

PLAN SHOWING A SURVEY OF PAD SITE FOR

GXO 2A-8 HZ WARNER 1-10-3-18

GXO 2B-8 HZ WARNER 4-6-3-18

HORIZONTALLY DRILLED FROM WITHIN L.S.2 SEC.8 TWP.3 RGE.18 W.4 M.
 COUNTY of WARNER No.5 – ALBERTA

LEGEND

- Survey Monuments found are shown thus ●
 - Iron Bars Found are shown thus ◆
 - Iron Spikes shown thus Found.....▲ Placed △
 - Computed Positions shown thus ☒
 - Well Head shown thus ☒ Sub-Surface Target..... ☒
 - Portions referred to shown thus —△—
- Distances are ground and shown in metres and decimals thereof.
 Bearings on Plan are Assumed from TWP. PLAN 3-17-W.4 M.

GEO-REFERENCING DATA

Geo-Reference Point is shown thus RP ○

Geo-Referenced point is Sta.100 in the S.E. 17-3-18-4, with coordinates derived by G.P.S. (P.P.P.) UTM NAD83 (C.S.R.S. 2002) Zone 12: 5451021.86 N. 399218.57 E.

Grid Bearings are UTM NAD83 (Original): derived from ATS v4.1 coordinates between N.E. 5-3-18-4 & N.E. 8-3-18-4

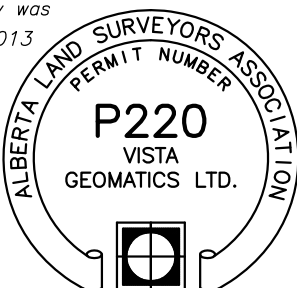
A Combined Scale Factor of 0.99953 is used to scale ground distances to grid distances.

SURVEYOR'S AFFIDAVIT

I, JOHN LOHNES, Alberta Land Surveyor, of the City of Calgary, Alberta, certify that the survey represented by this plan is true and correct to the best of my knowledge, has been carried out in accordance with the Alberta Land Surveyor's Association Manual of Standard Practice and the field survey was performed between the dates of June 8th, 2013 and October 5th, 2014.

John Lohnes
 Alberta Land Surveyor, December 15th, 2016

Witness - Burghard Winkel



LANDOWNER AGREEMENT

I / We agree to the location of the Pad Site and have no objections to the A.E.R. issuing a license for same.

 Owner / Occupant Date

 Owner / Occupant Date

 Owner / Occupant Date

LICENSEE

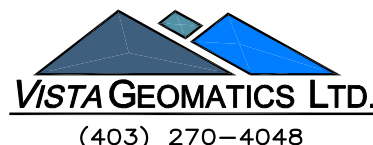


A.E.R. LICENSING INFORMATION:

The Proposed Well Centre is a minimum of:

- 1.5km from the Corporate limits of a City, Town, Village or Hamlet. Yes No
- 100m from any occupied dwelling, permanent building, school, church, or military building. Yes No
- 100m from any stream or water body, dry or wet, intermittent or permanent. Yes No
- 200m from any water well. Yes No
- 100m from any surface improvements. Yes No
- 40m from any Surveyed Road or Road Allowance. Yes No
- 5.0km from a Lighted Aerodrome as described in the Oil and Gas Regulations. Yes No
- 1.6km from an Unlighted Aerodrome as described in the Oil and Gas Regulations. Yes No
- The Proposed Well is outside any potential Coal Development Area. Yes No
- The Proposed Well satisfies Land Reclamation Guidelines for Elevation and Drainage. Yes No
- The Proposed Well requires Historical Resources Act Clearance. Yes No
- Distance to the Nearest Urban Centre (VILLAGE of WARNER) is ±16.0km. Yes No
- Distance to the Nearest Surface Development / Residence is ±6.4km in the S.E.1/4 32-3-18-W.4 M. to the best of our knowledge. Yes No

REV.	DATE: (YYYY-MM-DD)	SURVEYED BY:	DRAWN BY:	CHECKED BY:	REVISIONS:
①	2013-08-19	R.H. / D.T.	B.W. / J.H.	B.W.W.	ORIGINAL PLAN
②	2013-10-22		B.W.	B.W.W.	MOVE LEASE
③	2014-03-20		B.W.	B.W.W.	MOVE LEASE & ADD PROPOSED WCs
④	2014-09-12		J.P.D.	B.W.W.	MOVE WC's & REV. DRILL PATHS
⑤	2014-10-06	R.H. / D.T.	J.P.D. / B.W.	J.L.'	MOVE LEASE & W/C's
⑥	2015-05-21		B.W.	J.L.	CLIENT NAME CHANGE
⑦	2016-12-15		B.W.	J.L.	UPDATE PLAN



CLIENT FILE: GXO 2A-8 HZ WARNER 1-10-3-18 (W.4 M.) AFE No: 13.03.028

SURFACE

LOCAL COORDINATES (Bdy. of Sec.8 3-18-W.4 M.)	CALCULATED 1/4 LINE COORDINATES	NAD 27 DATUM - UTM ZONE 11		NAD 83 DATUM - UTM ZONE 11	
		GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
289.8 N. of S. 456.4 W. of E.	514.0 S. of N. 350.9 E. of W.	(49°11'27.5" N) (112°23'15.1" W)	North 5449393.3 East 398899.9	Lat: 49.190967 Long: -112.388427	(49°11'27.5" N) (112°23'18.3" W) North 5449612.9 East 398837.2

ELEVATION Well Centre 1206.17 (Ground)

N.W. Cor: SEE N.E. Cor: Datum: Geo-Reference Point (RP) Sta.100
S.W. Cor: LEASE S.E. Cor: DETAIL Elev. = 1249.67m (G.N.S.S. P.P.P)

SUB-SURFACE (CASING POINT - I.C.P.)

LOCAL COORDINATES (Bdy. of Sec.8 3-18-W.4 M.)	NAD 27 - UTM ZONE 11		NAD 83 - UTM ZONE 11	
	GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
285.0 N. of S. 255.0 W. of E.	Lat: 49.190931 Long: -112.384760	(49°11'27.3" N) (112°23'05.1" W) North 5449384.9 East 399101.1	Lat: 49.190925 Long: -112.385664	(49°11'27.3" N) (112°23'08.4" W) North 5449604.5 East 399038.4

SUB-SURFACE (BOTTOM HOLE)

LOCAL COORDINATES (Bdy. of Sec.10 3-18-W.4 M.)	NAD 27 - UTM ZONE 11		NAD 83 - UTM ZONE 11	
	GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
200.0 N. of S. 200.0 W. of E.	Lat: 49.190161 Long: -112.339187	(49°11'24.6" N) (112°20'21.1" W) North 5449239.6 East 402420.0	Lat: 49.190156 Long: -112.340090	(49°11'24.6" N) (112°20'24.3" W) North 5449459.2 East 402357.4

CLIENT FILE: GXO 2B-8 HZ WARNER 4-6-3-18 (W.4 M.) AFE No: 14.03.114

SURFACE

LOCAL COORDINATES (Bdy. of Sec.8 3-18-W.4 M.)	CALCULATED 1/4 LINE COORDINATES	NAD 27 DATUM - UTM ZONE 11		NAD 83 DATUM - UTM ZONE 11	
		GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
265.5 N. of S. 450.2 W. of E.	538.3 S. of N. 357.0 E. of W.	(49°11'26.7" N) (112°23'14.8" W)	North 5449368.9 East 398905.6	Lat: 49.190749 Long: -112.388342	(49°11'26.7" N) (112°23'18.0" W) North 5449588.5 East 398843.0

ELEVATION Well Centre 1205.67 (Ground)

N.W. Cor: SEE N.E. Cor: Datum: Geo-Reference Point (RP) Sta.100
S.W. Cor: LEASE S.E. Cor: DETAIL Elev. = 1249.67m (G.N.S.S. P.P.P)

SUB-SURFACE (CASING POINT - I.C.P.)

LOCAL COORDINATES (Bdy. of Sec.8 3-18-W.4 M.)	NAD 27 - UTM ZONE 11		NAD 83 - UTM ZONE 11	
	GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
195.0 N. of S. 570.0 W. of E.	Lat: 49.190120 Long: -112.389081	(49°11'24.4" N) (112°23'20.7" W) North 5449300.5 East 398784.6	Lat: 49.190114 Long: -112.389985	(49°11'24.4" N) (112°23'23.9" W) North 5449520.2 East 398722.0

SUB-SURFACE (BOTTOM HOLE)

LOCAL COORDINATES (Bdy. of Sec.6 3-18-W.4 M.)	NAD 27 - UTM ZONE 11		NAD 83 - UTM ZONE 11	
	GEOGRAPHIC	U.T.M.	GEOGRAPHIC	U.T.M.
200.0 N. of S. 200.0 E. of W.	Lat: 49.175697 Long: -112.423056	(49°10'32.5" N) (112°25'23.0" W) North 5447743.3 East 396278.9	Lat: 49.175691 Long: -112.423962	(49°10'32.5" N) (112°25'26.3" W) North 5447962.8 East 396216.2

AREAS AND CROWN TIMBER USAGE REPORT

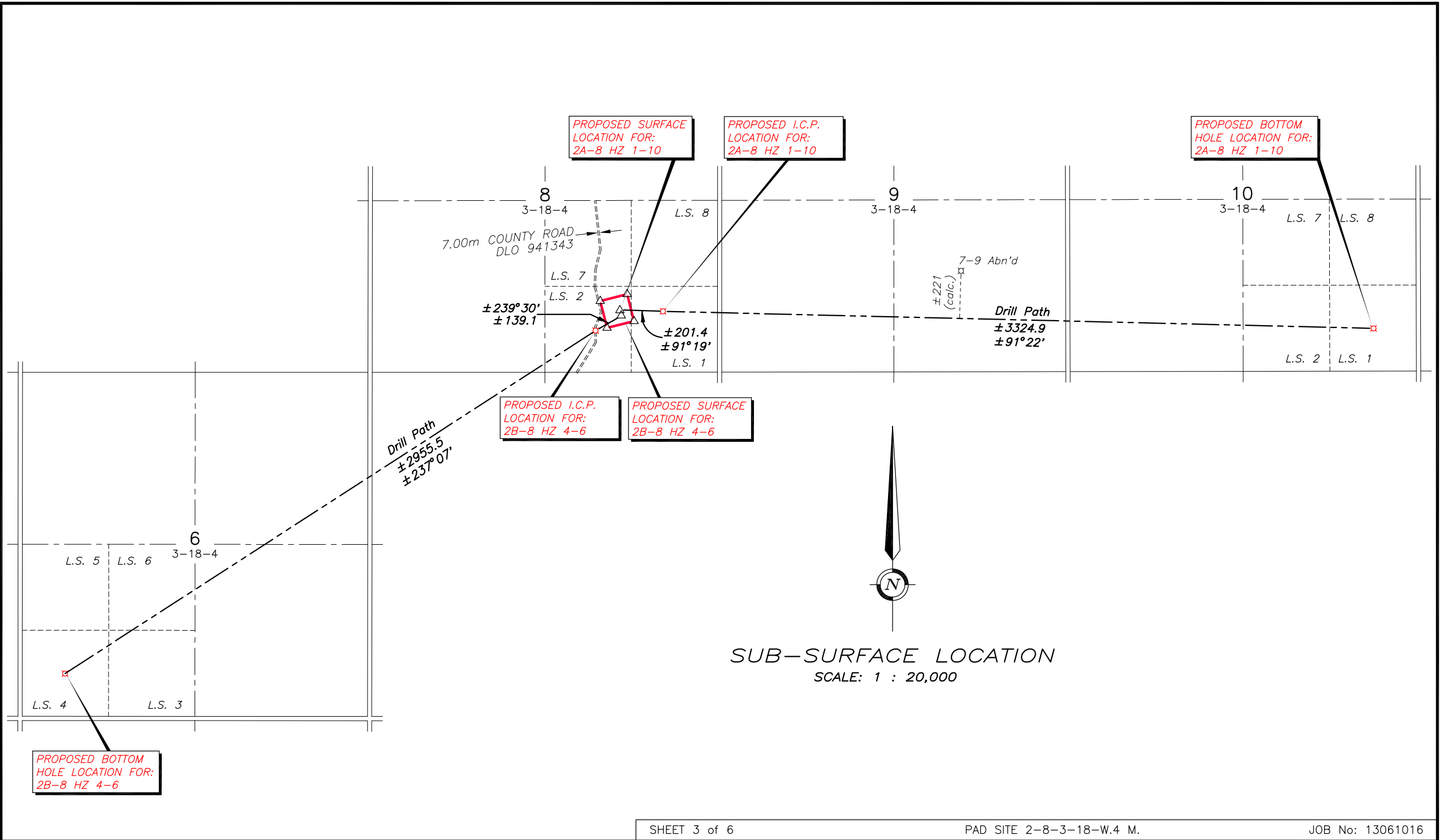
AREAS	NEW CUT (ha)	EXISTING CUT (ha)	TOTAL (ha) (Ac.)	LENGTH (m)
Pad Site:	1.690	0.000	1.690 4.18	

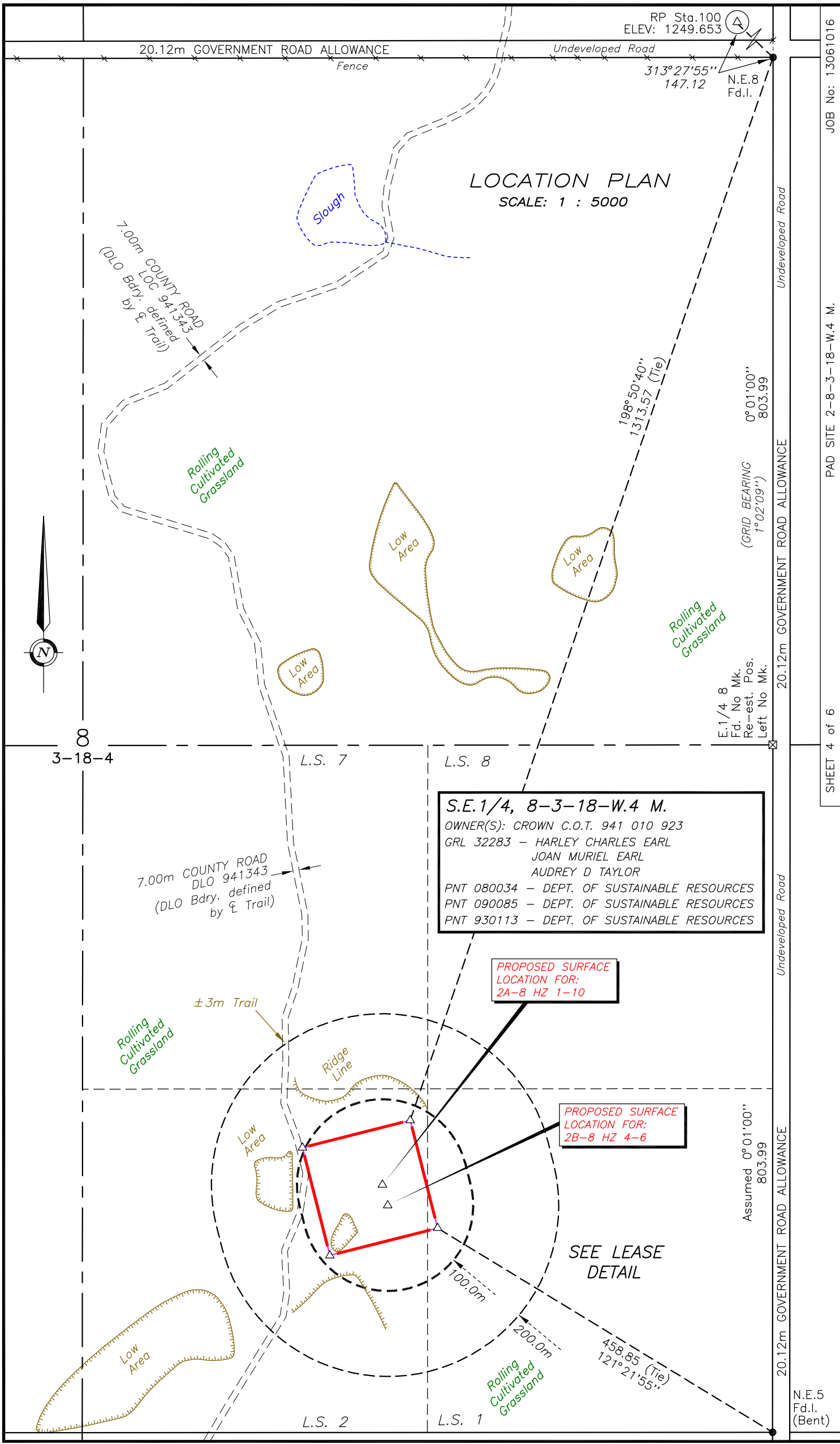
LIST OF PROXIMITIES FOR ALL PROPOSED WELL CENTRES

No.	DESCRIPTION
1	±6.4km to Nearest Residence in the S.E.1/4 32-3-17-W.4 M.

LIST OF CROSSINGS & NOTIFICATIONS

No.	DESCRIPTION
1	OWNER(S): CROWN (NON-PATENT) - C. of T. 941 010 923 - as to S.E.1/4, 8-3-18-W.4 M.
2	GRL 32283 - HARLEY CHARLES EARL, JOAN MURIEL EARL & AUDREY D TAYLOR
3	PNT 080034, 090085 & 930113 - DEPT. OF SUSTAINABLE RESOURCES
4	COUNTY OF WARNER





LEASE DETAIL

SCALE: 1 : 2500

7.00m COUNTY ROAD
DLO 941343
(DLO Bdry. defined
by E Trail)

Rolling
Cultivated
Grassland



Low Area

Ridge Line

13.6

1205.4

345°44'30"
130.00

1204.5

Ridge Line

26.7

130.00
75°44'30"

1206.17

1205.67

1206.0

255°44'30"
130.00

25.5

65.0

50.0

25.0

40.0

44.5

1210.8

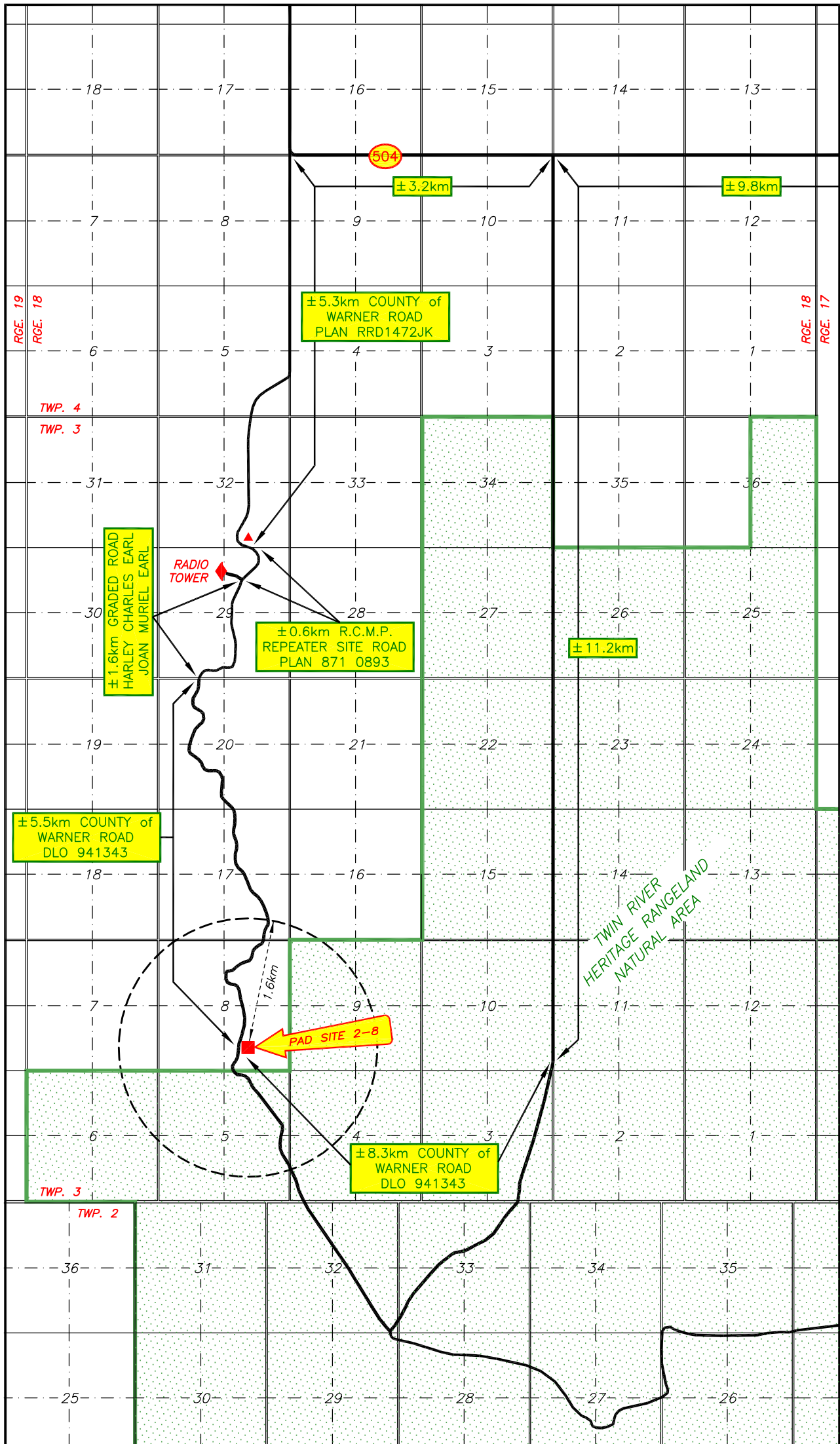
PROPOSED SURFACE
LOCATION FOR:
2A-8 HZ 1-10

PROPOSED SURFACE
LOCATION FOR:
2B-8 HZ 4-6

100m Radius

Rolling
Cultivated
Grassland

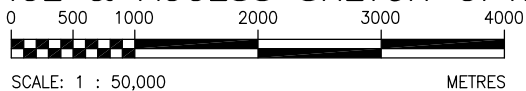
200m Radius



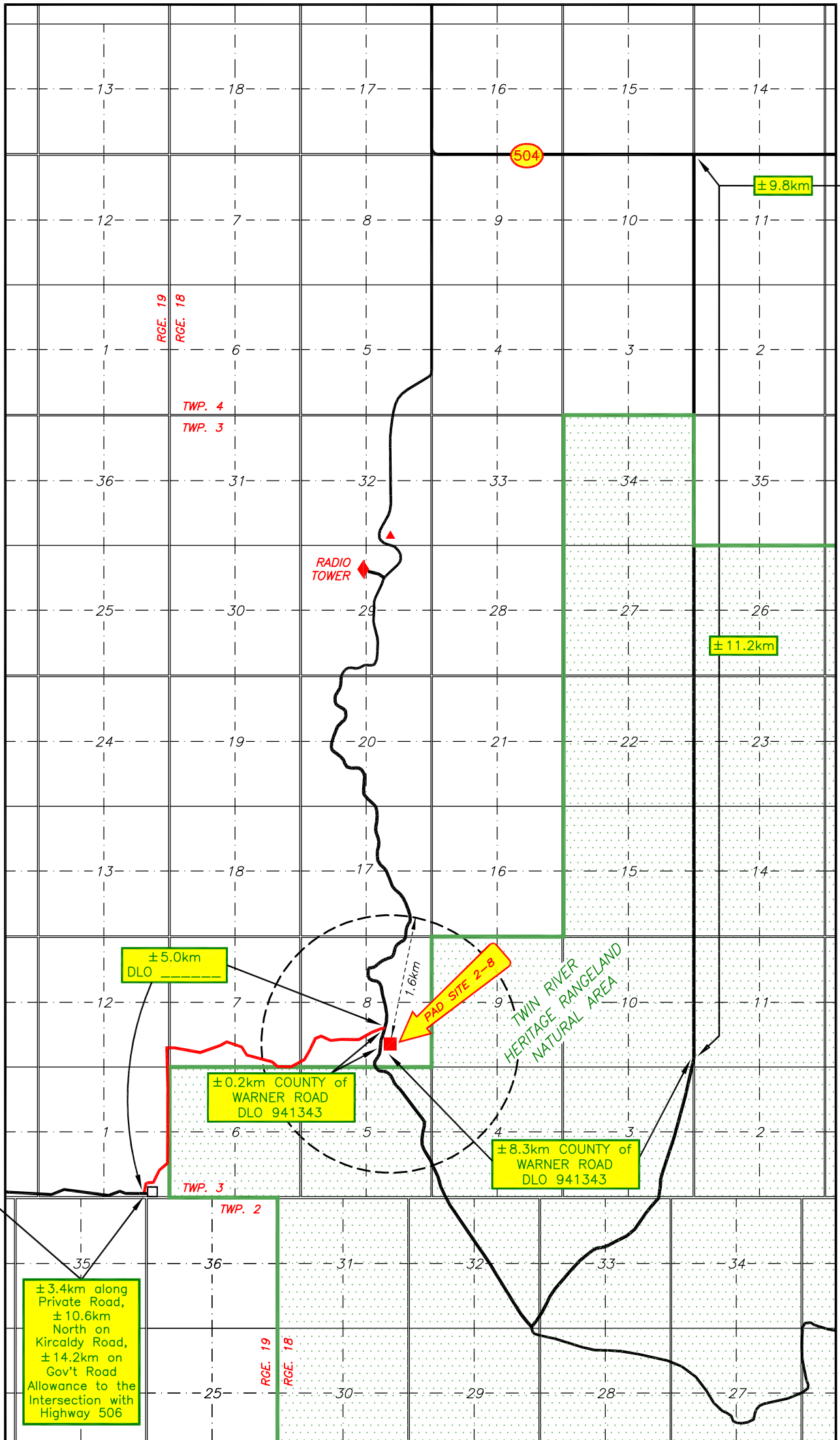
TO INTERSECTION WITH HIGHWAY 4 AT TOWN OF WARNER

RESIDENCE & ACCESS SKETCH OPTION 'A'

NOTE:
NOT ALL INDIVIDUAL RESIDENCES OUTSIDE THE 1.6km RADIUS HAVE BEEN SHOWN

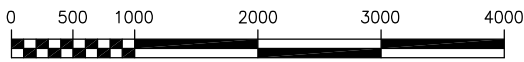


OCCUPIED RESIDENCES are shown as thus.....▲
UNOCCUPIED RESIDENCES are shown as thus.....△

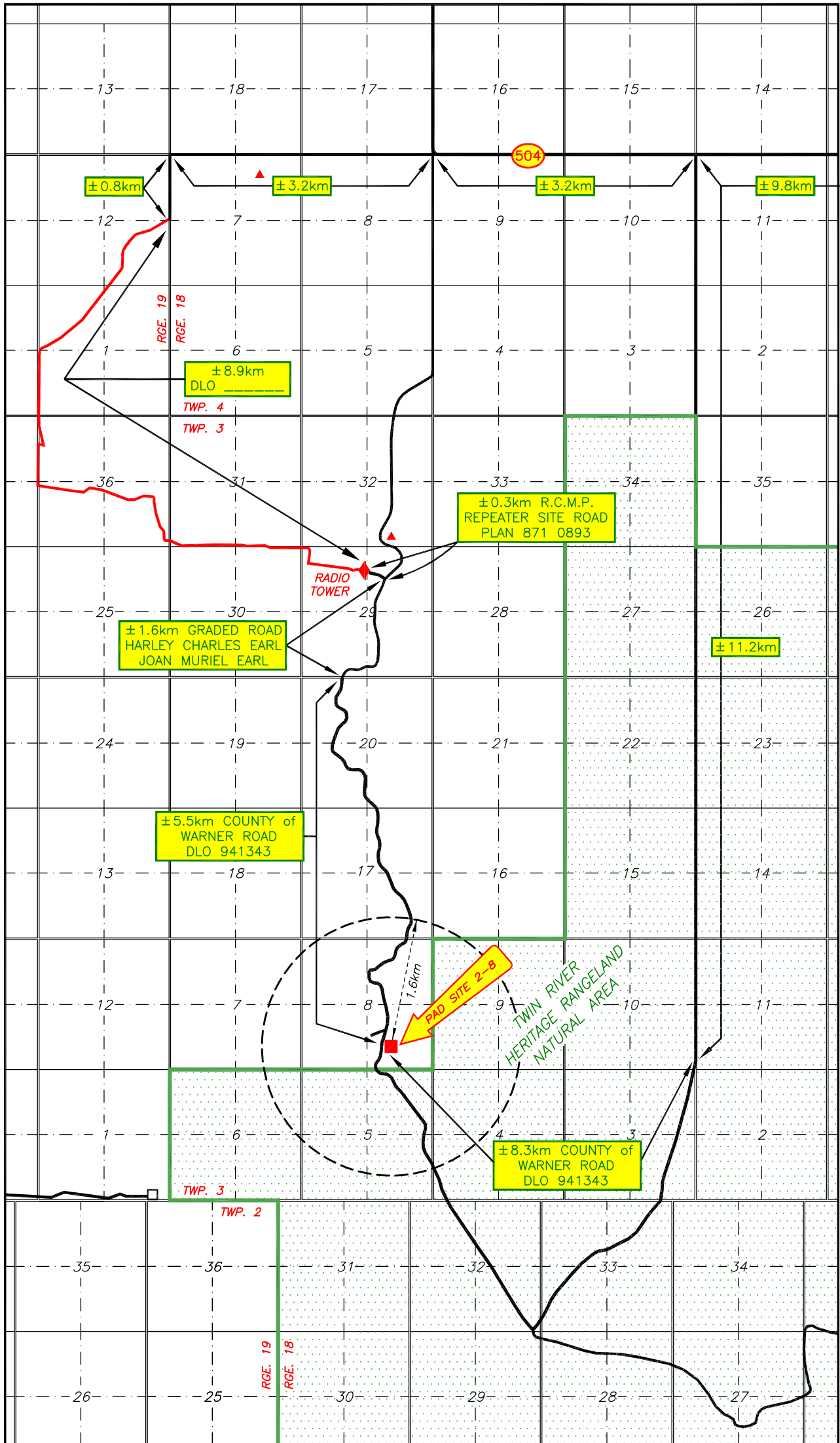


RESIDENCE & ACCESS SKETCH OPTION 'B'

NOTE:
 NOT ALL INDIVIDUAL
 RESIDENCES OUTSIDE
 THE 1.6km RADIUS
 HAVE BEEN SHOWN



SCALE: 1 : 50,000 METRES
 OCCUPIED RESIDENCES are shown as thus.....▲
 UNOCCUPIED RESIDENCES are shown as thus.....△



RESIDENCE & ACCESS SKETCH OPTION 'C'

NOTE:
 NOT ALL INDIVIDUAL
 RESIDENCES OUTSIDE
 THE 1.6km RADIUS
 HAVE BEEN SHOWN



SCALE: 1 : 50,000 METRES

OCCUPIED RESIDENCES are shown as thus.....▲
 UNOCCUPIED RESIDENCES are shown as thus.....△