## Appendix A: Lambton Area Water Supply System 2020 Budget 2020 Capital Plan with Forecast for 2020 to 2025 (\$000's)

| No. |      |          | Description                                       | Prev.      | 2019  | 2020 | 2021  | 2022  | 2023 | 2024  | 2025 |
|-----|------|----------|---|------------|-------|------|-------|-------|------|-------|------|
| 1   | WTP  | MM       | Filter Core Sampling                              |            |       | 15   |       |       |      |       | 15   |
| 2   | WTP  | MM       | VFD Flocc Mixers                                  |            |       | 45   |       |       |      |       |      |
| 3   | WTP  | MM       | Replace 7 Chlorine On-Line Analyzers              |            |       | 20   | 15    |       |      |       |      |
| 4   | WTP  |          | Electrical Upgrade (Reliability Study)            |            | 500   | 90   | 696   | 677   | 282  | 16    |      |
| 12  | WTP  | MM       | Chemical Feed Pumps (3)                           |            |       | 16   |       |       |      |       |      |
| 13  | WTP  |          | Main Plant HVAC Rehab                             |            |       | 111  | 738   |       |      |       |      |
| 14  | WTP  | MM       | Gearbox Refurb at Floc Tanks 2/yr                 | <u> </u>   |       | 42   | 43    |       |      |       |      |
| 15  | WTP  | MM       | Lab pH meter replacement                          |            |       | 3    |       |       |      |       |      |
| 16  | WTP  |          | Radio PLC Upgrade                                 | 352        | 160   |      |       |       |      |       |      |
| 17  | WTP  | 1        | PLC conversion/upgrade construction               |            | 150   | 150  |       |       |      |       |      |
| 18  | WTP  | MM       | Sluice gate inspection & Maintenance              | <u>   </u> |       |      | 15    |       |      |       |      |
| 19  | WTP  | MM       | Vibration Monitoring Program                      |            | 2     | 2    | 2     | 2     | 2    | 2     | 2    |
| 20  | WTP  |          | Admin HVAC Replacement                            |            | 250   |      |       |       |      |       |      |
| 21  | WTP  | MM       | Security Camera Upgrades                          |            |       |      | 45    |       |      |       |      |
| 22  | WTP  | MM       | Person Down Alarm Monitor 3rd party               |            |       |      | 5     |       |      |       |      |
| 23  | WTP  | MM       | 3rd party electrical inspection                   |            |       |      | 18    |       | 18   |       | 25   |
| 24  | WTP  | MM       | Valve gate isolation(3) 10 inch                   |            |       | 25   |       |       |      |       |      |
| 25  | WTP  | MM       | Low Lift Wet Well Cleanout                        |            |       | 15   | 15    | 15    | 15   | 15    | 15   |
| 26  | WTP  |          | Emergency Generator w/ Main Plant 4160V Switchgea | 4150       | 1,616 |      |       |       |      |       |      |
| 27  | WTP  | <u> </u> | Lighting/Barrier North walkway (outdoors)         |            |       |      | 200   |       |      |       |      |
| 28  | WTP  | <u> </u> | Inlet Water Screens                               |            |       |      |       |       | 185  | 185   |      |
| 29  | WTP  |          | Pump Upgrade Demand forecast                      |            |       |      |       |       |      | 350   |      |
| 30  | WTP  | MM       | EQ Tank Cleanout Inspection                       |            |       |      |       |       |      |       | 22   |
|     | WLPS |          | Storage Tank (South) Rehabilitation               |            |       | 60   | 5,600 |       |      |       |      |
| 32  | WLPS |          | Storage Tank (North) Rehabilitation               |            |       | 60   |       | 5,600 | 1    |       |      |
| 36  | WLPS | MM       | Electrical Inspection-3rd party contractor        |            | 10    |      | 10    |       | 10   |       | 10   |
| 37  | WLPS | MM       | Motor HLP-2 (VFD Compliant)                       |            |       |      | 25    |       |      |       |      |
| 38  | WLPS |          | 36" Ross Valve                                    | 70         |       |      |       |       |      |       |      |
|     | WLPS | MM       | Crack Injection (West Wall)                       |            |       | 5    |       |       |      |       |      |
|     | WLPS |          | Valve Discharge P1 Refurbish                      |            |       | 25   |       |       |      |       |      |
| 42  | ELBS | MM       | Electrical Inspection-3rd party contractor        |            | 5     |      | 5     |       | 5    |       | 5    |
|     | ELBS | MM       | Actuator Inlet Valve (electronic)                 |            |       |      |       |       |      | 14    |      |
|     | SYS. | <u> </u> | Field Gate 4 G network upgrade                    |            |       | 75   |       |       |      |       |      |
| 47  | SYS. | į        | Indian Road Water Tower Rehabilitation            |            |       | 30   | 120   |       | 270  | 3,000 |      |

| 48 SYS. | İ        | Loop Study (including OCWA's time)                  |          |         | 300     |         |         |       |         |       |
|---------|----------|---|----------|---------|---------|---------|---------|-------|---------|-------|
| 52 SYS. | MM       | Hydrant Installation- 6622 London Line              |          |         | 20      | 20      | 20      | 20    |         |       |
| 53 SYS. |          | Leak Detection                                      |          | 230     |         |         |         |       |         |       |
| 54 SYS. | MM       | Chamber (flow) abandonment                          |          |         | 20      | 20      | 20      | 20    |         |       |
| 55 SYS. | MM       | Air Relief valve- 5867 Confederation Line           | <u>i</u> |         | 15      |         |         | İ     |         |       |
| 56 SYS. | ММ       | Hydrant Isolation valve repairs x (3) (gland bolts) |          |         | 15      | 2       |         |       |         |       |
| 57 SYS. |          | Flow Restriction/Chamber Removal                    |          | 175     |         |         |         |       |         |       |
| 58 SYS. | MM       | Concrete Pipe end closures and 20' lengths          |          | 10      |         | 15      | 15      | 15    | 15      | 15    |
| 59 SYS. |          | Port Lambton Tower refurbish                        |          |         |         |         | 1,400   |       |         |       |
| 61 SYS. | MM       | Repair Clamps & Appurtenances                       |          | 10      | 10      | 10      | 10      | 10    | 10      | 10    |
| 62 ENG. |          | System - Master Plan                                |          |         | 250     |         |         |       |         |       |
| 63 ENG. |          | System - Asset Management Plan                      |          |         |         | 150     |         |       |         |       |
| 64 ENG. |          | System - Financial Plan                             |          |         |         |         | 150     |       |         |       |
| 65 ENG. |          | WTP- Travelling Water Screen Assessment             |          |         | 12      |         |         |       |         |       |
| 66 ENG. |          | System - Energy Efficient Lighting grant program    |          |         | 2       |         |         |       |         |       |
| 67 ENG. | 1        | System - Power factor study WTP)                    |          |         | 2       |         |         |       |         |       |
| 68 ENG. |          | System - Pump Upgrades for forecasted demand growth |          |         | 2       |         |         |       |         |       |
| 70 ENG. |          | Corrosion Control Member Municipality Impact Study  |          |         | 113     |         |         |       |         |       |
| 71 ENG. |          | WTP - Backwash Pump softstart or VFD conversion     |          |         | 2       |         |         |       |         |       |
| 72 ENG. |          | WTP - Electrical Reliability Study                  |          |         |         |         |         |       |         |       |
| ENG.    | 1        | Twinning & Grid-Municipal Class EA (Addendum)       |          |         | 105     |         |         |       |         |       |
| 73 ENG. | <u> </u> | WTP - HVAC Dehumidification                         |          | 20      |         |         |         |       |         |       |
| 74 ENG. |          | WTP - Pump Upgrade to match growth strategy         |          |         |         |         |         |       |         |       |
| ENG.    |          | Watermain Condition Assessment                      |          |         | 35      |         |         |       |         |       |
| 75 ENG. |          | WTP - Filter Core sampling                          |          |         |         |         |         |       |         | 15    |
| 76 ENG. |          | Condition Assessment - WLPS & Indian Road WT        |          | 30      |         |         |         |       |         |       |
| 77 ENG. |          | Condition Assessment - Port Lambton SP & Watford SP |          |         | 30      |         |         |       |         |       |
|         |          | Total: \$4  | 4,572    | \$3,168 | \$1,721 | \$7,769 | \$7,909 | \$852 | \$3,607 | \$134 |