

Before the Independent Hearing Panel

In the Matter of the Resource Management Act 1991 (**RMA**)

And

In the Matter of an application to the Central Otago District Council and Otago Regional Council for resource consent to establish and operate a gold mining activity at 1346 – 1536 Teviot Road, Millers Flat

Reference RC230325 (Central Otago District Council)
RM23.819 (Otago Regional Council)

Evidence of Mike Moore on behalf Hawkeswood Mining Limited

(Landscape)

Dated 29 April 2024

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Introduction

1. My full name is Michael William Moore. I am a Landscape Architect. I hold a Bachelor of Science degree (BSc) in Geography from University of Canterbury, a Post Graduate Diploma in Landscape Architecture (DipLA) from Lincoln University, and a Master of Regional Resource Planning (MRRP) from University of Otago. I am a registered member of the New Zealand Institute of Landscape Architects (NZILA).
2. I have over 35 years' experience as a landscape architect and have operated my own consultancy since 1994. My work involves both landscape design and planning and has a particular emphasis on landscape assessment. I have prepared numerous natural character and / or landscape assessments on plan changes and on projects of various scales and character around New Zealand, including dwellings, subdivisions, port expansions, industrial zones, wind farms, cycle trails, mines, riverbank and coastal protection structures, and hydro-electric developments. I have also been involved in natural character and landscape assessment work for Councils to assist with the development of District and Regional planning provisions, in particular, Dunedin, Clutha, Waitaki and Gore District Plans, as well as a coastal natural character and landscape assessment study for the Otago Regional Council.
3. I was instructed by Hawkeswood Mining Ltd in December 2022 to prepare an assessment of the landscape effects of the proposed mining, and my report (dated October 2023) was submitted in support of the application. I am familiar with the area to which the application for resource consent relates. I have visited the Millers Flat area on numerous occasions and made specific visits to this site on 5 December 2022 and 17 April 2024.
4. Although this is not a hearing before the Environment Court, I record that I have read and agree to and abide by the Environment Court's Code of Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2023. This evidence is within my area of expertise, except where I state that I rely upon the evidence of other expert witnesses as

presented to this hearing. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

Scope of Evidence

5. My evidence will address the following:
 - a. The updated site plans.
 - b. Summary of my assessment
 - c. Visual amenity effects from private properties.
 - d. Issues arising from the CODC landscape peer review.
 - e. Issues arising from the s42A report and submissions

The updated site plans

6. Since lodgement of the application and in response to ongoing discussions with CODC and its consultants, the applicant has prepared updated site plans, which provide greater detail on the proposed works and the staging of the works. These plans are attached to the Evidence of Simon Johnstone). Notable additions include detail regarding the location and timing of bund creation and removal, detail regarding the location of the workshop and site office, and the timing of relocation of the Clutha Gold trail where it crosses through the proposed mining area.
7. I have reviewed the assessments in my report, on the basis of these updated plans (Site plans dated 22 April 2024 prepared by Overview Surveying) and largely confirm the ratings given, albeit with some adjustments and refinements. I outline my updated assessment in the next section.

Assessment summary

8. My report (dated October 2023) provides an assessment of the effects of the proposed mining on landscape values. The method adopted follows the concepts and principles outlined in the New Zealand Institute of Landscape

Architects (NZILA) Landscape Assessment Guidelines¹. The following is a summary of the key points. The figures attached to the report are also attached to this evidence but have been updated in some cases. I also include some additional figures.

9. As shown in **Figure 1**, the site is located on river flats within the Teviot Valley on the true left side of the Clutha River / Mata Au, approximately 1.2 km upstream of Millers Flat township, and between the river and Teviot Road. The wider landscape context is the Teviot Valley, defined by largely pastoral hill country to either side and the landscape has a 'working rural' character with settlement and development focused on the Teviot Valley corridor.
10. The site geology is alluvial gravels, and the landform is largely comprised of river flats. The site is mainly on a low terrace landform some 2 – 6m above the riverside Clutha Gold cycle trail. Near the river there are modified landforms relating to historic gold mining sluicing, dredging and tailings. The site is mainly under pasture cover and grazed. **Figures 2 - 11** illustrate the character of the site and area.
11. The landscape impacted by the proposed mining is river flat which has been significantly modified by previous mining and by agricultural use. It is not recognized as an area of outstanding natural landscape (ONL) or Significant Amenity Landscape (SAL) in the CODP but falls into the category of 'other rural landscapes' as discussed in Section 2.3.1. Whilst not the focus of landscape protection provisions, the CODP nevertheless, seeks *'to maintain and where practicable enhance rural amenity values created by the open space, landscape, natural character and built environment values of the District's rural environment'*.²
12. I have assessed the key characteristics and features that contribute to the landscape quality and amenity values in the area surrounding the site as:

¹ Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines, Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

² CODP Objective 4.3.3.

- a. Rural character based on openness and generally modest impact of built form / natural landform modification, along with rural land uses, predominantly stock grazing.
 - b. The Clutha River / Mata Au is a significant natural feature with natural character values, and which has cultural significance to tangata whenua (including as a mahinga kai trail and important transportation route).
 - c. Legibility of landforms relating historic gold mining practices in the area such as sluicing / tailings in places.
 - d. More broadly, the hills to either side of the valley provide a less built, more natural rural setting to the valley landscape.
13. Landscape impacts of this operation will arise from vegetation and landform disturbance, gravel stockpiles, the presence of plant and machinery, bunds, and lighting. An important factor is that the proposed operation will be temporary, and that the effects will be for a limited, approximately 5-7-year timeframe. Once completed, the area (including the existing dump area) will be returned to pastureland with virtually no sign that it was mined.
14. Whilst the site area is large, it will not all be impacted at once, and the proposed progressive rehabilitation to pasture immediately following mining is a key mitigation measure. Bunds are proposed to provide screening and separation, as are colour treatments to mitigate the visual prominence of depot structures.
15. The site is not in an area of significant landscape quality and its sensitivity to mining is lowered to the extent that it has already been subject to quarrying and mining activities. On the other hand, the site is close to a main road (Teviot Road) and the Clutha Gold trail.
16. The proposed mining works will have a semi-industrial character and will impact the rural character of the site in terms of its openness and naturalness. The mitigation measures proposed will reduce these impacts to an extent, and the timeframe of the operation involved is limited to the

medium term. The long term / legacy effects will be a return to pastoral farmland with the existing dump site also tidied up.

17. As discussed, I have reviewed my assessment of landscape effects in the light of the updated plans, and **Appendix A** provides the details of this. Overall, my updated assessment finds that from the viewpoints surrounding the site, effects of the proposed activity (whilst operational) on the landscape values will vary over the life of the project and will fall within the following ranges:

- Teviot Road: Adverse / Low (minor) – Adverse / Moderate (more than minor).
- State Highway 8: Adverse / Low – Adverse / Low-moderate (minor).
- Oven Hill Road: Adverse / Low-moderate (minor) – Adverse / Moderate (more than minor).
- Clutha Gold Trail: Adverse / Low-moderate (minor) – Adverse / Moderate-high (more than minor).

18. As regards the long-term effects following final rehabilitation, I conclude as follows:

- Teviot Road: Neutral – Positive / Very low
- State Highway 8: Neutral
- Oven Hill Road: Neutral – Positive / Very low
- Clutha Gold Trail: Adverse / low (minor) – Positive / Very low.

19. As noted in my memorandum dated 20 November 2023 which formed part of the applicant's RFI response to CODC, it is my assessment that the proposed mining is largely beyond the Clutha River / Mata-Au margin (defined as the strip of land between the active riverbed and the wider landscape context). In relation to natural character effects, I conclude that the proposed mining will have:

- a. no direct physical effects of any significance on natural character, within the riverbed or margin.
- b. some adverse experiential effects associated with noise and visibility whilst operational that will vary with the proximity of the works over the life of the project, will be temporary, and up to moderate in degree.
- c. no long-term adverse effects following rehabilitation.

Visual amenity effects from private properties

20. With a few exceptions, the majority of property owners surrounding the site have signed written approvals of the proposed activity. Taking account of the consultation with surrounding landowners undertaken by Hawkeswood Site Manager, Simon Johnstone (and the written approvals and submissions in opposition received), there are two properties that I wish to address in terms of the visual effects of the proposed activity. These are 1334 Teviot Road and 67 Clutha Road (both submitters in opposition). I have been able to visit 1334 Teviot Road, however contact was unable to be made with the owners of 67 Clutha Road prior to my site visit. In this latter case, I have assessed effects on the basis of what I have been able to observe from the site looking back to this property, aerial imagery and public viewpoints surrounding.

1334 Teviot Road

21. 1334 Teviot Road is to the north of the mining site and directly adjacent. The dwelling is located approximately 33m from the boundary and there is a hedge, along with various sheds / outbuildings, fencing and amenity plantings between the house and the boundary. The most significant living spaces potentially impacted by mining works are a dining room and an associated outdoor space at the western end of the house. **Figures 14(a) and (b)** illustrate views from inside the dining room and from the slightly lower patio outside. The site is more visible from other parts of the property nearer the boundary, for example, as illustrated in **Figure 14(c)**, but these areas are not so significant in terms of usage and living spaces.

22. During Stages 2 and 3A, a 4m high grassed bund will be present approximately 48m from the 1334 Teviot Road boundary. This will screen views of mining activity behind but will significantly modify the sense of rural openness where there are views to the south from this property (e.g. Figure 14(c)). I estimate the Stages 2 and 3A timeframe as approximately 2 - 3 years. The evidence of Ms Collie records that the Applicant offers a condition of consent restricting the duration of Stage 2 to 2 years, which provides more certainty on the effects. Prior to and following this, the adjoining land will be in pasture and mining activity will be no closer than approximately 800m. Considering the limits to gravel stockpile heights, the mining activity will have lower visual impact than that currently associated with the exploratory works.
23. Overall, whilst I acknowledge that the residents of 1334 Teviot Road will experience the surrounding landscape holistically, including from the roads and trails nearby, I assess the visual effects from this property as adverse / low-moderate (minor) during Stages 2 and 3A and as adverse / very low (less than minor) during the other stages. Key reasons are that the main living / outdoor living areas are well buffered by buildings and plantings, and that beyond the period that the proposed bunding is present near the southern boundary of the property, mining activity will be at a considerable distance.

67 Clutha Road

24. 67 Clutha Road is located opposite the northern end of the mining site across the Clutha River / Mata-Au on a river terrace of similar height to the site. The dwelling on the property is approximately 300m from the proposed mining area at its closest point. As shown in **Figure 15** there is considerable screening by trees between the house and the site including garden trees near the house and trees on the banks and margins on both sides of the Clutha River / Mata-Au. Most of the trees are deciduous but would still provide a good degree of visual buffering in winter months.
25. The proposed mining will be closest during Stage 2 and will be well separated from this property outside this stage. The gravel stockpile / depot area is screened by existing trees that are outside the mining area. I consider

that the Stage 2 visual effects will be effectively mitigated by the 300m or greater distance, the tree screening, the limit to the area disturbed at any one time, and the short duration (approximately 2 years). Overall, I assess the visual effects from this property as adverse / low-moderate (minor) during Stage 2 and Adverse / very low (less than minor) during the other stages.

Issues arising from the CODC landscape peer review

26. The landscape and visual effects assessment peer review memo by Jess McKenzie of Vivian Espie dated 13 December 2023 raised various issues, most notably relating to the need for greater detail on the proposed works. The applicant has subsequently provided updated and more detailed plans describing the proposed works and Ms McKenzie has responded with a second memo dated 3 April 2024. In paragraph 4 of this memo she states that:

'The updated plan set offers more information and clarity regarding site management, staging and the location of visible elements during the activity. We consider that adverse effects on views and visual aspects can be adequately mitigated, if the plan set is accompanied by suitable conditions and additional details ensuring mitigation along the Clutha River boundary for Stage Two are provided.'

27. In paragraph 2 of her 3 April 2024 memo, Ms McKenzie notes that the stage 2 bunding only extends a short distance along the Clutha River boundary, and that *'while the topography and existing vegetation may offer some mitigation, the absence of bunding could diminish visual separation between the activity site and the cycle trail, as well as the nearby houses across the river.'*

28. Having checked the views from the Clutha Gold trail again on my 17 April site visit, I consider that Ms McKenzie is correct, and that additional bunding, approximately as now indicated in the updated site plans is appropriate³. There are areas where landform and vegetation provide

³ For clarity, the Applicant has accepted my advice and offers additional bunding.

appropriate screening but also areas where additional bunding is needed. Given that the terrace slope drops away gradually (reflecting old gold workings) bunding, whilst effective in mitigating views from the trail, will not offer as much mitigation from more distant and higher viewpoints across the river. In this regard, I note that there are no public viewpoints of significance across the river in this area and that with the exception of the property at 67 Clutha Road (discussed above), the affected landowners have provided written approval.

29. The evidence of Anita Collie addresses suitable conditions to accompany the plan set. I consider that these give assurance that effects will be appropriately contained. As reflected in the conditions now proposed, I consider that it is important that the bunding shown on the plans for each stage is in place, prior to any other works commencing. Likewise, bunding should not be removed until backfilling and rehabilitation earthworks for each stage are complete.
30. In her original 13 December 2023 memo Ms McKenzie suggests lowering the bund height to 3m where appropriate for noise mitigation, and ensuring it is an appropriate gradient to retain views of hills. I understand from the Hegley Acoustic Report that 4m high bunding is required for noise mitigation purposes at the northern end of the site but otherwise concur with Ms McKenzie that minimising bund height to 3m is desirable where possible. The activity associated with the active mining cell will be at or below existing ground level and 3m high bunds will screen this effectively from adjacent viewpoints. A difference of 1m height will make little difference in screening distant gravel stockpiles from viewpoints at greater distance to the bunding.
31. In paragraph 13 of her 13 December 2024 memo, Ms McKenzie suggests that there might be opportunities for establishment of indigenous riparian planting alongside the Clutha River / Mata-Au and the Tima Burn. The evidence of Dr Wills for the applicant agrees that there are opportunities to include areas of ecological enhancement through planting of indigenous vegetation, with the most appropriate location being along the Clutha Gold Trail corridor berm land, thereby enhancing the riparian margin.

32. With regard to the Clutha River / Mata-Au, the riverside in this area is well treed with large exotic species such as willow sycamore, hawthorn, poplar, and pine. Bunding has already been constructed along much of the site boundary, and the boundary is located somewhat arbitrarily in relation to the riverside landforms. Indigenous planting in this area could be undertaken and would enhance natural character values but would ideally be undertaken to relate to landforms rather than property boundaries. In my opinion, this would most appropriately entail a cooperative approach with the Clutha Gold Trail Trust. I consider that it is important that the mitigation bunding is eventually removed (rather than planted on) as this does not integrate well with the landforms.
33. As regards planting alongside the Tima Burn, I understand that this would create issues for the landowner and is not supported by the applicant for that reason.
34. Riparian plantings could provide some long term / legacy enhancement but given the limited duration of the proposed mining, would do little in the way of mitigation of the operational effects. Given that the land will be fully remediated back to attractive pastureland, the degree to which riparian enhancement is warranted does not directly relate to any adverse operational effects. From a landscape perspective, I agree that establishment of indigenous riparian planting alongside the Clutha River / Mata-Au would be positive.

Issues arising from the s42A report and submissions

35. Most of the matters pertinent to landscape and rural amenity effects raised in the s42A report echo those just discussed from the peer review memo.
36. In paragraph 65 the issue of whether the effects of the mining can be considered temporary is discussed, noting that this was also an issue in the submission of J P Clarke & K L Franklin and F G Works Ltd.
37. I consider that it is entirely appropriate to characterise the effects as temporary. There is a set timeframe beyond which the entirety of the site will be returned to a state similar to what it was prior to any works

beginning, with the staged and progressive nature of the proposal requiring rehabilitation and restoration during the course of the works. I acknowledge that up to a ten-year timeframe is not short term and have taken this into account in my assessment. However, it is important to remember that in relation to specific viewpoints such as adjacent residences, the degree of effect will vary over the life of the project given the migratory nature of the mining and there is definitely a temporary (and in most cases, short term) nature to the effects of most significance.

Conclusion

38. My evidence above refers to the further amendments to staging detail, size and location of bunds, and revised conditions of consent (addressed by Ms Collie) relevant to landscape and visual effects. Based on my assessment and the revisions referred to above, my conclusion is that the proposal will result in an acceptable level of visual and landscape effects.

Mike Moore

Dated 29 April 2024

Appendix A: Updated Assessment of Visual Effects

Viewpoint: Teviot Road

Stage	Effects description	Nature / degree of effect
Current	<p>Unvegetated bunds and old tailings up to approximately 6m high and gravel stockpiles up to approximately 16m high can be seen beyond mainly open paddocks at distances of approximately 270m. These elements are continuous over an approximately 450m length. In places plant and machinery is visible on or beyond the stockpiles. Rural hillslopes define the landscape behind and exotic trees (largely screened by the gravel stockpiles etc) are visible to either side of the works area nearer the river.</p> <p>The mining elements have a semi-industrial appearance a disrupt natural landforms. Adverse effects are mitigated by the distance from the road and openness values are not unduly impacted.</p>	Adverse / moderate
1	<p>The bunds and road facing sides of the tailings will be grassed, and gravel stockpiles reduced in height and moved / rearranged to conform to mitigation consent conditions (7m high). A similar area will be impacted as at present and openness from the road retained. Mining activity will be screened by the bunds.</p>	Adverse / Low
2	<p>Grassed bunds up to 4m high will be formed along 740m of the Teviot Road frontage at the northern end of the site. This will be mainly, but not entirely continuous. Bunding will also be installed along the northern boundary. The bunding will screen views of Stage 2 mining activity but will impact open rural character. To the south of the bunding, views will be more open, and the more distant bunds and gravel stockpiles will be visible.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	Adverse / Moderate
3A	<p>The grassed bunding will be extended along Teviot Road to adjoin a total of 1160m of its frontage. It will also be visible for northbound travellers extending back toward the river beside the Clutha Gold Trail. The bunding will screen views of Stage 2 rehabilitation activity and Stage 3A mining activity but will impact open rural character. It will also screen views of the gravel stockpile area except from near the southern end of the site.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	Adverse / Moderate
3B	<p>Bunding fronting Teviot Road will be reduced to 740m but bunds will be visible running back from the road toward the river. The northern part of the site will return to open, pasture reinstated rural land. From parts of the road without adjacent bunding gravel stockpiles will be visible over the top of bunds in the distance. The</p>	Adverse / Moderate

	<p>bunding will screen views of Stage 3B mining activity but will impact open rural character.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	
4 Start	<p>The roadside bunding will remain unchanged from Stage 3B. From parts of the road without adjacent bunding gravel stockpiles will be visible over the top of bunds in the distance. There will be some visibility of Stage 4 mining / rehabilitation activity adjacent to the southern end of the site frontage, but glimpses are likely to be relatively fleeting for drivers and cyclists. The bunding will mainly screen views of Stage 4 Start mining activity but will impact open rural character.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	Adverse / Moderate
4B Mid	<p>The roadside bunding will remain unchanged from Stage 3B and 4 Start. The gravel stockpile area will be in a potentially more visually prominent position closer to the road and from parts of the road will be visible over the top of bunds. Visibility of Stage 4 mining / rehabilitation activity will be minimal given the bunding and its location nearer the river. The bunding will mainly screen views of Stage 4 Mid mining activity but will impact open rural character.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	Adverse / Moderate
4 End	<p>The roadside bunding will be reduced to a 520m length but bunding will be seen running back toward the river. Mining activity will be screened by the bunds, but gravel stockpiles will be visible above these, relatively close to the road. The land at either end of the site will be restored to open pastoral farmland. Bunding will impact open rural character where present.</p> <p>The bunding and where visible, the gravel stockpiles will impact rural character.</p>	Adverse / Moderate
After final rehabilitation	<p>The site will be restored to open rural farmland. Landform is likely to be smoother / more level with the green-waste gravel pit removed and some existing trees gone. Open rural character will be enhanced to a small extent.</p>	Neutral or Positive / Very low

Viewpoint: State Highway 8

Stage	Effects description	Nature / degree of effect
Current	Riverside trees largely preclude visibility of mining elements but there are a few glimpses of stockpiles and plant. The degree of screening will reduce slightly in winter due to the trees being	Adverse / Low-moderate

	deciduous. The primary mitigation is the trees rather than bunding due to the relative height of the gravel stockpiles.	
1	Gravel stockpile heights will be lowered to no more than 7m reducing the impact of any glimpses through the screening trees. Essentially however, no change.	Adverse / Low-moderate
2	A greater length of riverside land is impacted by mining activity and bunding but the highway does not run close to the river opposite the northern (Stage 2) part of the site and Stage 2 activity will be well screened. There will be no change to gravel stockpiles.	Adverse / Low-moderate
3A	Essentially, no change due to riverside tree screening	Adverse / Low-moderate
3B	Essentially, no change due to riverside tree screening	Adverse / Low-moderate
4 Start	Whilst largely screened by riverside trees, the extension of bunding may introduce some minor additional impact. Essentially however, no change.	Adverse / Low-moderate
4B Mid	The relocation of gravel stockpiles further from the river will reduce any adverse effects. Mining activity near the river will be at low level and not visually significant. Likewise, the relocated workshop / site office area will be less visually prominent than the higher stockpiles.	Adverse / Low
4 End	Essentially, no change from Stage 4B Mid.	Adverse / Low
After final rehabilitation	Trees will still almost entirely screen the site. Any mining elements will be removed	Neutral

Viewpoint: Oven Hill Road

Stage	Effects description	Nature / degree of effect
Current	The mine site is viewed obliquely on the Teviot Valley floor from a higher viewpoint. The disturbance to vegetation cover and landforms creates an adverse effect and a focal point within the otherwise pastoral rural context. Elements visible include gravel stockpiles, unvegetated bunds, site structures and plant. The total 'disturbance area' is approximately 11ha. The considerable viewing distance helps to mitigate the visual impact.	Adverse / Low-moderate
1	From this higher viewpoint the proposed bunding mitigation is not particularly effective and the extent of the disturbance footprint is the key issue. Stage 1 will result in a very minor increase in footprint.	Adverse / Low-moderate
2	The overall 'disturbance area' will wax and wane with revegetation staging etc but overall, will increase in scale. It will increasingly be	Adverse / Moderate

	seen in two discrete areas with the Stage 2 mining area being at considerable distance	
3A	The overall 'disturbance area' will wax and wane with revegetation staging etc. Overall, there will be little difference from Stage 2	Adverse / moderate
3B	The 'disturbance area' concentrates in the central part of the site but is overall, similar in scale to Stages 2 and 3A.	Adverse / moderate
4 Start	The 'disturbance area' remains similar in scale but moves closer to the viewpoint.	Adverse / moderate
4B Mid	The 'disturbance area' increases in scale to an extent as the stockpile area is moved. Most activities are at a greater distance from the viewpoint.	Adverse / moderate
4 End	All activity is concentrated in the middle portion of the site with a progressively reducing 'disturbance area'.	Adverse / Low-moderate
After final rehabilitation	The entire site will be returned to pasture with no visually jarring 'disturbance area'.	Neutral or Positive / Very low

Viewpoint: Clutha Gold Trail

Stage	Effects description	Nature / degree of effect
Current	<p>The mining site is directly adjacent to the trail where it runs between Teviot Road and the river and adversely impacts rural amenity values due to the visibility of unvegetated bunds, site buildings and gravel stockpiles.</p> <p>In the section adjacent to the river impacts are less due to screening by natural banks, trees and already constructed bunds. In places stockpiles and plant can be seen above bunds but there is generally good buffering.</p>	<p>Adverse / Moderate-high (Terrace top)</p> <p>Adverse / low-moderate (Riverside)</p>
1	Stage 1 will result in bunds adjacent to the workshop, site office and gravel stockpiles area being grassed, and structures being finished in low prominence colours. Other than this little change is expected	<p>Adverse / moderate-high (Terrace top)</p> <p>Adverse / Low-moderate (Riverside)</p>
2	Adjacent to the site office and gravel stockpile areas effects will remain unchanged but there will also effects alongside the Stage 2 area. These will involve bunds (to be grass covered) being constructed along much of the Stage 2 length, broken up by areas of existing landform screening. Visibility of historic tailings will reduce and natural character amenity will be adversely impacted. The bunds will largely screen visibility of Stage 2 mining activity.	<p>Adverse / moderate-high (Terrace top)</p> <p>Adverse / moderate (Riverside).</p>

3A	There will be no change to visual effects along the riverside section from Stage 2. On the terrace top area the additional bunding proposed will block views to the north. Rural character here is already compromised by the green waste pit and views of the existing bunding and tailings.	Adverse / moderate-high (Terrace top) Adverse / moderate (Riverside)
3B	On the terrace top area, the trail will be in a relocated position with bunding screening mining activity to the south and open rehabilitated farmland to the north On the riverside, the bunding alongside the Stage 2 area will be gone and open rural amenity values will be restored. This area will be less complex with a reduction in the amount of scrub and tree cover and some of the tailings gone. Landforms will be restored to blend as naturally as possible with the trail environs. The trail will no longer run adjacent to the gravel stockpile area, however its length adjacent to the river will be reduced.	Adverse / Low-moderate (Terrace top) Adverse / Low-moderate (Riverside)
4 Start	There will be no change from Stage 3B.	Adverse / Low-moderate (Terrace top) Adverse / Low-moderate (Riverside)
4B Mid	There will be no change from Stage 4 Start	Adverse / Low-moderate (Terrace top) Adverse / Low-moderate (Riverside)
4 End	The original track alignment adjacent to the river will be restored. In this area bunding will entirely screen visibility of Stage 4 End mining activity. On the terrace top bunding will screen views of mining elements northward except that the gravel stockpile area will be visible above this. Open restored pastureland will be visible to the south	Adverse / Moderate (Terrace top) Adverse / Low-moderate (Riverside)
After final rehabilitation	On the terrace top the land will be restored pasture, more open and smoother contoured than previously with the green waste pit also rehabilitated. Around the riverside, all the bunds will be removed and relatively natural landforms will be restored (acknowledging that previous mining has already impacted these). There will be less tree and shrub cover and historic tailing will have been modified (but not entirely removed)	Positive / Very low (Terrace top) Adverse / Low.

Graphic Supplement

Evidence, M W Moore

April 2024

Proposed Alluvial Gold Mine, Millers Flat



MIKE MOORE

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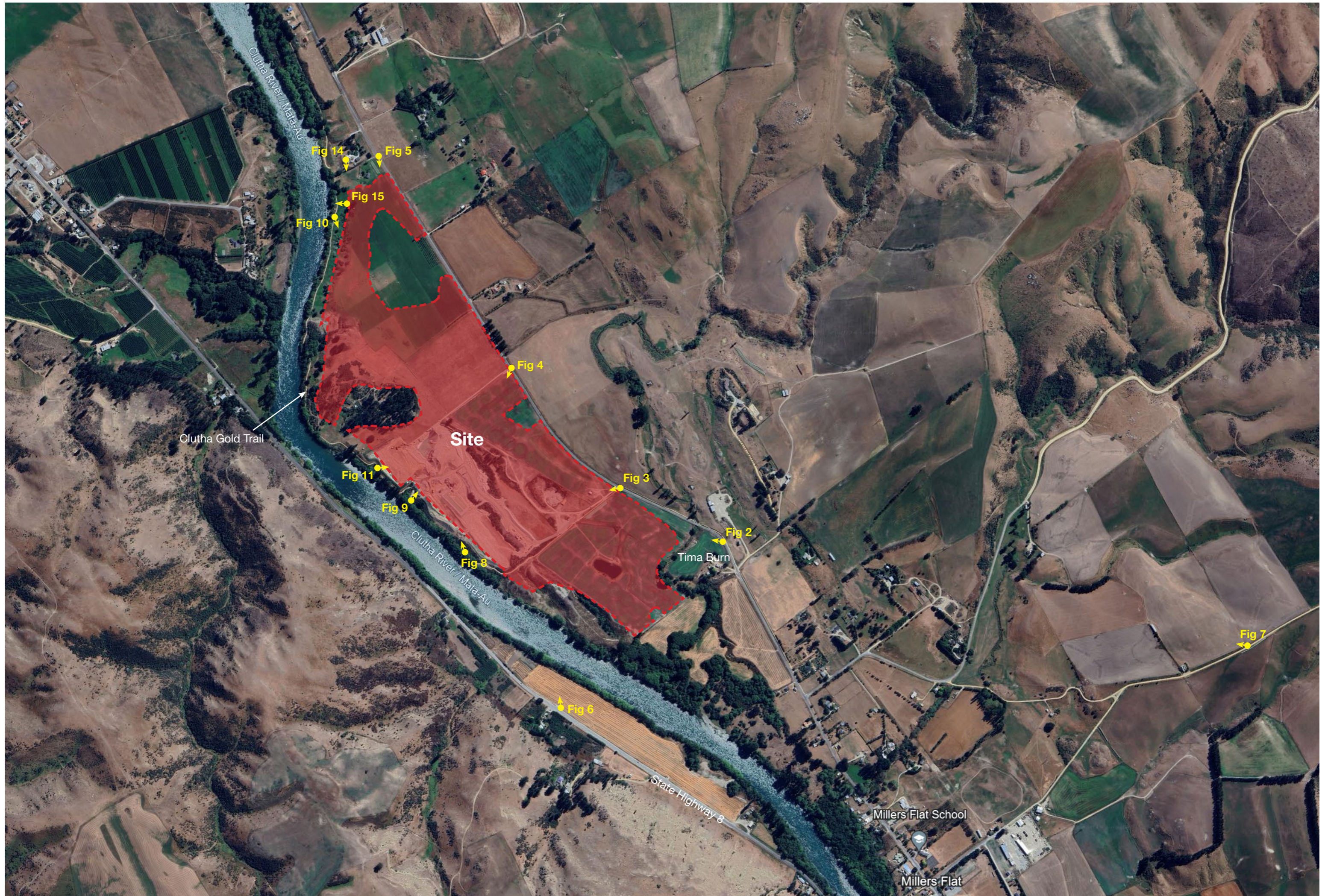


Figure 1: Location and photo-points plan



Figure 2: View across the site from near its southern end on Teviot Road.

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 3: View across the site from near the Clutha Gold Trail access point on Teviot Road.

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 4: View across the site from near its northern entrance on Teviot Road

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 5: View across the site from near its northern end on Teviot Road

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 6: View toward the site from State Highway 8

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 7: View toward the site from Oven Hill Road

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 50mm



Figure 8: View toward the site from the Clutha Gold Trail

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 18mm



Figure 9: View toward the site from the Clutha Gold Trail

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 50mm



Figure 10: View toward the site from the Clutha Gold Trail

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 40mm



Figure 11: View toward the site from the Clutha Gold Trail

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 30mm

Figure 12: Refer to Amended Site Plan set (Evidence of Simon Johnstone)



Figure 13: The processing plant already present on the site for the exploratory works.

Camera: Canon EOS D1000 / Image: Stitched photographs – focal length 18mm



Figure 14(a): View toward the site from the dining room patio

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 14(b): View toward the site from inside the dining room

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 14(c): View toward the site from near the southern boundary

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm

Figure 14: Views toward the site from 1334 Teviot Road



Figure 15(a) View illustrating an area where there is intervisibility between the site and 67 Clutha Road

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 50mm



Figure 15(b) View near Figure 15(a) showing screening by trees.

Camera: Canon EOS 80D / Image: Stitched photographs – focal length 18mm

Figure 15: Views toward 67 Clutha Road from the site (Stage 2 area)