

## Appendix 2

---

### Site Descriptions

## Site Descriptions - Summary Data

### Site contents - raw materials and artefact types

Site number	Figure Code	Feature(s)	Landform	Artefacts	Raw Material	Category	Comments
Atlas 1	Atl1	Isolated Artefact	Wilkurra	1	silcrete	flaked	core fragment
Atlas 2	Atl2	Isolated Artefact	Wilkurra	1	silcrete	flaked	core
Atlas 3	Atl3	Isolated Artefact	Arumpo	1	silcrete	flaked	
Atlas 4	Atl4	Isolated Artefact	Bulgamura	1	silcrete	flaked	
Atlas 5	Atl5	Isolated Artefact	Bulgamura	1	silcrete	flaked	
Atlas 6	Atl6	Isolated Artefact	Arumpo	1	silcrete	flaked	
Campaspe 1	Cam1	Isolated Artefact	Arumpo	1	silcrete	flake	
Campaspe 2	Cam2	Artefacts	Bulgamura	20	silcrete, quartzite	flaked, grinding	backed
Campaspe 3	Cam3	Artefacts	Bulgamura	9	silcrete	flaked	marni-wadna style graver
Campaspe 4	Cam4	Artefacts	Bulgamura	3	silcrete	flaked	tool
Campaspe 5	Cam5	Artefacts	Bulgamura	40	silcrete	flaked	
Campaspe 6	Cam6	Scarred Tree	Bulgamura	1	Black Box	scar	
Hatfield 1	Hat1	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 2	Hat2	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 3	Hat3	Isolated Artefact	Hatfield	1	silcrete	flaked	weathered
Hatfield 4	Hat4	Artefacts	Hatfield	4	silcrete	flaked	core
Hatfield 5	Hat5	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 6	Hat6	Artefacts	Hatfield	3	silcrete	flaked	
Hatfield 7	Hat7	Isolated Artefact	Hatfield	1	silcrete	flaked	tool
Hatfield 8	Hat8	Artefacts	Hatfield	15	silcrete	flaked	tools, core, flakes
Hatfield 9	Hat9	Artefacts, Hearths	Youhl	150	silcrete	flaked, grinding	tools, core, flakes, fragments
Hatfield 10	Hat10	Artefacts	Hatfield	30	silcrete, chert	flaked	chert geometric microlith
Hatfield 11	Hat11	Artefacts	Hatfield	2	silcrete	flaked	
Hatfield 12	Hat12	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 13	Hat13	Artefacts	Hatfield	2	silcrete	flaked	weathered, retouched
Hatfield 14	Hat14	Artefacts	Hatfield	60	silcrete, quartzite	flaked, grinding	burren, muller fragment
Hatfield 15	Hat15	Artefacts	Youhl	23	silcrete	flaked	
Hatfield 16	Hat16	Artefacts	Marma	2	silcrete	flaked	
Hatfield 17	Hat17	Artefacts, Hearths, Shell	Youhl	120	silcrete, quartzite	flaked	burren, tula, axe
Hatfield 18	Hat18	Artefacts	Youhl	3	silcrete	flaked	
Hatfield 19	Hat19	Artefacts	Youhl	2	silcrete	flaked	multi-core
Hatfield 20	Hat20	Artefacts, Hearths, non human bone & organic material	Youhl	110	silcrete, quartzite, other	flaked, grinding, ground edge	grinding fragments, axe
Hatfield 21	Hat21	Artefacts, Hearths	Youhl	170	silcrete	flaked	
Hatfield 22	Hat22	Artefacts	Youhl	4	silcrete	flaked	
Hatfield 23	Hat23	Isolated Artefact	Youhl	1	silcrete	flaked	tool
Hatfield 24	Hat24	Artefacts	Youhl	2	silcrete	flaked	
Hatfield 25	Hat25	Artefacts	Youhl	100	silcrete, quartzite	flaked, grinding	adze slug, grinding fragment
Hatfield 26	Hat26	Artefacts	Marma	4	silcrete	flaked	
Hatfield 27	Hat27	Isolated Artefact	Marma	1	silcrete	flaked	cortical
Hatfield 28	Hat28	Artefacts	Marma	7	silcrete	flaked	tool
Hatfield 29	Hat29	Isolated Artefact	Marma	1	silcrete	flaked	
Hatfield 30	Hat30	Artefacts	Marma	3	silcrete	flaked	
Hatfield 31	Hat31	Artefacts	Marma	4	silcrete, quartzite	flaked	

Site number	Figure Code	Feature(s)	Landform	Artefacts	Raw Material	Category	Comments
Hatfield 32	Hat32	Artefacts	Marma	4	silcrete	flaked	
Hatfield 33	Hat33	Artefacts	Marma	3	silcrete	flaked	
Hatfield 34	Hat34	Isolated Artefact	Marma	1	silcrete	flaked	
Hatfield 35	Hat35	Isolated Artefact	Marma	1	silcrete	flaked	
Hatfield 36	Hat36	Artefacts	Marma	8	silcrete	flaked	
Hatfield 37	Hat37	Artefacts	Youhl	8	silcrete	flaked	
Hatfield 38	Hat38	Artefacts	Marma	2	silcrete	flaked	
Hatfield 39	Hat39	Artefacts, Hearths	Marma	18	silcrete	flaked	tools, flakes
Hatfield 40	Hat40	Artefacts, Hearths	Hatfield	300	silcrete, quartzite, other	flaked, grinding, ground edge, percussion	flaking floors, hammers, grinding fragments, axe
Hatfield 41	Hat41	Artefacts, Hearths	Hatfield	11	silcrete	flaked	core, flakes, single event
Hatfield 42	Hat42	Isolated Artefact	Hatfield	1	silcrete	flaked	tool
Hatfield 43	Hat43	Artefacts	Hatfield	20	silcrete	flaked	
Hatfield 44	Hat44	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 45	Hat45	Isolated Artefact	Hatfield	1	quartzite	grinder with pitting	
Hatfield 46	Hat46	Artefacts	Hatfield	8	silcrete	flaked	tool, core
Hatfield 47	Hat47	Artefacts	Hatfield	6	silcrete	flaked	retouched
Hatfield 48	Hat48	Artefacts	Hatfield	3	silcrete	flaked	
Hatfield 49	Hat49	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 50	Hat50	Artefacts	Hatfield	2	silcrete	flaked	core and flake
Hatfield 51	Hat51	Artefacts, Hearths	Hatfield	1	silcrete	flaked	
Hatfield 52	Hat52	Artefacts	Hatfield	2	silcrete	flaked	
Hatfield 53	Hat53	Isolated Artefact	Hatfield	1	silcrete	flaked	cortical
Hatfield 54	Hat54	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 55	Hat55	Artefacts	Hatfield	42	silcrete	flaked	flaking floor
Hatfield 56	Hat56	Artefacts, Hearths, non human bone & organic material	Hatfield	8	silcrete	flaked	core, tool
Hatfield 57	Hat57	Artefacts	Hatfield	4	silcrete	flaked	tool
Hatfield 58	Hat58	Artefacts, Hearths	Hatfield	6	silcrete	flaked	
Hatfield 59	Hat59	Artefacts	Hatfield	9	silcrete	flaked	
Hatfield 60	Hat60	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 61	Hat61	Isolated Artefact	Hatfield	1	silcrete	flaked	
Hatfield 62	Hat62	Isolated Artefact	Hatfield	1	silcrete	flaked	cortical
Hatfield 63	Hat63	Artefacts	Youhl	3	silcrete	flaked	
Hatfield 64	Hat64	Artefacts	Hatfield	20	silcrete	flaked	
Hatfield 65	Hat65	Artefacts, Hearths	Hatfield	3	silcrete	flaked	
Hatfield 66	Hat66	Isolated Artefact	Mulurulu	1	silcrete	flaked	
Ivanhoe RLF 7	RLF7	Isolated Artefact	Hatfield	1	silcrete	flaked	
Ivanhoe RLF 8	RLF8	Isolated Artefact	Hatfield	1	silcrete	flaked	
Ivanhoe RLF 9	RLF9	Artefacts	Hatfield	3	silcrete	flaked	core
Ivanhoe RLF 10	RLF10	Artefacts	Hatfield	2	silcrete	flaked	
Ivanhoe RLF 11	RLF11	Artefacts, Hearths	Hatfield	160	silcrete, other	flaked	
Ivanhoe RLF 12	RLF12	Isolated Artefact	Hatfield	1	sandstone	grinding fragment	
Ivanhoe RLF 13	RLF13	Artefacts, Hearths	Hatfield	30	silcrete, chert, other	flaked, grinding, percussion	cores, tools, hammers
Ivanhoe RLF 14	RLF14	Artefacts	Hatfield	7	silcrete	flaked	geometric
Ivanhoe RLF 15	RLF15	Artefacts	Hatfield	2	silcrete	flaked	
Ivanhoe RLF 16	RLF16	Isolated Artefact	Hatfield	1	silcrete	flaked	
Ivanhoe RLF 17	RLF17	Artefacts, Hearths	Hatfield	24	silcrete, chert, sandstone	flaked, grinding	thumbnail

Site number	Figure Code	Feature(s)	Landform	Artefacts	Raw Material	Category	Comments
Ivanhoe RLF 18	RLF18	Artefacts, Hearths	Hatfield	10	silcrete, sandstone	flaked, grinding	
Ivanhoe RLF 19	RLF19	Artefacts	Hatfield	3	silcrete	flaked	
Ivanhoe RLF 20	RLF20	Artefacts	Hatfield	2	silcrete	flaked	
Ivanhoe RLF 21	RLF21	Isolated Artefact	Hatfield	1	silcrete	flaked	
Ivanhoe RLF 22	RLF22	Artefacts	Hatfield	2	silcrete, sandstone	flaked, grinding	
Ivanhoe RLF 23	RLF23	Artefacts	Hatfield	10	silcrete	flaked	backed
Ivanhoe RLF 24	RLF24	Isolated Artefact	Hatfield	1	silcrete	flaked	
Ivanhoe RLF 25	RLF25	Artefacts	Hatfield	4	silcrete	flaked	backed
Ivanhoe RLF 26	RLF26	Artefacts, Hearths	Hatfield	20	silcrete, sandstone	flaked, grinding	
Ivanhoe RLF 27	RLF27	Artefacts	Hatfield	2	silcrete, sandstone	flaked, grinding	
Ivanhoe RLF 28	RLF28	Isolated Artefact	Hatfield	1	silcrete	flaked	



## Site Descriptions - Atlas-Campaspe Mine

### Atlas 1

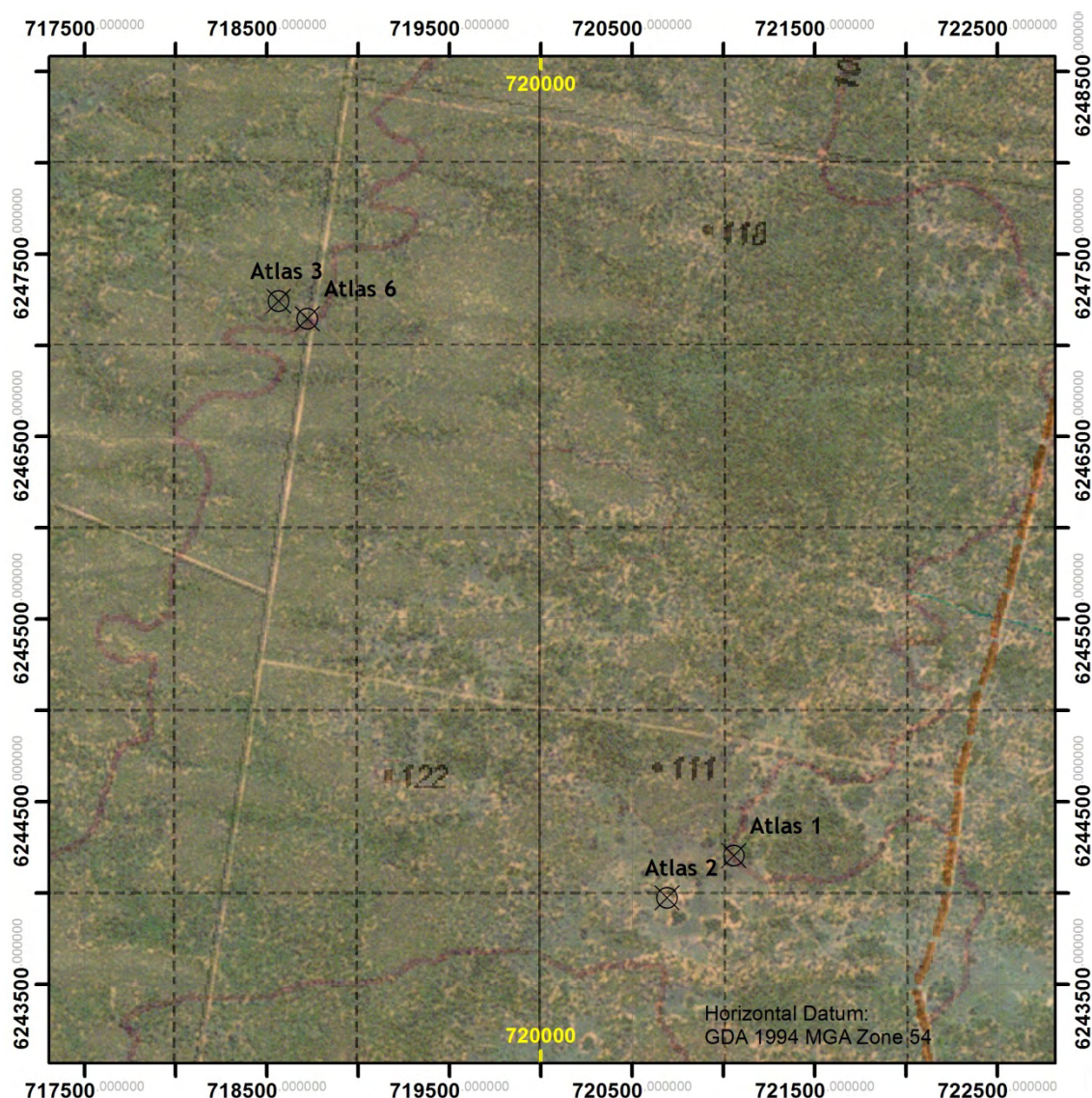
Atlas 1 is located on the edges of a cleared area within the Wilkurra land system, 630 metres (m) south of a fenceline and 1.19 kilometres (km) west of a fenceline. The site consists of a broken core fragment. There are no visible water sources, however, a slightly lower-lying area is located 200 m south. Visibility was poor due to leaf litter.



Atlas 1 - General location



Atlas 1 - Silcrete core fragment





## Atlas 2

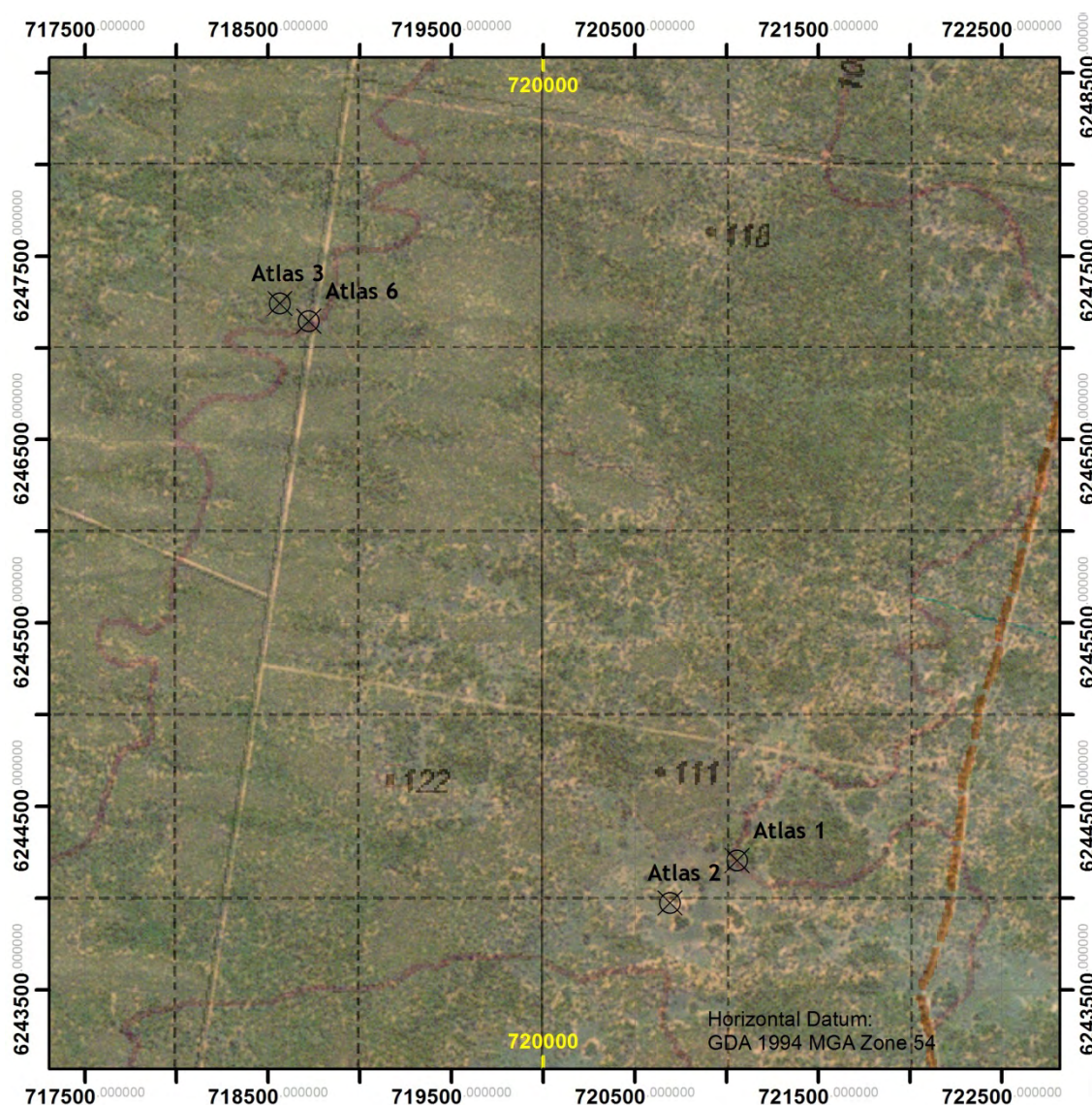
Atlas 2 is located in an exposure beside a stand of mallee trees in a cleared area within the Wilkurra land system, 938 m south of a fenceline and 1.53 km west of a fenceline. The site consists of a silcrete retouched tool. There are no visible water sources, however, cracking in the surrounding exposures suggest that some water may collect in the landscape during times of rain. A high number of kangaroos, emus and eagles were observed in the area. Visibility was very good.



Atlas 2 - General location



Atlas 2 - Silcrete retouched tool





## Atlas 3

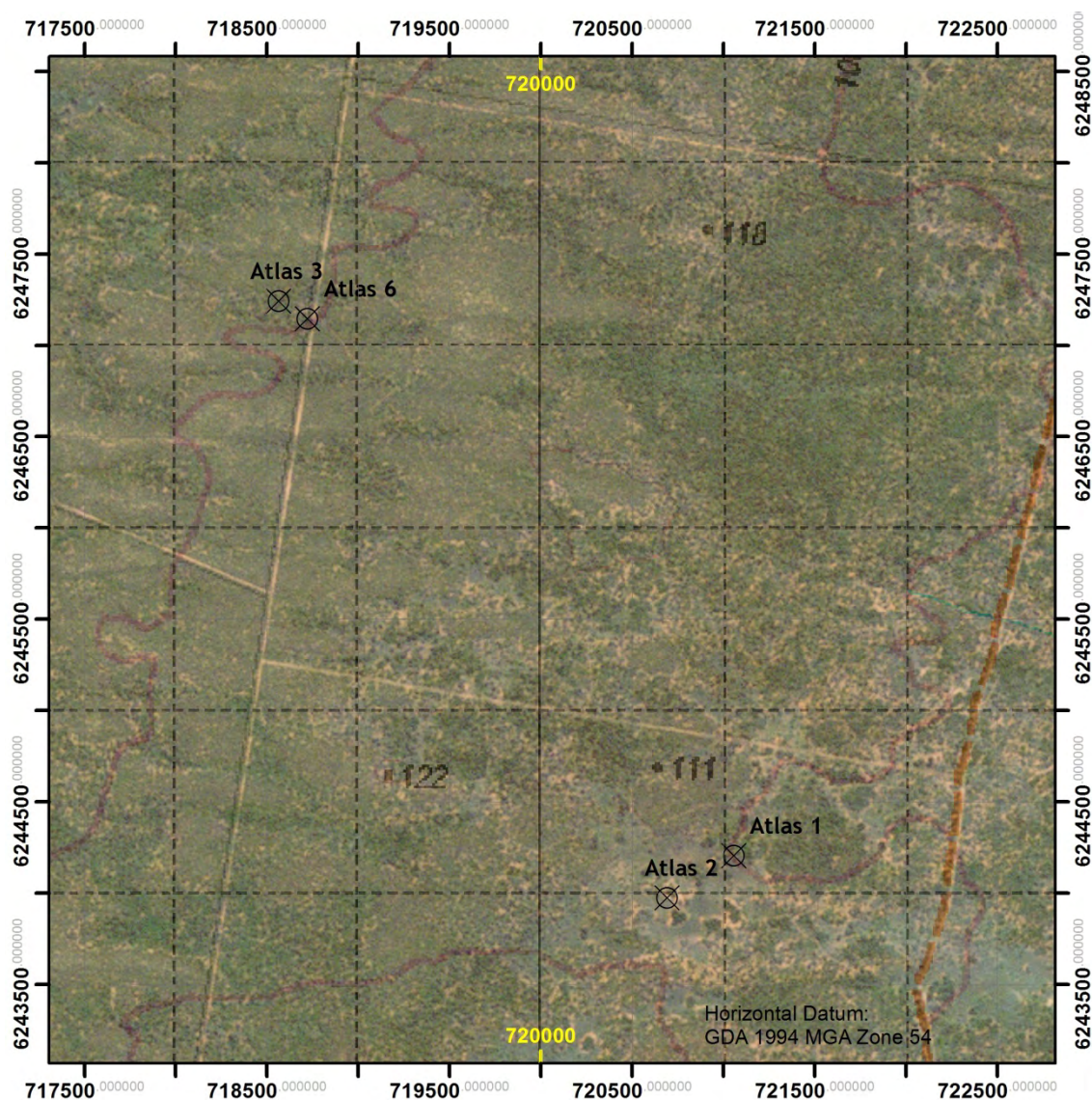
Atlas 3 is located in small exposure in a Belah (*Casuarina pauper*) vegetation area within the Arumpo land system, 200 m west of a fenceline and 70 m west-southwest of the dirt road that runs down the centre of the Atlas deposit. The site consists of a silcrete flake. There are no visible water sources.



Atlas 3 - General location



Atlas 3 - Silcrete flake





## Atlas 4

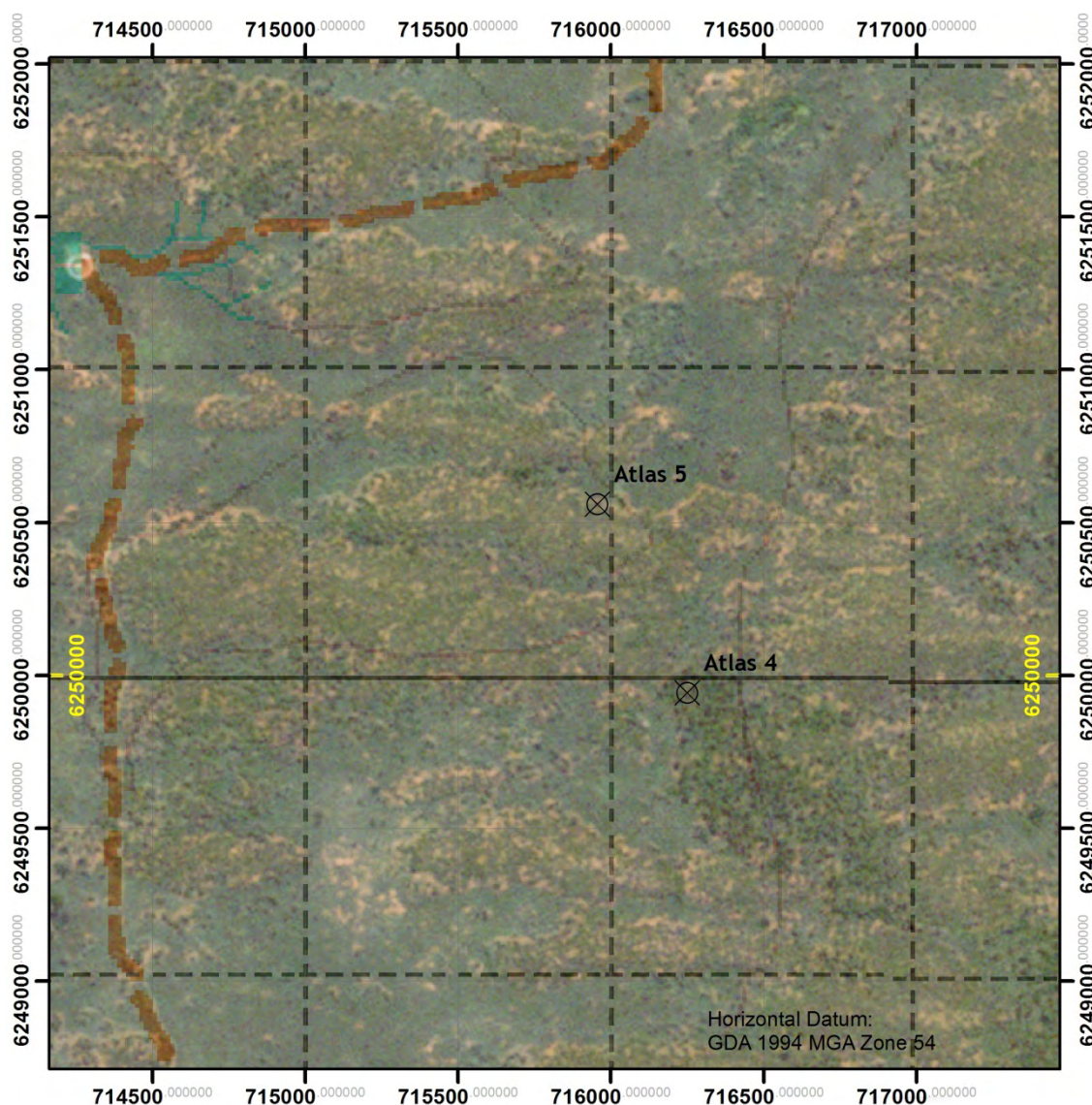
Atlas 4 is located in a small exposure within a Belah outcrop, on the edge of a vegetation change within the Bulgamarra land system, 130 m south-west of a dirt road running down the centre of the proposed Atlas deposit. The site consists of a cortical silcrete flake. There are no visible water sources, however, the site is located approximately 50 m from a vegetation change most likely associated with a slight depression in the topography.



Atlas 4 - General location



Atlas 4 - Cortical silcrete flake



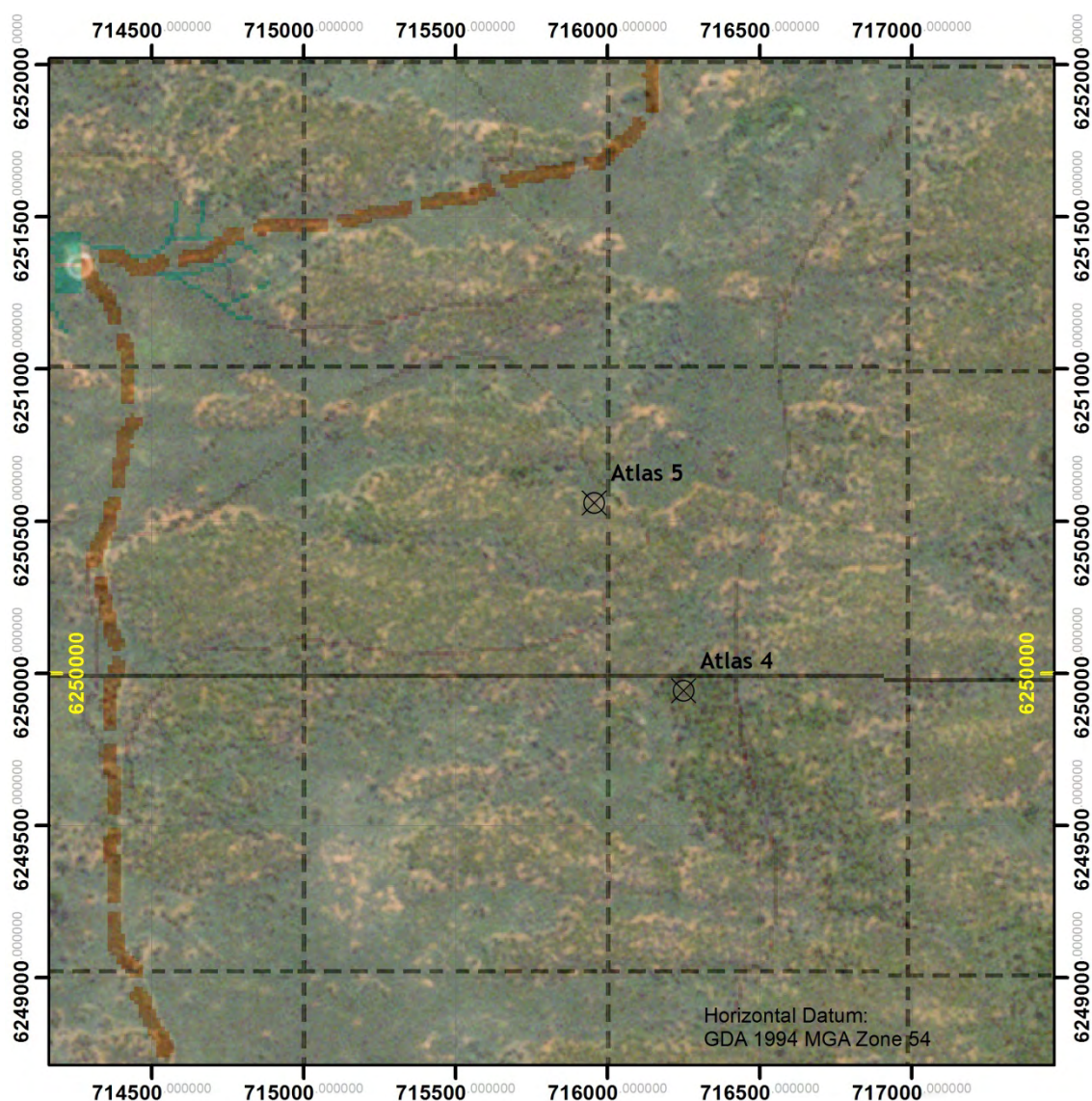


## Atlas 5

Atlas 5 is located on the edge of a dirt road and on the edge of a vegetation change most likely associated with a slight depression in the topography within Bulgamarra land system. The site consists of a broken silcrete flake. There are no visible water sources. Visibility was moderate.



Atlas 5 - General location





## Atlas 6

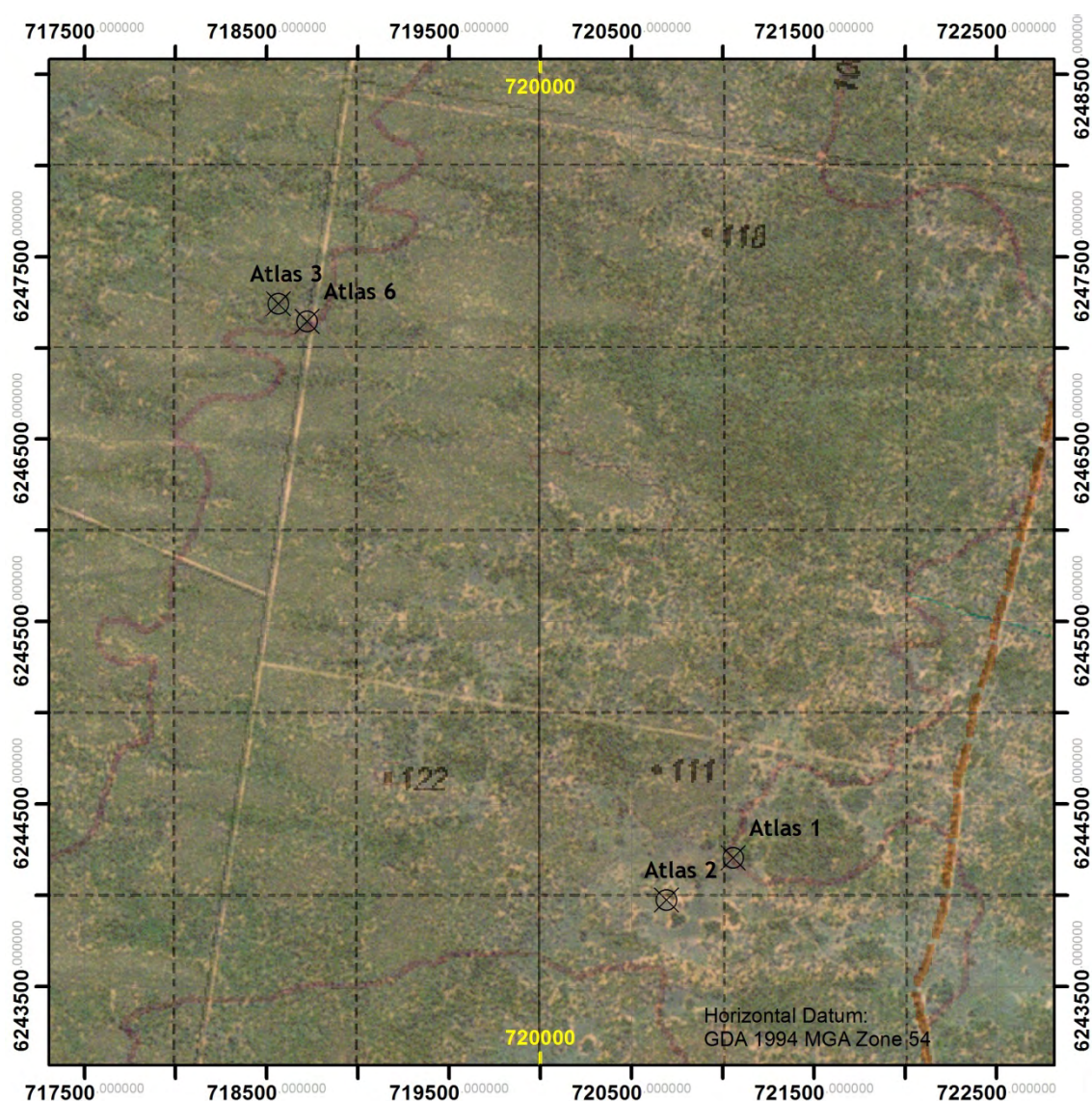
Atlas 6 is located in a small exposure beside a dirt road within the Arumpo land system, immediately to the south of the dirt road that runs through the centre of Atlas deposit and 10 m west of a fenceline and gate. The site consists of a silcrete flake. There are no visible water sources. Visibility was moderate.



Atlas 6 - General location



Atlas 6 - Silcrete flake





## Campaspe 1

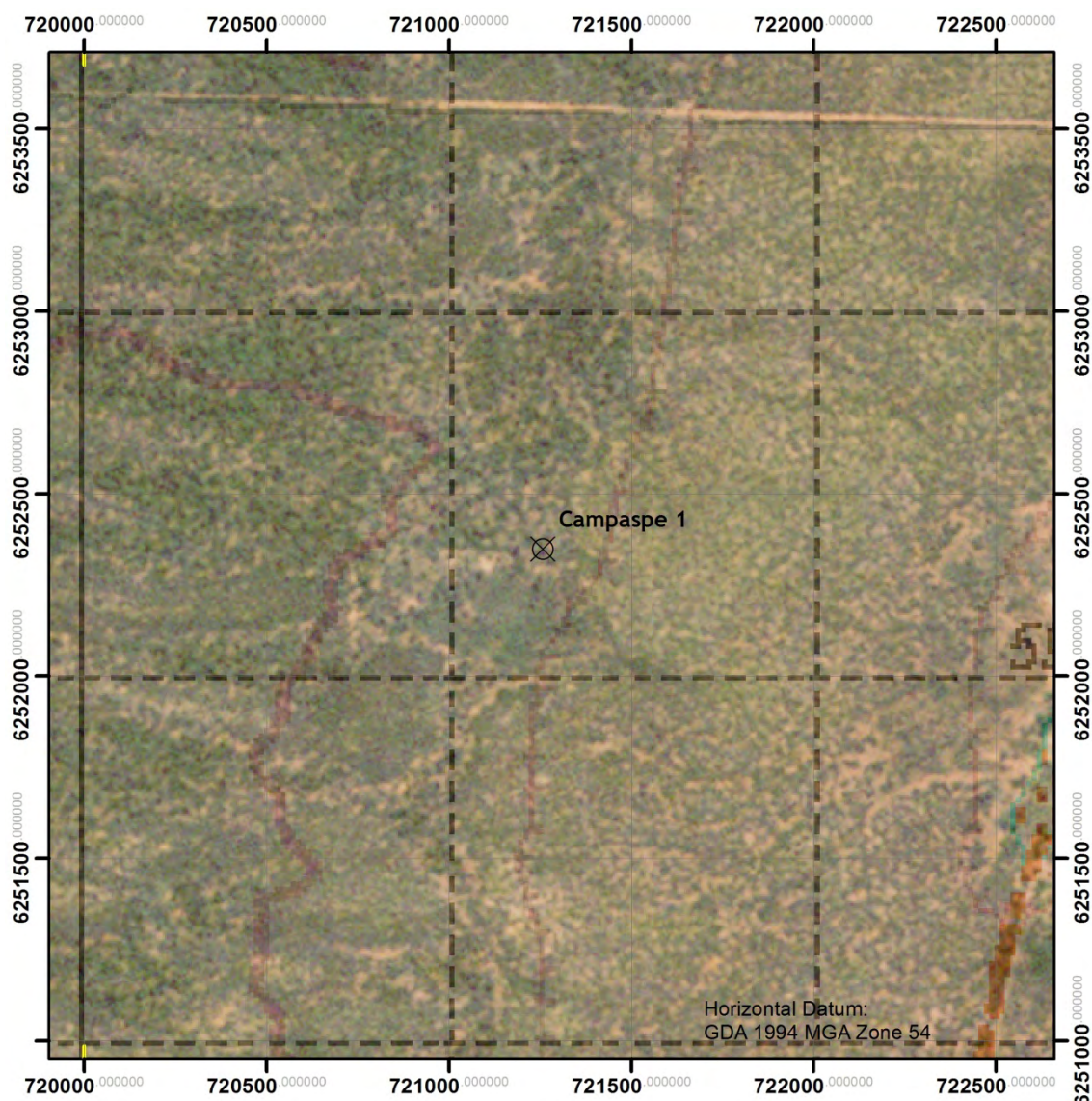
Campaspe 1 is located on the transition between mallee and Belah country near a grove of acacia, in sheetwashed area 1.2 km south of a fenceline within the proposed Campaspe deposit and within Arumpo land system. The site consists of a broken silcrete flake. There are no visible water sources. Visibility was moderate.



Campaspe 1 - General location



Campaspe 1 - Broken silcrete flake





## Campaspe 2

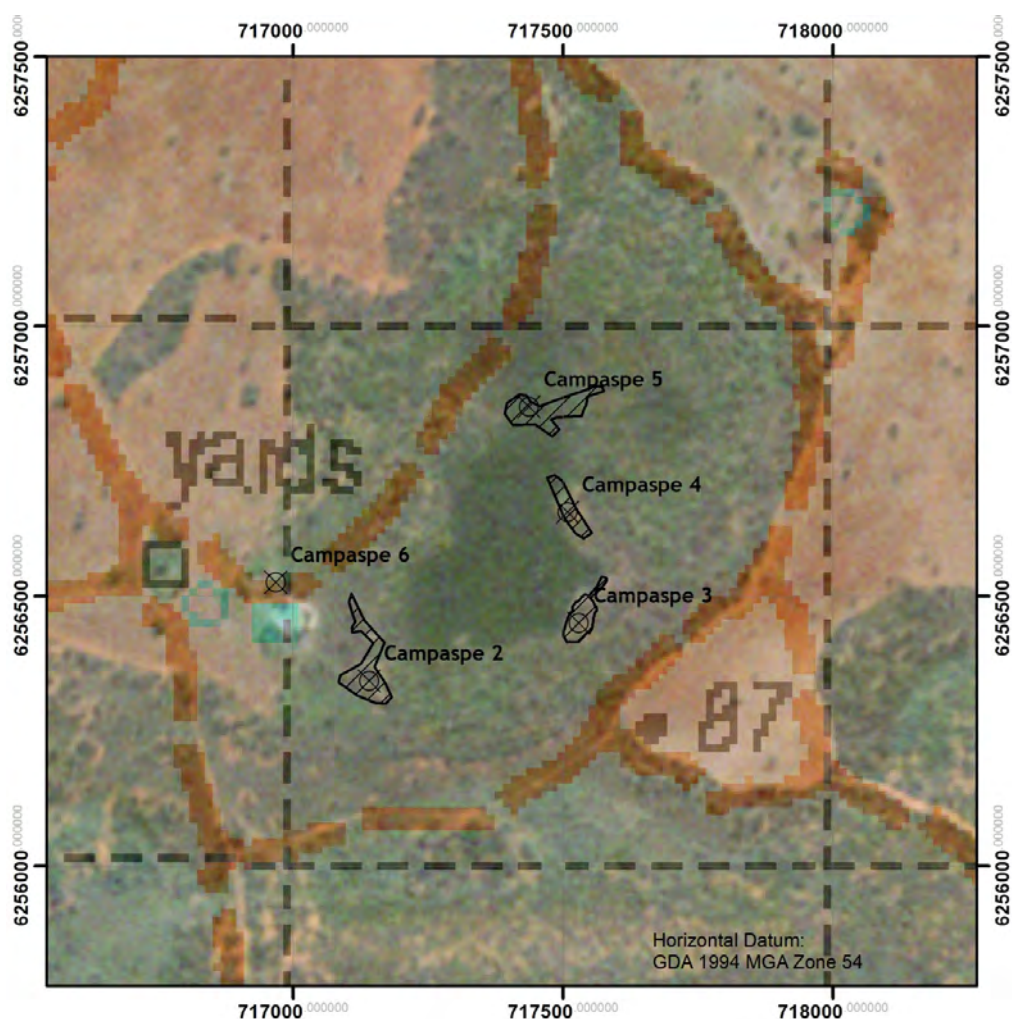
Campaspe 2 is located in an irregular exposure within a cleared area inter-dispersed Black Box (*Eucalyptus largiflorens*) trees within the Bulgamarra land system. The site starts 60 m east of a paddock dam and 90 m east of a depression/relict lake and continues 190 m south, ending approximately 25 m north of a buried irrigation pipe. The site consists of over 20 silcrete artefacts including backed artefacts, cores, retouched tools, flakes, broken and flaked silcrete cobbles. Water sources are within 100 m of the site. Campaspe 2 should be considered a continuation of Campaspe 3, 4 and 5.



Campaspe 2 - General location



Campaspe 2 - Silcrete core





## Campaspe 3

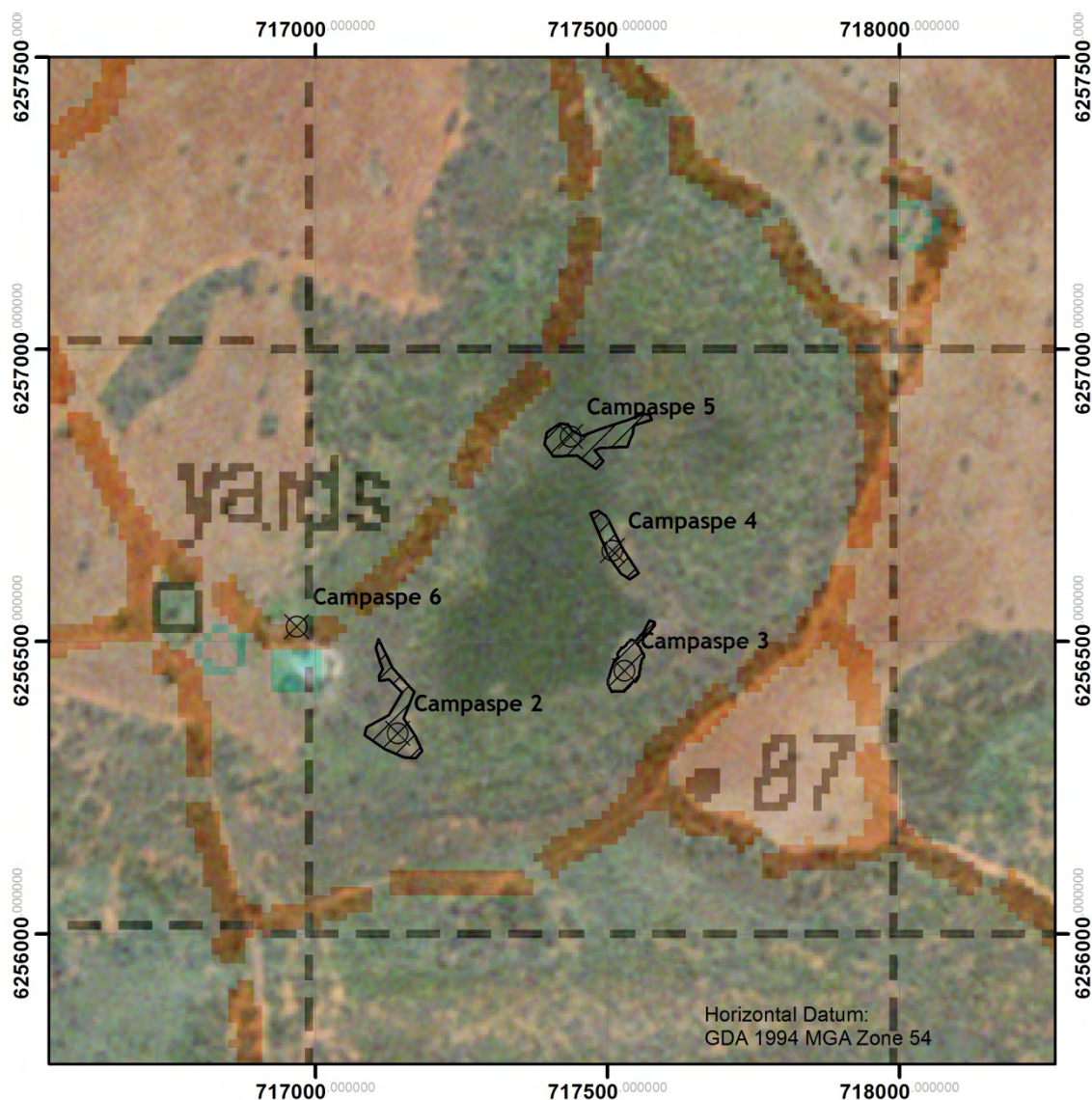
Campaspe 3 is located in an irregular, poorly defined exposure on raised topography (a lunette or source bordering dune) east of a water filled depression with Black Box vegetation within the Bulgamarra land system. The area is 130 m north-west of a dirt track in a cleared, cropped paddock. The site consists of nine silcrete artefacts. Water sources are within 10 m of the site. Campaspe 3 should be considered a continuation of Campaspe 2, 4 and 5.



Campaspe 3 - General view over the dune



Campaspe 3 -Marni wadna graver





## Campaspe 4

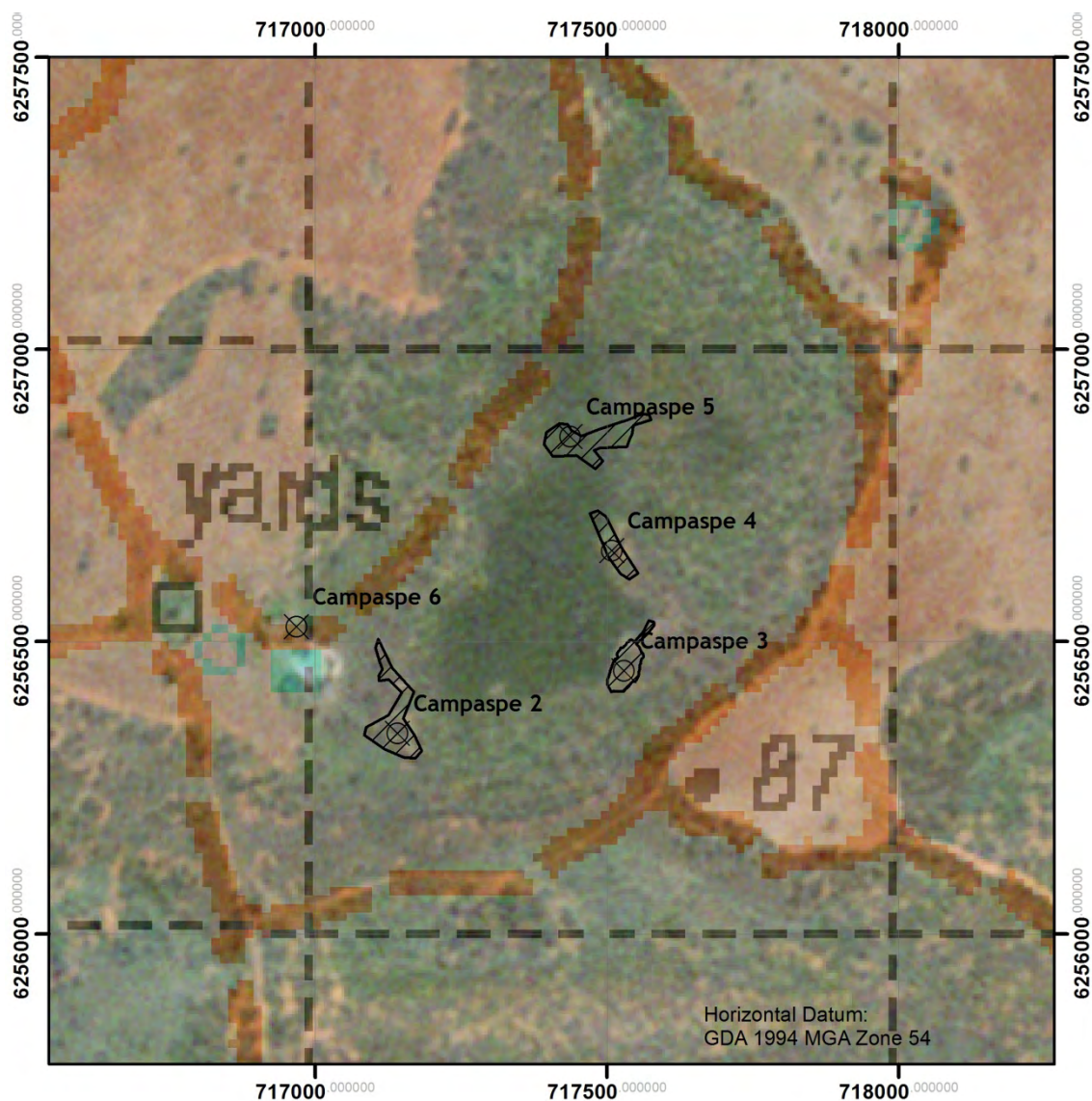
Campaspe 4 is located in an irregular, poorly defined exposure on raised topography (a lunette or source bordering dune) east of a water filled depression with Black Box vegetation within the Bulgamarra land system. The site consists of three artefacts over 100 m. Exposure and visibility are locally very low and there were no discernible site boundaries. Water sources are within 10m of the site. Campaspe 4 should be considered a continuation of Campaspe 2, 3 and 5.



Campaspe 4 - General location



Campaspe 4 - Silcrete retouched tool





## Campaspe 5

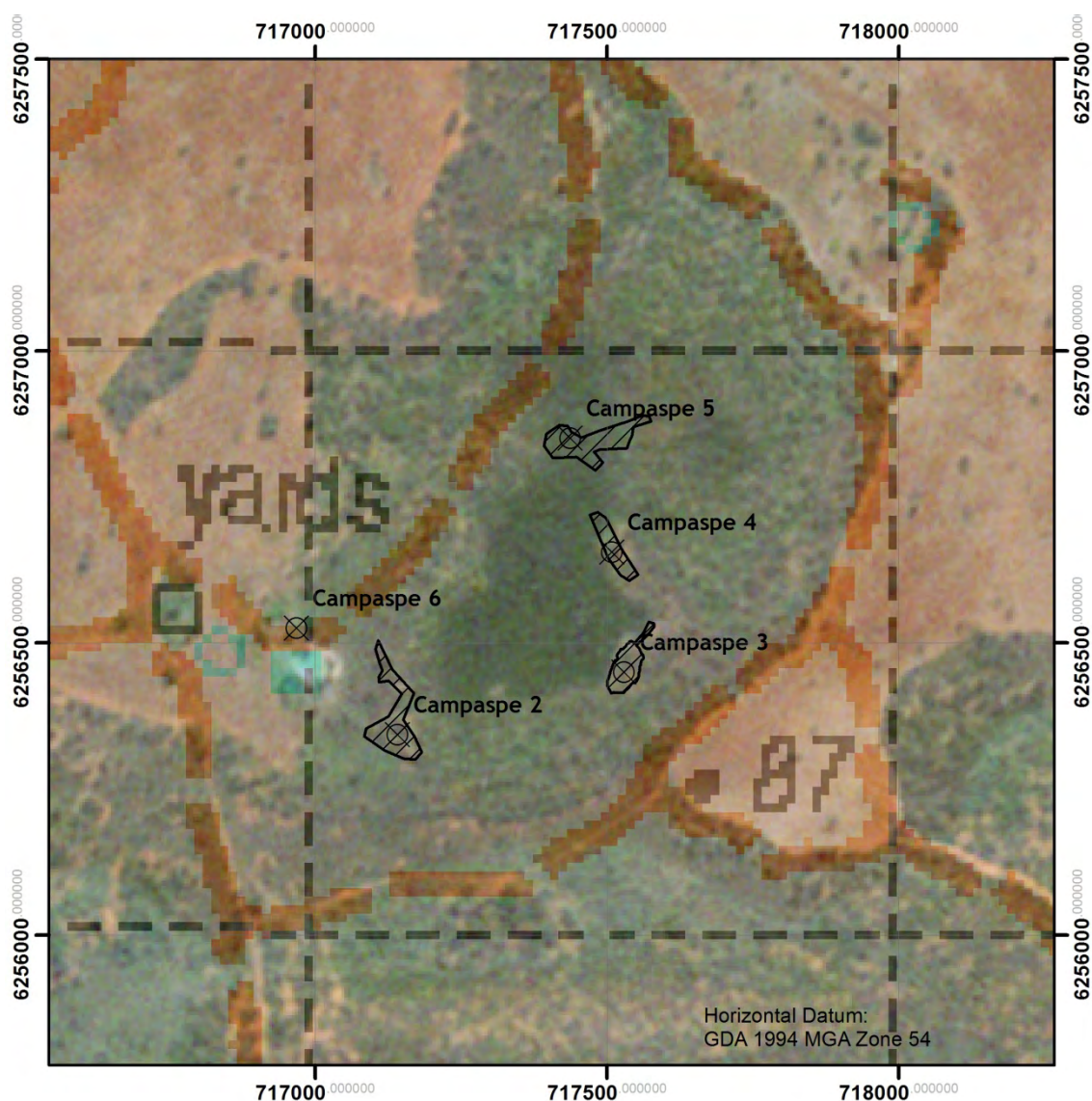
Campaspe 5 is located immediately north and adjacent to a waterfilled depression with Black Box vegetation within the Bulgamarra land system. The site consists of approximately 40 artefacts. Campaspe 5 should be considered a continuation of Campaspe 2, 3 and 4.



Campaspe 5 - General location



Campaspe 5 -View south towards water filled depression





## Campaspe 6

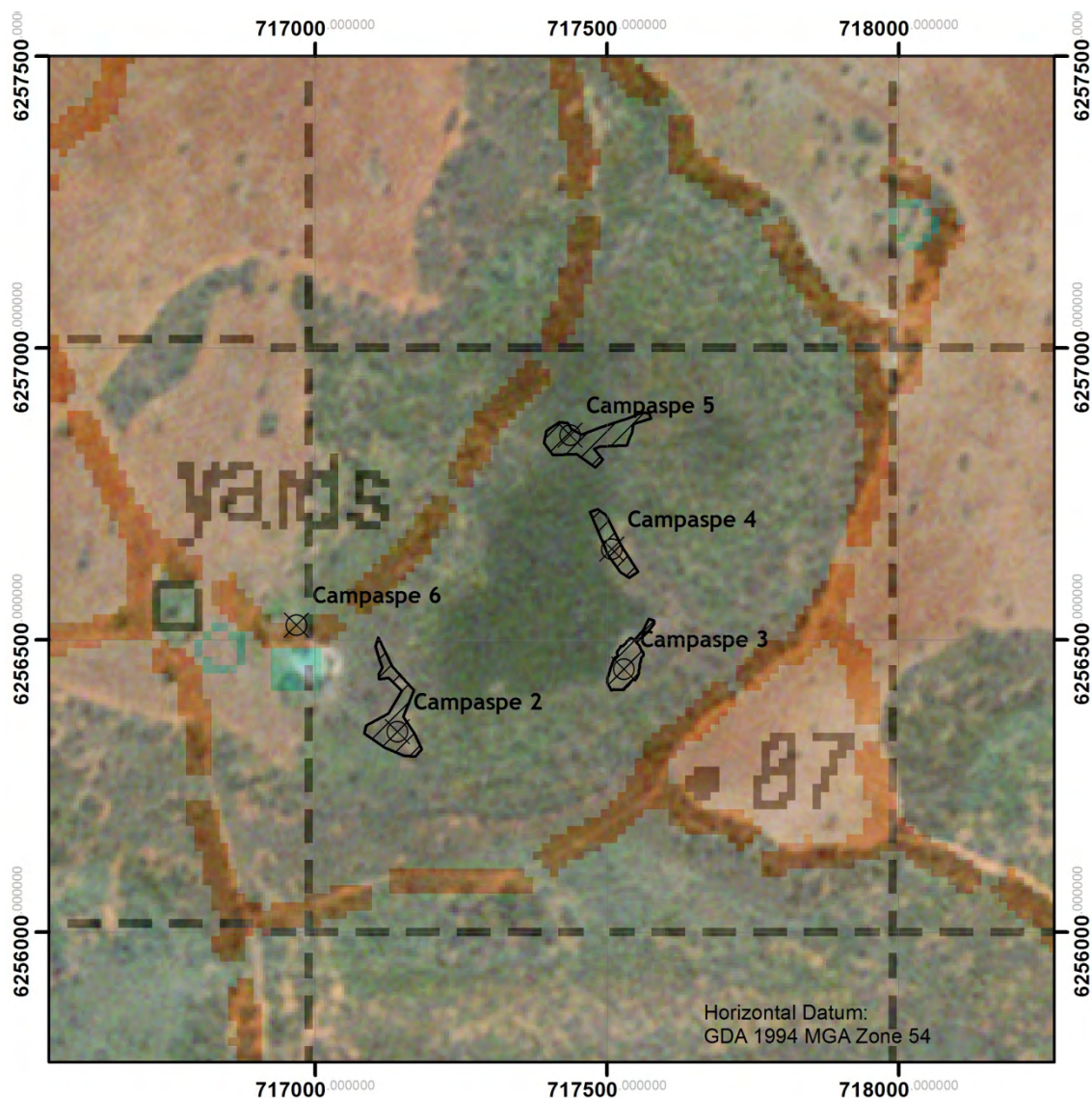
Campaspe 6 is a culturally scarred Black Box tree located west of a large water filled depression surrounded by Black Box vegetation. The tree is in a partially cleared paddock, 50 m north of a dam within the Bulgamarra land system. The tree is alive and has three trunks. The bark removal scar has clear tool marks, probably made by a steel tool, at its top.



Campaspe 6 - Scar on Black Box



Campaspe 6 - Tool marks





## Site Descriptions - Mineral Concentrate Transport Route

### Hatfield 1

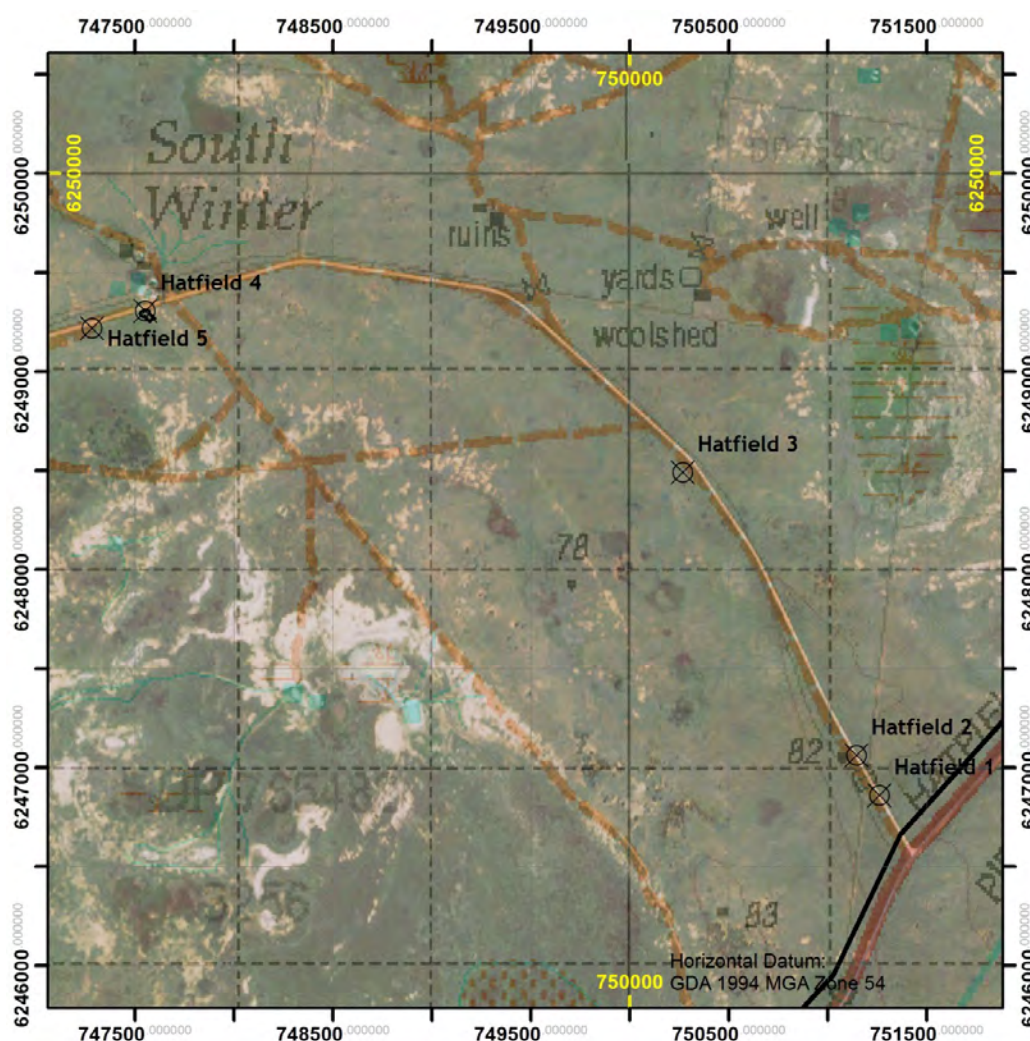
Hatfield 1 is located in a small exposure along a road drainage swale within the Hatfield land system, approximately 10 m east of Hatfield-The Vale Road and 330 m from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The site consists of a single silcrete flake, with 50 percent (%) cortex of the dorsal surface. Relict lakes, basins and depressions which periodically hold water are located within 500 m of the site. Further surface artefacts may be present in this area, however, visibility was poor in the immediate locale due to vegetation growth.



Hatfield 1 - General location



Hatfield 1 - Cortical silcrete flake



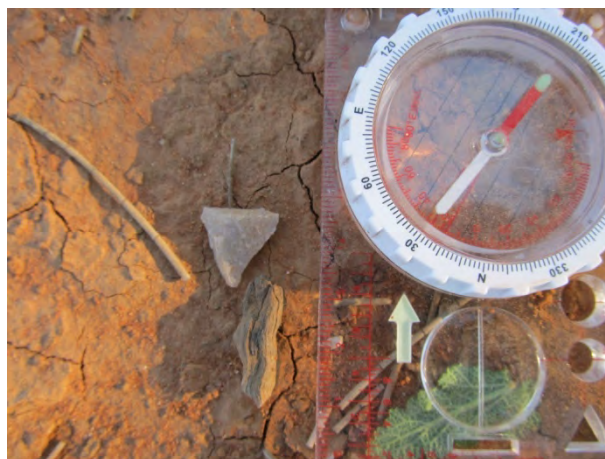


## Hatfield 2

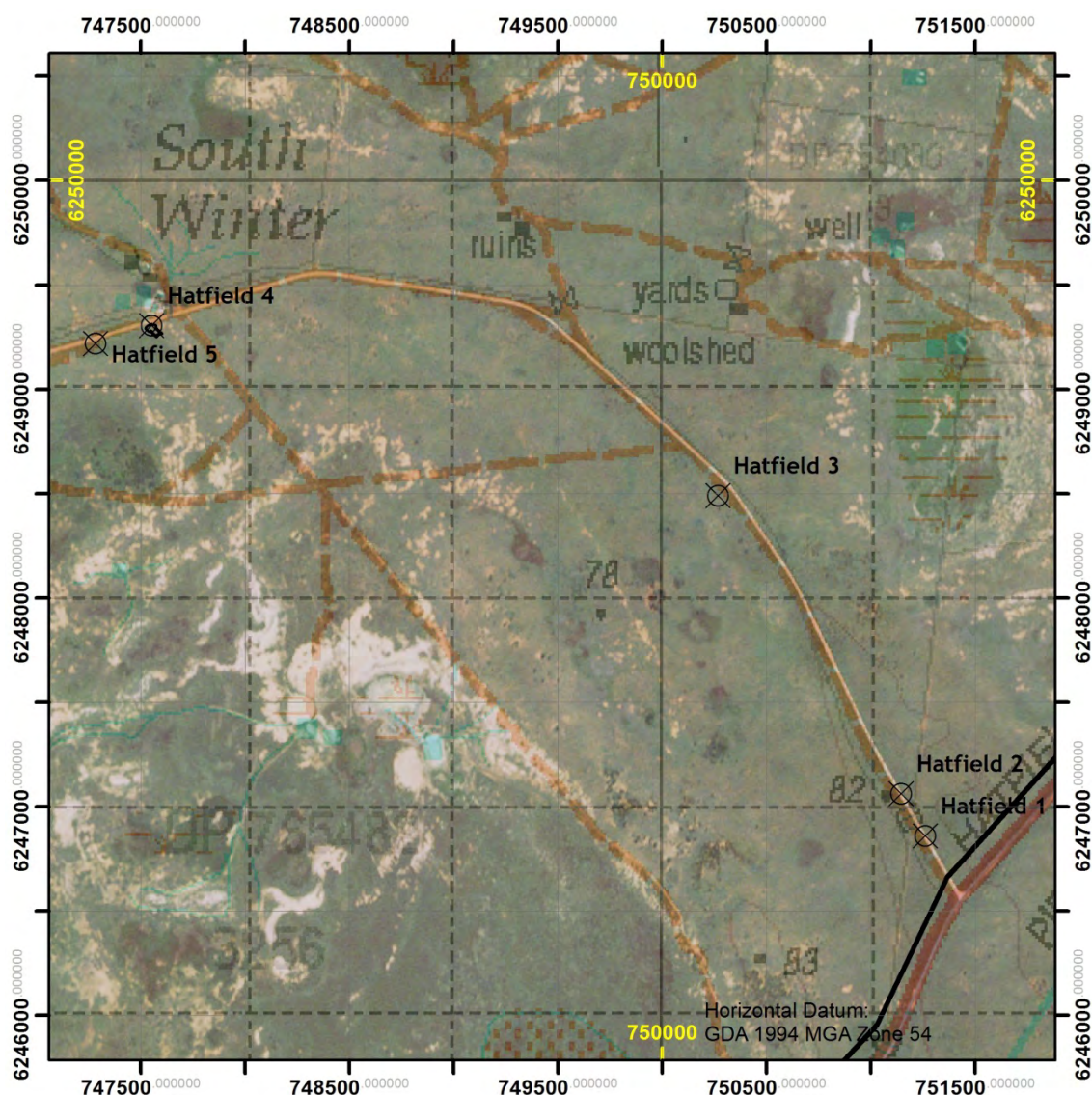
Hatfield 2 is located in an exposure measuring 25 m x 7 m within the Hatfield land system, approximately 15 m east of Hatfield-The Vale Road and 550 m from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The site consists of a single broken silcrete flake. Relict lakes, basins, pans and depressions which periodically hold water are located within 500 m of the site. Visibility was very good in the exposure, however, further surface artefacts may be present in vegetated areas beyond the exposure.



Hatfield 2 - General location



Hatfield 2- Broken silcrete flake





## Hatfield 3

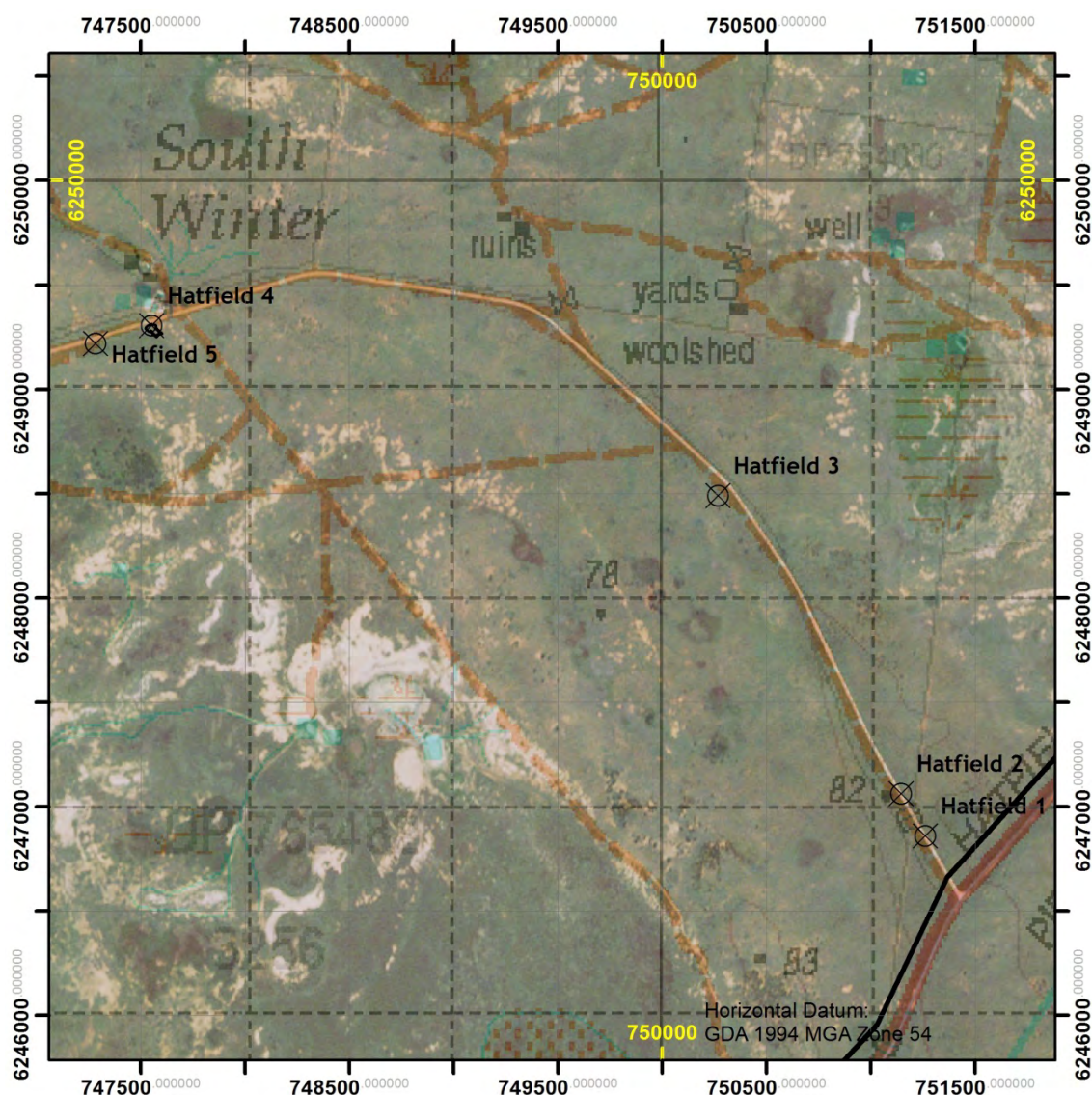
Hatfield 3 is located in an ill-defined exposure on a slight rise within the Hatfield land system, approximately 20 m west of Hatfield-The Vale Road and 2.25 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The site consists of a single highly weathered red silcrete retouched tool. Relict lakes, basins and depressions which periodically hold water are located within 600m of the site. Further surface artefacts may be present in this area, however, visibility was poor in the immediate locale due to vegetation growth.



Hatfield 3 - General location



Hatfield 3 - Weathered silcrete retouched tool





## Hatfield 4

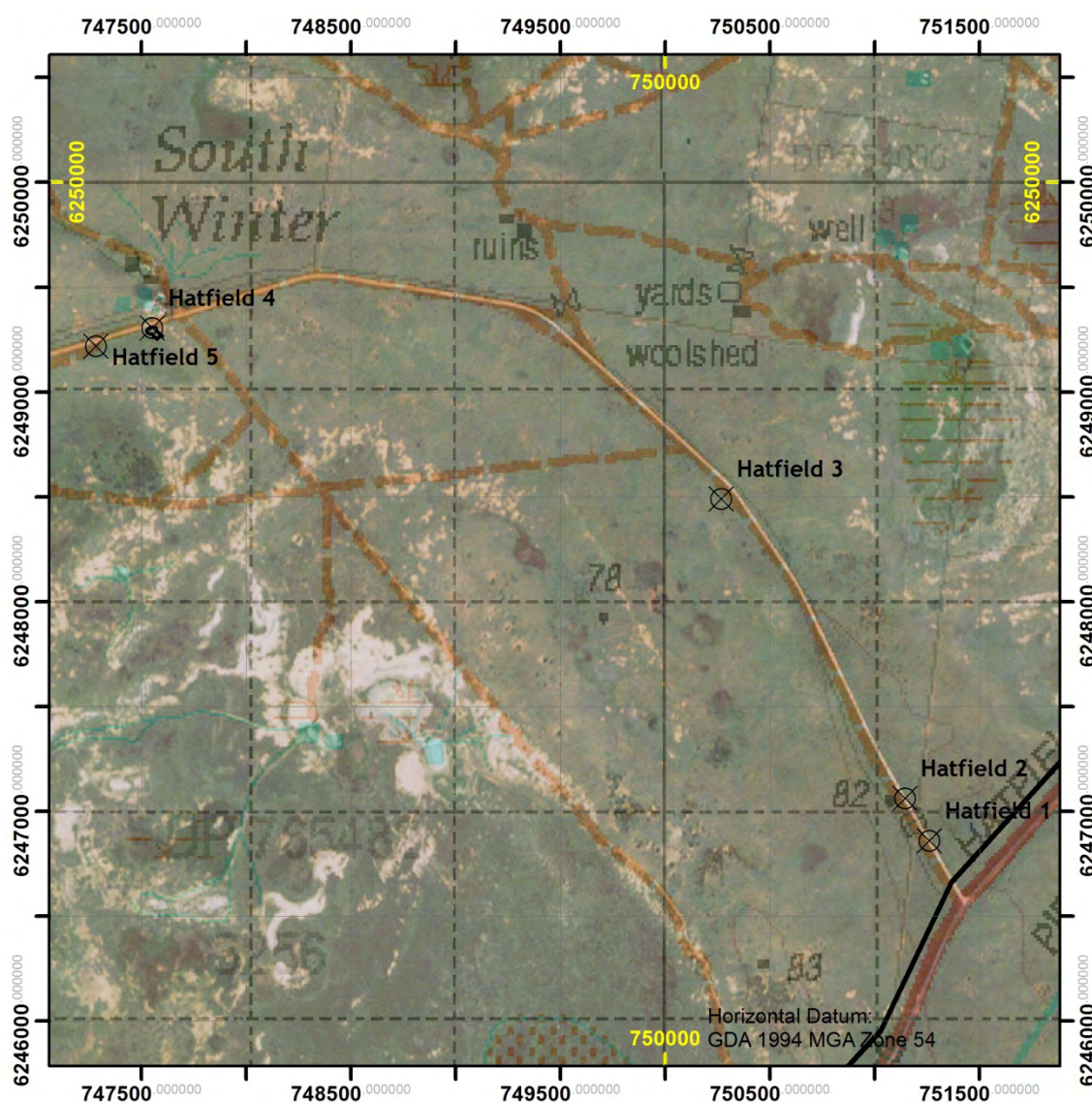
Hatfield 4 is located in an ill-defined exposure within the Hatfield land system, approximately 15 m south of Hatfield-The Vale Road, 30 m south of a dam, 16 m west of a fenceline and 5.45 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The site consists of four silcrete artefacts including a core, complete flake, a broken flake and a proximal flake. Relict basins, pans and depressions which periodically hold water are located within 200 m of the site. The exposure continues beyond the surveyed area and intermittently into vegetated areas and so may contain further surface artefacts.



Hatfield 4 - General location



Hatfield 4 - Example of silcrete flake





## Hatfield 5

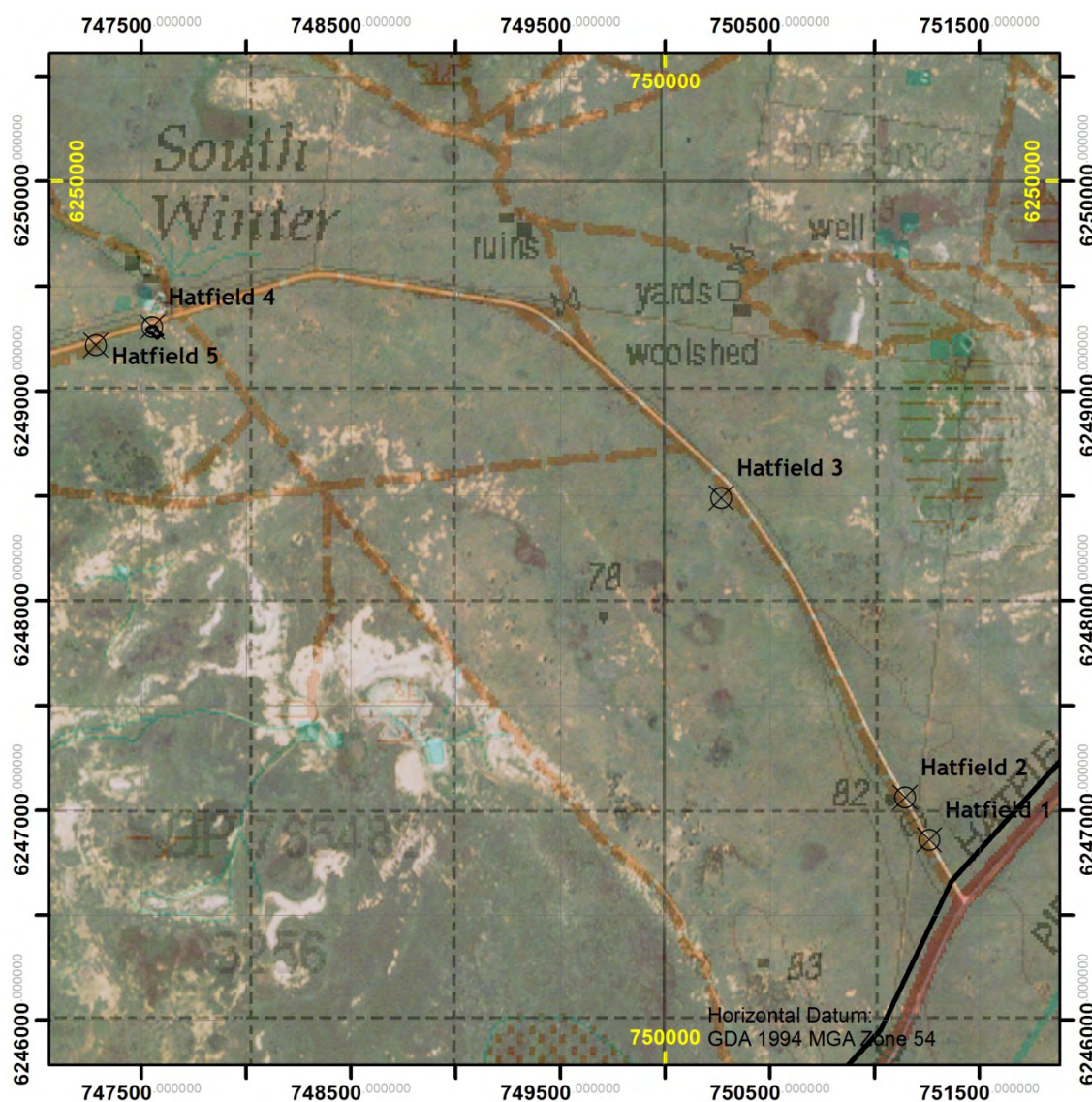
Hatfield 5 is located in an ill-defined exposure within the Hatfield land system, approximately 20 m south of Hatfield-The Vale Road, 400 m west and 850 m east of fencelines and 5.7 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The site consists of a single glossy white silcrete distal flake. Relict pans and depressions which may periodically hold water are located within 400 m of the site. Further surface artefacts may be present in this area, however, visibility was moderate in the immediate locale due to vegetation growth.



Hatfield 5 - General location



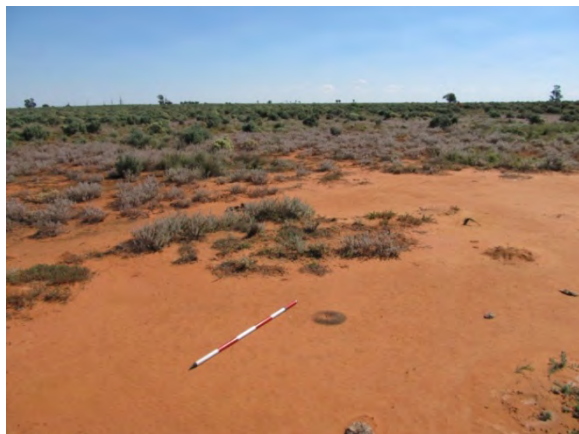
Hatfield 5 - Silcrete distal flake





## Hatfield 6

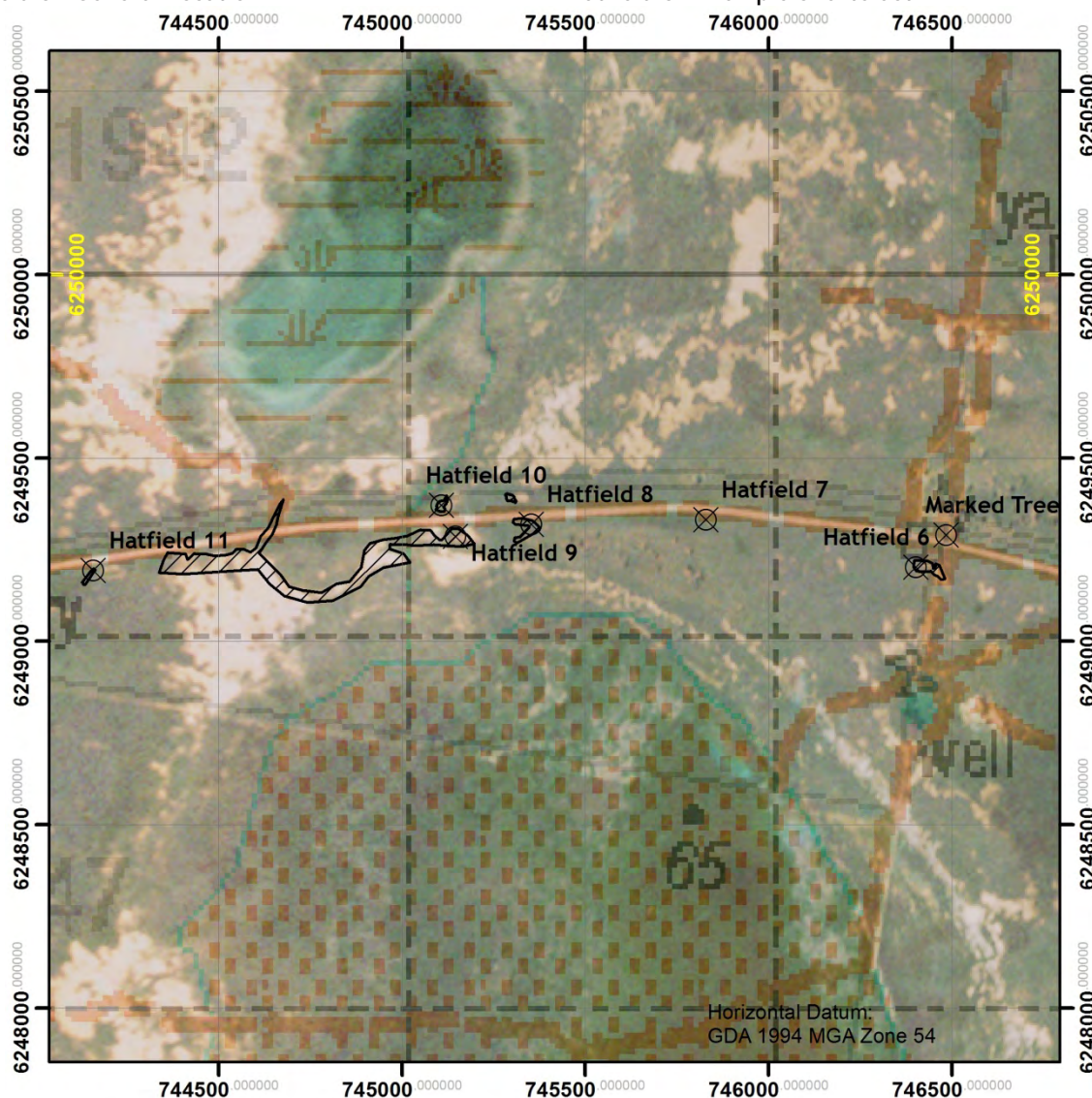
Hatfield 6 is located in an ill-defined exposure within the Hatfield land system, approximately 25 m south of Hatfield-The Vale Road and 5.7 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. The exposure starts at the Magenta fenceline and extends 70 m west and to the south beyond the surveyed area. The site consists of one recorded silcrete distal flake and two silcrete flakes reported by stakeholders. Relict lakes, basins pans and depressions which may periodically hold water are located within 400 m of the site. Further artefacts are likely to be present in this area, increasing in density and visibility with proximity to the Youhl land system and its associated relict lakes and lunettes.



Hatfield 6 - General Location



Hatfield 6 - Example of artefact





## Hatfield 7

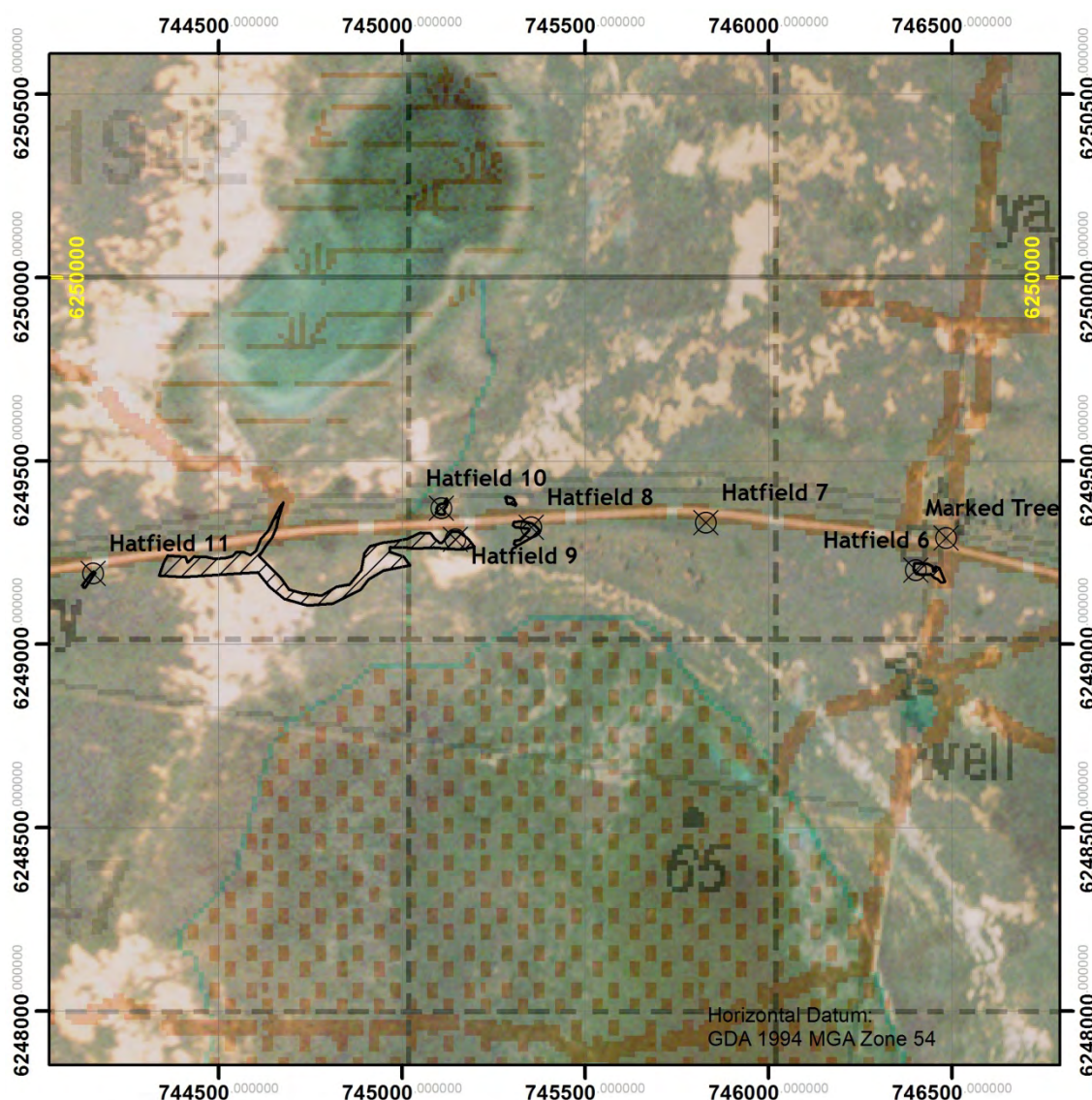
Hatfield 7 is located in an ill-defined exposure within the Hatfield land system, approximately 20 m south of Hatfield-The Vale Road and 7.26 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. While mapped as the Hatfield land system, the area may be transitional between the Youhl, Marma and Hatfield systems with extensive exposures, pans, depressions and lunettes occurring within 300 m of the site. The site consists of one cortical silcrete retouched tool. Potential water sources are located within 300 m of the site. Visibility is moderate and further artefacts are likely to be present in this area, increasing in density and visibility with proximity to the Youhl and Marma land systems and associated relict lakes and lunettes.



Hatfield 7 - General location



Hatfield 7 - Silcrete cortical retouched tool





## Hatfield 8

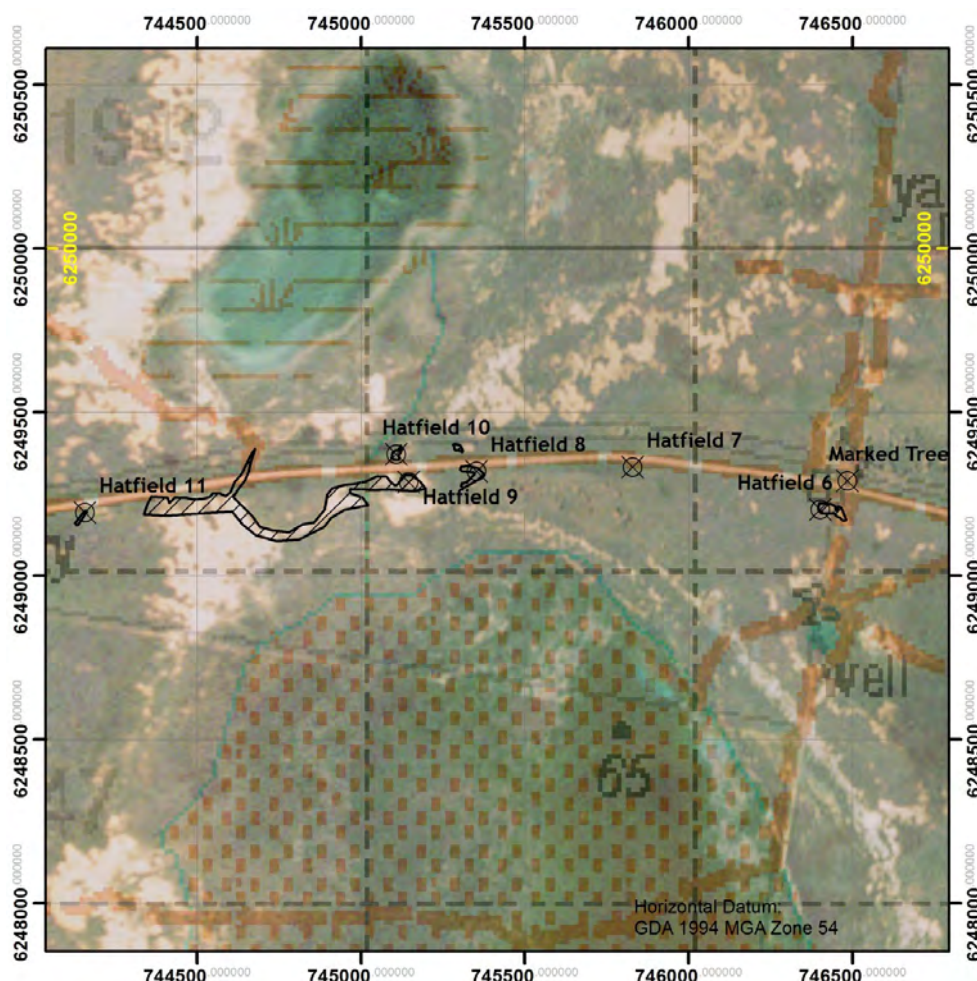
Hatfield 8 is located in two ill-defined exposures on either side of Hatfield-The Vale Road within the Hatfield land system, 7.8 km from the intersection of Hatfield-The Vale Road and Balranald-Ivanhoe Road. While mapped as the Hatfield land system, the area is likely transitional between the Youhl, Marma and Hatfield land systems, with extensive exposures, pans, depressions and lunettes occurring within 150 m of the site. The site consists of 15 silcrete artefacts, seven to the north of the road and eight to the south of the road including retouched tools, a core and complete and broken flakes. Potential water sources are located within 300 m of the site. Visibility is very good and further artefacts are likely to be present in this area, increasing in density and visibility with proximity to the Youhl and Marma land systems with its associated relict lakes and lunettes. Hatfield 8 should be considered a continuation of Hatfield 9, 10 and 11.



Hatfield 8 - Exposure north of the road



Hatfield 8 - Sample of artefacts north of road



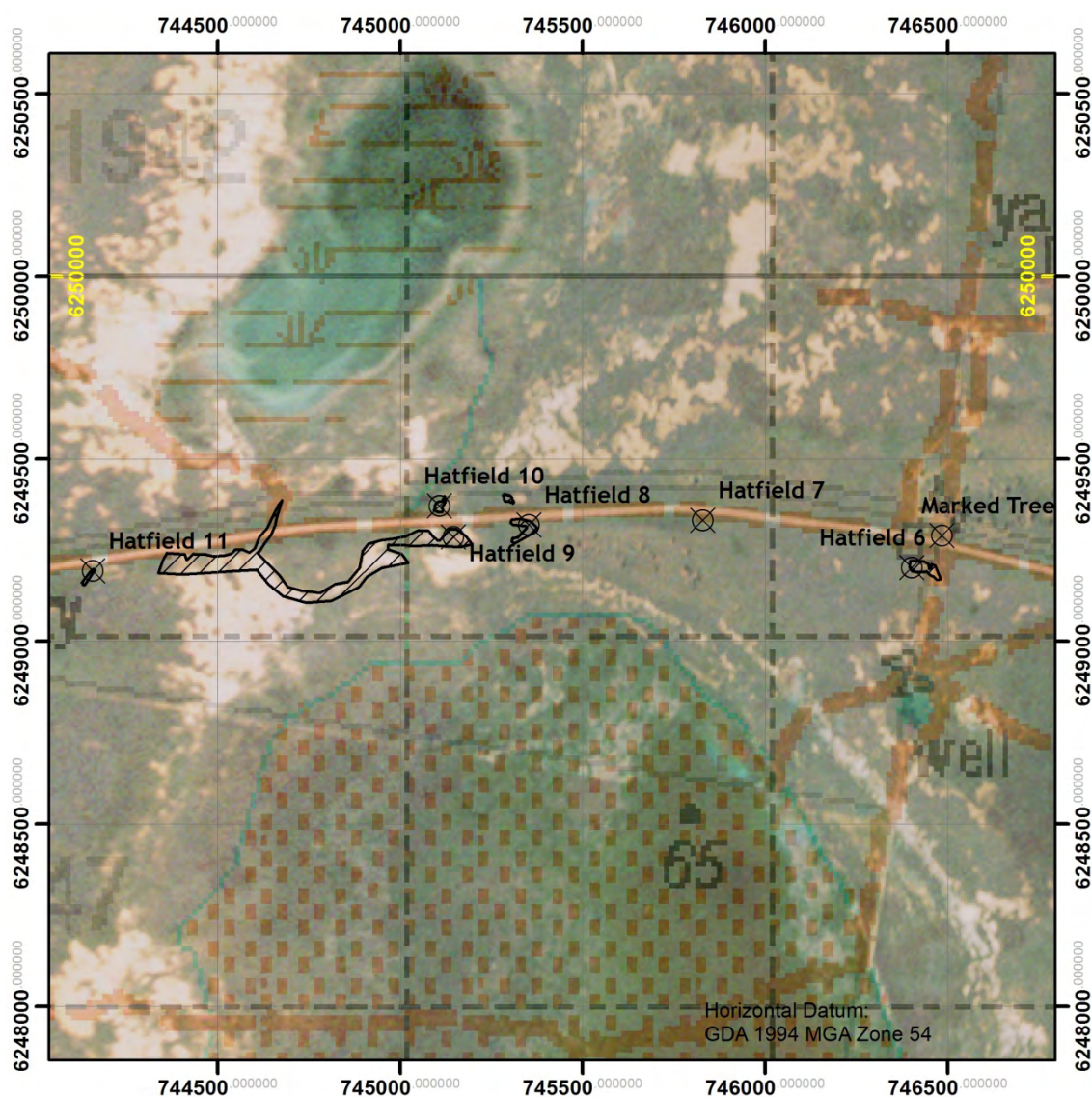


## Hatfield 9

Hatfield 9 is located in an extensive ill-defined series of pans and exposures within the Youhl land system, predominately to the south of Hatfield-The Vale Road, and 7.9 km to 8.7 km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure continues over 800 m and extends beyond the surveyed area. The site consists of over 150 observed artefacts and multiple intact, eroding and scattered hearths. Potential water sources are located within 400 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 9 should be considered a continuation of Hatfield 8, 10 and 11.



Hatfield 9 - General location





## Hatfield 10

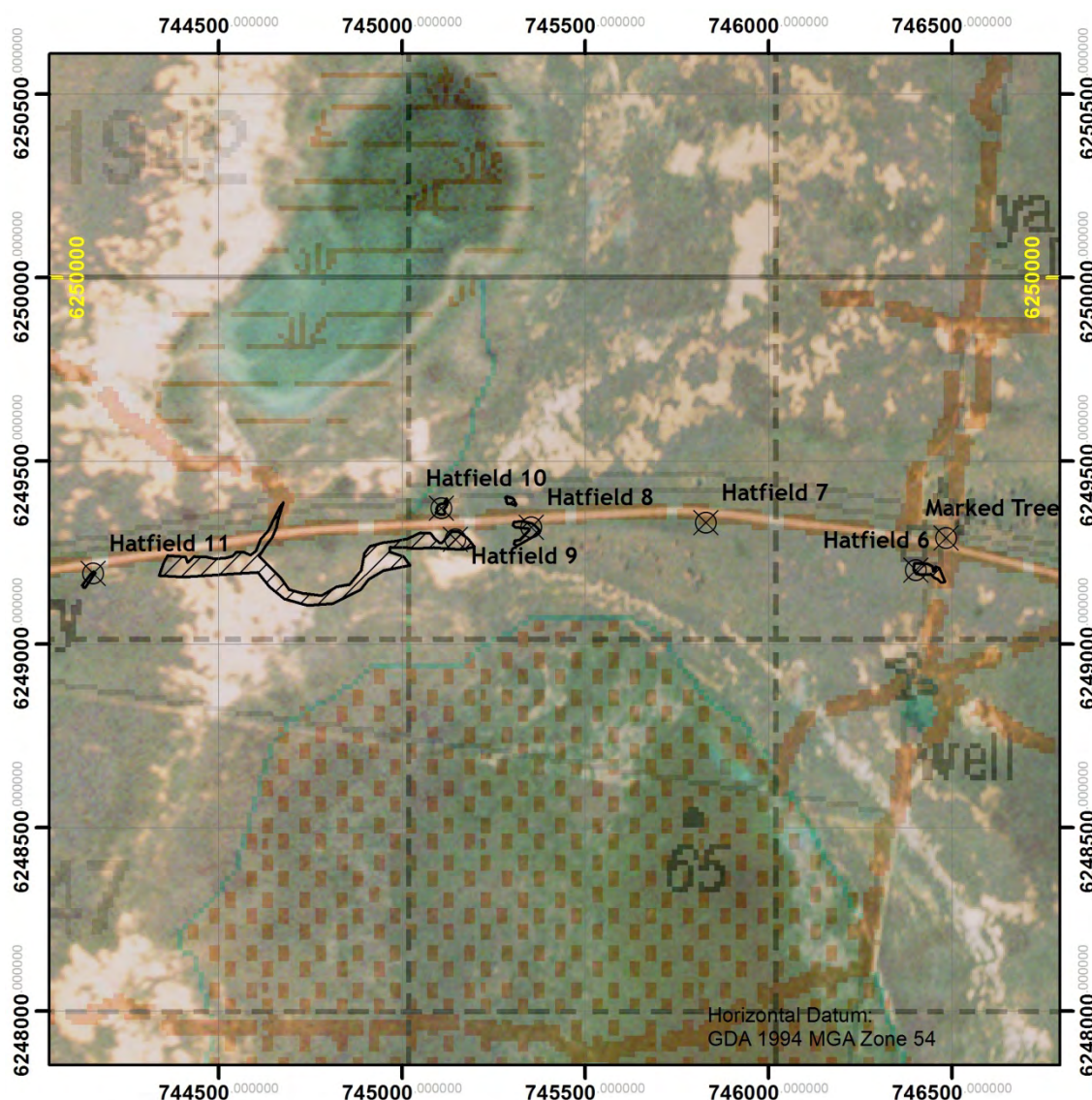
Hatfield 10 is located in a moderate exposure within the Hatfield land systems immediately to the north of Hatfield-The Vale Road and 8.7km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure forms part of an extensive series of ill-defined pans and exposures, continuing beyond the survey area and across the road. The site consists of 30 observed artefacts including a silcrete core, 28 silcrete artefacts and a chert geometric microlith. Potential water sources are located within 400 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 10 should be considered a continuation of Hatfield 8, 9 and 11.



Hatfield 10 - General location



Hatfield 10 - Moderate density scatter eroding from wall of exposure





## Hatfield 11

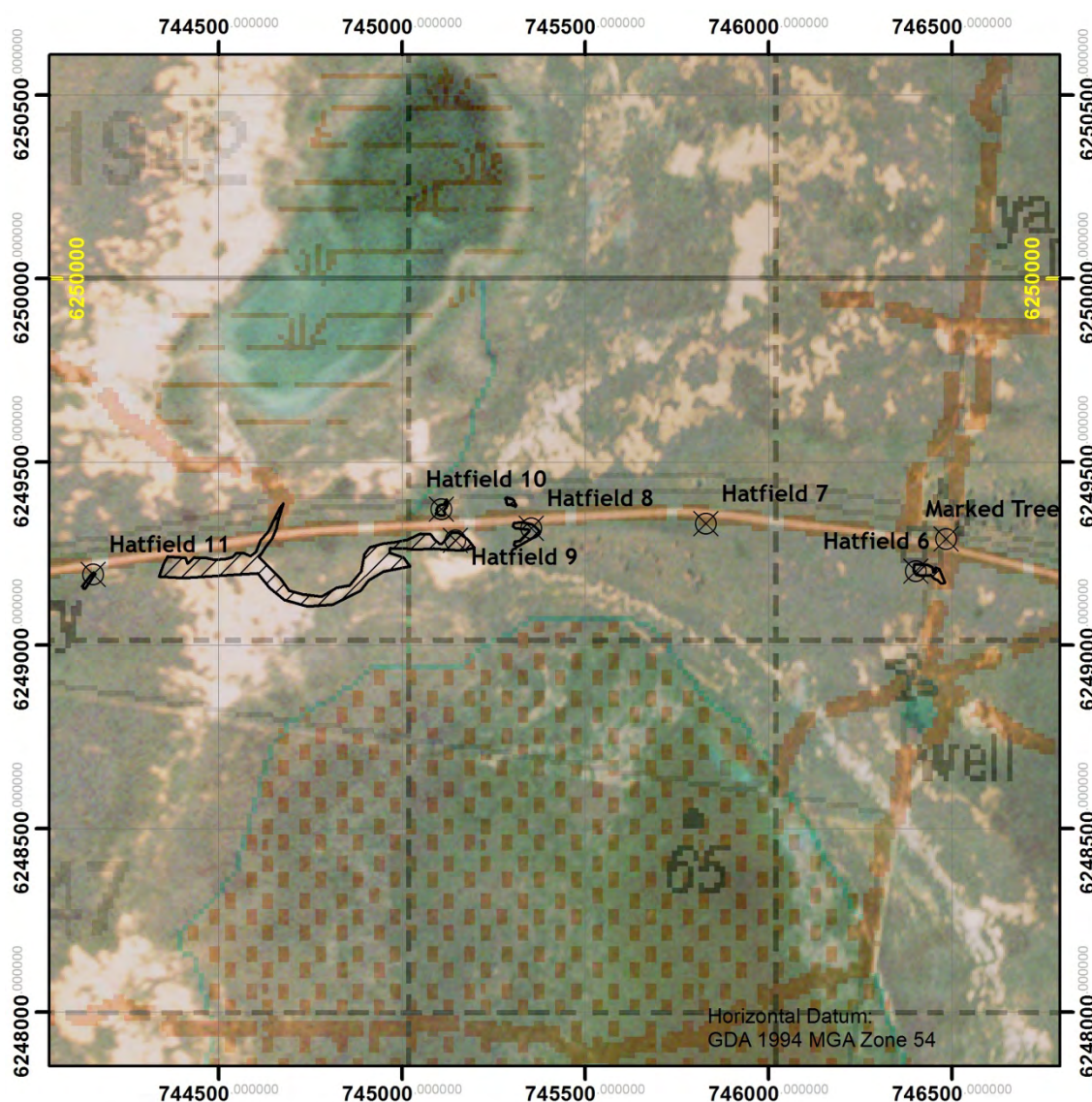
Hatfield 11 is located in two ill-defined exposures within the Hatfield land system 20 m and 30 m to the south of Hatfield-The Vale Road, and 6.92 km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure forms part of an extensive series of revegetating, ill-defined pans and exposures. The site consists of 2 silcrete flakes. Potential water sources are located within 600 m of the site. Visibility is moderate due to vegetation and further artefacts are likely to be present. Hatfield 10 should be considered a continuation of Hatfield 8, 9 and 10.



Hatfield 11 - General Location



Hatfield 11 - Example of artefact





## Hatfield 12

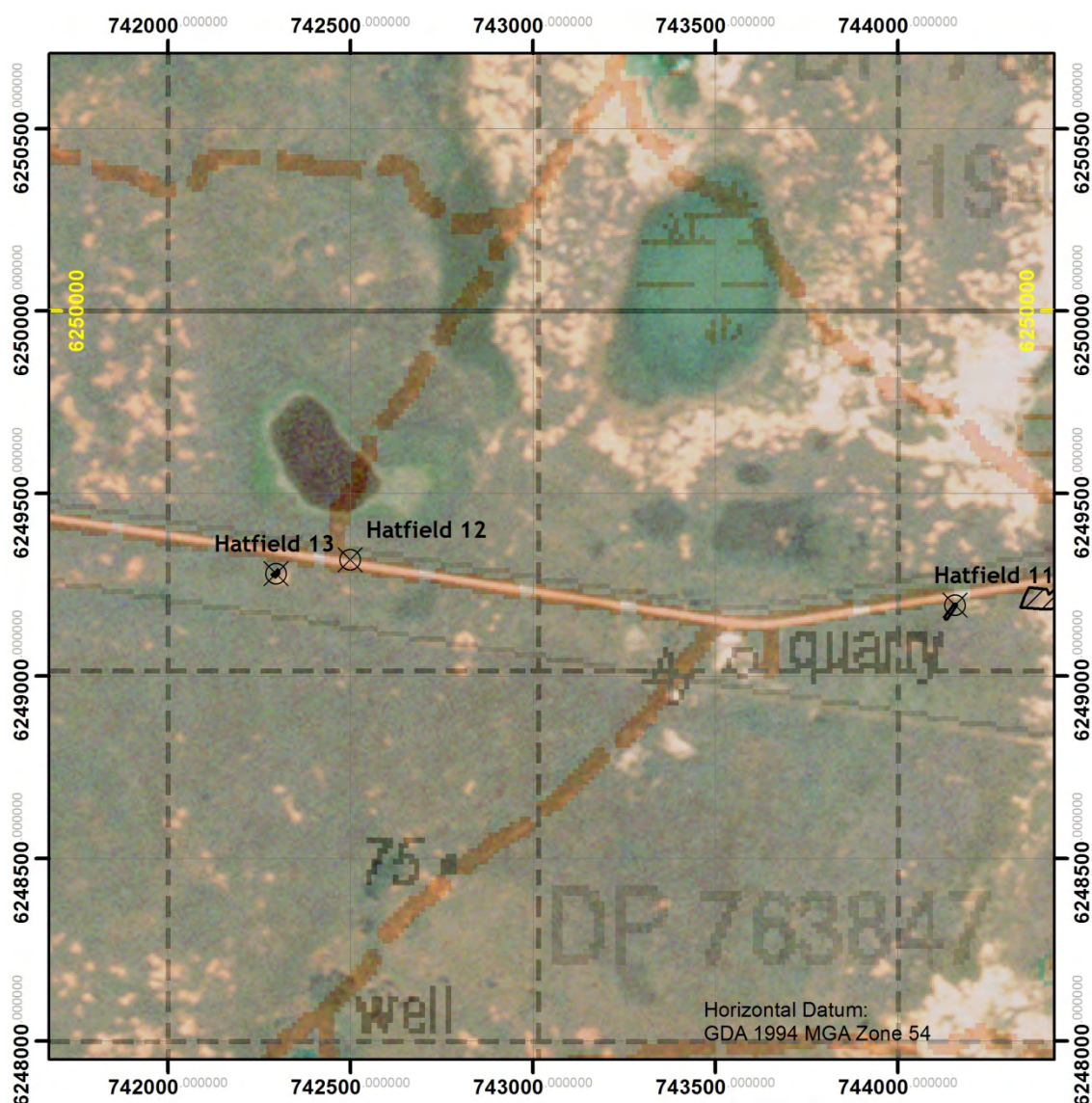
Hatfield 12 is located in a small exposure on the margins of a road drainage swale within the Hatfield land system, 10 m to the north of Hatfield-The Vale Road, and 5.31 km from the intersection of Hatfield-The Vale Road and Magenta Road. The site consists of a single broken silcrete flake. Potential water sources are located within 600 m of the site. Visibility is moderate due to vegetation and further artefacts are likely to be present.



Hatfield 12 - General location



Hatfield 12 - Broken silcrete flake





## Hatfield 13

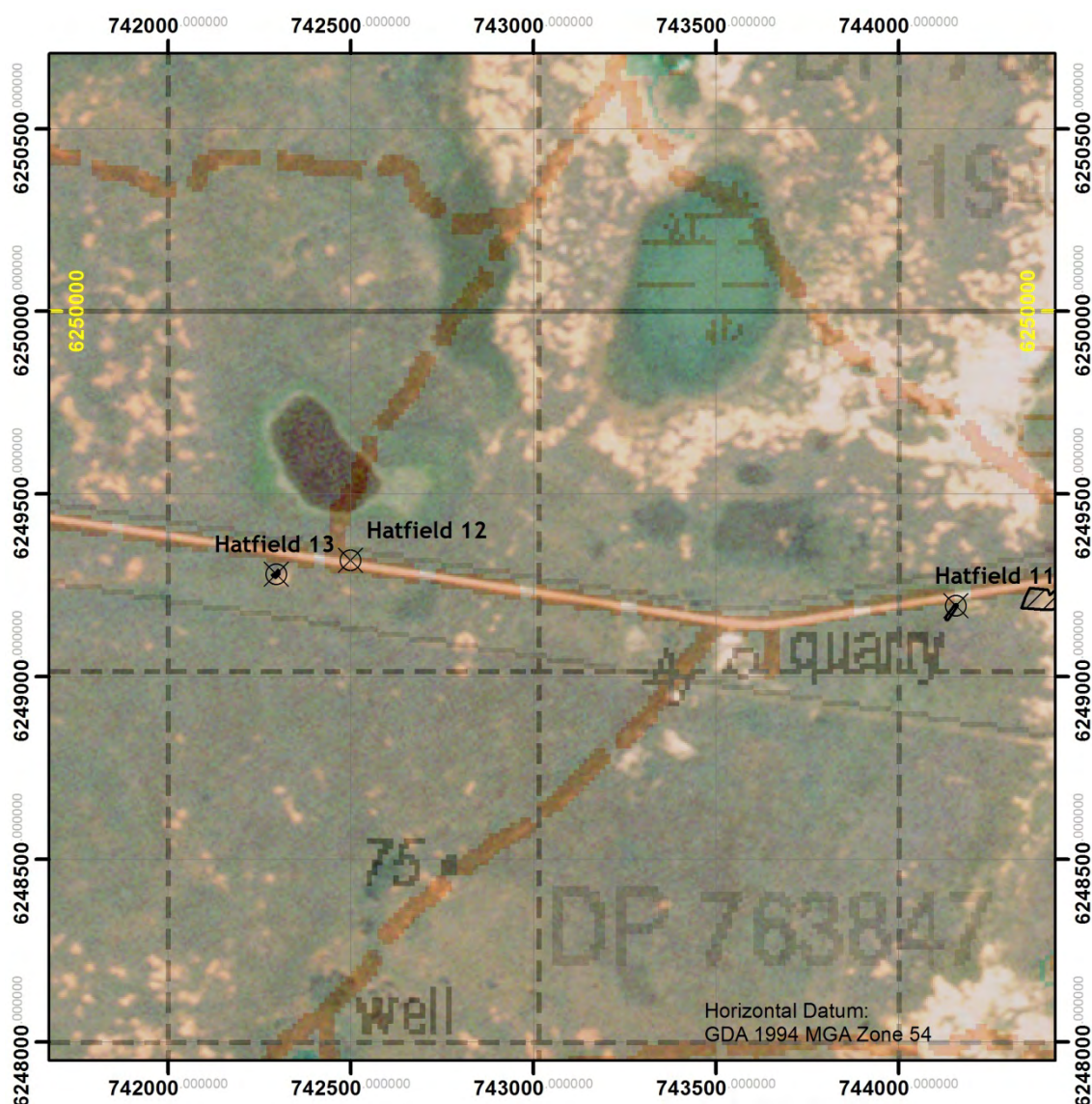
Hatfield 13 is located in a small exposure within the Hatfield land system, 35 m to the south of Hatfield-The Vale Road and 5.1 km from the intersection of Hatfield-The Vale Road and Magenta Road. The site consists of a silcrete flake and a weathered retouched silcrete tool. Potential water sources are located within 300 m of the site. Visibility is moderate due to vegetation and further artefacts are may be present.



Hatfield 13 - Silcrete retouched tool



Hatfield 13: Detail retouched tool





## Hatfield 14

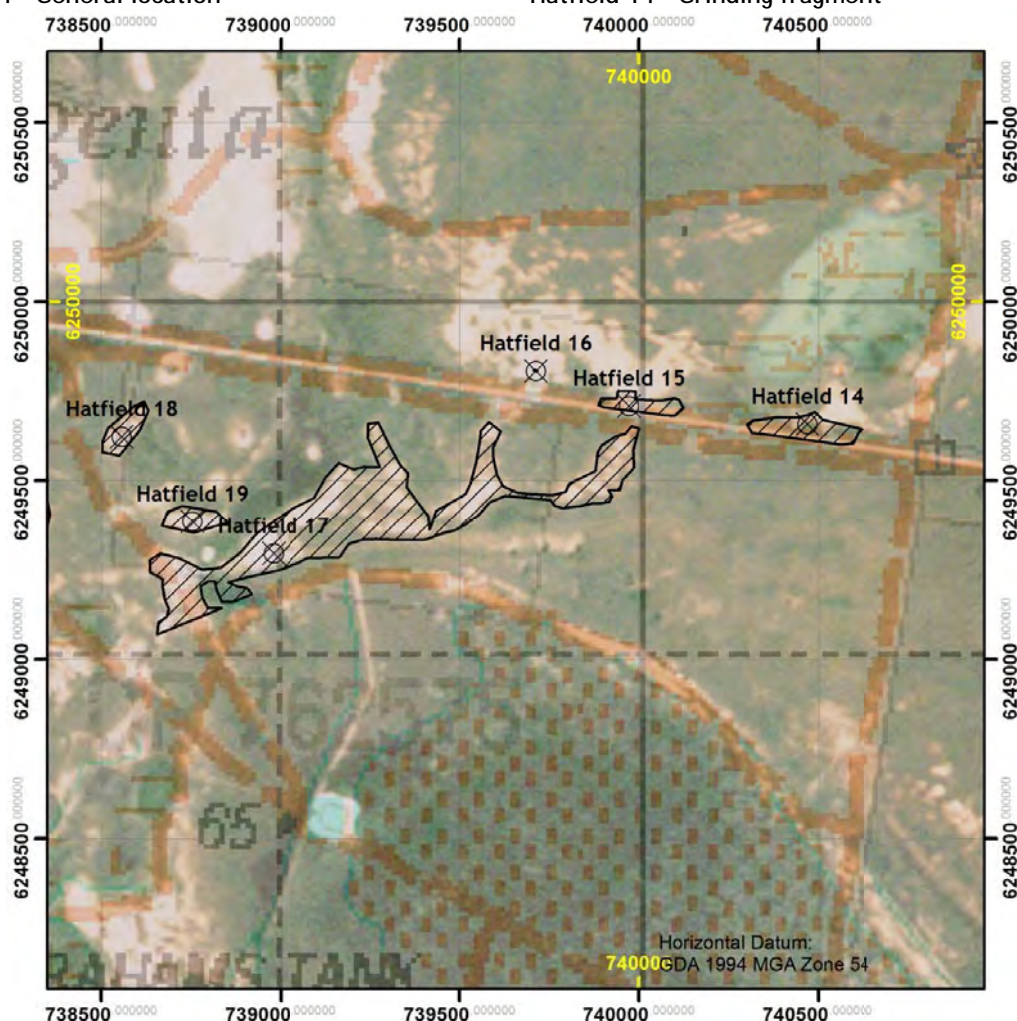
Hatfield 14 is located in an extensive, undulating ill-defined series of pans and exposures within the Hatfield land system, predominately to the south of Hatfield-The Vale Road, and between 3.08 km and 3.31 km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure continues over 300 m and extends beyond the surveyed area. While mapped as the Hatfield land system, the area is likely transitional between the Youhl, Marma and Hatfield land systems with extensive exposures, pans, depressions and lunettes occurring within 150 m of the site. The site consists of over 60 artefacts, including a burren adze, grinding top fragment and scattered heat retaining stones. Potential water sources are located within 200 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 14 should be considered a continuation of Hatfield 15-25.



Hatfield 14 - General location



Hatfield 14 - Grinding fragment





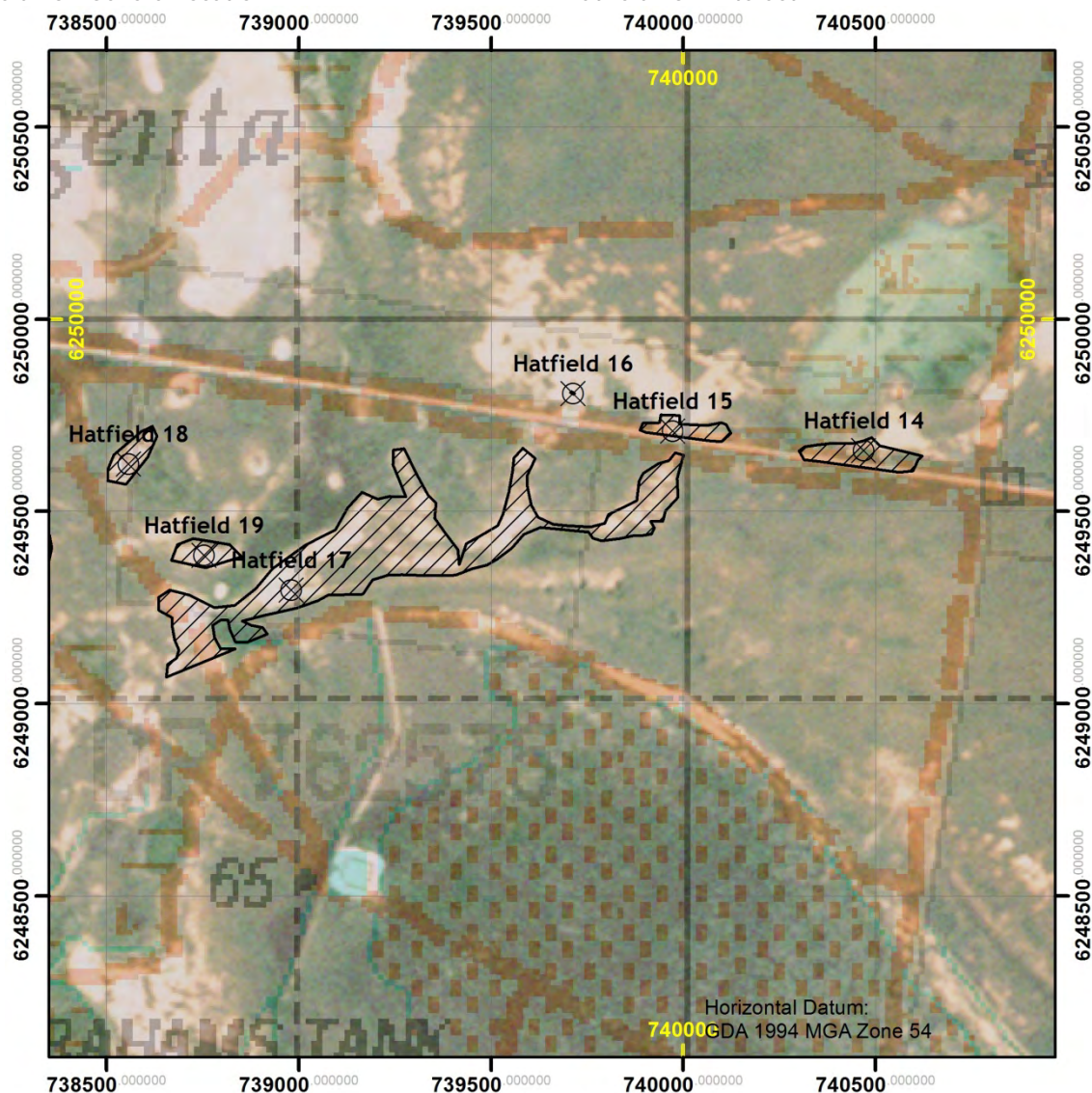
## Hatfield 15

Hatfield 15 is located in an extensive, undulating ill-defined series of pans and exposures within the Youhl land system, to the north of Hatfield-The Vale Road and between 2.68 km and 2.8 km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure continues over 200 m and extends beyond the surveyed area. The area is likely transitional between the Youhl and Marma land systems with extensive exposures, pans, depressions and lunettes. The site consists of 23 artefacts including retouched tools. Potential water sources are located within 200 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 15 should be considered a continuation of Hatfield 14-25.



Hatfield 15 - General location

Hatfield 15 - Artefact





## Hatfield 16

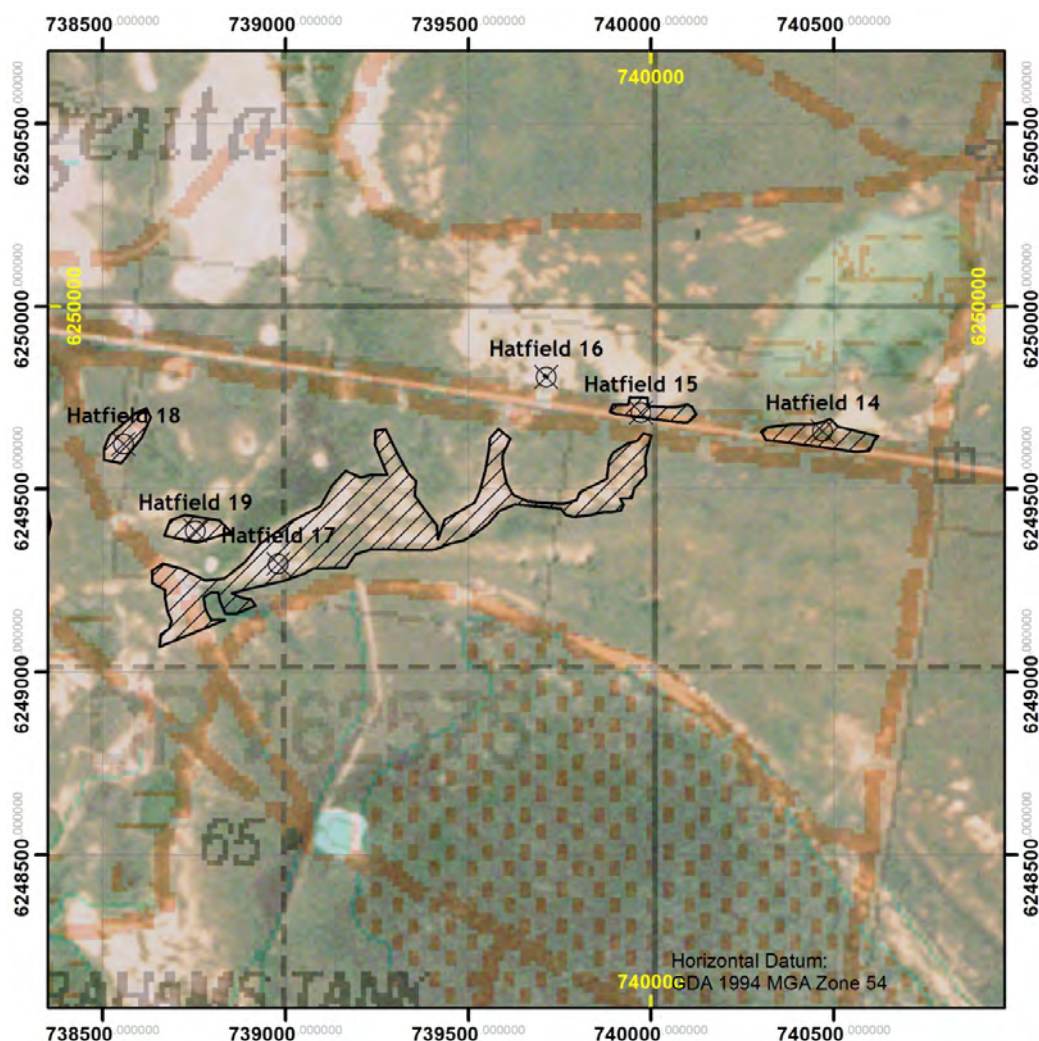
Hatfield 16 is located in an extensive, ill-defined series of pans and exposures within the Marma land system, to the north of Hatfield-The Vale Road and between 2.68 km and 2.8 km from the intersection of Hatfield-The Vale Road and Magenta Road. The exposure continues over 200 m and extends beyond the surveyed area. The area is likely transitional between the Youhl and Marma land systems with extensive exposures, pans, depressions and lunettes. The site consists of two artefacts, including a retouched tool and flake. Potential water sources are located within 600 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 16 should be considered a continuation of Hatfield 14-25.



Hatfield 16 - General location



Hatfield 16 - Artefact with extensive, steep retouch on lateral and distal margin





## Hatfield 17

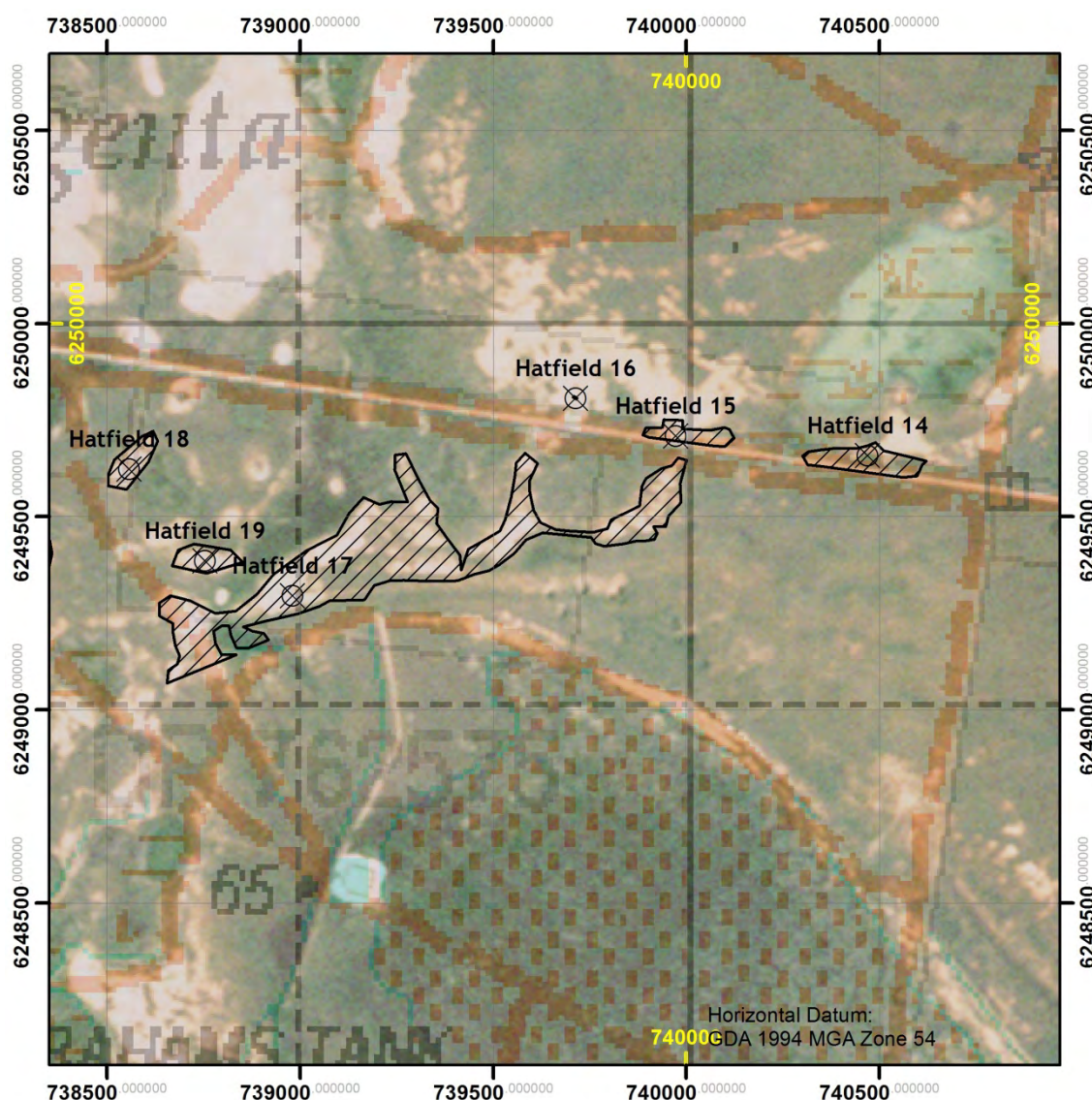
Hatfield 17 is located in an extensive, ill-defined series of lunettes, pans and exposures within the Youhl land system, to the south of Hatfield-The Vale Road, east of Magenta Road. The site consists of a continuous occupation area including over 120 artefacts, multiple hearths and middens. Artefact types include burrens, tula slugs, cores, retouched tools, core tools, burnt flakes and tools, and a sandstone hatchet/axe. Historic metals, glasses and ceramics also occur within the area. Potential water sources are located within 200 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 17 should be considered a continuation of Hatfield 14-25.



Hatfield 17 - Looking north, north-east along lunette and extensive exposures



Hatfield 17 - Scattered shell





## Hatfield 18

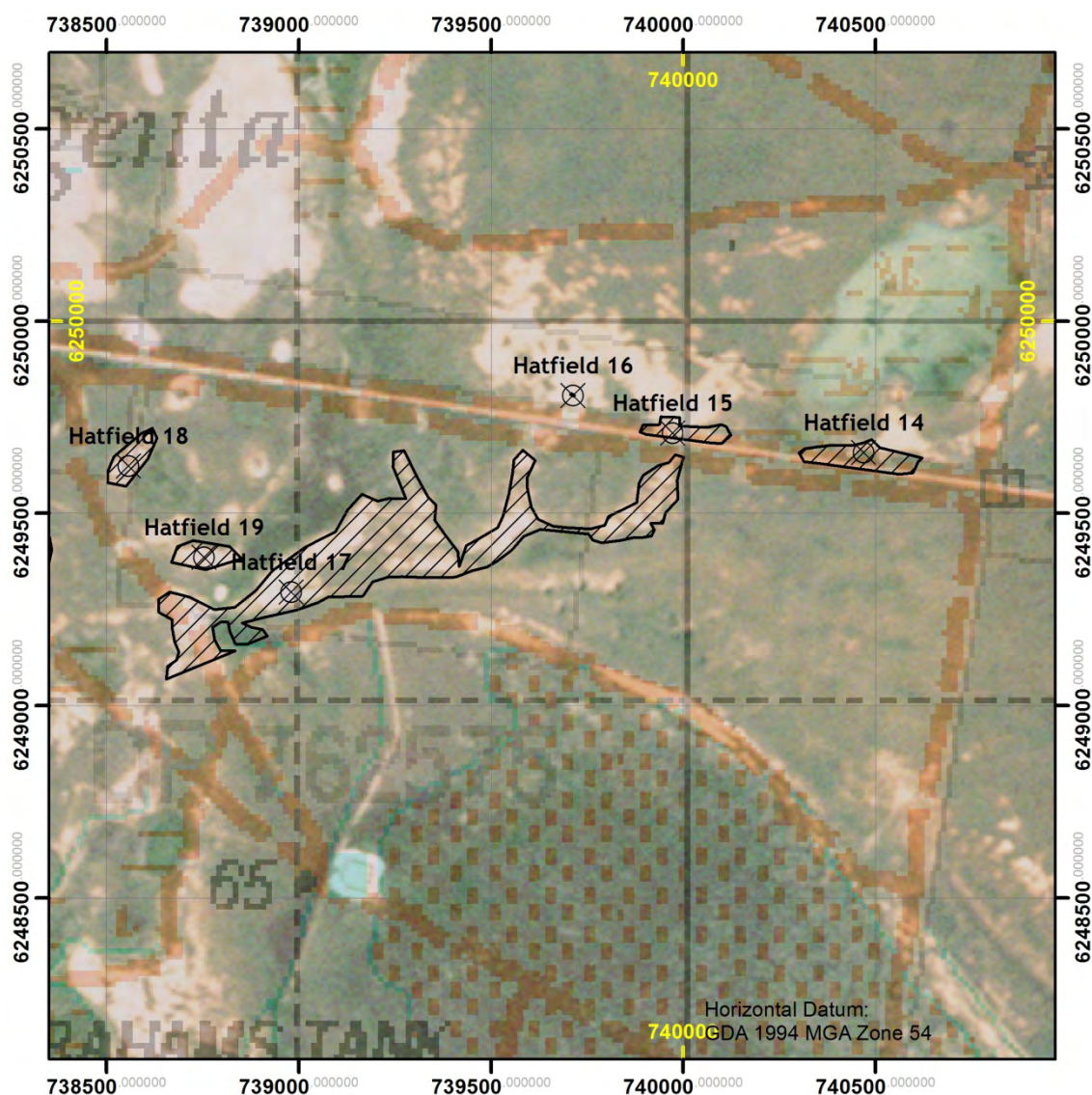
Hatfield 18 is located in an extensive, ill-defined series of pans and exposures within the Youhl land system, 250 m south of Hatfield-The Vale Road and 1.28 km east of Magenta Road. Three artefacts were counted during a quick transect of the exposure. Potential water sources, including depressions and now dry pans, are located within 100 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 18 should be considered a continuation of Hatfield 14-25.



Hatfield 18 - Example of exposure



Hatfield 18 - Example of exposure





## Hatfield 19

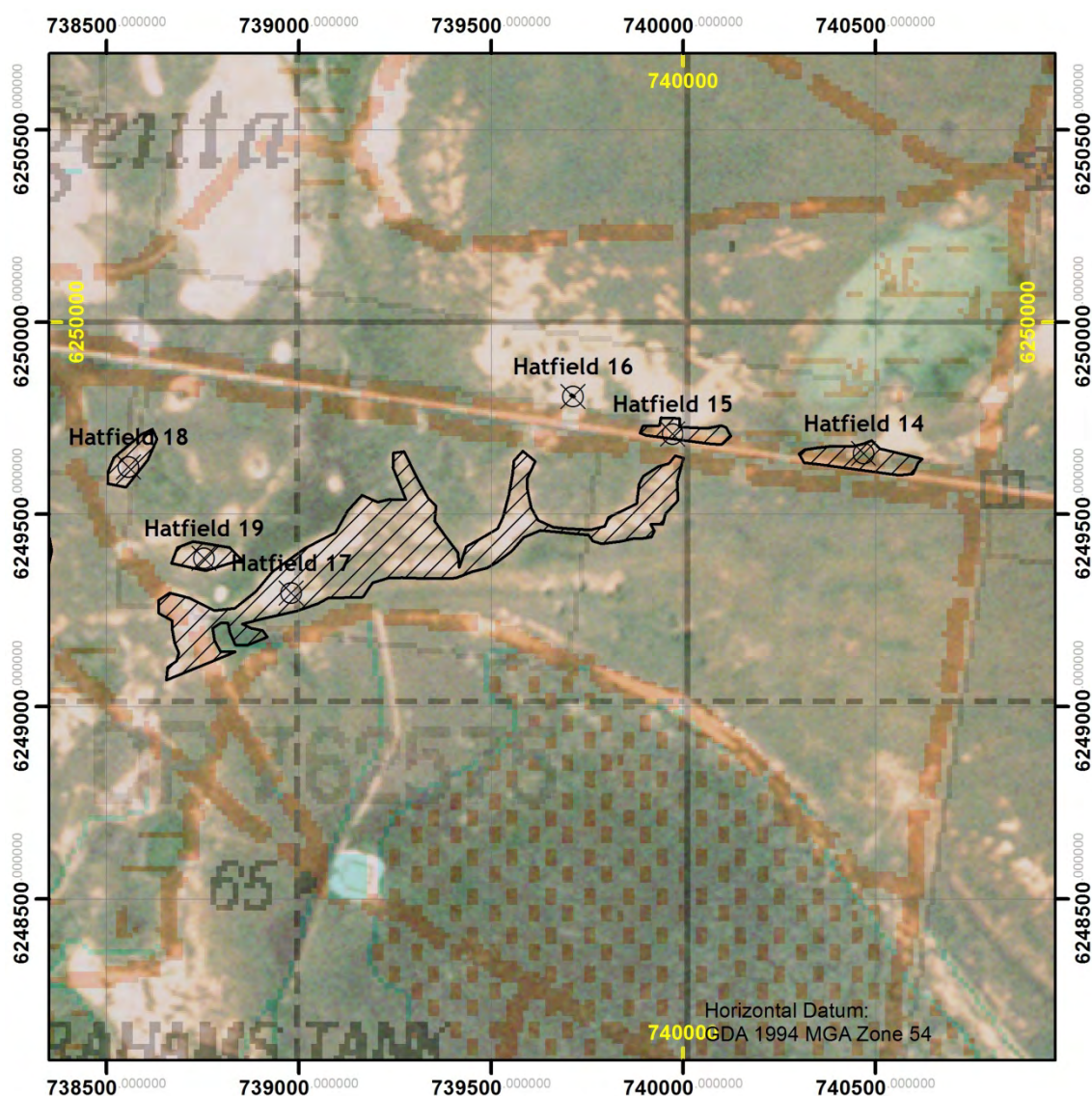
Hatfield 19 is located in an extensive, ill-defined series of pans and exposures within the Youhl land system, 440 m south of Hatfield-The Vale Road and 1.31 km east of Magenta Road. The site contains one silcrete multiple platform core, 100 millimetres (mm) (h) x 90 mm (w), the longest flake scar being 82 mm. The site also contained scattered hearth material. Potential water sources, including depressions and now dry pans, are located within 200 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 19 should be considered a continuation of Hatfield 14-25.



Hatfield 19 - Artefact



Hatfield 19 - Surface conditions



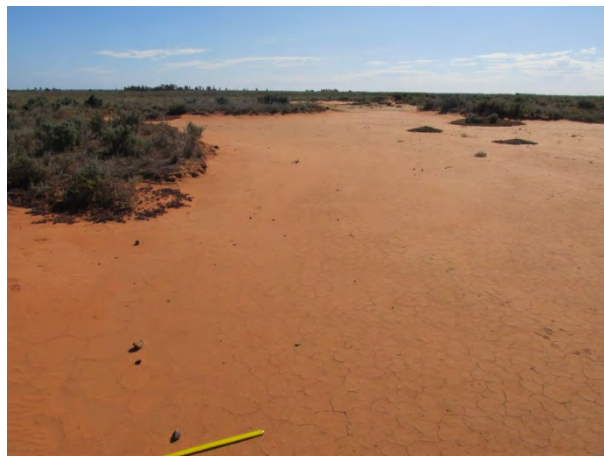


## Hatfield 20

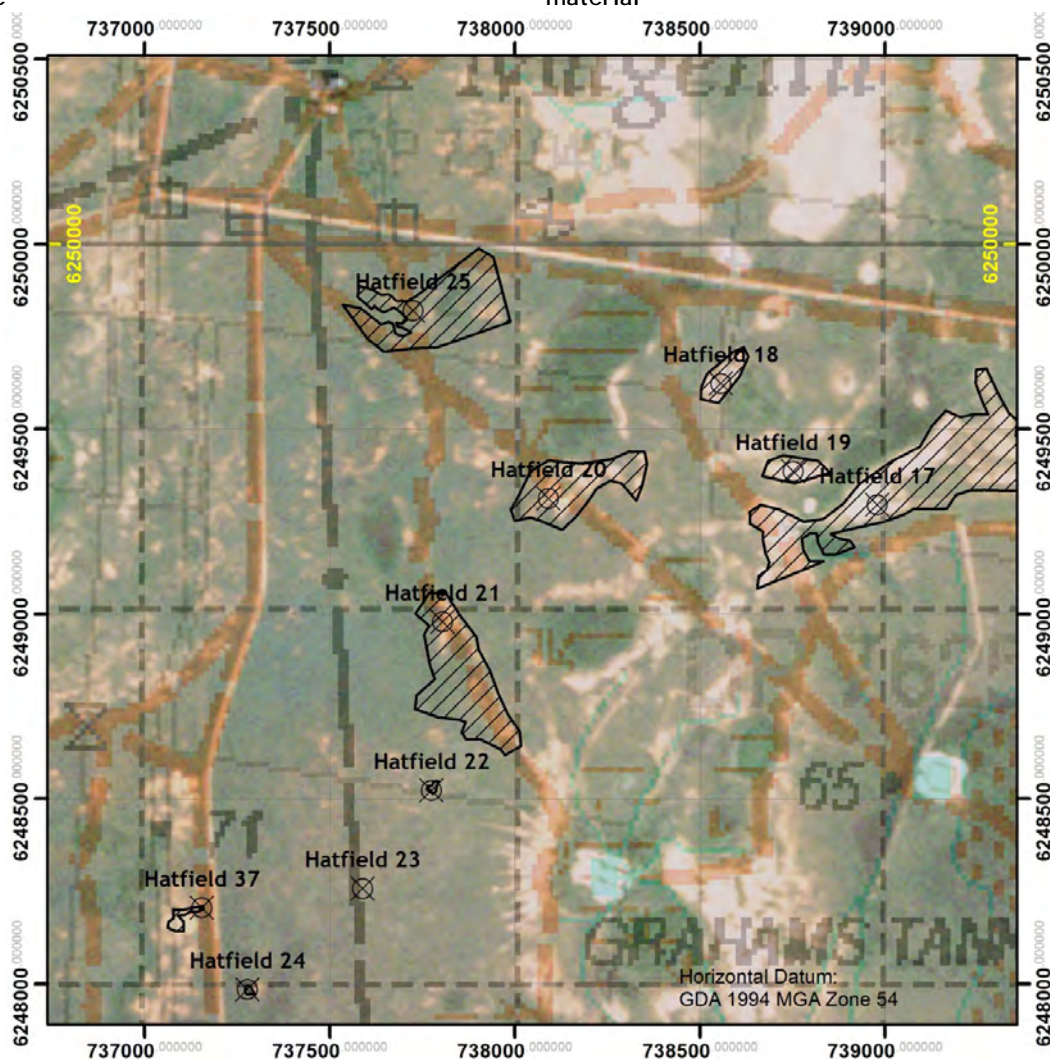
Hatfield 20 is located in an extensive, ill-defined series of pans and exposures within the Youhl land system, 600 m south of Hatfield-The Vale Road and 750 m east of Magenta Road. The site consists of over 110 artefacts, two earthen mounds with artefacts eroding from them, multiple intact, eroding and scattered hearths and buried bone eroding from the edges of the pan alongside artefacts. Artefact types include cores, flakes, retouched tools, grinding fragments and a hatchet/axehead. Potential water sources, including depressions and now dry pans, are located within 100 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 20 should be considered a continuation of Hatfield 14-25.



Hatfield 20 - Bone and artefacts eroding from wall of exposure



Hatfield 20- Example of exposure and scatter hearth material





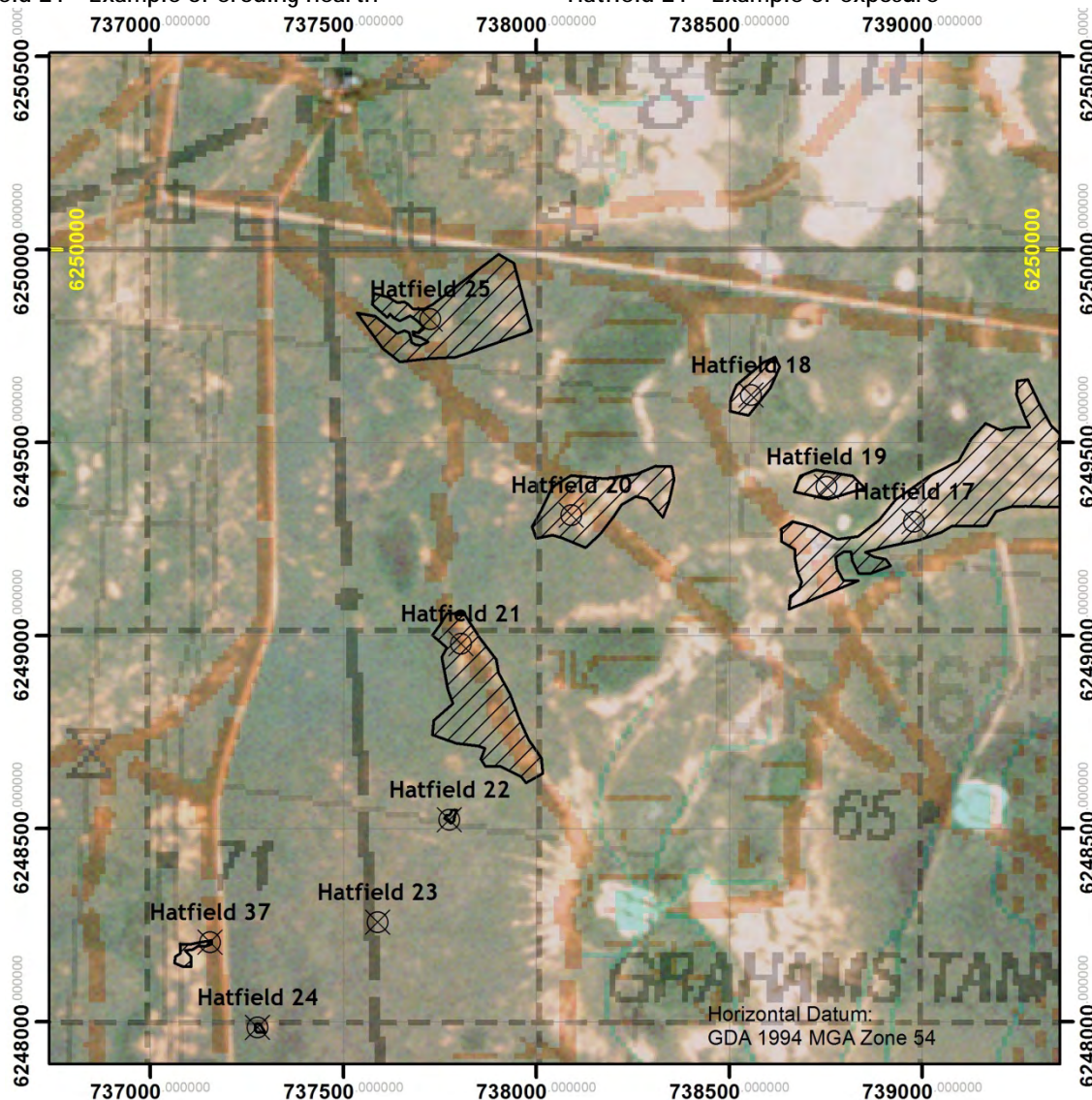
## Hatfield 21

Hatfield 21 is located in an extensive, ill-defined series of pans and exposures within the Youhl land system, 950 m to 1450 m south of Hatfield-The Vale Road and 450 m east of Magenta Road. The site consists of over 170 artefacts, multiple intact, eroding and scattered hearths and earthen mounds with hearth and artefacts eroding from them. Artefact types include cores, flakes, retouched and retouched tools. Potential water sources, including depressions and now dry pans, are located within 100 m of the site. Visibility is very good and further artefacts are likely to be present. Hatfield 21 should be considered a continuation of Hatfield 14-25.



Hatfield 21 - Example of eroding hearth

Hatfield 21 - Example of exposure





## Hatfield 22

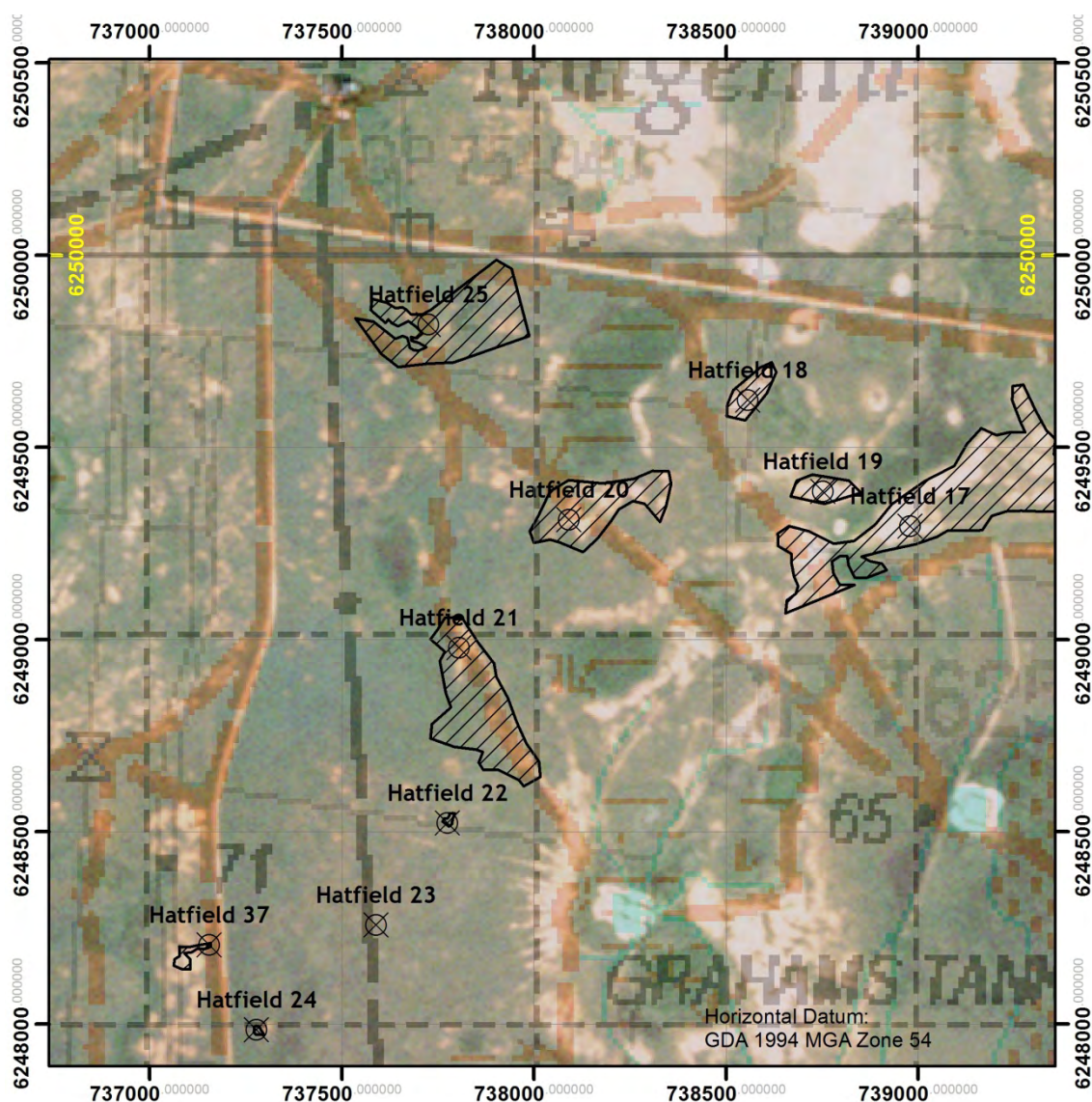
Hatfield 22 is located in a small exposure that has formed around depressions and drainage channels within the Youhl land system, 1.47 km south of Hatfield-The Vale Road and 600 m east of Magenta Road. The site consists of four artefacts. Potential water sources including depressions are immediately adjacent the site. Visibility is good and further artefacts are likely to be present. Hatfield 22 should be considered a continuation of Hatfield 14-25.



Hatfield 22 - General location



Hatfield 22 - Example of artefacts





## Hatfield 23

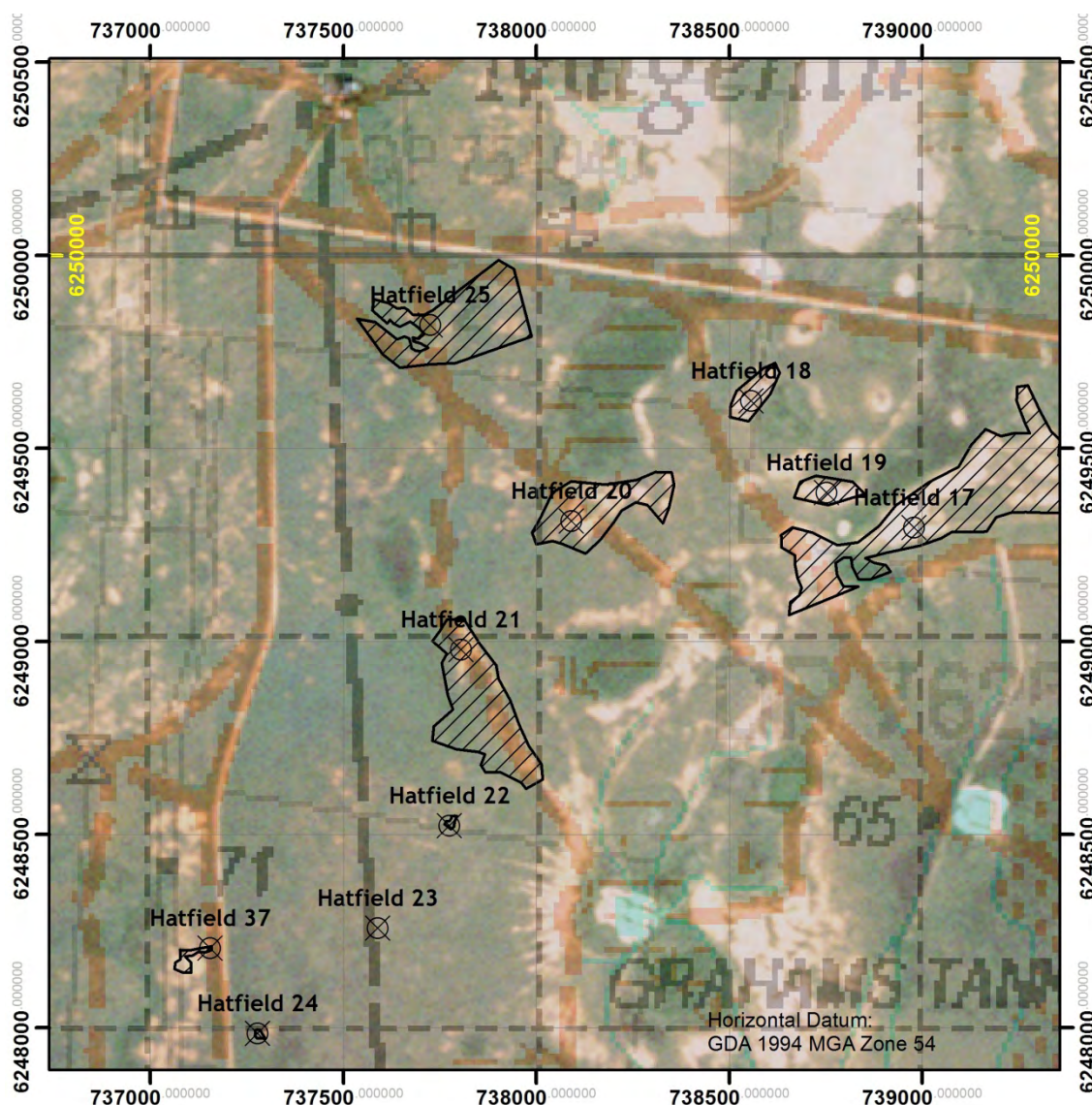
Hatfield 23 is located in a small exposure within the Youhl land system, 1.78 km south of Hatfield-The Vale Road and 395 m east of Magenta Road. The site consists of a single silcrete retouched tool. Potential water sources, such as depressions, are present within 300 m of the site. Visibility is moderate and further artefacts are likely to be present. Hatfield 23 should be considered a continuation of Hatfield 14-25.



Hatfield 23 - General location



Hatfield 23 - Silcrete retouched tool





## Hatfield 24

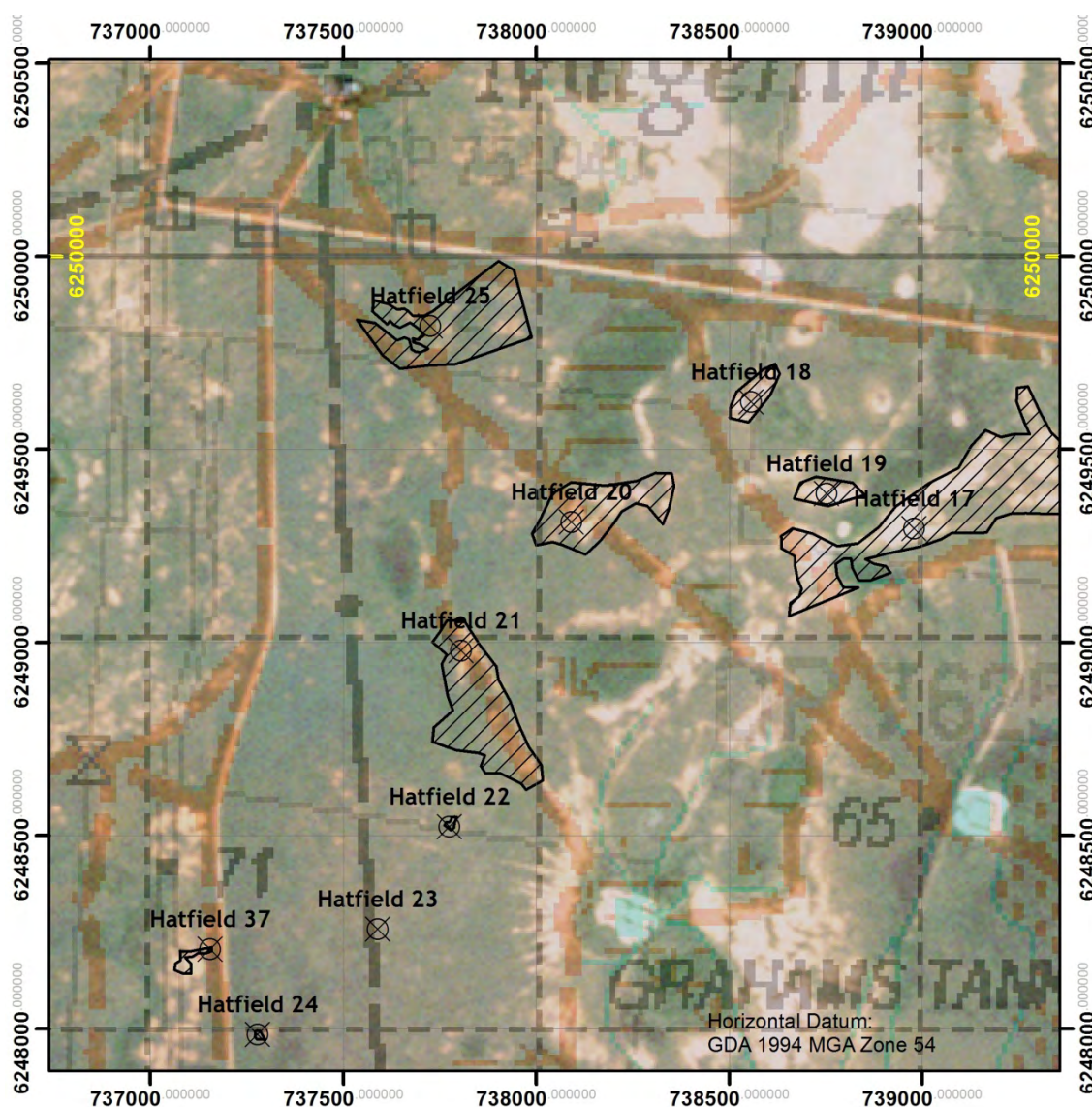
Hatfield 24 is located in an exposure within the Youhl land system, 2.1 km south of Hatfield-The Vale Road and 65 m east of Magenta Road. The site consists of two silcrete flakes. Potential water sources, such as depressions and relict pans, are present within 200 m of the site. Visibility is moderate and further artefacts may be present. Hatfield 24 should be considered a continuation of Hatfield 14-25.



Hatfield 24 - General location



Hatfield 24 - Example of artefact





## Hatfield 25

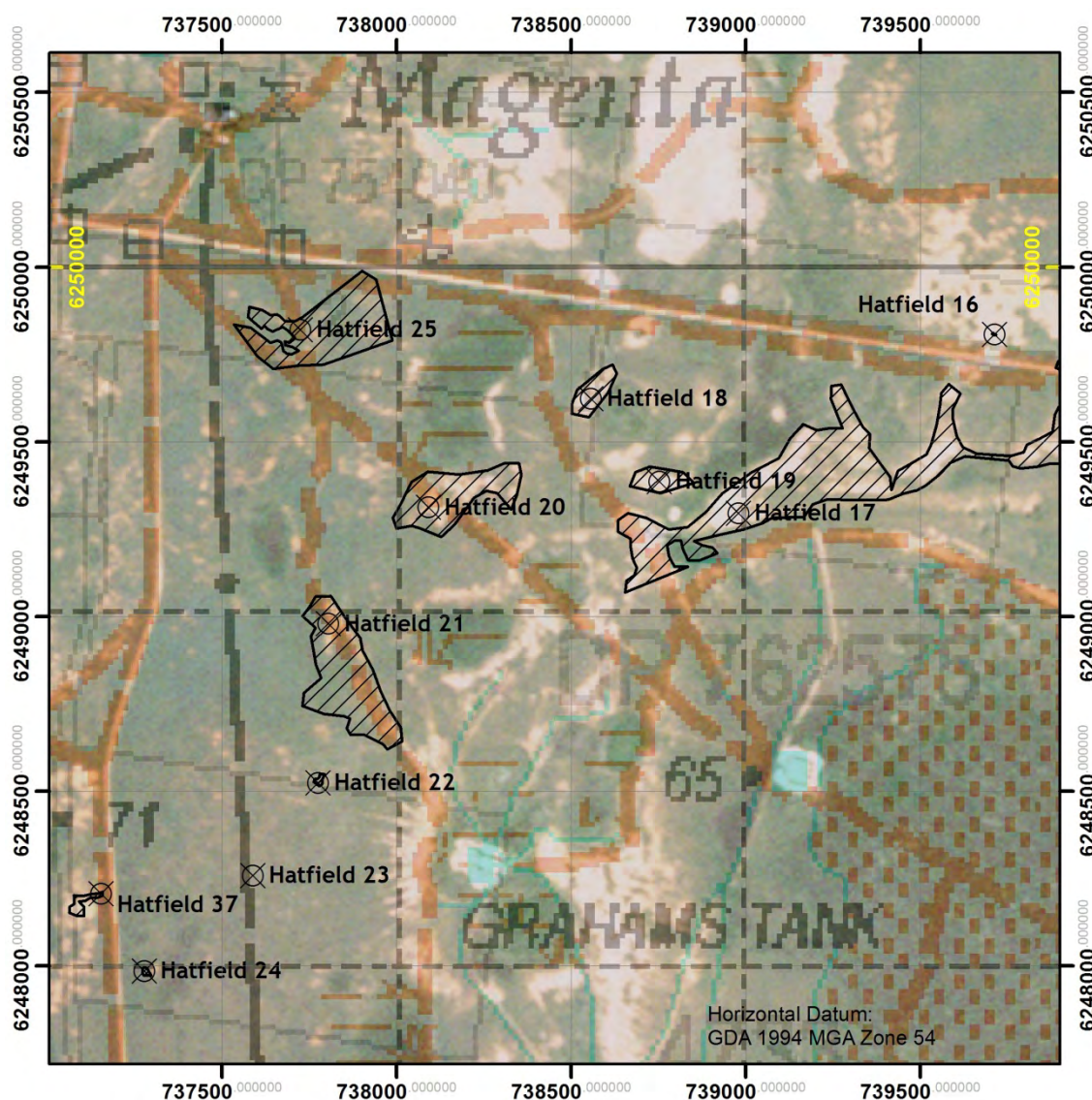
Hatfield 25 is located in an extensive series of ill-defined exposures within the Youhl land system, 20 m south of Hatfield-The Vale Road and 230 m east of Magenta Road. The site consists of over 100 artefacts and multiple eroding and scattered hearths with heat retaining stones. Artefact types include silcrete flakes, retouched tools, an adze slug, and a grinding fragment. Potential water sources, such as depressions and relict pans, are present within 200 m of the site. Visibility is moderate and further artefacts are present. Hatfield 25 should be considered a continuation of Hatfield 14-24.



Hatfield 25 - Example of exposure



Hatfield 25 - Adze slug





## Hatfield 26

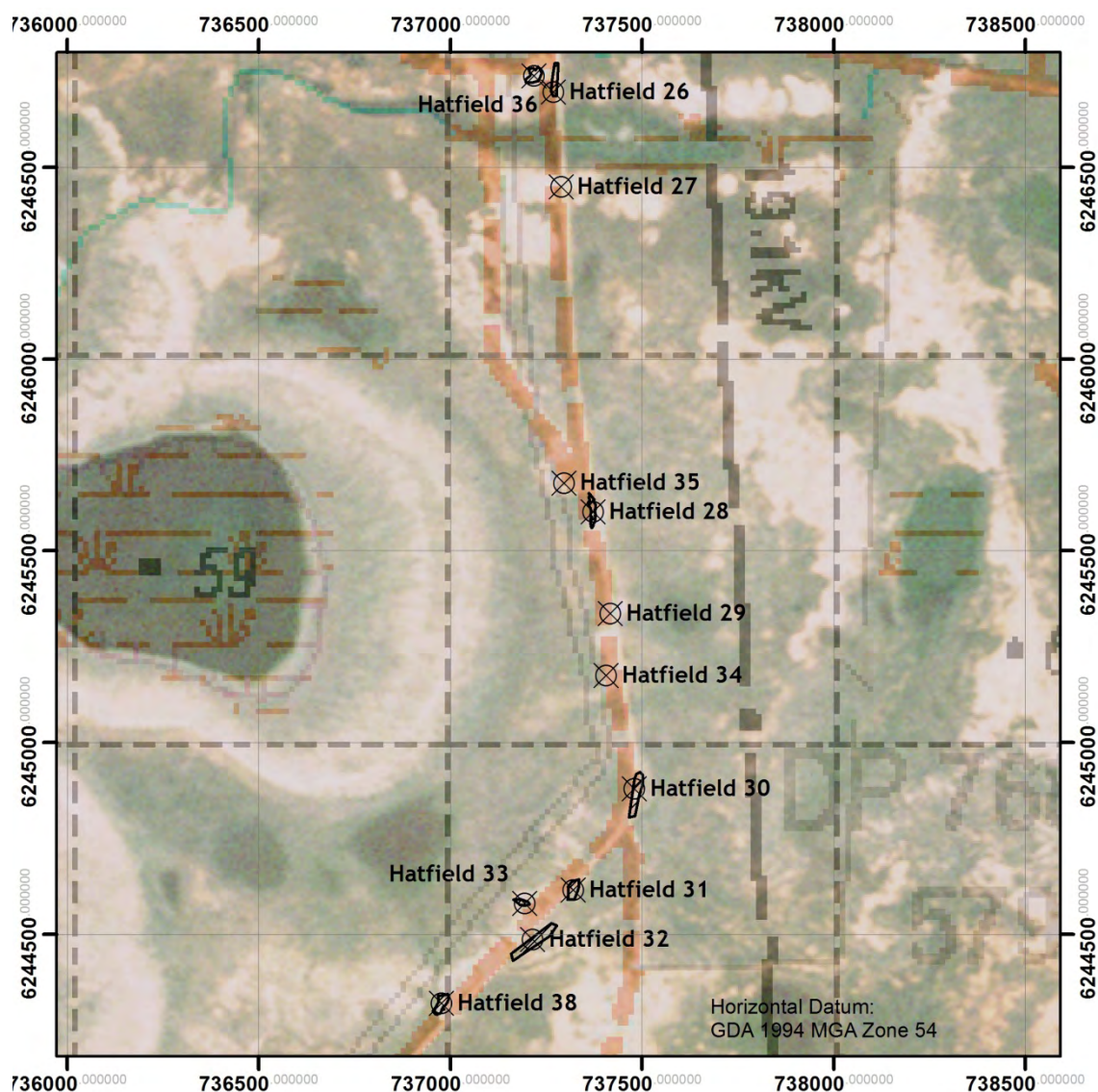
Hatfield 26 is located in ill-defined exposure within the Marma land system, 3.41 km south of Hatfield-The Vale Road and 10 m east of Magenta Road. The exposure continues on both sides of the road beyond the surveyed area. The site consists of 4 silcrete flakes. Potential water sources, such as depressions, are present within 100 m of the site. Visibility is good and further artefacts may be present.



Hatfield 26 - General location



Hatfield 26 - Example of artefacts





## Hatfield 27

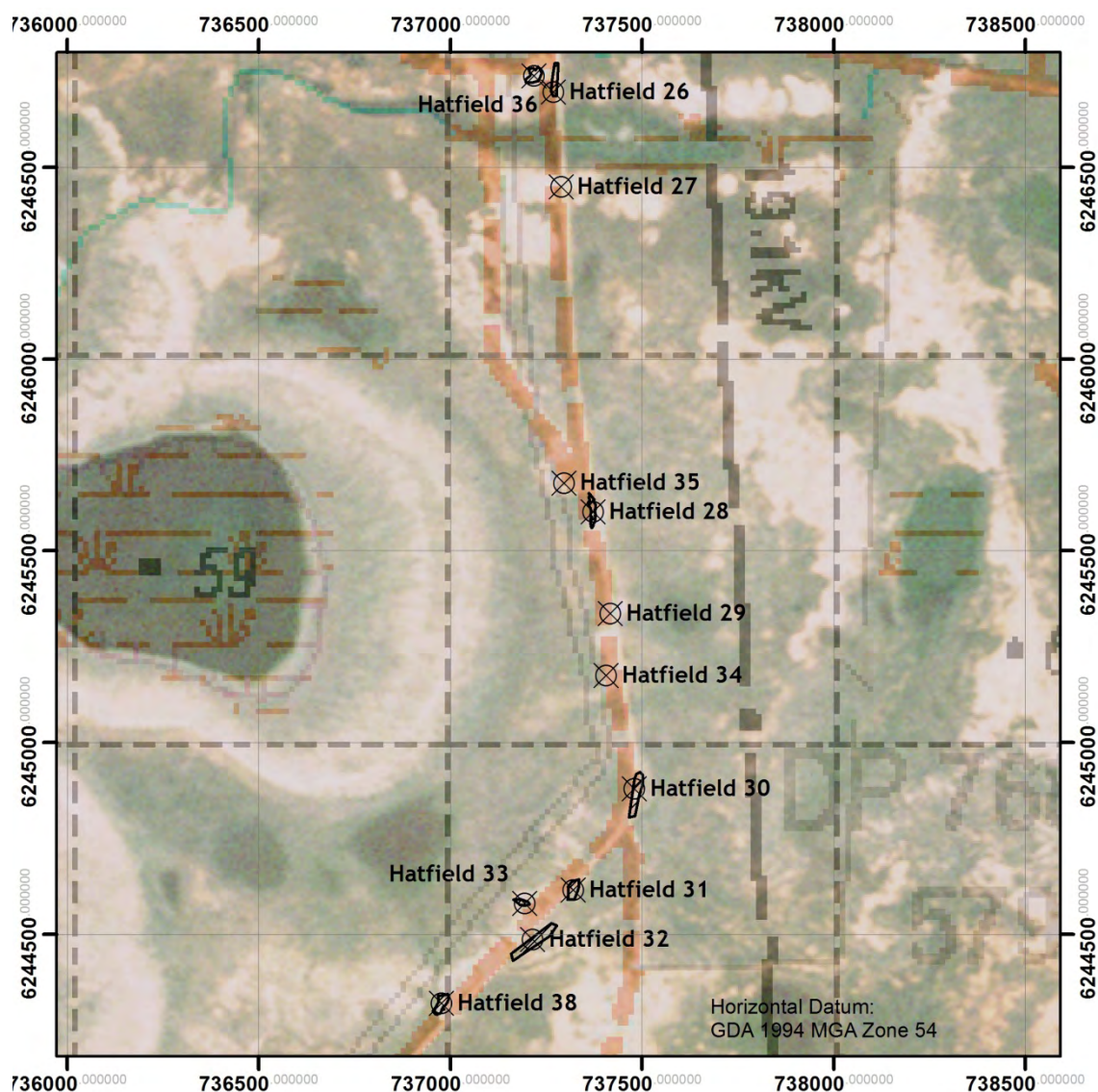
Hatfield 27 is located in ill-defined exposure within the Marma land system, 3.65 km south of Hatfield-The Vale Road and 10 m east of Magenta Road. The exposure continues on both sides of the road beyond the surveyed area. The site consists of a cortical silcrete flake. Potential water sources, such as depressions and wetlands, are present within 100 m of the site. Visibility is good and further artefacts may be present.



Hatfield 27 - General location



Hatfield 27 - Cortical silcrete flake





## Hatfield 28

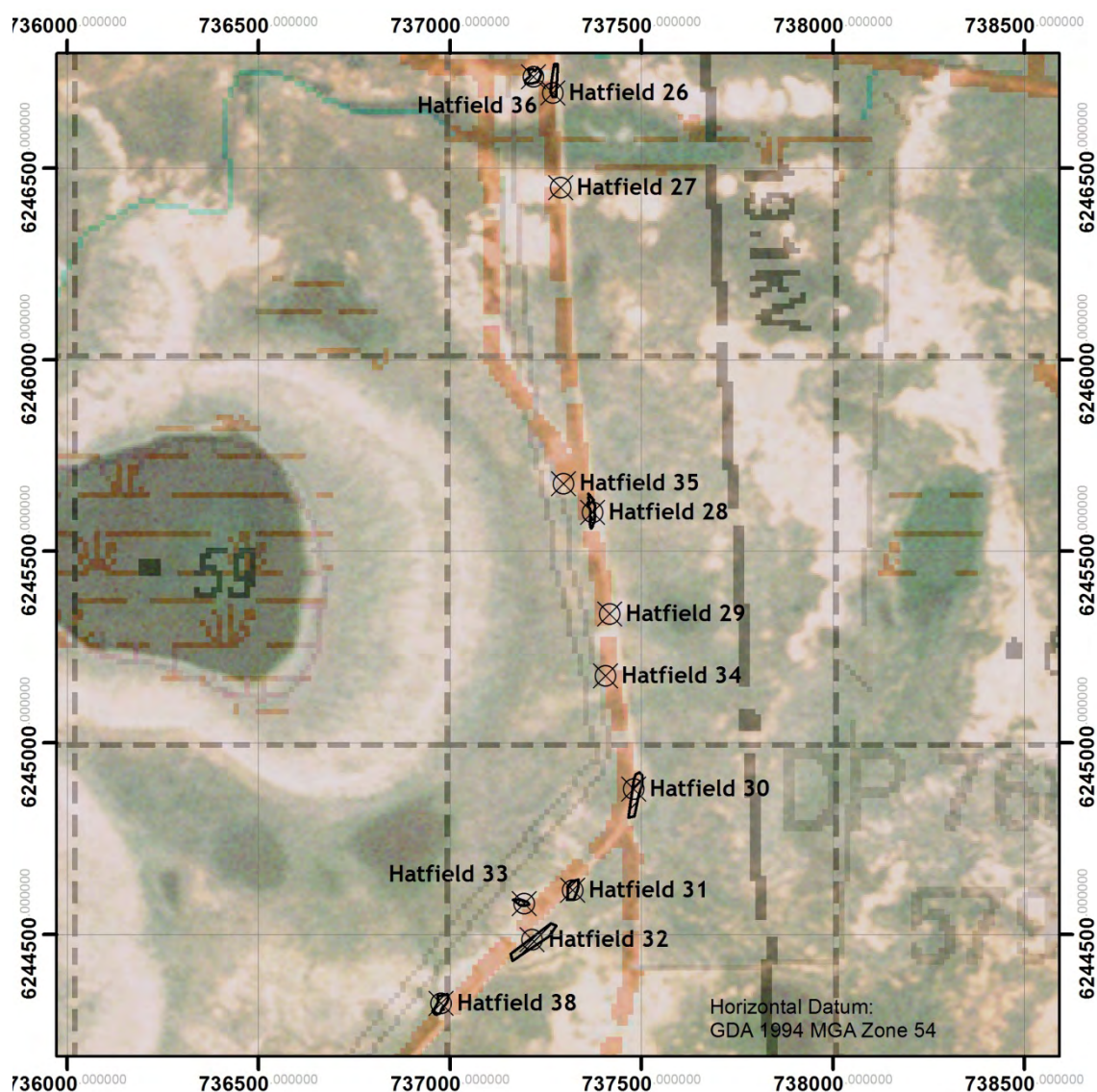
Hatfield 28 is located in ill-defined exposure on a vegetated lunette within the Marma land system, 3.8 km north of Hatfield-The Vale and Boree Plains-Gol Gol Road and 10m east of Magenta Road. The site consists of seven silcrete artefacts, including flakes and retouched tools. Potential water sources, such as depressions and relict lake basins, occur between 400 m and 700 m from the site. Visibility is moderate and further artefacts may be present.



Hatfield 28 - General location



Hatfield 28 - Example of artefacts





## Hatfield 29

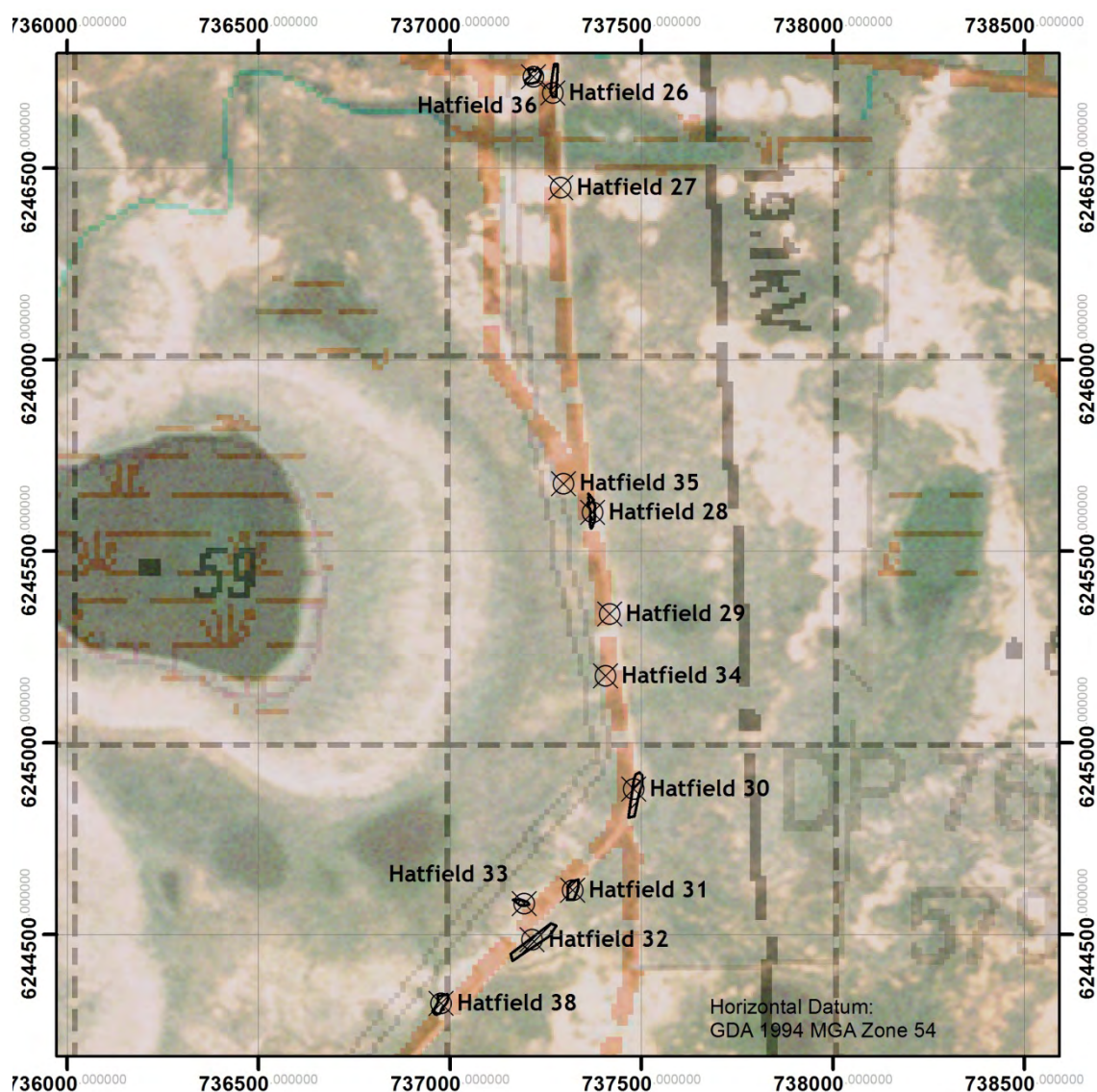
Hatfield 29 is located in ill-defined exposure on a vegetated lunette within the Marma land system, 3.8 km north of Hatfield-The Vale and Boree Plains-Gol Gol Road and 10 m east of Magenta Road. The site consists of a silcrete artefact. Potential water sources, such as depressions and relict lake basins, occur between 200 m and 700 m from the site. Visibility is moderate and further artefacts may be present.



Hatfield 29 - General location



Hatfield 29 - Silcrete flake





## Hatfield 30

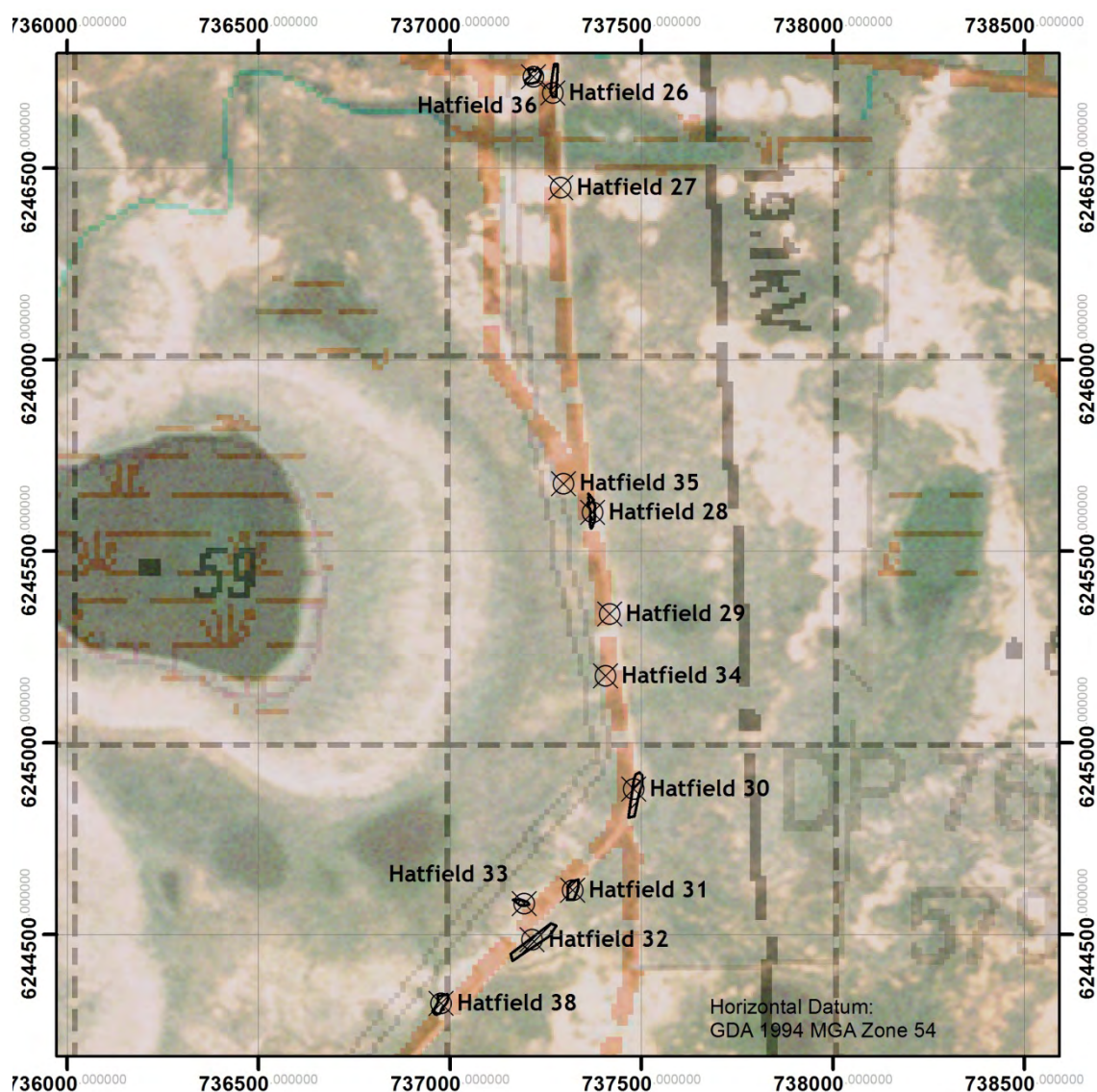
Hatfield 30 is located in ill-defined exposure on a vegetated lunette within the Marma land system, 2.96 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 20 m east of Magenta Road. The site consists of three silcrete artefacts. Potential water sources, such as depressions and relict lake basins, are present within 500 m from the site. Visibility is moderate and further artefacts may be present.



Hatfield 30 - General location



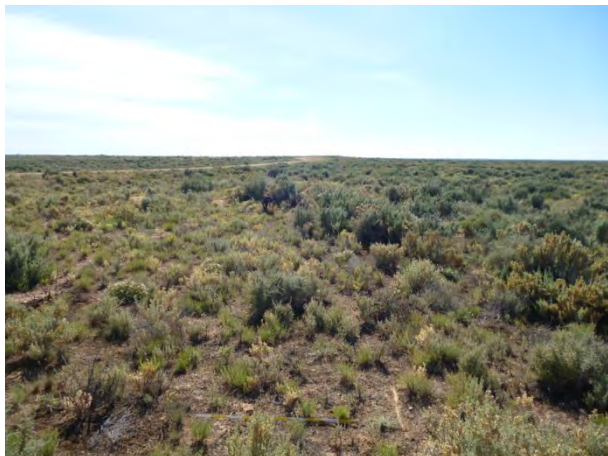
Hatfield 30 - Example of artefact





## Hatfield 31

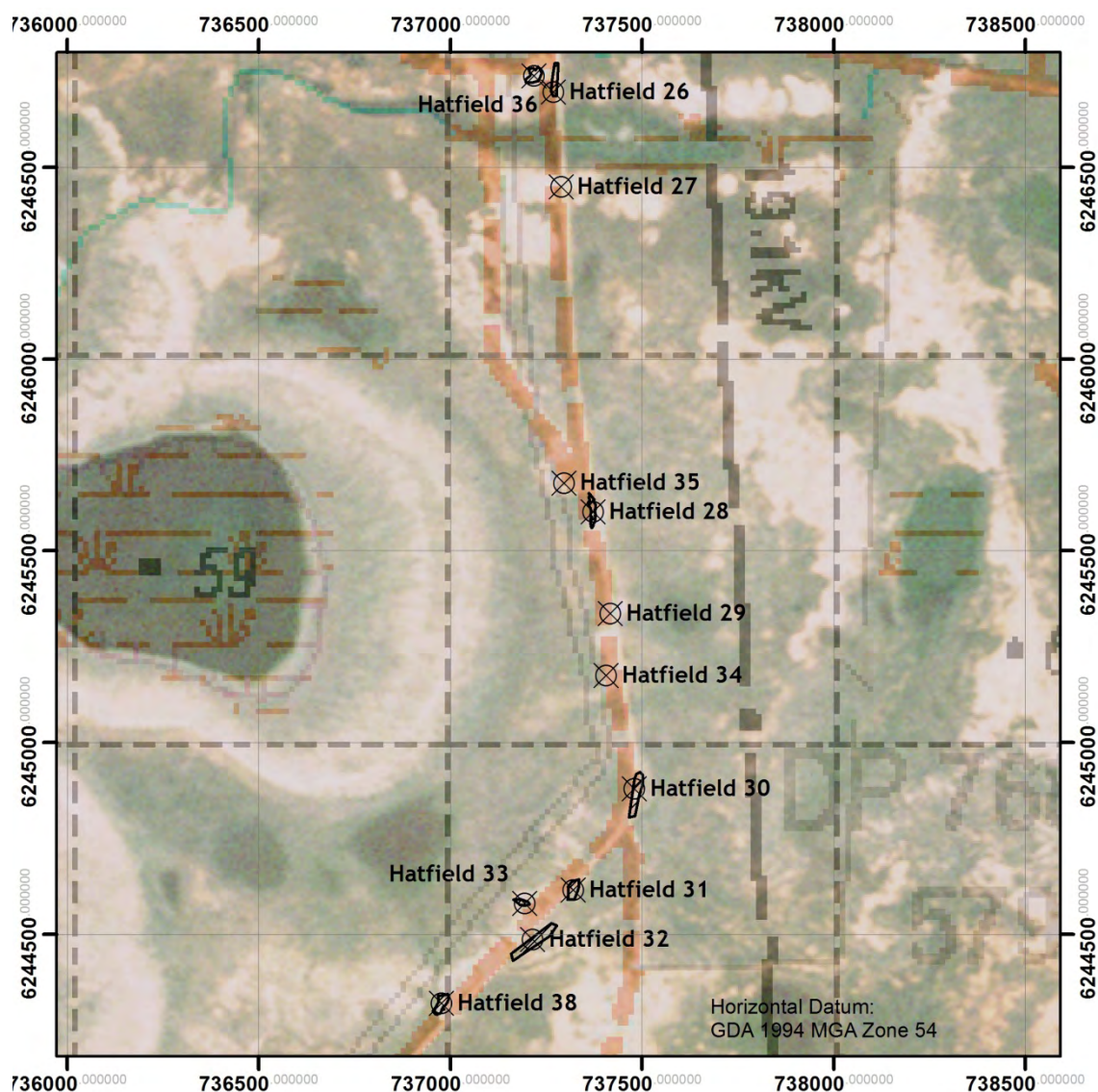
Hatfield 31 is located across a vegetated area within the Marma land system, 2.73 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 10 m east of Magenta Road. The site consists of four artefacts, including silcrete and quartzite flakes. Potential water sources, such as depressions and relict lake basins, are present within 400 m from the site. Visibility is moderate and further artefacts may be present.



Hatfield 31 - General location



Hatfield 31- Example of artefact





## Hatfield 32

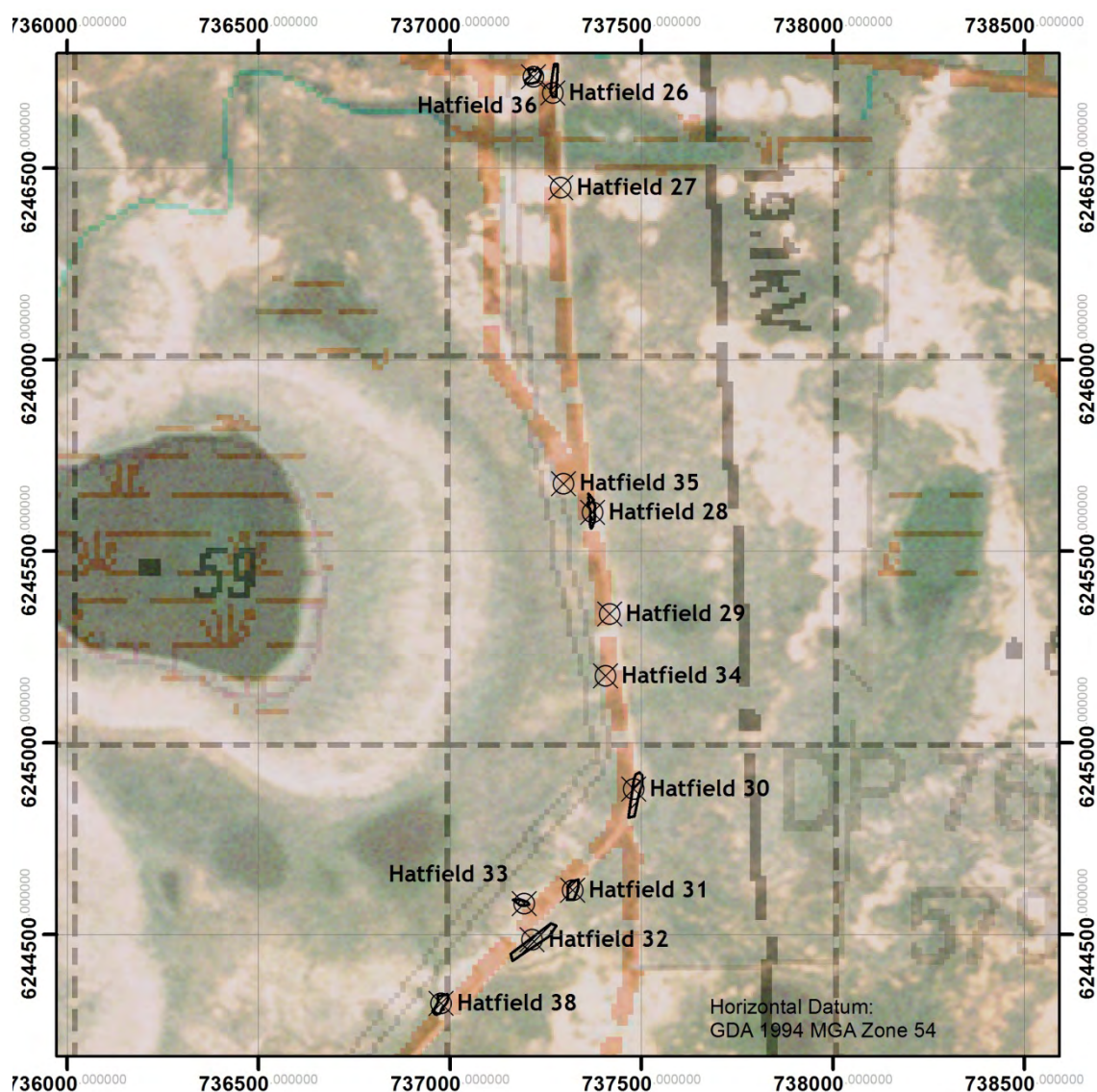
Hatfield 32 is located in an ill-defined series of exposures within the Marma land system, 2.49 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 15 m east of Magenta Road. The site consists of four artefacts, including silcrete and quartzite flakes. Potential water sources, such as depressions and relict lake basins, are present within 400 m from the site. Visibility is moderate and further artefacts may be present.



Hatfield 32 - General location



Hatfield 32 - Example of artefacts





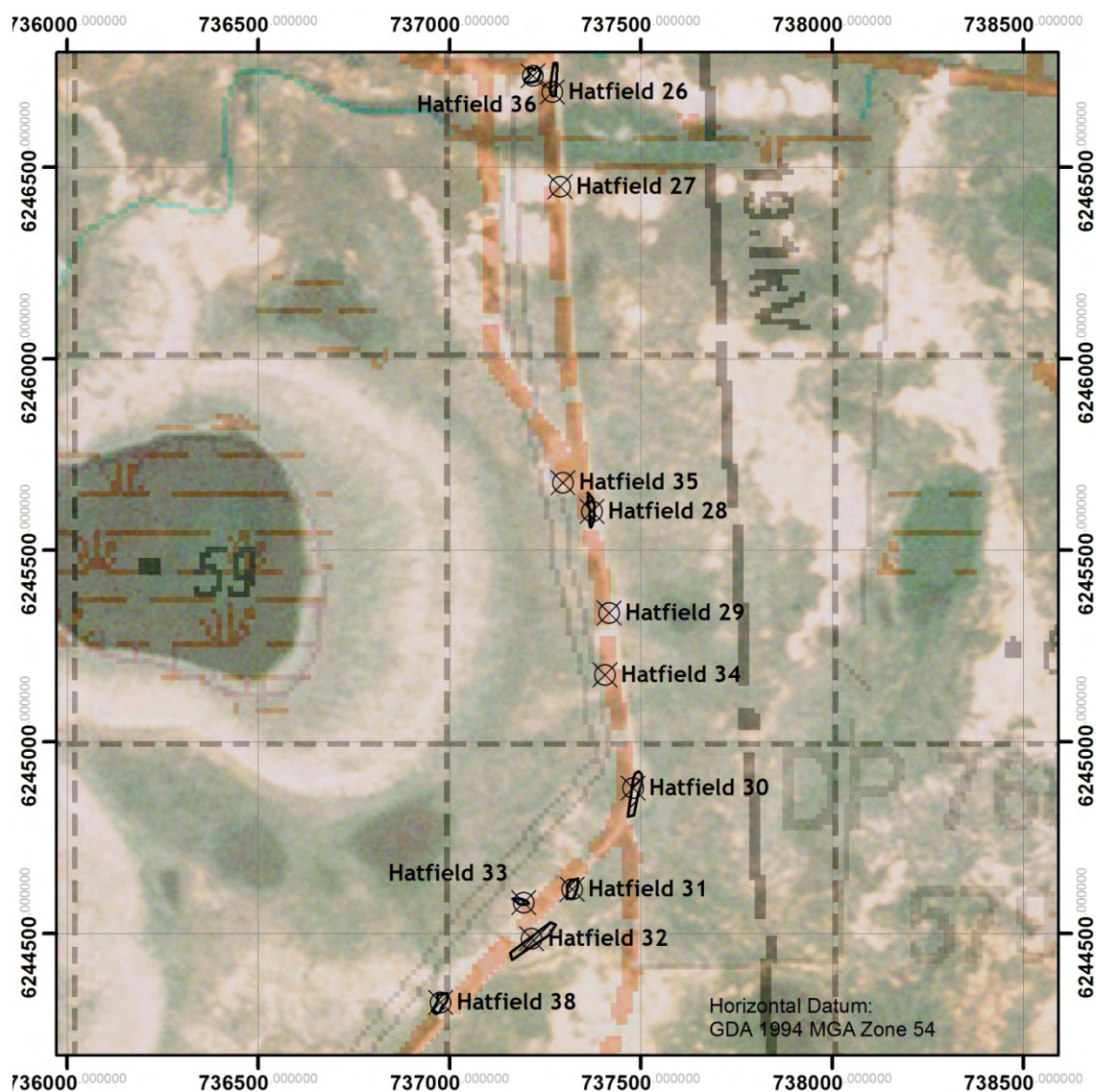
## Hatfield 33

Hatfield 33 is located in an exposure within the Marma land system, 30 m west of Magenta Road. The site consists of 3 silcrete artefacts. Potential water sources, such as depressions and relict lake basins, are present within 300 m from the site. Visibility is very good and further artefacts may be present.



Hatfield 33 - General location

Hatfield 33 - Artefact



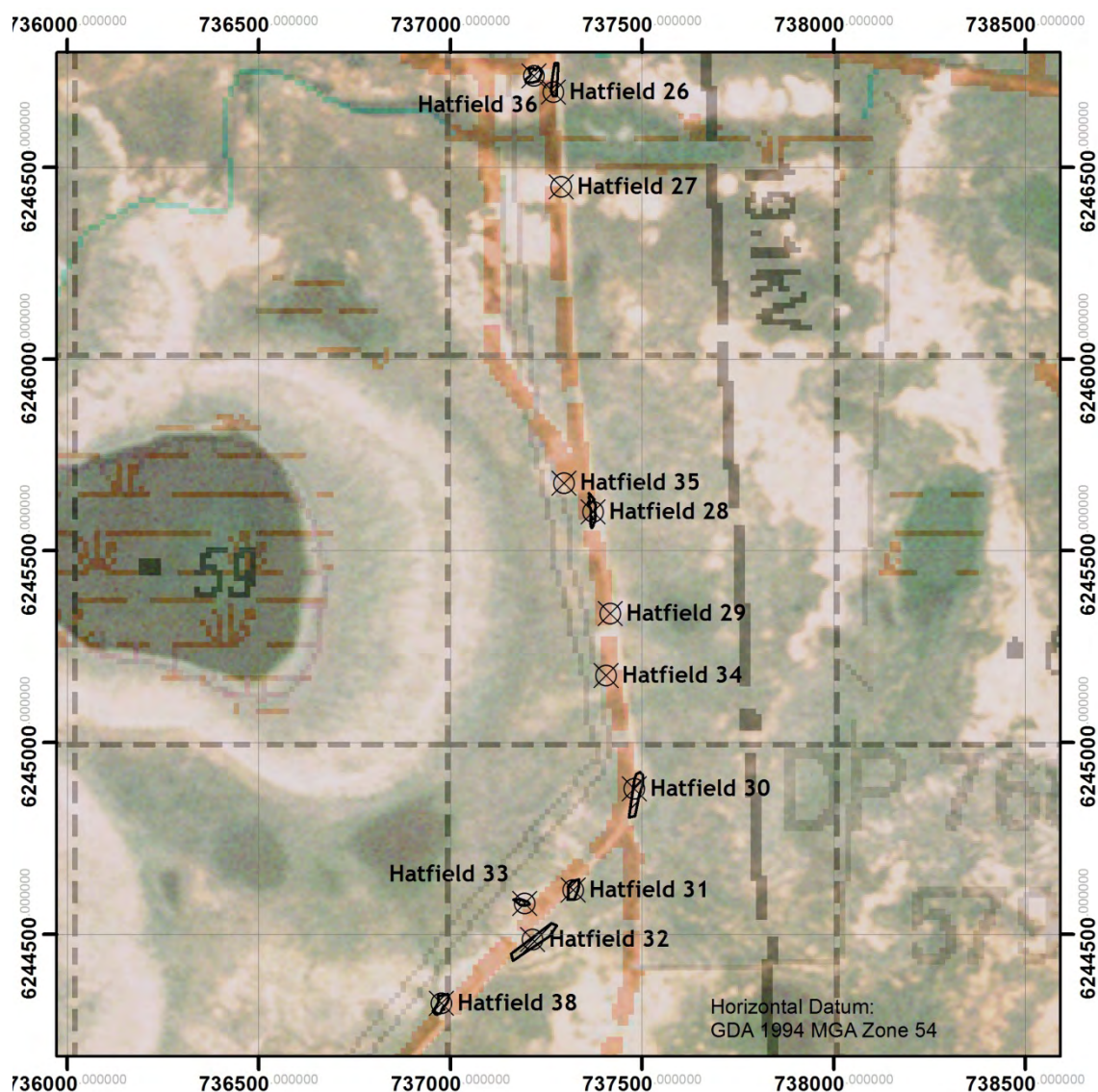


## Hatfield 34

Hatfield 34 is located in an exposure within the Marma land system, 10 m west of Magenta Road. The site consists of a single silcrete artefact. Potential water sources, such as depressions and relict lake basins, are present nearby to the site. Visibility is very good and further artefacts may be present.



Hatfield 34 - General location





## Hatfield 35

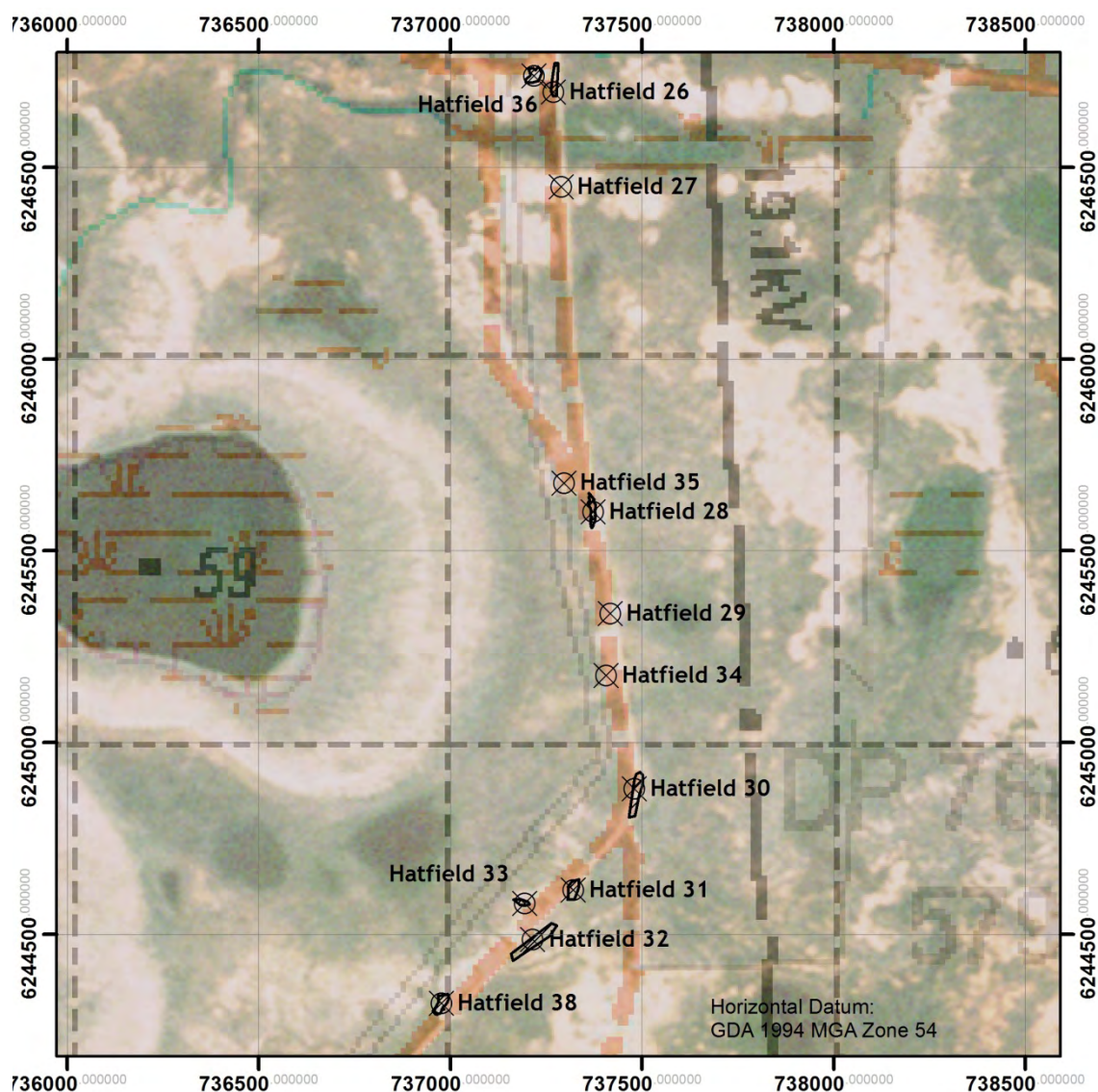
Hatfield 35 is located in an exposures within the Marma land system, 50 m west of Magenta Road. The site consists of a single silcrete artefact. Potential water sources, such as depressions and relict lake basins, are present nearby to the site. Visibility is good and further artefacts may be present as the site is located on a small lunette.



Hatfield 35 - General location



Hatfield 35 - Artefact





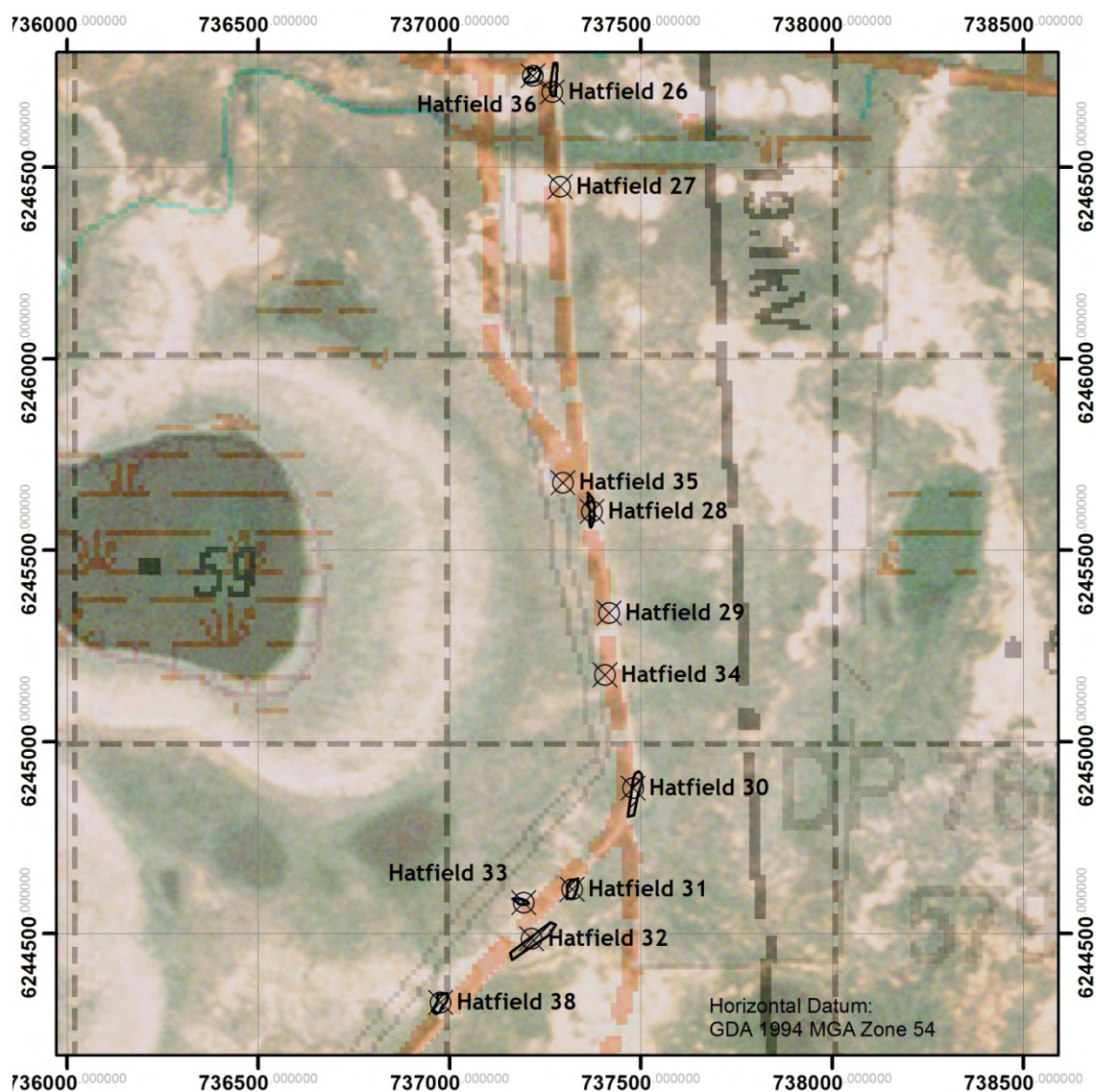
## Hatfield 36

Hatfield 36 is located in exposures in saltbush plain within the Marma land system, 40 m west of Hatfield-Magenta Road. The site consists of eight silcrete artefacts. Potential water sources, such as depressions and relict lake basins, are present within 200 m from the site.



Hatfield 36 - General location

Hatfield 36 - Artefact



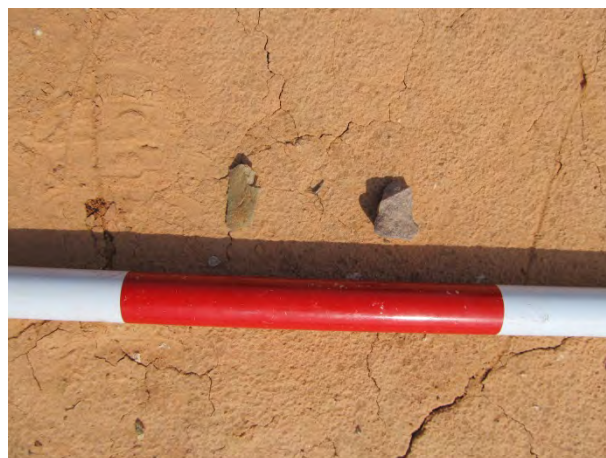


## Hatfield 37

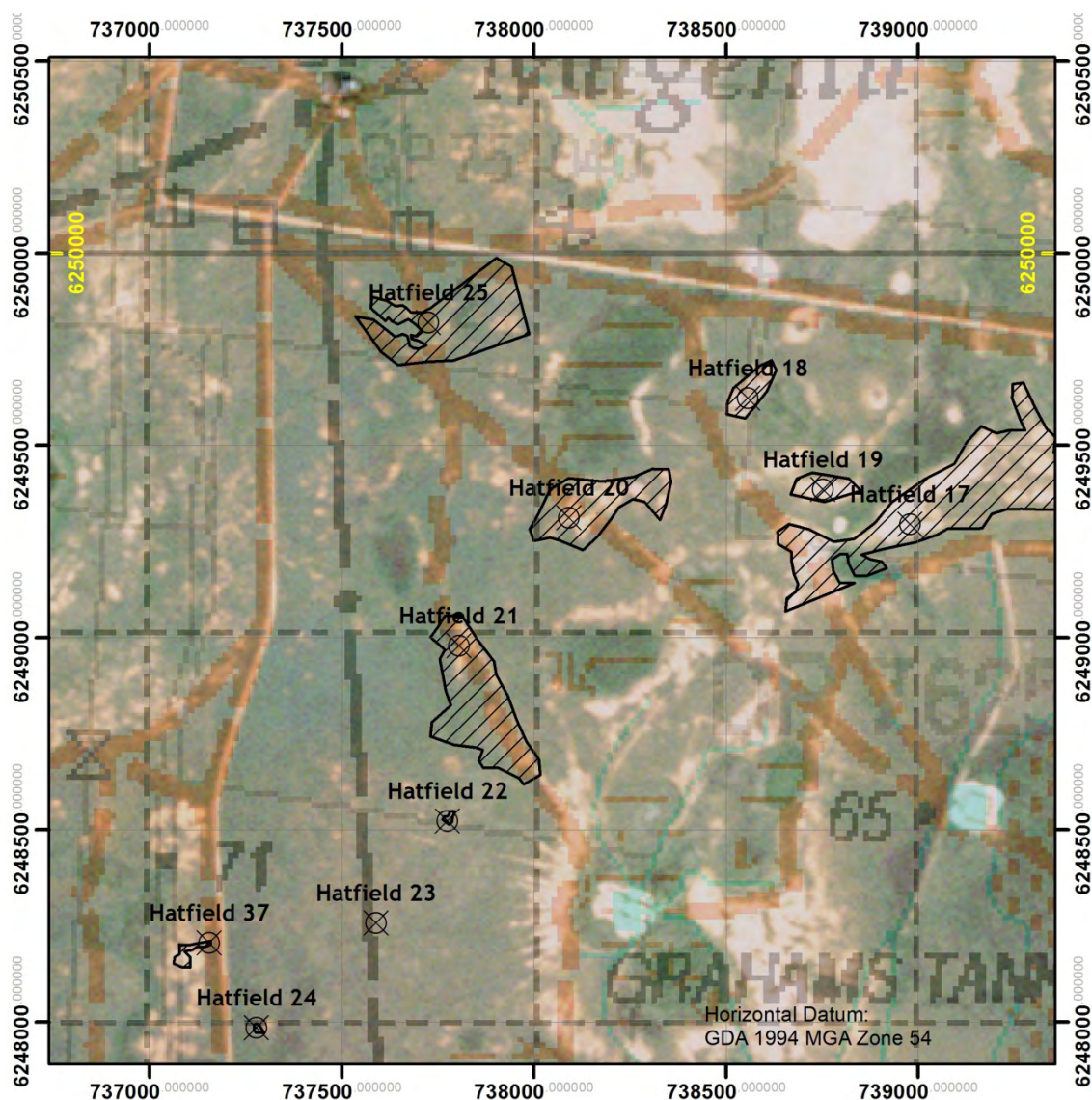
Hatfield 37 is located in a large exposure in saltbush plain within the Youhl land system, 40 m west of Magenta Road. The site consists of eight silcrete artefacts in the exposure. Potential water sources, such as depressions and relict lake basins, are present within 200 m from the site. Visibility is excellent within the exposure.



Hatfield 37 - General location



Hatfield 37 - Artefact



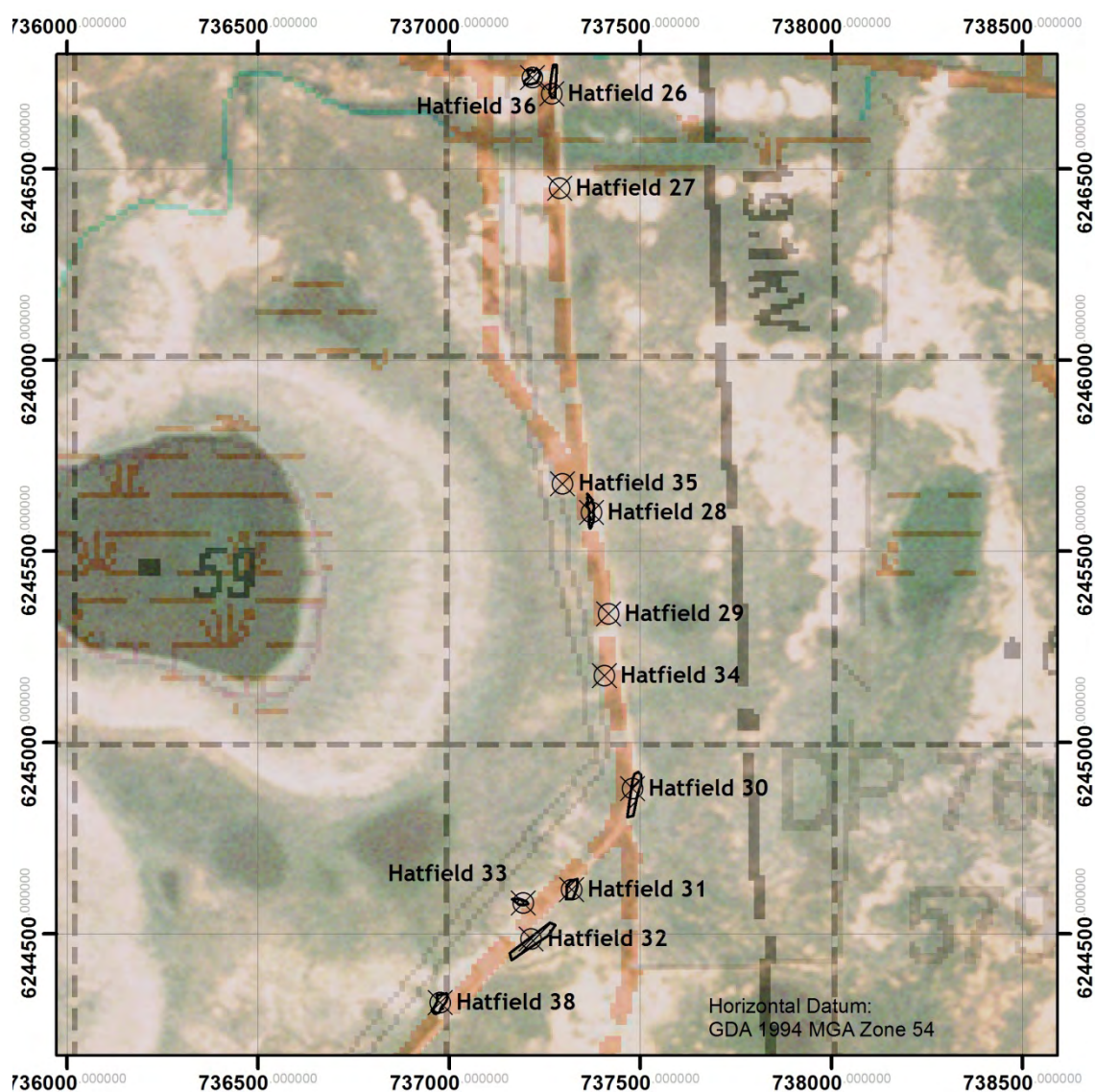


## Hatfield 38

Hatfield 38 is located in an exposure within the Marma land system, 2.28 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 10 m west of Magenta Road. The site consists of two artefacts, including a core and flake. Potential water sources, such as depressions and relict lake basins, are present within 300 m from the site. Visibility is very good and further artefacts may be present.



Hatfield 38 - General location





## Hatfield 39

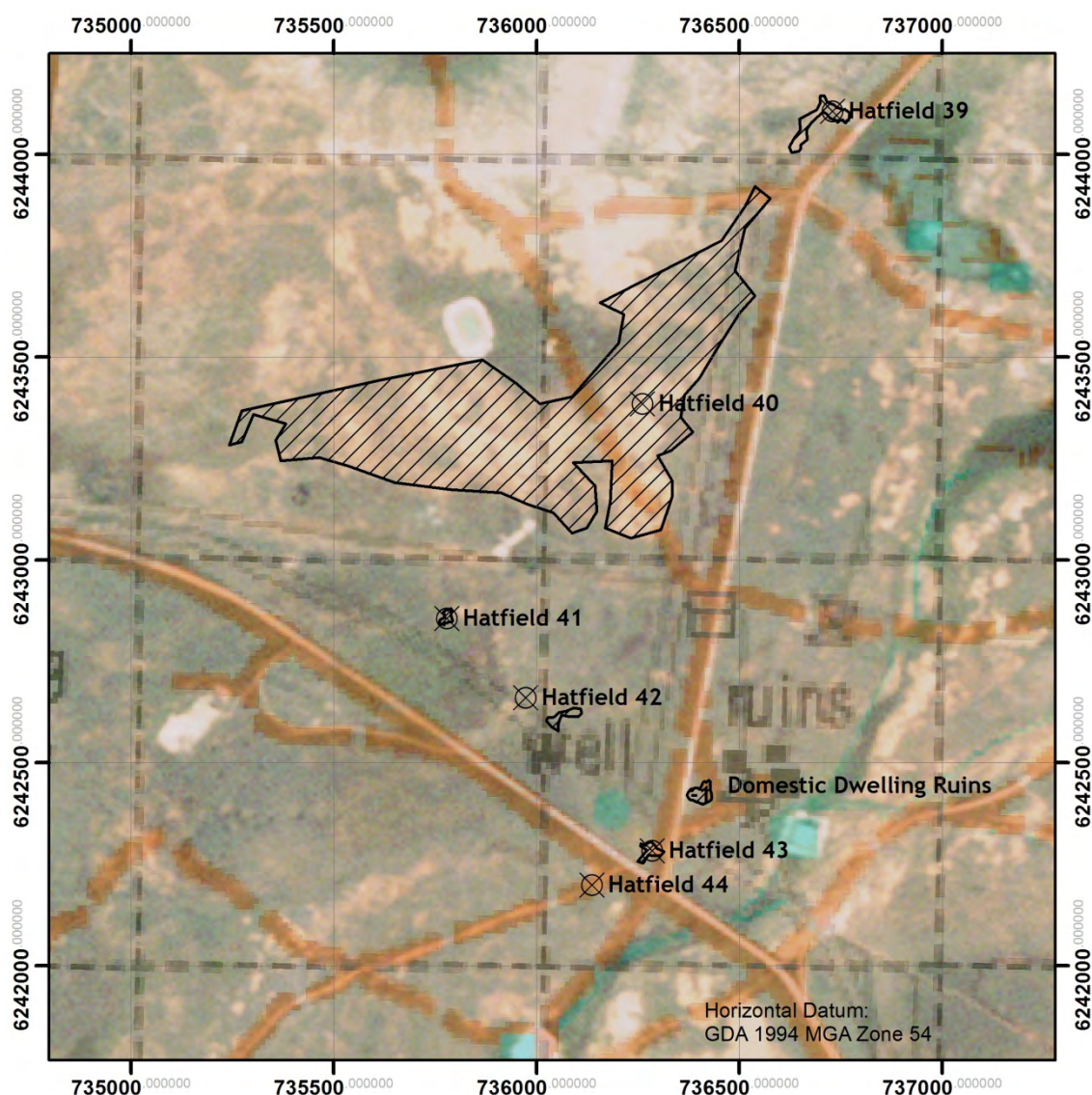
Hatfield 39 is located in an extensive series of undulating exposures, pans and scalds within the Marma land system, 1.97 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 20 m west of Magenta Road. The site consists of 18 artefacts and eroding hearths. Artefact types includes retouched tools and flakes. Potential water sources, such as depressions and relict lake basins, are present within 100 m from the site. Visibility varies and further artefacts are likely to be present. Hatfield 39 should be considered a continuation of Hatfield 40, 41, 42 and 43.



Hatfield 39 - General location



Hatfield 39 - Scattered heat retaining material





## Hatfield 40

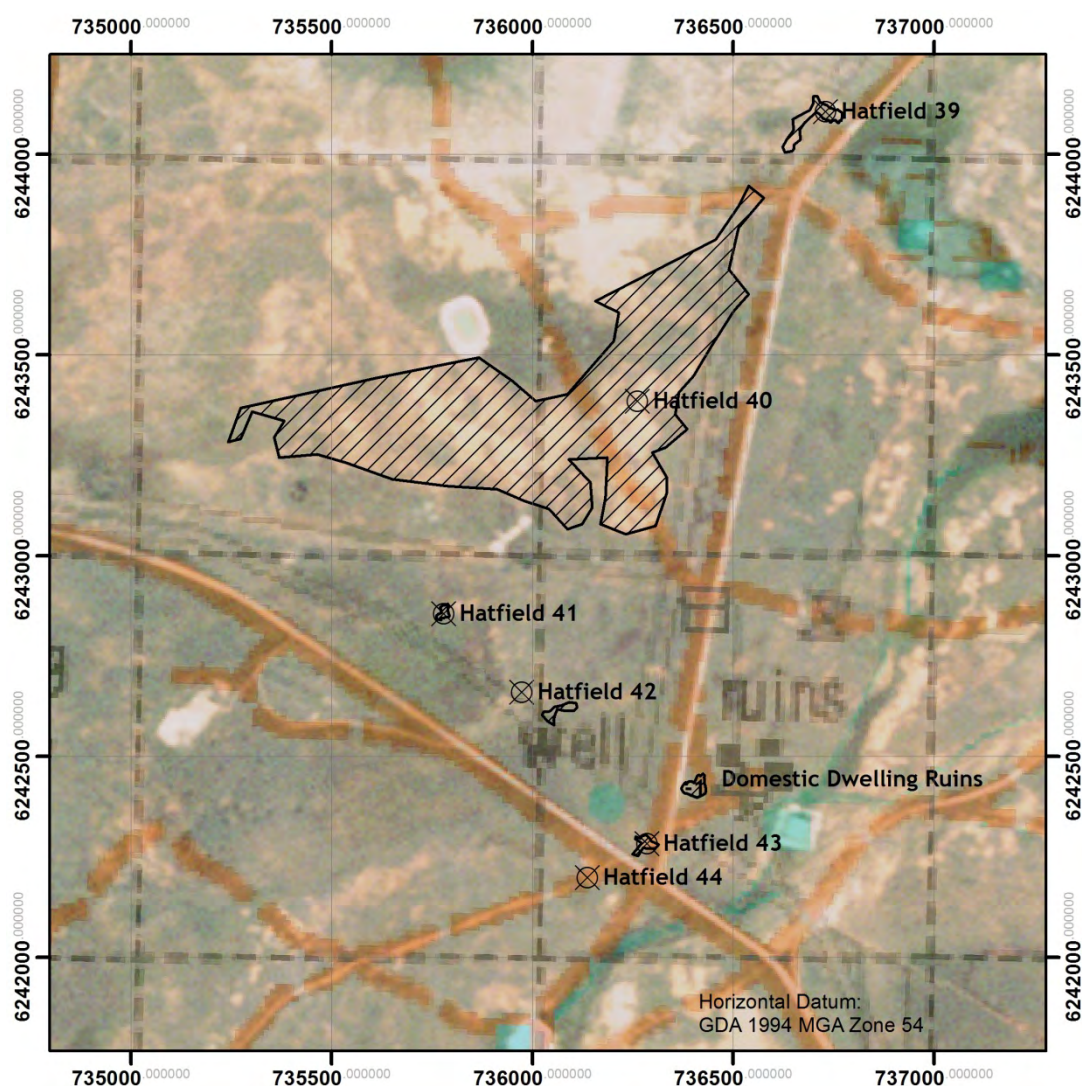
Hatfield 40 is located in an extensive series of exposures, pans and scalds within the Hatfield land system, 50 m west of Magenta Road and between 0.84 km and 1.67 km north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection. The site consists of over 300 observed artefacts and multiple intact, eroding and scattered hearths. Knapping floors are evident. Artefact types include cores, retouched tools, flakes, an axehead, hammerstones. Potential water sources, such as depressions and relict lake basins occur between 400 and 800m from the site. Visibility is very good and further artefacts are likely present. Hatfield 40 should be considered a continuation of Hatfield 39, 41, 42 and 43.



Hatfield 40 - Example of exposure



Hatfield 40 - Ground silcrete core with flaked material





## Hatfield 41

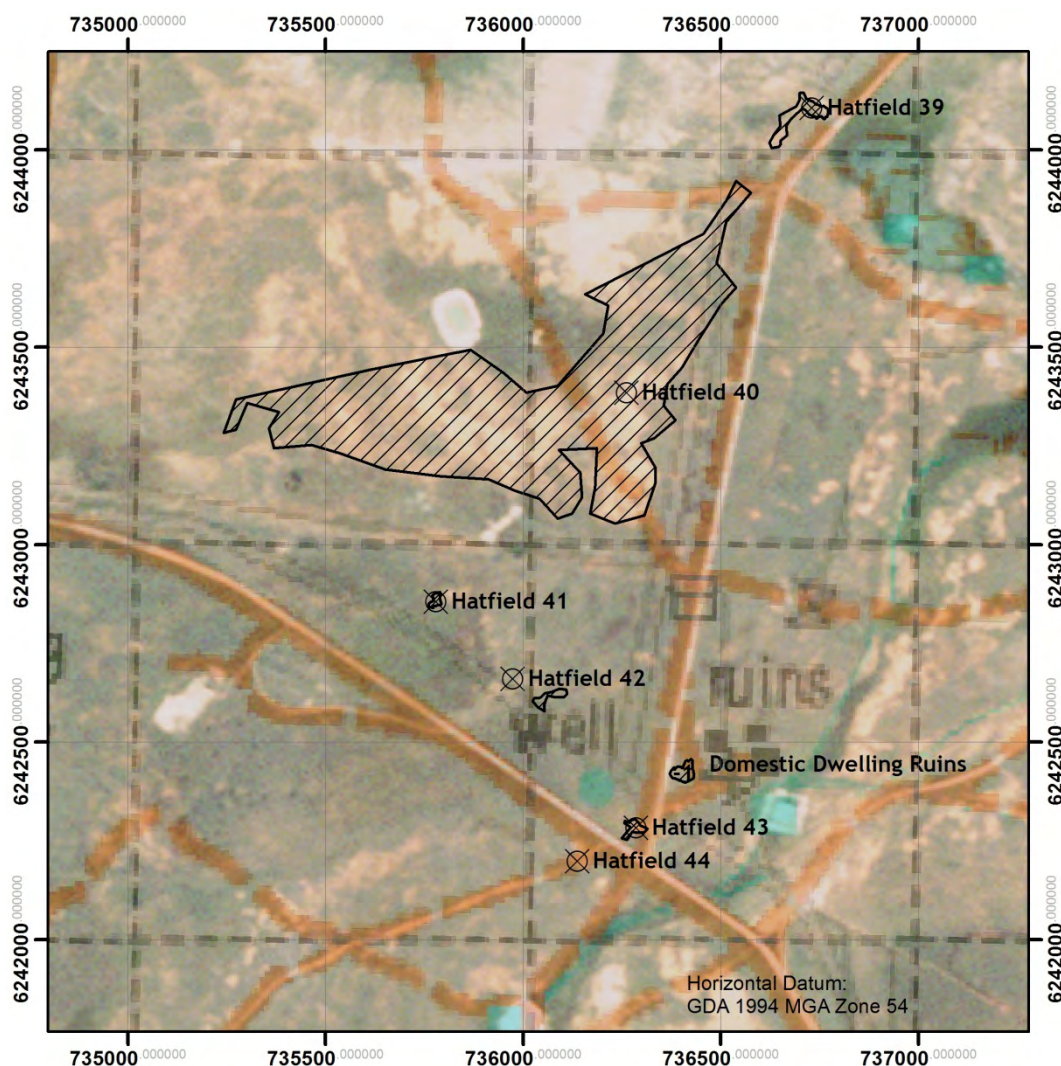
Hatfield 41 is located a small series of undulating exposures, pans and scalds within the Hatfield land system, 270 m north of Hatfield-The Vale Road and Boree Plains-Gol Gol Road intersection and 650 m west of Magenta Road. The site consists of 11 artefacts and an eroding hearth and represents a knapping event with a multi-platform core, cortical flakes and flakes. Potential water sources, such as depressions and relict lake basins, are present within 1 km from the site. Visibility varies and further artefacts are likely to be present. Hatfield 41 should be considered a continuation of Hatfield 39, 40, 42 and 43.



Hatfield 41 - Exposure



Hatfield 41 - Heat retainers





## Hatfield 42

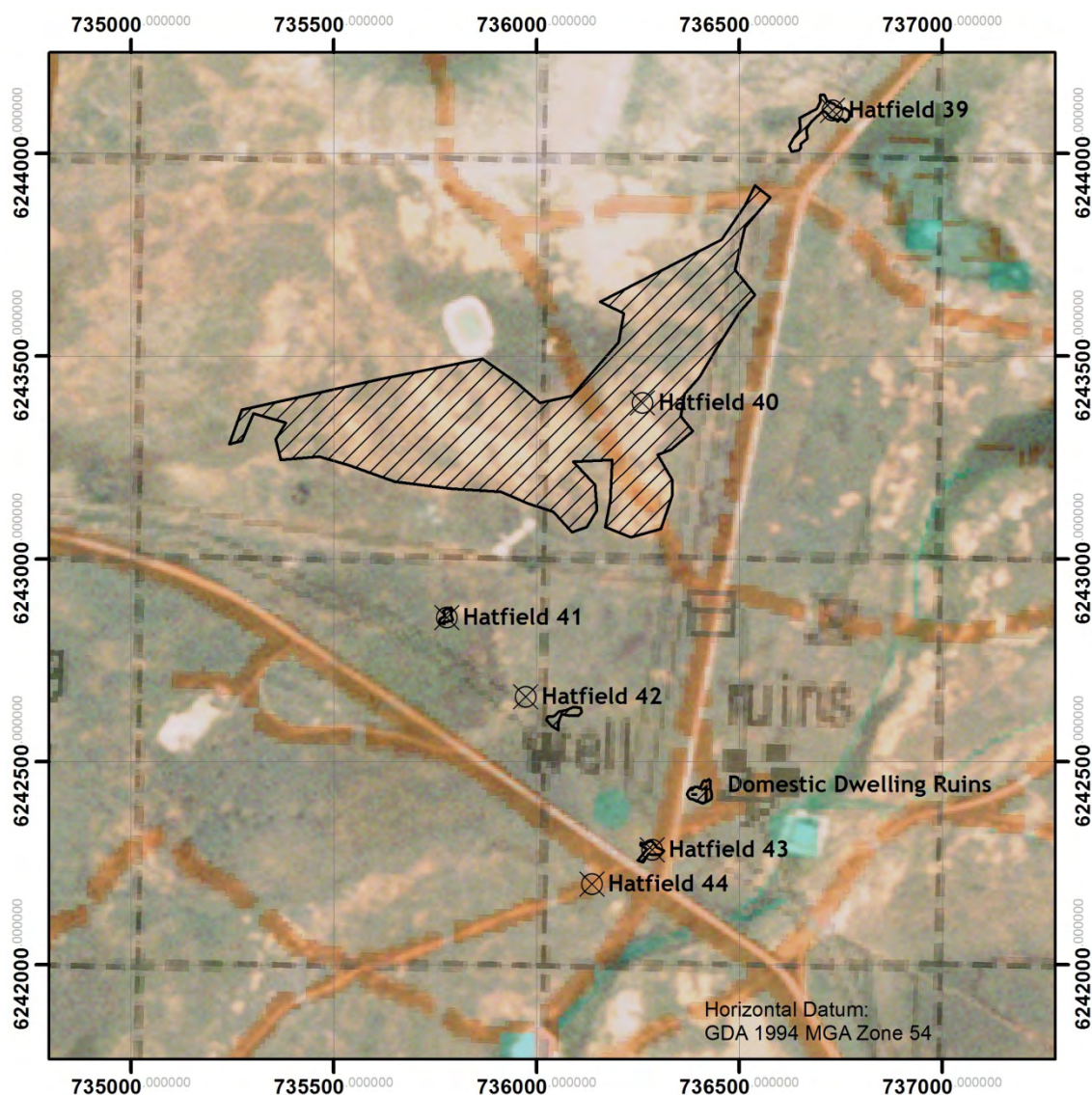
Hatfield 42 is located a small exposure within the Hatfield land system, 225 m north of Boree Plains-Gol Gol Road intersection and 420 m west of Magenta Road. The site consists of one silcrete retouched tool. Potential water sources, such as depressions and relict lake basins, are present within 1 km from the site. Visibility varies and further artefacts may be present. Hatfield 42 should be considered a continuation of Hatfield 39, 40, 41 and 43.



Hatfield 42 - Exposure



Hatfield 42 - Artefact





## Hatfield 43

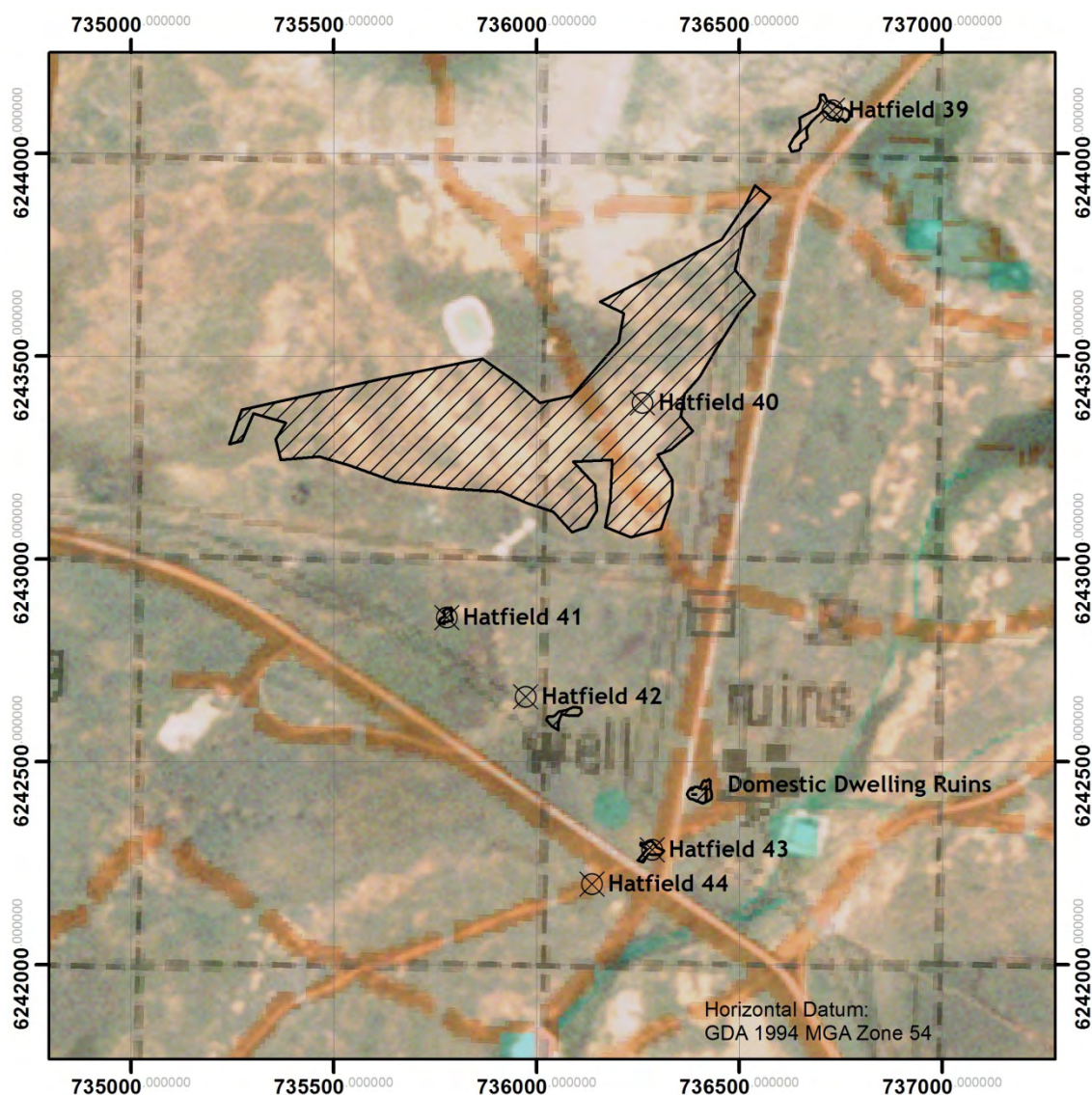
Hatfield 43 is located a exposure associated with dirt track and gate in the Hatfield land system immediately adjacent Hatfield-Magenta Road, 60 m north of Magenta Road and Boree Plains-Gol Gol Road intersection. The site consists of 20 silcrete cortical and non-cortical flakes and debitage. Potential water sources, such as depressions, are present within 300 m of the site. Further artefacts may be present. Hatfield 43 should be considered a continuation of Hatfield 39, 40, 41 and 42.



Hatfield 43 - Exposure and general conditions



Hatfield 43 - Artefact





## Hatfield 44

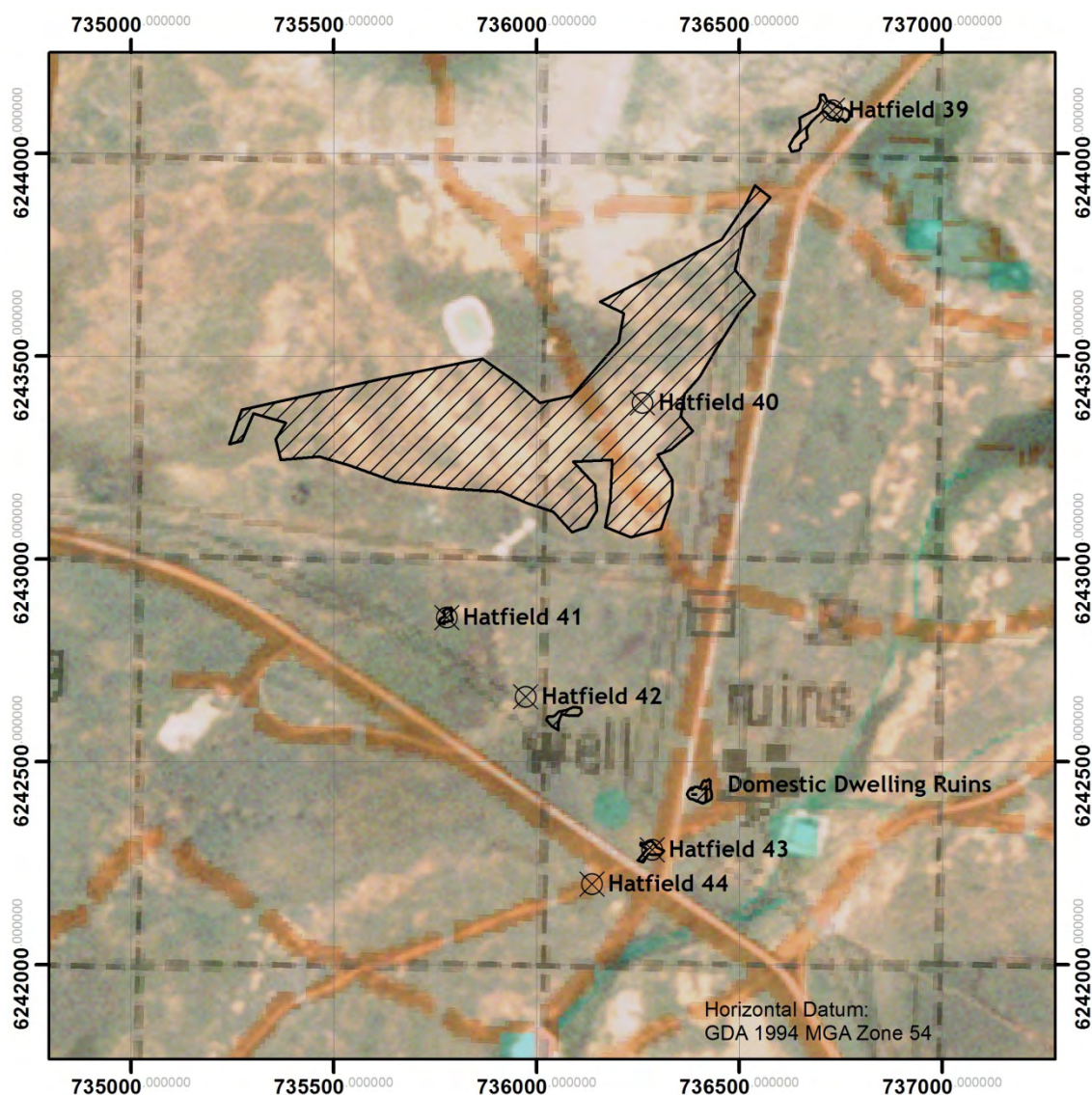
Hatfield 44 is located a exposure within the Hatfield land system, 40 m south of Boree Plains-Gol Gol Road, 270 m west of Magenta Road and Boree Plains-Gol Gol Road intersection. The site consists of a single silcrete flake. Potential water sources, such as depressions, are present within 200 m of the site. Further artefacts may be present however further investigation was not undertaken given the distance from the impact area.



Hatfield 44 - Exposure



Hatfield 44 -Artefact





## Hatfield 45

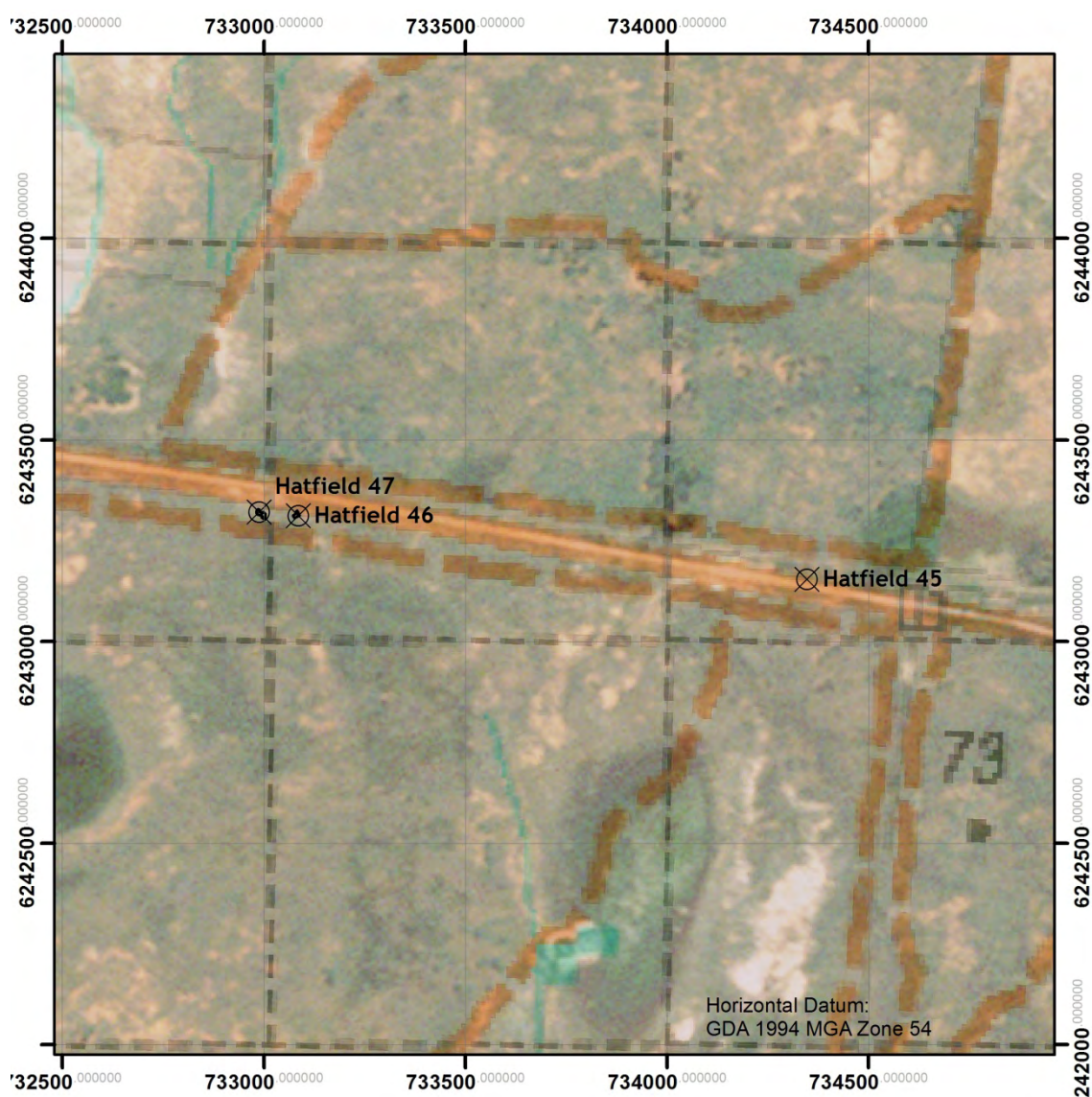
Hatfield 45 is located a exposure within the Hatfield land system, 10 m north of Boree Plains-Gol Gol Road, 2.89 km west of Magenta Road and Boree Plains-Gol Gol Road intersection. The site consists of a broken grinder with pitting. Potential water sources, such as depressions, are present within 400 m of the site. Further artefacts may be present.



Hatfield 45 - Conditions and exposure



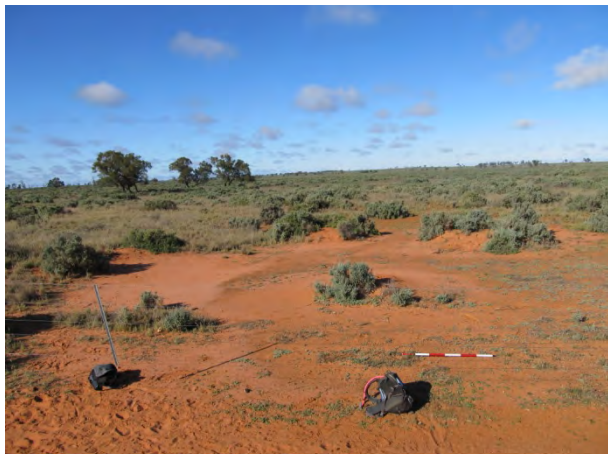
Hatfield 45 - Artefact





## Hatfield 46

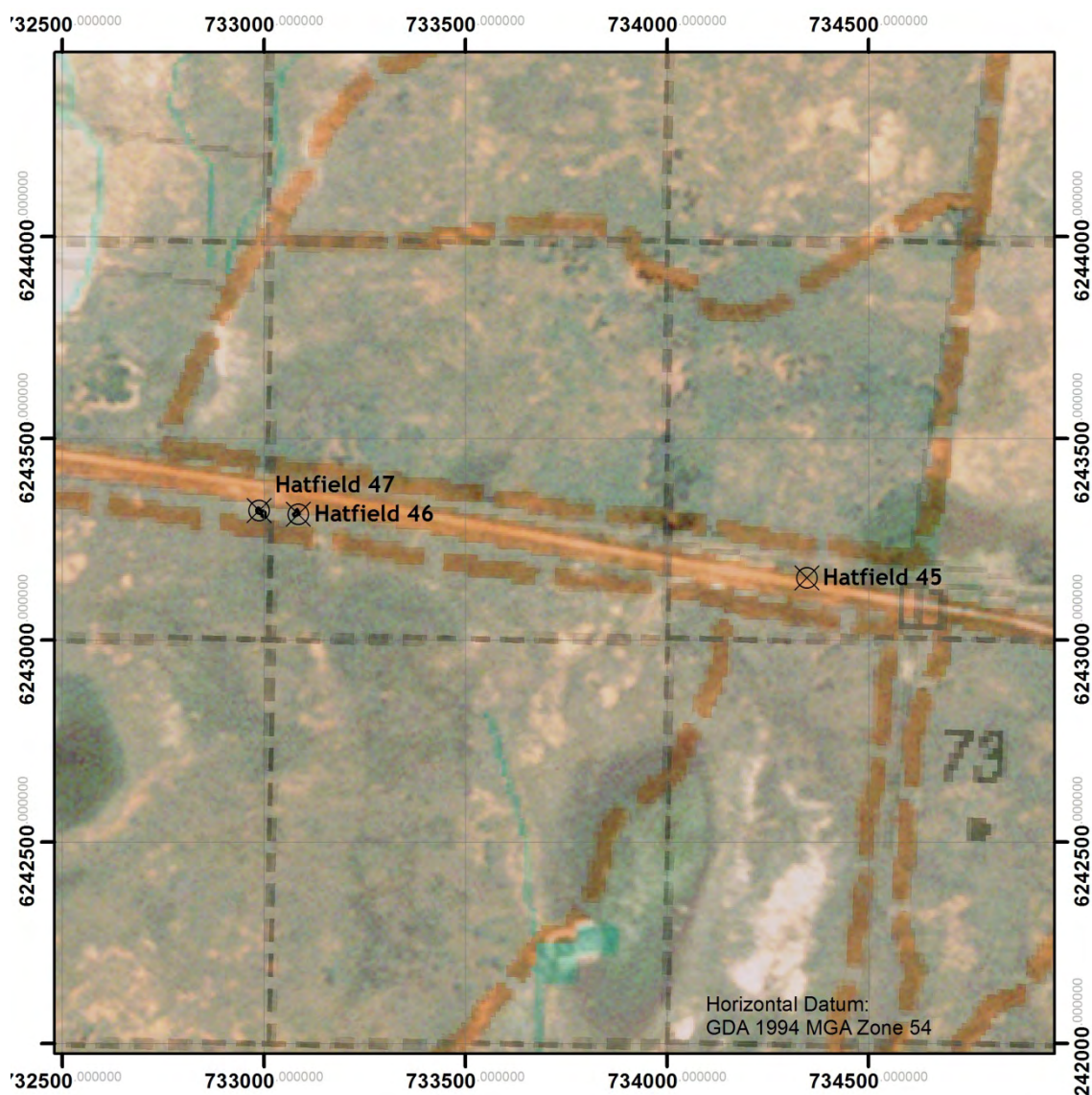
Hatfield 46 is located a exposure within the Hatfield land system, 30 m south of Boree Plains-Gol Gol Road, 3.43 km west of Magenta Road and Boree Plains-Gol Gol Road intersection. The exposure extends beyond the surveyed area. The site consists of eight silcrete artefacts, including one core, a retouched tool and cortical flakes. Potential water sources, such as depressions, are present within 700 m of the site. Further artefacts may be present.



Hatfield 46 - Exposure



Hatfield 46 - Artefact





## Hatfield 47

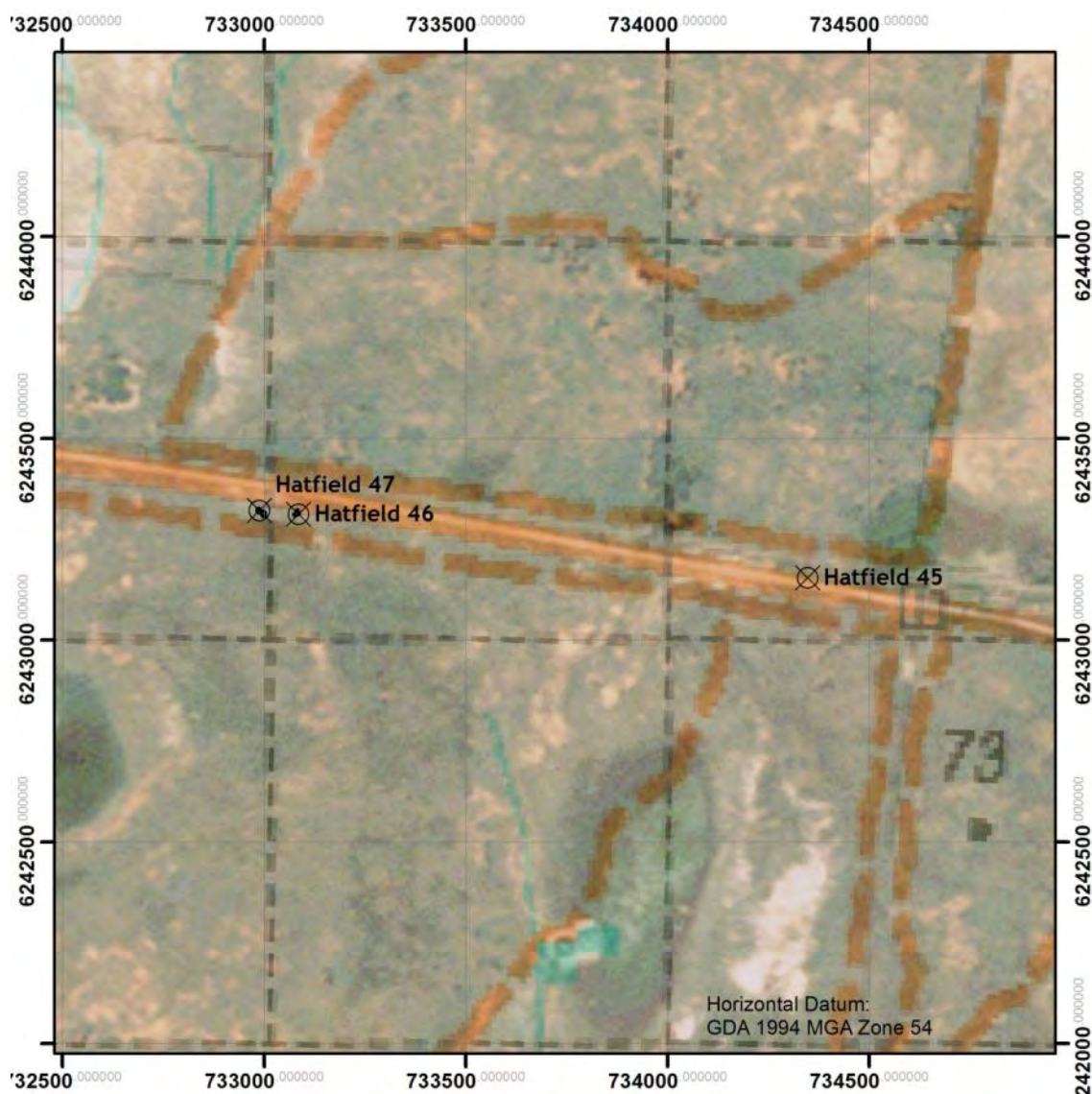
Hatfield 47 is located a exposure within the Hatfield land system, 50 m south of Boree Plains-Gol Gol Road, 3.52 km west of Magenta Road and Boree Plains-Gol Gol Road intersection. The exposure extends beyond the surveyed area. The site consists of six silcrete artefacts, including multiple retouched and used tools. Potential water sources, such as depressions, are present within 700 m of the site. Further artefacts may be present.



Hatfield 47 - General view



Hatfield 47 - Retouched artefact





## Hatfield 48

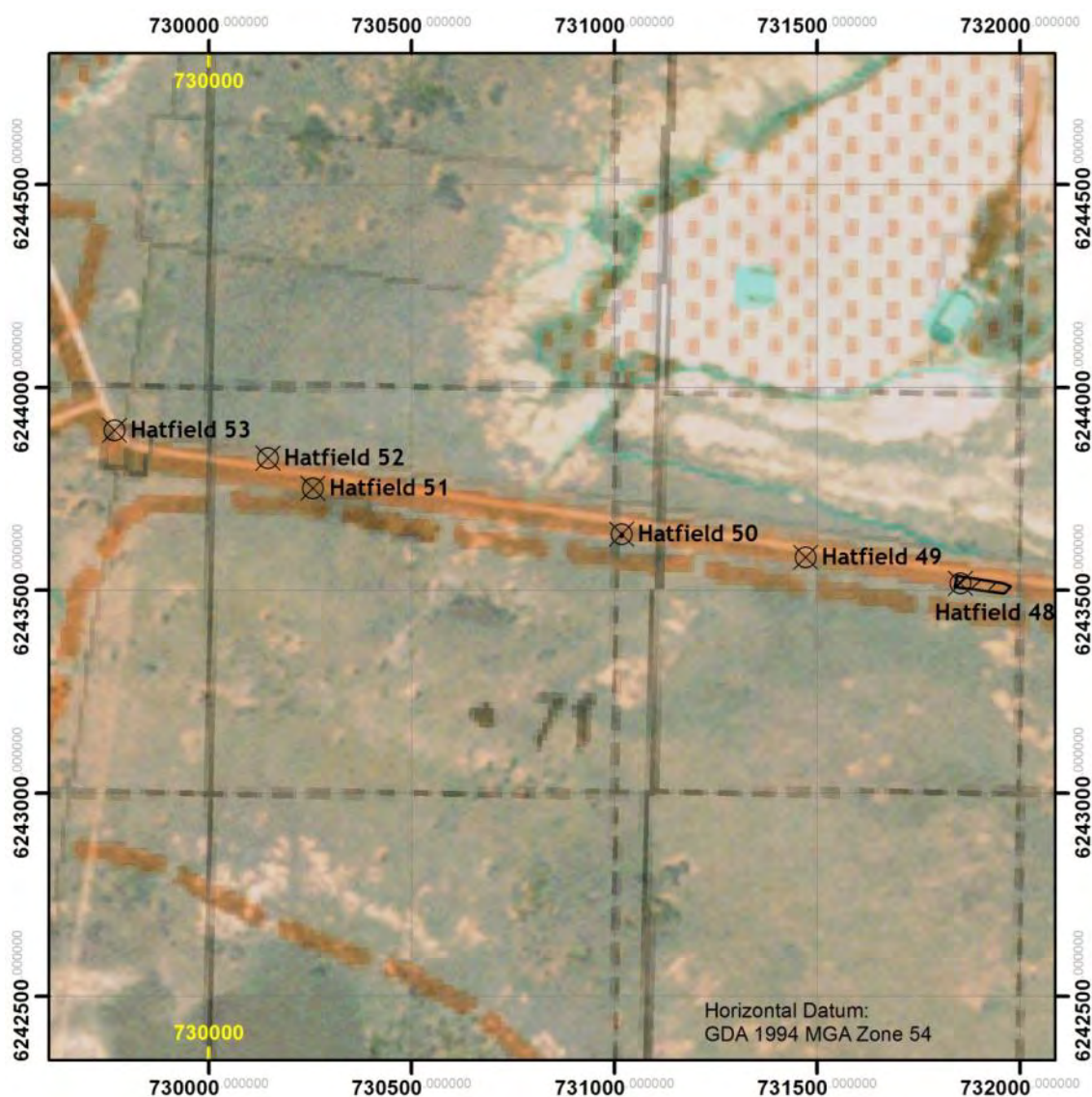
Hatfield 48 is located across an area of minimal exposure within the Hatfield land system, 15 m south of Boree Plains-Gol Gol Road and 4.7 km west of Boree Plains-Gol Gol Road and Magenta Road intersection. The exposure extends beyond the surveyed area. The site consists of three silcrete flakes. Potential water sources, such as depressions, are present within 700 m of the site. Further artefacts may be present.



Hatfield 48 - Exposure



Hatfield 48 - Artefact





## Hatfield 49

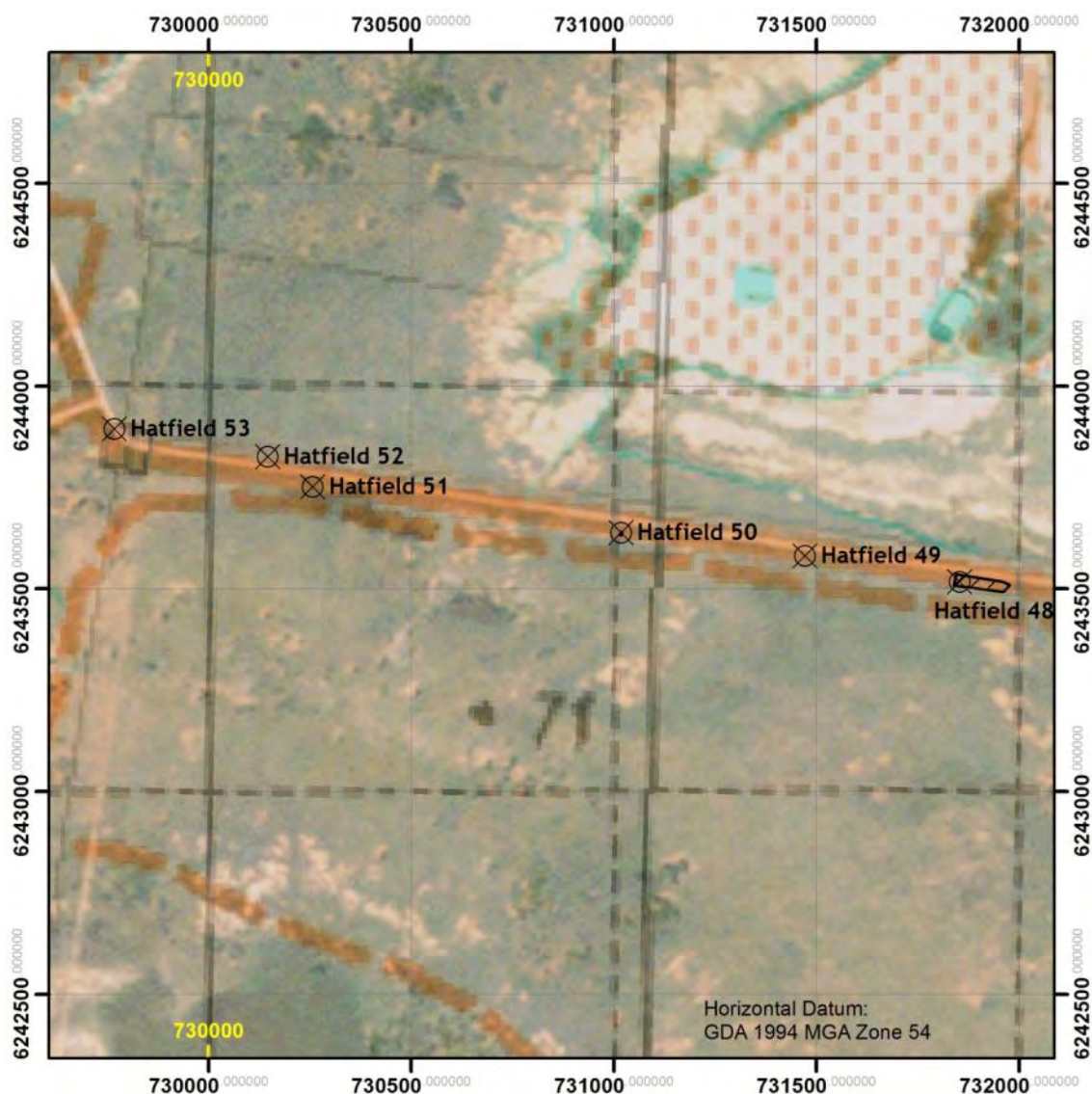
Hatfield 49 is located across an area of minimal exposure within the Hatfield land system, 5 m south of Boree Plains-Gol Gol Road and 1.68 km east of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a silcrete flake eroding from the road verge. Potential water sources, such as depressions, are present within 400 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 49 - General view



Hatfield 49 - Artefact





## Hatfield 50

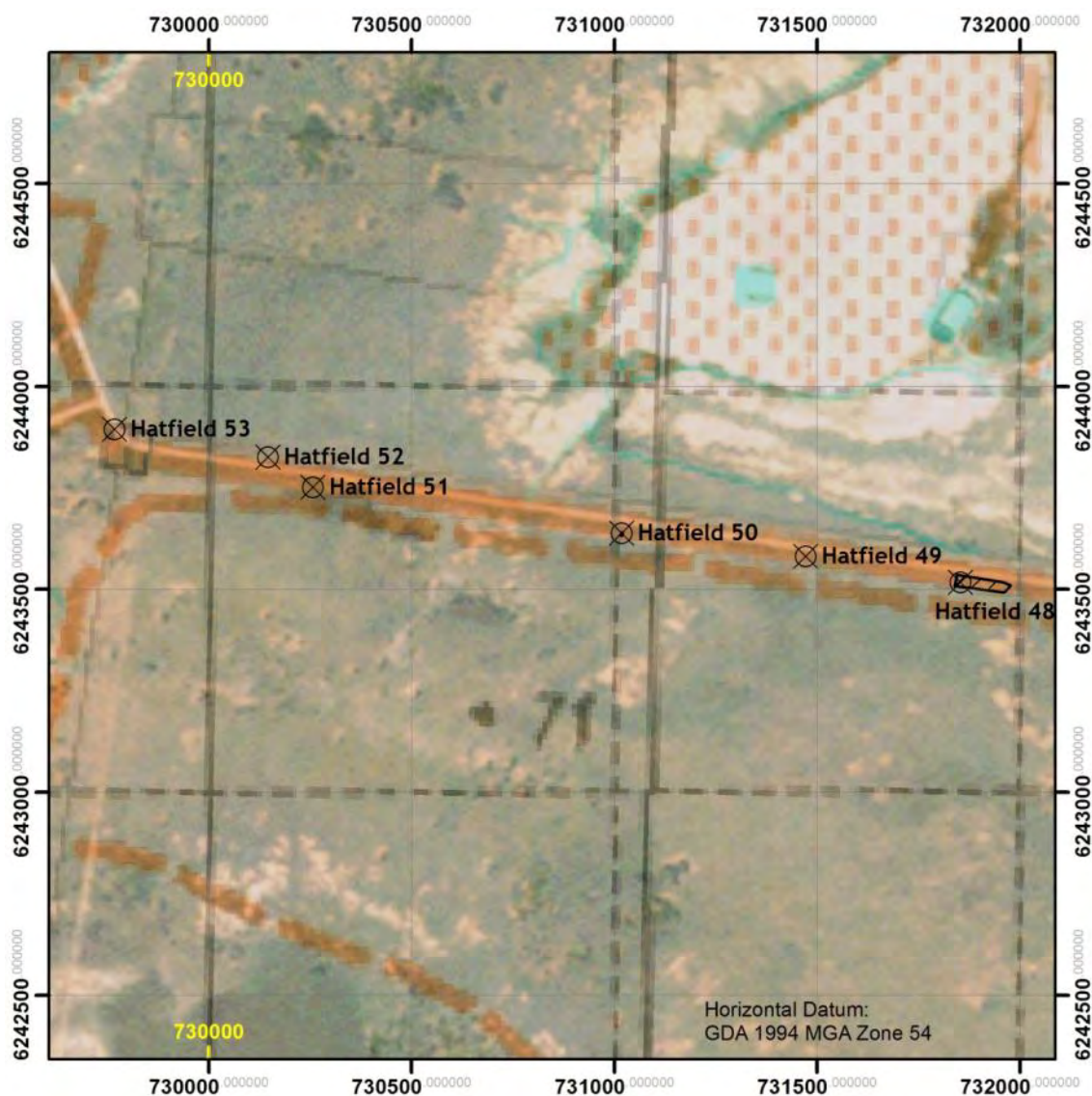
Hatfield 50 is located in a discontinuous exposure within the Hatfield land system, 15 m south of Boree Plains-Gol Gol Road and 1.37 km east of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a silcrete core and flake. Potential water sources, such as depressions, are present within 400 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 50 - General view of site



Hatfield 50 - Artefact





## Hatfield 51

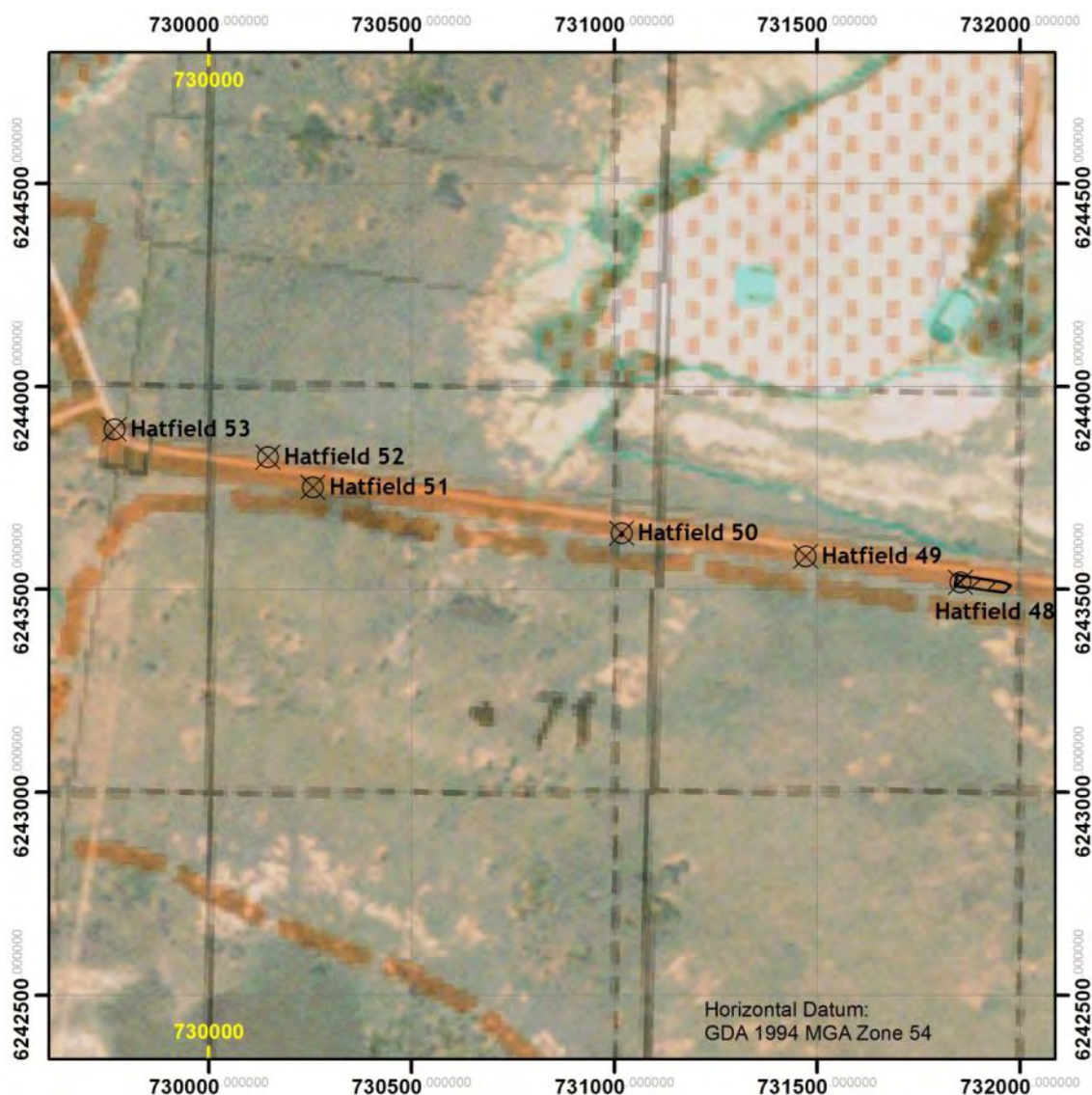
Hatfield 51 is located in an exposure next to a dam within the Hatfield land system, 42 m south of Boree Plains-Gol Gol Road and 605 m east of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a silcrete flake. Possible heat retaining stones were observed in a rill within the dam, however, it was unclear whether these were cultural or natural. Potential water sources, such as depressions, are present within 800 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 51 - General view



Hatfield 51 - Artefact





## Hatfield 52

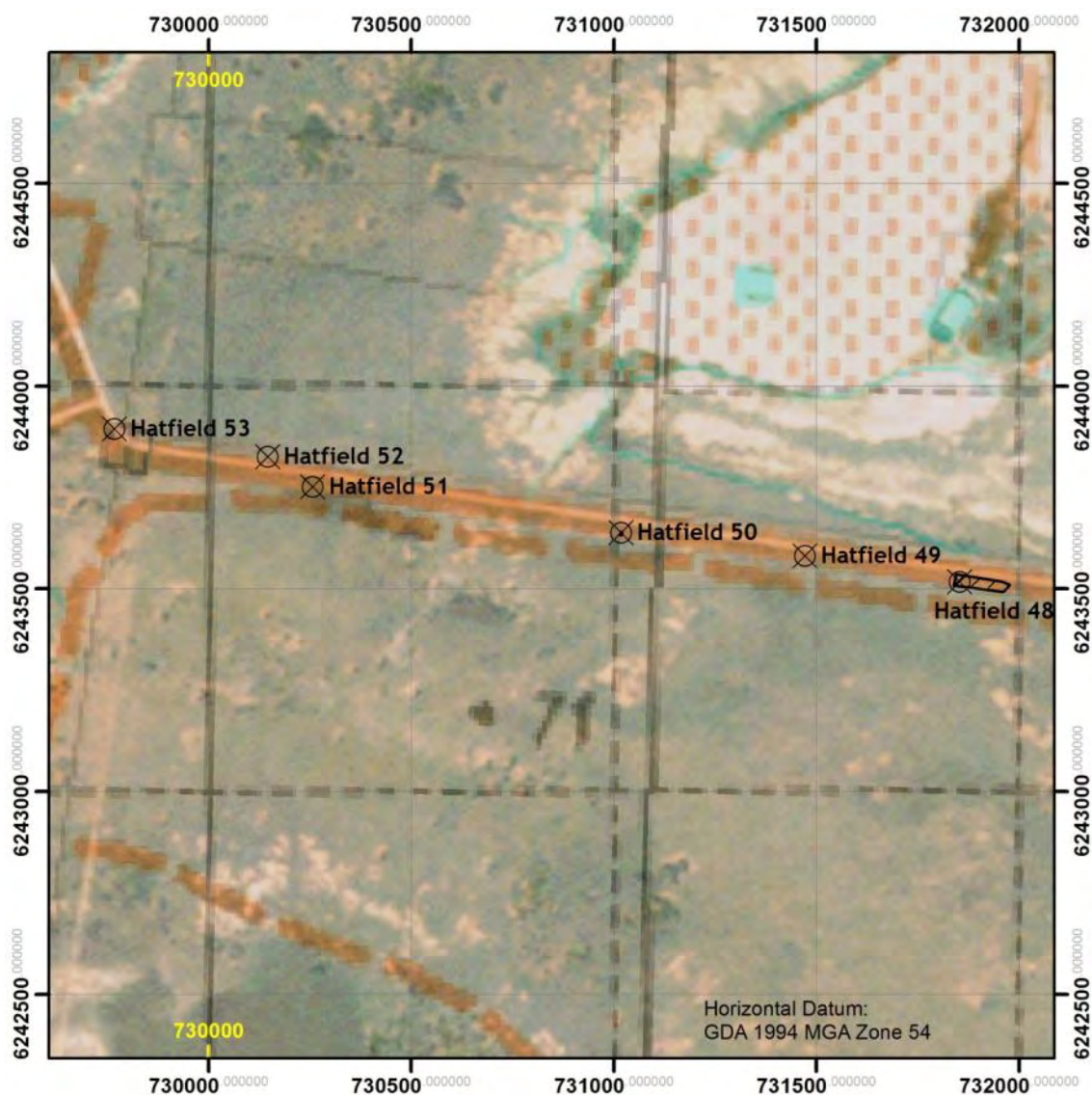
Hatfield 52 is located in an exposure within a grader cut within the Hatfield land system, 26 m north of Boree Plains-Gol Gol Road and 420 m east of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of two silcrete flakes. Potential water sources, such as depressions, are present within 900 m of the site. Visibility was excellent.



Hatfield 52 - Exposure and conditions



Hatfield 52 - Artefacts





## Hatfield 53

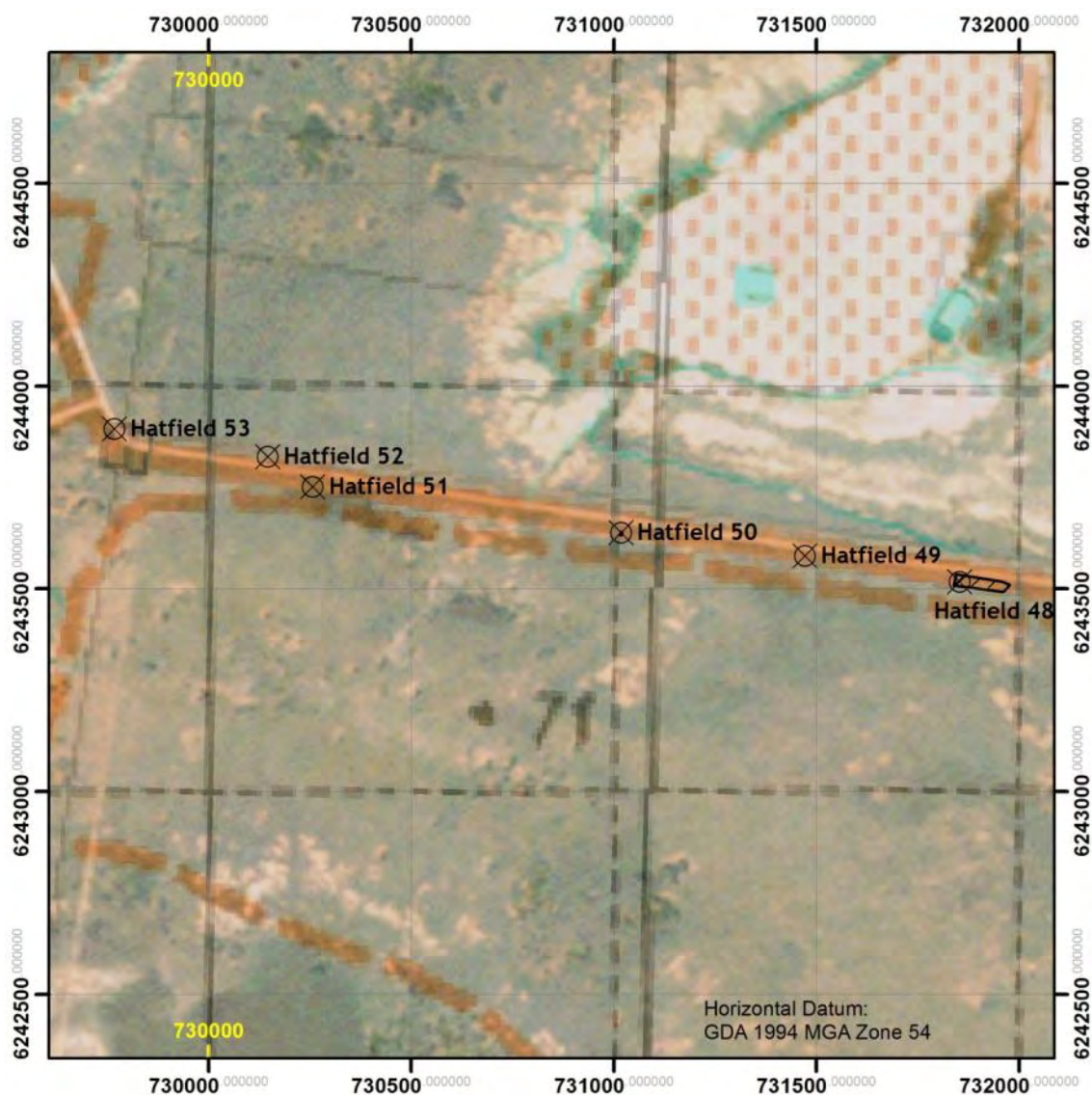
Hatfield 53 is located in an exposure within a grader cut within the Hatfield land system, 10 m east of Boree Plains-Gol Gol Road and 60 m south-east of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single cortical silcrete flake. Potential water sources, such as depressions, are present within 900 m of the site. Visibility was moderate and further artefacts may be present.



Hatfield 53 - General view of site



Hatfield 53 - Artefact





## Hatfield 54

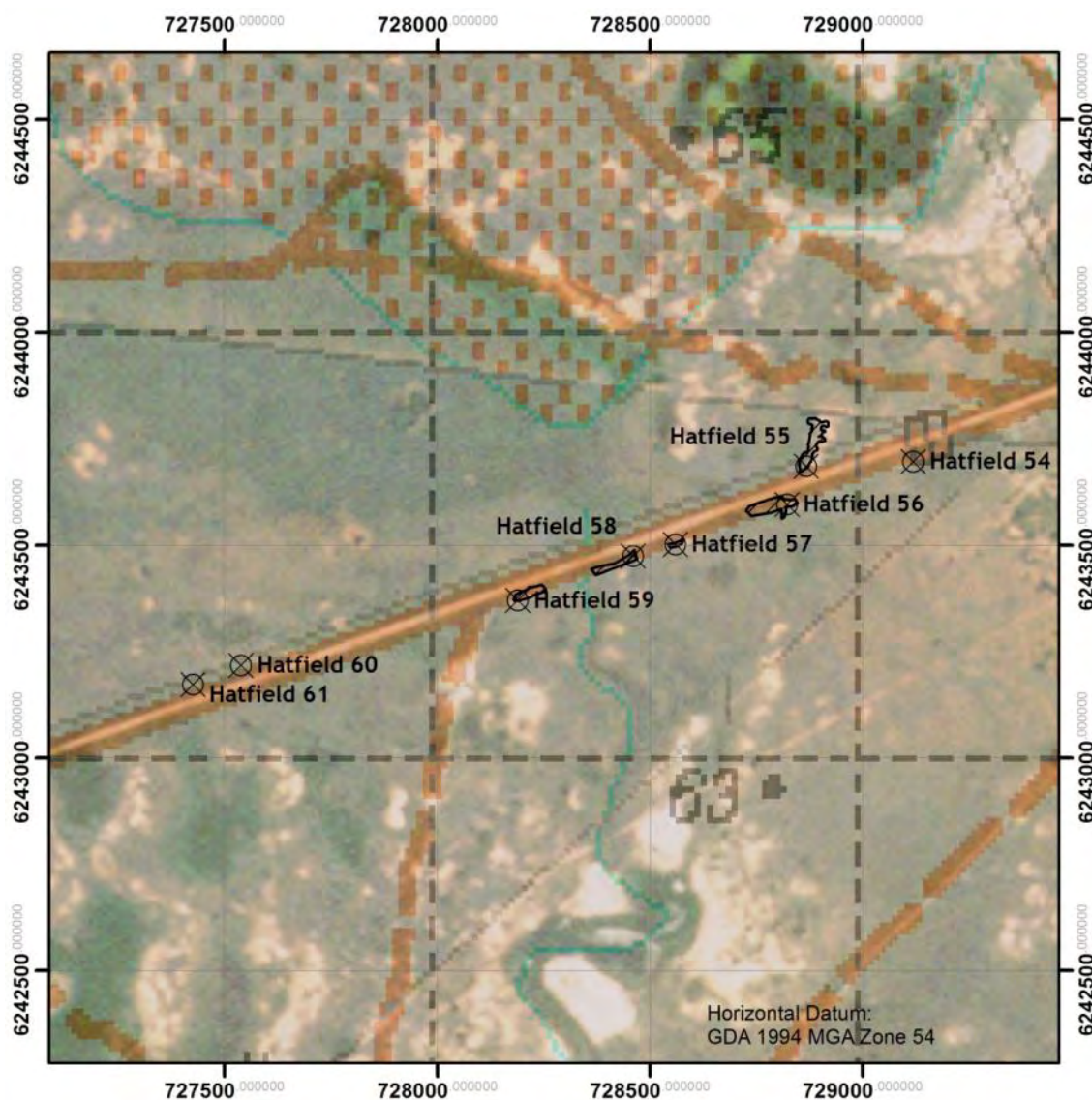
Hatfield 54 is located in an exposure the Hatfield land system, 20 m south of Link Road and 670 m south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single red silcrete flake. Potential water sources, such as depressions, are present within 700 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 54 - General view of site and exposure



Hatfield 54 - Artefact



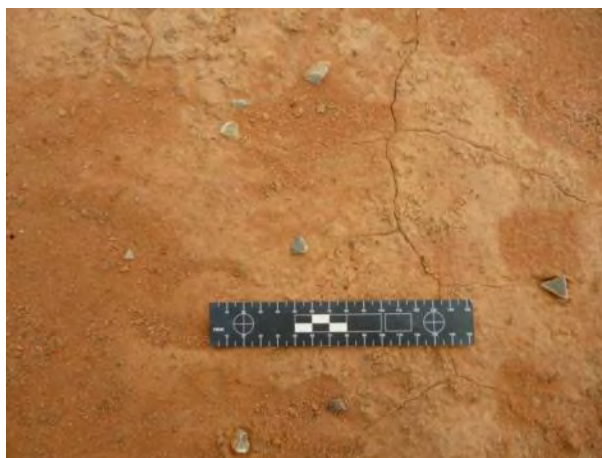


## Hatfield 55

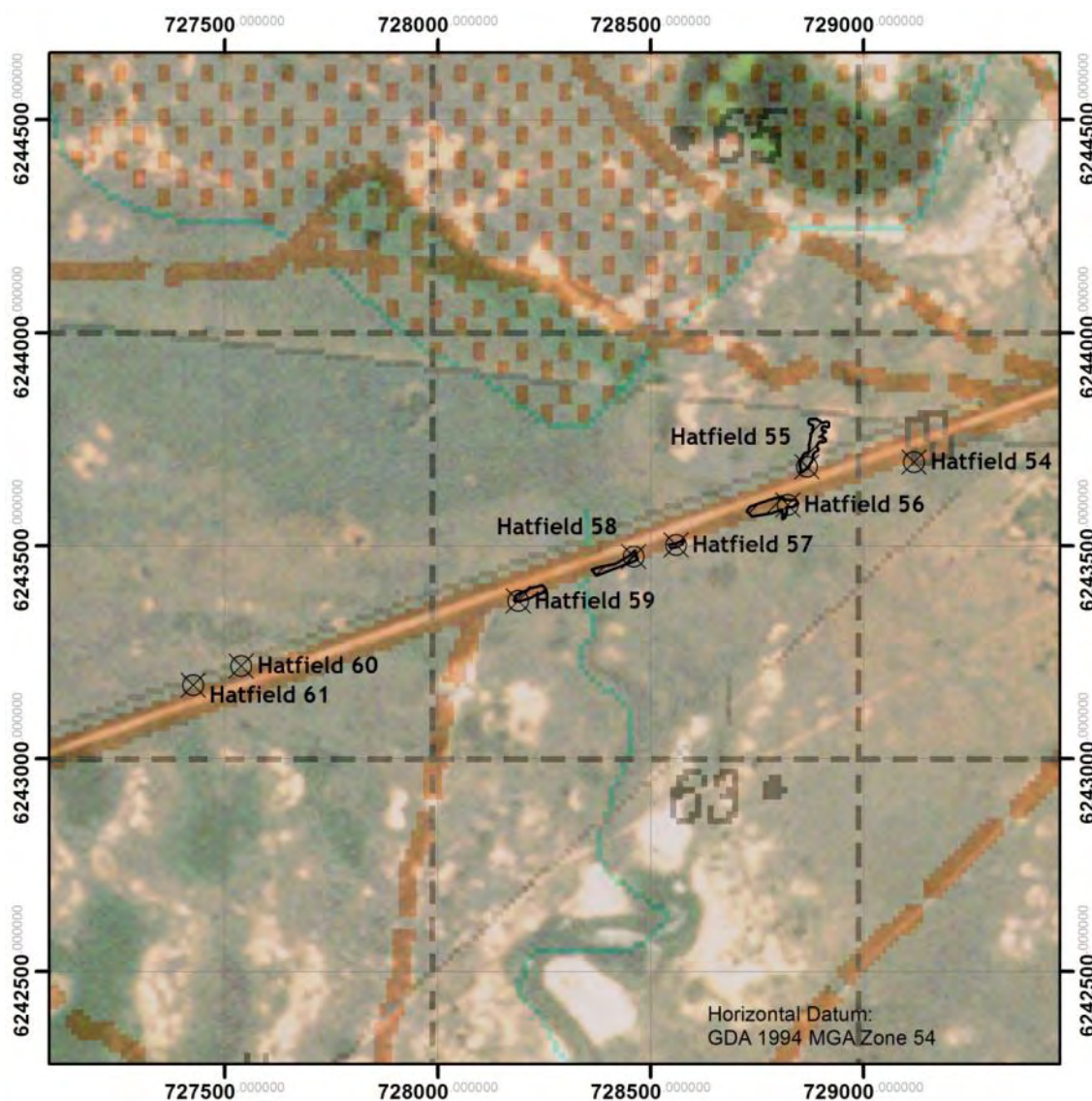
Hatfield 55 is located in an exposure the Hatfield land system, 15 m north of Link Road and 895 m south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a flaking floor with 42 silcrete artefacts, including retouched tools. Potential water sources, such as depressions, are present within 500 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 55 - Exposure



Hatfield 55 - Artefacts on flaking floor





## Hatfield 56

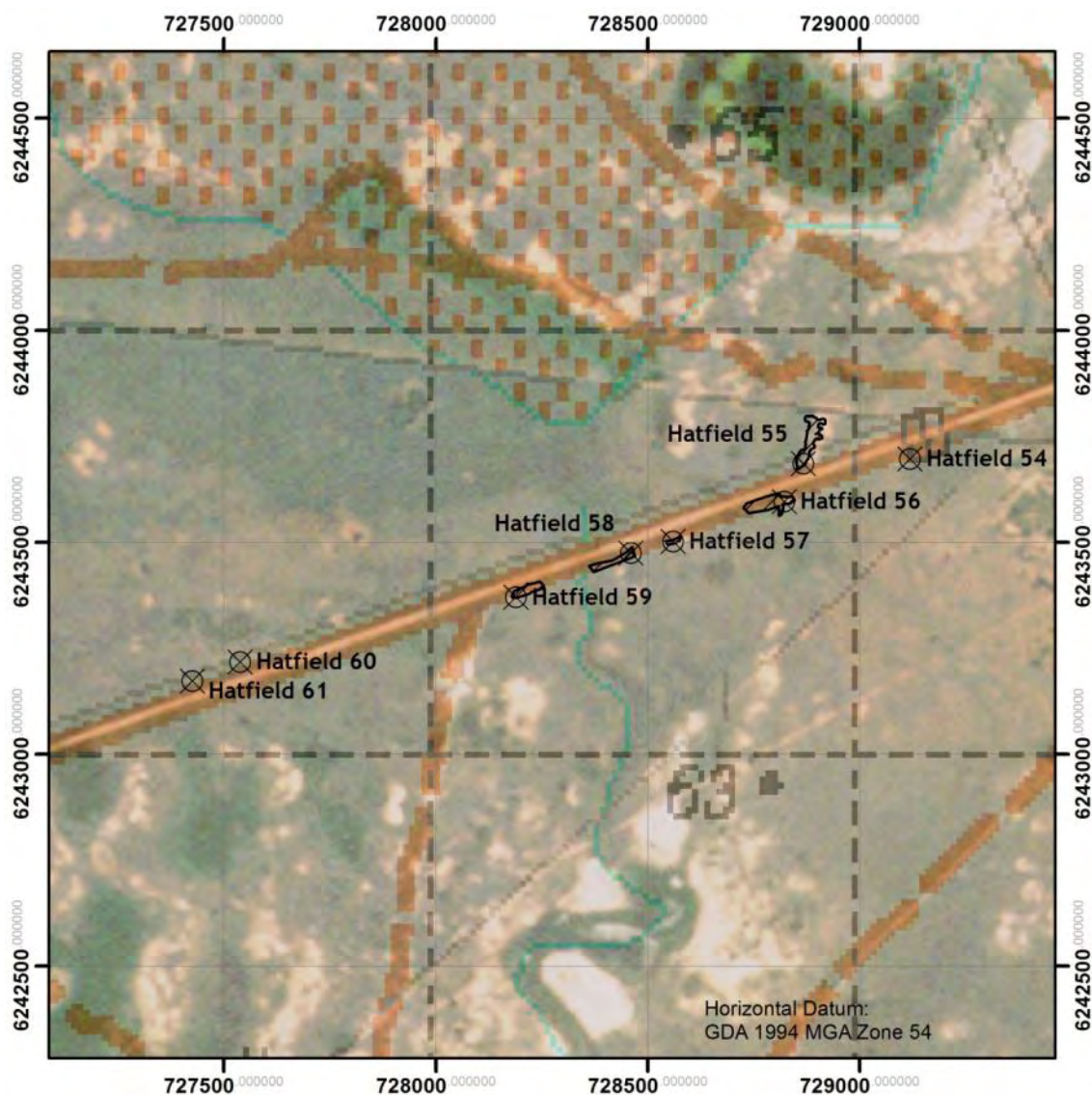
Hatfield 56 is located in an exposure the Hatfield land system, 5 m to 10 m south of Link Road and 970 m south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of eight silcrete artefacts including a core, retouched tools, a cortical flake inside an intact hearth; an eroding hearth; and buried bone. Potential water sources, such as depressions, are present within 500 m of the site. Visibility is good and further artefacts and hearths may be present.



Hatfield 56 - Exposure



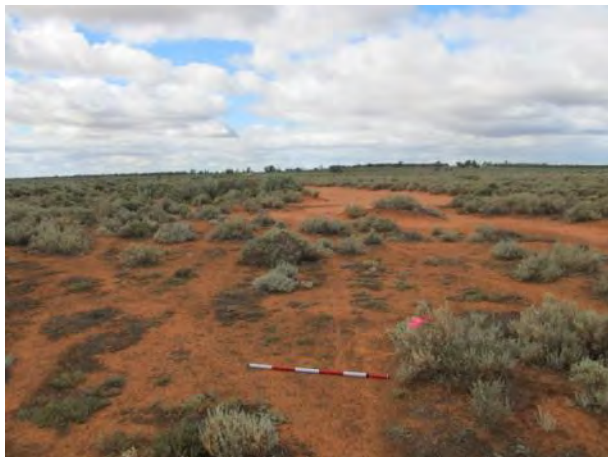
Hatfield 56 - Hearth





## Hatfield 57

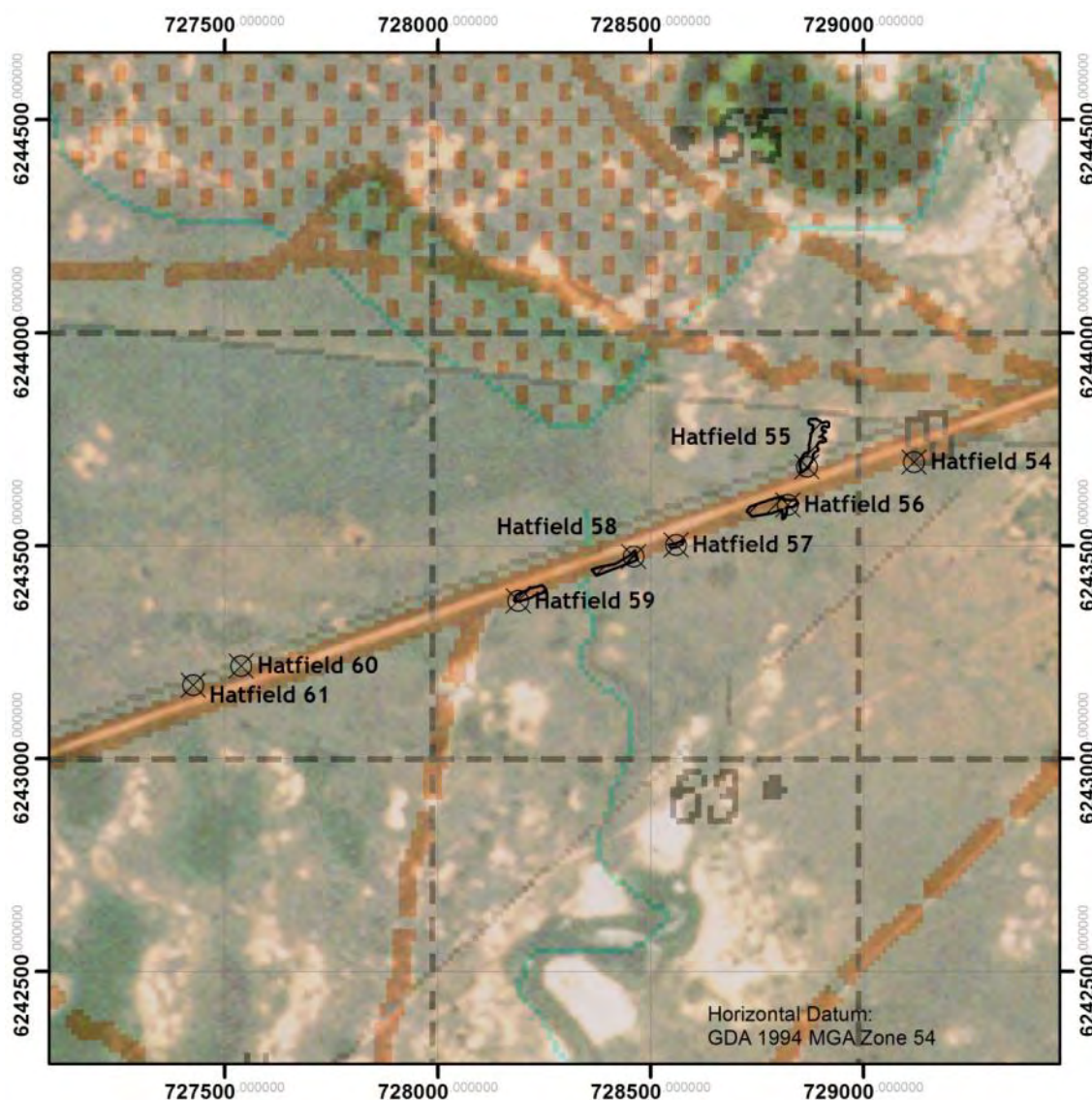
Hatfield 57 is located in an exposure to the south of a grader cut drainage/dam/swale within the Hatfield land system, 15 m south of Link Road and 1.23 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of four silcrete flakes including retouched tools. Potential water sources, such as depressions, are present within 500 m of the site. Visibility is good and further artefacts may be present.



Hatfield 57 - General location



Hatfield 57 -Artefacts



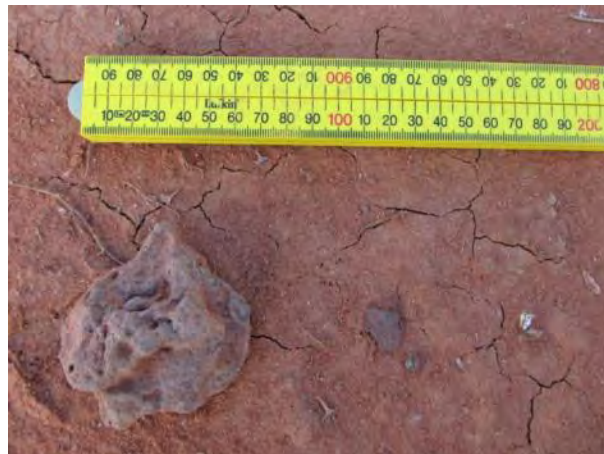


## Hatfield 58

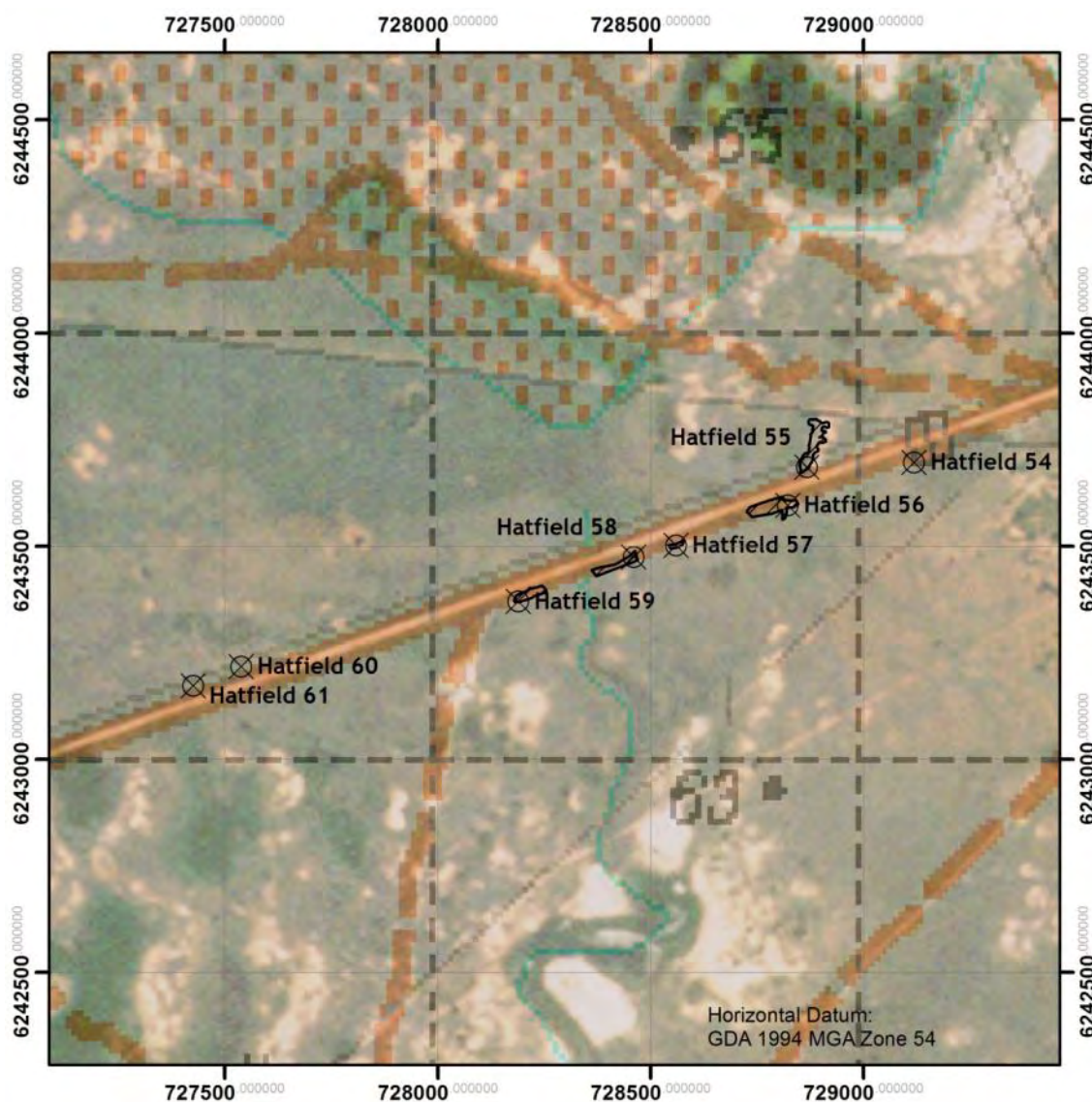
Hatfield 58 is located along one side of a drainage channel within the Hatfield land system, 10 m north of Link Road and 1.36 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a six silcrete artefacts some of which were burnt and a few scattered heat retaining stones. Potential water sources, such as depressions, are present within 500 m of the site. Visibility is good and further artefacts may be present.



Hatfield 58 - General location



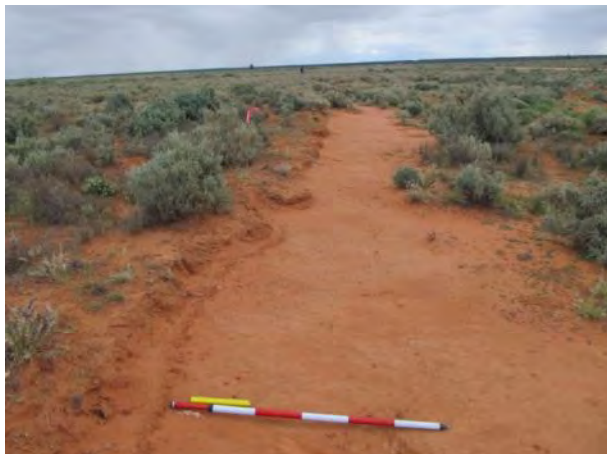
Hatfield 58 - Heat retainer and burnt silcrete flake





## Hatfield 59

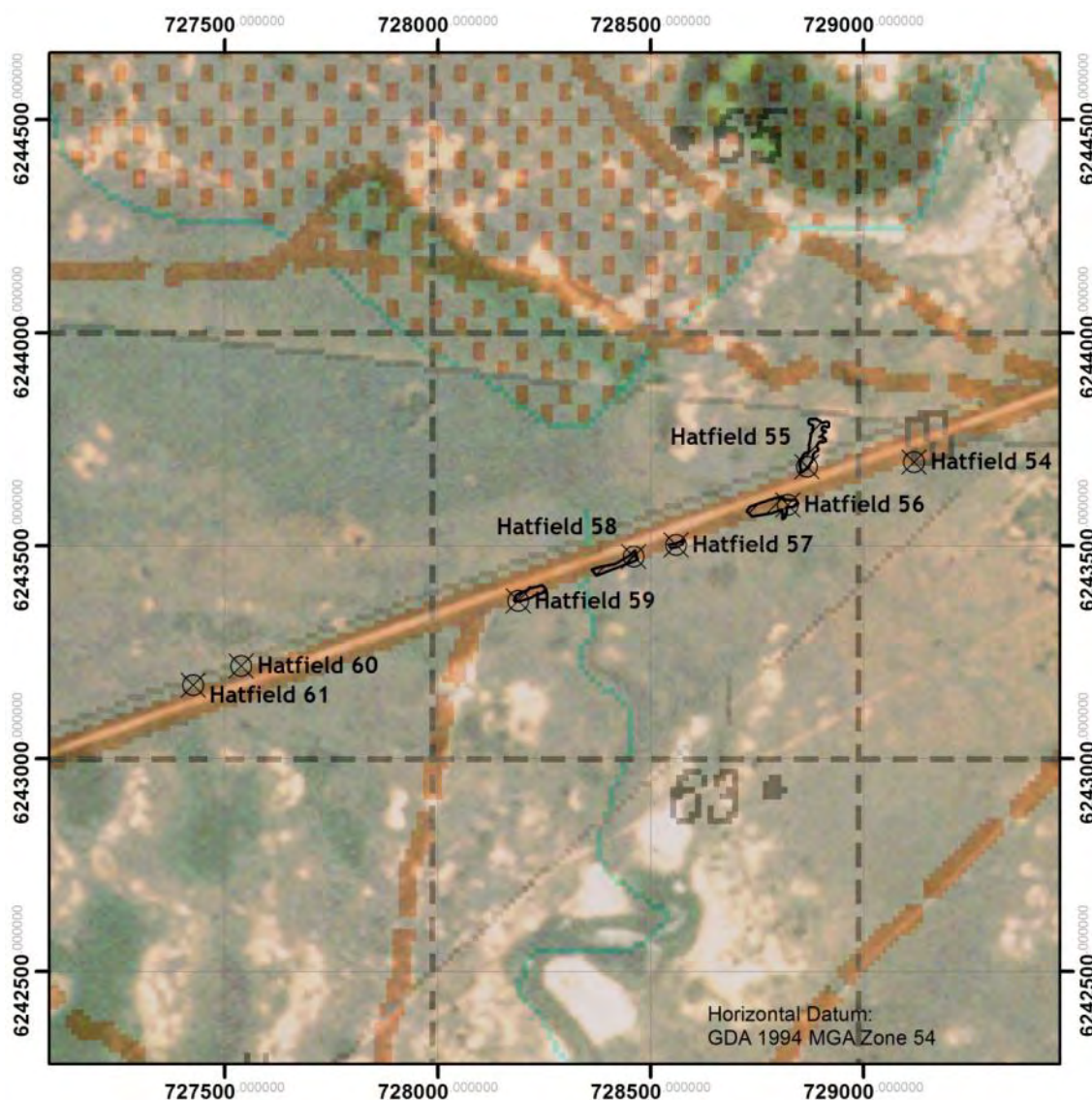
Hatfield 59 is located in exposures along both sides of a drainage channel within the Hatfield land system, 15 m south of Link Road and 1.57 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of nine silcrete broken flakes. Potential water sources, such as depressions, are present within 600 m of the site. Visibility is good and further artefacts may be present.



Hatfield 59 - General location



Hatfield 59 - Example of artefacts





## Hatfield 60

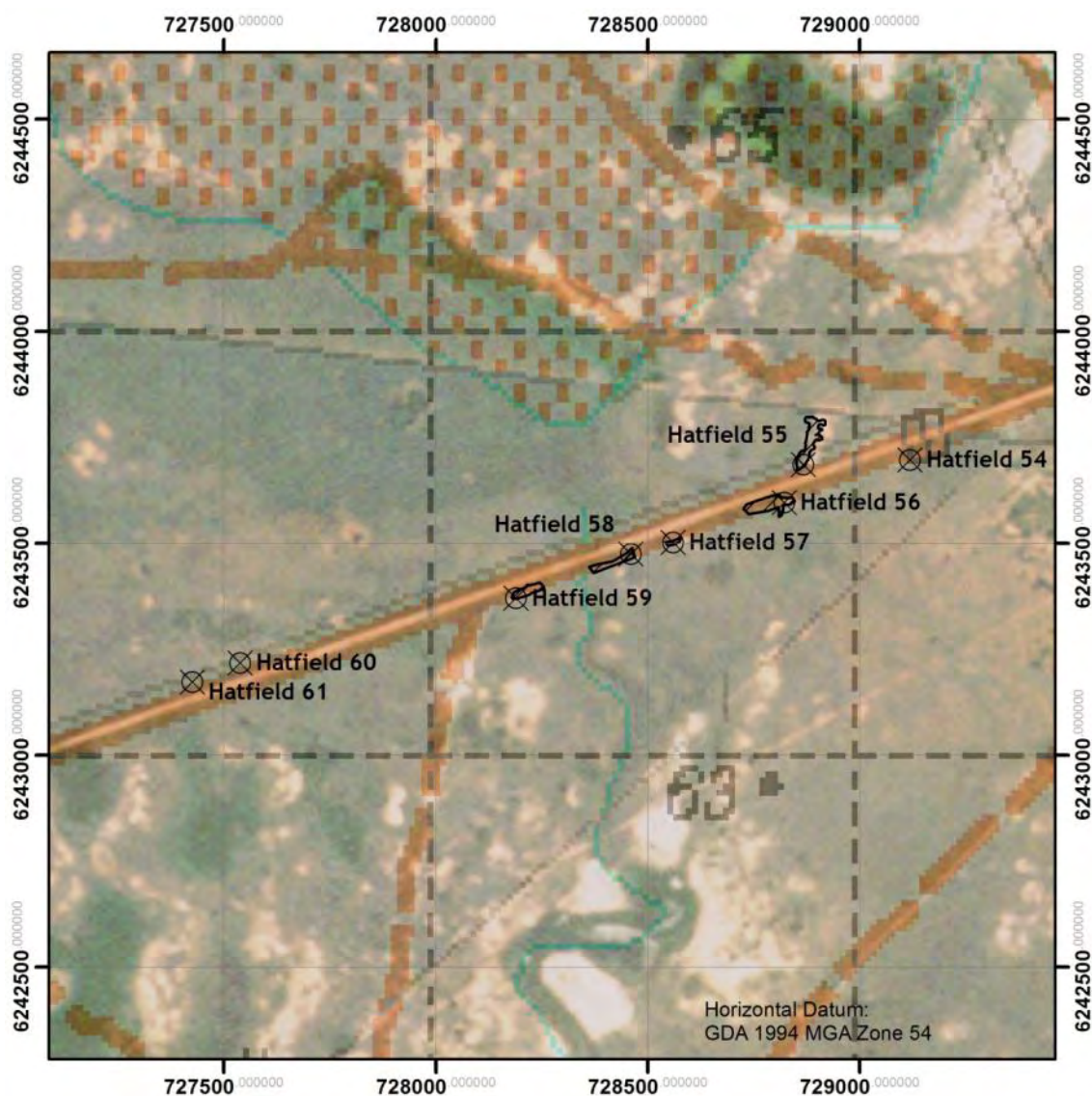
Hatfield 60 is located in discontinuous exposure within the Hatfield land system, 25 m north of Link Road and 2.32 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single silcrete flake. Potential water sources, such as depressions, are present within 300 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 60 - General location



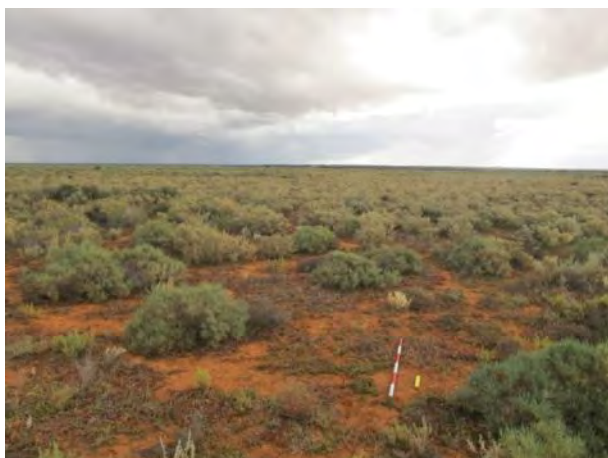
Hatfield 60 - Single silcrete artefact





## Hatfield 61

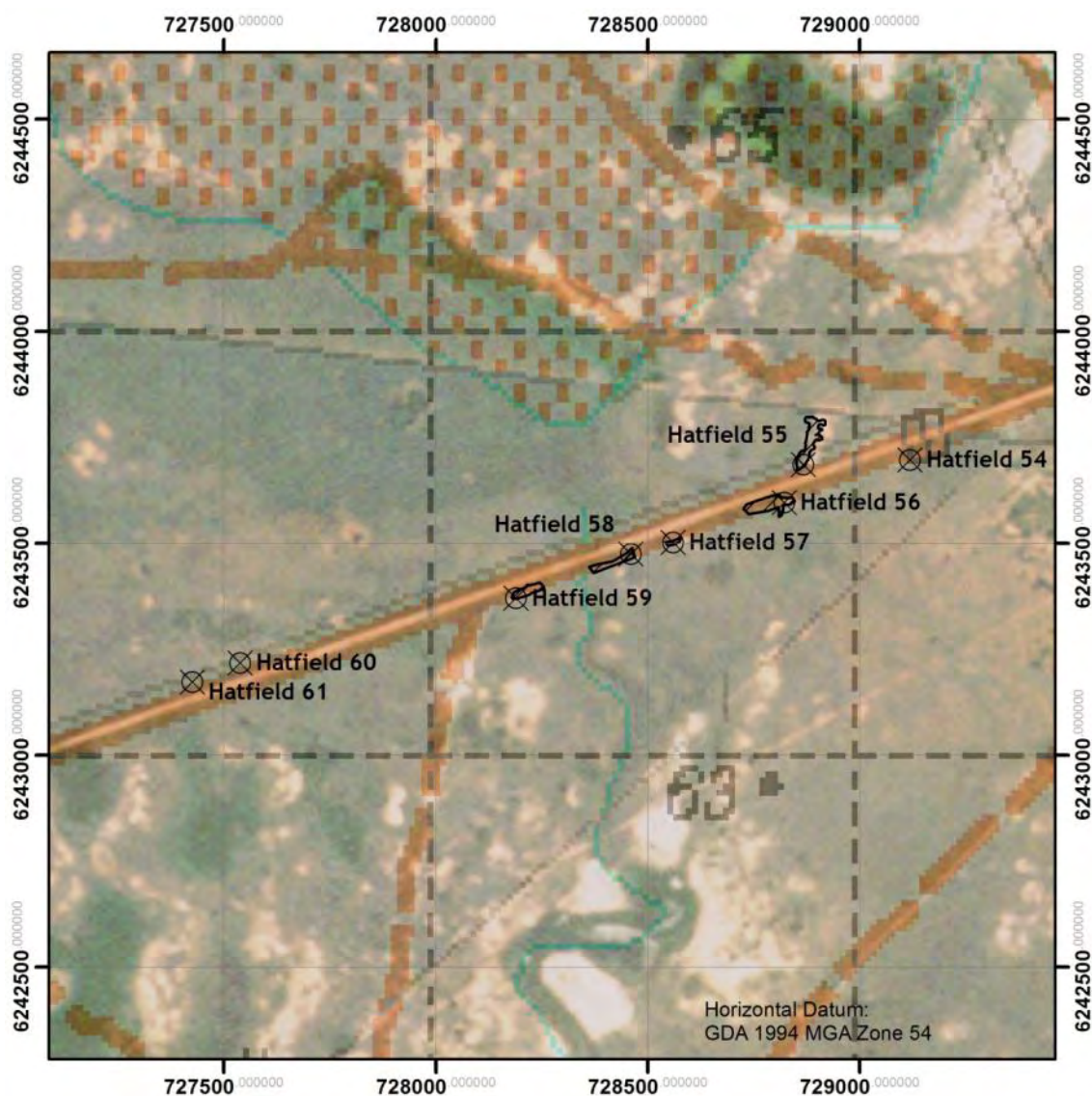
Hatfield 61 is located in discontinuous exposure within the Hatfield land system, 20 m north of Link Road and 2.42 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single silcrete flake. Potential water sources, such as depressions, are present within 300 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 61 - General location



Hatfield 61 - Partially buried silcrete flake





## Hatfield 62

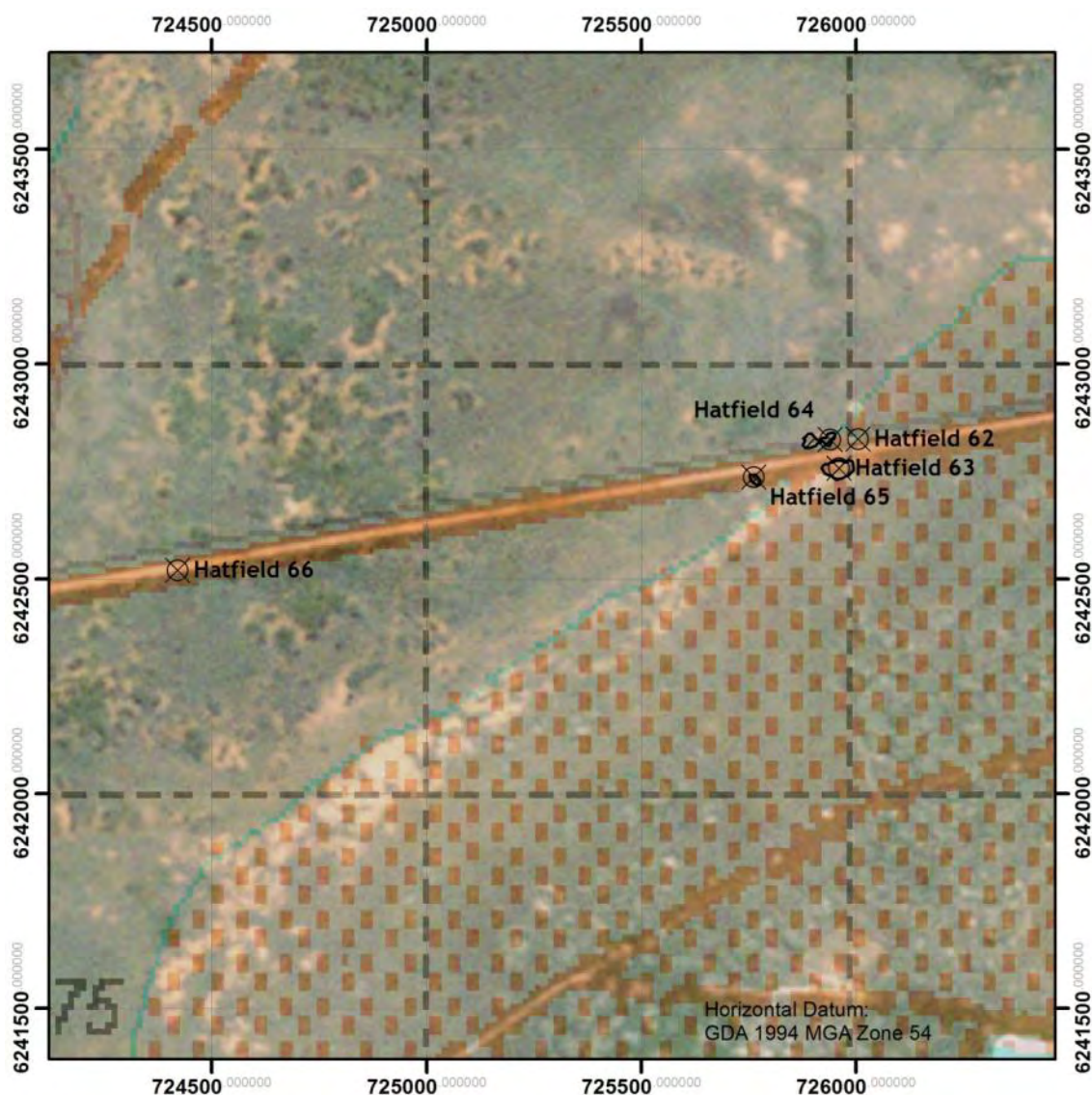
Hatfield 62 is located within the Hatfield land system in a vegetated area, 20 m north of Link Road and 3.9 km south-west of Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single cortical silcrete flake. Potential water sources, such as depressions, are present within 600 m of the site. Visibility is moderate and further artefacts may be present. Hatfield 62 should be considered a continuation of Hatfield 63 and 64.



Hatfield 62 - General location



Hatfield 62 - Silcrete cortical flake





## Hatfield 63

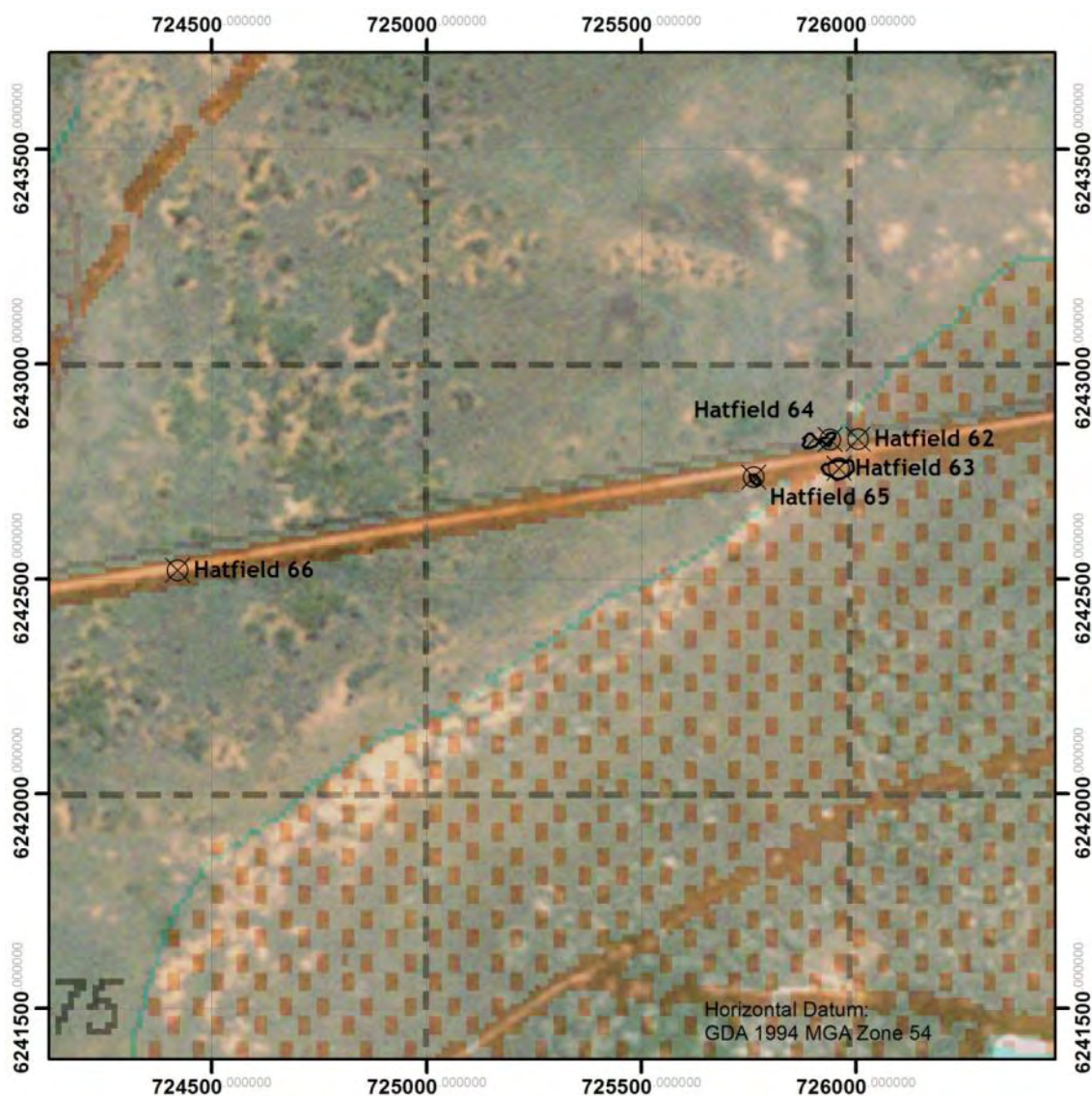
Hatfield 63 is located within the Youhl land system in a vegetated area, 5 m south of Link Road and 3.91 km south-west from Boree Plains-Gol Gol Road and Link Road intersection. The site consists of three artefacts. Potential water sources, such as depressions, are present within 600 m of the site. Visibility is moderate and further artefacts may be present. Hatfield 63 should be considered a continuation of Hatfield 62 and 64.



Hatfield 63 - General location



Hatfield 63 - Artefact





## Hatfield 64

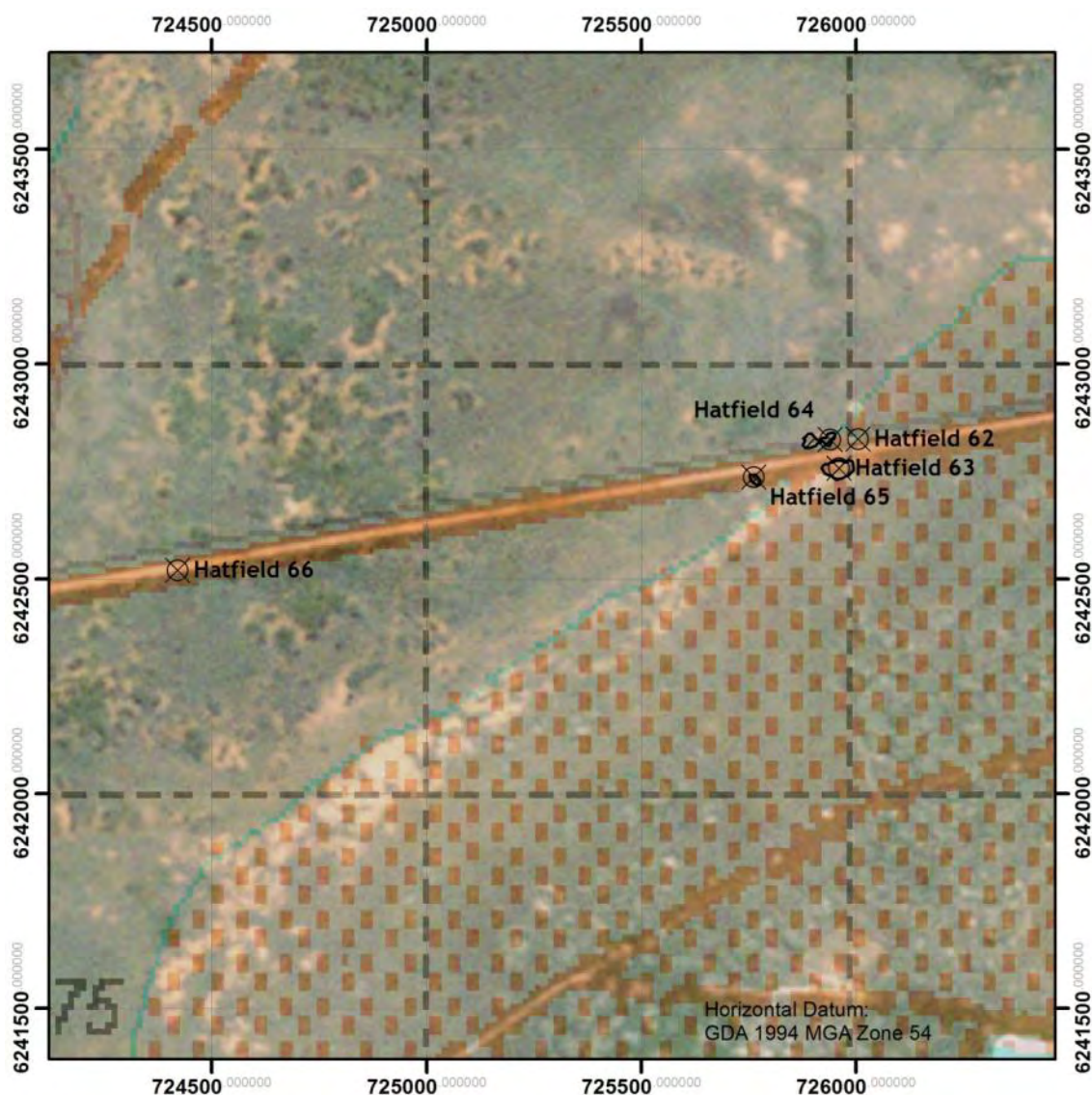
Hatfield 64 is located in discontinuous series of exposures and vegetated areas within the Hatfield land system, 15 m north of Link Road and 3.95 km south-west from Boree Plains-Gol Gol Road and Link Road intersection. The site consists of 20 artefacts. Potential water sources, such as depressions, are present within 600 m of the site. Visibility is moderate and further artefacts may be present. Hatfield 64 should be considered a continuation of Hatfield 62 and 63.



Hatfield 64 - General location



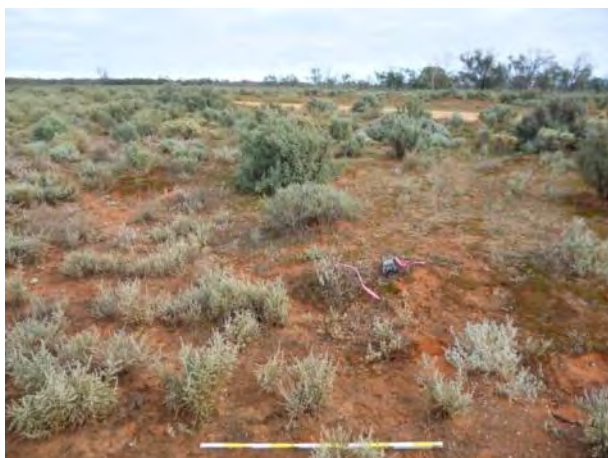
Hatfield 64 - Example of artefacts





## Hatfield 65

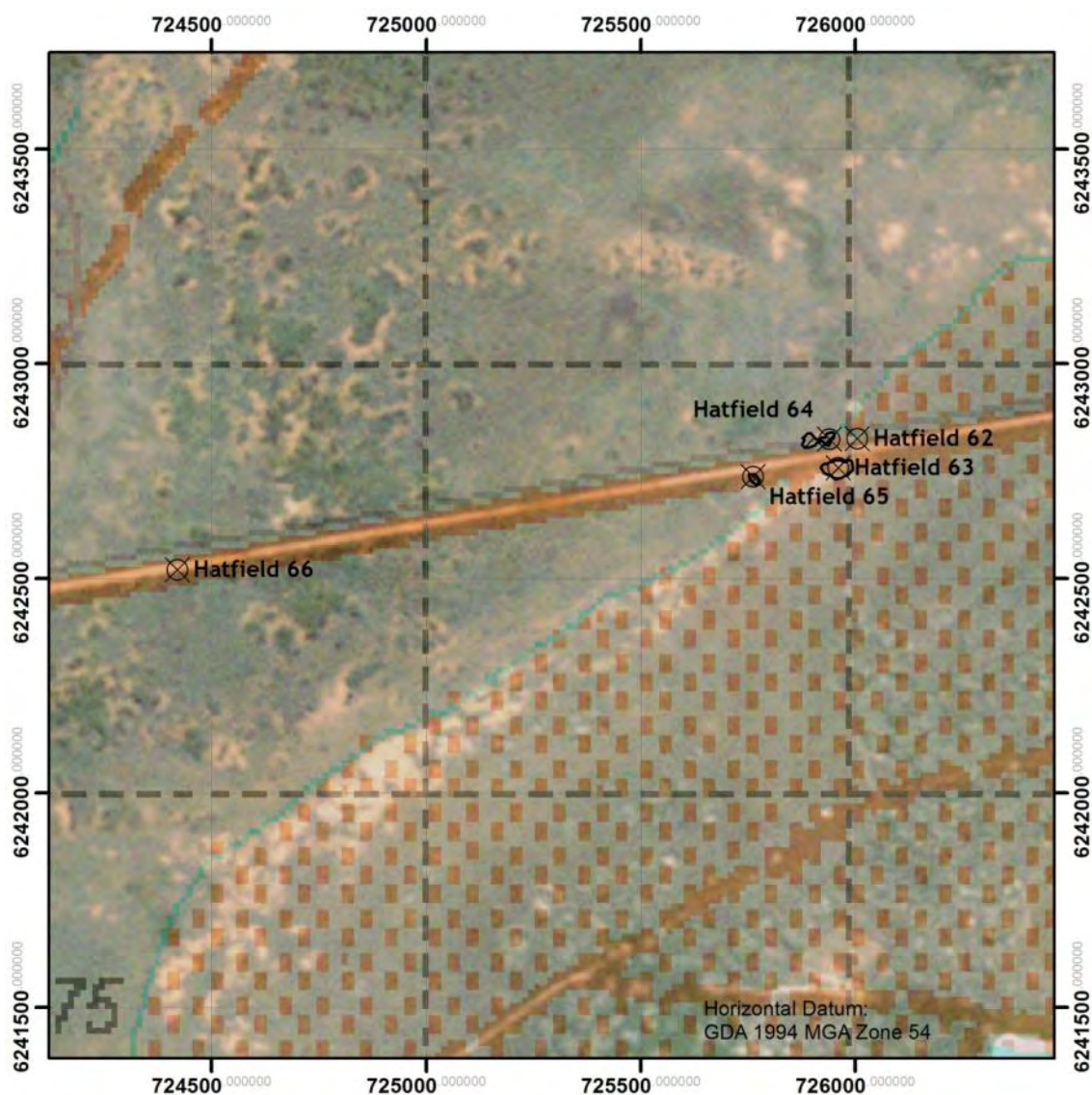
Hatfield 65 is located within the Hatfield land system in a vegetated area, 10 m south of Link Road and 4.06 km south-west from Boree Plains-Gol Gol Road and Link Road intersection. The site consists of three artefacts and a hearth. Potential water sources, such as depressions, are present within 600 m of the site. Visibility is moderate and further artefacts may be present.



Hatfield 65 - General location



Hatfield 65 - Artefact example





## Hatfield 66

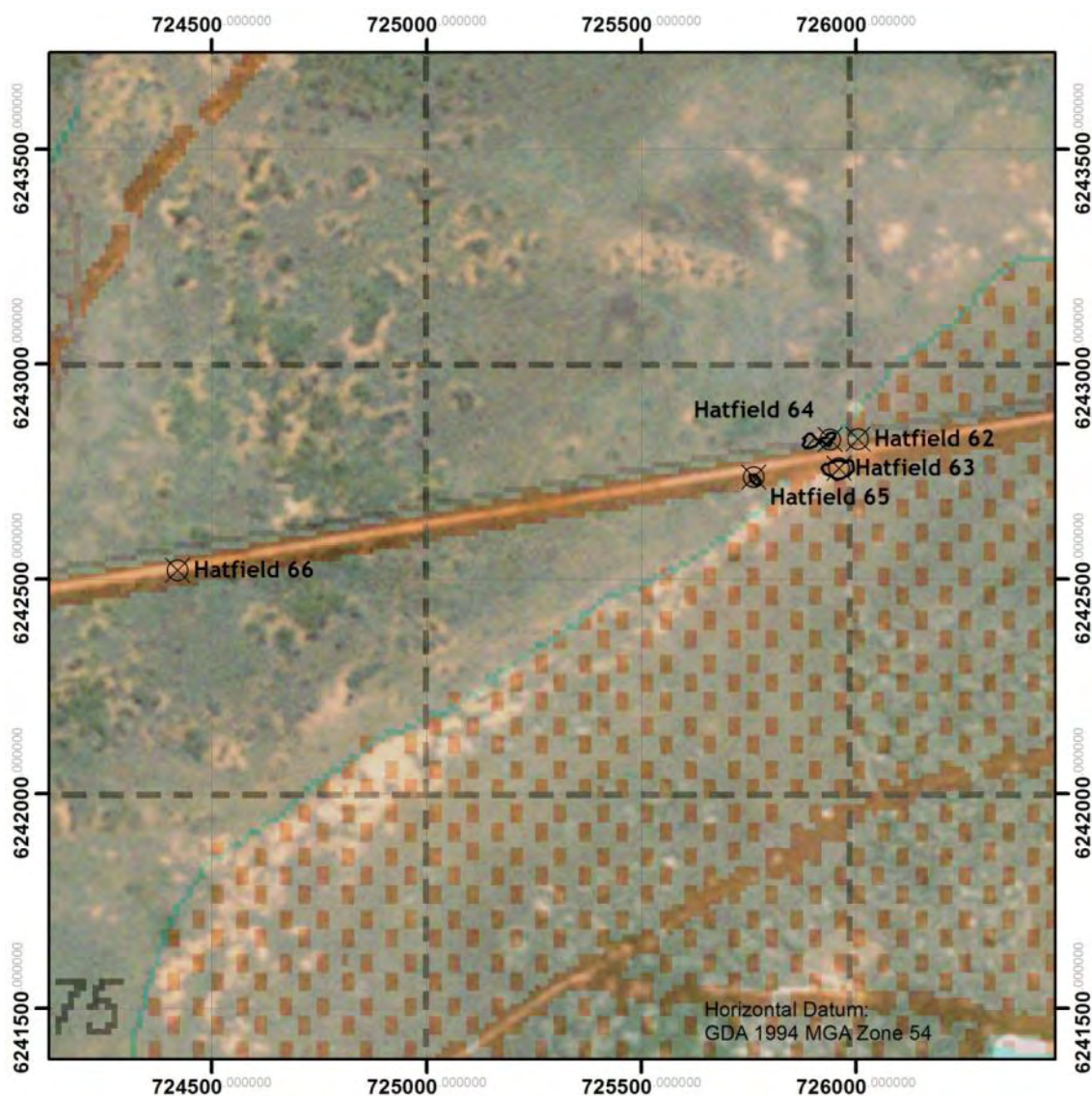
Hatfield 66 is located within the Mulurulu land system in the road verge immediately south of the Link Road and 5.53 km south-west from Boree Plains-Gol Gol Road and Link Road intersection. The site consists of a single silcrete artefact. Potential water sources, such as depressions, are present within 600 m of the site. Visibility was very good.



Hatfield 66 - General location



Hatfield 66 - Silcrete flake





## Domestic Dwelling Remains

This site comprises a historic artefact scatter and is indicative that a building, probably a house, once existed on the site. The site is located approximately 30 m on the eastern side of Magenta Road.

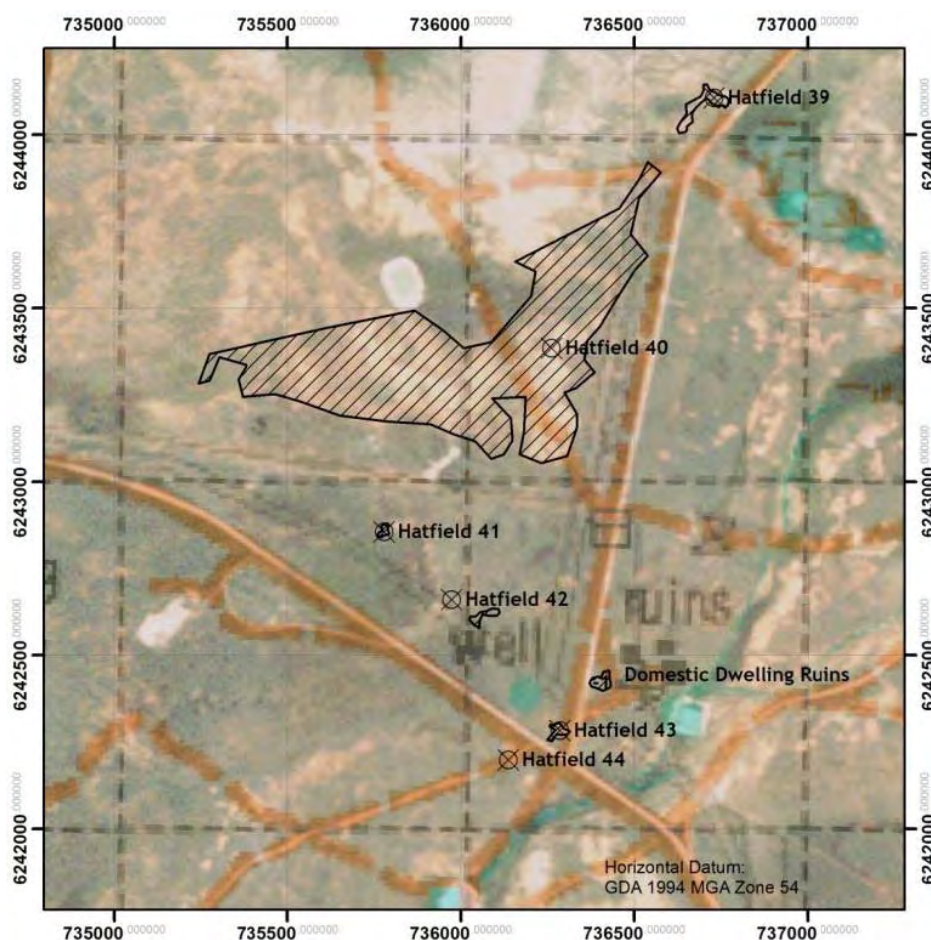
The site consist of numerous bottles, ceramics, metals as well as red brick fragments, roofing iron and fence wire. The majority of bottles on the site have diagnostic features and their manufacture has been dated to between 1880 and 1929. There are pieces of ceramic with diagnostic features, however, these pieces have not yet been prescribed a date or place of manufacture. Other items, such as a make-up tin, suggest that this was once the site of a house. Ray Murray, a traditional owner from the Balranald Local Aboriginal Land Council, recounts a story from his youth, remembering a small house at the location, possibly belonging to the regions post man (*pers. Comm.* Ray Murray 2012). It is unknown when the building was demolished. This site has the potential to contain subsurface historical archaeological deposit.



Domestic Dwelling Remains - Scatter of bottles and metal objects



Domestic Dwelling Remains - Scatter of historical artefacts including roofing iron.





## Marked Tree

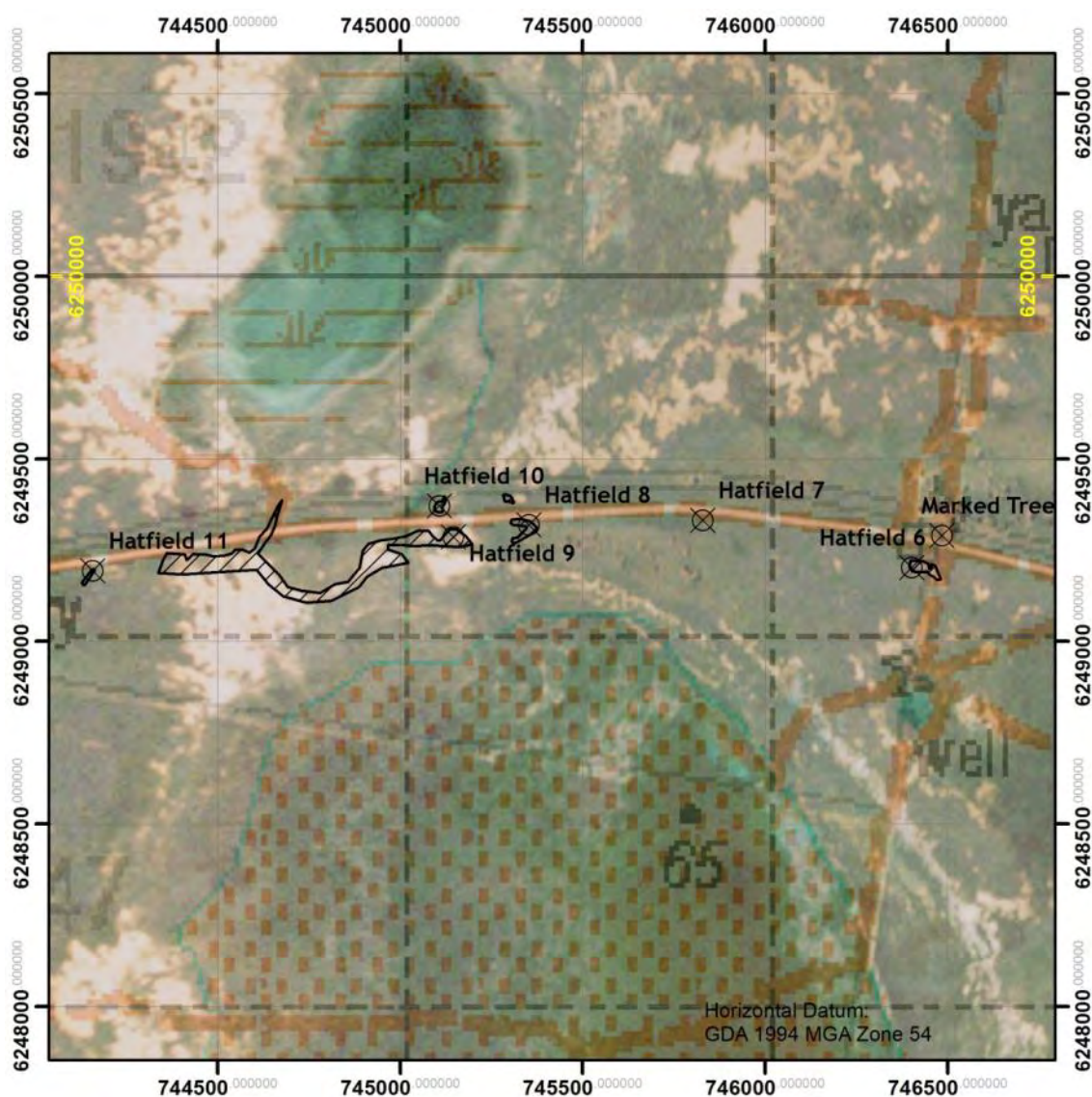
A marked tree, probably dating to the first half of the twentieth century. The tree is a living Belah tree, with a small area of bark removal with an upward facing arrow and the letters RD. The tree is located on the north side of The Vale-Hatfield Road, 6.5 km from the intersection with the Ivanhoe-Balranald Road. The tree is just to the east of a fence line and cattle grid that crosses The Vale-Hatfield Road.



Marked Tree - Location of the marked tree



Marked Tree - Detail of the marked tree

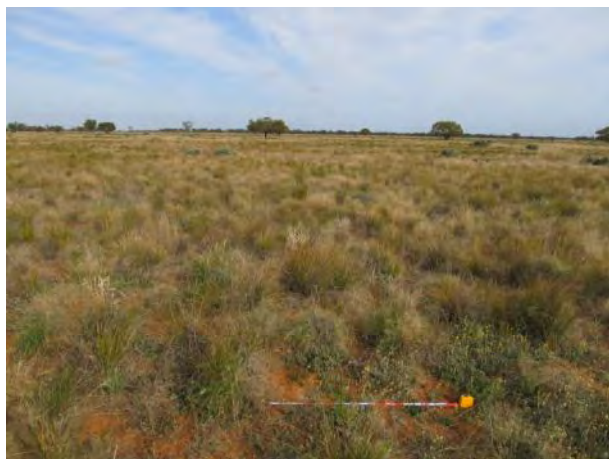




## Site Descriptions - Ivanhoe

### Ivanhoe RLF 7

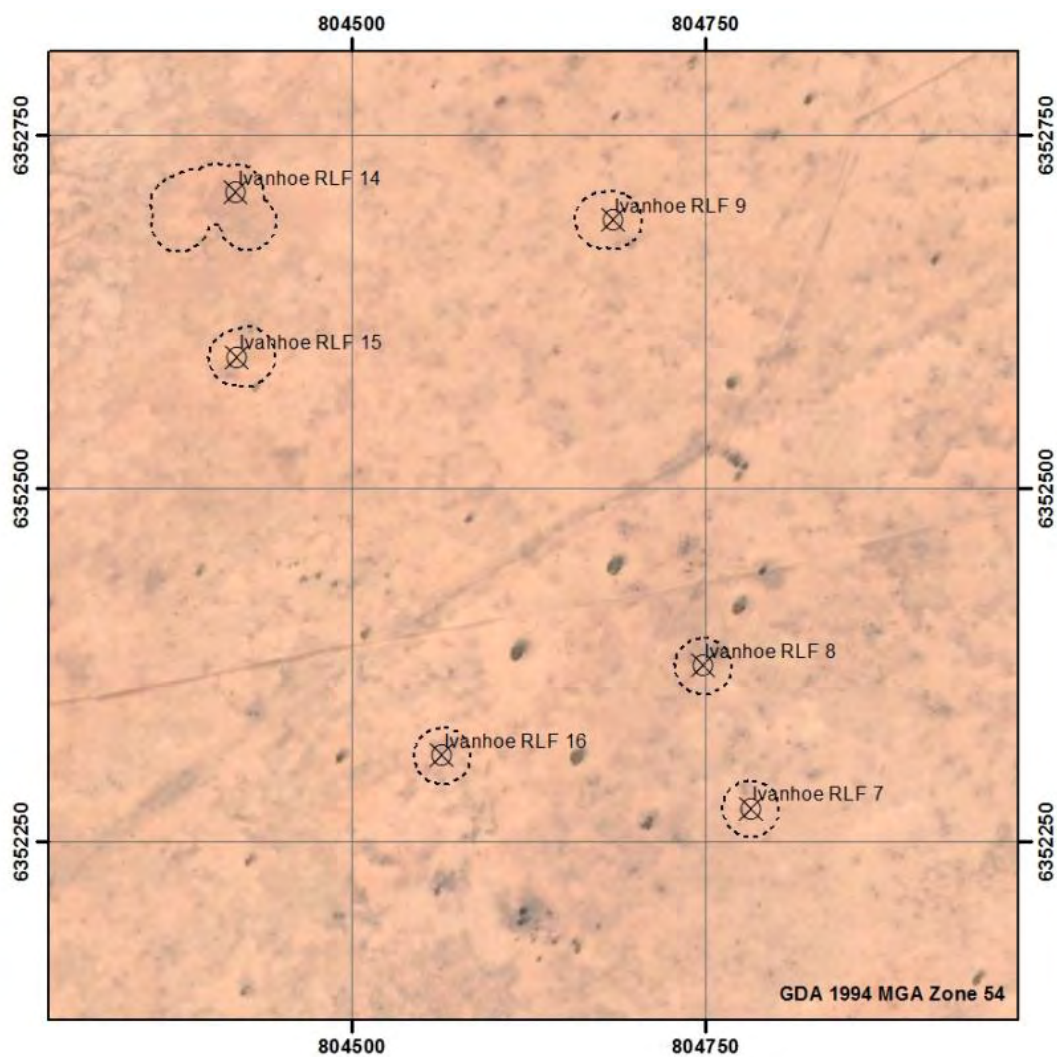
Ivanhoe RLF 7 is located within the Hatfield land system, in a patchy exposure in an area otherwise covered in grass with poor visibility, 855 m west of the Balranald Road, 1.76 m south of the Ivanhoe Railway line and 165 m south of a transmission line. The site consists of a single artefact. The artefact was a medial flake with retouch/usewear on 25% of one lateral margin.



Ivanhoe RLF7- General location and exposure



Ivanhoe RLF7 - Medial retouched flake





## Ivanhoe RLF 8

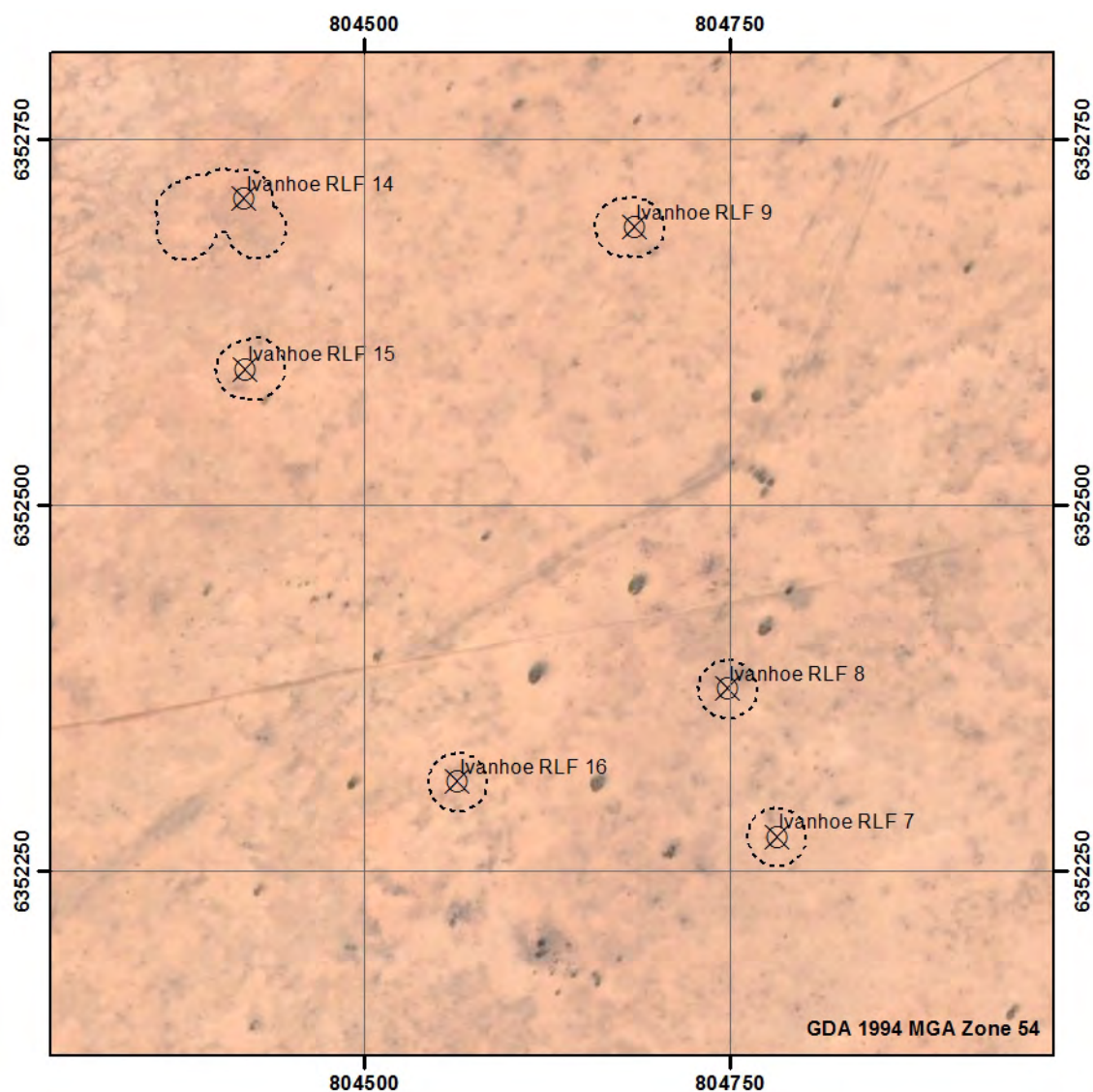
Ivanhoe RLF 8 is located within the Hatfield land system. This was a single artefact in an area of patchy exposure, 50 m south of a transmission line. The artefact was complete flake with some retouch on the lateral margin.



Ivanhoe RLF8 - General location



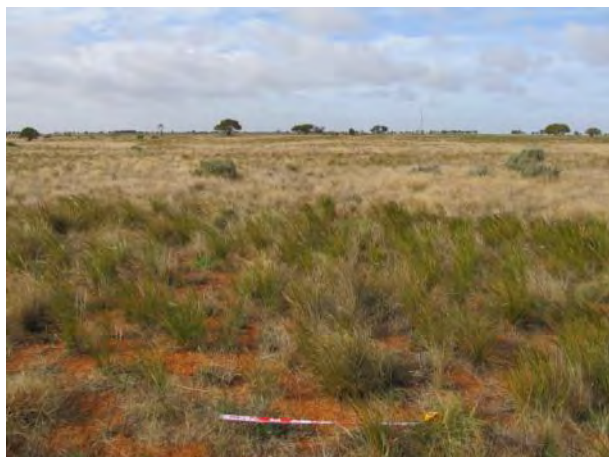
Ivanhoe RLF 8 - Silcrete complete flake





## Ivanhoe RLF 9

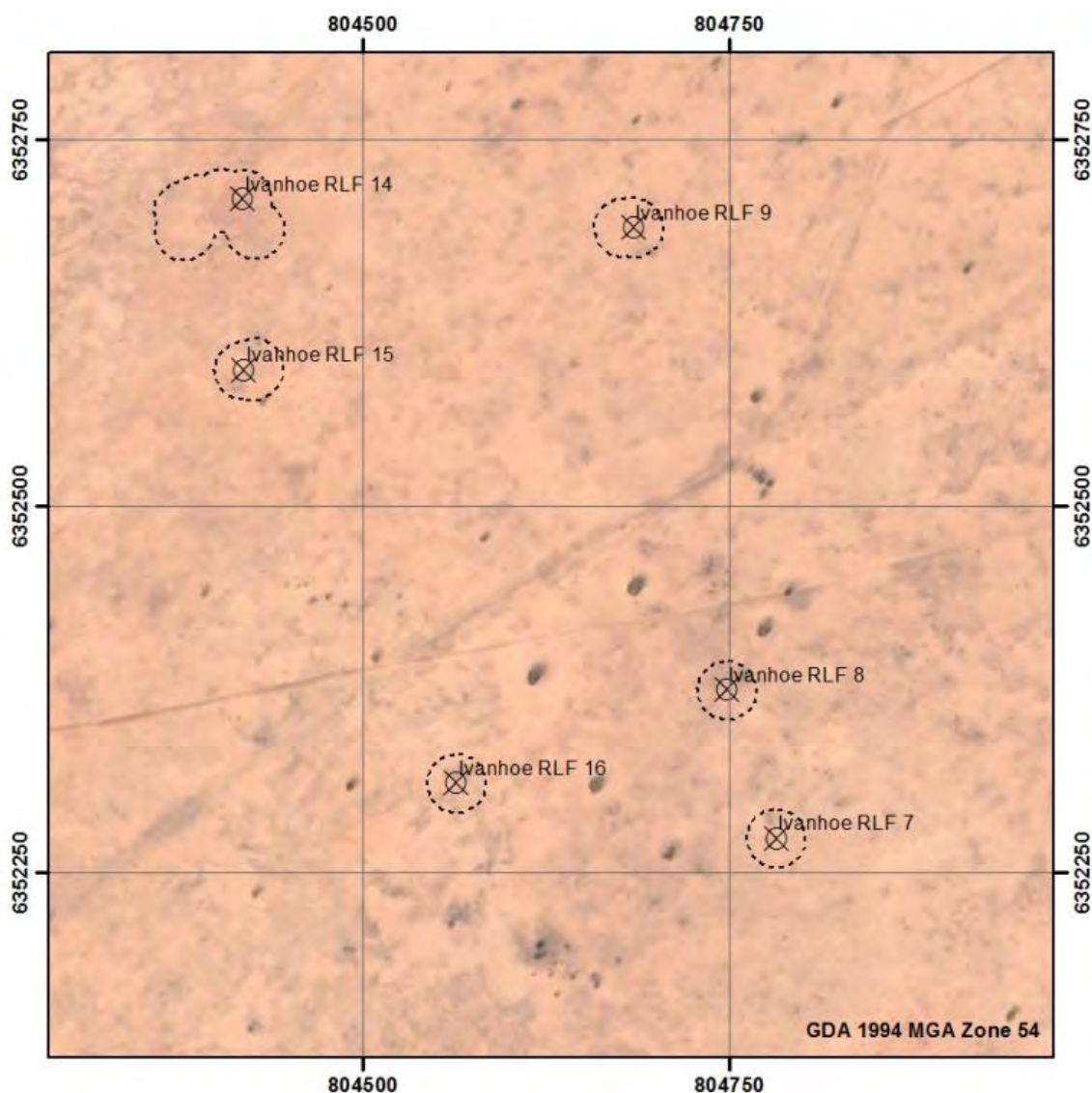
Ivanhoe RLF 9 is located within the Hatfield land system, 275 m north of a transmission line. The site consists of a low density artefact concentration on patchy exposure adjacent the margins of a shallow depression. Visibility was recorded at 30%. Three artefacts were located and non-artefactual silcrete gibber was present. Artefacts included two complete flakes and a core.



Ivanhoe RLF9 - General location



Ivanhoe RLF 9 - Silcrete complete flake



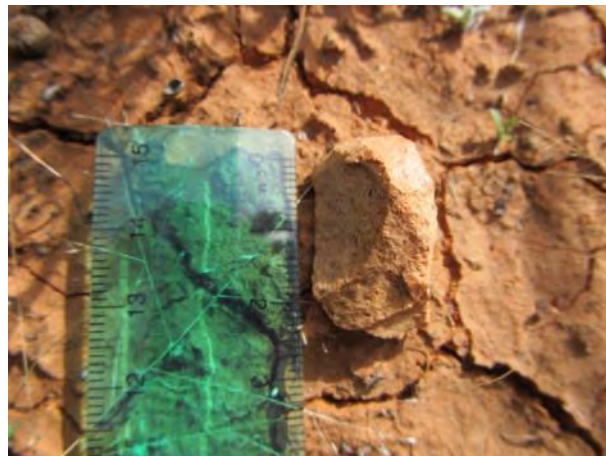


## Ivanhoe RLF 10

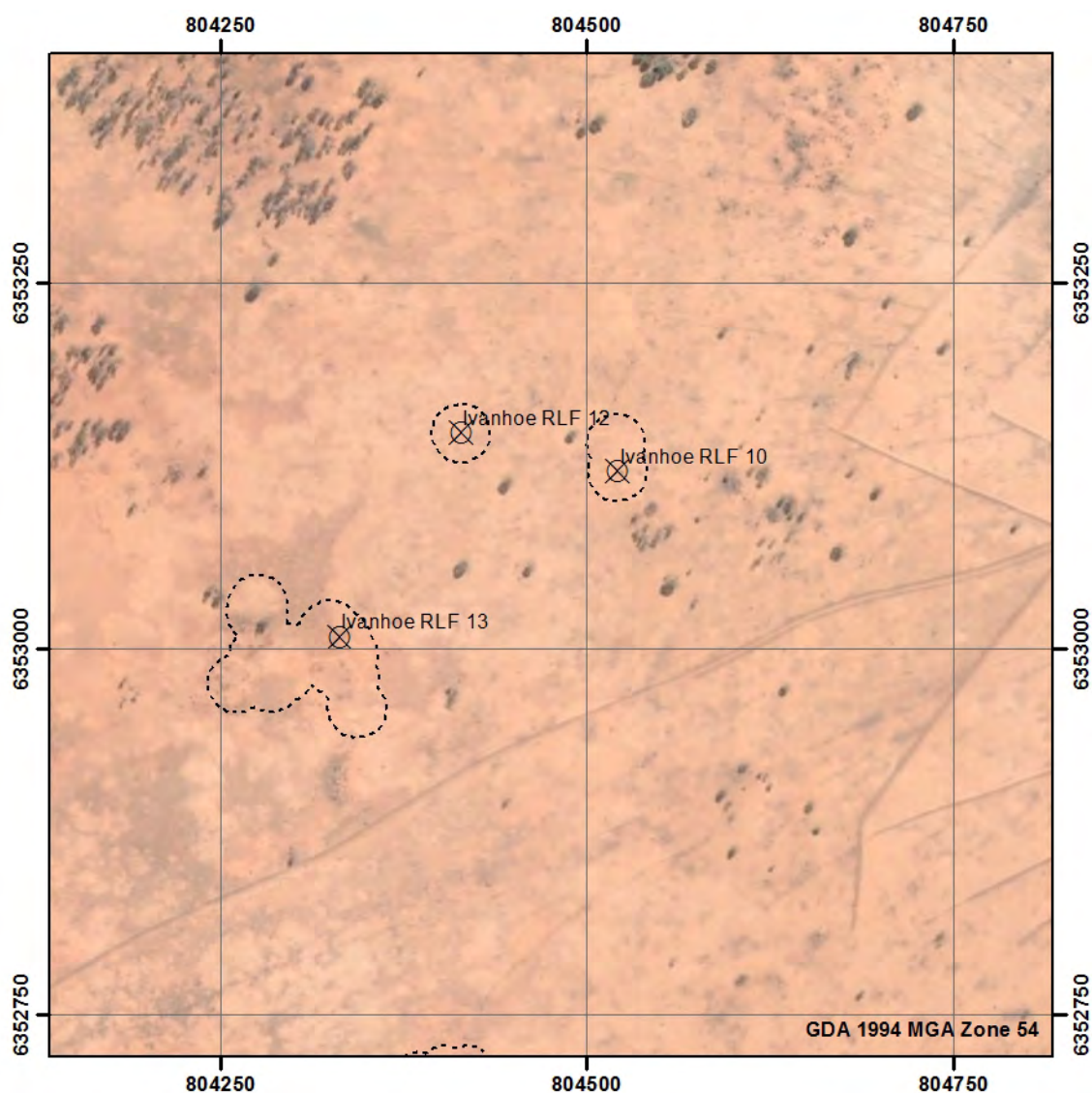
Ivanhoe RLF 10 is located within the Hatfield land system, on the margins of a shallow depression or revegetated scald, 630 m west of a dam. The site consists of two silcrete artefacts, a retouched flake and a retouched tool. Silcrete gibber with thermal cracking is also present. The artefacts were located in a small areas of exposure across approximately 40 m x 20 m, in an area where otherwise visibility and exposure was not present due to thick grass.



Ivanhoe RLF10 - General location and exposure



Ivanhoe RLF 10 - Retouched tool





## Ivanhoe RLF 11

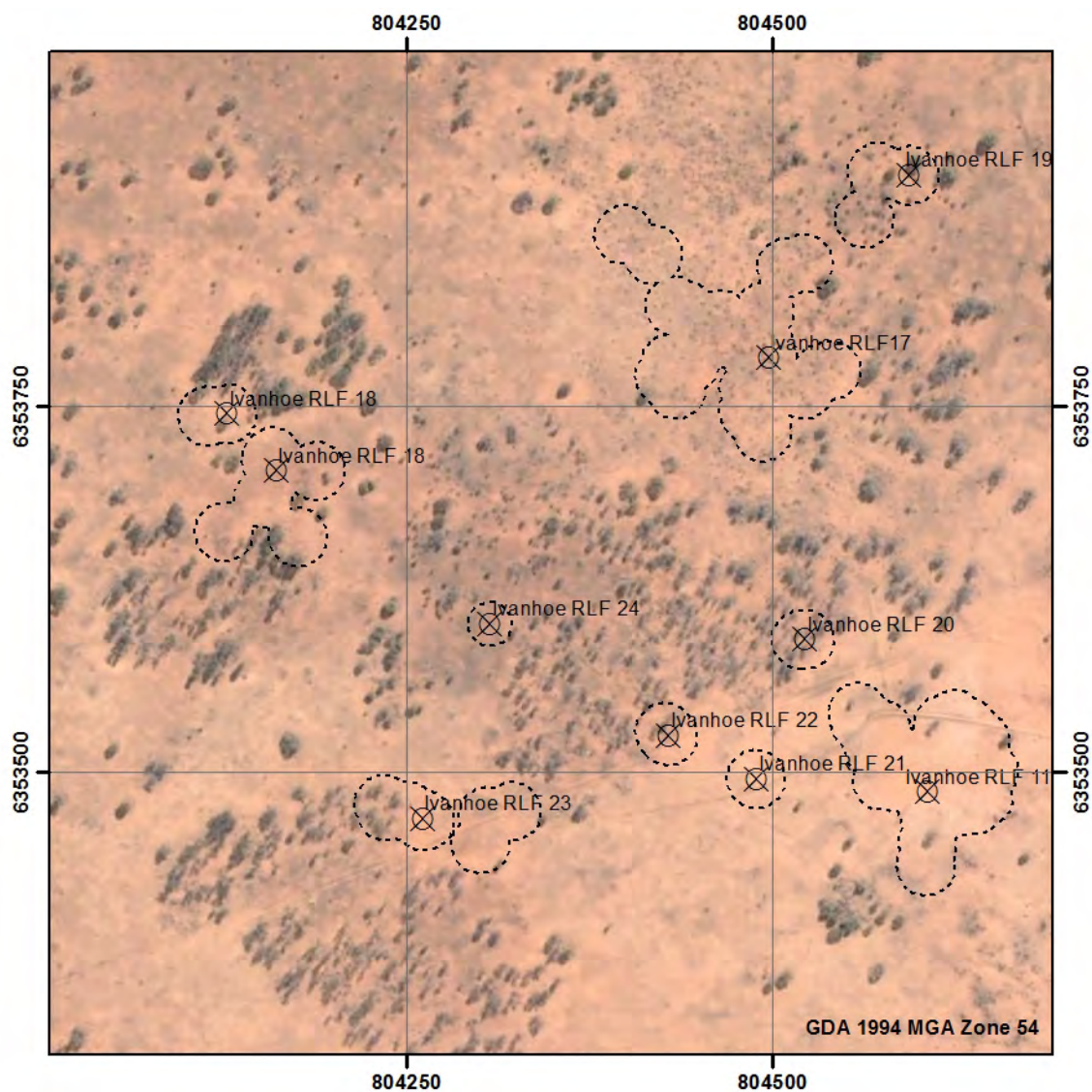
Ivanhoe RLF 11 is located within the Hatfield land system, within a series of scalds and within residual soil adjacent the scalds, 550 m north-west of a dam and 540 m south of the Ivanhoe Railway line. The site consists of over 160 artefacts, an eroding hearth and a partially buried hearth. A sample of 25 artefacts were recorded. The site dimensions are 135 m x 130 m, intersected by a buried water pipe that leads to the dam. Beyond the scalds and pans visibility was poor in this area due to grass cover. Residual soil within and adjacent the scalds most likely retain subsurface deposit.



Ivanhoe RLF11 - General location and exposure



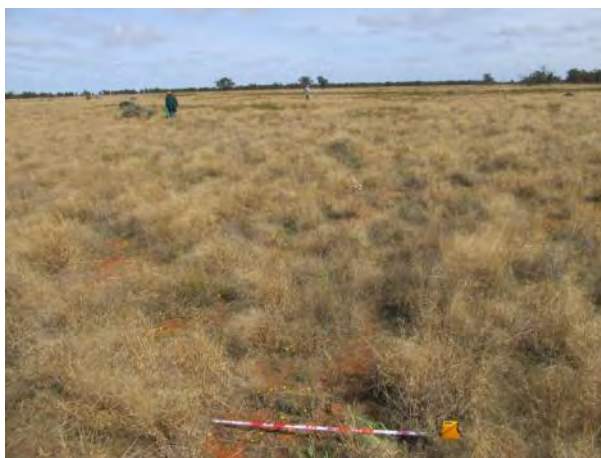
Ivanhoe RLF 11 - Silcrete core and chert flake



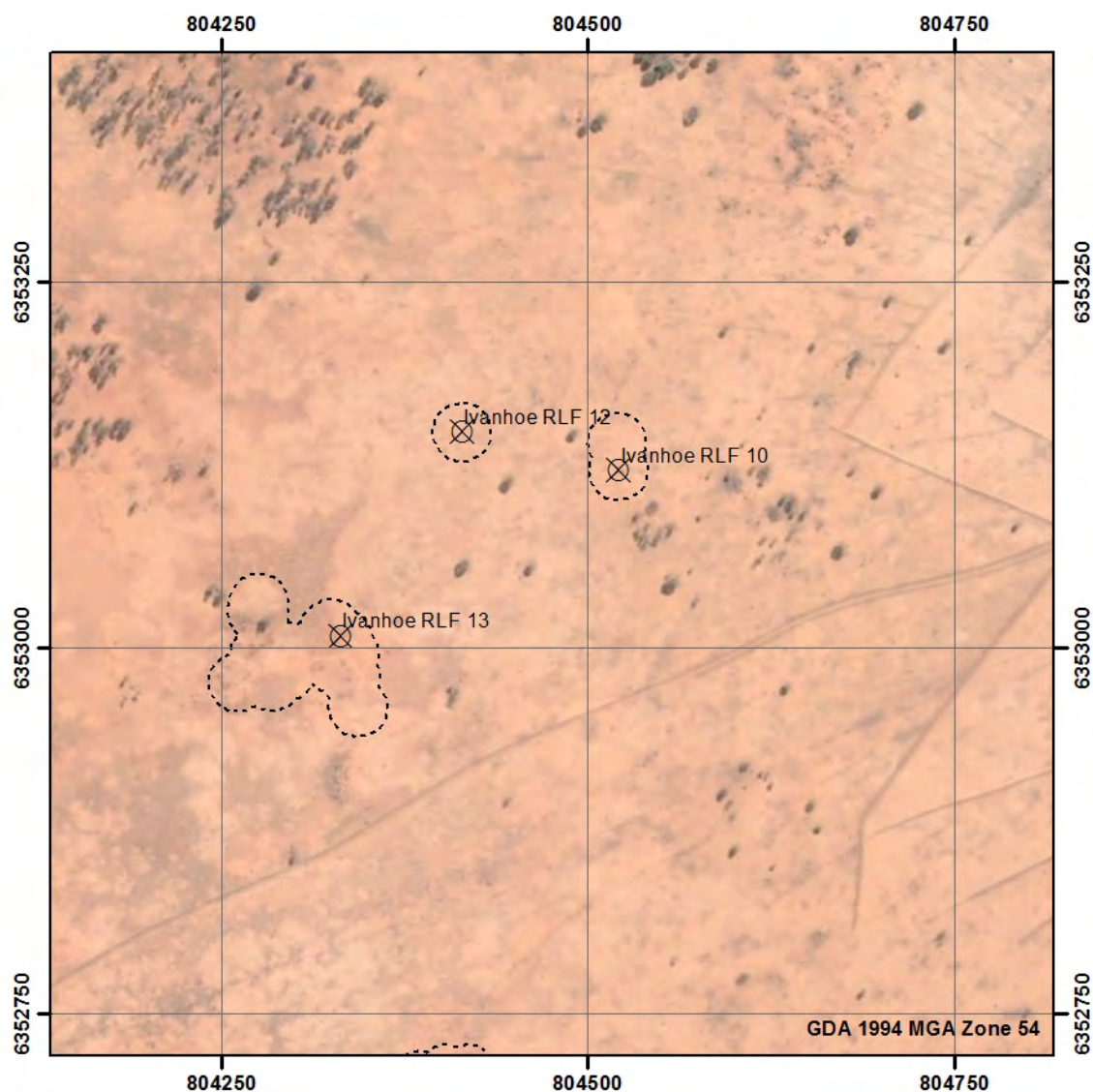


## Ivanhoe RLF 12

Ivanhoe RLF 12 is located within the Hatfield land system, 690 m west of a dam and 930 m south of the Ivanhoe Railway line. The site consists of a single sandstone grindstone fragment, in a small exposure in an otherwise grassy area with poor visibility.



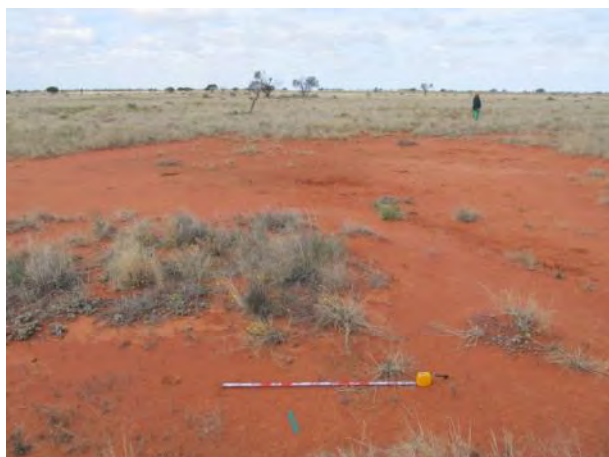
Ivanhoe RLF12 - General location and exposure





## Ivanhoe RLF 13

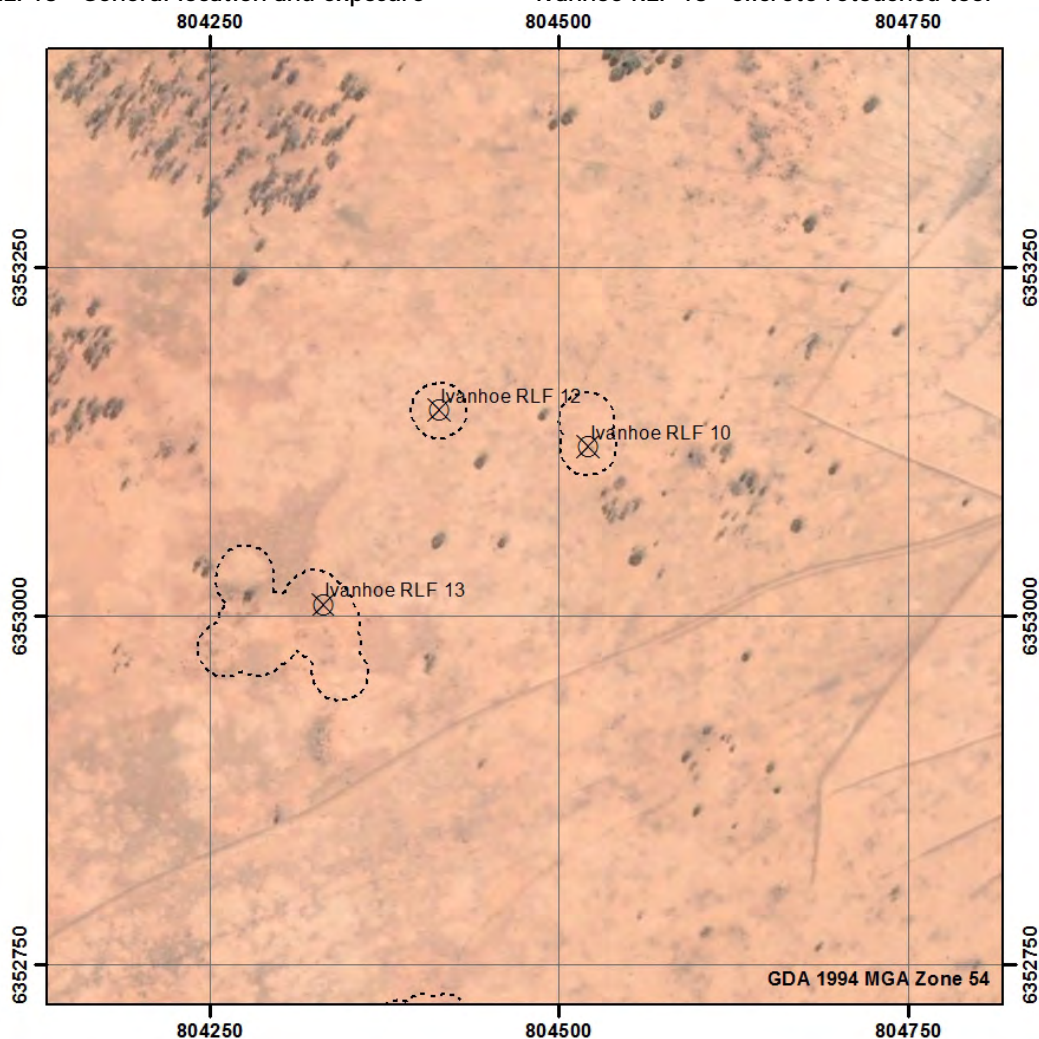
Ivanhoe RLF 13 is located within the Hatfield land system, within a series of small pans and scalds and within residual soil adjacent the pans, 65m north of a track which runs north-east/south-west towards a dam. The site consists of thirty artefacts and four discrete, partially buried ashy deposits which may be hearths and will require testing to confirm identification. Artefacts included silcrete flakes, flakes with retouch/usewear, cores, broken hammerstone, a small pitted anvil/grinding dish, and a chert retouched tool. The site dimensions are approximately 80 m by 70 m. Beyond the scalds visibility was poor in this area due to grass cover. Subsurface potential exists in the residual soil deposits.



Ivanhoe RLF13 - General location and exposure



Ivanhoe RLF 13 - Silcrete retouched tool





## Ivanhoe RLF 14

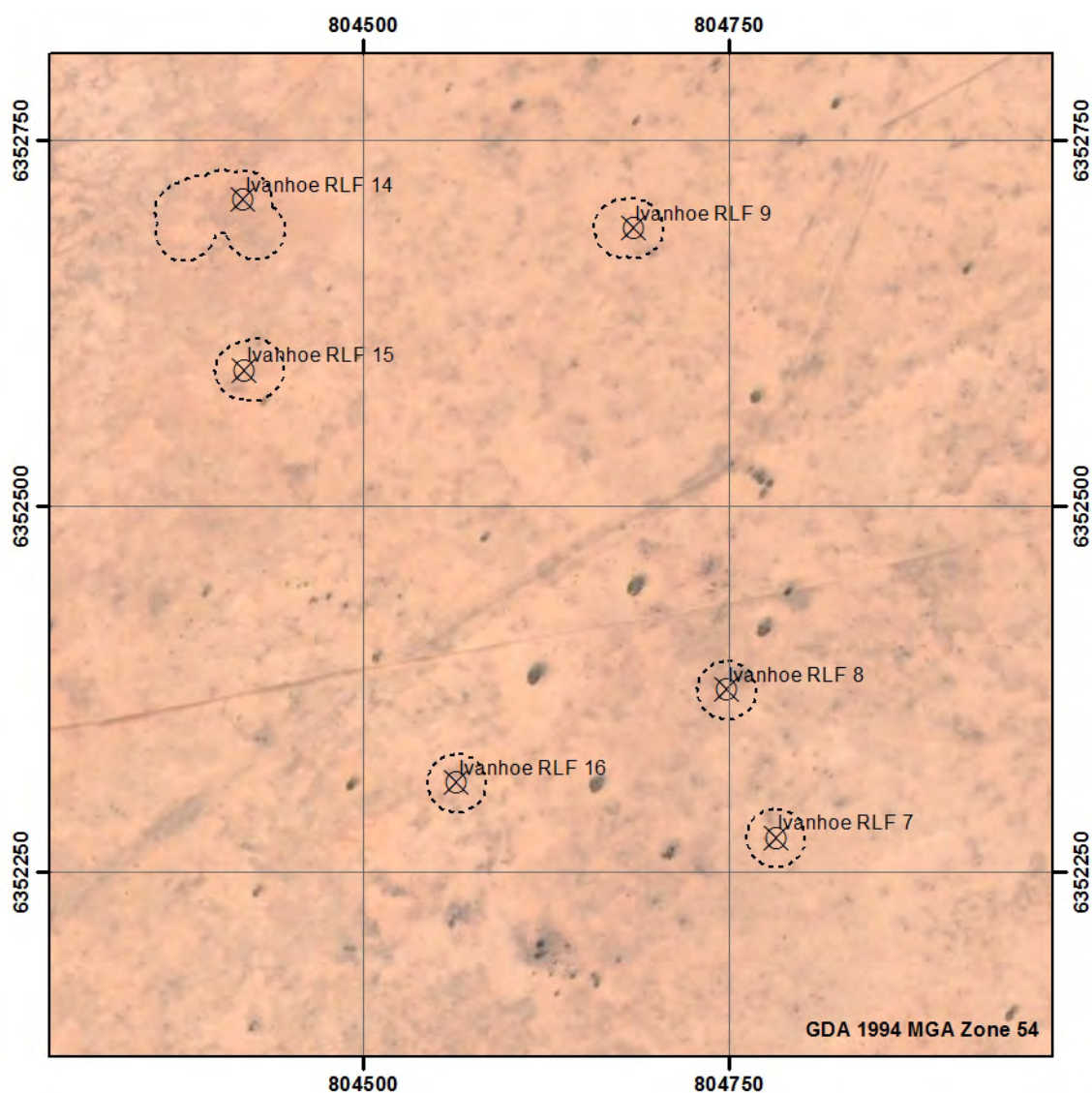
Ivanhoe RLF 14 is located within the Hatfield land system, within a series of revegetated small scalds and exposures in an otherwise grassy area, 325 m north of a transmission line. The site consists of seven silcrete artefacts. Artefacts included retouched tools (including a backed geometric microlith), complete flakes, flaked pieces and flakes with retouch/usewear. Site dimensions are approximately 65 m x 20 m.



Ivanhoe RLF14 - General location and exposure



Ivanhoe RLF 14 - Artefact





## Ivanhoe RLF 15

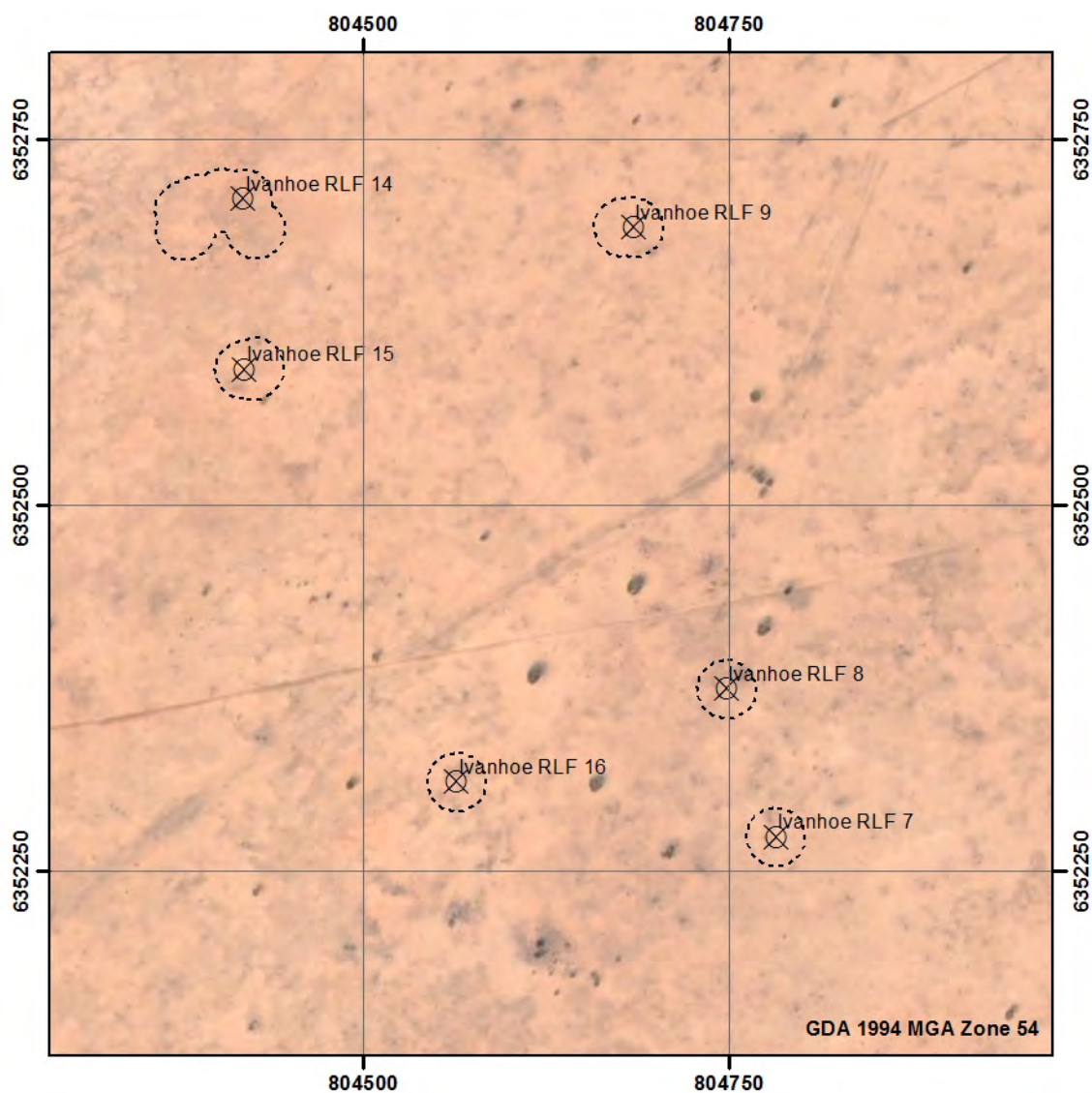
Ivanhoe RLF 15 is located within the Hatfield land system, in a small series of scalds and exposures, 225 m north of a transmission line. The site consists of a silcrete complete flake and a silcrete proximal flake with steep retouch on one margin. The site dimensions are approximately 10 m x 10 m. Beyond the scalds and pans visibility was poor in this area due to grass cover.



Ivanhoe RLF15 - General location and exposure



Ivanhoe RLF 15 - Silcrete flakes



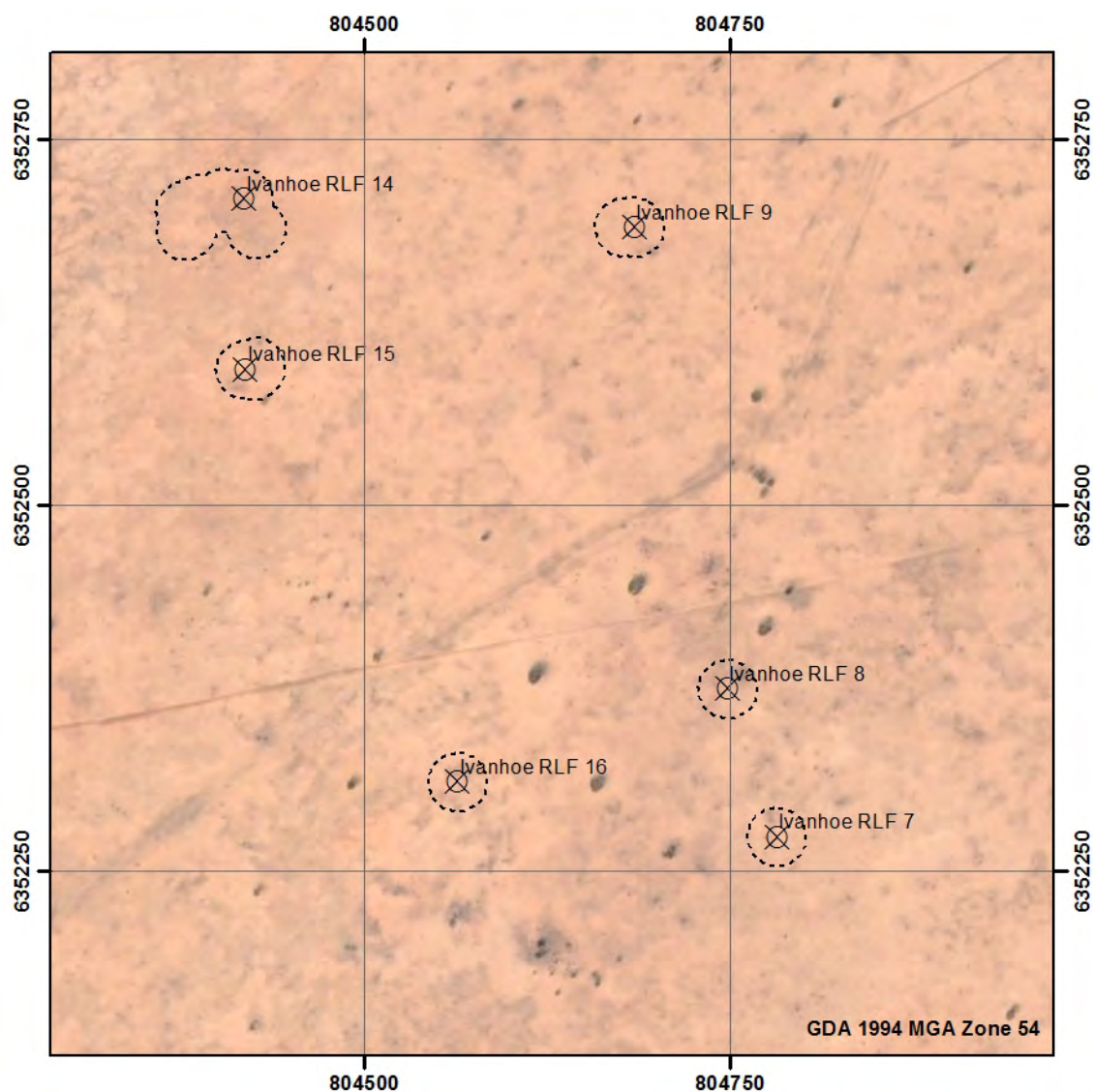


## Ivanhoe RLF 16

Ivanhoe RLF 16 is located within the Hatfield land system, in a small, patchy exposure measuring 2 m x 2 m, 95 m south of a transmission line. The site consists of single silcrete complete flake. Beyond the exposure visibility was poor in this area due to grass cover.



Ivanhoe RLF16 - General location and exposure





## Ivanhoe RLF 17

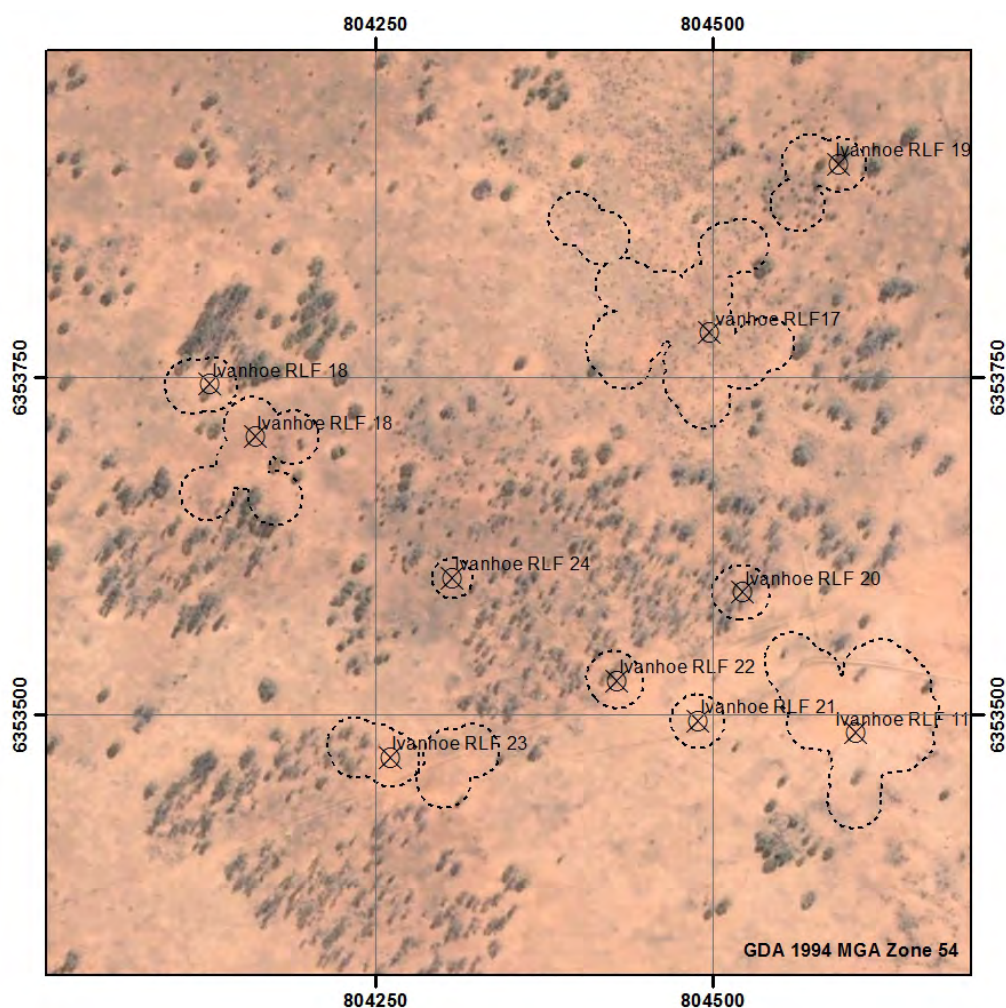
Ivanhoe RLF 17 is located within the Hatfield land system, within a series of small pans and scalds and within residual soil adjacent the pans, 210 m south of the Ivanhoe Railway line and 50 m south-west of Ivanhoe RLF 19. The site consists of 24 artefacts, one partially buried hearth and a hearth scatter. The hearth scatter was roughly circular but due to poor visibility from grass cover the point of origin was not located. Artefacts included a chert flake, silcrete flakes, retouched tools including a thumbnail scraper, flaked pieces and grinding stones. Site dimensions are approximately 85 m x 75 m. Some subsurface potential may exist.



Ivanhoe RLF17 - General location and exposure



Ivanhoe RLF 17 - Sandstone grinding stone





## Ivanhoe RLF 18

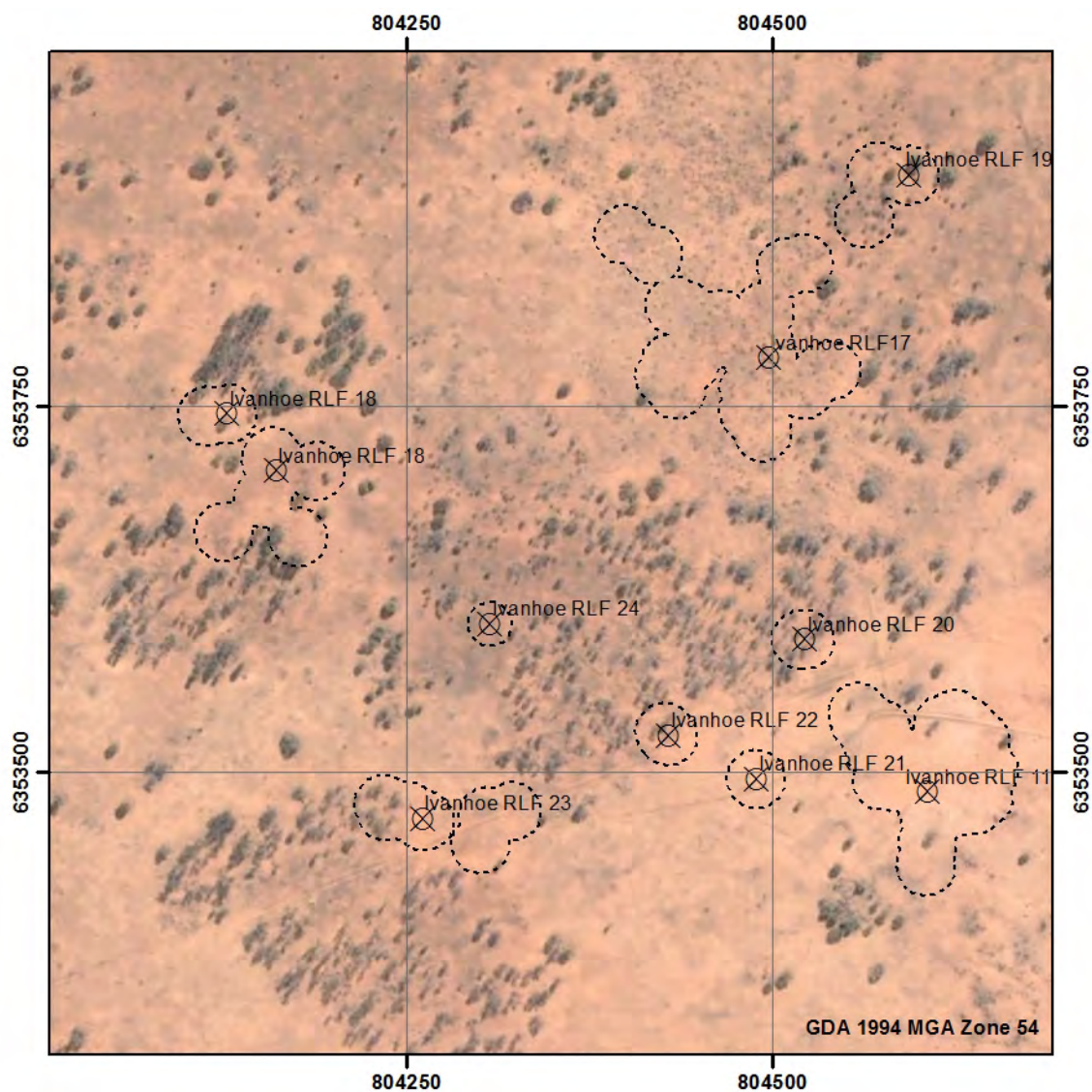
Ivanhoe RLF 18 is located within the Hatfield land system, within a series of exposures formed between and along the driplines of two groves of trees, 370m south of the Ivanhoe Railway line and 230 m north of a track running east-north-east/west-south-west that dissects the survey area. The site consists of ten artefacts and a partially buried hearth. Artefacts included sandstone grinding stone fragments, silcrete retouched tools, flakes and flaked pieces. The site dimensions are approximately 85 m by 70 m. Subsurface deposit may exist in this location.



Ivanhoe RLF18 - General location and exposure



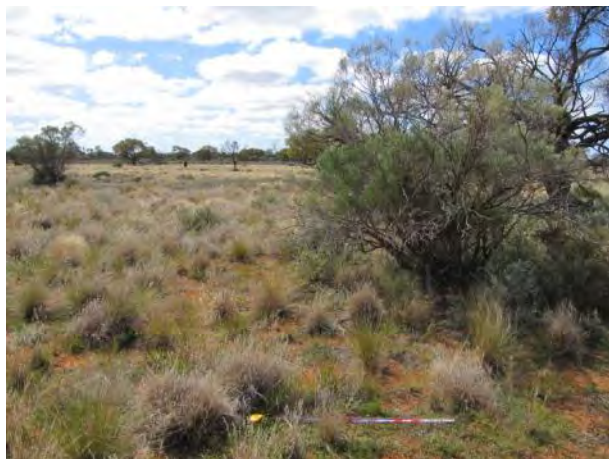
Ivanhoe RLF 6 - Grinding stone fragment





## Ivanhoe RLF 19

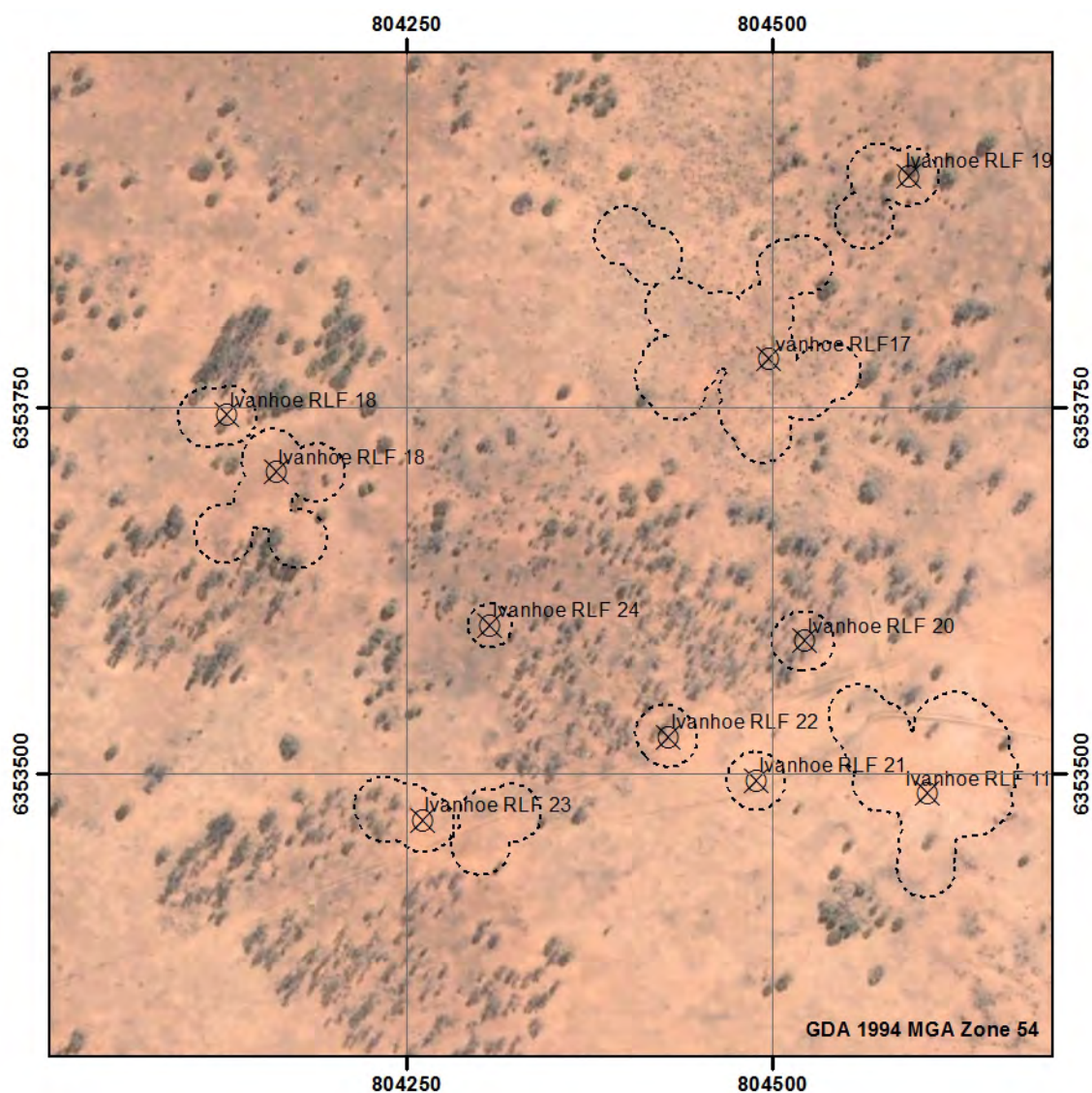
Ivanhoe RLF 19 is located within the Hatfield land system, located in small exposures associated with tree driplines, 140 m south of the Ivanhoe Railway line and 50 m north-east of Ivanhoe RLF 17. The site consists of a silcrete core and two silcrete flaked pieces. The site dimensions are approximately 30 m x 25 m.



Ivanhoe RLF19 - General location and exposure



Ivanhoe RLF 19 - Artefact





## Ivanhoe RLF 20

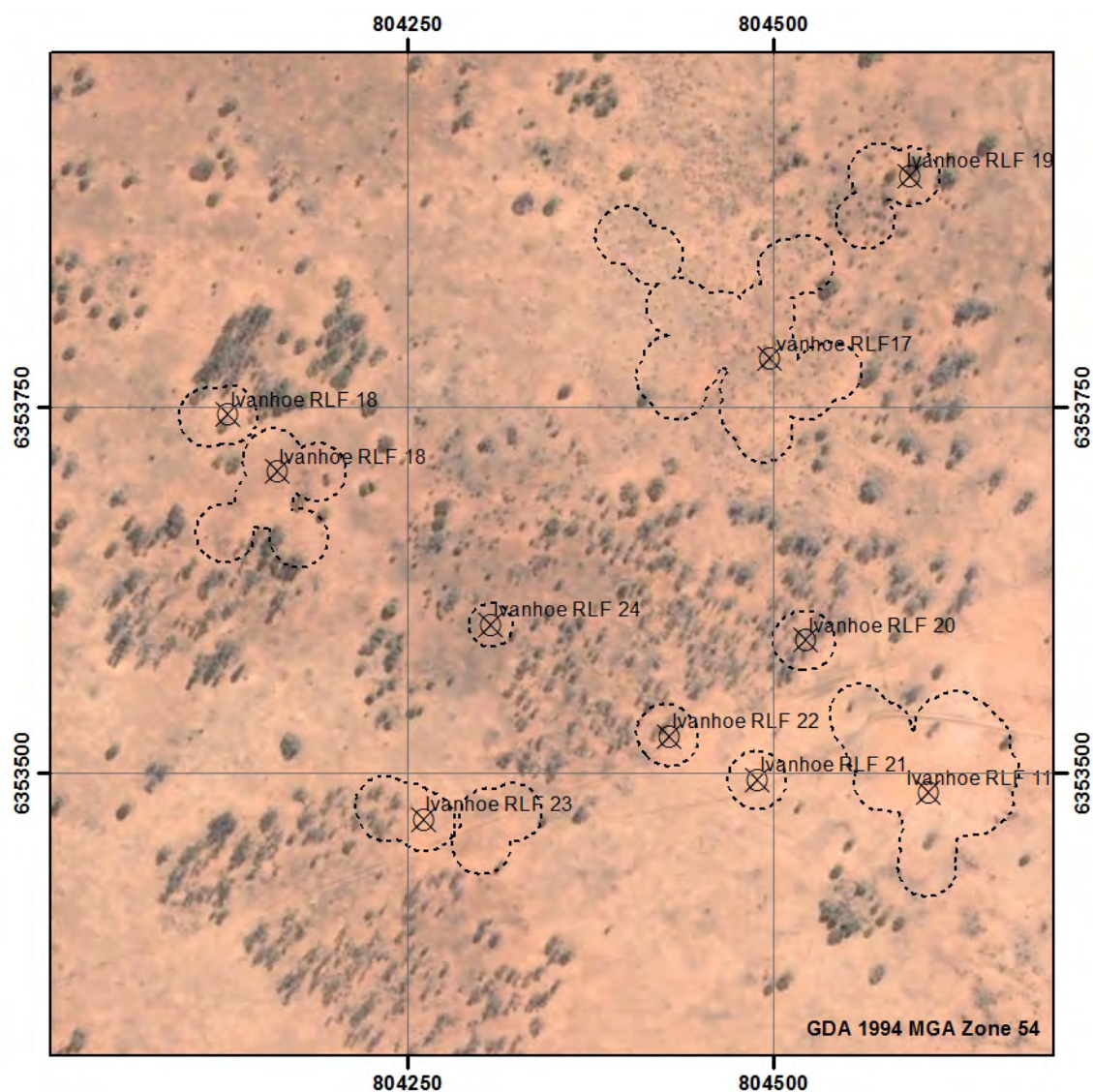
Ivanhoe RLF 20 is located within the Hatfield land system, in a small scald measuring 10 m x 10 m, 35 m north of a track running east-north-east that dissects the survey area and 470 m south of the Ivanhoe Railway line. The site consists of a silcrete complete flake and a partially buried silcrete artefact. Subsurface deposit may be present.



Ivanhoe RLF20 - General location and exposure



Ivanhoe RLF 20 - Artefact





## Ivanhoe RLF 21

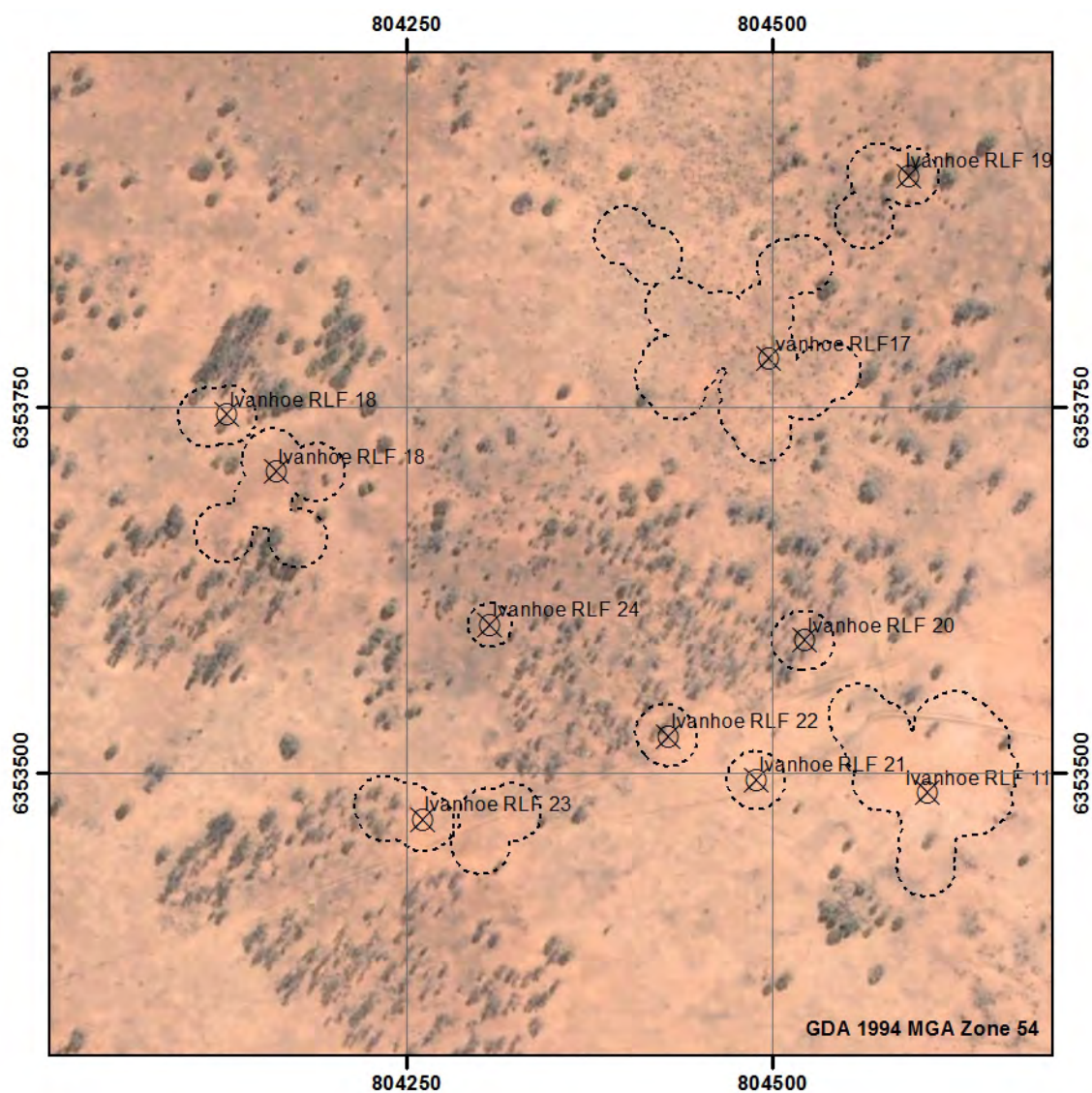
Ivanhoe RLF 21 is located within the Hatfield land system, within a small scald measuring 4 m x 3 m, 70 m west of Ivanhoe RLF 11 and 50 m south of a dirt track which runs east-north-east. The site consists of a single silcrete complete flake. Subsurface deposit likely exists in the residual soil surrounding the scold.



Ivanhoe RLF21 - General location and exposure



Ivanhoe RLF 21 - Silcrete flakes



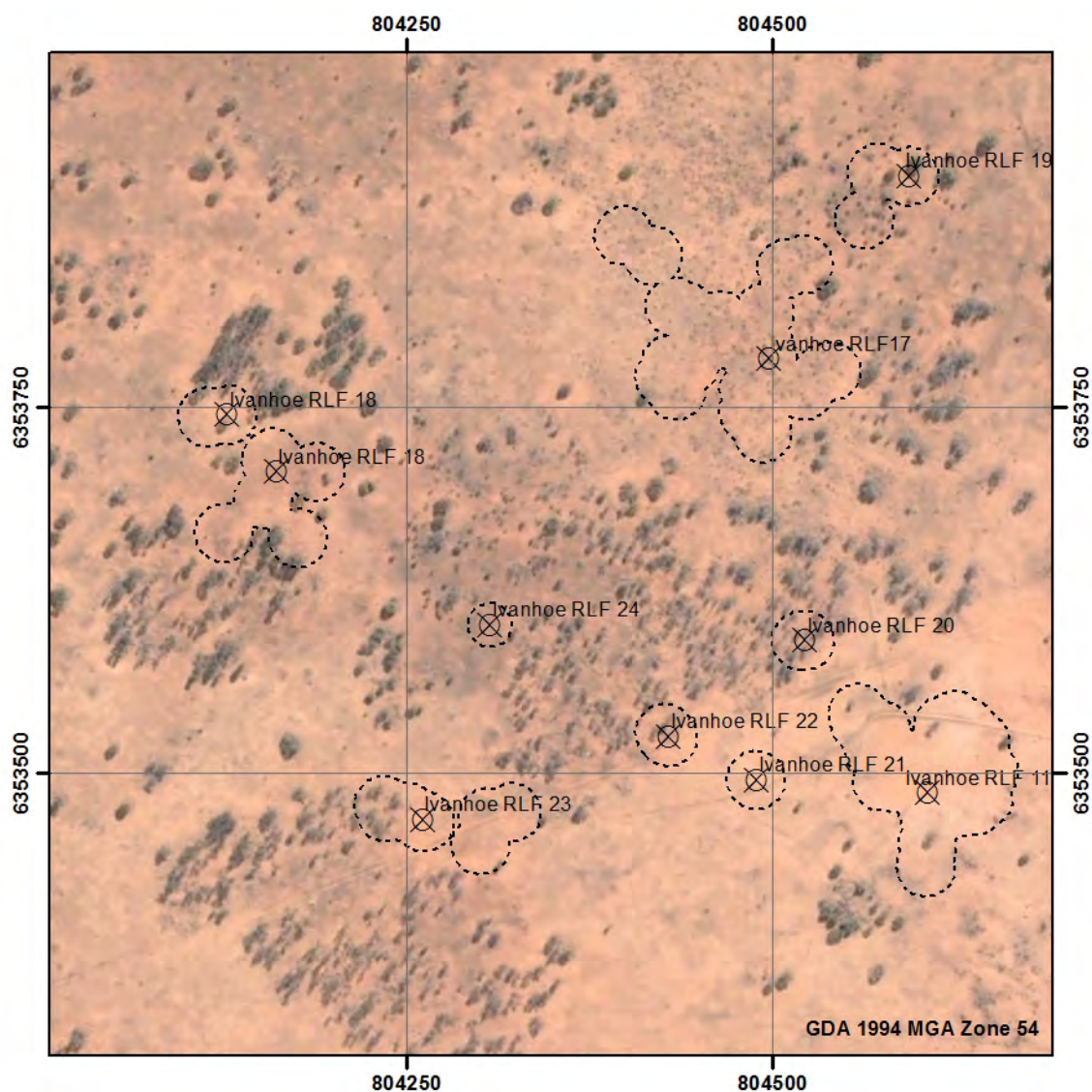


## Ivanhoe RLF 22

Ivanhoe RLF 22 is located within the Hatfield land system, in a small scald 5 m from an old track and pipe installation, 550 m south of the Ivanhoe Railway line and 100 m from Ivanhoe RLF 11. The site consists of two artefacts, a silcrete complete flake with cortex on the dorsal surface and a sandstone grinding stone fragment.



Ivanhoe RLF22 - General location and exposure





## Ivanhoe RLF 23

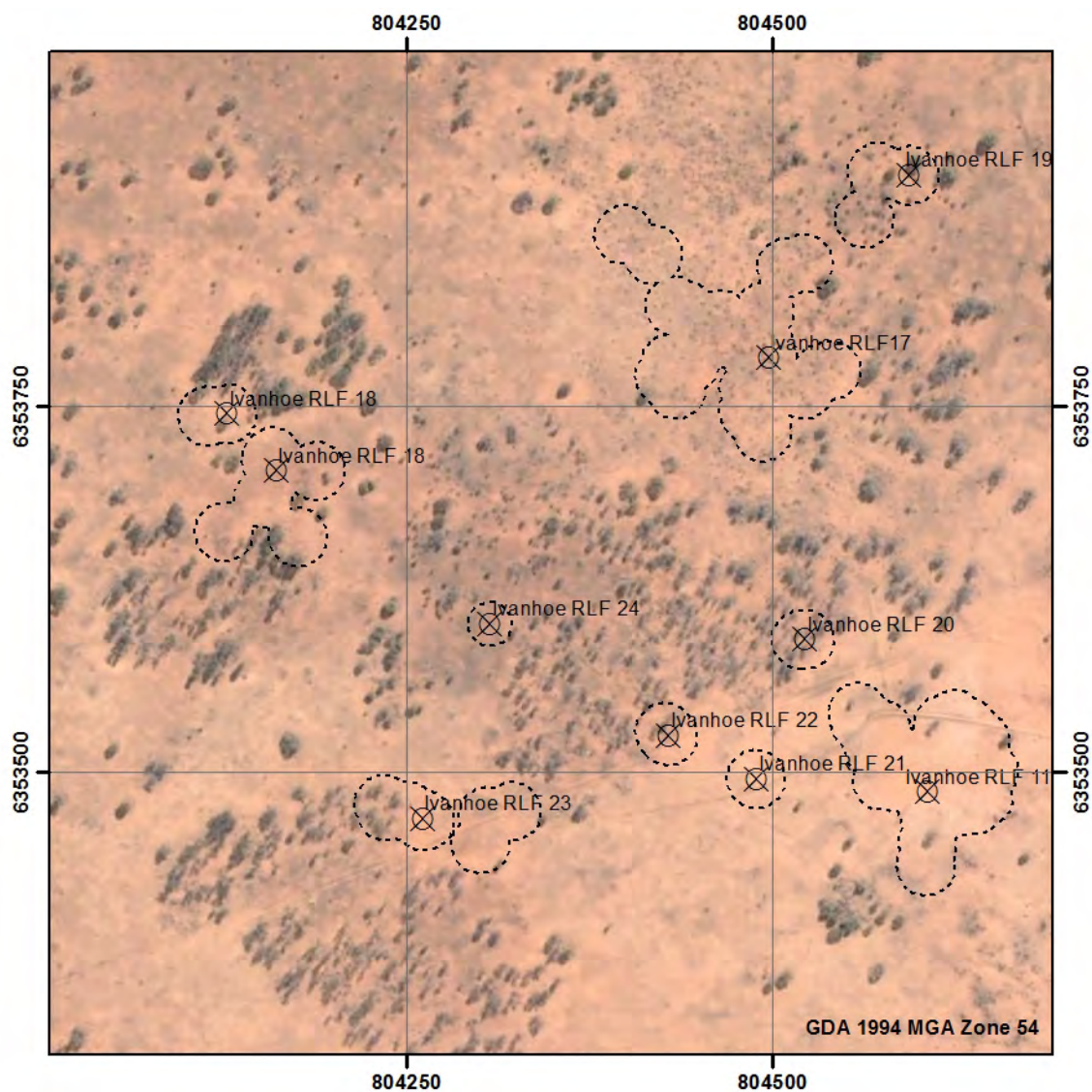
Ivanhoe RLF 23 is located within the Hatfield land system, within a series of narrow scalds and beyond the scald in small patchy exposures in a grassed area, 620 m south of the Ivanhoe Railway line. A dirt track which runs east-north-east intersects the site on the same alignment as Ivanhoe RLF 21. The site consists of 10 silcrete artefacts including a retouched tool, flakes and flaked pieces. One of the flakes had cortex on both ventral and dorsal surfaces. The site dimensions are approximately 80 m by 30 m. Subsurface deposit likely exists in the revegetated residual soil adjacent the scalds.



Ivanhoe RLF23 - General location and exposure



Ivanhoe RLF 23 - Silcrete retouched tool



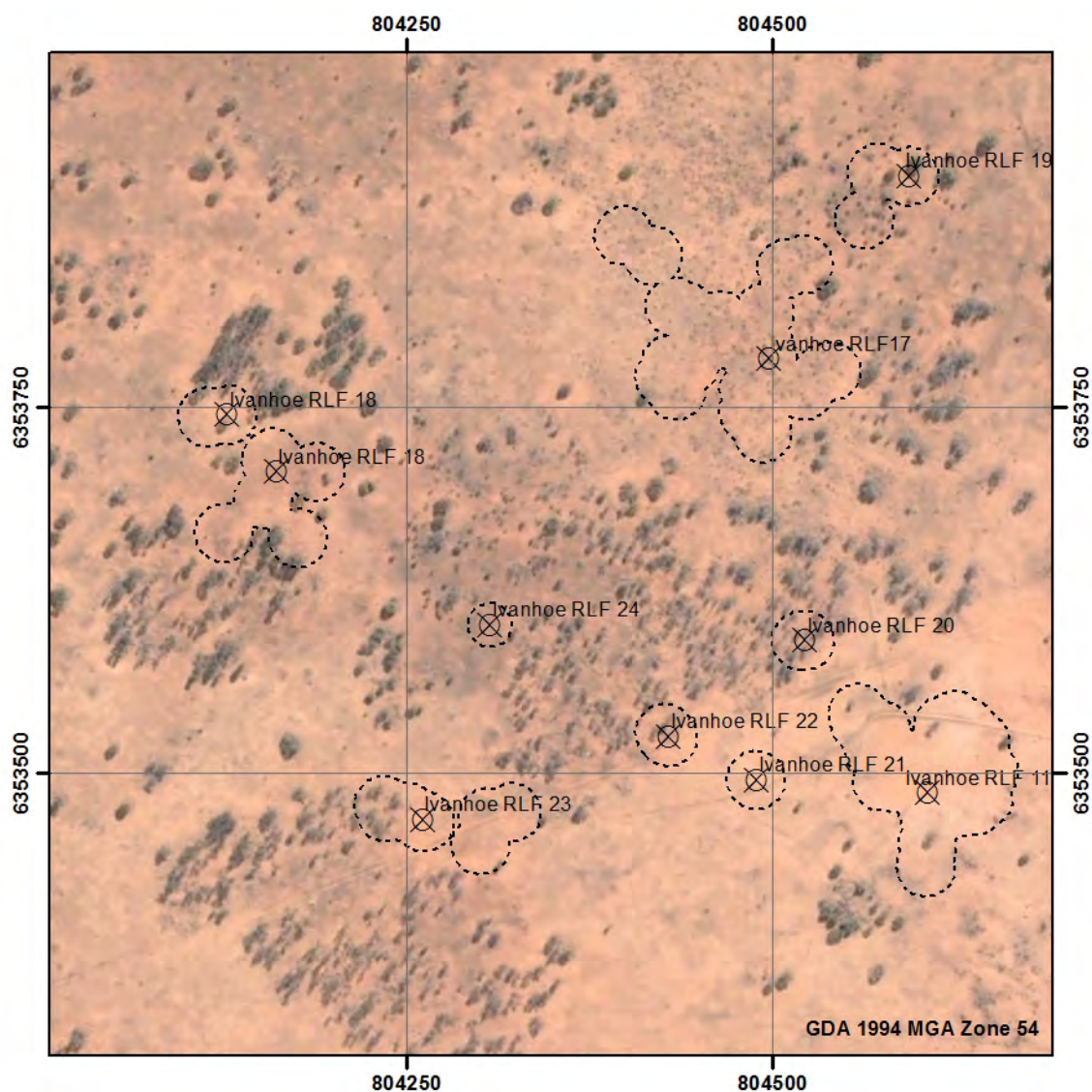


## Ivanhoe RLF 24

Ivanhoe RLF 24 is located within the Hatfield land system, in an exposure near a grove of trees in which an Aeolian dune has formed, 480 m south of the Ivanhoe Railway line and 130 m north of a dirt track which runs east-north-east through the survey area and Ivanhoe RLF 23. The site consists of a single weathered silcrete flake with retouch.



Ivanhoe RLF24 - Silcrete flake





## Ivanhoe RLF 25

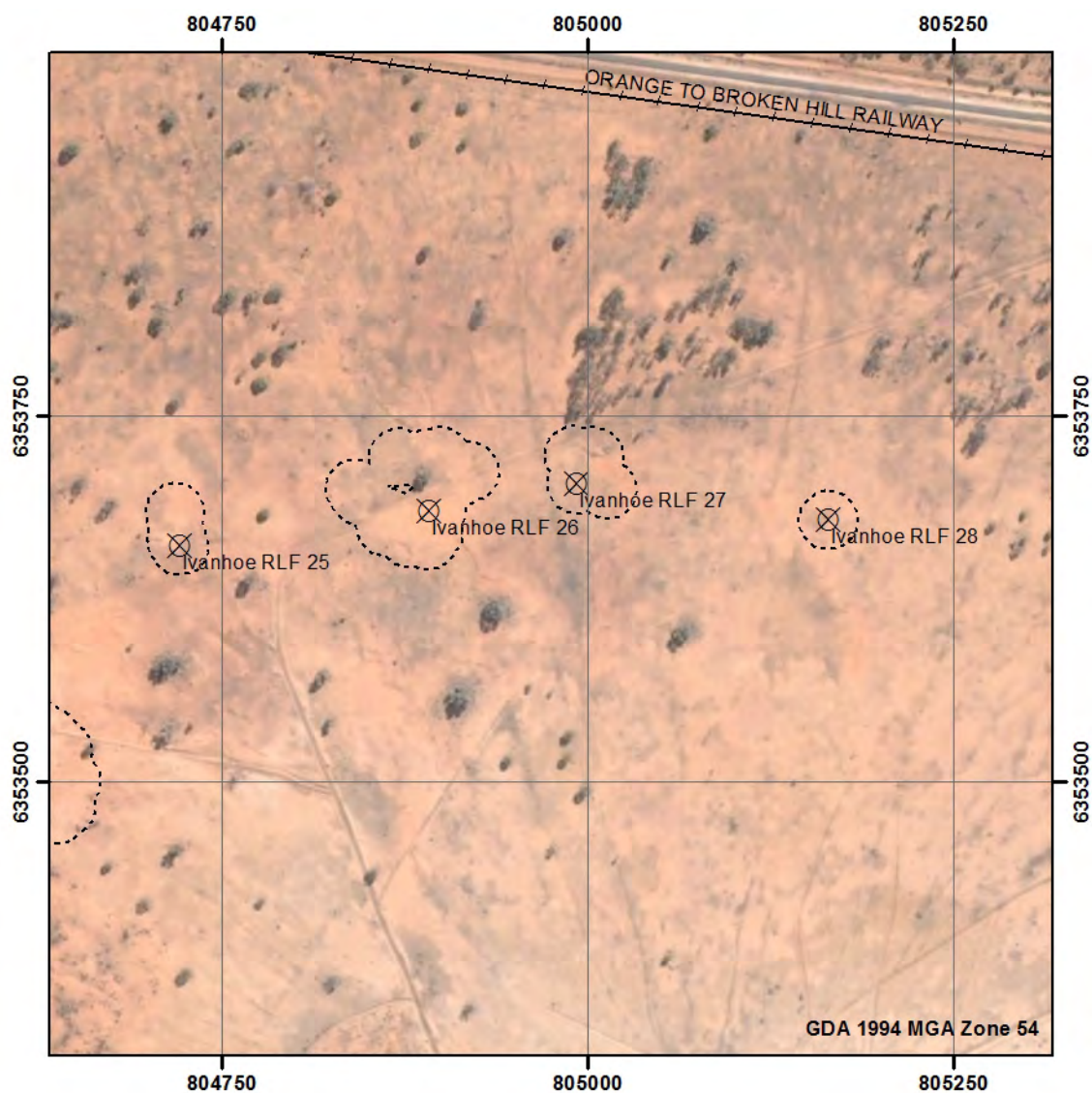
Ivanhoe RLF 25 is located within the Hatfield land system, in a series of small scalds, 360 m south of the Ivanhoe Railway line, 630 m north-west of the dam and 30m north of the dirt track which runs east-northeast through the survey area. The site consists of four silcrete flakes and a backed artefact. The exposure measures approximately 40 m x 20 m. Subsurface deposit may exist in residual soils surrounding scalds.



Ivanhoe RLF25 - General location and exposure, looking east



Ivanhoe RLF 25 - Artefact





## Ivanhoe RLF 26

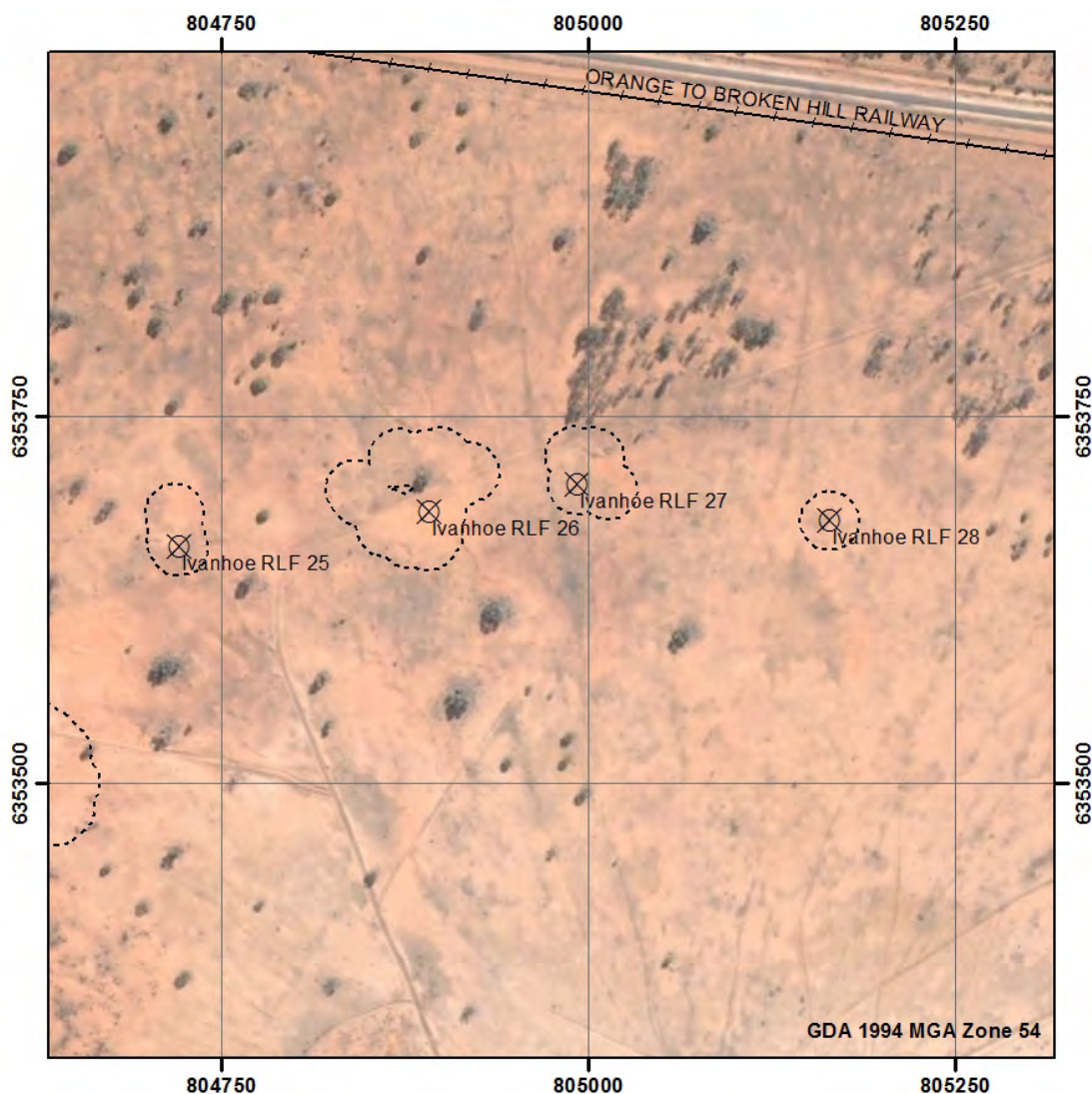
Ivanhoe RLF 26 is located within the Hatfield land system, in a series of scalds and patch exposures in areas vegetated with grass intersected by the east-north-east dirt track which runs through the survey area. The site is 310 m south of the Ivanhoe Railway line and 520 m north-west-north of a dam. The site consists of 20 silcrete artefacts, four eroding hearths and a hearth scatter. Artefacts included five grinding stone tops or fragment, retouched tools, flakes and flaked pieces. Site dimensions are approximately 80 m by 90 m. Subsurface potential exists in the residual soil deposits.



Ivanhoe RLF26 - General location and exposure



Ivanhoe RLF 26 - Eroding hearth



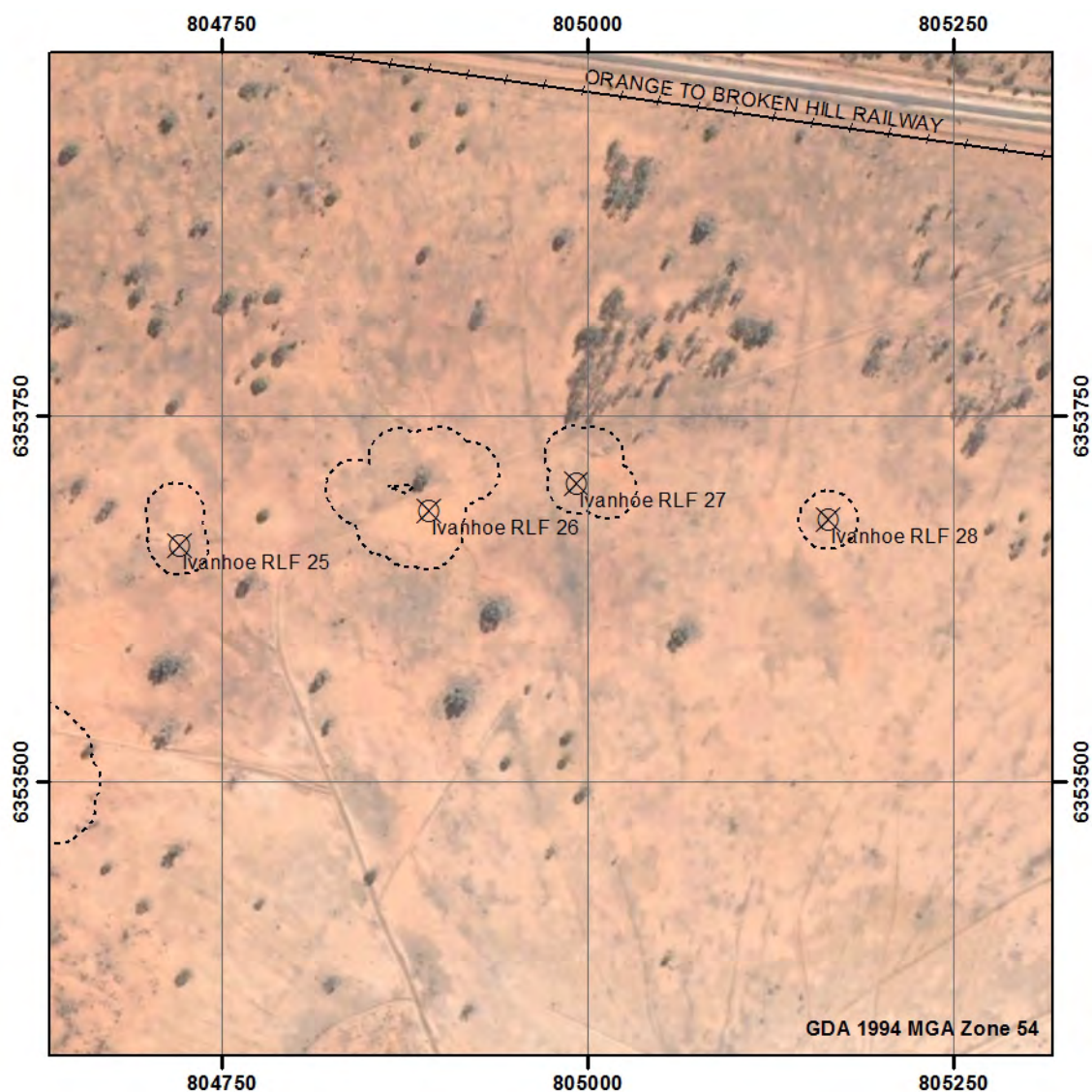


## Ivanhoe RLF 27

Ivanhoe RLF 27 is located within the Hatfield land system, in a narrow scald running north-south in an otherwise grassed area with poor visibility, 295 m south of the Ivanhoe Railway line, 510 m north of the dam and intersected by the dirt track which runs east-north-east through the survey area. The site consists of a sandstone grindingstone fragment and a retouched tool. The exposure measures approximately 25 m x 10 m. Subsurface deposit may be present.



Ivanhoe RLF27 - Artefact





## Ivanhoe RLF 28

Ivanhoe RLF 28 is located within the Hatfield land system, in a small, patchy exposure in an otherwise grassed area with poor visibility, 295 m south of the Ivanhoe Railway line and 515 m north of a dam. The site consists of silcrete flaked piece.



Ivanhoe RLF28 - General location and exposure

