112,500 | 13,884,000 | 12,335,000 | - | - | 4,800,000 |
| Grand Total | | | 249,255,706 | 111,834,751 | 60,884,804 | 54,725,700 | 13,300,000 | 3,025,000 | 5,485,451 |
| | J_20000912 | Rds Rehab - Roads Resurfacing | 10000000 | 4,200,000 | - | 1,000,000 | 4,800,000 | - | - |
| | J_20000929 | Int Imprv- RR46 Geneva St @ Carleton SG | 10000000 | 600,000 | - | 600,000 | - | - | - |
| | J_20000927 | Thorold Yard Upgrades | 15000000 | 960,000 | - | 640,000 | - | - | - |

2019 Capital Projects for Future Initiation

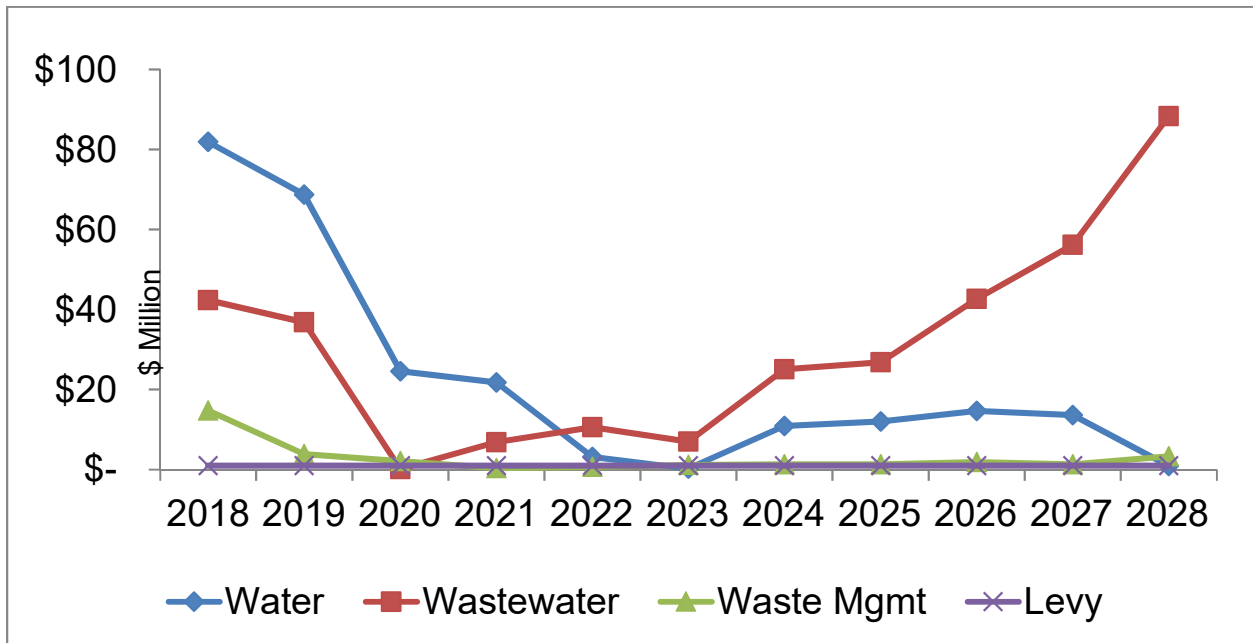
| Program | Project ID | Project Name | Gross Capital Request | Reserves | Debt | Development Charges | Federal Gas Tax | Local Area Municipality | Other External |
|--------------------------------|------------|---|-----------------------|------------|------|---------------------|-----------------|-------------------------|----------------|
| Corporate Services | J_20000946 | 2019-Environmental Centre Expansion | 21,177,000 | 21,177,000 | - | - | - | - | - |
| Corporate Services Total | | | 21,177,000 | 21,177,000 | - | - | - | - | - |
| Niagara Regional Housing | J_20001031 | NRH SIF Property Acquisition & Intensification | 1,101,260 | 275,315 | - | - | - | - | 825,945 |
| Niagara Regional Housing Total | | | 1,101,260 | 275,315 | - | - | - | - | 825,945 |
| Public Works - Levy | J_10RC1236 | Cpcty Imprv-New Escarpment Crossing | 1,000,000 | 150,000 | - | 850,000 | - | - | - |
| | J_20000901 | Cpcty Imprv - New West St. Cath Grade Separation - Louth/Vansickle/First/St. Paul W | 250,000 | - | - | 250,000 | - | - | - |
| | J_20000903 | Annual - Development Projects | 1,000,000 | - | - | - | - | - | 1,000,000 |
| Public Works - Levy Total | | | 2,250,000 | 150,000 | - | 1,100,000 | - | - | 1,000,000 |
| Waste Management | J_20000893 | Recycle-2019 Facility Improve | 500,000 | 450,000 | - | 50,000 | - | - | - |
| Waste Management Total | | | 500,000 | 450,000 | - | 50,000 | - | - | - |
| Grand Total | | | 25,028,260 | 22,052,315 | - | 1,150,000 | - | - | 1,825,945 |

Capital Request Summary - 10 Year

CSD 1-2019 **REVISED**
February 14, 2019
Appendix 4 **REVISED**

| Operating Unit / Division | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |
|---------------------------|------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|
| Community Services | \$1,807,816 | \$1,796,000 | \$2,328,000 | \$1,693,000 | \$2,335,000 | \$2,413,000 | \$1,827,000 | \$1,967,000 | \$1,991,000 | \$2,820,896 | \$20,978,712 |
| Corporate Administration | 26,776,500 | 134,452,000 | 58,300,000 | 8,000,000 | 7,000,000 | 7,000,000 | 7,100,000 | 7,200,000 | 7,200,000 | 105,480,000 | 368,508,500 |
| Planning | 685,000 | 3,000,000 | - | - | - | - | - | - | - | - | 3,685,000 |
| Public Health and EMS | 2,201,231 | 3,476,738 | 4,461,962 | 5,077,183 | 2,726,612 | 3,128,841 | 3,202,935 | 5,257,264 | 2,951,372 | 2,831,136 | 35,315,274 |
| Niagara Regional Housing | 13,915,419 | 11,447,213 | 9,205,636 | 22,707,994 | 6,962,042 | 10,555,401 | 5,339,133 | 6,818,055 | 15,200,049 | 6,186,115 | 108,337,057 |
| Niagara Regional Police | 3,088,500 | 7,918,000 | 9,829,000 | 3,414,000 | 27,864,000 | 2,914,000 | 37,964,000 | 3,164,000 | 3,164,000 | 3,164,000 | 102,483,500 |
| | 403,018,000 | 403,765,000 | | | | | | | | | |
| Transportation | 103,362,000 | 106,265,000 | 92,850,000 | 89,330,000 | 110,210,000 | 68,930,000 | 83,300,000 | 78,880,000 | 58,530,000 | 54,230,000 | 845,887,000 |
| Properties | 100,000 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 | 2,350,000 |
| Waste Management | 6,825,000 | 8,429,000 | 7,788,000 | 3,783,000 | 1,915,000 | 2,310,000 | 3,600,000 | 1,902,000 | 4,963,000 | 2,440,000 | 43,955,000 |
| Wastewater | 52,391,000 | 111,040,000 | 63,515,000 | 47,015,000 | 44,040,000 | 50,800,000 | 125,790,000 | 60,515,000 | 47,740,000 | 34,890,000 | 637,736,000 |
| Water | 63,131,500 | 72,324,870 | 75,045,990 | 63,176,570 | 67,407,080 | 57,965,860 | 35,895,250 | 23,294,940 | 28,607,490 | 42,540,000 | 529,389,550 |
| Grand Total | \$274,283,966 | \$460,398,821 | \$323,573,588 | \$244,446,747 | \$270,709,734 | \$206,267,102 | \$304,268,318 | \$189,248,259 | \$170,596,911 | \$254,832,147 | \$2,698,625,593 |

Forecasted Capital Reserve Balances



Forecasted Capital Reserve Amounts (in \$ millions)

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|--------------|------------|------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|
| Water | 82 | 69 | 25 | 22 | 3 | 1 | 11 | 12 | 15 | 14 | 1 |
| Wastewater | 42 | 37 | 1 | 7 | 11 | 7 | 25 | 27 | 43 | 56 | 88 |
| Waste Mgmt | 15 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 3 |
| Levy | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total | 140 | 110 | 28 | 30 | 15 | 9 | 38 | 41 | 60 | 72 | 93 |

Projects Allocated 1% Infrastructure Deficit Reduction Funding

CSD 1-2019
January 10, 2019
Appendix 6

| Project ID | Project Name | Gross Capital Request | Allocation | Growth % per DC Study |
|--------------------------------|--|-----------------------|--------------|-----------------------|
| Moving People and Goods | | | | |
| J_10RC1329 | Cpcty Imprv - Casablanca Blvd Widening - Livingston to QEW | \$ 10,000,000 | \$ 1,500,000 | 85% |
| J_10RC0816 | Cpcty Imprv-Recon RR 57 (Thorold Stone Rd) ext east of Stanley Ave | 6,000,000 | 900,000 | 85% |
| J_10RC0627 | Rd Rehab - RR38 Martindale Rd - QEW to Fourth Reconstruction | 16,100,000 | 500,000 | 85% |
| J_20000898 | Rds Rehab - RR 72 Louth St -RR 81 St. Paul West to Crestcomb | 500,000 | 300,000 | 40% |
| J_20000319 | St. Davids Road East (from Hwy 406 to Collier Rd) | 5,168,000 | 258,576 | 10% |
| J_10RC1554 | Cpcty Imprv - Glendale Ave Interchange at QEW | 6,000,000 | 250,000 | 85% |
| | | 43,768,000 | 3,708,576 | |

| Department | Gross Capital Request | Development Charges | Project Applied against AMP | New Project/ Replacement in excess of AMP and DCs |
|---|------------------------|-----------------------|-----------------------------|---|
| Community Services | 1,807,816 | - | 1,686,682 | 121,134 |
| Corporate Services | 26,776,500 | - | 23,318,900 | 3,457,600 |
| Enterprise Resource Management Services | 100,000 | - | - | 100,000 |
| Niagara Regional Housing | 13,915,419 | 674,900 | 12,905,419 | 335,100 |
| Niagara Regional Police Services | 3,088,500 | - | 1,400,000 | 1,688,500 |
| Planning & Development | 685,000 | - | - | 685,000 |
| Public Health Emergency Services | 2,201,231 | - | 2,201,231 | - |
| | 103,018,000 | 37,794,300 | 38,538,700 | 26,685,000 |
| Public Works - Levy | 103,362,000 | 36,638,700 | 37,498,300 | 29,225,000 |
| Waste Management | 6,825,000 | 220,100 | 1,908,300 | 4,696,600 |
| Wastewater Operations | 52,391,000 | 6,007,000 | 39,429,500 | 6,954,500 |
| Water Operations | 63,131,500 | 12,335,000 | 42,436,100 | 8,360,400 |
| | 274,283,966 | 55,875,700 | 162,784,432 | 55,623,834 |
| | % of Gross | 20% | 60% | 20% |

| Project ID | Project Name | Gross Capital Request |
|--|--|-----------------------|
| Moving People and Goods | | |
| J_10RC0627 | Rd Rehab - RR38 Martindale Rd - QEW to Fourth Reconstruction | 16,100,000 |
| J_10RC1329 | Cpcty Imprv - Casablanca Blvd Widening - Livingston to QEW | 10,000,000 |
| J_10RC1554 | Cpcty Imprv - Glendale Ave Interchange at QEW | 6,000,000 |
| J_10RC1566 | Struc Rehab - St. Paul W CNR Bridge - Bridge Replacement | 750,000 |
| J_10RC1567 | Rds Rehab - Riverside Dr. Reconstruction - Prince Charles Dr. to Lincoln | 3,950,000 |
| J_20000319 | St. Davids Road East (from Hwy 406 to Collier Rd) | 5,168,000 |
| J_10RC0816 | Cpcty Imprv-Recon RR 57 (Thorold Stone Rd) ext east of Stanley Ave | 6,000,000 |
| J_20000141 | Int Imprv RR 20 - Industrial Park Dr to Townline Rd (Phase 3) | 3,000,000 |
| J_20000658 | Struc Rehab - Mewburn Road @ CNR Tracks | 2,000,000 |
| J_20000660 | Rd Rehab - RR56 Burleigh Hill - Glendale Ave to St. David's Rd | 1,800,000 |
| J_20000663 | Struc Rehab - 20 Mile Arch - (Str. 081210) - Replace | 4,520,000 |
| J_20000664 | Struc Rehab - Hydro Canal Bridge North (Str. 020230) | 350,000 |
| J_20000681 | Int Improv RR20 - S Grimsby Rd 5 to Griffin St (Phase 2) | 3,600,000 |
| J_10RC1236 | Cpcty Imprv-New Escarpment Crossing | 1,000,000 |
| J_20000895 | Int Imprv - RR 24 Victoria Ave at RR 63 Canboro Road, WL and RR27 East Main at RR84 Moye | 200,000 |
| J_20000896 | Rds Rehab - RR 43 Bridge St - Victoria Ave to Erie | 500,000 |
| J_20000897 | Rds Rehab RR20 - Griffin St South to Industrial Park Rd (Phase 4) | 500,000 |
| J_20000898 | Rds Rehab - RR 72 Louth St -RR 81 St. Paul West to Crestcomb | 500,000 |
| J_20000899 | Struc Rehab - Seventh St Bridge (034205) | 200,000 |
| J_20000900 | Rds Rehab - RR 81 Main St - Oakes Rd N to Casablanca Blvd | 250,000 |
| J_20000901 | Cpcty Imprv - New West St. Cath Grade Separation - Louth/Vansickle/First/St. Paul W | 250,000 |
| J_20000903 | Annual - Development Projects | 1,000,000 |
| J_20000912 | Rds Rehab - Roads Resurfacing | 8,844,000 |
| J_20000914 | Struc Rehab - Engineering Studies for Future Bridge Projects | 200,000 |
| J_20000928 | Int Impr - RR100 Four Mile Creek @ York Rd, NOTL | 250,000 |
| J_20001038 | Transportation Infrastructure Means Protection | 4,000,000 |
| J_20000666 | Multi-Use Path- Sir Isaac Brock Way, Merrittville to 406 | 250,000 |
| J_20000936 | Annual - 2019 Survey Equipment Replacement | 30,000 |
| J_20000494 | NRT - Capital Acquisition | 13,900,000 |
| J_20000885 | 2019 Misc. Enhancements & Replacements | 150,000 |
| | | 95,262,000 |
| Fostering Innovation, Investment and Entrepreneurship | | |
| J_20000504 | iDarts Upgrade | 20,000 |
| J_20000937 | Online Development Planning Portal Phase 1 | 750,000 |
| | | 770,000 |
| Positioning Niagara Globally | | |
| J_20000515 | Civic Park and International Plaza | 685,000 |
| | | 685,000 |
| Building a Labour Ready Workforce | | |
| J_20000680 | NRH - Multi-Residential Intensification - Niagara Falls | 810,000 |
| J_20000918 | NRH - 2019 Annual Unit Capital Program | 5,355,404 |
| J_20000919 | NRH - 2019 - Annual Emergency Capital Program | 200,000 |
| J_20000920 | NRH - 2019 - Annual Grounds Capital Program | 912,842 |
| J_20000921 | NRH - 2019 Annual Building Capital Program | 5,535,913 |
| J_20001031 | NRH - Multi-Residential Intensification - Thorold | 1,101,260 |
| | | 13,915,419 |

| Project ID | Project Name | Gross Capital Request |
|---|---|-----------------------|
| Doing Business Differently and Organizational Excellence | | |
| J_20000922 | LTC Homes - 2019 Bed Replacement | 75,000 |
| J_20000923 | LTC Homes - 2019 Capital Improvements/Replacements | 327,389 |
| J_20000924 | LTC Homes - 2019 Machinery/Equipment | 434,277 |
| J_20000925 | LTC Homes - 2019 Resident Care Equipment | 469,300 |
| J_20000926 | LTC Homes - 2019 Roof Replacement | 501,850 |
| J_20000931 | Print Shop-Printing Press | 40,000 |
| J_20000933 | 2019 Annual Application Lifecycle Replacement | 300,000 |
| J_20000938 | Project/Portfolio Management Software | 250,000 |
| J_20000981 | Asset Management Software | 250,000 |
| J_20000935 | 2019 IT Asset Replacement | 2,288,000 |
| J_20000939 | 2019 Annual - Code and Legislative Compliance Program | 100,000 |
| J_20000941 | 2019 Annual - Energy Conservation Program | 200,000 |
| J_20000942 | Bldg Int-2019 Region HQ-Space Acc | 100,000 |
| J_20000946 | 2019-Environmental Centre Expansion | 21,177,000 |
| J_20000943 | Bldg Int-NRHQ-Emergency PA System & Fire Alarm System | 700,000 |
| J_20000977 | 19-Bldg Ext-NR-SAEO Niagara Falls Roof | 290,000 |
| J_20000976 | 19-Bldg Site-250 Thorold Road Life Cycle Renewal | 220,000 |
| J_20000979 | 19-Bldg Ext-NRPS-Gun Range Roof Design | 71,500 |
| J_20000980 | 19-Bldg Ext-NR Thorold Patrol Yard Roof Design | 20,000 |
| J_20000945 | 2019 Misc Levy Properties | 100,000 |
| J_20001009 | NRPS - RTOC CCTV Equipment (2019) | 45,000 |
| J_20000997 | NRPS - Annual Vehicle Replacements (2019) | 1,400,000 |
| J_20001000 | NRPS - CEW Replacements (2019) | 24,000 |
| J_20001001 | NRPS - Armoured Rescue Vehicle (2019) | 300,000 |
| J_20001002 | NRPS - Bomb Suit Replacements (2019) | 30,000 |
| J_20001003 | NRPS - Forensic Scanner (2019) | 75,000 |
| J_20001004 | NRPS - Drug & Expl. Detection Equip. (2019) | 40,000 |
| J_20001005 | NRPS - Fraud Unit Scanner (2019) | 6,000 |
| J_20001006 | NRPS - SIS Investigative Software (2019) | 8,500 |
| J_20001007 | NRPS - Respiratory Protection Systems (2019) | 36,000 |
| J_20000999 | NRPS - NG 911 Equipment Replacement (2019) | 400,000 |
| J_20000998 | NRPS - Annual IT & Network Equipment Replacement (2019) | 700,000 |
| J_20001008 | NRPS - Prisoner Restraint Systems (2019) | 24,000 |
| J_20000891 | 2019 Annual - EMS - Ambulance and Equipment Replacement | 2,201,231 |
| J_20000913 | Rds Equip Prgm - Equipment Upg | 200,000 |
| J_20000915 | Rds Fac Prgm - Patrol Yard Imprv | 1,000,000 |
| J_20000904 | Annual - Guide Rail Improvement Program | 200,000 |
| J_20000909 | Annual - Railway Crossing Improvement Program | 100,000 |
| J_20000911 | Annual - Storm Sewers & Culvert Program | 1,000,000 |
| J_20000905 | Annual - Illumination Installation & Upgrade Program | 750,000 |
| J_20000910 | Annual - Traffic Signal Program | 2,100,000 |
| J_20000906 | Annual - Engineering for Future Projects | 400,000 |
| J_20000908 | Annual - Miscellaneous Road Properties | 200,000 |
| J_20000916 | Ann_Prog-2019 Crack Sealing | 250,000 |
| J_20000917 | Struc Rehab - Structural Rehabilitation Program- Construction | 1,000,000 |
| J_20000930 | Rds Fac Prog-Traf Cntrl Cntr | 250,000 |
| J_20000907 | Annual - Fleet Vehicle & Equipment Replacement Program | 800,000 |
| J_20000886 | 2019 Property Acquisition | 110,000 |
| J_20000713 | Bridge Street - Reuse Centre | 180,000 |
| J_20000172 | NR-12 - Cell # 4 | 1,430,000 |
| J_10GL1216 | Pumping Station Upgrades - NR-12 & Park Rd | 770,000 |
| J_20000171 | NR-12 - Drop-Off Depot Improvements | 180,000 |
| J_20000883 | NR-12 - Stormwater Management Pond Upgrades | 605,000 |
| J_10GL1218 | Glenridge - Leachate Collection System Upgrades | 910,000 |

| Project ID | Project Name | Gross Capital Request |
|------------|---|-----------------------|
| J_20000601 | Line 5 - LCS Improvements | 910,000 |
| J_10GL1515 | Mountain Road - End Use Works | 200,000 |
| J_20000170 | Mountain Road - Leachate Collection System | 110,000 |
| J_20000887 | Mountain Road - Constructed Wetland | 110,000 |
| J_10GL1325 | Quarry Road - Site Improvements | 250,000 |
| J_20000892 | Recycle-2019 Loader Replace | 300,000 |
| J_20000893 | Recycle-2019 Facility Improve | 500,000 |
| J_20000894 | Recycle-2019 Build & Equip | 110,000 |
| J_20000864 | 19-Replacement of Vac-Truck | 500,000 |
| J_20000870 | 19-Generator Replacement Program | 360,000 |
| J_20000872 | 19-Master Meter Replacement | 600,000 |
| J_20000873 | 19-Security Improvement Program | 240,000 |
| J_20000874 | 19-Chemical System Upgrade | 900,000 |
| J_20000875 | 19-Boiler Replacement Program | 900,000 |
| J_20000877 | 19-Odour Control System Program | 240,000 |
| J_20000879 | 19-Out Station Kiosk Program | 300,000 |
| J_20000880 | 19-WWTP Digester & Sludge Management Program | 2,050,000 |
| J_20000684 | MCC Upgrade Wastewater Program | 1,800,000 |
| J_20000484 | Bender Hill Pump Station Upgrade | 711,000 |
| J_20000692 | Mewburn Pump Station Upgrade | 235,000 |
| J_20000866 | 19-Decommission Old Central PS | 90,000 |
| J_10SW1513 | WWTP Upgrade Prgm - Garner Road Access & Lagoon Improvements | 2,300,000 |
| J_20000475 | Stevensville-Douglastown Lagoons Upgrade | 4,000,000 |
| J_20000881 | 19-Dain City Pump Station Forcemain Replacement | 5,775,000 |
| J_20000857 | 19-Dain City Pump Station Upgrade | 295,000 |
| J_20000860 | 19-Welland WWTP Ugrade - Phase 2 | 2,400,000 |
| J_20000711 | East Side Pump Station Forcemain Replacement | 400,000 |
| J_20000861 | 19-Seaway WWTP Electrical Upgrade | 295,000 |
| J_20000869 | 19-Seaway WWTP Influent Channel | 295,000 |
| J_20000192 | Riverview Pump Station Upgrade | 1,185,000 |
| J_20000862 | 19-Replace Carleton Pump Station Forcemain | 150,000 |
| J_10SW1528 | WWTP Upgrade - NOTL Lagoon Decommissioning | 12,000,000 |
| J_20000854 | 19-Hunters Pointe Pump Station Upgrade | 170,000 |
| J_20000858 | 19-Renown Pump Station Upgrade | 300,000 |
| J_20000856 | 19-Lake Street PS Upgrade | 840,000 |
| J_20000859 | 19-Decommissioning of Biggar Lagoons | 340,000 |
| J_20000197 | Tupper Dr Trunk Sewer Rehab | 2,660,000 |
| J_10SW1230 | Lakeside Pump Station Upgrade | 2,000,000 |
| J_10SW1264 | Woodsvew Pump Station Upgrades | 3,000,000 |
| J_20000724 | South Niagara Falls Wastewater Treatment Plant | 2,400,000 |
| J_10SW1527 | Master Meter Replacement - Merrit Meadows | 510,000 |
| J_20000868 | 19-Garner Rd W&WW Storage Facility Upgrade | 590,000 |
| J_20000853 | Biosolids Management - Replacement of Rotating Assembly and Components for Centrifuge | 1,560,000 |
| J_20000836 | 19-Generator Replacement Program | 150,000 |
| J_20000837 | 19-Master Meter Replacement | 115,000 |
| J_20000838 | 19-Reservoir & Storage Program | 600,000 |
| J_20000839 | 19-Security Improvement Program | 150,000 |
| J_20000840 | 19-Hardware & Software Upgrade | 230,000 |
| J_20000842 | 19-Optimize Maintenance Syst. | 340,000 |
| J_20000845 | 19-Four new trucks | 345,000 |
| J_20000612 | 2018 WTP Upgrade - GAC Replacement | 500,000 |
| J_20000625 | Decommissioning of St. David's Standpipe | 325,000 |
| J_20000464 | Niagara Falls WTP Raw Water Intake | 4,800,000 |
| J_20000849 | 19-Lundy's Lane Watermain Repl | 1,000,000 |
| J_20000460 | WTP Upgrade - Niagara Falls Lead Abatement & Filter Repairs - Plant 1 & 2 | 5,200,000 |
| J_20000458 | WTP Upgrade - Rosehill New Intake | 1,750,000 |

| Project ID | Project Name | Gross Capital Request |
|------------|--|-----------------------|
| J_20000614 | New Fort Erie ET | 300,000 |
| J_20000847 | Decomissioning of Ridgeway Standpipe | 425,000 |
| J_20000468 | Niagara Street Transmission Main Crossing Welland River | 3,555,000 |
| J_20000619 | New Pelham ET | 1,185,000 |
| J_20000623 | New Barrick Road Watermain | 1,700,000 |
| J_10CW1408 | Welland WTP – Transmission Main Crossing (Welland Canal) | 4,620,000 |
| J_20000615 | DeCew Falls Bypass Channel Weir Upgrade (Middle Res) | 150,000 |
| J_20000833 | 19-St. Davids Rd Main Phase 1 | 775,000 |
| J_20000844 | 19-DeCew High Lift Pump Sizing | 90,000 |
| J_20000834 | 19-DeCew WTP Valve House Rehab | 90,000 |
| J_20000851 | DeCew Falls Low Lift Booster Station Upgrade | 361,500 |
| J_20000852 | 19-DeCew UV Upgrade | 600,000 |
| J_20000848 | Watermain - Port Robinson System Interconnect | 440,000 |
| J_20000841 | 19-House Demolition | 60,000 |
| J_10CW1516 | WTP Upgrade Prgm - DeCew WTP Waste Optimization | 600,000 |
| J_20000185 | WTP Upg - DeCew Plant 3 | 21,000,000 |
| J_20000982 | 19-St.Davids Rd Main Phase 2 | 125,000 |
| J_10CW1302 | Grimsby System Storage | 11,550,000 |
| | | 163,651,547 |
| | | \$ 274,283,966 |

| TREASURER'S REPORT | | | |
|---|--|----------------------------|-----------------------|
| PROJECT IDENTIFICATION AND FINANCING INFORMATION | | | |
| Project ID | Description | Long-term Financing | Term (min-max) |
| J_10SW1528 | WWTP Upgrade - NOTL Lagoon Decommissioning | \$ 8,400,000 | 1 - 30 |
| J_10CW1408 | Welland WTP – Transmission Main Crossing (Welland Canal) | 4,620,000 | 1 - 30 |
| J_20000663 | Struc Rehab - 20 Mile Arch - (Str. 081210) - Replace | 4,520,000 | 1 - 30 |
| J_20000468 | Niagara Street Transmission Main Crossing Welland River | 3,555,000 | 1 - 30 |
| J_20000881 | 19-Dain City Pump Station Forcemain Replacement | 2,775,000 | 1 - 30 |
| J_10SW1513 | WWTP Upgrade Prgm - Garner Road Access & Lagoon Improvements | 2,300,000 | 1 - 30 |
| J_20000684 | MCC Upgrade Wastewater Program | 1,800,000 | 1 - 30 |
| J_20000724 | South Niagara Falls Wastewater Treatment Plant | 1,440,000 | 1 - 30 |
| J_10CW1302 | Grimsby System Storage | 1,155,000 | 1 - 30 |
| J_20000849 | 19-Lundy's Lane Watermain Repl | 1,000,000 | 1 - 30 |
| J_20000623 | New Barrick Road Watermain | 850,000 | 1 - 30 |
| J_20000833 | 19-St. Davids Rd Main Phase 1 | 775,000 | 1 - 30 |
| J_20000484 | Bender Hill Pump Station Upgrade | 711,000 | 1 - 30 |
| J_20000619 | New Pelham ET | 592,500 | 1 - 30 |
| J_10RC1566 | Struc Rehab - St. Paul W CNR Bridge - Bridge Replacement | 562,500 | 1 - 30 |
| J_20000711 | East Side Pump Station Forcemain Replacement | 400,000 | 1 - 30 |
| J_20000851 | DeCew Falls Low Lift Booster Station Upgrade | 361,500 | 1 - 30 |
| J_20000870 | 19-Generator Replacement Program | 360,000 | 1 - 30 |
| J_20000664 | Struc Rehab - Hydro Canal Bridge North (Str. 020230) | 350,000 | 1 - 30 |
| J_20000858 | 19-Renown Pump Station Upgrade | 300,000 | 1 - 30 |
| J_20000658 | Struc Rehab - Mewburn Road @ CNR Tracks | 300,000 | 1 - 30 |
| J_20000861 | 19-Seaway WWTP Electrical Upgrade | 295,000 | 1 - 30 |
| J_20000869 | 19-Seaway WWTP Influent Channel | 295,000 | 1 - 30 |
| J_20000848 | Watermain - Port Robinson System Interconnect | 220,000 | 1 - 30 |
| J_20000862 | 19-Replace Carleton Pump Station Forcemain | 150,000 | 1 - 30 |
| J_20000836 | 19-Generator Replacement Program | 150,000 | 1 - 30 |
| J_20000614 | New Fort Erie ET | 150,000 | 1 - 30 |
| J_20000615 | DeCew Falls Bypass Channel Weir Upgrade (Middle Res) | 150,000 | 1 - 30 |
| J_20000982 | 19-St.Davids Rd Main Phase 2 | 125,000 | 1 - 30 |
| J_20000844 | 19-DeCew High Lift Pump Sizing | 90,000 | 1 - 30 |
| J_20000834 | 19-DeCew WTP Valve House Rehab | 90,000 | 1 - 30 |
| J_20000494 | NRT - Capital Acquisition | 11,835,466 | 1 - 10 |
| J_20000921 | NRH - 2019 Annual Building Capital Program | 4,786,801 | 1 - 10 |
| J_20000918 | NRH - 2019 Annual Unit Capital Program | 4,630,719 | 1 - 10 |
| J_20000920 | NRH - 2019 Grounds Capital Program | 789,318 | 1 - 10 |
| | TOTAL | \$ 60,884,804 | |

TREASURER'S VERIFICATION REPORT

(REQUIRED ONLY ON PROJECTS INVOLVING DEBENTURE FINANCING)

This confirms that I have checked the "Debt Repayment Limit" for Regional Niagara and passage of the by-law to approve these projects will not cause the Region to exceed its limit.

DATE_____

SIGNATURE