

TUNDRA EAST MANSON PROV HZNTL 8-10-13-28WPM

WELL SITE AND ACCESS ROAD

TERMINUS

LSD. 8A - SEC. 10 - TWP. 13 - RGE. 28WPM

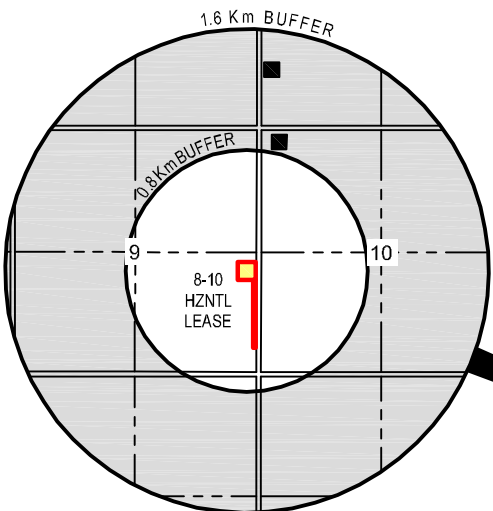
WELL SITE SURFACE LOCATION

LSD. 8D - SEC. 9 - TWP. 13 - RGE. 28WPM

R.M. of ARCHIE

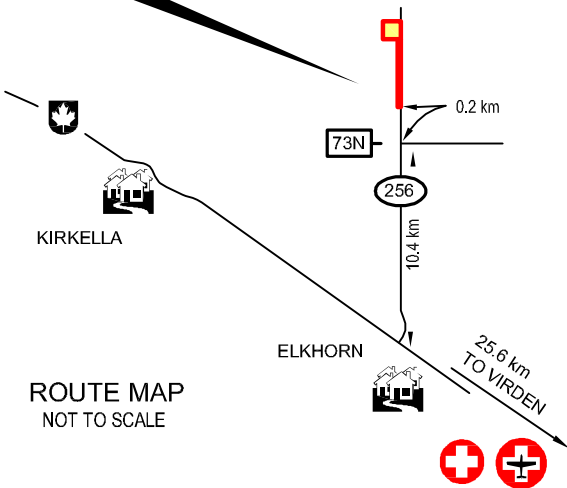
LEGEND

- HOSPITAL
- LIFE FLIGHT EMERGENCY SERVICE
- SECONDARY HIGHWAY
- PRIMARY HIGHWAY
- MUNICIPAL ROAD
- TRANSCANADA HIGHWAY



RESIDENCE SKETCH

■ RESIDENCE



ROUTE MAP
NOT TO SCALE

LEGEND:

Distances are in metres. SCALE: 1:5000

Portions referred to shown thus:

Legal Survey Posts (found / placed)

Planted Wood Hub

Fence Lines

Oil / Gas Lines

Overhead Power Lines

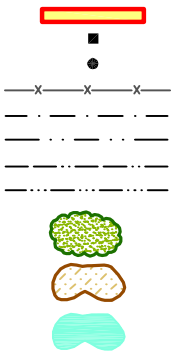
Buried Power Cables

Buried Telecom Cables

Bush

Low Area / Slough

Water Covered Area



Surveyed Well Centre
Standing Well
Producer
Abandoned Producer
Abandoned Dry
Injection Well
Injection Well (Former Producer)
Abandoned Water Injection
Abandoned Water Injection (Former Producer)
Salt Water Disposal

Salt Water Disposal (Former Producer)
Abandoned Salt Water Disposal
Abd. Salt Water Disposal (Former Prod.)
Dual Completion
Abandoned Dual Completion
Junked and Abandoned
Surface Location - Horizontal / Directional / Slant
Water Supply Well
Abandoned Water Supply Well
Abandoned Structure Test Hole



OPERATOR:



WELL LICENCE INFORMATION

THE PROPOSED WELL CENTRE IS:

- At least 1.5 km from the Corporate Limits of a City, Town or Village
- At least 75m from any shoreline
- At least 75m from any Surface Improvements
- At least 45m from any surveyed road
- At least 75m from any aircraft runway or taxiway
- At least 75m from any water well
- Approximately 10.8 km from the nearest urban centre (Kirkella)
- Approximately 0.9 km from the nearest residence (NW¼ 10-13-28WPM)

YES NO
■ □
■ □
■ □
■ □
■ □
■ □

FACILITIES SHOWN ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. PRIOR TO ANY CONSTRUCTION ON LEASE OR ACCESS ROAD, TUNDRA OIL & GAS PARTNERSHIP, MTS COMMUNICATIONS INC., MANITOBA HYDRO, AND MANITOBA HYDRO-GAS OPERATIONS **MUST** BE CONTACTED FOR LOCATION OF ANY UNDERGROUND FACILITIES THAT MAY EXIST.

There are no surface or underground improvements within 76m of well centre except as shown. OTHER FACILITIES MAY EXIST, OF WHICH WE WERE UNAWARE OF OR UNABLE TO LOCATE.



Toll Free: 1-800-465-6233
www.altusgeomaticsmb.com



Client File: N/A
NTS SHEET: 62 K/3
ALTUS GEOMATICS File: 148472

All distances shown are horizontal and at ground level.

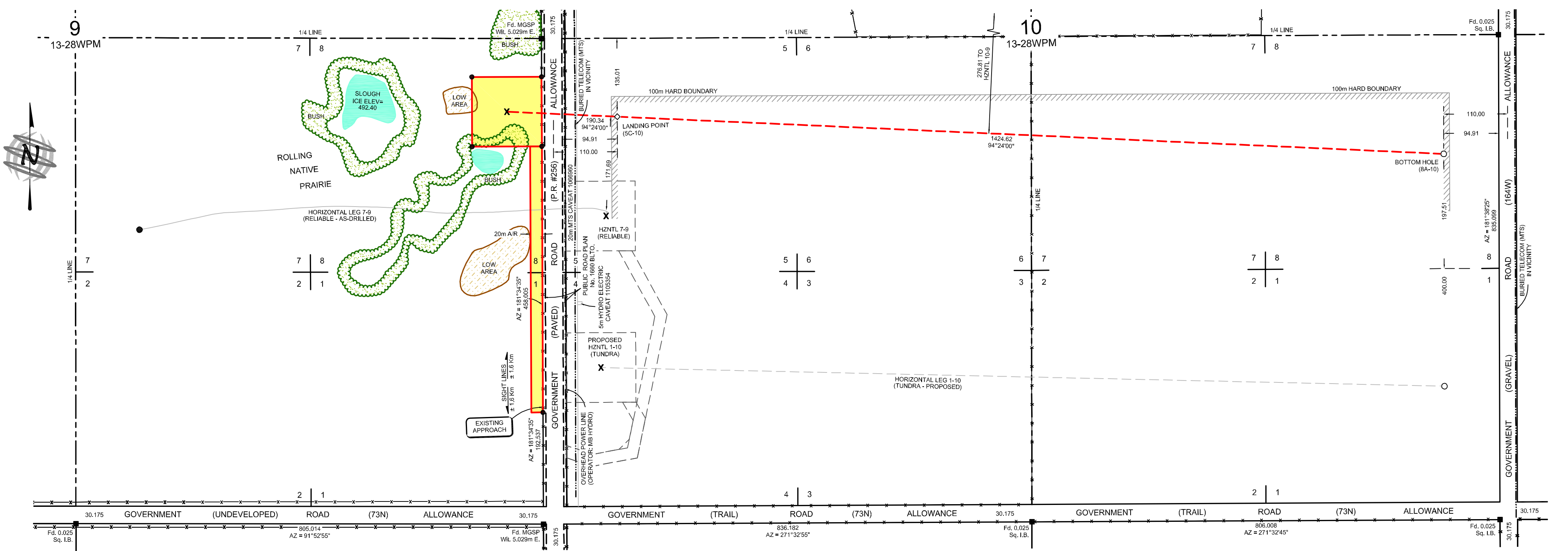
All bearings are NAD 83 (Zone 14) UTM grid bearings.
The Combined Scale Factor derived is 0.999842

No.	DATE	REVISION	CP	BM
0	DEC. 29, 2011	ISSUED	CP	BM
-	DEC. 22, 2011	ISSUED FOR REVIEW	CP	PFS
No.	DATE	DESCRIPTION	DWN	CKD

REVISIONS

FIELD BOOK
V29
PAGE(S)
N/A

Surveyed by: DM
Drafted by: CP
Checked by: PFS



SURFACE (8D-9)	LANDING POINT (5C-10)	BOTTOM HOLE (8A-10)
LOCAL CO-ORDINATES 680.00 N of S 65.03 W of E } Sec 9	LOCAL CO-ORDINATES 670.89 N of S 94.91 E of W } Sec 10	LOCAL CO-ORDINATES 600.00 N of S 94.91 W of E } Sec 10
UTM CO-ORDINATES (NAD 83) 5550451.290 N 339598.669 E } CSRS	UTM CO-ORDINATES (NAD 83) 5550436.690 N 339788.423 E } CSRS	UTM CO-ORDINATES (NAD 83) 5550327.414 N 341208.625 E } CSRS
UTM CO-ORDINATES (NAD 27) 5550231.021 N 339627.005 E } CSRS	UTM CO-ORDINATES (NAD 27) 5550216.417 N 339816.759 E } CSRS	UTM CO-ORDINATES (NAD 27) 5550107.112 N 341236.960 E } CSRS
LATITUDE / LONGITUDE (LL83) 50°05'04.771" } CSRS 101°14'31.868" } CSRS	LATITUDE / LONGITUDE (LL83) 50°05'04.483" } CSRS 101°14'22.304" } CSRS	LATITUDE / LONGITUDE (LL83) 50°05'02.319" } CSRS 101°13'10.730" } CSRS
LATITUDE / LONGITUDE (LL27) 50°05'04.757" } CSRS 101°14'30.176" } CSRS	LATITUDE / LONGITUDE (LL27) 50°05'04.468" } CSRS 101°14'20.613" } CSRS	LATITUDE / LONGITUDE (LL27) 50°05'02.304" } CSRS 101°13'09.041" } CSRS

CARTESIAN CO-ORDINATES (NAD83)	CARTESIAN CO-ORDINATES (TRUE NORTH)
Note: All distances are cartesian referenced to the UTM GRID, NAD 83, ZONE 14	Note: All distances are cartesian referenced to True North (Grid Convergence = -1.7197°)
Landing Point is 14.60 South 189.78 East of surface location	Landing Point is 8.90 South 190.14 East of surface location
Bottom Hole is 123.90 South 1610.21 East of surface location	Bottom Hole is 75.52 South 1613.20 East of surface location
Proposed HZNTL 1-10 Surface is 404.85 South 11.15 West of surface location	Proposed HZNTL 1-10 Surface is 405.00 South 1.01 East of surface location
HZNTL 7-9 Surface is 184.91 South 165.22 East of surface location	HZNTL 7-9 Surface is 179.87 South 170.69 East of surface location
HZNTL 10-9 Surface is 212.24 North 849.79 East of surface location	HZNTL 10-9 Surface is 237.65 North 843.04 East of surface location

WELL CENTRE ELEVATION: 493.00
Elevations shown are in Geodetic Datum from
the Province of Manitoba Mon. #82R748

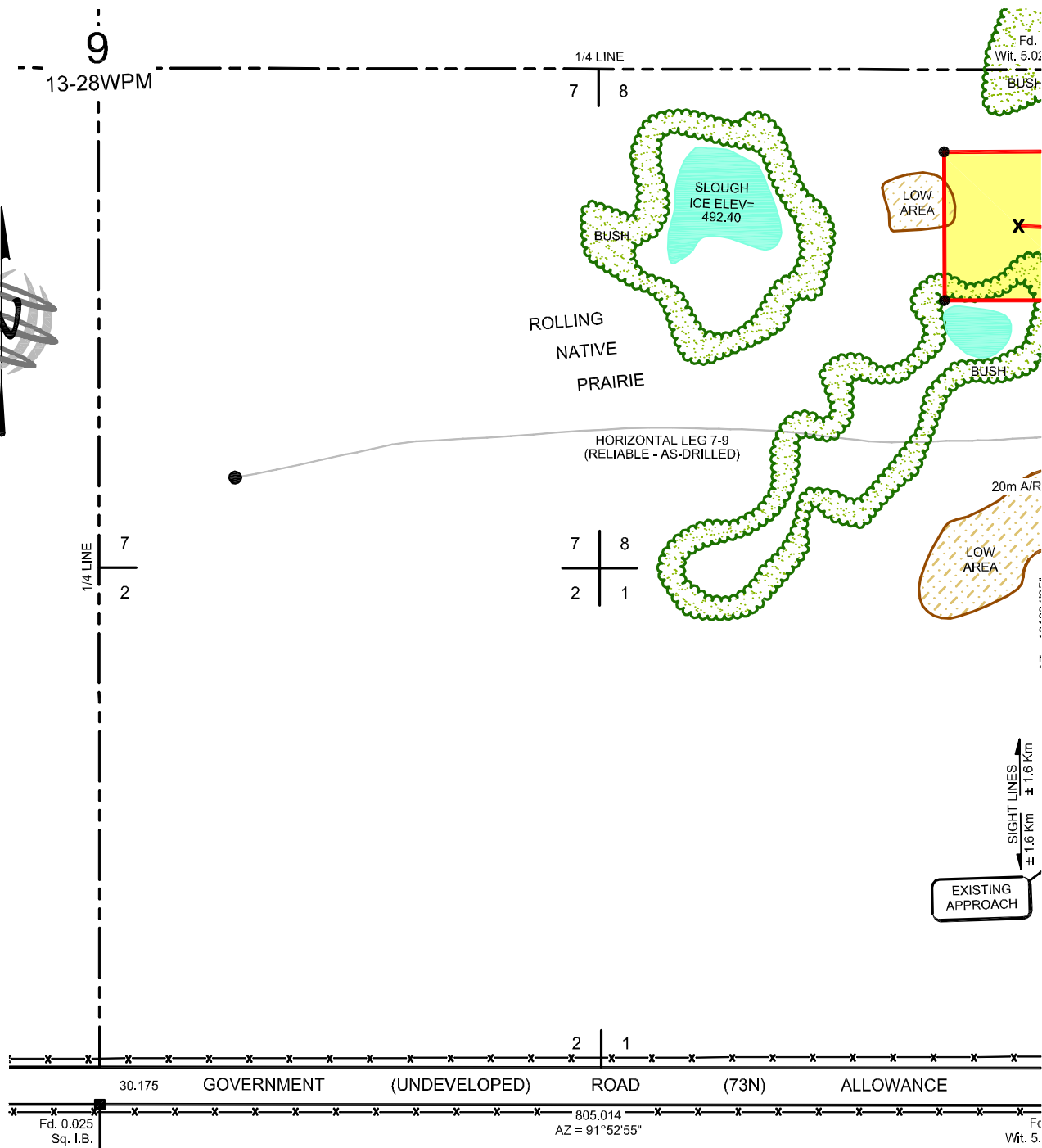
SE ¼ Sec. 9 Twp. 13 Rge. 28WPM
Owner(s): EDNA MAY FERRIS (LIFE ESTATE)
JAMES RONALD FERRIS (UNDIVIDED 1/2 INTEREST)
JUDITH MAY COE (UNDIVIDED 1/2 INTEREST)

C.T. No. 1824306

AREAS REQUIRED		
WELL SITE	1.440 ha	3.56 ac
ACCESS ROAD	0.916 ha	2.26 ac
TOTAL	2.356 ha	5.82 ac

I certify that the survey represented by this plan is
correct to the best of my knowledge and was
completed on the 15th day of December, 2011.

Ken Boley
MANITOBA LAND SURVEYOR
Witness



SURFACE
(8D-9)

LOCAL CO-ORDINATES
680.00 N of S } Sec 9
65.03 W of E }

UTM CO-ORDINATES (NAD 83)
5550451.290 N } CSRS
339598.669 E }

UTM CO-ORDINATES (NAD 27)
5550231.021 N } CSRS
339627.005 E }

LATITUDE / LONGITUDE (LL83)
50°05'04.771"
101°14'31.868" } CSRS

LATITUDE / LONGITUDE (LL27)
50°05'04.757"
101°14'30.176" } CSRS

LANDING POINT
(5C-10)

LOCAL CO-ORDINATES
670.89 N of S } Sec 10
94.91 E of W }

UTM CO-ORDINATES (NAD 83)
5550436.690 N } CSRS
339788.423 E }

UTM CO-ORDINATES (NAD 27)
5550216.417 N } CSRS
339816.759 E }

LATITUDE / LONGITUDE (LL83)
50°05'04.483"
101°14'22.304" } CSRS

LATITUDE / LONGITUDE (LL27)
50°05'04.468"
101°14'20.613" } CSRS

BOTTOM HOLE
(8A-10)

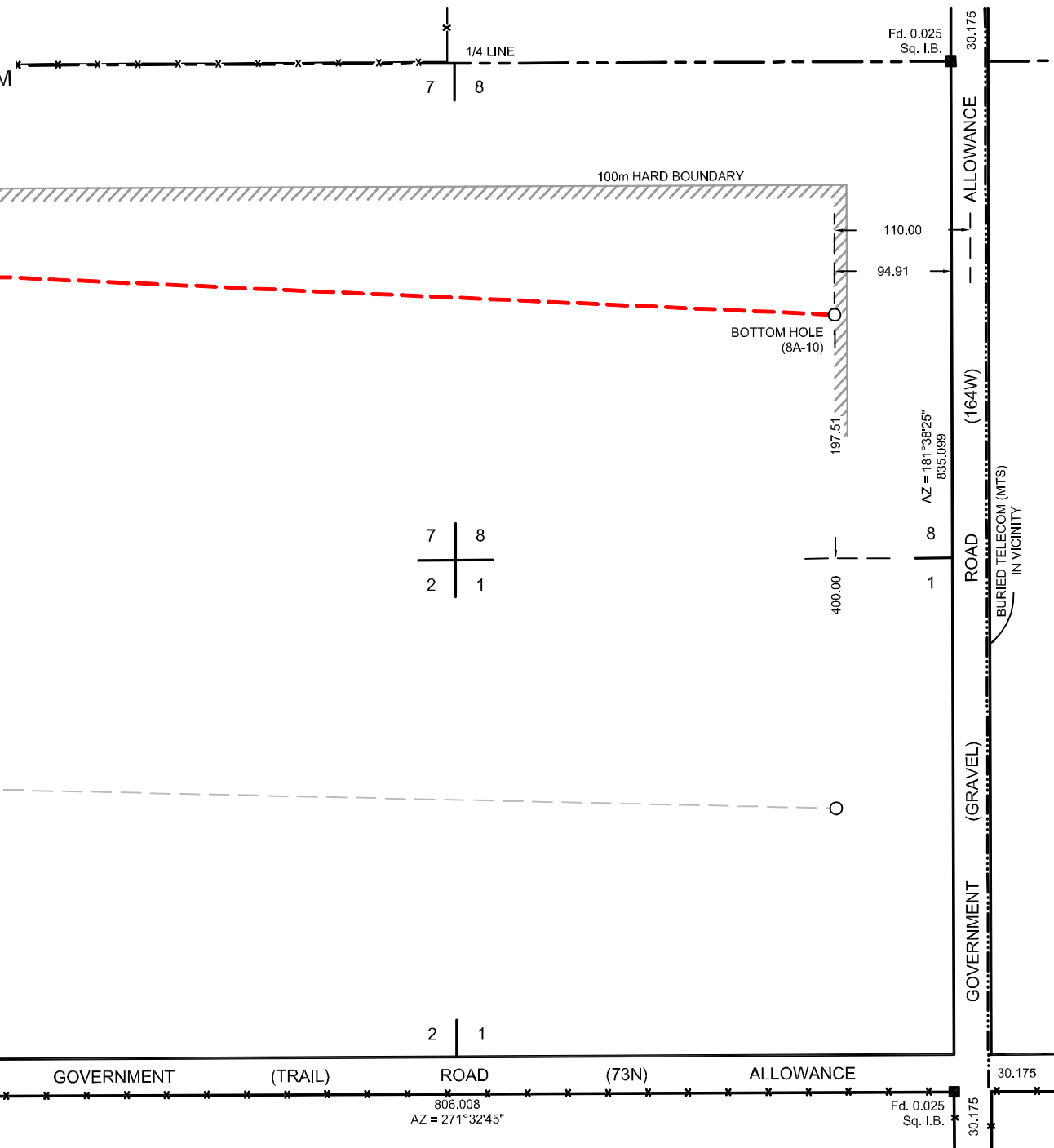
LOCAL CO-ORDINATES
600.00 N of S } Sec 10
94.91 W of E }

UTM CO-ORDINATES (NAD 83)
5550327.414 N } CSRS
341208.625 E }

UTM CO-ORDINATES (NAD 27)
5550107.112 N } CSRS
341236.960 E }

LATITUDE / LONGITUDE (LL83)
50°05'02.319"
101°13'10.730" } CSRS

LATITUDE / LONGITUDE (LL27)
50°05'02.304"
101°13'09.041" } CSRS



WELL CENTRE ELEVATION: 493.00
Elevations shown are in Geodetic Datum from
the Province of Manitoba Mon. #82R748

SE ¼ Sec. 9 Twp. 13 Rge. 28WPM
Owner(s): EDNA MAY FERRIS (LIFE ESTATE)
JAMES RONALD FERRIS (UNDIVIDED 1/2 INTEREST)
JUDITH MAY COE (UNDIVIDED 1/2 INTEREST)

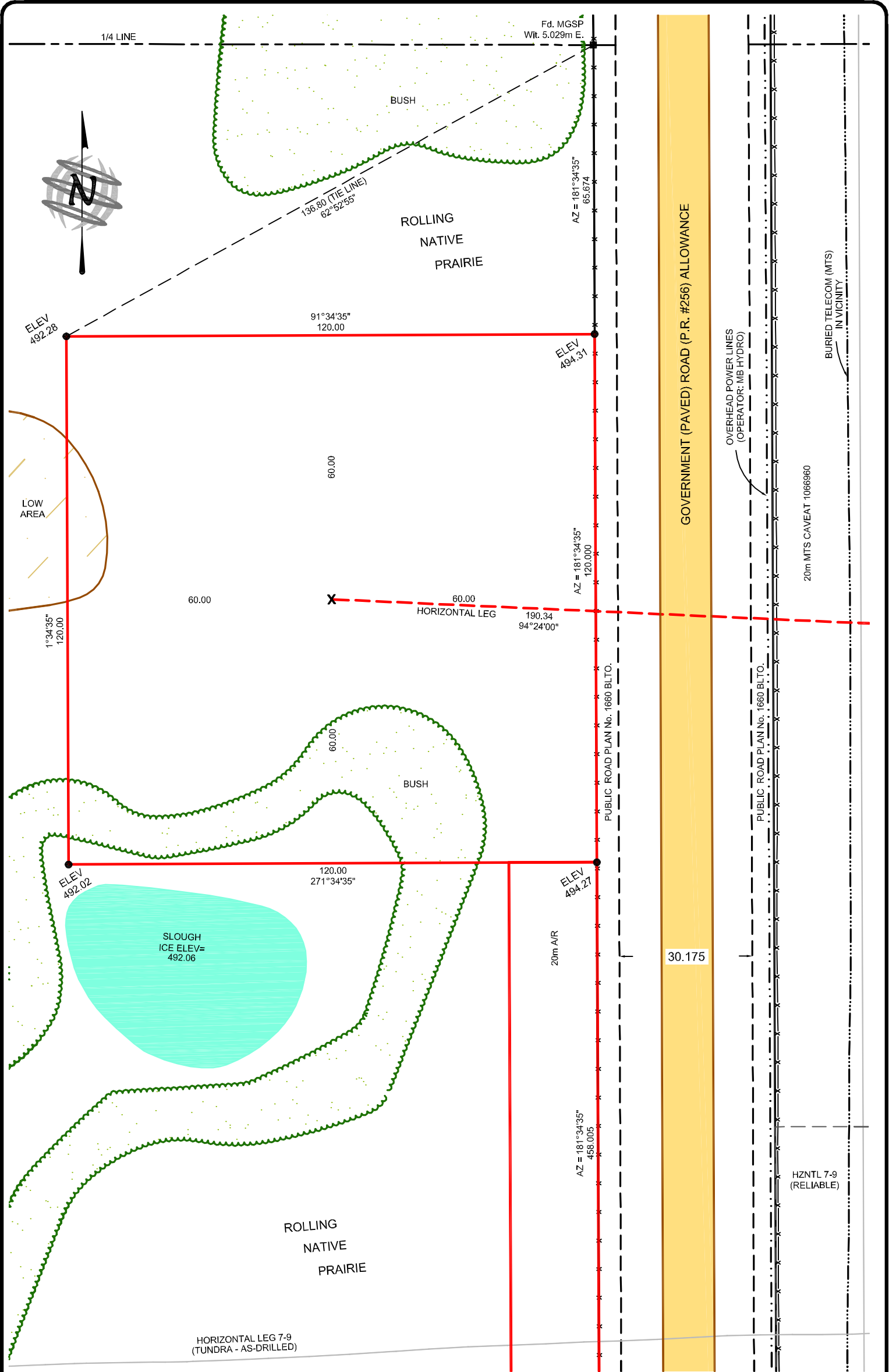
C.T. No. 1824306

AREAS REQUIRED

WELL SITE	1.440 ha	3.56 ac
ACCESS ROAD	0.916 ha	2.26 ac
TOTAL	2.356 ha	5.82 ac

I certify that the survey represented by this plan is
correct to the best of my knowledge and was
completed on the 15th day of December, 2011.

Ken Baley
MANITOBA LAND SURVEYOR
[Signature]
Witness



DETAIL AT HZNTL 8-10 (SURFACE 8-9)
SCALE 1:1000