GOEDGEVONDEN COMPLEX

GLENCORE MANAGED OPERATION

CULTURAL HERITAGE MANAGEMENT PLAN

August 2022

DMR Ref No: MP 30/5/1/2/2/169 MR



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The compilation of this management plan was carried out with the information available to the specialists at the time of developing the plan and is based on the available previous heritage assessments conducted in the area. Additional information which might strengthen arguments or contradict information in this report might exist.

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1 BACKGROUND

The Goedgevonden Complex (GGV) is an existing coal mine that has been in operation since 2009. GGV is jointly owned by African Rainbow Minerals (ARM) Coal (Pty) Ltd (51%) and Glencore Coal Operations South Africa (Glencore) (49%). ARM Coal in turn is held by both African Rainbow Minerals (51%) and Glencore (49%).

GGV operates under Mining Right No. MP 30/5/1/1/2/169 MR and has an approved Environmental Management Programme (EMPr), the latest amendment having been approved by the (then) Department of Minerals and Energy (DME) on 10 February 2016.

Since the approval of GGV in 2002, numerous Heritage Impact Assessments (HIA) were conducted in the Mining Right area and several sites of cultural heritage (archaeological and/or historical) origin or significance have been identified. A number of these are Grave/Burial Sites, some of which has been exhumed and relocated since the commencement of mining.

This report provides the status quo of all identified sites of cultural heritage within and near the GGV Mining Right area and includes a Cultural Heritage Management Plan (CHMP) for the protection and management of the remaining sites.

2 LOCATION

GGV is essentially an opencast mine, mining seam 2, seam 4 and seam 5 coal on portions of the farms Goedgevonden 10 IS, Zaaiwater 11 IS and Kleinzuikerboschplaats 5 IS. Underground mining was approved on portions of the farm Grootpan 7 IS which is still to be developed.

GGV is located approximately 50 km south-west of eMalahleni, and 38 km east of Delmas. The town of Ogies is situated directly north of GGV. It falls in the eMalahleni Local Municipality of the Nkangala District Municipality, Mpumalanga Province.

GGV is situated in a mostly rural community setting with a mixed land use including agricultural activities (mainly maize production), residential areas and various coal mining operations in the surrounding area. The GGV operation is in the Zaaiwaterspruit catchment, which forms part of the Olifants River catchment upstream of the Witbank Dam.

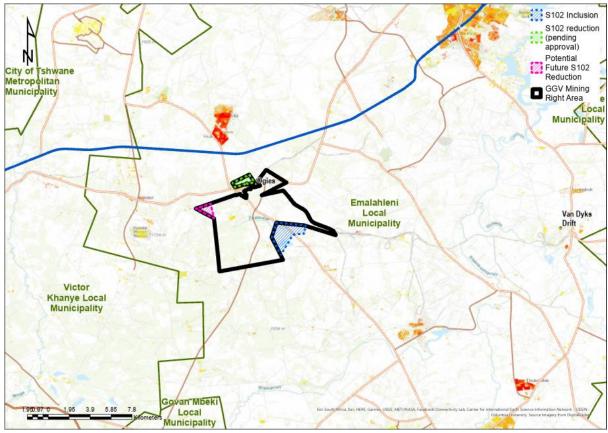


Figure 1: Locality Map

3 STATUS QUO OF KNOWN SITES OF CULTURAL HERITAGE

Table 2 provides a list of all the known sites of cultural heritage, derived through a thorough review of the numerous cultural heritage reports and assessments conducted in the GGV area – refer to the list of references presented at the end of this report.

The sites have been split between graves/burial sites (Figure 2) and historical structures (Figure 3). 34 gravesites and 18 historical structures have been identified within the GGV area and immediate surroundings.

Most of the gravesites within the GGV area have been exhumed and relocated as mining operations extended. Some gravesites remain, most notably the Muslim site (GY-02) located at the Mosque (V2) and the sites located on Grootpan 7 IS where only underground mining is scheduled.

The majority of the historical structures identified within the GGV area have been demolished; however, a few sites of historical value are still in existence and need to be managed and maintained.

Several sites are located outside of the area directly impacted by GGV but have been recorded in the event of future expansion or development of ancillary infrastructure outside of the GGV area.

The status quo of the known cultural heritage sites is summarised in Table 1.

Table 1: Summary of cultural heritage site status quo

Status Category	Site ID
Gravesite: Graves exhumed and relocated	GY-03 (Mbila Estate)
	GY-04
	GY-05 (Grave Site 5)
	GY-10 (Site G)
	GY-12
	GY-13
	GY-14 (GY-MK"B")
	GY-15 (Grave Site 18)
	GY-17
	Site B
Gravesite: Remaining gravesites	GY-01 (Site C)
	GY-02 (GY-02B) (Site D)
	GY-02A (Site E)
	GY-16 (OFT GY-01)
	Site A1
	Site A2
	G-01 (OFT)
	GY-02 (OFT)
Gravesite: Disputed graves#	GY-06
	GY-MK "A"
	GY-11
	MHC031
	GY-18
Gravesite: Outside of GGV area	GY-07
	GY-08
	GY-09 (Site F)
	GY-i, GY-ii, GY-iii (Ogies)
	GY-vii, GY-viii, GY-ix, GY-x, GY-xi (Tweefontein MRA)
Historical structure: Demolished, no historical	F1, V3, V4
value	
Historical structure: Demolished, historical value	F3, F4
Historical structure: Remaining, no historical value	F2
Historical structure: Remaining, historical value	H3, V2
	HH01, O1, O2 (OFT)
Historical structure: Outside of GGV area	F5, H1, H2, V1, MHC026, HSRa1, HSRa2

^{*} No records found, discrepancy i.r.o. family names and/or location

Table 2: Cultural Heritage Status Quo

Farm name abbreviations: KZB – Farm Kleinzuikerboschplaats 5 IS; GGV – Farm Goedgevonden 10 IS; ZWT – Farm Zaaiwater 11 IS; GTP – Farm Grootpan 7 IS

Category	Label	Description	Farm	Y field	X field	Status	Photographs
GRAVE SITES	– FIGURE 1	· · · · · · · · · · · · · · · · · · ·					
Graves	GY-01 (Site C)	Close to Mosque (V2). Located to the west of maize field, east of dirt road. Long and narrow from north to south. Neglected. Contain 'iron cage' with 3 graves (dated to 1947 and belonging to the Ndhlazi family) and a further approximately 60 graves outside of this area. Most of these graves are unknown. Ref: Pistorius, 2004; Cultmatrix, 2007; Archaetnos AE1019, March 2010; APAC1706, Feb 2017.	GGV 10 IS Ptn 6	-26.06867	29.058024	In existence.	Grave sites at GY-01 (APAC, 2017).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-02 (GY-02B) (Site D)	Close to Mosque and GY-01. Next (west) to a dirt road. Approx. 45 graves. Muslim cemetery. Ref: Pistorius, 2004; Cultmatrix, 2007; Archaetnos AE1019, March 2010; APAC1706, Feb 2017.	GGV 10 IS Ptn 6	-26.071764	29.058934	In existence. Well maintained.	GY02 – Muslim graveyard (Pistorius, 2004).
Graves	GY-02A (Site E)	GY-02 contains 2 sections, with a small section containing Hindu graves (around 22 graves) that are separately fenced, and a second large section with African/Christian graves numbering in excess of 270 graves. Ref: Archaetnos AE1019, March 2010; APAC1706, Feb 2017.	GGV 10 IS Ptn 6	-26.072602	29.059211	In existence.	View of GY-02A – African/Christian Section (APAC, 2017). View of GY-02A – Hindu Section (APAC, 2017).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-03 (Mbila Estate)	Located to the south of Mbila village. Neglected. Approx. 60 graves. Ref: Pistorius, 2004; Cultmatrix, 2007; Archaetnos AE1019, March 2010.	GGV 10 IS RE of Ptn 1	-26.076754	29.064132	Relocated in January 2018 (APAC1801).	GY-03 pre-relocation (Pistorius, 2004). Mbila grave site (Cultmatrix, 2007).
Graves	GY-04	Located on the farm of Tielman Roux close to a T - junction. Situated under clump of wattle trees near soil heap with mine beacon. Two possible graves covered with ferricrete (ouklip). Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 12	-26.101055	29.064835	Relocated in December 2008 by Archaetnos – AE866.	The location of Grave Site GY-04. The graves were relocated in 2008 (APAC, 2022).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-05 (Grave Site 5)	Located on the farm of Tielman Roux. Near western shoulder of dirt road (and dam) running to Klippoortjie. Six graves. Ref: Pistorius, 2004; Cultmatrix, 2007. Grave site 5: This grave site contains around 22 visible graves, while at least 10 have already been exhumed and relocated during previous years. Most of the graves remaining are unknown. Ref: Archaetnos AE1019, March 2010; Archaetnos AE01252P, August 2012.	GGV 10 IS RE of Ptn 2	-26.099632	29.079811	Relocated in August 2012 by Archaetnos – AE01252P.	
Graves	GY-06	Located close to Zaaiwater farmstead (F5) along the northern border of an avenue of Blue Gum trees. Neglected. Nearly invisible. Approx. 8 graves. Ref: Pistorius, 2004; Cultmatrix, 2007.	ZWT 11 IS Ptn 23	-26.106565	29.09955	Relocated in December 2008 by Archaetnos – AE866. Relocated Mabona family, discrepancy i.r.o. family names – to be verified. Outside GGV MRA (Tweefontein MRA).	
Graves	GY-07	GY-07 is situated next to a maize field and is fenced in. It contains as many as 15 graves, the majority of which have cement tombstones but no inscriptions as these have faded away. Ref: Pistorius, 2004; Cultmatrix, 2007.	Klippoortje 32 IS Ptn 32	-26.116944	29.100833	Unknown – to be verified. Outside GGV MRA.	
Graves	GY-08	GY-08 is located directly to the south of GY-07 along the edge of a maize field. It is fenced in. GY-08 is	Klippoortje 32 IS Ptn 32	-26.120887	29.102685	Unknown – to be verified. Outside GGV MRA.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
		large and contains as many as 60 graves, the majority of which have cement head stones and cement edgings. The remaining number of graves is covered with stones. Ref: Pistorius, 2004; Cultmatrix, 2007.					
Graves	GY-09 (Site F)	On southern border of project area. Situated next (south) of a dirt road. Visible from the dirt road. Approx. 30 graves. Ref: Pistorius, 2004; Cultmatrix, 2007.	Springboklaagte 33 IS Ptn 3	-26.118366	29.048653	Unknown – to be verified. Outside GGV MRA.	GY09 is located on the border between GGV 10 IS and Springboklaagte 33 IS (Pistorius, 2004).
Graves	GY-10 (Site G)	Located on the farm of BG Schmidt Brothers. Situated near farm homestead. Neglected. Approx. 6 graves covered with kikuyu grass. Ref: Pistorius, 2004; Cultmatrix, 2007; APAC021105, November 2021.	GGV 10 IS Ptn 4	-26.111227	29.04731	Relocated in November 2021 (APAC021105).	GY-10 near a modern farm homestead on the farm of the BG Schmidt brothers pre-demolition (Pistorius, 2004).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-11	GY-11 is located on the farm of the BG Schmidt Brothers. The graveyard is situated in tall grass next to a maize field and is hardly visible. At least twelve graves are demarcated with a fence. An unknown number of graves are scattered in the tall grass. Khutala Colliery's waste rock dump is approaching this graveyard from the north-west.	GGV 10 IS Ptn 4	-26.104528	29.035182	Unknown, no records found. May be the same as MHC031 or GY-MK "A" – to be verified.	View of GY Site G before exhumation & relocation in November 2021 (APAC, 2021).
		Ref: Pistorius, 2004; Cultmatrix, 2007.					GY-11 located on GGV 10 IS on a piece of undisturbed veldt next to a maize field (Pistorius, 2004).
Graves	MHC031	Informal Cemetery – approximately 11 graves on the border of GGV and Khutala MR boundary.	Zondagsvlei 9 IS Ptn 21	-26.108297	29.031999	May be the same as GY-11 – to be verified. Khutala MRA.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-MK "A"	Informal cemetery containing a fairly large number of graves (around 40 or more), of which some are older than 60 years of age, some younger and some unknown. With two known graves, older than 60 years of age belonging to the Mtsweni family. Ref: Archaetnos, 2008 (AE866); Archaetnos, 2009 (AE974); Archaetnos AE01252P, August 2012.	GGV 10 IS Ptn 4	-26.093124	29.03142	Two known graves, older than 60 years of age belonging to the Mtsweni family was exhumed and relocated to the Kameelrivier D Cemetery in KwaNdebele in December 2009 (AE974). Remaining graves under topsoil dump — to be verified (AE01252P, August 2012).	Site MK "A" (Archaetnos, 2010)
Graves	GY-12	GY12 is located on the western perimeter of the project area on the border between Goedgevonden 10 IS and Zondagsvlei 8 IS. Ref: Pistorius, 2004; Cultmatrix, 2007.	Zondagsvlei 9 IS Ptn 16	-26.084603	29.029506	Relocated by Zenzele Funerals for Khutala Colliery.	GY-12 (Pistorius, 2004).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-13	GY-13 is also located on the western perimeter of the project area on the border between Goedgevonden 10 IS and Zondagsvlei 8 IS. It is located near the ruins of an old farm homestead. Ref: Pistorius, 2004; Cultmatrix, 2007.	Zondagsvlei 9 IS Ptn 16	-26.084722	29.029167	Relocated by Zenzele Funerals for Khutala Colliery.	GY-13 (Pistorius, 2004).
Graves	GY-14 (GY- MK"B")	Located on the Bombardie Farm Complex. The grave is situated in the road department's servitude directly next to the national road running to Bethal (R545). Ref: Pistorius, 2004; Cultmatrix, 2007. This grave site contains around 18 visible graves. Ref: Archaetnos AE1019, March 2010; Archaetnos AE01252P, August 2012.	ZWT 11 IS Ptn 4	-26.079548	29.080952	Relocated in August 2012 by Archaetnos – AE01252P.	Site MK "B" (Archaetnos, 2012).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	GY-15 (Grave Site 18)	Located on the Bombardie Farm Complex near an avenue with blue gum trees. It consists of a single grave and a small graveyard with six (6) graves located one hundred meters from each other. Ref: Pistorius, 2004; Cultmatrix, 2007. 17 visible graves. Ref: Archaetnos AE1019, March 2010; Archaetnos AE01252P, August 2012.	ZWT 11 IS Ptn 4	-26.08513	29.075482	Relocated in August 2012 by Archaetnos – AE01252P.	GY-15 (Grave Site 18). Note avenue of blue gum trees (Archaetnos, 2010).
Graves	GY-16 (OFT GY- 01)	Informal graveyard located between maize fields, remains of approximately ten individuals. Some of the graves are fitted with cement head stones and edged with cement strips or upright stones. Ref: Pistorius, 2004 & 2009; Cultmatrix, 2007.	ZWT 11 IS Ptn 20	-26.057016	29.070338	In existence. Verified in 2022.	GY-16 with ten graves is located between maize fields (Pistorius, 2009). Two of the graves on the site (APAC, 2022).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							Another of the identified graves on GY16. There are approximately 10 graves at the site (APAC, 2022).
Graves	GY-17	This graveyard is located in the path of tall grass in a maize field on the farm of De Vos Breedt. It contains 4 or 5 graves. Ref: Pistorius, 2004; Cultmatrix, 2007; Archaetnos AE926, May 2009; Archaetnos AE930, June 2009.	GGV 10 IS RE of Ptn 16	-26.081346	29.047015	Relocated by Archaetnos in May & June 2009 – AE926 & AE930.	IN LIEFDEVOLLE HERINNERING AAN MY EGGENOOT EN PAPPIE CHRISTOFFEL JOHANNES CORNELIUS GER 10 3 1004 BEFYERS GER 20 3 1015 GER 10 3 1004 BEFYERS FORMELIUS GER 20 3 1004 BEFYERS FORMELIUS GER 20 3 1005 GER 20 3 1004 BEFYERS FORMELIUS GER 20 3 1005 GER 20 3 1

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							Exhumation of Kruger graves (Archaetnos, June 2009).
Graves	GY-18	This graveyard is near the Goedgevonden Mine. It contains a single grave that is separated from at least two other graves by a distance of fifty meters. Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 24	-26.09005	29.04561	Unknown, no records found. To be verified.	The grave of Sanah Piet Mtsweni at GY-18 (Pistorius, 2004).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	Site A1	This site is located close to the conveyor belt and consists of several stones/stone-packed possible graves that were difficult to identify and document. There are at least 5 possible graves. Ref: APAC, July 2017.	KZB 5 IS RE	- 26.06802	29.02732	In existence. Within GGV MRA, outside of scheduled mining area.	One of the possible graves on Site A1 (APAC, July 2017).
Graves	Site A2	This site contains between 20 and 30 graves, with some demarcated by bricks and stones and others with clear headstones including inscriptions, while some are just demarcated with single cement headstones and soil heaps.	KZB 5 IS RE	- 26.06902	29.02589	In existence. Within GGV MRA, outside of scheduled mining area.	General view of Site A2 (APAC, July 2017).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							Grave site at Site A2 (APAC, July 2017).
Graves	Site B	Graveyard located on De Vos Breedt farm, next to the workers' accommodation. Ref: Pistorius, 2004; Cultmatrix, 2007; APAC1801, 2018.	GGV 10 IS Ptn 7	-26.06657	29.04916	Relocated by APAC in January 2018 (APAC1801).	Part of Site B in December 2017 (APAC, 2018).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Graves	G-01 (OFT)	Single grave occurs near HH01. This grave belongs to a woman who used to live in the farmhouse together with the Schoeman family. Ref: Pistorius, 2009.	GTP 7 IS Ptn 39	-26.047767	29.076683	Unknown. Situated on private land.	The single grave of Ms Schoeman near HH01 (Pistorius, 2009).
Graves	GY-02 (OFT)	Graveyard located in a Blue Gum east of HH01. It holds at least eleven graves. Severely dilapidated Ref: Pistorius, 2009.	GTP 7 IS Ptn 51	-26.0477	29.078417	Unknown. Situated on private land.	GY-02 in a Blue Gum bush with at least eleven graves (Pistorius, 2009).
Graves	GY-ii GY-iii GY-iii	The site is situated next to the road between Ogies town and GGV. The exact number of graves located here is not known but earlier (2017) estimates it to be in excess of 200. Ref: APAC, May 2018 (APAC018/29)	KZB 5 IS Ptn 1	-26.057955	29.054054	Outside GGV MRA.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							General view of the location of Grave Sites i, ii & iii (APAC, 2022).
Graves	GY-vii		ZWT 11 IS Ptn 27	-26.096991	29.114168	Outside GGV MRA (Tweefontein MRA).	
Graves	GY-viii		ZWT 11 IS Ptn 27	-26.096678	29.11426	Outside GGV MRA (Tweefontein MRA).	
Graves	GY-ix		ZWT 11 IS Ptn 27	-26.096256	29.114385	Outside GGV MRA (Tweefontein MRA).	
Graves	GY-x		ZWT 11 IS Ptn 10	-26.106762	29.136135	Outside GGV MRA (Tweefontein MRA).	
Graves	GY-xi		ZWT 11 IS Ptn 6	-26.085717	29.104841	Outside GGV MRA (Tweefontein MRA).	
HISTORICAL	STRUCTURES	FIGURE 2			•	,	
Historical Structures	F1	De Vos Breedt farmstead. Modern farm complex with at least three modern residential houses, numerous outbuildings, sheds and a tennis court. It also incorporates a nursery with numerous plastic tunnels. No old farm homesteads exist any longer. Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 14	-26.074334	29.04412	Demolished.	Three structures pre-demolition with historical significance (Pistorius, 2004).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							A view of the location of site F1 (De Vos Breedt farmstead). The structures have been demolished (APAC, 2022).
Historical Structures	F2	Tielman Roux farmstead. This complex is mainly composed of modern structures. Ref: Pistorius, 2004; Cultmatrix, 2007; Cultmatrix, 2006 (Rail HIA).	GGV 10 IS RE of Ptn 2	-26.100306	29.076167	Still exists. Used as Induction Centre at GGV.	Old Tielman Roux farmstead. Now used as Induction Centre (APAC, 2022).
Historical Structures	F3	BG Schmidt homestead: old dwelling, modern farmstead, workers village. Historical house between the labourer's village and the modern farm homestead is older than sixty years and may date from the colonial or Victorian period. Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 4	-26.112677	29.048912	Demolished.	The historical house in the BG Schmidt Farm Complex pre-demolition (Pistorius, 2022).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							View of some of the demolished structures at Site F3 (APAC, 2022).
Historical Structures	F4	Bombardie farmstead. The Bombardie farm complex is composed of many structures such as houses, outbuildings, sheds, enclosures for stock, a dairy, etc. The two main houses in this farm complex are both historical as well as the dairy. Ref: Pistorius, 2004; Cultmatrix, 2007.	ZWT 11 IS Ptn 4	-26.077841	29.07627	Demolished.	One of the two historical houses in the Bombardie Farm Complex pre-demolition (Pistorius, 2004). View of the main buildings of Bombardie farm

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							View of location of site F4 (Bombardie farmstead). The related stuctures have been demolished (APAC, 2022).
Historical Structures	F5	Zaaiwater farmstead. The main residence in the Zaaiwater Farm Complex is a Victorian dwelling that seems to be in a good state of repair. Several outbuildings are associated with this structure. Some of them may have historical significance. Not affected by GGV mining. Ref: Pistorius, 2004; Cultmatrix, 2007.	ZWT 11 IS Ptn 23	-26.106119	29.100224	Tweefontein MRA.	The main house in the Zaaiwater Farm Complex has historical significance (Pistorius, 2004).
Historical Structures	H1	Witcons garage/house. A historical house is located at the back of the garage near the entrance to the Witcons (Duiker) residential area. Not affected by GGV mining. Ref: Pistorius, 2004; Cultmatrix, 2007; Cultmatrix, 2006 (Rail HIA).	ZWT 11 IS Ptn 27	-26.097159	29.112394	Demolished. Tweefontein MRA.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							Pre-demolition: Houses in the northern main street of Witcons (Duiker) residential area (Pistorius, 2004).
Historical Structures	H2	Shop and doctors' rooms in Ogies. A single (small) house with another building, that may have historical significance. Not affected by GGV mining. Ref: Pistorius, 2004; Cultmatrix, 2007.	KZB 5 IS Ptn 1	-26.057766	29.052936	Still exists. In bad state of preservation. Currently utilized as scrap yard and residence.	View of the doctor's consulting rooms and house at Ogies (Cultmatrix, 2007). View of Site H2. The site is badly preserved and currently utilized (partially) as scrap yard and residence (APAC, 2022).

Category Label H3 H3 Reidence Soetvelde. A single residential house with outbuildings with historical significance. Ref: Pistorius, 2004; Cultmatrix, 2007. ZWT 11 IS Ptn 4 -26.076621 -29.080349 Silli exists and fairly well preserved. View of Site H3 (Soetvelde Residence). The site and related structures are fairly well preserved and need to be managed (APAC, 2022).	Н3	Residence Soetvelde				
		A single residential house with outbuildings with historical significance. Ref: Pistorius, 2004; Cultmatrix,	ZWT 11 IS Ptn 4	-26.076621	29.080349	View of Site H3 (Soetvelde Residence). The site and related structures are fairly well preserved

Category	Label	Description	Farm	Y field	X field	Status	Photographs
Historical Structures	V1	Houses, Ogies south. Ref: Pistorius, 2004; Cultmatrix, 2007.	Klipfontein 3 IS Ptn 10	-26.056333	29.047722	Still exists. In Ogies town area. Occupied.	View of the houses from the west (Cultmatrix, 2007).
							One of the houses related to Site V1 (Ogies South). The houses are all currently occupied and in varying degrees of preservation (APAC, 2022).
Historical Structures	V2	Mosque (Madrassah). Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 18	-26.064317	29.056013	Still exists.	View of the shop and mosque looking east (Cultmatrix, 2007).

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							A partial view of the Mosque at Site V2 (APAC, 2022). One of several houses in the historical village of Madressa (Pistorius, 2004).
Historical Structures	V3	Mbila Village. Ref: Pistorius, 2004; Cultmatrix, 2007.	GGV 10 IS Ptn 1	-26.075655	29.063061	Demolished.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
							Pre-demolition Mbila village was composed of several pre-cast concrete houses used by farm workers (Pistorius, 2004). View of Mbila Village from the north (Cultmatrix, 2007). General view of the location of Site V3 (Mbila Village). The related structures have been
Historical Structures	V4 (Site B)	Small village that is occupied by labourers working for Mr. De Vos Breedt. This village is composed of modern houses with no historical significance.	GGV 10 IS Ptn 7	-26.06657	29.04916	Demolished.	completely demolished (APAC, 2022).
		Ref: Cultmatrix, 2007.					
Historical Structures	HSRa1	Springboklaagte farm workers' dwellings Ref: Cultmatrix, 2006 (Road HIA).	Springboklaagte 33 IS Ptn 2	-26.119769S	29.058976E	Village in use. Springboklaagte Community. Khutala MRA.	
Historical		Klippoortje farm workers'	ZWT 11 IS Ptn 23	-26.107133S	29.099195E	Village in use.	
Structures		dwellings				Mafufela Community.	

Category	Label	Description	Farm	Y field	X field	Status	Photographs
		Ref: Cultmatrix, 2006 (Road HIA).				Tweefontein MRA.	
Historical Structures	HH01 (OFT)	A farm residence (HH01) which dates from the 1930's. Ref: Pistorius, 2009.	GTP 7 IS Ptn 39	-26.047877	29.075998	Unknown. Situated on private land.	Historical house (HH01) which dates from the 1930's (Pistorius, 2009).
Historical Structures	O1 (OFT)	Shed 02 – outbuilding associated with HH01 which probably served as a milk-shed. Ref: Pistorius, 2009.	GTP 7 IS Ptn 39	-26.047674	29.075208	Unknown. Situated on private land.	Former milk-shed which holds historical significance (Pistorius, 2009).
Historical Structures	O2 (OFT)	Shed 01 – outbuilding associated with HH01 which probably served as a wagon shed. Ref: Pistorius, 2009.	GTP 7 IS Ptn 39	-26.047667	29.075183	Unknown. Situated on private land.	J , ,
Historical Structures	MHC026	Ruins of red face brick building.	Springboklaagte 33 IS Ptn 3	-26.121131	29.049726	Unknown. Situated on private land. Khutala MRA.	

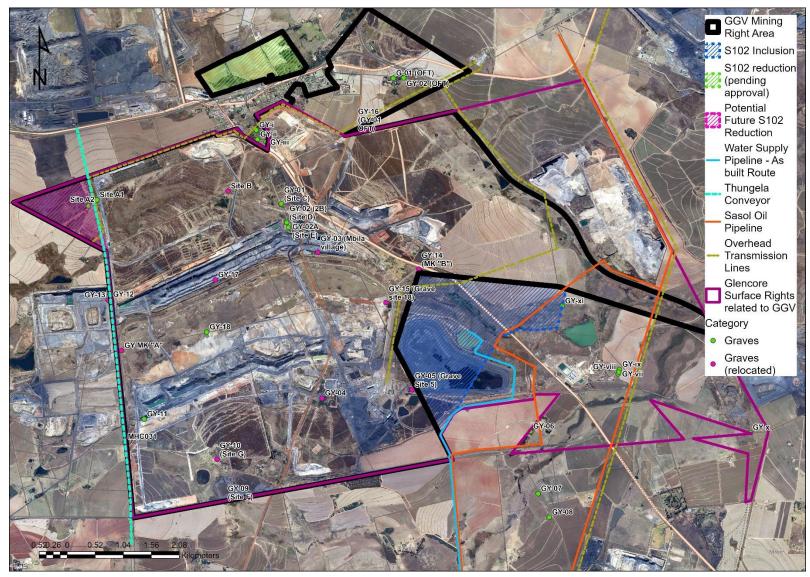


Figure 2: Known sites of cultural heritage - Graves/Burial sites

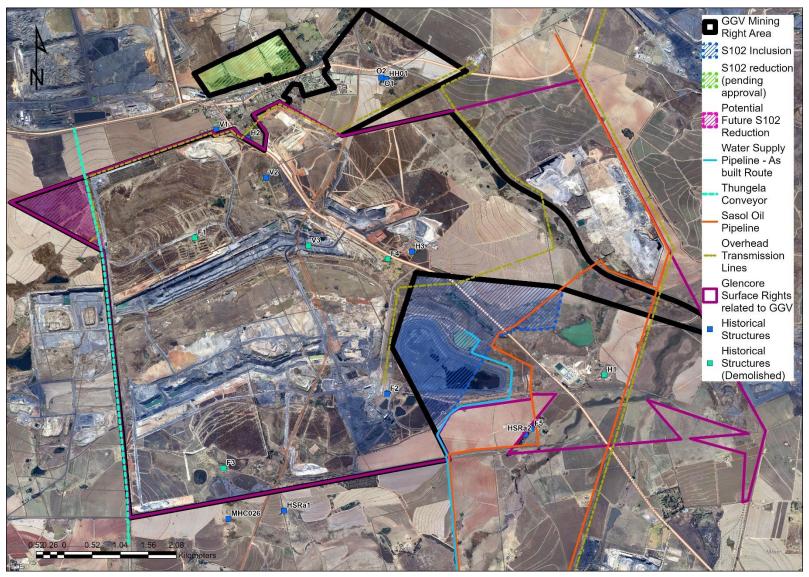


Figure 3: Known sites of cultural heritage - Historical Structures

4 CULTURAL HERITAGE MANAGEMENT PLAN

The Cultural Heritage Management Plan (CHMP) for the GGV Complex is provided in Table 3. The CHMP should be reviewed on a regular basis (at least on a 2-year interval) and updated as required.

Table 3: Cultural Heritage Management Plan for GGV Complex

Status Category	Site ID	Potential impact	Management Actions
Gravesite: Graves exhumed and relocated	GY-03 (Mbila Estate) GY-04 GY-05 (Grave Site 5) GY-10 (Site G) GY-12 GY-13 GY-14 (GY-MK"B") GY-15 (Grave Site 18) GY-17 Site B	 No direct impact as graves have been exhumed and relocated. Future queries or disputes may ensue. 	 Obtain exhumation and relocation records from the archaeologist and/or undertaker. Safe keeping of exhumation and relocation records for future queries or disputes.
Gravesite: Remaining gravesites	GY-01 (Site C) GY-02 (GY-02B) (Site D) GY-02A (Site E) Site A1 Site A2	 No direct impact is envisaged as no mining is scheduled in the location of the gravesites. Blasting and infrastructure development in the North Pit opencast may however have an indirect impact on the sites. 	 Demarcate the graveyards with a fence or wall and fit with an access gate. A buffer of at least 100m should be maintained between the sites and mining activities. This buffer zone must be maintained and zoned as no-go areas. Pre-blast structural survey of the gravesites to be conducted before blasting commences within a radius of 500m of the sites. The graveyards should be inspected every three months and noted in an inspection register. The register should outline the state of the graveyards during each inspection. Reports on damages to any of the graves or to the graveyards (fences, walls, gates) should be followed with the necessary maintenance work. Maintenance work should be recorded in the inspection register.

Status Category	Site ID	Potential impact	Management Actions
			The graveyards should be kept tidy from any invader weeds and any other refuse.
Gravesite: Remaining gravesites	GY-16 (OFT GY-01)	 No direct impact is envisaged as no mining is scheduled in the location of the gravesites. Blasting and infrastructure development in the Zaaiwater Pit opencast may however have an indirect impact on the site. The road re-alignment is in proximity to the gravesite and may impact on the site. 	 Site to be clearly demarcated (fenced in) and zoned as a no-go area. A buffer of 100m must be kept between the site and mining and construction activities. If this is not feasible, the graves need to be exhumed and relocated in line with the prescribed legislative requirements. Contractor appointed to construct the re-alignment of Road P53-1 to be made aware of the site and buffer requirement. Pre-blast structural survey of the gravesite to be conducted before blasting commences within a radius of 500m. The graveyard should be inspected every three months and noted in an inspection register. The register should outline the state of the graveyard during each inspection. Reports on damages to any of the graves should be followed with the necessary maintenance work. Maintenance work should be recorded in the inspection register.
Gravesite: Remaining gravesites	G-01 (OFT) GY-02 (OFT)	 No direct impact is envisaged as only underground mining is scheduled on the farm Grootpan 7 IS. Underground blasting and/or surface subsidence may however impact on the integrity of the gravesites. 	 Pre-blast structural survey of the gravesites to be conducted before blasting commences within a radius of 500m. The graveyard should be inspected every three months and noted in an inspection register. The register should outline the state of the graveyard during each inspection. Reports on damages to any of the graves should be followed with the necessary maintenance work. Maintenance work should be recorded in the inspection register. Any signs of subsidence must be recorded during the inspection, followed by the necessary action and maintenance.

Status Category	Site ID	Potential impact	Management Actions
Gravesite: Disputed graves	GY-06 GY-MK "A" GY-11 MHC031 GY-18	 Limited or no records are available for these sites which can potentially result in damage to the gravesites because of mining and construction activities in proximity to the sites if they are still in existence. Discrepancies in respect of the family names and/or location of the sites exist that need to be resolved. 	 Obtain exhumation and relocation records from the archaeologist and/or undertaker to determine which of these sites have been exhumed and relocated. Physical inspection of the sites by a heritage specialist to determine the status quo and actual location of the sites. Once the discrepancies have been resolved, an action plan should follow based on the findings.
Gravesite: Outside of GGV area	GY-09 (Site F)	 No direct impact is envisaged as the gravesite is outside of the GGV area. Blasting in the South Pit opencast in proximity of the site which may have an indirect impact on the site. The development of ancillary infrastructure outside of the GGV area may impact on the gravesites. 	 A buffer of 100m must be kept between the site and mining activities. Pre-blast structural survey of the gravesite to be conducted before blasting commences within a radius of 500m. The graveyard should be inspected every three months and noted in an inspection register. The register should outline the state of the graveyard during each inspection. Reports on damages to any of the graves should be followed with the necessary maintenance work. Maintenance work should be recorded in the inspection register. Sites to be kept on record and actioned in the event of future development of ancillary infrastructure outside of the GGV area. Share information with surrounding Mining Right holders to prevent any impacts on the identified sites.
Gravesite: Remaining gravesites	GY-i, GY-ii, GY-iii (Ogies)	 No direct impact is envisaged as the gravesite is outside of the GGV area. Underground blasting in proximity to the sites may however impact on the integrity of the gravesites. 	 Pre-blast structural survey of the gravesite to be conducted before blasting commences within a radius of 500m. The graveyards should be inspected every three months and noted in an inspection register. The register should outline the state of the graveyards during each inspection. Reports on damages to any of the graves should be followed with the necessary maintenance

Status Category	Site ID	Potential impact	Management Actions		
			work. Maintenance work should be recorded in the inspection register.		
Gravesite: Remaining gravesites	GY-07 GY-08 GY-vii, GY-viii, GY-ix, GY-x, GY-xi (Tweefontein MRA)	 No direct impact envisaged. Future expansion or development of ancillary infrastructure outside of the GGV area may impact on the gravesites. 	 Sites to be kept on record and actioned in the event of future expansion or development of ancillary infrastructure outside of the GGV area. Share information with surrounding Mining Right holders to prevent any impacts on the identified sites. 		
Historical structure: Demolished, no historical value	F1, V3, V4	None.	No further action required.		
Historical structure: Demolished, historical value	F3, F4	None.	Safe keeping of demolition permits issued by SAHRA.		
Historical structure: Remaining, no historical value	F2	None.	No further action required.		
Historical structure: Remaining, historical value	H3	 No direct impact is envisaged as no mining is scheduled in the immediate area. Blasting and infrastructure development in the Zaaiwater Pit opencast may however have an indirect impact on the site. 	 Pre-blast structural surveys to be conducted of the historical house and outbuildings before blasting commences within a radius of 1 km. A buffer of 500m must be kept between the historical structures and any infrastructural development and opencast mining activities. This buffer should be maintained and zoned as a no-go area. Vibration and air blast monitoring must be conducted if blasting within 1 km of the historical structures. Implement a management plan to protect and conserve the historical structures. Ongoing maintenance of the historical structures as per specialist advice. 		
Historical structure: Remaining, historical value	V2	 No direct impact is envisaged as only underground mining is scheduled in the area. Blasting and infrastructure development in the North Pit opencast may however have an indirect impact on the site. 	 Pre-blast structural surveys to be conducted of the Mosque and Madrassah before blasting commences within a radius of 1 km. A buffer of 500m must be kept between the Mosque and Madrassah and any infrastructural development and 		

Status Category	Site ID	Potential impact	Management Actions
		Underground blasting and/or surface subsidence may also impact on the integrity of the Mosque and Madrassah.	 opencast mining activities. This buffer should be maintained and zoned as a no-go area. When blasting is conducted close (within 1 km) to the Mosque and Madrassah, blasting activities must be curtailed at times of worship or as agreed to with the leaders. Vibration and air blast monitoring must be conducted if blasting within 1 km of the Mosque and Madrassah. Regular inspections should be conducted to identify any signs of subsidence, followed by the necessary action and maintenance.
Historical structure: Remaining, historical value	HH01, O1, O2 (OFT)	 No direct impact is envisaged as only underground mining is scheduled on the farm Grootpan 7 IS. Underground blasting and/or surface subsidence may however impact on the integrity of the historical structures. 	 Pre-blast structural surveys to be conducted of the historical structures before mining/blasting commences within a radius of 500m. Regular inspections should be conducted to identify any signs of subsidence, followed by the necessary action and maintenance.
Historical structure: Outside of GGV area	F5, H1, H2, V1, MHC026, HSRa1, HSRa2	None.	No action required.
Unidentified, subsurface sites of cultural value or graves	-	Uncovering of unknown or invisible, subterranean sites during any development actions.	 Ongoing monitoring during construction and/or mining to be done by a qualified heritage specialist for early detection of unidentified (sub-surface) sites or graves. All activities shall cease immediately upon any discovery of cultural and heritage resources and a qualified archaeologist informed to do further assessment and reporting. The site where cultural and heritage have been discovered shall be cordoned until such time that an instruction to resume work is provided to the contractor in writing, following consultation with the regulating authorities. Include national heritage and cultural issues in the environmental awareness/induction programme.

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