



**Haweswater Aqueduct Resilience Programme - Proposed Marl Hill
Section**

Environmental Statement

Volume 4

Appendix 6.4: Schedule of Landscape Effects

June 2021



Water for the North West



Haweswater Aqueduct Resilience Programme - Proposed Marl Hill Section

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1. Schedule of Landscape Effects

Table 6.1: Schedule of Landscape Effects (Marl Hill)

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
2d. Waddington Fell Landscape Character Area (02. Moorland Hills LCT) Approx. Dist.: 300m from Bonstone Compound, 1.5 km from Braddup Compound and 1.45 km	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed during the enabling works. Areas used for construction works returned to agriculture. Reinstatement of existing landform after construction works. Reinstatement of grass sward. Reinstatement of stone walls, hedgerows and fences.	Enabling Works Phase	Direct Effects: There would be no direct effects. Indirect Effects: Minor disturbance from views of the enabling works at the Bonstone Compound within the nearby 04e. Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs. Barely perceptible disturbance from enabling works at the Braddup Compound within the nearby 05g. South Bowland Fringes, G7. Browsholme and F2. Bolton by Bowland to Waddington LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape. The combined effects from the Bonstone Compound and Braddup Compound would result in a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Slight Adverse	None	Minor	Slight Adverse
			Construction Phase	Direct Effects: There would be no direct effects. Indirect Effects: Noticeable disturbance from views of the construction activity at the Bonstone Compound. Barely perceptible disturbance from the construction activity at the Braddup Compound. Specific changes would result from the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Tall cranes stationed at the launch and reception shafts would be visible within the setting and represent incongruous, large-scale features within outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape. The combined effects from the Bonstone Compound and Braddup Compound would result in a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
			Commissioning Phase	Direct Effects: There would be no direct effects. Indirect Effects: Minor disturbance from views of the commissioning works at the Bonstone Compound. Barely perceptible disturbance from the commissioning works at the Braddup Compound. Specific change would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. Tall cranes located at the nearby launch and reception shafts would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain slightly detectable. Commissioning activity would continue to be uncharacteristic and contrast with	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor views towards the above-ground features, such as the introduced valve houses and access roads, at the Bonstone Compound. Barely perceptible views towards the above-ground features at the Braddup Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a minor and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Bonstone and Braddup compounds. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
4d. Bowland Gritstone Fringes Landscape Character Area (04. Moorland Fringe LCT)	High (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Braddup Compound within the nearby 05g. South Bowland Fringes, G7. Browsholme and F2. Bolton by Bowland to Waddington LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Approx. Dist.: 400 m from Braddup Compound		<p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Noticeable disturbance from views of the construction activity at the Braddup Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. The tall crane stationed at the launch shaft would be visible within the setting and represent incongruous, large-scale features within outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Braddup Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain slightly detectable. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor views towards the above-ground features at the Braddup Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Braddup Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of an adverse permanent / irreversible change.					
4e. Bowland Limestone Fringes Landscape Character Area (04. Moorland Fringe LCT) Approx. Dist.: 0 m from Bonstone Compound	High (V: High / S: High)	Siting of proposed works to reduce visibility and scheme footprint. Tree and shrub planting to replace vegetation removed during the enabling works. Areas used for construction works returned to agriculture. Reinstatement of existing landform after construction works. Reinstatement of grass sward. Reinstatement of stone walls, hedgerows and fences.	Enabling Works Phase	Direct Effects: Noticeable disturbance from the enabling works at the Bonstone Compound. Specific changes would result from soil stripping and the installation of temporary drainage; the removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRow network at the Bonstone Compound (3-29-FP 42 and 3-29-FP 43). The installation of temporary construction and internal boundary fencing; establishment of the construction compound, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape. Indirect Effects: There would be no indirect effects. There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	Direct Effects: Substantial disturbance from the construction works at the Bonstone Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials; the presence of the construction compound, laydown areas and temporary access road; and the introduction of temporary water management systems. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. Reinstatement would occur within sections of the Bonstone Compound, although the construction compound, laydown areas and temporary access roads would remain. Indirect Effects: There would be no indirect effects. There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change	Moderate	Major Adverse	None	Moderate	Major Adverse
			Commissioning Phase	Direct Effects: Noticeable disturbance from the commissioning works at the Bonstone Compound. Specific change would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compounds, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the from the presence of the introduced valve house building at the Bonstone Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects..</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the presence of the introduced above-ground features at the Bonstone Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
5a. Upper Hodder Valley Landscape Character Area (05. Undulating Lowland Farmland LCT)	High (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Bonstone Compound. This would include soil stripping and the installation of temporary drainage; the removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform. The installation of temporary construction and internal boundary fencing; establishment of the construction compounds, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Bonstone Compound within the adjacent 04e. Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound,</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Approx. Dist.: 0 m from Bonstone Compound (TR3)		<p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>		<p>laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>					
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Bonstone Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials, the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement within sections of the laydown areas would occur at the end of the construction phase, although the construction compound, laydown areas and temporary access road would remain.</p> <p>Indirect Effects: Noticeable disturbance from views of the construction activity at the Bonstone Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. Notable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Tall cranes stationed at the reception shaft would be highly visible within the setting and represent incongruous, large-scale features within several outward views. Construction activity would be uncharacteristic and contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Bonstone Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compounds, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Bonstone Compound. Specific changes would result from the tunnel boring operation and open-cut</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				trenching, and the storage and removal of excavated materials. The tall crane located at the reception shaft would no longer be present. Notable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.					
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects. Indirect Effects: Minor views towards the above-ground features, such as the introduced valve house at the Bonstone Compound. Notable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage. There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible views towards the above-ground features at the Bonstone Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape. There would be a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of an adverse permanent / irreversible change.	Negligible	Negligible	None	Negligible	Negligible
5b. Lower Hodder and Loud Valley Landscape Character Area (05. Undulating Lowland Farmland LCT)	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section	Enabling Works Phase	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Construction Phase	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible disturbance from the construction activity at the Braddup Compound. Tall cranes stationed at the launch facilities would be visible within the setting and represent incongruous, large-scale features within a very small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape. There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Approx. Dist.: 1.2 km from Braddup Compound			Commissioning Phase	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
5g. South Bowland Fringes Landscape Character Area (05. Undulating Lowland Farmland LCT) Approx. Dist.: 0 m from Braddup Compound	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed during the enabling works. Areas used for construction works returned to agriculture. Reinstatement of existing landform after construction works. Reinstatement of grass sward. Reinstatement of hedgerows and fences.	Enabling Works Phase	Direct Effects: Noticeable disturbance from the enabling works at the Braddup Compound. Specific changes would result from soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; and the localised reprofiling of the existing landform). The installation of temporary construction and internal boundary fencing; establishment of the construction compound, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape. Indirect Effects: There would be no indirect effects. There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	Direct Effects: Substantial disturbance from the construction activity at the Braddup Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials; including the tunnel arisings at the Braddup Compound; the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement would occur within sections of the Bonstone Compound, although the construction compound, laydown areas and temporary access roads would remain. Indirect Effects: There would be no indirect effects.	Moderate	Major Adverse	None	Moderate	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.					
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Braddup Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compound, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building and access road at the Braddup Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the presence of the introduced above-ground features at the Braddup Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
14a. Slaidburn-Giggleswick Landscape Character Area (14. Rolling Upland Farmland LCT) Approx. Dist.: 2.5 km from Bonstone Compound	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section	Enabling Works Phase	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Construction Phase	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible disturbance from views of the construction activity at the Bonstone Compound. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape. There would be a barely perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Commissioning Phase	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 1)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no indirect effects.	No Change	No Change	None	No Change	No Change
			Operational Phase (Year 15)	Direct Effects: There would be no direct effects. Indirect Effects: There would be no direct effects.	No Change	No Change	None	No Change	No Change
C3. Easington Landscape Character Area	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed	Enabling Works Phase	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Bonstone Compound within the nearby 04e. Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.	Negligible	Slight Adverse	None	Negligible	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
(C. Enclosed Moorland Hills LCT) Approx. Dist.: 500 m from Bonstone Compound		during the enabling works.		There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.					
		Areas used for construction works returned to agriculture.	Construction Phase	Direct Effects: There would be no direct effects. Indirect Effects: Minor disturbance from views of the construction activity at the Bonstone Compound. Specific changes would result from the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous, large-scale features within a small number of outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape. There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change	Minor	Slight Adverse	None	Minor	Slight Adverse
		Reinstatement of existing landform after construction works.	Commissioning Phase	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Bonstone Compound. Specific changes would result from the short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. There would be a barely perceptible and uncharacteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
		Reinstatement of grass sward.	Operational Phase (Year 1)	Direct Effects: There would be no direct effects. Indirect Effects: Barely perceptible views towards the above-ground features at the Bonstone Compound, such as the introduced valve house. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage. There would be a barely perceptible and predominately characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.	Negligible	Slight Adverse	None	Negligible	Slight Adverse
		Reinstatement of stone walls, hedgerows and fences..							

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Bonstone Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
<p>C9. Newton and Birket</p> <p>Landscape Character Area</p> <p>(C. Enclosed Moorland Hills LCT)</p> <p>Approx. Dist.: 700 m from Bonstone Compound, 600 m from Braddup Compound</p>	<p>High</p> <p>(V: High / S: High)</p>	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Bonstone Compound within the nearby 04e. Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs; the enabling works at the Braddup Compound within the nearby 05g. South Bowland Fringes, G7. Browsholme and F2. Bolton by Bowland to Waddington LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a barely perceptible and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from views of the construction activity at the Bonstone and Braddup compounds. Specific changes would result from the creation of the working platform; the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. Tall cranes stationed at the launch and reception shafts would be visible within the setting and represent incongruous, large-scale features within several outward views. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a minor and uncharacteristic change to a large proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Bonstone and Braddup compounds. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>the presence of above-ground features introduced during the construction phase. Tall cranes located at the launch and reception shafts would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a barely perceptible and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Bonstone and Braddup compounds, such as the introduced valve houses. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>The combined effects from the Bonstone Compound and Braddup Compound would result in a barely perceptible and predominately characteristic change to a small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above-ground features at the Bonstone and Braddup compounds. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>The combined effects from Bonstone Compound and Braddup Compound would result in a barely perceptible and characteristic change to a small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
D5. Beatrix to Collyholme Landscape Character Area (D. Moorland Fringe LCT)	High (V: High / S: High)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed during the enabling works.	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from the enabling works at the Bonstone Compound within the nearby 04e. Bowland Limestone Fringes, 05a. Upper Hodder Valley and G3. Upper Hodder LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a negligible and characteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
Approx. Dist.: 2 km from Bonstone Compound		<p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p> <p>Reinstatement of stone walls, hedgerows and fences.</p>	Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from the construction activity at the Bonstone Compound. Specific changes would result from the creation of the working platform; the tunnel boring operation and open-cut trenching; and the storage and removal of excavated materials. The tall crane stationed at the reception shaft would be visible within the setting and represent incongruous feature within a small number of outward views. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short to medium-term / reversible change</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from the commissioning activity at the Bonstone Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a negligible and characteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views of the above ground features at the Bonstone Compound. Slight detectable loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a negligible and characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Bonstone Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				There would be a negligible and characteristic change to a very small proportion of the landscape. Introduction of an adverse short-term / reversible change. Introduction of a permanent / irreversible change.					
D7. Moorcock Landscape Character Area (D. Moorland Fringe LCT) Approx. Dist.: 500 m from Braddup Compound	High (V: High / S: Medium)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed during the enabling works. Areas used for construction works returned to agriculture. Reinstatement of existing landform after construction works. Reinstatement of grass sward. Reinstatement of hedgerows and fences.	Enabling Works Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the enabling works at the Braddup Compound within the nearby O5g. South Bowland Fringes, G7. Browsholme and F2. Bolton by Bowland to Waddington LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a barely perceptible and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Construction Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Minor disturbance from the construction activity at the Braddup Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. Barely perceptible loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Tall cranes stationed at the launch shaft would be visible within the setting and represent incongruous, large-scale features within outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a minor and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Commissioning Phase	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible disturbance from views of the commissioning works at the Braddup Compound. Specific changes would result from short sections of open-cut trenching, the movement and temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. Tall cranes located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain barely perceptible. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a minor and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
			Operational Phase (Year 1)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features, such as the introduced valve house at the Braddup Compound. Barely perceptible loss of existing vegetation within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a barely perceptible and largely characteristic change to a very small proportion of the landscape. Introduction of a long-term / reversible change.</p>	Negligible	Slight Adverse	None	Negligible	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: There would be no direct effects.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Braddup Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of a permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
F2. Bolton by Bowland to Waddington Landscape Character Area (F. Undulating Lowland Farmland with Wooded Brooks LCT) Approx. Dist.: 0 m from Braddup Compound	High (V: High / S: Medium)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Braddup Compound. Specific changes would result from soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; and the localised reprofiling of the existing landform. The installation of temporary construction and internal boundary fencing; establishment of the temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: Minor disturbance from views of the enabling works at the Braddup Compound within the adjacent 05g. South Bowland Fringes, G7. Browsholme and F2. Bolton by Bowland to Waddington LCAs. Enabling works, such as the removal of existing vegetation, soil stripping, landform alterations and the establishment of the construction compound, laydown areas and temporary access roads, would contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Braddup Compound. Specific changes would result from the movement and disturbance from construction traffic and construction work; the storage and movement of excavated materials; and the presence of the temporary access roads. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement</p>	Moderate	Major Adverse	None	Moderate	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of hedgerows and fences.		<p>would occur within sections of the Braddup Compound, although the construction compound, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: Minor disturbance from views of the construction activity at the Braddup Compound. Specific changes would result from the tunnel boring operation and open-cut trenching, and the storage and removal of excavated materials. Slight detectable loss of existing vegetation, field boundaries and landform alterations undertaken at the enabling works phase. Tall cranes stationed at the launch facilities would be visible within the setting and represent incongruous, large-scale features within several outward views. Construction activity would be uncharacteristic and slightly contrast with the predominately rural character and setting of this landscape.</p> <p>There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Braddup Compound. Specific changes would result from the presence and movement of plant and machinery; the movement and temporary storage of excavated material; and the presence of temporary access roads introduced during the enabling works. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: Minor disturbance from views of the commissioning works at the Braddup Compound. Specific changes would result from short sections of open-cut trenching, the temporary storage of excavated material, and the presence of above-ground features introduced during the construction phase. Tall cranes located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would remain evident. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: Minor views towards the above-ground features at the Braddup Compound, such as the introduced valve house building. Slight detectable loss of existing vegetation</p>	Minor	Slight Adverse	None	Minor	Slight Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>within the setting. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration and screening at this stage.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>					
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from mitigation planting introduced during the commissioning phase. Maturing mitigation planting would help to replace removed vegetation during the enabling works.</p> <p>Indirect Effects: Barely perceptible views towards the above-ground features at the Braddup Compound. Maturing mitigation planting would help to replace existing vegetation removed during the enabling works and provide some integration of introduced features with the surrounding landscape.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible
G3. Upper Hodder Landscape Character Area (G. Undulating Lowland Farmland with Parkland LCT) Approx. Dist.: 0 m from Bonstone Compound)	High (V: High / S: High)	<p>Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section</p> <p>Tree and shrub planting to replace vegetation removed during the enabling works.</p> <p>Areas used for construction works returned to agriculture.</p> <p>Reinstatement of existing landform after construction works.</p> <p>Reinstatement of grass sward.</p>	Enabling Works Phase	<p>Direct Effects: Noticeable disturbance from the enabling works at the Bonstone Compound. Specific changes would result from the soil stripping and the installation of temporary drainage; the removal of existing tree and shrub vegetation; disruption to the existing field pattern; the localised reprofiling of the existing landform; and the temporary closure and diversion of the local PRoW network at the Bonstone compounds (3-29-FP 42 and 3-29-FP 43). The installation of temporary construction and internal boundary fencing; establishment of the construction compounds, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Moderate	Major Adverse	None	Moderate	Major Adverse
			Construction Phase	<p>Direct Effects: Substantial disturbance from the construction activity at the Bonstone Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and crane at the tunnel shaft; the creation of the working platform; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials, the presence of the construction compounds, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement of the tunnel portal and within sections of the</p>	Major	Major Adverse	None	Major	Major Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
		Reinstatement of stone walls, hedgerows and fences.		<p>laydown areas would occur at the end of the construction phase, although the construction compounds, laydown areas and temporary access roads would remain.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a substantial and uncharacteristic change to a large proportion of the landscape. Introduction of an adverse short to medium-term / reversible change.</p>					
			Commissioning Phase	<p>Direct Effects: Noticeable disturbance from the commissioning works at the Bonstone Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compounds, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the reception shaft would no longer be present. Commissioning activity would continue to be uncharacteristic and contrast with the rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>	Moderate	Moderate Adverse	None	Moderate	Moderate Adverse
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building at the Bonstone Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the introduced above-ground features at the Bonstone Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
G7. Browsholme Landscape Character Area (I. Wooded Rural Valleys LCT) Approx. Dist.: 0 m from Braddup Compound	High (V: High / S: Medium)	Siting of proposed works to reduce the visibility and footprint of the Proposed Marl Hill Section Tree and shrub planting to replace vegetation removed during the enabling works. Areas used for construction works returned to agriculture. Reinstatement of existing landform after construction works. Reinstatement of grass sward. Reinstatement of hedgerows and fences.	Enabling Works Phase	Direct Effects: Noticeable disturbance from the enabling works at the Braddup Compound. Specific changes would result from soil stripping and the installation of temporary drainage; removal of existing tree and shrub vegetation; disruption to the existing field pattern; and the localised reprofiling of the existing landform. The installation of temporary construction and internal boundary fencing; establishment of the construction compound, laydown areas and temporary access roads; movement of plant and machinery; and the temporary storage of topsoil and subsoil would contrast with the rural character of this landscape. Enabling works would reduce tranquillity and increase the perception of movement in the landscape. Indirect Effects: There would be no indirect effects. There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.	Minor	Moderate Adverse	None	Minor	Moderate Adverse
			Construction Phase	Direct Effects: Substantial disturbance from the construction activity at the Braddup Compound. Specific changes would result from the presence of construction plant and machinery, including TBM and cranes at the tunnel shaft; the movement and disturbance from construction traffic and construction work, including tunnel boring operation and open-cut trenching; the storage and movement of excavated materials; including the tunnel arisings at the Braddup Compound; the presence of the construction compound, laydown areas and temporary access roads; and the introduction of temporary water management systems. These changes would increase the perception of disruption and further contrast with the rural character of this landscape. The impact would also be more evident due to landform alterations and the loss of existing vegetation and field boundaries undertaken at the enabling works phase. Reinstatement would occur within sections of the Braddup Compound, although the construction compound, laydown areas and temporary access roads would remain. Indirect Effects: There would be no indirect effects. There would be a substantial and uncharacteristic change to a moderate proportion of the landscape. Introduction of an adverse short-term / reversible change.	Moderate	Major Adverse	None	Moderate	Major Adverse
			Commissioning Phase	Direct Effects: Noticeable disturbance from the commissioning works at the Braddup Compound. Specific changes would result from the presence and movement of plant and machinery; short sections of open-cut trenching; the movement and temporary storage of excavated material; the presence of the construction compound, laydown areas and temporary access roads introduced during the enabling works; and the presence of above-ground features introduced during the construction phase. The tall crane located at the launch shaft would no longer be present. The changes to landform, vegetation cover and field pattern arising during the enabling works would continue to be present. Commissioning activity would continue to be uncharacteristic and contrast with the predominately rural character and setting of this landscape; however, the scale of these effects would be reduced compared the construction phase. Reinstatement and restoration activities, including mitigation planting and land reprofiling, would be undertaken upon completion of the commissioning phase.	Minor	Moderate Adverse	None	Minor	Moderate Adverse

Landscape / Townscape	Sensitivity (with value (V) and susceptibility (S))	Embedded and Good Practice Landscape Mitigation	Assessment Timescale	Description of Change	Magnitude of Effect	Significance of Effect (Pre-Mitigation)	Additional Mitigation	Magnitude of Effect	Significance of Effect (Residual Effect)
				<p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a noticeable and uncharacteristic change to a small proportion of the landscape. Introduction of an adverse short-term / reversible change.</p>					
			Operational Phase (Year 1)	<p>Direct Effects: Minor change from the presence of the introduced valve house building at the Braddup Compound. The impact would also be more evident due to the loss of existing tree and shrub vegetation undertaken at the enabling works phase. Mitigation planting introduced during the commissioning phase would have a limited contribution to integration, enclosure and screening at this stage.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a minor and predominately characteristic change to a small proportion of the landscape. Introduction of an adverse long-term / reversible change.</p>	Minor	Slight Adverse	None	Minor	Slight Adverse
			Operational Phase (Year 15)	<p>Direct Effects: Barely perceptible change from the presence of the introduced above-ground features at the Braddup Compound. Maturing mitigation planting would help to replace removed vegetation during the enabling works and provide some integration of introduced structures and features into the surrounding landscape.</p> <p>Indirect Effects: There would be no indirect effects.</p> <p>There would be a barely perceptible and characteristic change to a very small proportion of the landscape. Introduction of an adverse permanent / irreversible change.</p>	Negligible	Negligible	None	Negligible	Negligible