



TAMWORTH REGIONAL COUNCIL

PRELIMINARY SITE CONTAMINATION INVESTIGATION

For Site 1 of the

SOUTH TAMWORTH RURAL LANDS MASTER PLAN

**BEING GOONOO GOONOO ROAD
'COMMERCIAL LANDS', GOONOO GOONOO
ROAD AND BURGMANN'S LANE, TAMWORTH**

Prepared for: Tamworth Regional Council
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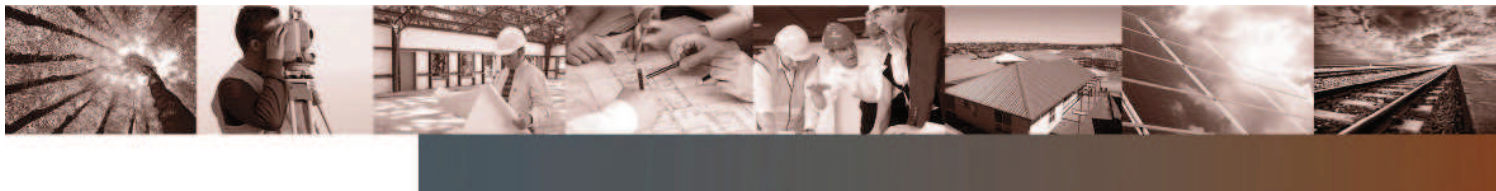


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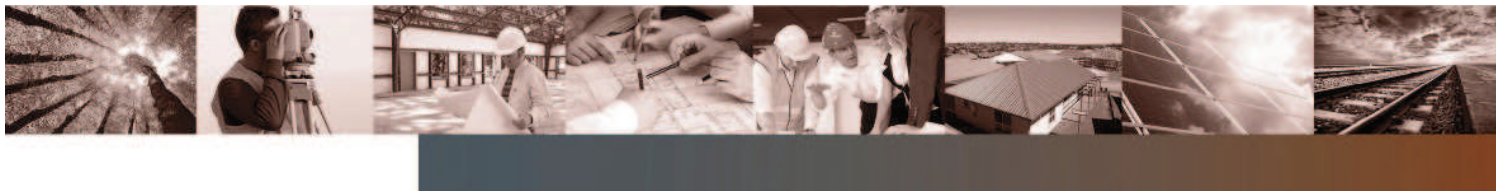


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1.0 Introduction

Tamworth Regional Council has prepared a Master Plan for the future development of the South Tamworth Rural Lands. These lands represent a unique opportunity to provide a range of future commercial, tourist, equine related and residential development. Council will seek to ensure throughout this process the protection of the natural environment and lifestyle of existing local residents.

Tamworth Regional Council is commencing the implementation of Stages 1 and 2 of the South Tamworth Rural Lands Master Plan (STRLM) with the rezoning of lands identified for future commercial and residential land uses. Planning Proposals are required to be submitted to the Department of Planning and Infrastructure's Gateway Determination process to rezone the lands. A Contaminated Site Assessment/Report and a Flora and Fauna Survey/Report are required to be submitted with the Planning Proposals to the Department.

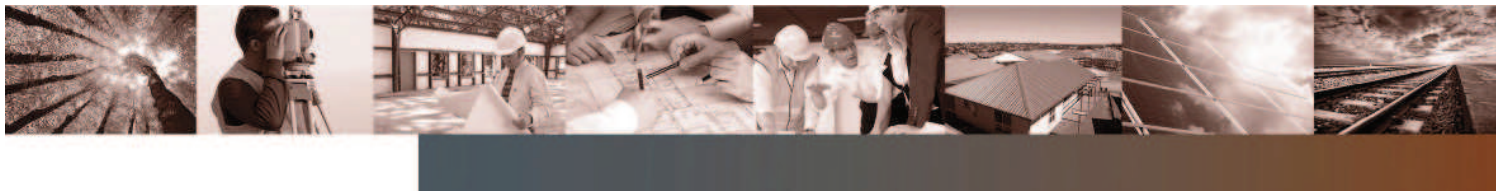
Two sites have been identified to be rezoned under the STRLM. These include lands in Stage 1 located along Goonoo Goonoo Road to be rezoned from RU4 - Primary Production Small Lots to B5 – Business Development and SP3 – Tourist. The lands identified in Stage 2 are an extensive area of rural land bordered by Duri Road and Burgmanns Lane, and are proposed to be rezoned from RU4 - Primary Production Small Lots to R5 – Large Lot Residential.

Mitchel Hanlon Consulting has been engaged by Tamworth Regional Council to carry out a Preliminary Site Contamination Investigation for the Site 1 of the proposed Goonoo Goonoo Road Commercial Lands.

The focus area of this assessment includes 18 individual lots [Refer to Figure 3 (p14)], identified as:

Lot 1 in DP 853320;	Lot 11 in DP 240631;
Lot 1 in DP 162623;	Lot 2511 in DP 1043391;
Lot 1 – 2 in DP 501210;	Lot 11 – 12 in DP 623431;
Lot 19 in DP 1111059;	Lot 4111 in DP 1053377;
Lot 230 in DP 1045797;	Lot 412-413 in DP 1003586;
Lot 24 in DP 95997;	Lot 5 in DP 529656;
Lot 4112 in DP 1053377;	Part Lot 71-72 in DP 866139

The land parcels are currently used for a range of purposes, including agricultural and residential, tourism, recreational and various commercial / industrial uses. As the proposal will require that the current land use be modified, State Environmental Planning Policy (SEPP) No. 55 – *Remediation of Land* is deemed to apply to the development. It is noted that this report only relates to the identified proposed development areas.



The purpose of the investigation is to determine if the site has potential to have been contaminated due to current or historical land use activities. The assessment is required to conform to the requirements of the appropriate NSW EPA and ANZECC guidelines.

Specifically this report follows the EPA Guideline *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (2000)* and Section 3.5.1 Stage 1 – Preliminary Investigation of the Department of Urban Affairs and Planning & NSW EPA (1998) *Managing Land Contamination – Planning guidelines SEPP55 – Remediation of Land*.

For Preliminary Site Investigation Reports, the guidelines state that the following matters are to be investigated and reported upon:-

- Identify all past and present potentially contaminating activities;
- Determine the potential for and, if any, the possible nature and extent of contamination;
- Site condition;
- Preliminary assessment of site contamination; and
- The need for further investigation.

The scope of work undertaken comprises:-

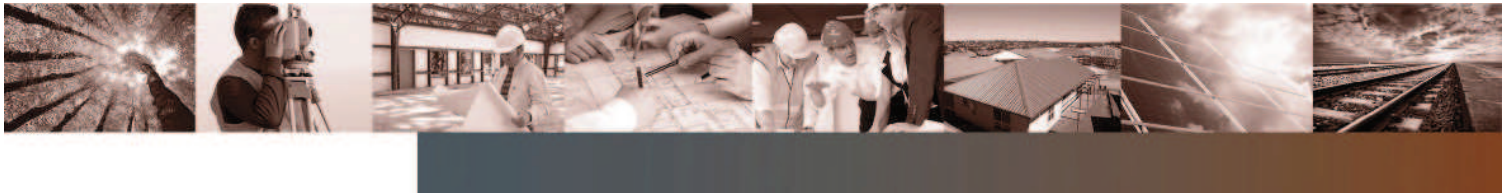
- Compilation of a site history;
- Detailed inspection of the site; and
- Preparation of this report.

1.1 Background

The Tamworth Regional Development Strategy (TRDS) 2008 was developed to provide for the future direction and management of the land uses within the Tamworth Region. The Strategy informed the preparation of the Tamworth Regional Local Environmental Plan (TRLEP) 2010.

The TRDS identified the South Tamworth lands as having potential for the development of equine related industry. This area was identified due to the growing equine industry and construction of the Australian Equine and Livestock Events Centre along Goonoo Goonoo Road.

The South Tamworth Rural Lands were also identified as having future development potential for rural residential and commercial development. The Master Plan area currently supports a mixture of uses and therefore a framework is required to guide future development and minimise land use conflict (TRC 2012).



1.1.1 The Proponent

Tamworth Regional Council (TRC) was established in March 2004, amalgamating the northern NSW shires of Barraba, Manilla, Nundle and Parry and the city of Tamworth. TRC is responsible for one of the biggest council regions in inland NSW, with a population of over 58,000 spread over an area three times as large as the Sydney basin. Tamworth is the regional hub, home to more than 50,000 people. Other population centres include the towns of Manilla, Barraba, Nundle and Kootingal, as well as another 17 hamlets and villages. Tamworth was the first city in the southern hemisphere to introduce electric street lighting, in 1888, and it remains one of NSW's most vibrant regions, with a flourishing modern economy and a strong sense of community (TRC 2012).

1.1.2 Development

The South Tamworth Rural Lands Master Plan (STRLM) provides an overarching framework for the future land uses of rural lands located in South Tamworth. On the 11 December 2012, Council endorsed the STRLM for the future development of lands in South Tamworth. The following year, the Department of Planning and Infrastructure formally endorsed the STRLM on the 16 April 2013. This approval from the Department enables Council to prepare future planning proposals to rezone lands in the appropriate stages of release including the changes proposed by Stages 1 and 2.

The publishing of the Tamworth Regional Local Environmental Plan 2010 (TRLEP 2010) saw the exclusion of bulky goods development from the IN1 – Industrial zone in particular the industrial precinct known as Tamworth Industrial Area (Taminda). This type of commercial use is now required to be located in business related zones. As the bulky goods retail industry has grown, so too has the need for the development of bulky goods retail premises.

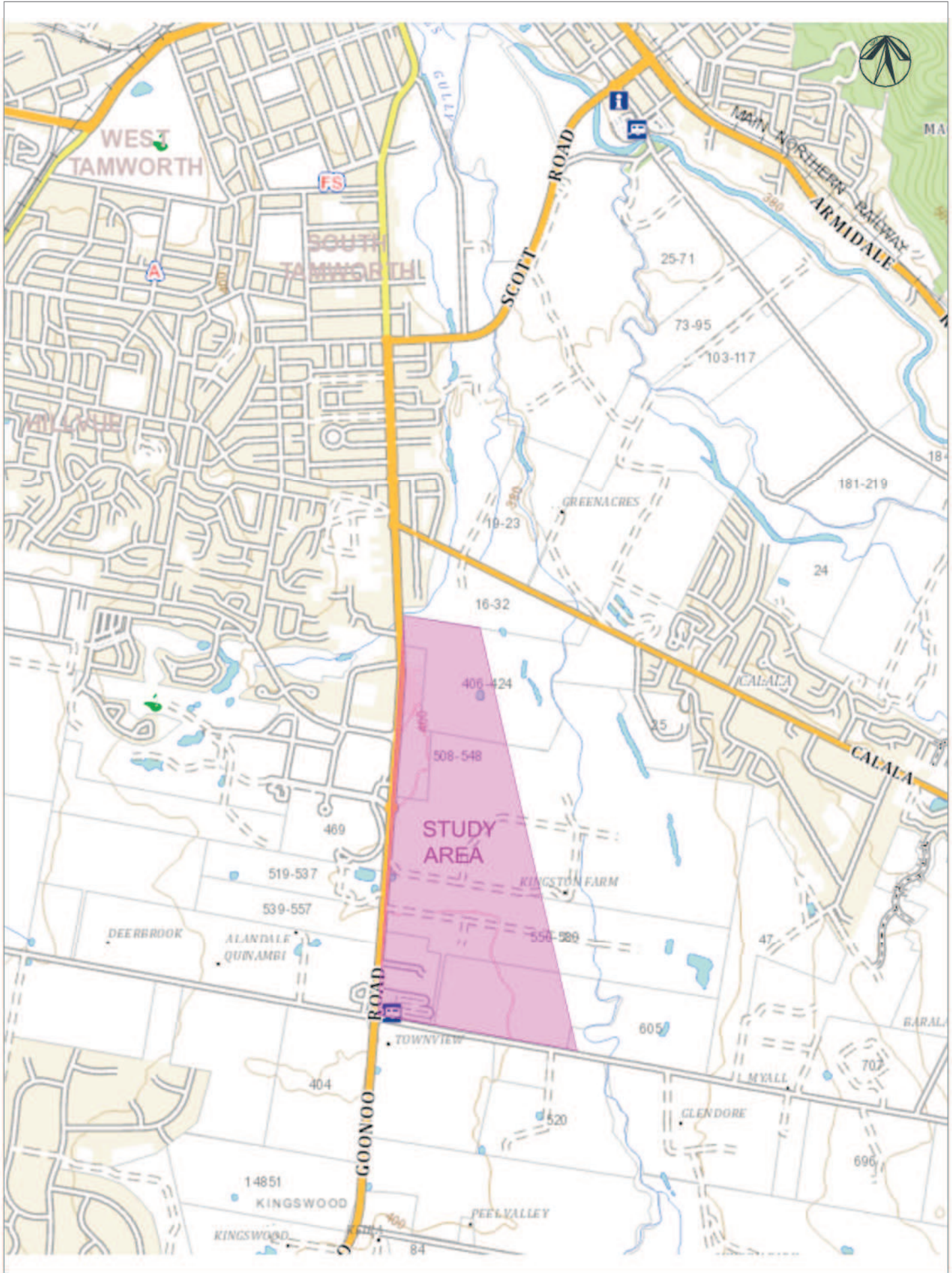
It has also become evident that there is a shortage of future residential land within the South Tamworth area. This includes lots ranging from 650m² to large lot residential development of 2000m² to 4000m² in area. Council is preparing a Servicing Strategy to ensure water and sewer services can be provided to lots of varying sizes (TRC 2013).



Tamworth Regional Council - Preliminary Site Investigation

Goonoo Goonoo Road, Tamworth NSW

FIGURE 1
Regional Locality



Tamworth Regional Council - Preliminary Site Investigation

Goonoo Goonoo Road, Tamworth NSW

FIGURE 2
Site Locality Plan

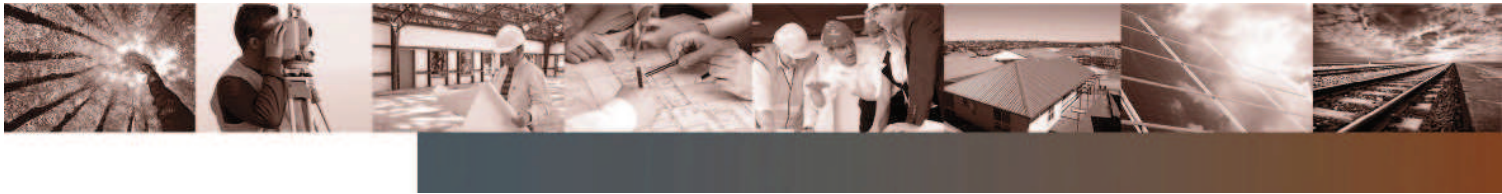


Plate 1: View West over Lot 19 in DP 1111059



Plate 2: View South West over lot 230 in DP 1045797



Plate 3: View South West over Lot 1 in DP 501210



Plate 4: View South over Lot 2 in DP 501210



Plate 5: View West over Lot 12 DP 623431



Plate 6: View South West over Lot 4111 DP 1053377



Plate 7: View North over Lot 4112 in DP 1053377 (from Centre)



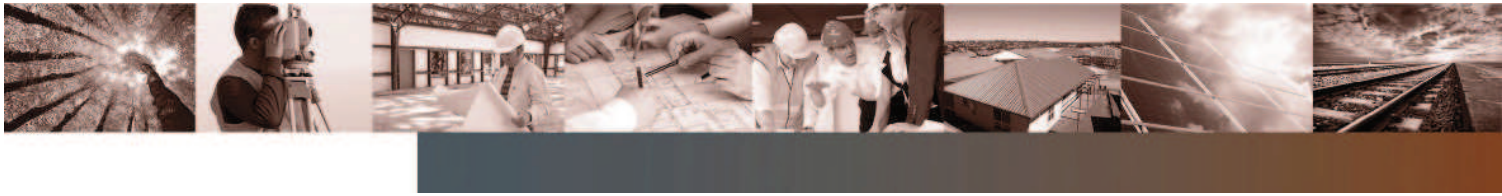
Plate 8: View South West over Lot 4112 in DP 1053377 (from Centre)



Plate 9: View South over Lot 5 in DP 529656



Plate 10: View North over Lot 11 in DP 240631



2.0 Site Characteristics

2.1 Site Location

The site is located approximately 3.5km south-west of the central business district of Tamworth, along Goonoo Goonoo Road. The size of the Study Area is approximately 200ha. The site is located within South Tamworth, and is comprised of 18 individual land parcels.

Table 1 (p22) outlines the site details including the current zoning of each of land parcels as identified by the Tamworth Regional Council Local Environment Plan (LEP) 2010. All 18 lots fall within the locality of Hillvue, parish of Calala, and county of Parry. Appendix B includes a copy of the Title Search for the Lot and land zoning information.

2.2 Site Description

With the exception of established gardens associated with dwellings and scattered tree plantings along property boundaries and paddock fencing, the Study Area is generally devoid of established vegetation (trees and shrubs). The site surface comprises a mixture of grass species and various crops utilised for the grazing of livestock and cropping activities.

2.3 Land use

The Goonoo Goonoo Road portion of the Study Area is identified as being predominately utilised for agricultural pursuits, while, the Burgmanns Lane portion is currently used for Rural Residential landholdings. The Study Area is also noted to contain a caravan park and a parcel of land forming part of the Australian Equine and Livestock Events Centre (AELEC)

2.4 Zoning

The zoning of each of the 18 land parcels under the Tamworth Regional Council Local Environment Plan (LEP) 2010 is detailed in Table 1 (p22).



Table 1: Site Identification

LOT/DP	ASPECT	DESCRIPTION
1 / 501210	Site owner	Prime Television
	Site Address	Television Station, 452 – 462 Goonoo Goonoo Road, Hillvue
	Current use	Commercial (Television Station)
	Lot Size (approx.)	1.3
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
2 / 501210	Site owner	Bunkhouse Tamworth Pty Limited
	Site Address	464 – 468 Goonoo Goonoo Road, Hillvue
	Current use	N/A (Vacant Land)
	Lot Size (approx.)	0.7 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
11 / 623431	Site owner	Mrs A Sleiman & Mr P Sleiman
	Site Address	590 – 610 Goonoo Goonoo Road, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	7.0 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
12 / 623431	Site owner	Mr G Fajks & Ms C Fajks
	Site Address	City of Lights Caravan Park, 612 – 628 Goonoo Goonoo Road, Hillvue
	Current use	Commercial (Caravan Park)
	Lot Size (approx.)	5.6 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
1 / 853320	Site owner	The Uniting Church in Australia Property
	Site Address	426 – 440 Goonoo Goonoo Road, Hillvue
	Current use	Place of Worship
	Lot Size (approx.)	1.7 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
1 / 162623	Site owner	Northern Expansion Pty Ltd
	Site Address	Radio Station 2TM, 442 – 450 Goonoo Goonoo Road, Hillvue
	Current use	Commercial (Radio Station)
	Lot Size (approx.)	1.2 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)

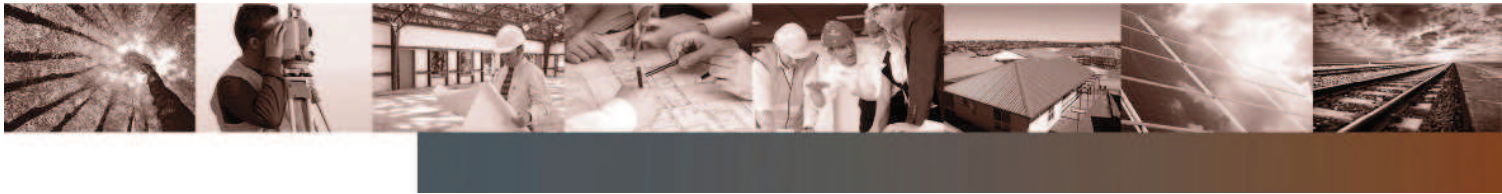


LOT/DP	ASPECT	DESCRIPTION
71 / 866139	Site owner	Mr J Archer & Mrs V Archer
	Site Address	509 Burgmanns Lane, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	14.3 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
72 / 866139	Site owner	Mr B Morris & Mrs E Morris
	Site Address	523 Burgmanns Lane, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	1.0 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
412 / 1003586	Site owner	Mr A McIntosh
	Site Address	467 Burgmanns Lane, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	5.1 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
413 / 1003586	Site owner	Mr D Pike and Estate of R Pike
	Site Address	475 Burgmanns Lane, Hillvue
	Current use	Residential
	Lot Size (approx.)	1.1 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
2511 / 1043391	Site owner	Liberty Church Incorporated
	Site Address	582 – 588 Goonoo Goonoo Road, Hillvue
	Current use	Place of Worship / Education Facility (School)
	Lot Size (approx.)	2.0 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
4111 / 1053377	Site owner	Mr W Worsfold
	Site Address	465 Burgmanns Lane, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	4.8 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
4112 / 1053377	Site owner	Mr M Chaffey & Mrs C Chaffey
	Site Address	550 – 580 Goonoo Goonoo Road, Hillvue
	Current use	Residential / Agricultural



LOT/DP	ASPECT	DESCRIPTION
230 / 1045797	Lot Size (approx.)	75.8 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
	Site owner	Mr E Crowe & Mrs J Crowe
	Site Address	508 – 580 Goonoo Goonoo Road, Hillvue
	Current use	Agricultural
	Lot Size (approx.)	87.2 Ha
24 / 95997	Zoning	RU4 (<i>Primary Production Small Lots</i>)
	Site owner	Mr E Crowe & Mrs J Crowe
	Site Address	508 – 580 Goonoo Goonoo Road, Hillvue
	Current use	Agricultural
	Lot Size (approx.)	80.0 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
19 / 1111059	Site owner	Mr E Crowe & Mrs J Crowe
	Site Address	508 – 580 Goonoo Goonoo Road, Hillvue
	Current use	Agricultural
	Lot Size (approx.)	45.5 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)
	Site owner	Mr C Saunders & Mrs A Saunders
5 / 529656	Site Address	481 Burgmanns Lane, Hillvue
	Current use	Residential / Agricultural
	Lot Size (approx.)	10.1 Ha
	Zoning	RU4 (<i>Primary Production Small Lots</i>)

Title search information sourced from the NSW Department of Lands [Refer to Appendix B] and Tamworth Regional Council.



3.0 Site Conditions

A desktop search was undertaken to determine the nature of soil and geology at the study site.

3.1 Topography and Drainage

Land slope across the Study Area is deemed to be in a north-easterly direction from the south western corner of Lot 12 in DP 623431 (Tamworth Lights Caravan Park) to north eastern corner of Lot 19 in DP 1111059. The land slope across this area is approximately 1.5%.

Goonoo Goonoo Creek is deemed to be the major surface water discharge point for the majority of the Study Area and is situated adjacent to the eastern boundary of Study Area.

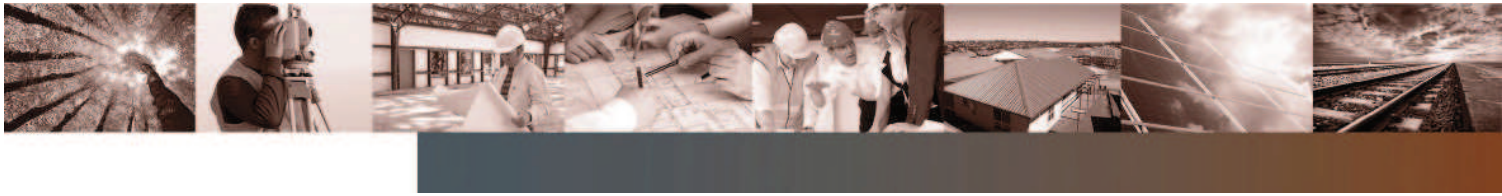
There are two small tributaries of Goonoo Goonoo Creek which traverse the Study Area. These tributaries are identified as Yellow Gully located within Lot 19 in DP 1111059 and an un-named ephemeral drainage line which traverses the Study Area from Lot 27 in DP 95997 to Lot 1 in DP 153665.

Surface runoff generated across the Study Area is expected to flow into Goonoo Goonoo Creek either directly or through the nearest tributary.

3.2 Bioregion

The subject site exists towards the southern side of the bioregion of the Nandewar. South Tamworth belongs to the subregion of Peel, comprised of low peaked hills with north-westerly alignment. The geology of the region is strongly folded and faulted with marked north-west alignment and areas of sub-horizontal carboniferous shales and sandstones in the north (NSW Government, 2012).

Vegetation characteristic of the Peel subregion includes *White Box Grassy Woodlands*, with *Yellow Box* and *Blakely's Red Gum* on lower slopes. *Rough-Barked Apple* and *Yellow Box* are common on flats, with *River Oak* and some *River Red Gum* along major rivers. Patches of *Red Stringy-Bark* and *Red Ironbark* are also common on steeper slopes in the east, with *Silver-Leaved Iron-Bark* commonly occurring on basalt caps. Stony areas in the west and north are often characterised by *White Cypress Pine* and *Kurrajong* (BRG).



3.3 Geology and Soil

3.3.1 Geology

The study site is identified as falling within the Cunningham Slopes, of the New England Moreton Uplands Province (CSIRO, 2006). Specifically, the Study Area is deemed to overlays an area comprising of Mandowla Mudstone which consists of Mudstone and Arenite deposits (Dept. of Mines, 1971).

3.3.2 Soil

The most proximate recorded soil profile to the subject site (approx. 0.5km) identified the analysed soil as being a Sodic Mellic Brown Kandosol (ASC), Brown Earth (GSG), Uf6.71 (PPF). Specifically the soils are described as a dark yellowish brown (10yr 3/4), silty clay with mottles (NSW Government, 2012).

The soil has a geological age of Silurian to Triassic, with the stratigraphy of the site based upon late Silurian to Middle Triassic shelf and trough sediments. The soil also has origins of felsic to mafic volcanics and continental sediments, with major breaks in the middle Devonian, middle to late Carboniferous, middle to late Permian and early Triassic. There is also evidence of Tertiary volcanic origin (CSIRO, 2006).

It is noted that given the location of the site, there is minimal potential for the site to be affected by acid sulphate soils (CSIRO, 2006).

3.4 Hydrogeology

A search of the NSW Natural Resource Atlas for registered Groundwater Bores in the local area revealed the presence of 19 bores within 1km of the approximate centre of the Study Area. Table 2 (p27) provides an overview of the 19 identified groundwater bores.

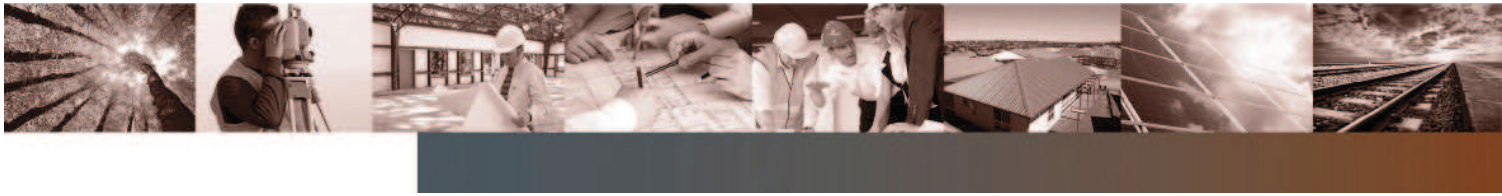


Table 2: Standing Water Level of Local Groundwater

GROUNDWATER NUMBER	LOCATION – LOT / DP	LICENSED / AUTHORISED USE	WATER BEARING ZONES	
			FROM (m)	TO (m)
GW021778 [#]	230/1045797	Irrigation	3.00	7.90
GW900897	22/1111432	Irrigation Stock	*	*
GW966859	22/1085063	Recreation (Groundwater)	*	*
GW015466 [#]	Sec 3/*	Domestic	14.60	14.60
GW019318 [#]	23/*	Domestic	14.30 17.70	15.50 18.60
GW037831	1/516989	Irrigation	26.20 38.40 49.60	31.60 39.30 50.50
GW043745 [#]	Farm 24	Stock	21.30	21.30
GW037695	12/240631	Domestic Stock	9.10 24.90	10.00 25.50
GW900737	2/240631	Test Bore	*	*
GW901196	2/240631	Test Bore	*	*
GW046672	2/234401	Domestic	16.00	25.00
GW057322	26/*	Domestic Stock	31.90	32.30
GW901777	42/634508	Domestic Stock	36.59 118.90	137.00 119.00
GW965005 [#]	5/529656	Domestic Farming Stock	*	*
GW003392	*	Domestic Stock	20.70	20.70
GW902006 [#]	72/866139	Domestic Stock	12.80 40.24	14.02 41.16



GROUNDWATER NUMBER	LOCATION – LOT / DP	LICENSED / AUTHORISED USE	WATER BEARING ZONES	
			FROM (m)	TO (m)
GW900591	8/537934	Domestic Irrigation Stock	*	*
GW042586	251/846874	Domestic Farming Stock	6.00	8.10
GW037935	25/*	Irrigation	*	*
# Indicates Groundwater Bore is located within Study Area * Information not provided				



3.5 Potential Environmentally Sensitive Receptors

Potential human onsite receptors to contamination include:

- General public, visitors, workers, trespassers; and
- Future users of the site.

Potential onsite environmental receptors to contamination include:

- Soils;
- Surface water; and
- Groundwater.

Potential offsite human receptors to contamination include:

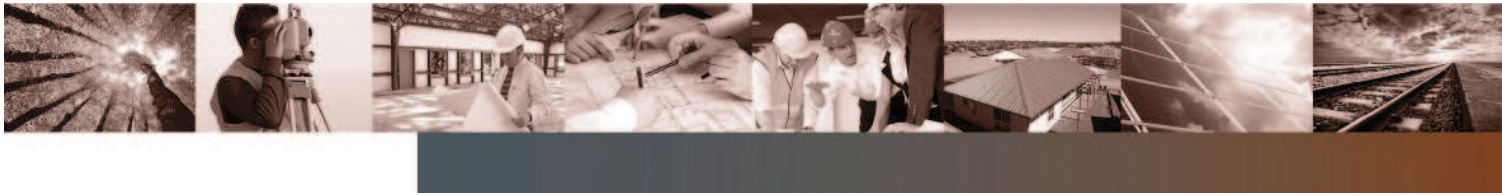
- General public.

Potential offsite environmental receptors to contamination include:

- Soils;
- Surface water;
- Groundwater; and
- Water bodies.

Potential exposure pathways for human receptors to contamination include:

- Direct Contact (including ingestion and dermal contact) with regards to contaminated materials e.g. soils or surface waters;
- Inhalation of dust that may be caused by wind impacted exposed soils e.g. soils lacking vegetative coverings;
- Inhalation of volatile chemicals that may migrate through subsurface soils from groundwater, leachate or chemical reactions to the air;
- Inhalation of respiratory fibres that may result from asbestos e.g. building materials and synthetic mineral fibres in fill material such as insulation.



4.0 Site History

4.1 Introduction

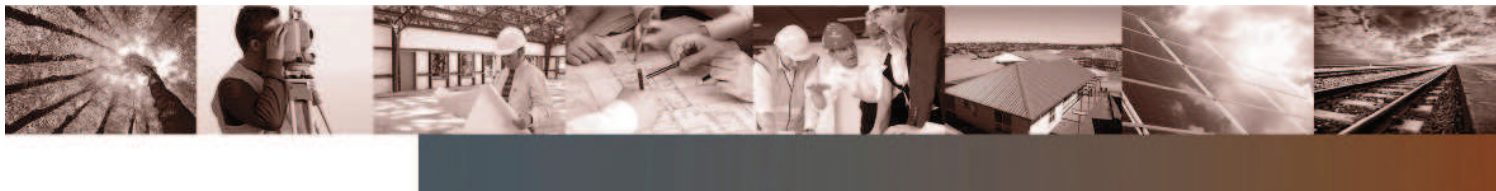
A site historical information review was conducted in order to ascertain as accurately as possible the past uses of the lands comprising the Study Area. The review included a historical title deeds search, a review of the NSW Contaminated Land Register for Notices issued under the Contaminated Land Management Act 1997, as well as a groundwater bore search of the NSW Office of Water database. The information contained within this section was provided by the following sources:

- A review of historical plans, aerial photographs, deposited plans and topographic maps;
- The NSW Environment Protection Authority (EPA);
- Discussions with current landholders;
- Discussions with previous landholders;
- Discussions with current adjoining landholders/occupants;
- Discussions with previous adjoining landholders/occupants;
- A review of the *Chronological History of Tamworth, 2004*;
- Mr Mark Groll of Service First Registrations Pty Ltd;
- Title search information sourced from the NSW Department of Lands [Refer to Appendix B]; and
- Observations made during the site inspection undertaken by Mitchel Hanlon Consulting Pty Ltd.

4.2 Land Use – Subject Site

4.2.1 NSW EPA Public Register

As part of the required site history assessment, a review of the relevant documentation available from the NSW EPA was undertaken. In particular, the *List of Contaminated Sites* (notified under Section 60 of the Contaminated Lands Management Act 1997, CLM Act) and the *Record of Notice* (issued under Section 58 of the CLM Act), was undertaken.



The review indicated that none of the investigated land parcels within the proposed site are listed as a notified contaminated site nor is the site listed as previously operating as a gasworks site.

In addition, none of the land parcels within the Study Area were identified as being the subject of a clean-up order, voluntary management proposal, site audit statement or actions issued by the NSW EPA or NSW Pollution Control Commission.

The EPA also issues environmental protection licences to the owners or operators of various industrial premises under the Protection of the Environment Operations (POEO) Act. Licence conditions relate to pollution prevention and monitoring, and cleaner production through recycling and reuse and the implementation of best practice. A search of the public register did not locate any listing for the Study Area.

However, two (2) licences were found to have been issued for site surrounding the Study Area, these licenses were issued to the Calala Water Treatment Facility operated by Tamworth Regional Council (northern side of Calala Lane) and the 'Transgrid' owned site fronting Goonoo Goonoo Road.

4.3 Property Ownership

A historical title deeds search is used to obtain ownership or occupancy information on the property, including company names and the occupations of individuals.

The title information can assist in the identification of previous land uses by the identification of company names or the site owners and can, therefore, assist in establishing whether there were potentially contaminating activities occurring within the Study Area. The title deed search results are summarised below.

The ownership history of the Study Area for the past 68 years is presented in Table 3 (p32).



Table 3: Historical Ownership Records

REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 19 in DP 1111059			
Book 1978 Folio 84 Now Vol. 19/1111059	William Crowe (Farmer) (& His Deceased Estate) [#]	1946	Current
19/1111059	Owen Boyd Crowe & Eric Crowe [#] (Executors of the Will of William Crowe)	2007	Current
Lot 1 in DP 853320			
Book 1978 Folio 84	William Crowe (Farmer) (& His Deceased Estate)	1946	1964
Book 2729 No. 525	Hunter Valley Co-Operative Dairy Company Limited	1964	1972
Book 3063 No. 845 Now 1/512144	Northern Expansion Pty Limited	1972	1995
1/512144 Now 1/853320	The Uniting Church in Australia Property Trust (NSW) Now The Uniting Church Property Trust (NSW) [#]	1995	Current
Lot 1 in DP 162623			
Book 1978 Folio 84	William Crowe (Farmer) (& His Deceased Estate)	1946	1957
Book 2434 No. 405 Now 1/162623	Northern Expansion Pty Limited [#]	1957	Current
Lot 1 in DP 501210			
Book 1978 Folio 84	William Crowe (Farmer) (& His Deceased Estate)	1946	1956
Book 2371 No. 508	Anthony Whelan (Company Director)	1956	1960
Book 2542 No. 585	Northern Expansion Pty Limited	1960	1963
Book 2643 No. 546 Now 1/501210	Television New England Limited	1963	1988
1/501210	Tresjore Pty Limited [#] Now Prime Television (Northern) Pty Limited [#]	1988	Current



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 2 in DP 501210			
Book 1978 Folio 84	William Crowe (Farmer) (& His Deceased Estate)	1946	1956
Book 2371 No. 508	Anthony Whelan (Company Director)	1956	1960
Book 2542 No. 585 Now 2/501210	Northern Expansion Pty Limited	1960	1995
2/501210	Trevor Stehr	1995	2009
2/501210	Bunkhouse Tamworth Pty Ltd [#]	2009	Current
Lot 230 in DP 1045797 (shown highlighted yellow on DP 1045797 in Appendix B)			
Book 2141 No. 9	Frederick Sutton (Farmer)	1950	1953
Book 2265 No. 381	George Hartley (Farmer & Grazier)	1953	1957
Book 2420 No. 682	William Crowe (Dairy Farmer)	1957	1976
Book 3227 No. 627 Now 230/1045797	Eric Crowe (Auctioneer) [#] Joan Crowe (Married Woman) [#]	1976	Current
Lot 2 in DP 999490			
Book 2141 No. 9	Frederick Sutton (Farmer)	1950	1953
Book 2265 No. 381	George Hartley (Farmer & Grazier)	1953	1957
Book 2420 No. 682	William Crowe (Dairy Farmer)	1957	1957
Book 2466 No. 575 Now 2/999490	Electricity Commission of New South Wales Now Transgrid [#]	1957	Current



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 1 in DP 516989			
Book 2141 No. 9	Frederick Sutton (Farmer)	1950	1953
Book 2265 No. 381	George Hartley (Farmer & Grazier)	1953	1957
Book 2420 No. 682	William Crowe (Dairy Farmer)	1957	1966
Book 2778 No. 1 Now 1/516989	Electricity Commission of New South Wales Now Transgrid [#]	1966	Current
Lot 24 in DP 95997			
Book 1901 No. 640	Patrick McMahon (Salesman now Farmer)	1941	1965
Book 2748 No. 481 Now 24/95997	Eric Crowe (Farmer now Auctioneer)	1965	2002
24/95997	Eric John Crowe (Auctioneer) [#] Joan Honora Crowe (Married Woman) [#]	2002	Current
Lot 11 in DP 240631			
Book 2280 No. 811	Patrick Murphy (Farmer & Grazier)	1953	1966
Book 2785 No. 472 Now Vol 11702 Fol 142	Jeffrey Ramm (Farmer & Grazier)	1966	1972
Vol 11702 Fol 142	Robert Lea (Medical Practitioner) Elaine Lea (Married Woman)	1972	1981
Vol 11702 Fol 142 Now 11/240631	Frederick Studte Dorothy Studte	1981	2012
11/240631	Tamworth Regional Council [#]	2012	Current



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 11 in DP 623431			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10787 Fol 201	Graham Little (Farmer & Grazier)	1967	1969
Vol 10787 Fol 201	Dennis Mitchell (Company Manager)	1969	1969
Vol 10787 Fol 201	Bryan Martin (Dental Surgeon) and Joan Martin (Married Woman)	1969	1977
Vol 10787 Fol 201 Now Vol 14736 Fol 216	Binda Holdings Pty Limited	1977	1982
Vol 14736 Fol 216	New England Agricultural Corporation Limited	1982	1983
Vol 14736 Fol 216 Now 11/623431	Paul Sleiman, Annette Sleiman and Peter Sleiman	1983	1993
11/623431	Paul Sleiman and Annette Sleiman [#]	1993	Current
Lot 12 in DP 623431 (part shown highlighted yellow on the attached copy of DP 623431 in Appendix B)			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10787 Fol 201	Graham Little (Farmer & Grazier)	1967	1969
Vol 10787 Fol 201	Dennis Mitchell (Company Manager)	1969	1969
Vol 10787 Fol 201	Bryan Martin (Dental Surgeon) and Joan Martin (Married Woman)	1969	1977
Vol 10787 Fol 201 Now Vol 14736 Fol 215	Binda Holdings Pty Limited	1977	1983



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 12 in DP 623431 (part shown highlighted pink on the attached copy of DP 623431 in Appendix B)			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10787 Fol 202	Graham Little (Farmer & Grazier)	1967	1970
Vol 10787 Fol 202	Suzanne Holdings Limited (Now Pty Limited)	1970	1977
Vol 10787 Fol 202 Now Vol 14736 Fol 215	Binda Holdings Pty Limited	1977	1983
Lot 12 in DP 623431 (Search continued as regards the whole of Lot 12 in DP 623431 in Appendix B)			
Vol 14736 Fol 215	Holts Enterprises Pty Limited	1983	1986
Vol 14736 Fol 215	Boritay Pty Limited	1986	1988
Vol 14736 Fol 215 Now 12/623431	Beryl Fajks, Garry Fajks and Christine Fajks	1988	1990
12/623431	Christine Fajks and Garry Fajks #	1990	Current
Lot 2511 in DP 1043391			
Book 2277 No. 339	Kenneth George Tongue (Farmer)	1954	1967
Book 2829 No. 45 Now 25/536986	Dekalb Shand Seed Company Pty Limited	1967	1990
Search continued as regards the part highlighted yellow on the attached copy of DP1043391 in Appendix B			
25/536986 Now 251/846874	Mervyn John Jobe (Stud Breeder) Beryl Mary Jobe (Married Woman)	1990	1995
251/846874	Josalt Pty Ltd	1995	1998
251/846874 Now 2511/1043391	Mini World Miniatures Pty Limited	1998	2004



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Search continued as regards the part highlighted pink on the attached copy of DP1043391 in Appendix B			
25/536986 Now 252/846874	Mervyn John Job (Stud Breeder) Beryl Mary Job (Married Woman)	1990	1997
252/846874	Mervyn John Jobe (Stud Breeder) Boryl (correctly called Beryl) Mary Jobe (Married Woman)	1997	1998
252/846874 Now 2511/1043391	Mini World Miniatures Pty Limited	1998	2004
Search continued as regards the whole of Lot 2511 in DP 1043391 in Appendix B			
2511/1043391	Liberty Life Ministries Now Liberty Church Inc #	2004	Current
Lot 4112 in DP 1053377 (part highlighted orange on the attached cadastre in Appendix B)			
Book 2277 No. 339	Kenneth Tongue (Farmer)	1954	1967
Book 2829 No. 45 Now 25/5 36986	Dekalb Shand Seed Company Pty Limited	1967	1990
25/536986 Now 251/846874	Mervyn Jobe (Stud Breeder) Beryl Jobe (Married Woman)	1990	1995
251/846874	Josalt Pty Ltd	1995	1998
251/846874 Now 2510/1043391	Mini World Miniatures Pty Limited	1998	2002
2510/1043391	Mark Chaffey and Cathryn Chaffey #	2002	Current
Part highlighted pink on the attached cadastre in Appendix B			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10856 Fol 176	Graham Little (Farmer & Grazier)	1967	1968
Vol 10856 Fol 176 Now 411/1003586	Owen McMahon (Technician) and Shirley McMahon (Married Woman)	1968	1999



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETORS & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
411/1003586 Now 4112/1053377	Robert Castledine and Deborah Castledine	1999	2006
4112/1053377	Mark Chaffey and Cathryn Chaffey #	2006	Current
Lot 4111 in DP 1053377			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10856 Fol 176	Graham Little (Farmer & Grazier)	1967	1968
Vol 10856 Fol 176 Now 411/1003586	Owen McMahon (Technician) and Shirley McMahon (Married Woman)	1968	1999
411/1003586 Now 4111/1053377	Robert Castledine and Deborah Castledine	1999	2003
4111/1053377	Shane Walsh and Jennifer Walsh	2003	2005
4111/1053377	Mark Worsfold and Allyson Worsfold	2005	2010
4111/1053377	Mark Worsfold #	2010	Current
Lot 412 in DP 1003586			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10856 Fol 176	Graham Little (Farmer & Grazier)	1967	1968
Vol 10856 Fol 176 Now 412/1003586	Owen McMahon (Technician) and Shirley McMahon (Married Woman)	1968	1999
412/1003586	Alexander McIntosh #	1999	Current

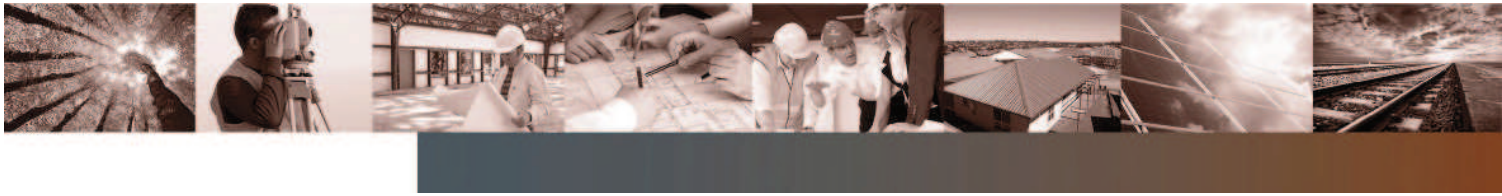


REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Lot 413 in DP 1003586			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10856 Fol 176	Graham Little (Farmer & Grazier)	1967	1968
Vol 10856 Fol 176 Now 413/1003586	Owen McMahon (Technician) and Shirley McMahon (Married Woman)	1968	2005
413/1003586	David Pike and Robyn Pike [#]	2005	Current
Lot 5 in DP 529656			
Book 1909 No. 767	Roger Clarence Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 10856 Fol 177	Graham Rodger Little (Farmer & Grazier)	1967	1969
Vol 10856 Fol 177 Now 5/529656	George Camilleri (Manager)	1969	1991
5/529656	George Camilleri (Manager), Adelina Camilleri, Martin Camilleri, Julie McGuirk and Daniel Camilleri	1991	1995
5/529656	Daniel Camilleri	1995	2001
5/529656	John Saunders and Ann Saunders [#]	2001	Current
Lot 71 in DP 866139			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 11161 Fol 164	Graham Little (Farmer & Grazier)	1967	1969



REFERENCE TO TITLE AT ACQUISITION AND SALE	REGISTERED PROPRIETOR/S & OCCUPATIONS (WHERE AVAILABLE)	DATE OF OWNERSHIP	
		YEAR (FROM)	YEAR (TO)
Vol 11161 Fol 164	Maylin Development Pty Limited	1969	1981
Vol 11161 Fol 164 Now 7/537934	John Archer and Vicki Archer	1981	1989
7/537934 Now 71/866139	Maisie Bull	1989	2003
71/866139	John Archer and Vicki Archer # (Transmission Application not investigated)	2003	Current
Lot 72 in DP 866139			
Book 1909 No. 767	Roger Burgman (Farmer)	1941	1960
Book 2523 No. 964	Chevron Sydney Limited	1960	1967
Book 2854 No. 125 Now Vol 11161 Fol 164	Graham Little (Farmer & Grazier)	1967	1969
Vol 11161 Fol 164	Maylin Development Pty Limited	1969	1981
Vol 11161 Fol 164 Now 7/537934	John Archer and Vicki Archer	1981	1989
7/537934 Now 72/866139	Maisie Bull	1989	2003
72/866139	Joanne Hickey	2003	2004
72/866139	Barry Morris and Elizabeth Morris #	2004	Current

Denotes Current Registered Proprietor



4.4 Discussion Land Owners/Occupants

To determine land use history for the subject site, attempts were made to contact all current registered owners of the relevant land parcels.

Lot 1 DP 501210

The site currently held by Prime Television. Discussions with Mr Barry McDonald (Station/Sales Manager) revealed details of previous ownership and land use dating back to 1961. In 1961 the site was first purchased by Mr. Ernest Higginbotham for use as a television station, as the New England Network (NEN Channel 9). During Mr. Higginbotham's ownership, the site was only ever used as a broadcasting station. In May 1988 the land was purchased by the Paul Ramsey Group and the use as a broadcasting station continued up until current day.

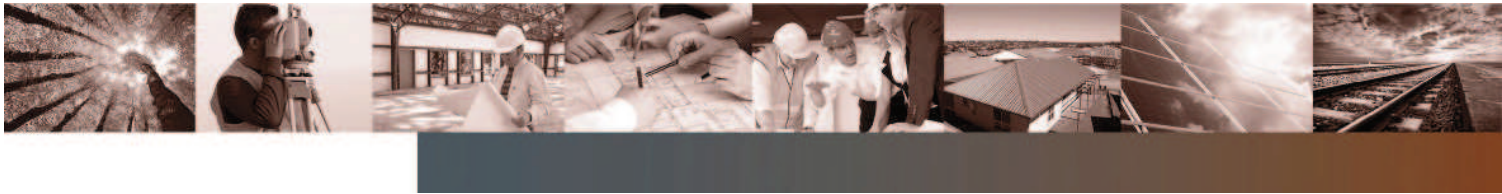
Lot 2 DP 501210

The site is currently held by Bunkhouse Tamworth Pty Ltd. Discussions were held with Mr Trevor Stehr who detailed that the site had been in his ownership for 15-20 years. Mr Stehr said that during his ownership the land had always remained vacant, as under the previous ownership by Prime Television. Barry McDonald of Prime Television confirmed that during Prime's ownership, the land had remained vacant.

Lot 11 DP 623431

The Site is currently held by Mr Paul Sleimen and Mrs Annette Sleimen. Discussions with the Sleimen's revealed that the site has been utilised as a residential hobby farm since 1983 when it was purchased by the current owners. The owners detailed that a small number of goats have been kept onsite during this time. The Sleimen's purchased the land off Mr. Peter Pulley as an unimproved block, void of any infrastructure.

A discussion was held with Mr Peter Pulley. During his company's ownership, the site always remained a vacant block.



Lot 12 DP 623431

The site is currently held by Mr and Mrs Gary Fajks and is leased to the current operators of the onsite caravan park. Discussions with Mr. Fajks revealed that the site has been in his ownership for approximately 25 years, with the majority of onsite infrastructure having been erected prior to his ownership. Mr. Fajks detailed that the site has always operated as a caravan park since he purchased it.

Discussions with Mr. Paul Sleimen revealed that the previous owner of his land, Mr. Peter Pulley, also owned the City Lights Caravan Park at the time that his lot was purchased.

A discussion was held with Mr Peter Pulley which revealed that during his company's ownership, the caravan park was constructed and operated. The block was vacant prior to this. Mr Pulley detailed that the site had always operated as a caravan park during his ownership, which was some thirty years ago. Mr Pulley could not recall how long the site was owned by his company.

Lot 1 DP 853320

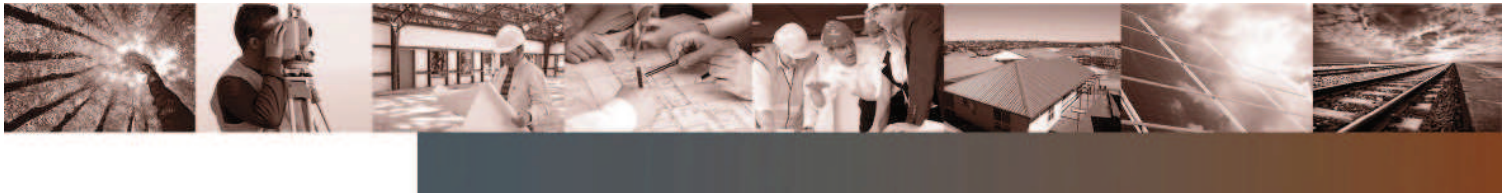
The Site is currently owned by the Uniting Church in Australia Property Trust. Office staff advised that it would be unlikely that the trust would have any significant knowledge about the use of the site, and subsequently it was advised that Mr John Carr (Church Architect and long-time parishioner) be contacted.

Mr Carr detailed that The Trust purchased the land for the construction of the church in approximately 2010. When the site was purchased, it was unimproved with no onsite infrastructure and was utilised for cattle grazing. Mr Carr was unable to provide details of previous ownership.

Since 2003 (when the church was constructed) the site has been used for religious purposes and associated car parking. The overflow Carr park is not sealed.

Lot 1 DP162623

The site is currently owned by Northern Expansion Pty Ltd. Discussions with Mrs Lisa Ashcroft (2TM General Manager) revealed information on the site use over the 17 years which Mrs Ashcroft has worked onsite. Mrs Ashcroft detailed that for the extent of her employment at the site, it has always been utilised as a radio station. Mrs Ashcroft detailed that as far as she is aware, the site was owned by the previous owners of the Prime Television site. Prior to the construction of onsite buildings, it is expected that the land was utilised as undeveloped grazing land.



Lot 71 DP 866139

The site is currently owned by Mr John and Mrs Vicki Archer. The Archers detailed that throughout their ownership and the previous ownership, the site has only ever been utilised as a small scale cropping enterprise. In addition to this they also stored and sold firewood from the property. Mr Archer indicated that the wood was raw and was subsequently untreated timber.

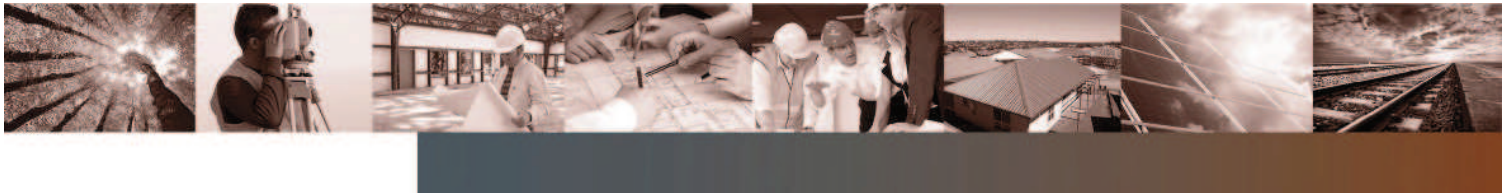
Mr and Mrs Archer also detailed that they were aware of a previous landowner who owned the site (and a number of other surrounding sites prior to subdivision) a number of decades ago, Mr Lindsay Burgmann. Mr Burgmann was contacted via phone to discuss his knowledge of the land use history of the site. Mr Burgmann did not disclose any information relevant to Lot 71 in DP 866139, however useful information which he provided relevant to other lots within the Study Area has been detailed in the relevant sections.

Discussions with Mr Burgmann have led Mitchel Hanlon Consulting to believe that his previous ownership comprised all lots bound by Burgmanns Lane, Goonoo Goonoo Road, Goonoo Goonoo Creek and the southern boundary of the land currently owned by Mr. Eric Crowe. For these lots, where no information relating to Mr Burgmann's ownership has been detailed, it has been deemed that no information relevant to this study has been disclosed relevant to that lot (i.e. the land was only utilised for grazing). Mr Burgmann first purchased the land in 1933 (approximately 160 acres), but was unable to recall an approximate time at which the land was sold.

Lot 72 DP 866139

The site is currently owned by Mr BH and Mrs EJ Morris. Discussions with Mrs Morris revealed that the Morris' have owned the site for approximately 10 years and have used the site purely for residential purposes. Mrs Morris detailed that prior to their ownership, the site was owned by a 'Mrs. Bull' (first name was unable to be recalled). Mrs Morris now believes Mrs Bull to be deceased.

Mrs Morris believes that the site was originally subdivided off the neighbouring lot 71/866139 by Mr JP and Mrs VT Archer. According to her knowledge prior to the construction of the house by Mrs Bull, the site was void of infrastructure and utilised only for grazing and cropping.



Lot 412 DP 1003586

The Site is currently owned by Mr Scott McIntosh and utilised as a small scale grazing enterprise and tree plantation for a study being conducted by the National Heritage Trust. Mr McIntosh detailed that he has owned the site for approximately 14 years and the land use throughout this time has always remained the same. Mr McIntosh purchased the site off Mr Owen and Mrs Shirley McMahon, who owned the site for 20-30 years. It is believed that the site was utilised only for residential and small scale grazing purposes during their ownership. Prior to the ownership by the McMahons, Mr McIntosh is unsure who owned the site, but has anecdotal evidence that there used to be a small scale chicken farm onsite toward the western Boundary, north of the homestead.

Further details of the chicken farm were provided by Mr. Lindsay Burgmann (who is believed to have lived in the 120 year old homestead which Mr McIntosh currently occupies). Mr Lindsay detailed that the chicken farm was comprised of 17 chicken sheds which are believed to have extended from 100m north of the original homestead, to land now owned by Mr & Mrs Mark Chaffey. Mr Burgmann said that each shed housed approximately 10-20 chickens. Waste generated from the sheds was burnt onsite in the areas surrounding the sheds. Mr Burgmann detailed that all other waste was disposed of in Goonoo Goonoo Creek. While this area does not fall within the Study Area, the land use has been noted.

In addition to this, Mr Burgmann also detailed that a small dairy also used to operate onsite. The cows (approximately 25) were milked onsite. Mr Burgmann was unable to describe where exactly the dairy was located, but said that it was towards the northern side of the farm (possibly also on the land now owned by Mr and Mrs Chaffey).

Discussions were also held with Mr Owen McMahon who owned the site for approximately 40 years prior to Mr McIntosh's ownership. Mr McMahon confirmed that the chicken sheds were located behind the homestead. Mr McMahon detailed that he demolished the chicken sheds, and that during his ownership the site was only ever used for cattle grazing. Mr McMahon also detailed that the site was previously owned by Mr Grahame Little for the purpose of grazing, who he now believes to be deceased.



Lot 413 DP 1003586

The site is currently owned by Mr David Pike. Discussions with Mr Pike revealed that he has owned the site for approximately 8 years, and has only ever used the site for residential purposes during his ownership. To Mr Pike's knowledge, previous to his ownership the site has only ever been used for grazing. Mr Pike identified the previous owners as Owen and Shirley McMahon.

As detailed above, discussions were held with Mr McMahon regarding the land. Mr Pike's land is believed to have only been utilised for cattle grazing.

Lot 2511 DP 1043391

The site is currently owned by Liberty Church Incorporated. Discussions with Mr James Ardill (Church Pastor) determined that the site had been operating as the Liberty Church site since it was purchased off Mr John Jobe in 1998. Mr Ardill detailed that during Mr Jobe's ownership, the site was utilised as a hobby farm for miniature horses. Prior to Mr. Jobe's ownership, the site was owned by DeKalb Shand and the existing onsite Liberty Church Building was utilised as a research station for a number of years.

Lot 4111 DP 1053377

The site is currently owned by Mr Mark Worsfold. Discussions with Mr Worsfold determined that he has owned the site for approximately 10 years, and in this time used it only for residential and light grazing purposes. He believes that the previous owners, the 'Welch's' utilised the site for the same purposes. Contact details for the previous owner could not be located.

Lot 4111 also comprised part of the holding owned by Mr Owen McMahon. Mr McMahon detailed that during his ownership, this parcel of land was only utilised for light grazing purposes.

Lot 4112 DP 1053377

The site is currently owned by Mrs and Mr Mark Chaffey. Discussions with Mr Chaffey have determined that Mr Chaffey has operated the site as a cropping and grazing enterprise for approximately 12 years (the extent of the ownership). Mr Chaffey detailed that the previous owners also utilised the site for cropping and grazing. The previous owner, Ray Jobe, was unable to be contacted.

It is suspected that Mr Chaffey's land may have also comprised a part of Mr Burgmann's holding (as discussed in previous sections) and may have housed chicken sheds at one stage.



Lot 230 DP 1045797, Lot 24 DP 95997 & Lot 19 DP 1111059

The site is currently owned by Ms and Mr Eric Crowe. Discussions with Mr. Crowe determined that the land had been owned by Eric, and previously his father, for a number of years. Mr Crowe stated that lot 19 was purchased by his family in 1945, lot 230 in 1957 and lot 24 in 1965. To Mr Crowe's knowledge, all previous landowners utilised the site as grazing land for sheep.

Mr Crowe detailed that for a short period of time approximately 40 years ago; there was a sow stall (housing 3 sows total). The sow stall was located in Lot 19 near the old (unoccupied) homestead.

Mr Crowe also described a 'dairy' which operated in a small building which still exists in Lot 19 (but outside of the Study Area). The operations of the dairy as described by Mr Crowe were small scale and non intensive.

Also detailed was the former location of Netherton Abattoir within Lot 19. It has been determined that the former abattoir site is located outside of the Study Area.

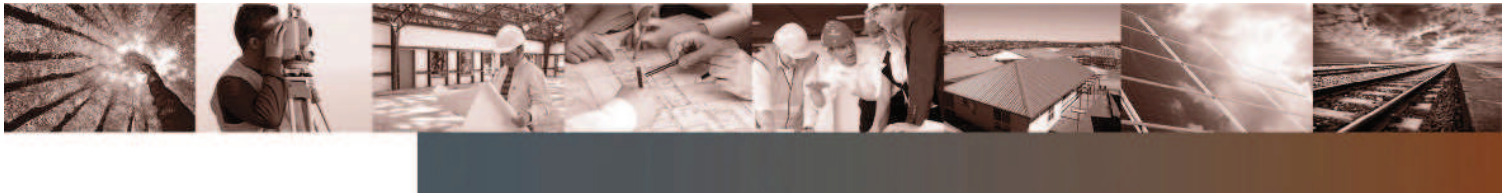
Lot 5 DP 529666

The site is currently owned by Mr JC and Mrs AL Saunders. Discussions with Mrs Saunders determined that her and her husband have owned the site since 2001. During the current ownership the site has been utilised for hobby farming, equestrian use and residential use, with a saddlery located towards the southern end of the site. Mrs Saunders provided details of previous ownership, but contact could not be made. Mrs Saunders said that the previous owners also used the site for hobby farming and equestrian use.

Lot 11 DP 240631

The site is currently owned by Tamworth Regional Council and the majority of the site is utilised as riding area associated with the Australian Equine and Livestock Event Centre (AELEC). A discussion was held with Mr Mike Roland who has worked onsite for approximately 5 years. Mr Roland detailed that during this time, the site has been used as a riding area for equestrian. Previous to this, Mr Roland said that the site was owned by Mr John Smyth and was utilised for cattle grazing. Similarly to Mr Smyth's use of the site, The previous owner to this was Mr Fred Studte, who also ran a grazing enterprise. Mr Smyth and Mr Studte were unable to be contacted for the purpose of this investigation.

The road-front side of the site contains the Tamworth ABCRA office. The use of this area is limited to general outdoor maintenance and internal administration.



4.5 Land Use – Adjoining Land

4.5.1 Historical

The area surrounding the Study Area has a land use history consistent with that of extensive agricultural holdings and as such is not expected to have negatively impacted the subject site.

4.5.2 Current

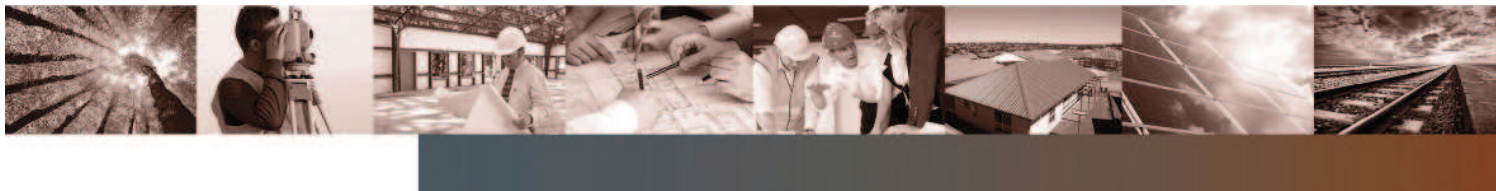
The surrounding properties are currently used for agricultural (grazing / cropping), Transgrid depot, the Australian Equine and Livestock Events Centre (equine and livestock facilities), residential and short term tourist accommodation (Cattlemans Motor Inn). With the exception of the Transgrid depot, the current land uses surrounding the Study Area are not considered to negatively impact the Study Area.

The 'Transgrid' site is identified as being an operational depot and electrical substation facility and as such is considered to have potential for the storage, distribution and handling of oils, fuels, chemicals and batteries. Given the sites use as an electrical substation, the site is also considered to have potential to have been exposed to Polychlorinated Biphenyls (PCBs) associated with the storage and use of electricity transformers produced prior to approximately 1980.

Based upon the age of the site it is also considered possible that the existing structures located onsite may contain asbestos containing materials.

4.6 Assessment of Information Integrity

The information obtained is deemed to be accurate. The information available is considered sufficient for the purposes of the assessment and is believed to be correct by the investigator.



5.0 Potentially Contaminating Activities

5.1 Prior Chemical Usage / Storage

Given the known land use history, it is suggested there is minimal potential for the site to have been used for the storage of potentially hazardous chemicals or products.

At the time of the site inspections there was no infrastructure observed to suggest that significant volumes of chemicals have been stored within the Study Area.

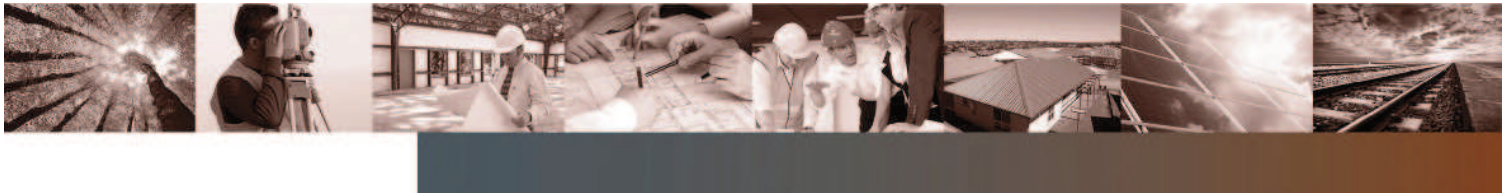
It is likely that, given the predominant current and historical agricultural land use, chemicals would have been applied within the Study Area. However, no information could be obtained in regard to specific chemicals applied, areas of chemical application or rates of application within the study site.

Discussions held with a representative of Prime Television indicated that Prime television currently has various chemical / hazardous material storage tanks located in their 'props bay' within the existing station building. These tanks are stored and secured within a chemicals cabinet comprising a concrete sealed area. No other chemical storage areas are known to exist onsite.

All other landholders indicated that small quantities of chemical were stored onsite for the purpose of weed management.

Based upon the anecdotal information obtained, it has been determined that there is a moderate potential for areas within the Study Area to have been contaminated as a result of the storage, handling and use of agricultural chemical, in particular pesticides and herbicides.

Based upon the reported usage and history of the Study Area, it is considered likely that this contamination potential would be restricted to the immediate area surrounding heavy cultivated areas.



5.2 Prior Fuel Storage / Use

Given the known land use history associated with the Study Area, it is suggested there is moderate potential for the site to have been used for the storage and use of fuel associated with farm vehicles / machinery.

Mr Mark Chaffey, Mr McDonald (Prime Television) and Mrs Lisa Ashcroft (2TM) indicated their sites contained aboveground fuel storage tanks. The volumes of these tanks ranged from 1000L to 2,000L and are used to store Diesel fuel for use in various pieces of farm machinery and back-up generators.

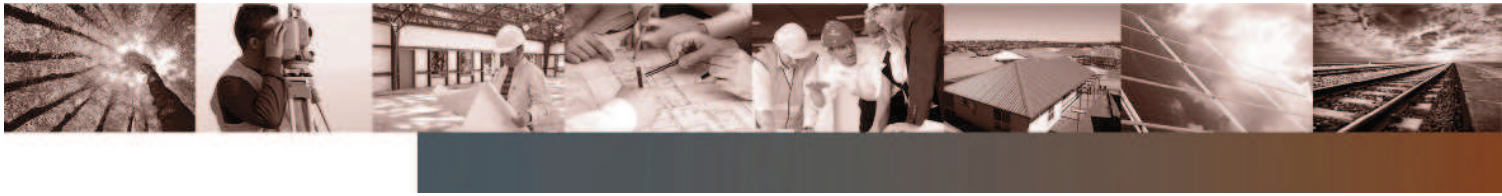
At the time of the site inspections there was no other infrastructure observed to suggest that significant volumes of fuel have been stored within the Study Area. With the exception of Mr Mark Chaffey and Mrs Lisa Ashcroft, all other landholders interviewed indicated that small quantities of fuel were stored onsite for the purpose of use in lawn care equipment.

N.B. the aboveground storage tanks located within Mr Chaffey's property are located outside of the Study Area and as such has not been investigated further.

All landholders interviewed stated that, no major fuel spills had occurred during their ownership.

Based upon the anecdotal information obtained, it has been determined that there is a moderate potential for areas within the Study Area to have been contaminated as a result of the storage, handling and distribution of fuel and other petroleum products.

Based upon the quantities stored and it is considered likely that this contamination potential would be restricted to the immediate area surrounding (and beneath) the storage infrastructure.



5.3 Prior Storage of Oil & Coolants

Given the known land use history associated with the Study Area, it is suggested there is moderate potential for the site to have been used for the storage and use of oil, coolants and lubricants associated with the operation and maintenance of farm vehicles / machinery.

During an inspection of the land owned by Mr Slieman a number of small (<2m in diameter) oil stains were observed near the existing house. Mr Slieman stated that these are the result of servicing his tractor and other light vehicles. Given the small scale of the staining these are not considered to have a significant potential to have contaminated the Study Area.

At present there is no infrastructure present within either site to suggest that significant volumes of oils and coolants were stored within the Study Area.

Given the historical land use associated with the Study Area, it is likely that oils and coolants were actively stored onsite for the use and maintenance of vehicles and machinery.

Therefore, it has been deemed that there is a low probability of the historical and current land uses and associated oil and coolant handling practices having caused soil contamination or a health risk within the Study Area.

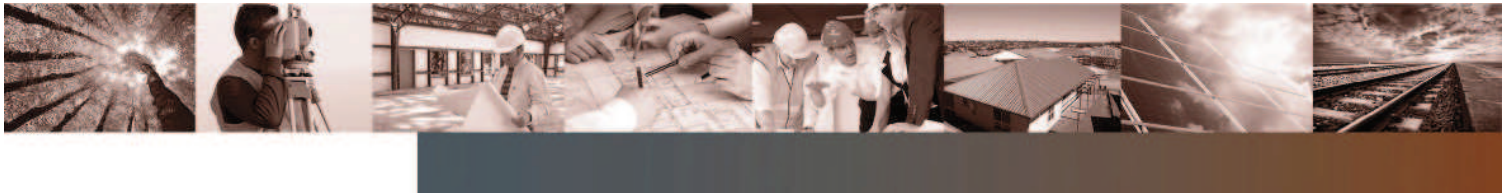
Based upon the quantities stored and the anticipated way and areas in which oils and coolants are generally used it is considered likely that, should any contamination potential exist, it would be restricted to the immediate area surrounding (and beneath) farm workshop areas.

5.4 Farm Tips

Through discussions with Mr Mark Chaffey, it has been determined that there is an area located within Lot 4112 in DP 1053377 that contains building (bricks and concrete) waste.

Mr Chaffey stated that building waste had been placed within the large dam located to the east of Goonoo Goonoo Creek and is therefore located outside of the Study Area. Subsequently, the contents of the dam have not been verified.

Through discussions with Mr Eric Crowe, it has been determined that there is a small farm tip located within Lot 230 in DP 1045797. Mr Crowe has stated that, the farm tip contains household waste.



Based upon the anecdotal information obtained, it has been determined that there is minimal potential for areas within the Study Area to have been contaminated as a result of the use of farm tips.

5.5 Cattle / Sheep Dip

5.5.1 Cattle Dip Sites

A search of the NSW Department of Primary Industries (DPI) shows that the landholding is outside the former Tick Quarantine Area (TQA). The furthest southern extent of the TQA included Macksville in 1933.

No current or former cattle dip sites in the Tamworth area are included in the NSW Agriculture's Dip Site Locator

(<http://www.agric.nsw.gov.au/tools/dipsite-locator/index.html>).

The nearest Local Government Area mentioned in the DPI locator is Glen Innes Severn Council, the southern boundary of which is >160km north east.

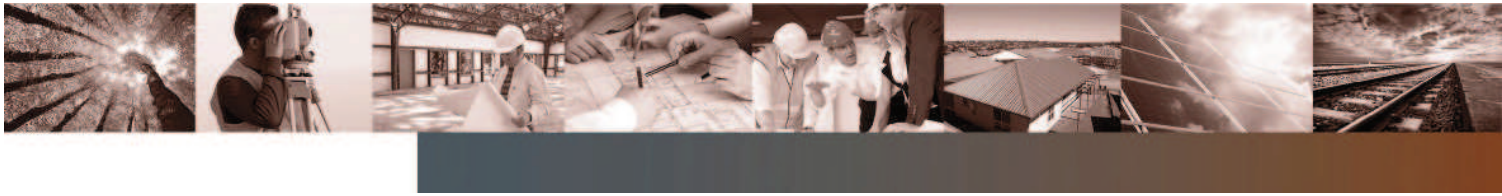
5.5.2 Sheep Dip Sites

Through discussions with Mr Crowe, it has been determined that, Lot 19 in DP 1111059 contains a sheep-dip and associated infrastructure. However, this sheep dip is located outside of the Study Area and as such has not been investigated further.

No other site within the Study Area is known to contain cattle / sheep dips or related infrastructure.

Based upon the anecdotal information obtained, it has been determined that there is a moderate potential for the area immediately surrounding the sheep dip to have been contaminated.

Based upon the past experience, research undertaken and a review of the relevant EPA guidelines, it is considered likely that this contamination potential would be restricted to the immediate area surrounding (and beneath) the sheep dip and associated infrastructure (drying yards, splash areas, scooping mounds). However, as the dip site is located outside and down-slope of the Study Area, the dip is not deemed to impact the Study Area.



5.6 Quarrying Operation

Through discussions with Mr Chaffey, it has been determined that prior to Mr Chaffey's ownership, Lot 4112 in 1053377 contained a small quarry (shale pit) located approximately 120m south west of the existing shed / workshop area.

Mr Chaffey also informed us that to the best of his knowledge the quarry was used to extract material for the internal driveway. He also stated that that he is in the process of filling the void with fill material excavated during the construction of dwellings within the Longyard area.

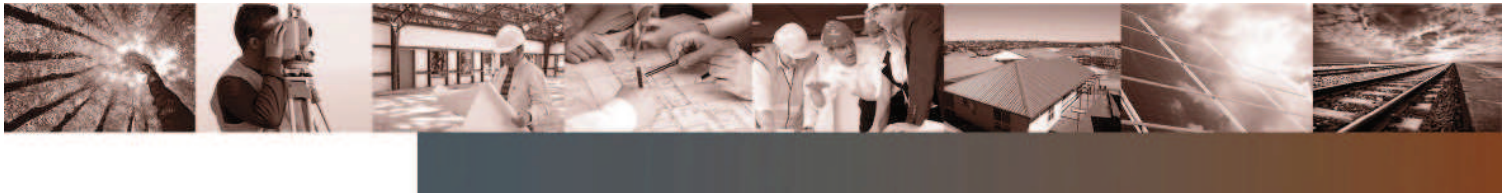
It is deemed that this area will not be impacted by the proposed redevelopment.

Given that the material used to fill the quarry area was sourced from various approved residential areas within the Longyard area, it is deemed unlikely that the fill material would contain contaminated / hazardous materials.

5.7 Extensive Agriculture

Through discussions with numerous landholders, it has been determined that, the predominant historical land use activity for the Study Area is that of extensive agriculture (cropping/grazing).

Based upon the anecdotal information obtained, it has been determined that there is minimal potential for areas within the Study Area to have been contaminated as a result of extensive agricultural land uses.



5.8 Intensive Agriculture

5.8.1 Cropping

Via discussions with Mr and Mrs Eric Crowe and Mr and Mrs Archer, it has been determined that, the site identified as Lot 4112 in DP 1053377 (which also formerly included Lot 2511 in DP 1043391) was until 1990 owned by DeKalb Shand Seeds Pty Ltd.

DeKalb Shand Seeds Pty Ltd purchased the site in 1967 and subsequently established a Plant Breeding Research Station within the site. The station was utilised for experimental research in forage and grain crops (Green, L. & Newman, W. 2004).

Mr Crowe also informed us that during the time DeKalb Shand operated the site, it was observed that a large quantity of chemicals (suspected to be pesticides) were applied across the site. However, no information could be obtained in regard to specific chemicals applied, areas of chemical application or rates of application within the site.

Based upon the anecdotal information obtained, it has been determined that there is a moderate potential for areas within the Study Area (in particular the former DeKalb Shand site) to have been contaminated as a result of the use of chemicals to control pest and weeds.

As stated above, based upon the reported usage and history of the Study Area, it is considered likely that this contamination potential would be restricted to the immediate area surrounding heavily cultivated fields (in particular within Lot 4112).

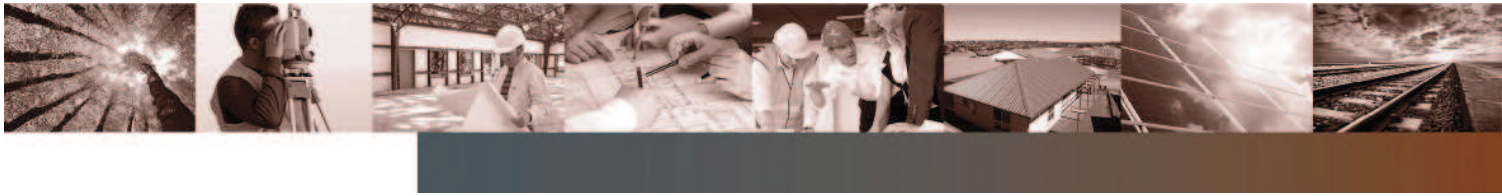
5.8.2 Piggery / Dairy

Mr Eric Crowe stated that, his land contains a dairy and a small scale pig breeding area, containing three (3) sow stalls and a small scale dairy which haven't been used for in excess of 40 years.

It is noted that the former dairy is not located within the Study Area. and as such hasn't been investigated any further.

5.8.3 Poultry

Discussions with Mr Scott McIntosh Mr Lindsey Burgmann and Mr Owen McMahon provided anecdotal evidence that there used to be a small scale chicken farm located (within Lot 412 in DP 1003586) toward the western Boundary, north of the homestead.



Further details of the chicken farm were provided by Mr. Lindsay Burgmann. Mr Lindsay detailed that the chicken farm was comprised of 17 chicken sheds (now removed) which are believed to have extended from 100m north of the original homestead, to land now owned by Mr & Mrs Mark Chaffey. Mr Burgmann said that each shed housed approximately 10-20 chickens.

Given the small scale (approximately 400 birds), the farm, is not expected to have impacted the site.

Through discussions with numerous past and present landholders it has been determined that, the remainder of the Study Area has not been utilised for intensive agriculture (feed-lotting, poultry farming, orchids, turf farming or market gardens).

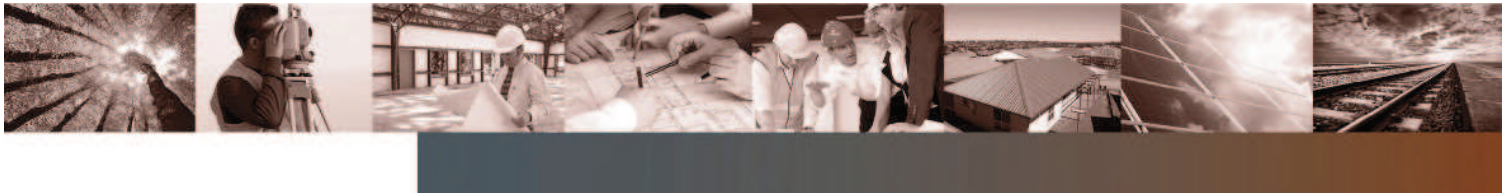
5.9 Television / Radio Broadcasting

5.9.1 Prime Television

Based upon a review of the *Chronological History of Tamworth* and via discussions with Mr Barry McDonald (Station Manager, Prime Television) it has been determined that Lot 1 in DP 501210 has been utilised as a television station / studio since 1965. The station was constructed and operated by NBN9-ECN8 (also known by various other station names) until 1988 when Prime Television, purchased the site.

The front façade of the existing station was constructed in 1965 with the rear studio area being constructed in the mid 1980's.

Interviews with Mr McDonald indicate that the site has remained relatively unchanged since the 1980s. Mr McDonald also stated that the site contains an un-bunded aboveground fuel tank (currently being relocated to a bunded area) and numerous small chemical and hazardous containers tanks within the station. Mr McDonald stated that to the best of his knowledge there hasn't been a significant spill of fuel or chemicals onsite.



5.9.2 2TFM

A review of the *Chronological History of Tamworth* indicates that, in 1959 Radio 2TM relocated from its studio in Peel Street to its present site fronting Goonoo Goonoo Road (Lot 1 in DP 162623).

Interviews with Mrs Lisa Ashcroft (General Manager, 2TFM) indicate that the site has remained relatively unchanged during the stations occupation. With the exception of a now disused aboveground fuel tank, no hazardous materials have been actively stored onsite. Mrs Ashcroft stated that to the best of her knowledge there hasn't been a significant spill of fuel.

Mrs Ashcroft also stated that part of the site is now leased by 'Agririsk' (an agribusiness insurance broker). This occupation is not expected to impact the site.

Based upon the anecdotal information obtained, it has been determined that there is minimal potential for areas within the Study Area to have been contaminated as a result of extensive agricultural land uses.

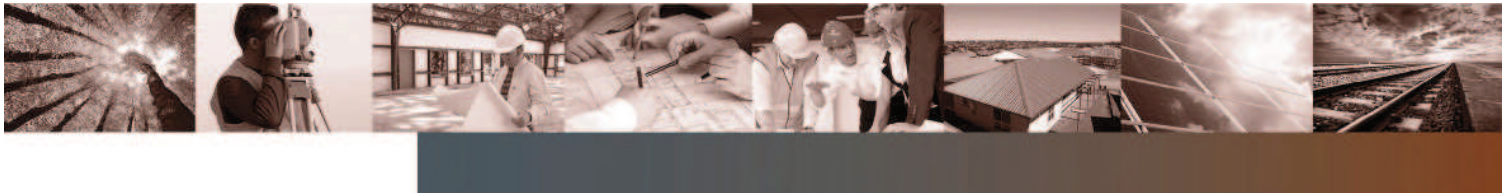
5.10 Saddlery

It has been determined from a site inspection and discussions with Landowners that there is an operational saddlery located on lot 5 in DP 529656. Discussions with the landowner, Mr. Saunders, have determined that while the construction of leather goods occurs onsite, all leather is pre-treated, with no leather treatment occurring onsite. Mr Saunders detailed that vegetable oil is occasionally used during the construction of some pieces.

Based upon the statements from landholders, it has been determined that there is minimal potential for the Study Area to have been contaminated as a result of the operation of the onsite saddlery.

5.11 Onsite Wastewater Disposal

It has been determined via discussions with landholders that, numerous land parcels utilise onsite wastewater systems (OWSs) for the disposal of wastewater generated within various dwellings and other 'out-buildings' located within the Study Area. The operation of OWSs has the potential to contaminant the surrounding environment due to leaks or seepage from onsite units if the units are not installed, or maintained adequately.



In addition, effluent discharges from septic tanks and potential disposal of other wastes into the OWS can also result in contamination of the surrounding environment.

During the site inspections and subsequent interviews with landholder undertaken by Mitchel Hanlon Consulting, no anecdotal or visual evidence could be obtained to suggest significant leaks or seepages have occurred from the OWS observed.

Based upon the observations made and statements from landholders, it has been determined that there is minimal potential for areas within the Study Area to have been contaminated as a result of the use of OWSs.

5.12 Storage and Sale of Firewood

Via discussions with Mr and Mrs Archer (owners of Lot 71 in DP 866139) it has been determined that during their ownership Mr and Mrs Archer operated a business which sold loads of firewood.

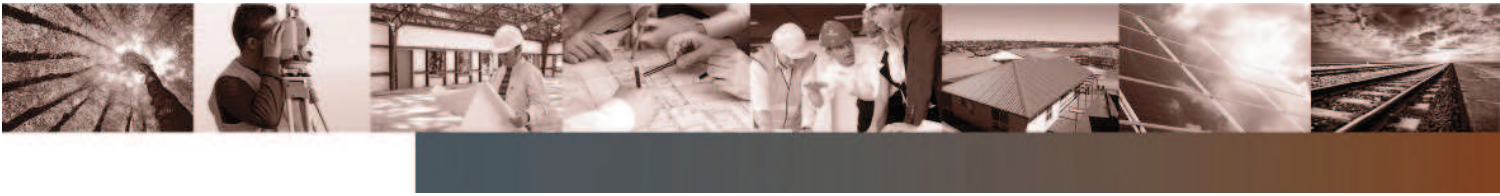
Mr Archer stated that the wood stacked onsite and subsequently sold was raw timber and as such hadn't been treated with chemical. He also stated that the wood was only stockpiled on site for short periods of time.

Based upon this information, the storage and sale on firewood on Lot 71 in DP 866139 is not considered to be a potentially contaminating activity.

5.13 Abattoir

A review of the *Chronological History of Tamworth*, indicates that from 1916 a portion of the land (Lot 19 in DP 1111059) now owned by Mr Eric Crowe, formed part of the 'Netherton Abattoir'. The abattoir is reported to have been 'situated about 180m from the present Radio 2TM tower and not far from Goonoo Goonoo Creek. No other information could be obtained as operation of the abattoir.

It is noted that the former abattoir is not located within the Study Area and as such hasn't been investigated any further.



5.14 Waste Management

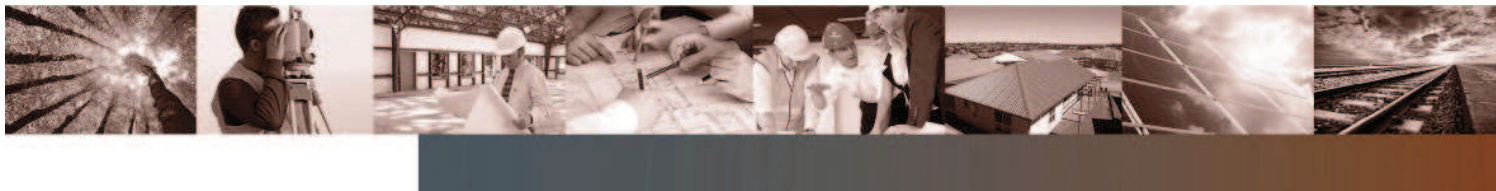
With the exception of the known farm tips [Refer to Section 5.4 (p50)], discussions held with landholders have indicated that, general waste management / handling practises within the Study Area consist of waste material being contained within designated bins and disposed of by either Tamworth Regional Councils' waste collection service or by other private waste contractors.

Based upon the anecdotal information obtained, it has been determined that there is minimal potential for areas within the Study Area to have been contaminated as a result of waste management practices.

5.15 Adjoining Landuse

Based on the sites topography, it is considered possible that the adjoining Transgrid site may have resulted in soil based contamination of the Study Area.





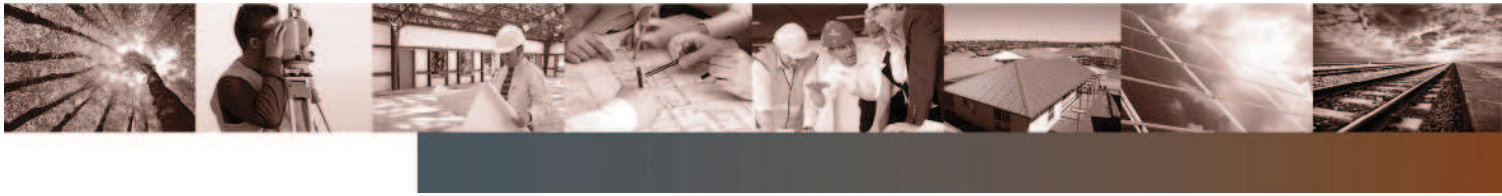
6.0 Site Investigation

The Study Area was visited numerous times between 7th to 14th January 2013 by Ms Catherine Lockyer (*Environmental Scientist*) and Mr Tim McLean (*Environmental Engineer*) of Mitchel Hanlon Consulting for the purpose of a site contamination investigation.

The site investigation included the visual inspection of boundary areas, areas surrounding dwellings / existing infrastructure, surface soils, vegetation and any bare earth throughout the Study Area. A random walk throughout the remainder of the Study Area was also carried out with attention given to boundary areas close to fence lines and roadside areas.

A number of general site attributes were noted during the contamination investigation:

- The site was generally void of overstorey species and midstorey vegetation, with a ground layer generally significantly degraded as a result of historical agricultural pressures;
- Vegetation present generally appeared to be in good health, other than impacts of drought. No bare patches or unexplained spatial inconsistencies that may indicate that soil contamination was present were observed;
- In general, current chemical oil and fuel use and storage on all sites was small scale and limited to what was required for general garden maintenance requirements;
- A single property was identified as having a small number of oil stains - Lot 11 in DP 623431. The stains were located around the sheds associated with the onsite residential dwelling. In particular they were evident around a 44 gallon drum utilised for the temporary storage of tractor oil, and around old automobiles parked around the shed;
- An above ground storage tank was located on both the 2TM Broadcasting site and the Prime Television site. Soils beneath each tank were inspected for evidence of spills such as staining, with none observed;
- The majority of sheds associated with the various residential properties throughout the site were generally located on concrete slabs, preventing the leaching of any potential internal chemical spills;
- Sites were generally free of and major refuse, with waste disposal occurring through the Tamworth Regional Council waste disposal service for most residential properties, and through private waste disposal companies for most commercial premises;



- Small amounts of refuse were noted to be present within lots 412/1003586, 4111/1053377 and 11/623431. No items were of major concern.

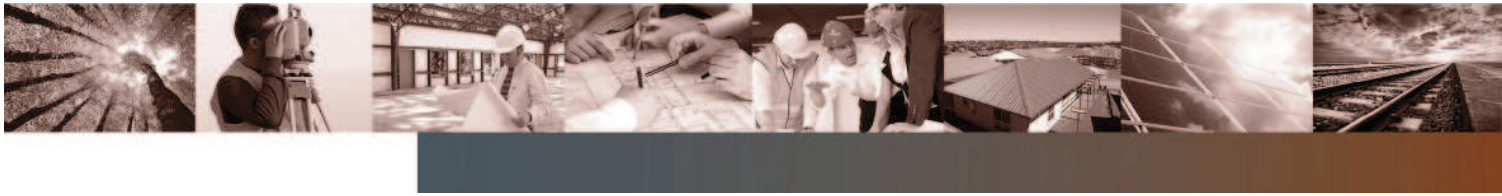
7.0 Potential for Contamination

Based upon the observation made during the site inspections undertaken and the previous known uses that have occurred within the site, it has been determined that, there is a moderate likelihood that the soils contained within the Study Area have been contaminated by a variety of contaminants including heavy metals, pesticides, herbicides and petroleum products.

A review of the previous and current site history revealed potential activities that may have resulted in soil contamination of the site. The areas within the site that would appear to have the greatest risk of contamination have been identified in Figure 6 (p61). However, it is noted that the large portions of the Study Area has minimal potential to have been contaminated due to the historical land uses throughout the Study Area.

These areas are identified as:

- The former DeKalb Shand grain research site [Refer to Site 1 in Figure 6 (p61)]
- The existing aboveground fuel tanks located within the 2TFM and Prime Television sites [Refer to Sites 2 and 3 respectively in Figure 6 (p61); and
- The area immediately adjacent to the Transgrid Depot [Refer to Site 4 in Figure 6 (p61)].



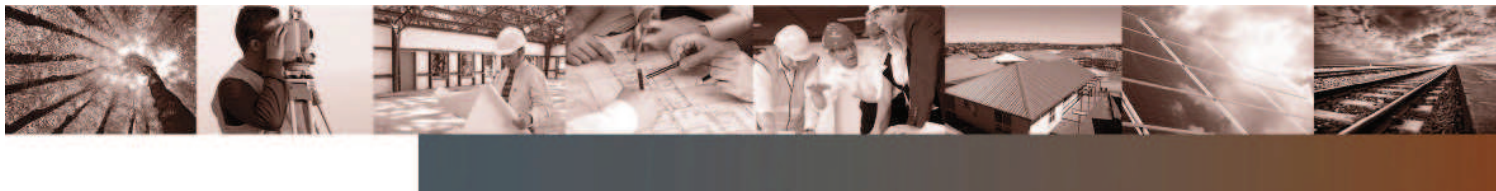
8.0 Salinity Potential

Urban salinity is present in Tamworth, salinity problems exist in the Longyard Golf Course area and adjoining residential zones. There is also some concern regarding salinity along Timbumburi Creek floodplains and adjoining land including Calala (DLWC, 2001).

Urban salinity can have impacts on roads, reduced lifespan of sewerage and water supply systems, footpaths, increased maintenance on sporting fields and repairs to affected houses and public buildings (TRC Salinity and Groundwater Management Policy).

Given the site proximity to both the Longyard Golf Course and Calala areas it is considered that there is potential for the site to contain saline soil areas adjacent to Goonoo Goonoo Creek.

However, given the observations made during the site visits and that the Study Area doesn't comprise land adjoining Goonoo Goonoo Creek, there is deemed to be minimal potential for the Study Area to be impacted by saline soils.



9.0 Potential Contaminants of Concern

Based on the known site history, the potential contaminants of concern for the Study Area are considered to be:

- Former DeKalb Shand site [Refer to Site 1 in Figure 6 (p61)]:
 - Organochlorides & Organophosphates (OCs/OPs)
 - Heavy Metals and other Metalloids (including Arsenic, Barium, Cadmium, Copper, Chromium, Lead and Mercury)
- Aboveground Fuel Tanks (2TFM and Prime Television sites) [Refer to Sites 2 and 3 respectively in Figure 6 (p61)]:
 - Total Recoverable Petroleum Hydrocarbon Fractions (C₆ – C₄₀);
 - Benzene, Toluene, Ethyl-benzene and Xylene (BTEX) fractions
 - Lead; and
 - Polycyclic Aromatic Hydrocarbons (PAHs).
- Adjacent to the Transgrid Depot [Refer to Site 4 in Figure 6 (p61)]:
 - Heavy Metals and other Metalloids (including Arsenic, Barium, Cadmium, Copper, Chromium, Lead and Mercury);
 - Polychlorinated biphenyl (PCBs);
 - Petroleum Hydrocarbon Fractions; and
 - Polycyclic Aromatic Hydrocarbons (PAHs).

It is recommended that these contaminants be analysed in greater detail in future investigations prior to future development occurring.



Plate 11: View of the Emergency Generator used by the Prime News Station



Plate 12: View of Above Ground Storage Tank at the rear of the Prime News Station

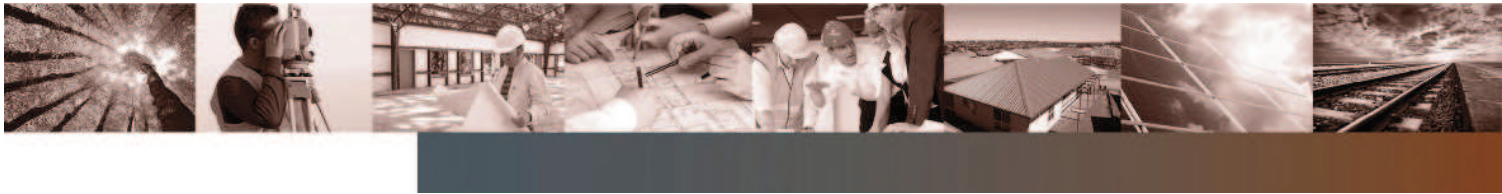


Plate 13: View of Temporary Tractor Oil Storage Drum within Lot 11 DP 623431



Plate 14: View of Material Stockpiles within Lot 11 DP 623431

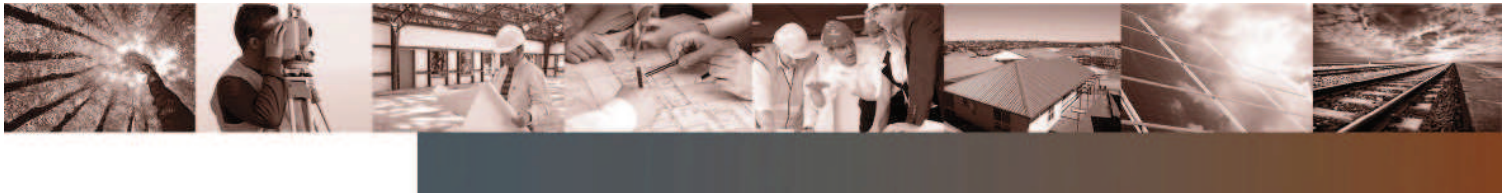


Plate 15: View of Leaked Motor Oil within Lot 11 DP 623431



Plate 16: View of Empty Drums within lot 12 in DP 623431

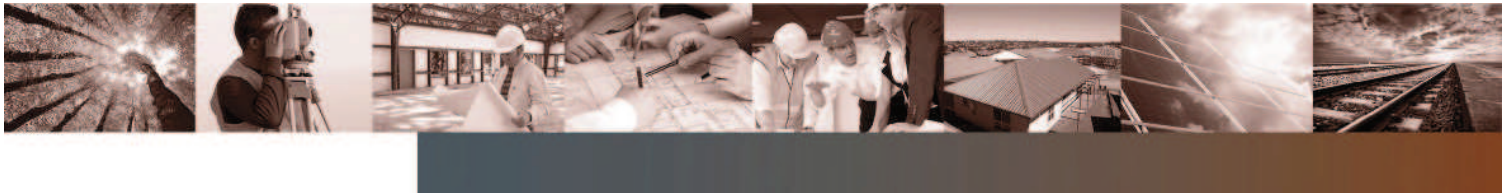


Plate 17: View of Waste Water Aeration Pond within Lot 12 in DP 623431



Plate 18: View of Above Ground Storage Tank in Lot 1 in DP 162623



Plate 19: View of Back-up Generator in Lot 1 in DP 162623



Plate 20: Septic System located within Lot 413 in DP 1003586

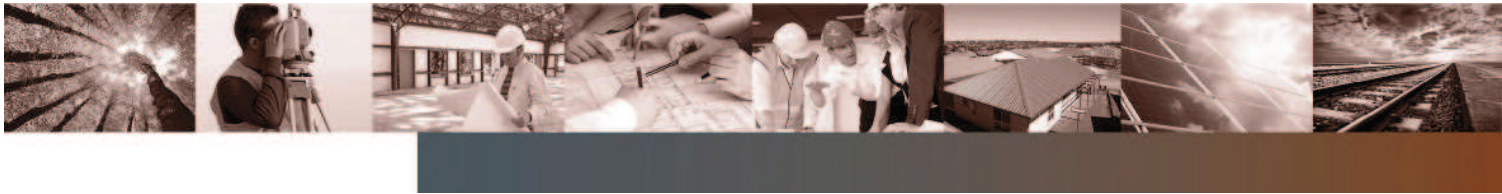


Plate 21: Small amounts of Oil, Fuel and Garden Chemicals Stored Securely within Lot 413 in DP 1003586



Plate 22: Small generator stored within Lot 413 in DP 1003586

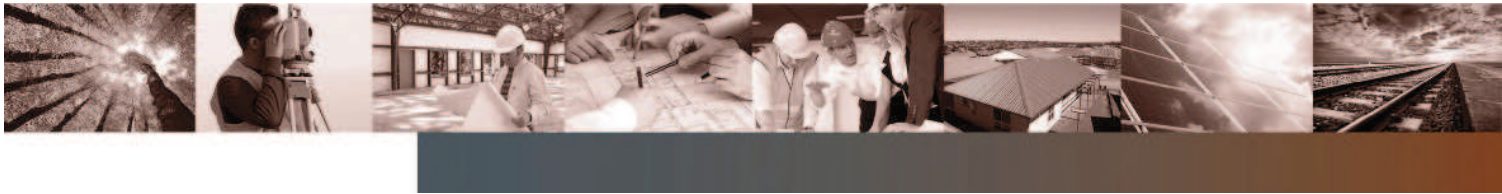
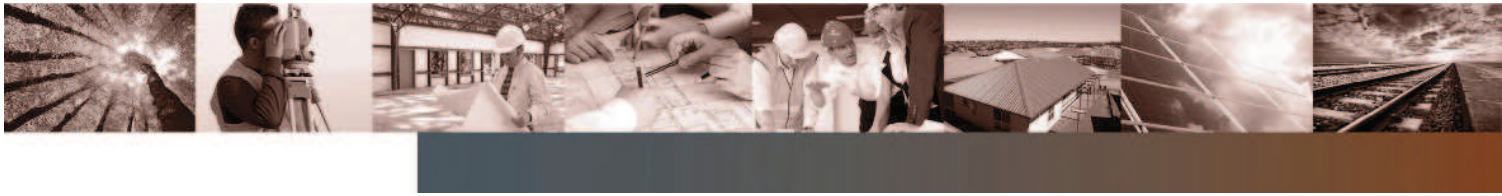


Plate 23: Remainder of an Irrigation Tank located within lot 2511 in DP 1043391(Formerly Utilised by DeKalb Shand)



Plate 24: View of Shale Quarry Located within Lot 4112 in DP 1053377



10.0 Site Suitability Statement

Clause 6 of SEPP 55 requires site contamination to be considered in zoning or rezoning (planning) proposals. SEPP 55 also requires a statement as to the sites suitability for the proposed zoning.

Therefore, based upon the findings of the scope of works undertaken by Mitchel Hanlon Consulting, the Study Area is not deemed to contain gross widespread contamination. However, it has been determined that there are isolated locations within the Study Area that may contain of potential contamination.

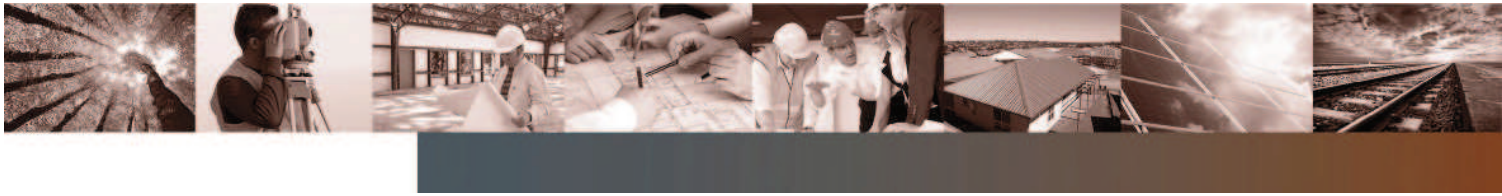
With the exception of the pocket of future 'Large Lot Residential' land located towards the rear of Lot 4112 in DP 1053377, these locations are considered to be restricted to the future Commercial areas of the Study Area.

Given that commercial and tourist land uses would generally have limited access to any potential soil contamination that may be present within the site, the land identified as being located within the future 'Commercial' and 'Tourist' zoning is deemed to suitable for re-development.

With the exception of the of the pocket of future 'Large Lot Residential' land located towards the rear of Lot 4112 in DP 1053377, all other areas are deemed suitable for redevelopment. TRC have informed us that, it is only proposed to change the 'minimum lot area' of this portion of the Study Area not the actual zoning. As such, it is our understanding that this area is not part of the 'planning proposal' and therefore is not deemed to require a statement regarding its suitability for re-development.

Therefore, the portion of the Study Area subjected to the planning proposal is deemed to be suitable to be re-zoned.

The requirement for additional investigation in not deemed to prevent this planning proposal from proceeding as the current land use activities within the Study Area are expected to continue until such time as individual sites are re-developed. Therefore additional investigations are recommended to be undertaken as part of any future development applications on the land contained within the Study Area.



11.0 Conclusions

As a result of the initial site inspection, a review of the recent site history (approximately 68 years), as well as relevant survey plans, it has been deemed that the Study Area contains several potential areas of concern. It is considered, based on the scope of work carried out during the preliminary contamination assessment, that the site contains numerous potential sources of contamination.

The Preliminary Site Investigation involved the review of historical ownership titles, the recording of anecdotal land activity information and the physical inspection of the property. The property inspection focused on assessing the attributes of the site, existing features / infrastructure present onsite and the potential for contaminating substances stored or used onsite. A review of any activities that may have resulted in the contamination of the subject site was also undertaken.

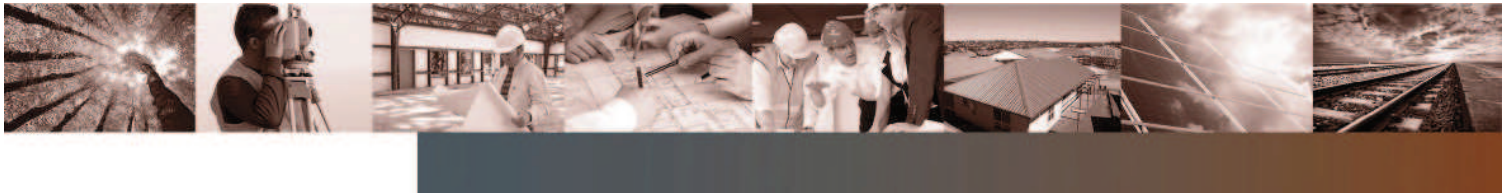
The investigation undertaken by Mitchel Hanlon Consulting determined that the site has been identified as possessing historical land use activities that are deemed to be potentially contaminating.

The investigation identified numerous areas within the Study Area that are deemed to possess potential for soil based contamination. These areas are identified as:

- The former DeKalb Shand grain research site [Refer to Site 1 in Figure 6 (p61)]
- The existing aboveground fuel tanks located within the 2TFM and Prime Television sites [Refer to Sites 2 and 3 respectively in Figure 6 (p61); and
- The area immediately adjacent to the Transgrid Depot [Refer to Site 4 in Figure 6 (p61)].

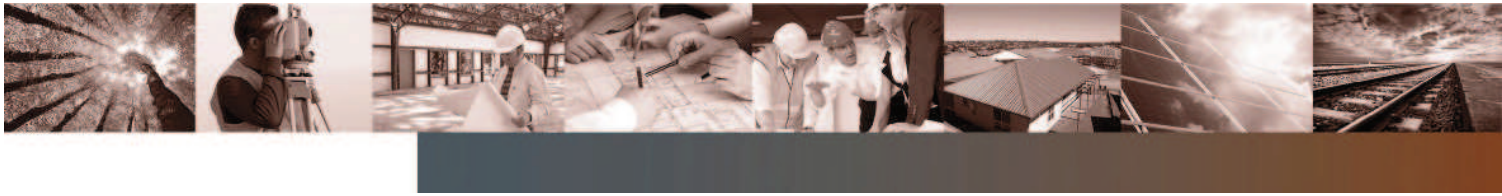
With the exception of the pocket of future 'Large Lot Residential' land located towards the rear of Lot 4112 in DP 1053377, these locations are considered to be restricted to the future Commercial areas of the Study Area.

Given that commercial and tourist land uses would generally have limited access to any potential soil contamination that may be present within the site, the land identified as being located within the future 'Commercial' and 'Tourist' zoning is deemed to suitable for re-development.



With the exception of the of the pocket of future 'Large Lot Residential' land located towards the rear of Lot 4112 in DP 1053377, all other areas are deemed suitable for redevelopment. TRC have informed us that, it is only proposed to change the 'minimum lot area' of this portion of the Study Area not the actual zoning. As such, it is our understanding that this area is not part of the 'planning proposal' and therefore is not deemed to require a statement regarding its suitability for re-development.

Therefore, the portion of the Study Area subjected to the planning proposal is deemed to be suitable to be re-zoned.



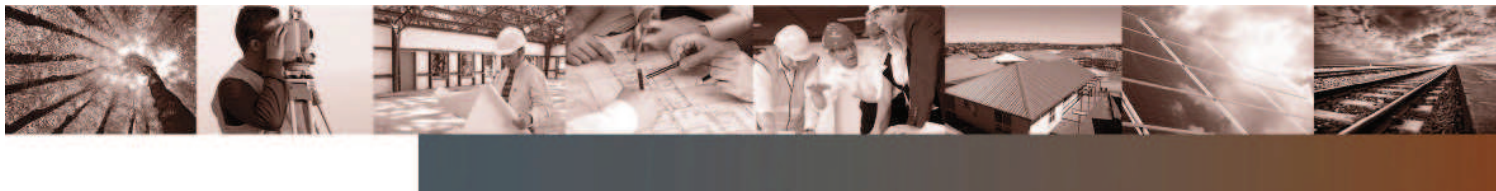
12.0 Recommendations

The current land use activities within the Study Area are expected to continue until such time as individual sites are re-developed. Therefore additional investigations are recommended to be undertaken as part of any future development applications on the land contained within the Study Area. These additional investigation works are to be undertaken by a suitably qualified environmental consultant.

It is suggested that the further investigation includes an appropriately designed sampling/ laboratory testing regime specifically designed to test for the potential contaminants identified in Section 9.0 (p63) of this report.

Should any contamination be identified as a result of the further investigation, a Remedial Action Plan should be prepared and a Site Validation assessment undertaken to ensure the site is suitable for development as zoned by the TRLEP 2010.

All future works and subsequent reports should be undertaken by a suitably qualified environmental consultant and in accordance with requirements of the appropriate NSW EPA and ANZECC guidelines.



13.0 Report Limitations

This report has been prepared for use by the client, who has commissioned the works, in accordance with the project brief only and the specific instructions received from Tamworth Regional Council.

This report has been prepared in accordance with the requirements of appropriate NSW EPA and ANZECC guidelines and in particular Section 3.5.2 Stage 1 – Preliminary Investigation of the *NSW EPA 'Planning Guidelines SEPP 55 – Remediation of Land'*. Specifically this report follows the EPA Guideline Contaminated Sites: *Guidelines for Consultants Reporting on Contaminated Sites (2000)*.

The findings and recommendations made in this report are based upon a site inspection, and a review of relevant surveys, aerial photos, and historical information obtained from verbal discussions with current and past landowners.

This report may not be relied upon by any third party not named in this report for any purpose except with the prior written consent of Mitchel Hanlon Consulting Pty Ltd or Tamworth Regional Council (which consent may or may not be given at the discretion of Mitchel Hanlon Consulting Pty Ltd or Tamworth Regional Council).

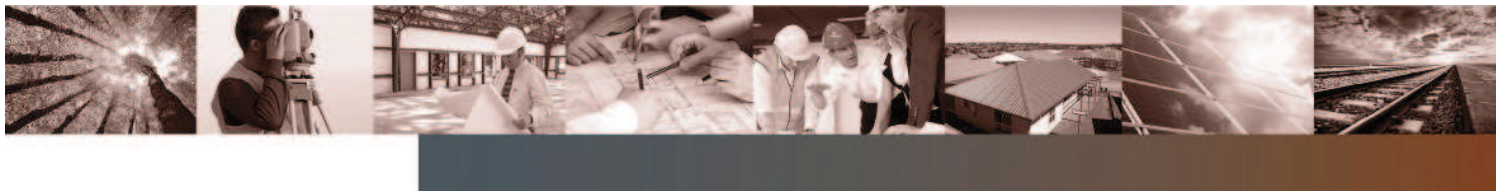
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This report comprises the formal report, documentation sections, tables, figures and appendices as referred to in the index to this report and must not be released to any third party or copied in part without all the material included in this report for any reason.

The report only relates to the site referred to in the scope of works being located within the Study Area as detailed in Section 2.0 (p21) and Figure 3 (p14) of this document.

The report relates to the site as at the date of the report as conditions may change thereafter due to natural processes and/or site activities.

No warranty or guarantee is made in regard to any other use than as specified in the scope of works reported in this report.



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Where the Scope of Works does not include offsite investigations, Mitchel Hanlon Consulting Pty Ltd provides no warranty as to offsite conditions, including the extent if any to which substances in the Site may be emanating off site, and if so whether any adjoining sites have been or may be impacted by contamination originating from the Site.

Where the Scope of Works does not include the investigation, sampling, monitoring or other testing of groundwater in, on or under the Site, Mitchel Hanlon Consulting Pty Ltd provides no warranty or representation as to the quality of groundwater on the Site or the actual or potential migration of contamination in groundwater across or off the Site.

Mitchel Hanlon Consulting Pty Ltd has prepared this report with the diligence, care and skill which a reasonable person would expect from a reputable environmental consultancy and in accordance with environmental regulatory authority and industry standards, guidelines and assessment criteria applicable as at the date of this report. Industry standards and environmental criteria change frequently, and may change at any time after the date of this report.



14.0 References

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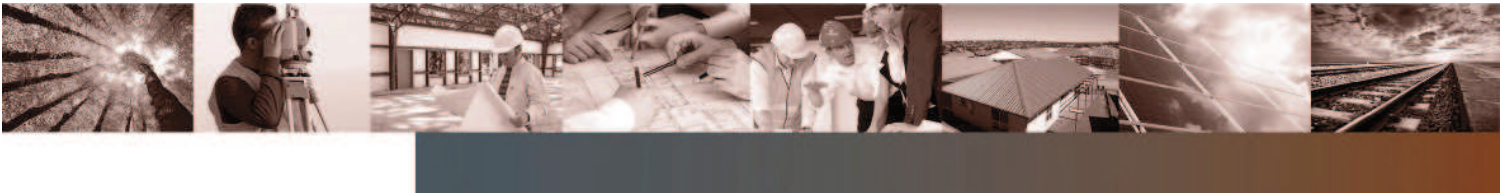
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Appendix A Tamworth Regional Council – South Tamworth Rural Lands Master Plan

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