

**TRURO CREEK CULVERT SURVEY DATA**

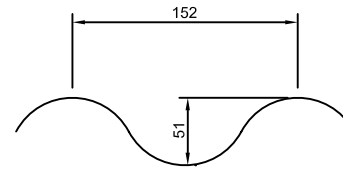
SURVEY CONDUCTED NOVEMBER 18, 2010

| STATION | WIDTH | HEIGHT | ELEVATION | COMMENT                        |
|---------|-------|--------|-----------|--------------------------------|
| 0+00    | 2.62  | 2.62   | 100.000   |                                |
| 0+05    | 2.57  | 2.57   | 100.127   | INVERT CORRODED THROUGH        |
| 0+10    | 2.55  | 2.63   | 99.981    | 270 O.D. SERVICE PIPE AT 9.5 m |
| 0+15    | 2.65  | 2.64   | 99.923    |                                |
| 0+20    | 2.70  | 2.57   | 99.987    |                                |
| 0+25    | 2.72  | 2.57   | 99.957    |                                |
| 0+30    | 2.69  | 2.54   | 99.947    |                                |
| 0+35    | 2.72  | 2.47   | 99.931    |                                |
| 0+40    | 2.74  | 2.47   | 99.847    |                                |
| 0+45    | 2.72  | 2.45   | 99.852    |                                |
| 0+49.3  | 2.64  | 2.59   | 99.747    |                                |

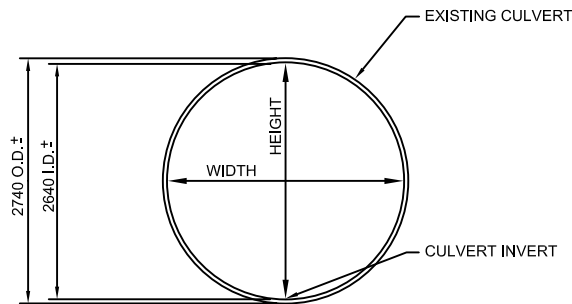
NOTE: - INVERT ELEVATION AT NORTH END OF CULVERT TAKEN AS 100.000.  
-150 TO 400 mm OF DEBRIS PRESENT ALONG INVERT OF CULVERT.

**NOTES:**

1. WORK TO BE UNDERTAKEN IN WINTER WHEN TEMPERATURES ARE BELOW ZERO DEGREES CELCIUS AND CREEK FLOW IS MINIMAL.
2. CONTRACTOR RESPONSIBLE TO BY-PASS PUMP OR OTHERWISE PERMIT ANY FLOWS TO PASS THROUGH CULVERT IF AND WHEN IT IS NECESSARY.
3. CONTRACTOR MAY CLOSE OFF CURB LANES ON PORTAGE AVENUE FOR WORK STAGING / LAYDOWN AREAS.
4. CONTRACTOR MAY CONSTRUCT ACCESS WAYS TO NORTH AND SOUTH END WORK AREAS AND ACCESS WAYS TO BE RESTORED TO PRE-EXISTING CONDITIONS AT COMPLETION OF CONSTRUCTION.
5. CONTRACTOR TO SITE VERIFY AND PROTECT ALL UTILITIES.
6. CONTRACTOR RESPONSIBLE TO FIELD VERIFY ALL MEASUREMENTS AND DIMENSIONS.
7. NEW LINER TO BE INSTALLED AND SHIMMED AS REQUIRED TO PROVIDE CONSISTENT GRADE.



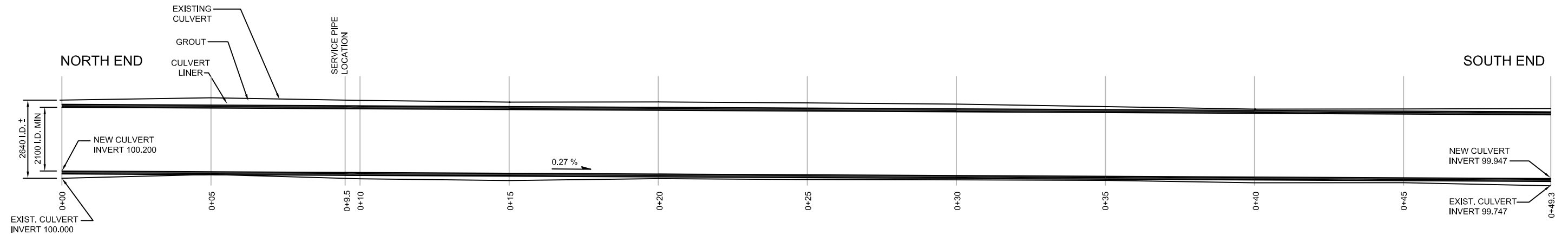
**CULVERT CORRUGATIONS**  
N.T.S.



**EXISTING CULVERT**  
N.T.S.



**SITE PLAN PHOTO**  
N.T.S.



**CULVERT PROFILE**  
N.T.S.

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

|  |      |
|--|------|
| LOCATION APPROVED UNDERGROUND STRUCTURES   |      |
| SUPR. U/G STRUCTURES   | DATE |
| NOTE:<br>LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION. |      |

|                     |             |
|---------------------|-------------|
| B.M. ELEV.          |             |
| DESIGNED BY:        | D.N.B.      |
| DRAWN BY:           | M.R.T.      |
| CHECKED BY:         | D.N.B.      |
| APPROVED BY:        | D.N.B.      |
| AUTHORIZED BY:      |             |
| ORIGINAL SIGNED BY: | D.N. BURMEY |
| NO.                 | REVISION    |
| DATE                | BY          |

|  |          |      |
|--|----------|------|
| ISSUED FOR TENDER                          | 25/11/10 | M.T. |
| ORIGINAL SIGNED BY D.N. BURMEY             |          |      |
| D.N. BURMEY<br>BRIDGE MAINTENANCE ENGINEER |          |      |

ENGINEER'S SEAL  
  
 BID OPPORTUNITY NO.:  
**882-2010**

**CITY OF WINNIPEG**  
 PUBLIC WORKS DEPARTMENT  
 ENGINEERING DIVISION

PORTAGE AVENUE AT TRURO CREEK  
 CULVERT RELINING

SHEET **2** OF **2**  
 HORIZONTAL: N.T.S.  
 VERTICAL: N.T.S.  
 CITY DRAWING NUMBER:  
**C307-10-02**

SITE PLAN PHOTO, SURVEY DATA, PROFILE & NOTES