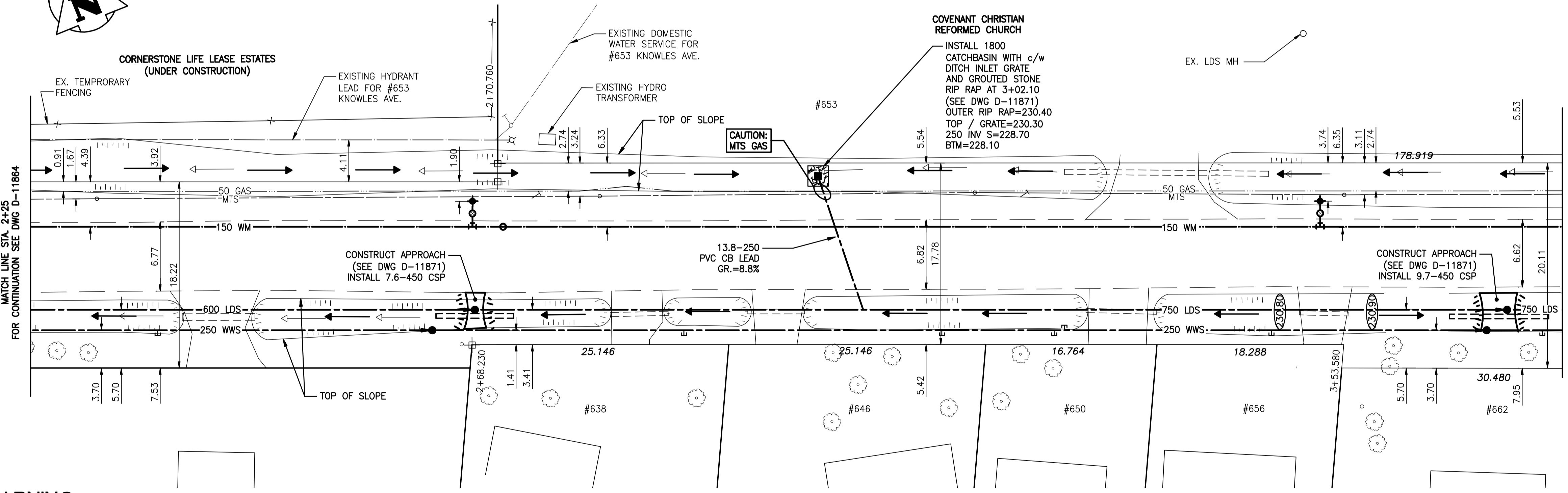
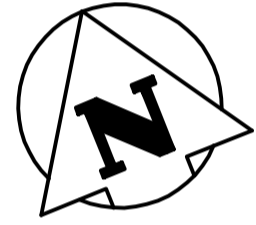


KNOWLES AVENUE



- CONSTRUCTION NOTES:**
1. ALL SEWERS TO BE INSTALLED BY TRENCHLESS METHODS.
  2. INSTALLATION OF WWS TEES AND RISERS AT LOCATIONS NOTED, NO WASTEWATER SEWER SERVICES TO BE INSTALLED.
  3. WWS TEE LOCATIONS TO BE VERIFIED IN THE FIELD BY CONTRACT ADMINISTRATOR BASED ON EXISTING SEPTIC TANK LOCATIONS AND FUTURE SEWER CONNECTIONS FROM CORNERSTONE ESTATES (BY OTHERS).
  4. NO WATER SERVICES OR CORPORATION STOPS TO BE INSTALLED UNDER THIS CONTRACT.
  5. EXCAVATIONS WITHIN 1.0m OF PAVEMENT OR DRIVEWAYS TO BE BACKFILLED WITH CLASS 3 MATERIAL.
  6. SEE DWG. D-11871 FOR TYPICAL HYDRANT / MANHOLE APPROACH DETAIL. ALL PROPOSED CSP's TO 450 mm Ø.
  7. SEE DWG. D-11871 FOR DITCH CATCH BASIN DETAIL.
  8. CONTRACTOR TO RESTORE DITCHES TO PRECONSTRUCTION CONDITION AND AS PER SPECIFICATION.

**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 140/92 FOR DETAILS

**METRIC**

WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

BENCH MARK: 86R347 - N.E. Knowles Ave. & Gateway Rd. Tblt. on top of 0.05m dia. x 2.4 ron pipe, 8m S. of S. wall No.451 Knowles Ave. & 33.4m E. of most Ely. rail of railway tracks on C.P.R. Loc Du Bonnet Subd. R.O.W. or 1.1m W. of E.L. Gateway Rd. & 0.9m S. of N.L. of Knowles Ave.

NOTE:  
STATIONING IS ALONG S. P/L OF KNOWLES AVE.  
BID OPPORTUNITY 678-2009



150 WM	WATERMAIN	150 WM	HYDRO	150 WM	WATERMAIN	150 WM
⊕	HYDRANT	⊕	M.T.S.	⊕	HYDRANT, VALVE	⊕
⊕	VALVE	⊕	CONCRETE	⊕	LAND DRAINAGE SEWER	⊕
300 LDS	LAND DRAINAGE SEWER	300 LDS	ASPHALT	250 WWS	WASTE WATER SEWER	250 WWS
250 WWS	WASTE WATER SEWER	250 WWS	SIDEWALK	⊕	PROFILE	⊕
○	MANHOLE	○	PROPERTY LINE	□	NORTH OR WEST GUTTER	□
□	CATCH BASIN	□	SURVEY BAR	⊕	SOUTH OR EAST GUTTER	⊕
▽	CURB INLET	▽	DITCH	⊕	NORTH OR WEST P	⊕
+	JUNCTIONS	+	ELEVATION	⊕	SOUTH OR EAST P	⊕
⊕	CULVERT	⊕	DITCH ELEVATION	⊕	NORTH OR WEST DITCH	⊕
⊕	GAS	⊕	DITCH SLOPE	⊕	SOUTH OR EAST DITCH	⊕
EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING
EXISTING	LEGEND-PROFILE	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED	EXISTING

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPV. U/G STRUCTURES COMMITTEE DATE

NOTE:  
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.

NO.	REVISIONS	DATE	BY

**Stantec Consulting Ltd.**  
905 Waverley Street, Winnipeg, Manitoba  
Tel 204-489-5900 Fax 204-453-9012

DESIGNED BY: J.K.H.	CHECKED BY: H.A.K.
DRAWN BY: B.K.W.	APPROVED BY: H.A.K.
HOR. SCALE: 1:250	RELEASED FOR CONSTRUCTION:
VERTICAL: 1:50	DATE

DATE 09.08.07

ENGINEER'S SEAL

CONSULTANT DRAWING NO. C-202

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

**KNOWLES AVENUE LOCAL IMPROVEMENT**  
RALEIGH STREET TO DE VRIES AVENUE  
105.0m E OF EL OF RALIEGH ST. TO  
179.2m W OF WL OF SUNNY MORNING RD.  
WATERMAIN, LAND DRAINAGE AND WASTEWATER SEWER

SHEET 2 OF 8  
CAD FILE DRAWING NUMBER I1730c-201-712.dwg  
CITY DRAWING NUMBER D-11865

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