

NOVEMBER 2023

Vaughan-Tarilta River Crossings Heritage Impact Statement

Final

Mount Alexander Shire Council



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ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Dja Dja Wurrung people as the Traditional Owners of the Country on which this project has been conducted. We recognise their continuing connection to land, waters and culture and pay our respects to their Elders past and present, and we acknowledge emerging leaders. Moreover, we express gratitude for the knowledge and insight that Traditional Owners and other Aboriginal and Torres Strait Islander people contribute to our shared work in Australia.

We pay respects to all Aboriginal and Torres Strait Islander communities. We recognise that Australia was founded on the genocide and dispossession of First Nations people and acknowledge that sovereignty was not ceded in this country. We embrace the spirit of reconciliation, working towards self-determination, equity of outcomes, and an equal voice for Australia's First People.

1 Introduction

1.1 PURPOSE OF THIS REPORT

This Heritage Impact Statement (HIS) has been prepared on behalf of Mount Alexander Shire Council pertaining to a low-level crossing upgrade along the border of the Castlemaine Diggings National Heritage Park (H2047). This report has been informed by the results of pre-application meeting P38543, and feedback gathered during an onsite inspection with Heritage Victoria.

This statement has been prepared by Jamie Rooney (M.A. Hons, Archaeology and History), in consultation with David Bannear.

135 Mollison Street, Bendigo, Victoria, 3550

0487 426 509; jamier@rmcg.com.au.

1.2 LOCATION OF WORKS

The activity area is located directly east of Vaughan, approximately 10 km south of Castlemaine. The activity are measures approximately 1.7 ha in size and incorporates part of the Castlemaine Diggings National Park extent (Figure 1-1). Cadastral information is included below (Table 1-1).

Table 1-1: Cadastral Information

SIMPLE ADDRESS	LOT/PLAN OR CROWN DESCRIPTION	LGA	SPI	
16 Burgoyne Street, Vaughan 3451	PC380572	Mount Alexander	PC380572	
16 Burgoyne Street, Vaughan 3451	Allot. 23 Sec. 1	Mount Alexander	23~1\PP5813	
16 Burgoyne Street, Vaughan 3451	Allot. 24 Sec/ 1	Mount Alexander	24~1\PP5813	
1 Ball and Welch Lane, Vaughan 3451	Lot 1 TP901849	Mount Alexander	1\TP901849	
1 Ball and Welch Lane, Vaughan 3451	Lot 2 TP200392	Mount Alexander	2\TP200392	
1 Ball and Welch Lane, Vaughan 3451	Lot 1 TP200392	Mount Alexander	1\ TP200392	
Burgoyne Street, Vaughan 3451	Allot. 26A Sec.1	Mount Alexander	26A~1\PP5813	
1 Ball and Welch Lane, Vaughan 3451	Lot 1 TP643462	Mount Alexander	1\TP643462	
Ball and Welch Lane, Vaughan 3451	Allot. 32B Sec. 1	Mount Alexander	32B~1\PP5813	
Burgoyne Street, Vaughan 3451	Allot. 10C Sec. 3A	Mount Alexander	10C~3A\PP2622	
Vaughan-Tarilta Road, Vaughan 3451	Allot. 10B Sec. 3A	Mount Alexander	10B~3A\PP2622	
15 Vaughan-Tarilta Road, Vaughan 3451	Lot 4 TP950885	Mount Alexander	4\TP950885	

1



Figure 1-1: Study Area

2 Cultural Heritage Values

2.1 STATEMENT OF SIGNIFICANCE

The following statement of significance and supporting information was sourced from the Heritage Victoria database (https://vhd.heritagecouncil.vic.gov.au/).

What is significant?

The Castlemaine Diggings National Heritage Park envelopes a goldfield which was the catalyst for the Victorian gold rush of the early 1850s. In that tumultuous decade Victorian gold transformed the demographic, social, political and economic complexion of Australia. The gold won from Mount Alexander (later renamed Castlemaine) and other early rushes such as Ballarat and Bendigo mainly found its way to England as bullion where it helped bankroll a spectacular period of world trade, industrial and commercial expansion.

Following the flush of discovery in July 1851, Mount Alexander all but depopulated other Australian goldfields; by mid-1852 it was renowned as a world significant goldfield. The Mount Alexander rush drew large numbers of gold seekers from Britain, Europe and America and was the first Victoria goldfield on which Chinese miners converged in large numbers, in 1854. The Mount Alexander rush helped establish a pattern of international and local migration for future Australian and international gold rushes.

Of the major 1850s goldfields, Mount Alexander alone remained a primarily surface field, and for this reason has uniquely preserved the early alluvial landscape. Ballarat and Bendigo were transformed into great cities by even richer underground mines which obliterated their gold rush workings.

At the core of the Castlemaine Diggings National Heritage Park is an area of land, approximately 50 km by 10 km, containing auriferous quartz reefs, gullies, flats and hills which encompasses the goldfield known historically as the Mount Alexander Diggings. Inextricably linked to the historic gold locations is an abundance of mining relics relating to the early 1850s Mount Alexander gold rush. They form subtle landscapes comprising shallow alluvial diggings, tracks, burial grounds, huts and fireplaces, puddling machines, sluices and tail races, quartz roasting kilns and early quartz mining & battery sites. Interlacing the gold rush features is physical evidence of successive periods of mining which lead up to the present day.

Despite the transformation of the natural environment evidence of Aboriginal occupation such as rock wells and stone tools is also present. This outstanding archaeological palimpsest is now part of a regenerating Box-Ironbark forest which is in its own right an artefact of gold mining and later forestry. The place names of the park's gold mining locations are significant markers of ethnicity, experiences, and events of the Mount Alexander rush. Adjoining the park are the townships born of the gold rush, Barkers Creek, Castlemaine, Chewton, Fryerstown, Vaughan, Campbells Creek, and Guildford.

How is it significant?

The Castlemaine Diggings National Heritage Park is of historical, scientific, archaeological, and aesthetic (landscape) significance to the State of Victoria.

Why is it significant?

The Castlemaine Diggings National Heritage Park is historically significant as an authentic and intact early 1850s goldfield. It was the catalyst for the Victorian gold rush of the 1850s, which was a profoundly significant event in the shaping of Australia. In that tumultuous decade Victorian gold transformed the demographic, social, political, and economic complexion of Australia.

The Castlemaine Diggings National Heritage Park is scientifically significant because it envelopes an extraordinary mass of geological, geomorphologic and cultural features relating to initial and subsequent periods of gold mining from 1851 to the present day. Its uniqueness lies in the authentic nature of the gold rush material evidence as compared to other contemporary goldfields, its association with the momentous Mount Alexander rush, and the intactness and diversity of the preserved mining sequence over a period of 150 years. The integrity of the 1850s gold-rush landscape in the section south of Vaughan is particularly exceptional. The park also has some of the earliest remaining gold reef mining sites in Australia. Many of the alluvial and reef mining sites are associated with remnants of housing, which are significant both as evidence of historical occupation of the goldfield and as archaeological resources likely to contain evidence which will cast greater light on ethnicity, mining, and domestic life. The land and its regenerating Box-Ironbark forest is important scientific evidence in its own right in demonstrating a spectacular event of transformation of the pregold rush environment.

The Castlemaine Diggings National Heritage Park is a mysterious and picturesque landscape of environmental transformation and regeneration and is culturally significant as the embodiment of the Mount Alexander rush, the commencement of the Victorian gold rush proper. The overall quality and range of surviving sources of information (archaeological, environmental, and historical) when combined speaks eloquently of the history of the Mount Alexander rush of Victoria's first great concentration and mixing of ethnic and regional groups. Mount Alexander- and its central Victorian contemporaries, Bendigo and Ballarat, were responsible for energising society in the early 1850s with results that transformed Australia.

2.2 LAND USE HISTORY

Originally an agricultural landscape, the population of Vaughan and surrounding areas increased after gold was discovered in the Castlemaine area (Victorian Places, 2015). Approximately 20,000 people arrived at the Castlemaine-Mount Alexander gold fields after word reached Melbourne that gold had been discovered in the area (Clark 1995). Between 1851 and 1854, the Castlemaine region was known as one of the most prosperous shallow alluvial gold mines in the world (Edmonds, 2004).

Gold was officially discovered in Vaughan in 1853, predominantly along the Loddon River (Turnbull and Lane 2008). As a result, the Loddon was extensively dredged for gold until the 1950s (Edmonds 2004; Story 1993). The region of Vaughan became known as a gold rush town called The Junction (Edmonds, 2004). Nearby Guildford quickly became a large Chinese settlement in the region, with most of the settlement occurring along the river flats adjacent to the Loddon River and Campbell Creek (Figure 7-2) (Edmonds 2004; Story 1993; Turnbull and Lane, 2008). Once gold mining began to decline, Chinese residents in the area started market gardens (Edmonds, 2004).

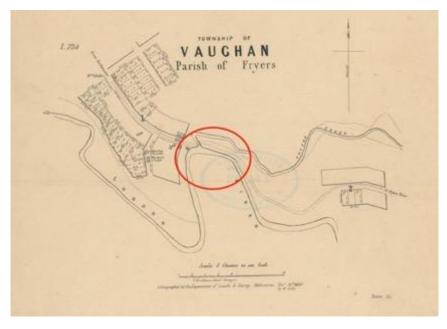


Figure 2-1: Depiction of Vaughan township in 1860 with the activity area in red. (Department of Crown Lands and Survey 1860 (Trove 2023))

Shanty towns were quickly constructed near the gold sites in the region and the population in the wider region boomed (Clark, 1995). Consequently, the surrounding areas were quickly cleared of timber for access to the alluvial gold, to make space for housing (Turnbull and Lane 2008). The demand for timber resulted in mills operating in the region and along the Loddon River between 1856 and 1898 (Turnbull and Lane 2008). As a result of early settlement and timber practices in the area, the landscape has been extensively cleared since 1946 (Figure 7-3).



Figure 2-2: Aerial imagery of Vaughan in 1946, with the activity area in red (Adastra Airways 1946 (Mapshare 2023))

In the early 1900s, gold sluicing in Vaughan identified springs in the area, which are now a modern-day tourism attraction (Victorian Places 2015). In 1914, the first section of public reserve including parkland and the mineral springs were protected (Victorian Places 2015). Later, in 1995, the area surrounding Vaughan was deemed the Castlemaine Diggings National Park to mark the significance of the historical mining in the region (Turnbull and Lane 2008).

2.3 EXISTING CONDITION

The study area centres on an existing low level crossing constructed within the last decade as a replacement for the dilapidated 1868 bridge to the east. At present, this river ford is the only means of connection between the two halves of the Vaughan Township. It is currently used by emergency services and local residents to travel between Tarilta and Vaughan. Homes and farms are located on both sides of the Loddon River, however the crossing becomes unusable in high water resulting in a 20 minute detour. The inability to cross the Loddon during these periods poses high risk to emergency services in the area.



Figure 2-3: Existing crossing, North Facing.



Figure 2-4: Existing crossing, West Facing



Figure 2-5: Existing crossing, South Facing

3 Proposed Works

3.1 WORKS DESCRIPTION

These works relate to safety upgrades and infrastructure works on the Vaughan – Tarilta low level crossing within the township of Vaughan Springs. Complete design plans for this project are included below (Figure 3-1), artists impression of the works at completion are included below (Figure 3-2 and Figure 3-3).

The low-level crossing is being upgraded to ensure that local residents are able to safely cross the Loddon River. Currently, the river can only be crossed with a four-wheel drive and is inaccessible when the water levels are too high. The low-level crossing will be constructed by piles being driven to limit the amount of sediment produced with the removal of the existing river ford.

The following activities may also be included as a part of the construction:

- Track grading/rehabilitation
- Rock spall pier construction
- Retaining the existing road footprint
- Stormwater drainage construction
- Removal of existing stone drains
- Construction of rock beaching and wingwalls on the embankment
- Crane lifting of prestressed planks from truck and placement on cross head for construction
- Excavation within the river ford during the deconstruction so the piles can be driven
- Lay downs will be along Ball and Welch Lane and the access track to the river ford. There may be some laydown areas set up along the closed Vaughan-Tarilta Road and Burgoyne Street.
- The piles will be approximately 9.5m with the piles driven to a depth of approximately 7m and 9m.

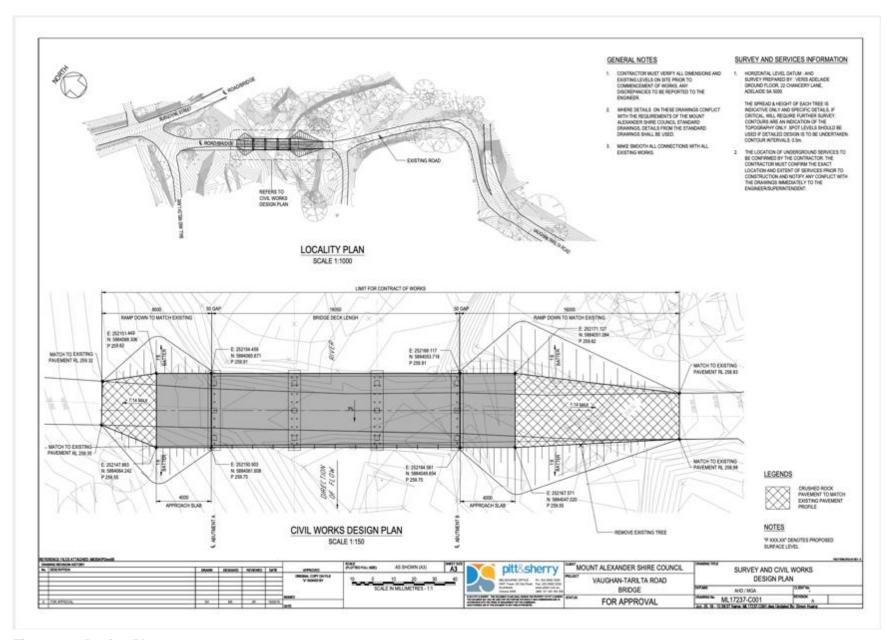


Figure 3-1: Design Plan



Figure 3-2: Artist's impression of completed works, north facing



Figure 3-3: Artist's impression of completed works, south facing

3.2 REASONS FOR THE ACTIVITY

This activity is being undertaken to ensure safe access across the river for visitors to the Castlemaine Diggings, residents and emergency services. Without adequate infrastructure local emergency services have struggled to turn out to bushfire and emergency events located south of the Loddon at Vaughan. Significant detours on difficult roads with very steep inclines have been required. The current ford is inadequate for larger tankers and is impassable when there is moderate flow in the Loddon.

3.3 ASSESSMENTS OF IMPACTS

Impacts on cultural heritage significance

The following section makes assessment of the proposed works against Section 101 (2) of the *Heritage Act* 2017.

The Castlemaine Diggings National Heritage Park is of historical, scientific, archaeological, and aesthetic (landscape) significance to the State of Victoria. Specifically, the Castlemaine Diggings National Heritage Park is historically significant as an authentic and intact early 1850s goldfield containing numerous examples of material culture from this period. The proposed changes will not diminish the cultural significance of this place. These works are focused on the extreme border of the heritage overlay in an area that has already been developed and altered from its original fabric. No destruction of historic or archaeologically sensitive areas will occur as part of these works. The existing crossing is approximately 10 years old and holds no historic or archaeological value. These works seek only to strengthen the existing crossing and ensure it is used in a safe manner.

The visual impacts are low and affect approximately 0.015 hectares of the 7,550-hectare overlay (0.0002%). Any negative impact to the visual amenity is offset by the current inaccessibility by emergency services and resultant risk to human health.

This proposal is supported by both SES and CFA. The only alternative route around Vaughan-Tarilta Road is along an unsealed fire access track with a 10% incline, which traverses a working farm where livestock often block the road. While this alternative road can be utilised, the additional time required to drive along this road could increase the time taken to respond to emergency events in Vaughan and at the Castlemaine Heritage Diggings.

One neighbouring heritage place is present within 1km, the Vaughan Chinese Cemetery (H1408, 280m southeast). This site will not be impacted by the proposed works.

4 Summary of impacts and conclusion

The works relating to the upgrade of the existing low level crossing are minor in nature and seek to ensure safe travel along Vaughan – Tarilta road is possible for all. The proposed works will involve grading and strengthening of an existing roadway and rock shoring and beaching. A new slightly elevated crossing will be installed above the water level to replace the existing 4x4 only fording point.

The proposed works do not affect the historical, scientific, or archaeological values of this place. The study area straddles the border of the mapped heritage extent of H2047. Works will primarily be undertaken on extant road reserves, and within the Loddon River itself. The works area includes an existing low level crossing deemed unfit for purpose. This crossing has been in place for approximately 10 years and holds no historical, scientific, or archaeological value. Minor impact to visual amenity will occur as part of this activity. Visual changes will be confined to a built-up area on the border of the heritage overlay and are required to ensure safe access to both sides of the river.

It is concluded that the proposed upgrade works will have little to no impact on the cultural heritage significance of the Castlemaine Diggings National Heritage Park. While some change will occur to the visual amenity of approximately 0.0002% of the site, the impact of such change is offset by the need for safe emergency access to the whole of the Vaughan township.

5 Bibliography

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Appendix 1: Letters of support

CAMPBELLS CREEK CFA SUPPORT LETTER

Patron: Her Excellency the Honourable Linda Dessau AC, Governor of Victoria

Helen Davies, Secretary
13 Brigade Avenue Campbells Creek Vic 3451
M: 0474 452 093
E: campbellscreekfirebrigade@outlook.com





1st August 2023

Dale Baker
Project Engineer – Engineering
Mount Alexander Shire Council
P.O. Box 185
Castlemaine VIC 3450
via email: d.baker@mountalexander.vic.gov.au

Dear Dale

Re: Vaughan-Tarilta low level crossing project

I am writing this letter to express my support for the construction of the Vaughan-Tarilta low level crossing over the Loddon River at Vaughan. This crossing will provide an essential link between the main sealed road running through Vaughan and a number of residents who reside on the Vaughan-Tarilta Rd.

From an emergency services perspective this will benefit the community & our volunteer firefighters in several ways:

- ☐ The proposed crossing will provide an all-year-round safe & efficient way for CFA volunteers to access properties & bushland on the Vaughan-Tarilta Rd in the event of a structure fire or bushfire emergency
- ☐ It will provide direct access to the two water storage tanks on the Vaughan-Tarilta Rd/Cornish Lane intersection. These purposely-built firefighting water tanks hold a capacity of 63400 ltrs of water a precious commodity when mains water supply is not available within the village of Vaughan
- ☐ This direct access to the water tanks means our fire trucks will no longer be required to make the 12.5km, 10-minute detour that includes a narrow, winding, unsealed road that passes through a farm property complete with free-roaming farm animals
- ☐ It will provide an additional safe escape route for residents in the event of a bushfire emergency

This project is essential for the safety of the Vaughan residents & CFA volunteers alike and trust it will be completed as soon as possible.

Yours sincerely

Stuart Hand

Captain Campbells Creek Fire Brigade M: 0419 550 293 E: s.j.hand@bigpond.com

Protecting lives and property

cfa.vic.gov.au

SES SUPPORT LETTER





Friday, 4 August 2023

Darren Fuzzard Chief Executive Officer Mount Alexander Shire Council PO Box 185 Castlemaine Vic 3450

Dear Darren

Support for the Vaughan-Tarilta low level crossing

I am pleased to confirm that Victoria State Emergency Service (VICSES) supports the Vaughan-Tarilta low level crossing project proposed by Mount Alexander Shire Council.

Construction of this low level crossing will provide increased access during low to moderate flows where the existing river ford crosses the fire access track between Ball and Welch Lane and the Vaughan-Tarilta Road.

This fire access track is currently the only suitable access other than the alternative route, the unsealed Vaughan-Tarilta Road that has a hill with a 10% incline. While this alternative road can be utilised the additional time required to drive along this road could increase the time taken to respond to emergency events in Vaughan and at the Castlemaine Heritage Diggings.

Castlemaine Unit Controller Adam Pratt reviewed the draft designs for the Vaughan-Tarilta Road Bridge available on the Council website and has confirmed that they are suitable for our vehicles.

Please reach out should you have any queries regarding our support for the project.

Kind regards

Sharon Unthank

Sharon Unthank Senior Assistant Chief Officer Unit Support and Regional Operations sharon.unthank@ses.vic.gov.au

M: 0427 300 946

Victoria State Emergency Service

Western Region 7 Rohs Road, Bendigo East Vic 3550 ses.vic.gov.au



FRYERSTOWN CFA SUPPORT LETTER

FRYERSTOWN FIRE BRIGADE

18 Market Street Fryerstown, VIC 3451 24/07/2023



Captain, Hamish MacCallum 240 White Quartz Road, Fryerstown 3451

To whom it may concern,

I am writing my support and approval for the planned construction of a low level crossing, at the fire access track/road between Ball and Welch Lane and the Vaughan-Tarilta Road, Vaughan Springs.

Since the closure of the old bridge crossing at Vaughan we have struggled to turn out to bushfire and emergency events located south of the Loddon at Vaughan. It has required some massive detours on difficult roads with very steep inclines. The current ford is inadequate for larger tankers and is impassable when there is moderate flow in the Loddon.

As captain of a local CFA who regularly requires access in the southern sector of Vaughan, I strongly support any proposed access and egress improvement to this crossing.

Kind regards,

Hamish MacCallum Captain, Fryerstown CFA

STRATHLODDON CFA GROUP SUPPORT LETTER

To whom it may concern

The following relates to any emergency (police, fire SES or ambulance)

The Township of Vaughan is in the Guildford brigade area, it's divided in two by the Loddon River, access to the south side of the township and to Porcupine ridge rd. area is by the low level crossing at Vaughan or Via Vaughan Tarilta rd. Tarilta. The current low level crossing can be made impassable due to water levels (60cm for brigades lower for police and ambulance) or cars parked on the Fire Access track or there's been a flood and Parks Vic have not cleared the crossing Under normal conditions the three closest Brigades would take 10 minutes after turn out to arrive at this crossing. There are a number of houses on the south side including approx. 7 along Porcupine Ridge road. If this crossing is not accessible emergency services would take a significant long time to get to the south side due to the extra time to travel to Tarilta and along the Vaughan Tarilta road (steep and winding road second and third gear driving)

In the event of a structure fire the structure would most likely be fully involved by the time brigades arrived Porcupine Ridge which extends from Vaughan south to Porcupine Ridge town ship is subject to lightning strikes in the summer period and swift access to this area for Brigades and Forest Fire Management is paramount, the currant track does not allow for Heavy earth moving equipment to travel they have to go via Tarilta a long slow drive At the start of the Porcupine Ridge rd. there is a large number of old gold mining shaft where rescue for people and animals have occurred in the past

A permanent low level crossing maintained by the shire would greatly protect the community in the event of any emergency.

The Strathloddon group of fire brigades strongly support a permanent low level crossing.

Regards Shane Scoble Strathloddon Group of fire brigades 0419303970

Innovative, creative, connected.

I acknowledge the traditional Aboriginal custodians of country throughout Victoria and pay my respect to them, their culture and their Elders past, present and future.

GUILDFORD CFA SUPPORT LETTER

Re the proposed, much delayed and much anticipated Low Level Crossing of the mighty Loddon River, between Ball & Welch Lane and the Vaughan-Tarilta Rd at Vaughan.

The closest CFA Brigade, at Guildford, is totally in support of the construction of anything enabling us to cross the Loddon in this location.

As such we are in support of the proposed low level crossing which will allow emergency vehicle access for most of the year. A crossing here is of paramount importance to gain timely access to the properties on the South side of the river.

In any emergency event, the speed at which we can respond is vital to the early suppression of any fire activity.

Easy and direct access is the key to this, and in this specific case the only alternate access route is longer, on unsealed, steep tracks. The Vaughan-Tarilta Road is more track than road and does not constitute a great alternative.

It is also much more difficult to navigate to the area in question if there is no crossing at Vaughan.

All these reservations about the current situation have been flagged numerous times in the past, and are just as relevent to other branches of the emergency services, ambulances in particular.

For these reasons the Brigade whole heartedly support the construction of a crossing at Vaughan, and would encourage its making as soon as possible given the anticipated conditions for fire in the years ahead...

Sincerely Daydd Kelly

Captain Guildford Fire Brigade CFA This report has been prepared by:

RM Consulting Group Pty Ltd trading as RMCG

135 Mollison Street, Bendigo Victoria 3550

(03) 5441 4821 — rmcg.com.au — ABN 73 613 135 247

Offices in Victoria, Tasmania and NSW





Key RMCG contact

Jamie Rooney

0487 426 509 — jamier@rmcg.com.au

Document review and authorisation

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