

NOTES:

1. DECIMALIZED NUMBERS INDICATE METERS AND WHOLE NUMBERS INDICATE MILLIMETERS.
2. LOCATION OF UNDERGROUND SERVICES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT.
3. CONTRACTOR MUST CONFIRM WITH THE INDIVIDUAL UTILITIES FOR EXISTENCE AND EXACT LOCATIONS OF ALL THE SERVICES PRIOR TO CONSTRUCTION.
4. CONTRACTOR MUST EXPOSE EXISTING INFRASTRUCTURE AT THE PROPOSED TIE-IN LOCATIONS TO ALLOW DEPARTMENTAL REPRESENTATIVE TO VERIFY SIZE, MATERIAL AND INVERTS PRIOR TO CONSTRUCTION OF TIE-INS.
5. ALL SITE LAYDOWN AREAS SHALL BE AS NOTED IN THE SPECIFICATIONS AND APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
6. ALL AREAS SUBJECT TO CONSTRUCTION OPERATIONS SHALL BE RESTORED TO THE CONDITION IN WHICH THEY EXISTED PRIOR TO CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, PAVEMENT REPAIRS, RE-GRAVELLING, TRENCH SETTLEMENT CORRECTION AND RE-SEEDING OF GRASSED AREAS.
- 6.1. ALL EXCAVATIONS UNDER PAVED AREAS SHALL BE BACKFILLED WITH COMPACT SELECT GRANULAR FILL AND COMPACTED TO 98% STANDARD PROCTOR DENSITY.
7. CONTRACTOR SHALL MAINTAIN THE FOLLOWING INSTALLATION DISTANCES:
 - 7.1. SEPARATION BETWEEN POTABLE WATER AND RAW WATER OR WASTEWATER:
 - 7.1.1. HORIZONTAL = 3.0 m
 - 7.1.2. VERTICAL = 0.5 m, POTABLE WATER ABOVE.
 - 7.2. MINIMUM BURY DEPTH SHALL BE 3.0 m
8. INSTALLATIONS WITH LESS THAN MINIMUM COVER SHALL BE INSULATED AS PER SPECIFICATION.
9. WHERE THE PROPOSED ALIGNMENT CROSSES PTH'S, PR'S, DEVELOPED ROAD ALLOWANCES, PRIVATE LANES, WATER RUNS AND WETLANDS, A TRENCHLESS METHOD OF INSTALLATION SHALL BE USED. SEE SPECIFICATION.
 - 9.1. ALL WATERMAIN PIPING IN TRENCHLESS AREAS SHALL BE HDPE DR-17

LINETYPES

ROAD

CONTROL LINE
GRAVEL ROAD
EDGE OF PAVEMENT

MISCELLANEOUS

FENCE

SILT FENCE

ABANDONED PIPE

RAILWAY

BOTTOM OF BANK

TOP OF BANK

EDGE OF WATER

HEDGE

BUILDING

PROPERTY

PARCEL / LOT LINE

EASEMENT

STATUTORY ROW

ROAD ROW

WATER

WATER MAIN

WATER MAIN (PROFILE)

FIRE SUPPRESSION

IRRIGATION

RAW WATER

POTABLE WATER

SANITARY SEWER

SANITARY SEWER

SANITARY FORCEMAIN

SANITARY COMBINED SEWER

COMMUNICATIONS / TELEPHONE

FIBRE OPTIC CABLE

TELEPHONE/LINE

UNDERGROUND TELEPHONE

ELECTRICAL / POWER

POWER / COMM / CONDUIT

OVERHEAD POWER

UNDERGROUND POWER

GAS/OIL

GAS

TRENCHLESS INSTALL

GRAVEL

PAVEMENT

CROSSING

EXISTING

PROPOSED

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C

SYMBOLS

SURVEY

SURVEY HUB
MONUMENT
IRON PIN
IRON PIN (FOUND)

MISCELLANEOUS

TEST PIT

BORE HOLE

BUSH

TREE (DECIDUOUS)
(SCALE AS REQUIRED)

TREE (CONIFEROUS)
(SCALE AS REQUIRED)

SPOT ELEVATION

SLOPE

SANITARY SEWER

MANHOLE

COMBINED MANHOLE

VALVE CHAMBER

CLEANOUT

VALVE BOX

FLOW DIRECTION

GAS / OIL

METER

WATERMAIN

VAULT BOX

FIRE HYDRANT

MANHOLE

METER CHAMBER

CROSS FLANGE

TEE FLANGE

END CAP / PLUG

GATE VALVE

THRUST BLOCK

45 DEGREE ELBOW

90 DEGREE ELBOW

WYE

ENCASEMENT

WATER LEVEL

COUPLING

REDUCER

WELL

CURB STOP / CURB BOX

ELECTRICAL/POWER

TRANSFORMER VAULT MANHOLE

TRANSFORMER PAD

METER

LIGHT / LAMP STANDARD

HYDRO / UTILITY POLE

GUY WIRE

COMMUNICATIONS / TELEPHONE

TELEPHONE PEDESTAL

EXISTING

PROPOSED

HUB

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Canada



Public Works and
Government Services
Canada

Travaux publics et
services gouvernementaux
Canada



Certificate of Authorization

Associated Engineering (Gask.) Ltd.

No. 396 Date: June 20, 2018

Contractor to verify all dimensions & conditions on site and immediately notify the departmental representative of all discrepancies.

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| A | ISSUED FOR TENDER AND CONSTRUCTION | 06/20/2018 |
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| revisions | description | date |
|-----------|-------------|------|
|-----------|-------------|------|

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|---|--|---|
| A | A detail no. no. du detail | A |
| C | B location drawing no. sur dessin no. | B |
| | C drawing no. dessin no. | C |

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| project | projet |
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BRANDON RESEARCH
CENTRE WATERMAIN
UPGRADES

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| drawing | dessin |
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NOTES AND LEGEND

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|-----------------|--------------|---------------------------|--|
| Designed By | K.ANDERSON | Conçu par | |
| Date | 2018/06/06 | (yyyy/mm/dd) | |
| Drawn By | C.HOUSTON | Dessiné par | |
| Date | 2018/06/06 | (yyyy/mm/dd) | |
| Reviewed By | K.ANDERSON | Examiné par | |
| Date | 2018/06/20 | (yyyy/mm/dd) | |
| Approved By | K.ANDERSON | Approuvé par | |
| Date | 2018/06/20 | (yyyy/mm/dd) | |
| Tender | 2018/06/20 | Soumission | |
| Project Manager | J.O'DRISCOLL | Administrateur de projets | |
| Project no. | | No. du projet | |
| | R.094327.001 | | |
| Drawing no. | | No. du dessin | |
| | C001 | | |