

2010 FORECAST COSTS OF SEWER LATERAL INITIATIVE

1. Details of Enbridge's forecast of 2010 costs related to each of the constituent elements of its Sewer Lateral Initiative are set out below.
2. For each element, a chart is presented which sets out the categories of costs, whether the costs are capital or O&M, and the total cost of that element.

a. New construction and excavation techniques

| <u>Expenditure Description</u> | <u>Expenditure Type</u> | <u>Expenditure Cost</u> | <u>Total Volume of Work</u> |
|---|-------------------------|-------------------------|-----------------------------|
| <i>Sewer Lateral Locate</i> - Perform sewer lateral locates. | Capital | \$1,232,617 | 6555 |
| <i>Transition Holes</i> - Excavations required to maintain minimum depth during the installation of mains and services. | Capital | \$123,894 | 3520 |
| <i>Daylight Witness Holes</i> - Excavations required to determine that minimum clearances are maintained at sewer lateral crossing locations. | Capital | \$51,833 | 880 |
| <i>Site Specific Construction</i> - Additional construction costs incurred when sewer lateral locates are unsuccessful. | Capital | \$91,656 | 3605 |
| <i>Total Cost</i> | | \$1,500,000 | |

Witnesses: C. Clark
L. Lawler

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b. Investigate and address potential crossbore locations

| <u>Expenditure Description</u> | <u>Expenditure Type</u> | <u>Expenditure Cost</u> | <u>Total Volume of Work</u> |
|--|-------------------------|-------------------------|-----------------------------|
| <i>Sewer Lateral Investigations</i> - Perform video inspection of sewer laterals. | O&M | \$766,145 | 1817 |
| <i>Performance Standard Inspector Investigation</i> - Perform gas locates and site verifications for areas where sewer lateral investigations were not possible. | O&M | \$33,311 | 999 |
| <i>Daylighting Inspections</i> - Excavate and inspect areas of possible crossbores where sewer lateral investigations are not possible. | O&M | \$33,311 | 91 |
| <i>Relocations, Relays, Pipe Replacements</i> - Complete work when a crossbore is found. | Capital | \$131,571 | 26 |
| <i>Total Cost</i> | | \$964,338 | |

Witnesses: C. Clark
L. Lawler

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c. Public information campaign and follow-up

| <u>Expenditure Description</u> | <u>Expenditure Type</u> | <u>Expenditure Cost</u> | <u>Total Volume of Work</u> |
|---|-------------------------|-------------------------|-----------------------------|
| <i>Ontario One Call Services</i> - Call centre services to take call and dispatch appropriate locate service provider. | O&M | \$21,400 | 8646 |
| <i>Emergency Natural Gas Locate</i> - The completion of a natural gas locate on an emergency basis. | O&M | \$403,500 | 8646 |
| <i>Ontario One Call Services</i> - Call centre services to take call and dispatch appropriate locate service provider. | Capital | \$2,378 | 8646 |
| <i>Emergency Natural Gas Locate</i> - The completion of a natural gas locate on an emergency basis. | Capital | \$44,850 | 8646 |
| <i>Emergency Sewer Lateral Investigation</i> - The completion of an emergency sewer lateral inspection and/or utility clearance process. | O&M | \$1,073,040 | 1729 |
| <i>Daylighting Inspections</i> - Excavate and inspect areas of possible crossbores where sewer lateral investigations are not possible or are inconclusive. | O&M | \$172,000 | 86 |
| <i>Potential Claims and Program Incentives</i> - The compensation that will be sought by plumbers/drain cleaners/homeowners for standby time. | O&M | \$683,000 | 4700 |
| <i>Education Materials</i> - All publicity materials, public meeting and mailing costs. | O&M | \$300,000 | 2000000 |
| <i>Total Cost</i> | | \$2,700,168 | |

Witnesses: C. Clark
L. Lawler

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d. IT upgrades and tracking

| <u>Expenditure Description</u> | <u>Expenditure Type</u> | <u>Expenditure Cost</u> |
|--|-------------------------|-------------------------|
| System change required to record the method used to install the service line. | Capital | \$13,000 |
| System change required to record method of installation between nodes of every section of main. | Capital | \$21,000 |
| System change required for record system to be used to track the inspection work/areas completed during the sewer lateral investigation. | Capital | N/A |
| I.T. Maintenance of Sewer Lateral Programs - Required server maintenance to sewer lateral storage servers. | O&M | \$10,000 |
| Sewer Lateral Clearance Tracking - The addition of resources to record sewer lateral clearance in the GIS system and to investigate as-laid construction drawings for construction method. | O&M | \$50,100 |
| Sewer Lateral Clearance Tracking - The addition of resources to record sewer lateral clearance in the GIS system and to investigate as-laid construction drawings for construction method. | Capital | \$144,900 |
| System change required to create job codes necessary to send sewer lateral investigative contractors out on emergency investigations. | Capital | \$14,000 |
| <i>Total Cost</i> | | \$253,000 |

Witnesses: C. Clark
L. Lawler

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e. Research and development efforts

| <u>Expenditure Description</u> | <u>Expenditure Type</u> | <u>Expenditure Cost</u> |
|--|-------------------------|-------------------------|
| <i>Research and development of Sewer Lateral locating technologies - Research and develop safe and more cost-effective methods of locating sewer laterals.</i> | Capital | \$300,000 |
| <i>Total Cost</i> | | \$300,000 |

Witnesses: C. Clark
L. Lawler

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