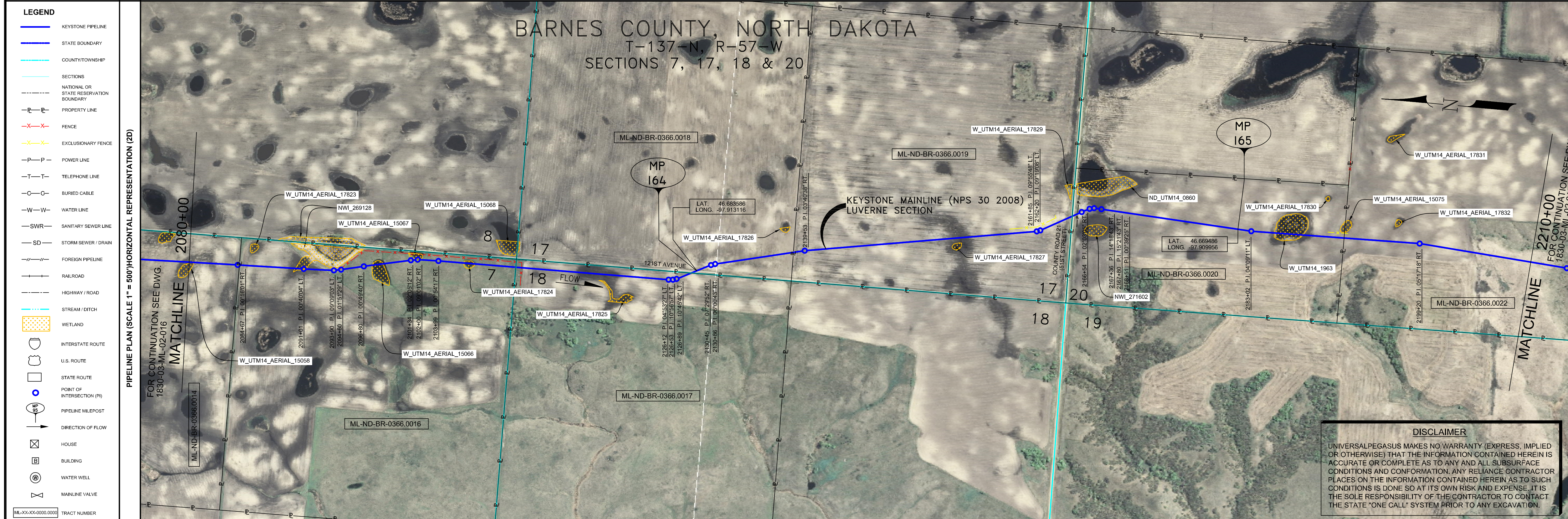


- GENERAL NOTES**
- 1) ALL CHAINAGES ARE IN FEET UNLESS OTHERWISE SPECIFIED.
  - 2) DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
  - 3) FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
  - 4) UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER EXCEPT 36 INCHES IN AREAS OF CONSOLIDATED ROCK.
  - 5) NO ACTUAL AS-BUILT GROUND SHOTS WERE TAKEN AT THIS LOCATION. THE PROFILE REPRESENTS A PROJECTION FROM SHOTS TAKEN AT 150' TO 250' INTERVALS.
  - 6) THE TYPE OF COATING APPLIED TO THE FIELD WELDS DURING THE ORIGINAL CONSTRUCTION WAS TWO COMPONENT LIQUID EPOXY. THE COATING PRODUCTS USED WERE DENSO 7200 OR SPC SP-2888.
  - 7) THE SUBSTANTIAL COMPLETION DATE, BASED ON CALPINE PIG RUN, WAS SEPTEMBER 23, 2009 FOR M.P. 114.00 TO M.P. 130.00, AUGUST 05, 2009 FOR M.P. 129.90 TO M.P. 168.72 AND AUGUST 07, 2009 M.P. 168.73 TO M.P. 195.68.
  - 8) ORIGINAL IN-SERVICE DATE OF THE KEYSTONE PIPELINE (PHASE 1): JUNE 30, 2010.
  - 9) CPS CALCULATION DATE: MAY 2010.
  - 10) ORION STATION SERIES NUMBER: 1182700.
  - 11) TO DETERMINE THE MILE POST AT A GIVEN LOCATION, ADD THE 3D STATION NUMBER FROM THIS SEGMENT TO STATION NUMBER 6528+26 AND DIVIDE BY 5280.



**OPERATING AND TEST PRESSURE**

1. THE MAXIMUM OPERATING PRESSURE (MOP) IS 1440 PSIG.
2. THE MINIMUM TEST PRESSURE WAS 1601 PSIG.

**BILL OF MATERIALS (3D)**

ITEM NO.	DESCRIPTION	QUANTITY
2	30" O.D. X 0.386" W.T. API-5L X 70 WFBE COATING	12,619'
3	30" O.D. X 0.516" W.T. API-5L X 70 WFBE COATING & ABRASION RESISTANT OVERCOAT	999'

**REFERENCE DRAWINGS**

REF. NO.	DRAWING NO.	REV. NO.	DRAWING TITLE

**REVISIONS**

NO.	DATE	REV. BY	CHECKED BY	APPROVED BY	DESCRIPTION
1	5/7/08	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	9/17/09	UEI	RDG	LAG	ISSUED FOR AS-BUILT
					REPLACES COVERAGE OF IFC DRAWINGS
					1830-03-ML-02-026
					1830-03-ML-02-027
					1830-03-ML-02-028

**ENGINEERING RECORDS**

DRAWN BY	INITIAL	DATE	ENY APPROV.	INITIAL	DATE
UEI		10/01/18			

**PROFESSIONAL ENGINEER**

NAME	STATE	LIC#	REV#	DATE
LOYS A. GRAY, III	ND	PE5714		

**SCALE:** 0 125 250 500 Feet

**TransCanada**  
In business to deliver

KEYSTONE MAINLINE (NPS 30 2008) LIVERNE SECTION

**AS-BUILT ALIGNMENT**

M.P. 163.07 TO M.P. 165.54  
SHEET 17 OF 20 SHEETS

STA. 2081+86 TO STA. 2212+04 (3D)

DRAWING NO. 1830-03-ML-02-017  
REV. 2

**PIPELINE SCHEMATIC**

STATIONING	DESCRIPTION
2084+57 P.I. 107+1501' RT.	MATCHLINE 2080+00
2085+53 P.I. 107+1501' RT.	2085+53 5.0' OVR.
2086+07 P.I. 107+1501' RT.	2086+07 BEGIN SLOUGH
2086+25 P.I. 107+1501' RT.	2086+25 END SLOUGH
2086+46 P.I. 107+1501' RT.	2086+46 FENCE (BARBED WIRE)
2086+59 P.I. 107+1501' RT.	2086+59 P.I. 107+1501' RT.
2087+43 P.I. 107+1501' RT.	2087+43 BEGIN SLOUGH
2088+14 P.I. 107+1501' RT.	2088+14 CL SLOUGH
2088+74 P.I. 107+1501' RT.	2088+74 END SLOUGH
2101+34 P.I. 107+1501' RT.	2101+34 P.I. 107+1501' RT.
2101+50 P.I. 107+1501' RT.	2101+50 BEGIN SLOUGH
2102+40 P.I. 107+1501' RT.	2102+40 CL SLOUGH
2102+88 P.I. 107+1501' RT.	2102+88 END SLOUGH
2103+39 P.I. 107+1501' RT.	2103+39 P.I. 107+1501' RT.
2108+64 P.I. 107+1501' RT.	2108+64 BEGIN SLOUGH
2109+36 P.I. 107+1501' RT.	2109+36 END SLOUGH
2111+88 P.I. 107+1501' RT.	2111+88 FENCE (BARBED WIRE)
2113+90 P.I. 107+1501' RT.	2113+90 FENCE (BARBED WIRE)
2125+27 5.0' OVR.	2125+27 5.0' OVR.
2128+06 P.I. 107+1501' RT.	2128+06 P.I. 107+1501' RT.
2128+46 P.I. 107+1501' RT.	2128+46 P.I. 107+1501' RT.
2128+89 P.I. 107+1501' RT.	2128+89 P.I. 107+1501' RT.
2130+30 P.I. 107+1501' RT.	2130+30 EDGE OF ROAD
2130+67 P.I. 107+1501' RT.	2130+67 EDGE OF ROAD
2130+94 M.P. 164	2130+94 M.P. 164
2132+39 P.I. 107+1501' RT.	2132+39 P.I. 107+1501' RT.
2132+86 P.I. 107+1501' RT.	2132+86 P.I. 107+1501' RT.
2137+03 5.0' OVR.	2137+03 5.0' OVR.
2141+48 P.I. 107+1501' RT.	2141+48 P.I. 107+1501' RT.
2165+43 P.I. 107+1501' RT.	2165+43 P.I. 107+1501' RT.
2167+33 P.I. 107+1501' RT.	2167+33 P.I. 107+1501' RT.
2167+48 P.I. 107+1501' RT.	2167+48 P.I. 107+1501' RT.
2168+12 P.I. 107+1501' RT.	2168+12 P.I. 107+1501' RT.
2168+54 P.I. 107+1501' RT.	2168+54 P.I. 107+1501' RT.
2167+38 P.I. 107+1501' RT.	2167+38 P.I. 107+1501' RT.
2167+48 P.I. 107+1501' RT.	2167+48 P.I. 107+1501' RT.
2170+44 5.2' OVR.	2170+44 5.2' OVR.
2179+34 5.3' OVR.	2179+34 5.3' OVR.
2180+72 4.5' OVR.	2180+72 4.5' OVR.
2183+74 M.P. 165	2183+74 M.P. 165
2185+00 P.I. 107+1501' RT.	2185+00 P.I. 107+1501' RT.
2186+04 P.I. 107+1501' RT.	2186+04 P.I. 107+1501' RT.
2188+40 CL SLOUGH	2188+40 CL SLOUGH
2188+15 END SLOUGH	2188+15 END SLOUGH
2201+50 P.I. 107+1501' RT.	2201+50 P.I. 107+1501' RT.
2212+04	MATCHLINE 2212+04