



**WINSTONE**  
AGGREGATES

Part  
B

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# Appendix B12.4.10b

Landscape Effects Assessment Appendix 3  
Visibility Visual Effects Table

## Appendix 3: Visibility and Visual Effects Table

The following Viewing Groups were established based on the ZTV analysis, observations from the site visit(s), and the dwellings' location relative to the quarry development area, classified by cardinal direction (north, east, south, and west of the Site) and by their proximity to the quarry footprint (within 500m, 1km, and beyond 1.5 km). In this assessment, 0 – 500m is defined as short range, 500m – 1km as medium range, and beyond 1.5km as long range viewing. The visual effects have been assessed across two different stages of the quarry's life cycle, during operation (before mitigation) and at completion after mitigation (after 10 years). The following describes each stage and outlines how visual effects are expected to change over time.

- a. **Effects During Operation (before mitigation):** During the operational life of the quarry, visual effects will be driven by active earthworks, exposed benches, soil and vegetation removal, and the progressive change in landform associated with each stage. Viewers may experience ongoing visibility of machinery, haul roads, stockpiles, and the incremental expansion of the quarry footprint. Effects are typically more noticeable where dwellings are elevated or in close proximity and have a more northerly aspect, and where existing vegetation provides limited screening. Overall, visual effects during operation are dynamic and evolving, reflecting the continual nature of extraction activities.
- b. **Effects at Completion after Mitigation/Rehabilitation (after 10 years):** Over time, as rehabilitation planting establishes across the benches and re-vegetates modified slopes, the quarry will develop a progressively greener, softer landform profile. Hardy native planting will help reduce the visibility of exposed rock faces, break up the terraced form of the benches, and restore a more naturalised backdrop. Once a functioning canopy forms, long-term visual effects are expected to diminish substantially, transitioning from a stark, exposed landform to one that integrates more sympathetically with the surrounding landscape.

While individual dwellings were not visited, the assessment of visual effects is based on a combination of detailed 3D modelling, ZTV analysis, reverse viewing from within the quarry and Site visit observations from publicly accessible locations.

Refer to **Figures 25 - 30, Appendix 4**, for the mapped extent of the Visual Catchments and Viewing Groups. **Figures 30 – 43, Appendix 4** include representative Viewpoints from the Visual Catchments and Viewing Groups.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
<b>Northern (N1)</b>	245, 315, 341, 367 Hunua Road  239 Kauri View Road	1-1.5km	N/A	N/A	<b>Neutral</b>	<p>The <b>N1</b> Viewing Group is situated at a lower elevation than the quarry, to the north-west. In the foreground, views include intervening landforms and extensive native vegetation. At present, no views of the Symonds Hill Pit are available due to the combination of intervening landform and substantial vegetation cover, which effectively screens this area from sight.</p> <p>Given these existing visual constraints, views toward the Site are already very limited, and the quarry development area is unlikely to become visible to this viewing group over the course of its operational life.</p>
<b>Northern (N2)</b>	34-116 Red Hill Road (located south of the road)  1, 3-18 Redmount Place  42-48 (even no.) Gibbs Crescent	1.8-2.1km	Stages 2, 7, and 8	Small Amount to Negligible	<p>During operation (before mitigation): <b>Low</b> (adverse)</p> <p>At completion (after mitigation): <b>Very Low</b> (adverse) to <b>Neutral</b></p>	<p>The <b>N2</b> Viewing Group comprises residential properties within the Red Hill suburb, specifically those located south of Red Hill Road and along Redmount Place. From these properties, residents currently experience partial or intermittent (glimpsed) views toward the Hunua Quarry, most notably of the upper slopes of the Hunua Pit, stockpiles and other quarry infrastructure. These views are illustrated in <b>Viewpoints 23 – 24</b> (Appendix 4).</p> <p>At present, the visible components of the quarry represent only a relatively small proportion of the overall outlook, and are read as minor elements within a broad, vegetated rural landscape. Quarry activity is largely screened by landform and existing vegetation, resulting in low visual presence from most dwellings.</p> <p>As the quarry footprint extends eastward and westward over time, elements of the western haul road may become perceptible from this viewing group. However, due to the distance, scale, and alignment of this road, it will be seen within the context of the existing quarry operations.</p> <p>In the longer term, Stages 7 and 8 of the quarry development are anticipated to become more perceptible to Red Hill residents, where viewing corridors allow. This increased visibility arises from both the higher elevation of these stages relative to the surrounding landform and the elevated position of Red Hill Road and adjoining properties, which affords more open sightlines toward the quarry.</p>

<sup>1</sup> Distances measured from the edge of the dwellings to the closest edge of the quarry development area.

<sup>2</sup> Stages 0 – 8, Stage 0 is the consented footprint.

<sup>3</sup> Extent of visibility: Full, Partial, Small Amount, Negligible.

<sup>4</sup> Significance of Effects: Very Low, Low, Low-Moderate, Moderate, Moderate-High, High, Very High.

<sup>5</sup> Nature of Effect: Adverse, Neutral, Beneficial.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
						Despite this change, the quarry will continue to occupy only a small proportion of the wider panoramic view, with the surrounding vegetated hill slopes remaining the dominant landscape feature. Over time, rehabilitation planting on the upper extents and benches of Stage 8 will progressively revegetate the area where the ridgeline has been lowered, ultimately helping to restore a cohesive, green backdrop within the broader landscape.
<b>Northern (N3)</b>	NZ Defence Land	410m-2.2km	Stage 0 (consented), 2, 6, 7, 8	Small Amount to Negligible	During operation (before mitigation): <b>Very Low</b> (adverse)  At completion (after mitigation): <b>Neutral</b>	<p>The <b>N3</b> Viewing Group comprises Crown-owned land used by the New Zealand Defence Force, located to the north of the Hunua Quarry. This area is predominantly covered in native vegetation, with no habitable buildings present on the property. The landform descends downwards towards Hunua Road from the quarry, meaning that any dwellings further north sit at lower elevations within the landscape, resulting in the quarry being fully screened from these locations by a combination of dense vegetation and intervening topography. Within the Defence Force property itself, visibility of existing quarry operations is extremely limited. While momentary glimpses through vegetation may be possible from elevated positions, these views are filtered and intermittent.</p> <p>Overall, the area is heavily vegetated, and existing views toward the quarry are already predominantly screened. This dense native vegetation, combined with the elevation of the landform, will continue to obstruct sightlines throughout the life of the quarry.</p>
<b>Northern (N4)</b>	892, 894, 896, 900, 902, 904 906, 910, 920, 969 Hunua Road  457 Ardmore Quarry Road	670m - 2km	N/A	Negligible	During operation (before mitigation): <b>Very Low</b> (adverse)  At completion (after mitigation): <b>Neutral</b>	<p>The <b>N4</b> Viewing Group is located to the north-east of the Site, where a combination of undulating topography and extensive vegetation within the NZ Defence Force land provides screening when looking toward the quarry. Due to the elevated position of some dwellings within this group and the topography between the viewer and the Site, visibility of future quarry stages will be screened. Quarrying within the Symonds Hill Pit is not visible from this viewing group, as all extraction activities are situated internally within the landform, with topography and vegetation effectively preventing outward views.</p> <p>Following completion of quarrying activities, the ridgeline and upper slopes will sit at a lower elevation than the existing landscape form. From the N4 vantage points, these changes will be indiscernible, particularly given the long-distance viewing, foreground landforms, and vegetation cover. The final landform will visually recede into the broader hill country backdrop. As rehabilitation planting establishes across the upper slopes and the Stage 8 ridgeline, the green backdrop will be progressively restored and strengthened, further integrating the modified landform into the wider landscape and reinforcing the dominance of vegetated hill slopes within views from this area.</p>

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
<b>Eastern (E1)<sup>6</sup></b>	136, 138, 159, 163, 170 Middleton Road	270m - 500m	Stages 7 and 8	Small Amount to Negligible	<p>During operation (before mitigation): <b>Low-Moderate</b> (adverse)</p> <p>At completion (after mitigation): <b>Low</b> (adverse)</p>	<p>The <b>E1</b> Viewing Group includes dwellings with varying visibility depending on intervening vegetation, local landform, and individual dwelling elevation. In most cases, the existing quarry is largely screened due to its eastern faces being located at a lower elevation than the E1 dwellings.</p> <p>As the quarry development area progresses, a noticeable visual change will occur during Stages 7 and 8, when the quarry development will alter the skyline and reduce it in height by approximately 15m, resulting in a more pronounced change in outlook for the nearest properties.</p> <p>Although rehabilitation planting will occur progressively across the quarry development area throughout Stage 7, it will not become visually apparent from this viewing group until the completion of Stage 8, when the first benches within view are able to be replanted. The majority of bench rehabilitation will occur during/at the completion of Stage 8. Once the native vegetation establishes and matures into a canopy, the greening of the benches and skyline will progressively soften and visually integrate the small amount of visible quarried faces from this viewing group, helping to reform the green backdrop</p>
<b>Eastern (E2)</b>	100, 977, 1001, 1021, 1041, 1712, 1712A Hunua Road  96, 111, 134 Middleton Road,	530m - 970m	Stage 8	Small Amount to Negligible	<p>During operation (before mitigation): <b>Low</b> (adverse)</p> <p>At completion (after mitigation): <b>Very Low</b> (adverse)</p>	<p>The <b>E2</b> Viewing Group currently has no visibility of the existing quarry due to the combination of mid to long-distance viewing, intervening landform, and established vegetation. A noticeable change in view will not occur until Stage 8, when the ridgeline and upper slopes within this stage are lowered, as illustrated in <b>Visual Simulation A</b>. Of the dwellings within this group, only 96 and 111 Middleton Road will obtain views of the resulting landform modification.</p> <p>At the completion of Stage 8, the previously vegetated ridgeline/knolls will be removed, creating a dip in the landform and opening up new views beyond the Site toward Papakura.</p> <p>Following this, rehabilitation of the upper, eastern slopes of Stage 8 will be undertaken to re-establish a green backdrop within the gap where the former ridgeline and knolls were located. As the native vegetation becomes established on the interior of the north-western quarry faces and a canopy develops, the greening of the benches will progressively soften and reduce the visibility of exposed rock faces and bench slopes over time.</p>
<b>Eastern (E3)</b>	26, 84, 160, 168A, 168B	1.1km - 1.8km	None	N/A	Neutral	The <b>E3</b> Viewing Group currently has no visibility of the existing quarry due to the combination of long-distance viewing, intervening landform, and established vegetation.

<sup>6</sup> Excludes 161 Middleton Road and 167 Middleton Road as these properties are controlled by Winstone.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
	Gillespie Road,  5, 8, 12, 27, 28, 34, 42, 51, 60, 65 Middleton Road,  1800 Hunua Road					Due to the expansive landscape and intervening factors, the quarry development area is unlikely to be visible from within this viewing group.
<b>Southern (S1)</b>	610, 798, 802 Ponga Road	345m - 490m	Stage 0 (consented) – 8	Partial	During operation (before mitigation): <b>Moderate-High</b> <sup>7</sup> (adverse) to <b>Moderate</b> (adverse) or lower with existing intervening vegetation/elements  At completion (after mitigation): <b>Moderate</b> (adverse) to <b>Low -Moderate</b> (adverse) or lower with existing intervening vegetation/elements	<p>The <b>S1</b> Viewing Group consists of three dwellings located on elevated ridgelines overlooking the existing quarry. Despite the presence of extensive vegetation, their elevated position provides partial visibility of the existing Symonds Hill Pit. As the quarry expands, all stages are expected to be visible from these properties due to their higher elevation relative to the quarry edges, the downward viewing angle, and their short-range viewing proximity to the Site.</p> <p>Given their location south of the Site, the dwellings are primarily oriented northwards towards the quarry. As the quarry expands, the current panoramic outlook, dominated largely by vegetation with partial views of the upper quarry slopes, will gradually broaden to include views of newly formed quarry benches, a deepened pit, and the removal of existing ridgelines and vegetation.</p> <p>From these viewing locations, rehabilitation of the benches will not be visible until at least Stage 7. However, due to the change in landform, the benches created in Stage 7 will sit lower in elevation than those formed in Stage 8 when viewed from this direction. As a result, the rehabilitation completed at the end of Stage 8 will be the most visually apparent and will be the first to noticeably soften and re-green the terraced quarry landform.</p>
<b>Southern (S2)</b>	714, 720, 721, 728, 736, 744, 745, 769, 777, 781, 794, 806, 822, 831,	610m - 1km	Stage 0 (consented) – 8	Full to Negligible	During operation (before mitigation): <b>Moderate-High</b> <sup>8</sup> (adverse) to <b>Moderate</b> (adverse) or lower with existing	Similarly, for the <b>S2</b> Viewing Group, a majority of the dwellings located north of Ponga Road are positioned on ridgelines and at a higher elevation than the Site. Despite the presence of extensive vegetation, their elevated position provides partial visibility of the existing Symonds Hill Pit. As the quarry expands, all stages are expected to be visible from a majority of these properties due to their higher elevation relative to the quarry edges, the downward viewing angle, and their mid-range viewing proximity to the Site.

<sup>7</sup> Refers to 610 Ponga Road and 802 Ponga Road.

<sup>8</sup> Refers to 736 Ponga Road.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
	850, 855, 872, 879, 894, 914, 916 Ponga Road				intervening vegetation/elements  At completion (after mitigation): <b>Moderate</b> (adverse) to <b>Low -Moderate</b> (adverse) or lower with existing intervening vegetation/elements	<p>Given their location south of the Site, the dwellings are primarily oriented northwards towards the quarry. As the quarry expands, the current panoramic outlook, dominated largely by vegetation with partial views of the upper quarry slopes, will gradually broaden to include views of newly formed quarry benches, a deepened pit, and the removal of existing ridgelines and vegetation.</p> <p>From these viewing locations, rehabilitation of the benches will not be visible until at least Stage 7. However, due to the change in landform, the benches created in Stage 7 will sit lower in elevation than those formed in Stage 8 when viewed from this direction. As a result, the rehabilitation completed at the end of Stage 8 will be the most visually apparent and will be the first to noticeably soften and re-green the terraced quarry landform.</p>
<b>Southern (S3)</b>	789, 797, 799, 801, 803, 805, 807, 809, 821, 827, 839, 845, 855A, 905, 930, 990, 996, 1065, 1081, 1583, 1605, 1627, 1629, 1629A, 1647, 1679, 1701, 1720, 1723, 1729, 1730, 1737, 1740B, 1741, 1743, 1755, 1771, 1773 Ponga Road  16, 72, 73, 83, 99 Sonja Drive	1km - 2.5km	Stages 0, 1, 2, 7 and 8	Partial to Negligible	<p>During operation (before mitigation): <b>Low</b> (adverse)</p> <p>At completion (after mitigation): <b>Very Low</b> (adverse)</p>	<p>The <b>S3</b> Viewing Group, located more than 1 km from the quarry development area, has partial visibility of the existing quarry through gaps in the intervening topography and foreground vegetation. Dwellings situated at lower elevations have no visibility of the quarry due to these screening elements. While the earlier stages of the quarry development area may be partially discernible from this viewing group, the most notable change in outlook will occur during Stages 7 and 8, reflecting the higher elevation of these quarrying stages in relation to the predominantly elevated dwellings.</p> <p>Given their position south of the Site, these dwellings are primarily oriented northwards towards the quarry. As the quarry expands, the current panoramic outlook, largely characterised by vegetation with occasional views of the upper quarry slopes, will gradually broaden to include visibility of newly formed benches and areas where existing ridgelines and vegetation are removed.</p> <p>From these viewing locations, rehabilitation of the benches will not be apparent until at least Stage 7. However, due to the altered landform, the benches formed in Stage 7 will sit lower than those created in Stage 8 when viewed from the south. Consequently, the rehabilitation undertaken at the completion of Stage 8 will be the most visually prominent and will provide the first meaningful softening and re-greening of the terraced quarry landform.</p>

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
<b>Western (W1)<sup>9</sup></b>	608, 612 Ponga Road  52, 68, 73, 74, 78, 80, 144, 154, 158, 163, 175, 181, 191, 215 Judge Richardson Drive	125m - 500m	Stages 0 (consented) - 8	Full to Negligible	During operation (before mitigation): <b>Moderate-High<sup>10</sup></b> (adverse) to <b>Moderate</b> (adverse) or lower with existing intervening vegetation/elements  At completion (after mitigation): <b>Moderate</b> (adverse) to <b>Low -Moderate</b> (adverse) or lower with existing intervening vegetation/elements	<p>The <b>W1</b> Viewing Group is located relatively close to the existing quarry operations, with dwellings situated at a range of elevations that provide differing viewing angles towards the Site. Most of these dwellings have views towards the upper eastern slopes of the existing Symonds Hill Pit, where the quarry currently forms part of the backdrop. At present, its scale is relatively contained, and its visibility is softened by extensive areas of mature native vegetation, which frame and partially screen the quarry faces.</p> <p>As the quarry expands westwards and northwards, the exposed faces and benches will progressively widen and become more prominent within the outlook from this viewing group. This change will be especially noticeable when fresh overburden (orange in colour) is removed ahead of rock extraction, creating more visually contrasting surfaces prior to the exposure of the underlying greywacke rock faces.</p> <p>Over time, the progressive removal of native vegetation associated with each stage of the quarry development area will increase the level of visibility into the quarry. The removal of vegetation and modification of intervening landforms will progressively reveal more of the quarry, opening up the view and enabling more direct sightlines to active extraction areas.</p> <p>The most substantial change is expected to occur during Stages 7 and 8, where the scale, height, and width of the quarry faces will markedly increase. From the W1 viewing locations, these stages are anticipated to present a dominant and visually prominent feature, reflecting the larger landform modification and the elevated position of several dwellings.</p> <p>Rehabilitation will take place progressively across the quarry where areas become available; however, from this viewing group, meaningful and noticeable re-vegetation will not occur until Stages 7 and 8. At this stage, the benches within view will begin to be reshaped and planted, eventually contributing to the softening and re-greening of the terraced slopes. Nevertheless, full landscape integration will take time, as vegetation will require several years to establish and develop a canopy capable of reducing the visibility of benches and rock faces.</p>
<b>Western (W2)</b>	3, 4, 9, 12, 15, 17, 19, 21, 25, 27, 33, 40 Judge	520m-1km	Stages 0 (consented) - 8	Full to Negligible	During operation (before mitigation):	The <b>W2</b> Viewing Group shares many similar characteristics with the W1 group, although these dwellings are situated slightly further from the quarry development area area. Despite this increased distance, the overall visibility and nature of the views towards the

<sup>9</sup> Excludes 105, 115 and 119 Judge Richardson Drive as these properties are controlled by Winstone.

<sup>10</sup> Refers to 608 Ponga Road, 52 Judge Richardson Drive, 68 Judge Richardson Drive, 73 Judge Richardson Drive, 74 Judge Richardson Drive, 80 Judge Richardson Drive and 175 Judge Richardson Drive.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
	Richardson Drive  35, 235 Kauri View Road  400, 484, 498, 502, 506, 510, 528, 534, 544, 546, 548, 555, 581, 600, 601, 604, 606, 616, 620, 624, 625, 630, 634, 640, 645, 647, 649, 650, 660, 676, 684, 690, 693, 696, 700, 705, 706, 717 Ponga Road  63, 65, 71, 79, 85, 89, 530, 534, 538 Coal Mine Road				<b>Moderate-High<sup>11</sup></b> (adverse) to <b>Moderate</b> (adverse) or lower with existing intervening vegetation/elements  At completion (after mitigation): <b>Moderate</b> (adverse) to <b>Low -Moderate</b> (adverse) or lower with existing intervening vegetation/elements	<p>quarry remain broadly comparable because of the elevated position of these properties and their orientation towards the Site. From much of this viewing group, the upper slopes of the existing Symonds Hill Pit are already visible above the intervening vegetation and landform.</p> <p>At present, the quarry forms a background feature within the wider landscape context, with its scale softened by the extensive native vegetation that frames and partially screens the upper quarry faces.</p> <p>As the quarry expands westwards and northwards, the benching and exposed rock faces will gradually widen and become more legible within the view from W2. The freshly excavated overburden, typically orange in colour, will initially appear as a high contrast surface, heightening the visibility of the expanding quarry faces before the underlying rock is exposed. While these effects will be slightly more moderated by distance than in W1, they will remain clearly perceptible to most dwellings within this group.</p> <p>The progressive removal of vegetation and modification of intervening landforms associated with each stage of quarrying will reveal increasingly open sightlines towards the active extraction areas. This combination of vegetation clearance and topographic change will incrementally expose more of the quarry, particularly as work advances into the higher elevation zones.</p> <p>The most notable shift in visibility, and the period during which the quarry will become a dominant visual feature, will occur during Stages 7 and 8. From the W2 viewing locations, these later stages will create a broader, more expansive quarry face and deepen the exposed pit area, resulting in a more pronounced presence across the mid- to long-range landscape.</p> <p>Rehabilitation works will occur progressively as areas of the quarry become available; however, from the W2 vantage points, meaningful and visually noticeable 'greening' will not occur until Stages 7 - 8. At this time, the benches that fall within the visible viewing corridor will begin to be reshaped and planted, marking the first stage of gradual softening of the terraced quarry landform. As planting establishes and canopy cover develops in the later years, these rehabilitated areas will begin to mitigate the scale and visual contrast of the quarry, although this will take time due to the time it takes for vegetation to mature.</p>

<sup>11</sup> Refers to 19 Judge Richardson Drive, 27 Judge Richardson Drive, 534 Ponga Road, 604 Ponga Road, 620 Ponga Road, 624 Ponga Road, 634 Ponga Road, 640 Ponga Road, 650 Ponga Road, 690 Ponga Road, 696 Ponga Road, and 700 Ponga Road.

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
<b>Western (W3)</b>	32, 68, 72, 76, 97, 140, 179, 248, 297, 320, 357, 373 Kauri View Road  29, 37, 55, 57, 66 Coal Mine Road  238, 254, 340, 366, 380, 381, 390, 396, 402, 403, 412, 418, 422, 426, 427, 437, 447, 451, 457, 458, 461, 463, 465, 467, 469, 471, 473, 473A, 475, 477, 478, 479, 481, 482, 483, 483A, 485, 494, 509, 549, 571, 577, 639, 643, 671 Ponga Road  603, 615, 627, 630, 632 Drury Hills Road	1-1.5km	Stage 0 (consented), 2, 6, 7, 8	Partial to Negligible	During operation (before mitigation): <b>Low-Moderate</b> (adverse)  At completion (after mitigation): <b>Low</b> (adverse)	<p>The <b>W3</b> Viewing Group is located more than 1km west of the Site, and a majority of dwellings along Kauri View Drive and Coal Mine Road currently obtain views of the existing quarry. Properties located along Ponga Road and Harry Dreadon Road generally experience more limited visibility due to their lower elevation and the presence of established vegetation that screens views from these locations. While these latter dwellings are situated slightly further from the quarry, their increased distance results in a broader outlook of the quarry. This means the quarry is perceived as an expansive feature in the mid-distance rather than at close-range and changes to the quarry footprint will typically appear more gradual within this viewing context.</p> <p>As the quarry expands westwards and northwards, the benching and exposed rock faces will progressively widen and become more readily discernible from the W3 viewing group. Freshly excavated overburden, typically characterised by an orange hue, will initially present as a high-contrast surface that heightens the visual prominence of newly exposed areas prior to the underlying grey rock becoming visible.</p> <p>Throughout the staged quarrying process, the removal of vegetation and re-shaping of intervening landforms will gradually increase the openness of sightlines towards active extraction zones. As the quarry advances into higher elevation areas, these changes will incrementally expose a greater proportion of the quarry to W3 viewers, contributing to a more continuous and legible view of the extraction faces over time.</p> <p>The most notable shift in visibility, and the period during which the quarry is likely to become a more dominant visual element from W3, is expected to occur during Stages 7 and 8. During these later phases, the quarry face will broaden significantly, and the depth of the exposed pit will increase. From W3 viewpoints, this will result in a more expansive and visually prominent landform that occupies a greater extent of the mid to long range landscape.</p> <p>Rehabilitation efforts will occur progressively as areas are retired from active extraction; however, from the W3 vantage points, substantial and visually meaningful 'greening' will not be apparent until Stages 7–8. At this time, benches visible within the W3 viewing corridor will begin to be reshaped and planted, initiating the gradual softening of the stepped quarry landform.</p> <p>Over subsequent years, as planting establishes and canopy cover develops, these rehabilitated areas will begin to reduce the quarry's scale, contrast, and visibility. However, this mitigation effect will occur at a slow pace due to the time required for vegetation to mature and achieve visually cohesive coverage.</p>

Viewing Group	Dwellings	Minimum distance to the Project (approx.) <sup>1</sup>	Stages Visible <sup>2</sup>	Extent of Visibility <sup>3</sup>	Level <sup>4</sup> and Nature <sup>5</sup> of visual effect	Visual Effects Assessment
	25, 36, 38, 38A, 46, 54, 86 Harry Dreadon Road					