The Issue: Surface Flooding

Montgomery Place's unique network of ditches and culverts for storm water drainage contributes to its rural charm

Over time, drainage paths have been compromised by:

- Newly constructed driveways
- Landscaping
- Ongoing ditch erosion



During spring snowmelt and intense rainfalls, run-off results in:

- Flooded basements and property damage
- Nuisance water ponding in yards and streets
- Stress for Residents
- Maintenance costs for City crews









Proposed 2020 Construction

Shallow Storm Sewer Pipe Installation:

- Dundonald Ave from Caen St to Dieppe St
- Road resurfacing will occur once the pipe has been installed and trench backfill is complete

Ditch and Culvert Reconstruction:

- Both sides of Caen St from Dundonald Ave to Currie Ave
- Doth sides of Lancaster Blvd from Caen St to Ortona St
- The east side of Lancaster Blvd from Ortona St to Dieppe St

Water Main Replacement:

- Caen St from Dundonald Ave to 3206 Caen St (west of Lancaster Blvd)
- ➤ Lancaster Blvd from Caen St to 1210 Lancaster Blvd (south of Lancaster-Caen intersection)
- Lead-line and Fibre connection replacement

Road Construction:

- Will occur once water main replacement and/or ditch construction is completed
- Caen Street from Dundonald Ave to 3206 Caen St
- Lancaster Blvd from Caen St to Dieppe St



Timeline





Project Costs

Total 2020 Construction Cost Estimate: \$3.6 million

2020 Culvert and Driveway Restoration

Cost Estimate: \$510,000

- > Estimated \$3,000 to \$39,000 per property
- In March or April, City Council will consider a cost sharing options to restore the portions of non-compliant driveways across right-of-ways

Lead Water Replacement Program

Cost Sharing Agreement:

- ➤ 60-40% between the City and homeowner
- > 2020 rate for homeowner lead line replacement cost is \$3,520

Fibre Connection (sewer) Replacement Program

Cost Sharing Agreement:

- ➤ 2020 rate for homeowner fiber connection replacement cost is \$2,906
- > Fibre connection replacement is optional (at discretion of homeowner)



Cost Sharing

Compliant Driveways

- Crossing less than or equal to6.1 m in width
- > 300 mm culvert installed.

Property Owners with compliant driveways **will not** have to pay for driveway restoration or culvert installation

Non-Compliant Driveways Cost Sharing Options

- > OPTION 1: Residents to pay for costs exceeding \$10,000
- > **OPTION 2:** 60%/40% cost sharing agreement between the City and Resident

Residents may select a different driveway restoration material and/or width to reduce the overall cost (e.g. existing brick driveway restored with asphalt)



Project Impacts

- > Improved Road Surface
- > Reduced Risk of Water Main Breaks
- > Reduced Risks of Flooding and Damage
 - Ditch and culvert installation
 - Increased steepness of ditches to preserve most trees in City right-of-ways
 - Limited tree removal where necessary
 - Landscaping removal

 (e.g. flower beds and irrigation)
 in City right-of-ways
 - Parking impediments
 - Incremental effort for residents to maintain drainage paths





Culverts & Driveways

- Installation of 300 mm PVC (i.e. plastic material) or Concrete Culvert under all driveway crossings to meet drainage design elevations
- > Optional riprap on culvert
- > Driveway crossing reconstruction





Proposed New Crossing Standard Option

Maximum driveway crossing width based on lot frontage

Interior Site:

- Maximum total crossing width of 1/3 lot frontage or 10 m (32.8 ft), whichever is smaller
- Lots where 1/3 frontage is less than 6.1 m (20 ft) may have a maximum total crossing width of 6.1 m
- Maximum two crossings per residence (house)

Exterior Site (Corner Lot):

- > Maximum one crossing on the frontage and one crossing on the flankage (side of property) or two crossings on the frontage and zero crossings on flankage
- The frontage crossing(s) may have a maximum total crossing width of 1/3 lot frontage or 10 m (32.8 ft), whichever is smaller.
- > Corner lots where 1/3 frontage is less than 6.1 m (20 ft) may have a maximum total crossing width of 6.1 m on the frontage
- > The flankage crossing may have a maximum total crossing with of 3.1 m (10 ft) if only one crossing exists on the frontage



Trees on City Right-of-Ways

- Steeper ditch slope for short distances around trees for preservation
- > 135 out of 148 trees on ROWs proposed to be preserved
- Locations of tree removal shown on Site Map



