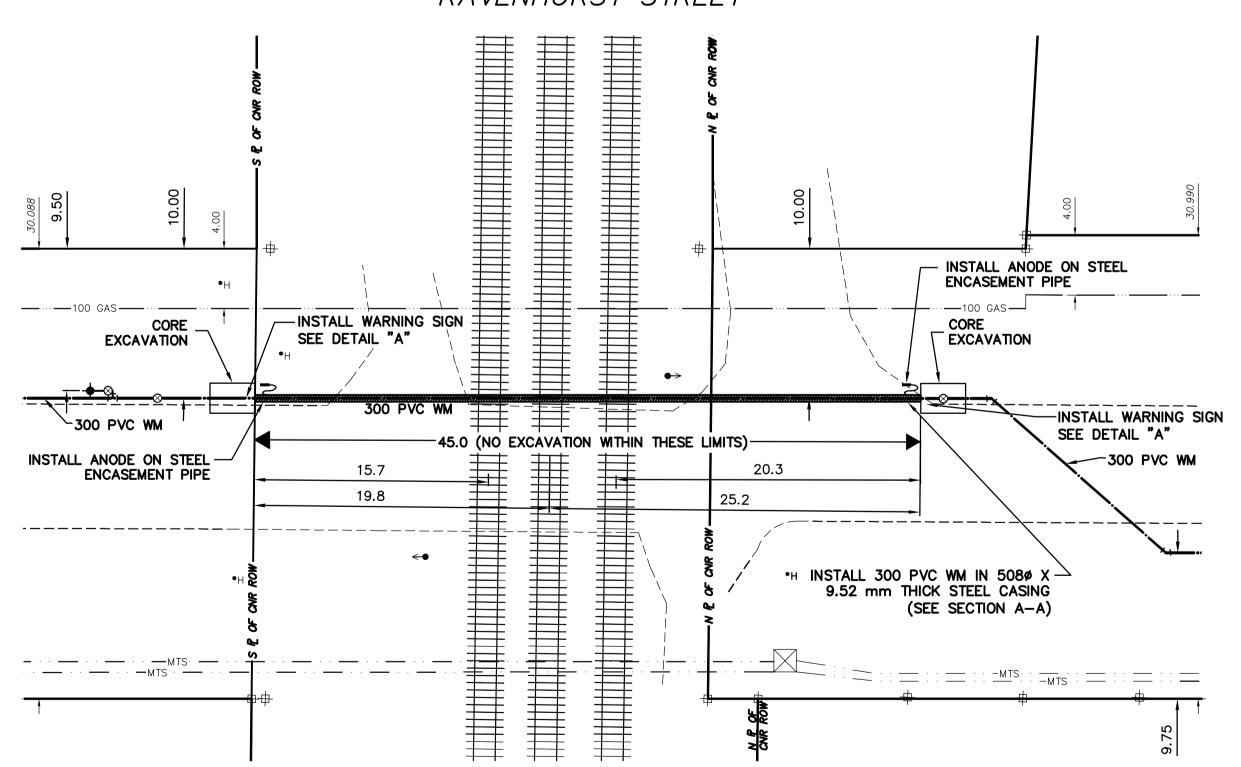
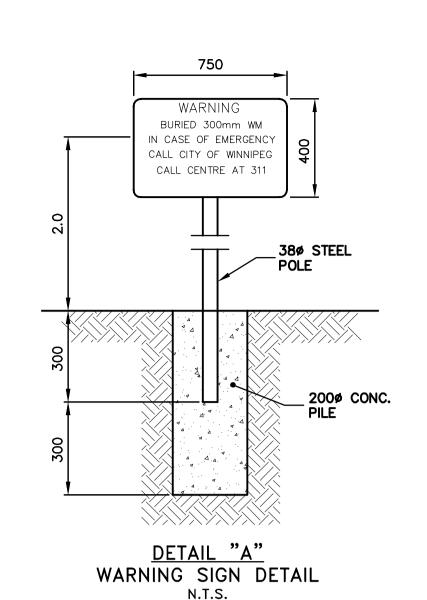
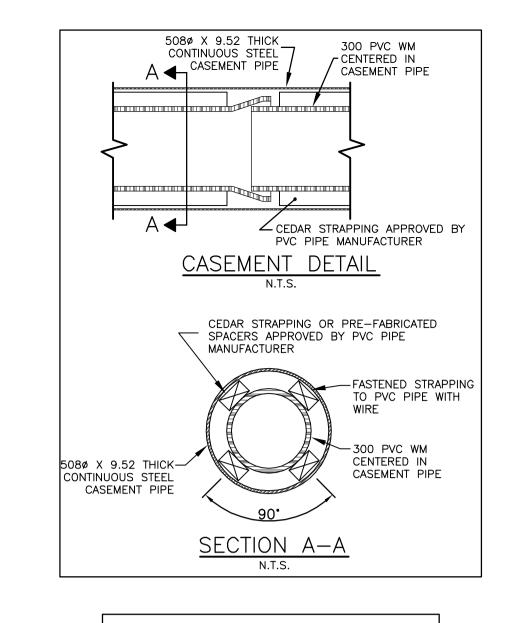


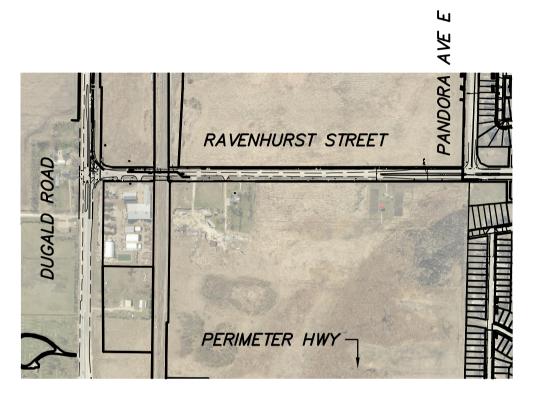
NOTE: CHAINAGES SHOWN ARE ALONG W. P OF RAVENHURST ST

## RAVENHURST STREET









WATER CARRIER PIPE INFORMATION DIAMETER - 300mm (335mm O.D.) MATERIAL - PVC WALL THICKNESS - 18.6 mm PIPE CLASS - AWWA C900 DR18 SURGE PRESSURE - 300 PSI (2.0MPa) OPERATING PRESSURE - 60 PSI (0.4 MPa) TEST PRESSURE - 150 PSI (1.0 MPa) INSTALLATION METHOD

- PIPE ADVANCING WITH CORING - CORING HEAD TO BE MIN. 0.5m FROM CASING END, IN CASING

**ENCASEMENT PIPE INFORMATION** DIAMETER - 508 mm MATERIAL - STEEL - ASTM A53 WALL THICKNESS - 9.52 mm MIN.

YIELD STRENGTH - 241 MPa

**KEY MAP** 

## **CONSTRUCTION NOTES**

- 1. EXPOSE EXISTING WATERMAIN & CONFIRM INVERTS PRIOR TO CONSTRUCTION
- 2. LOCATION OF ALL SERVICES TO BE CONFIRMED IN THE FIELD.
- 3. INSTALL WATERMAIN BY TRENCHLESS METHODS.
- 4. TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS SHALL BE CLASS 3 BACKFILL.
- 5. ALL MATERIALS SHALL CONFORM TO THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
- 6. MINIMUM COVER TO TOP OF WATERMAIN SHALL BE 2.4 m.
- 7. REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATERMAIN TO P.
- 8. NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.

## **RAILWAY NOTES**

ENGINEER'S SEAL

CONTRACT NUMBER:

17/08/14

- 1. RAILWAY CROSSING WILL BE CONSTRUCTED, MAINTAINED AND OPERATED IN ACCORDANCE TO TRANSPORT CANADA E-10 (STANDARDS RESPECTING PIPELINE CROSSINGS UNDER RAILWAYS).
- 2. EXCAVATIONS SHALL NOT BE CLOSER TO THE RAIL TRACKS THAN NOTED ON THE DRAWING. DISTANCES MEET CN GUIDELINES.
- 3. NO RAILWAY CROSSING CONSTRUCTION SHALL BE PERMITTED UNTIL THE CONTRACTOR IS IN RECEIPT OF APPROVAL FROM CNR.

FOR INDEX SEE D-14184

NOTE: ALL VALVES INSTALLED CLOCKWISE TO CLOSE

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

WARNING IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST: 1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION. 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

LOCATION APPROVED UNDERGROUND STRUCTURES SUPV. U/G STRUCTURES COMMITTEE DATE 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.

DESIGNED MJK DRAWN RS SCALE: 1: 250 HORIZONTAL

REVISIONS

ORIGINAL SIGNED BY S.R.J. COURNOYER CHECKED SC APPROVED RELEASED FOR CONSTRUCTION CONSULTANT DRAWING NUMBER KAS ZUREK 2016 05 02 DATE 2017 08 14

1:50

VERTICAL

PLOT DATE:

DATE

DATE

## THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

2017 TRANSCONA WATER MAIN RELIABILITY UPGRADES CONTRACT

RAVENHURST STREET D-14315CN RAIL CROSSING

ENGINEERING DIVISION

SHEET 11 OF 11

CITY DRAWING NUMBER

FILE PATH: R:\DRAWINGS\WATER\RENEWAL\2016 RENEWALS\Dugald\CNR\

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