



# Cottam Parkway Railway Station

## Environmental Statement

Volume 3: Appendices

Appendix 18.4: Impacts Summary Table

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## ES Document Control

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**Appendix Title:** Impacts Summary Table

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<b>Version 1</b> <b>April 2022</b>	Nicholas Benson	Victoria Walmsley Niamh O'Sullivan	07/04/2022
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ES Discipline	Sub discipline	Potential Significant Impacts		Comments	Mitigation		Predicted Residual Impacts
		Construction	Operation (Opening Year)		Proposed	Timing of Implementation	Operation (Design Year)
Landscape and Visual Impact	Topography and Hydrology	The assessment of landscape elements and features (i.e. landform and drainage, landcover and vegetation, historic and cultural associations, and settlement and built heritage) are inherent within the assessment of landscape character. The landscape chapter assessment describes these features but they have not been assessed and given a significance rating to avoid the risk of double counting.					
	Land Use						
	Landscape Character	<p><b>Moderate</b> adverse significance effects to two landscape character areas</p> <p>The remaining landscape character areas would experience <b>no</b> impacts</p>	<b>Moderate</b> adverse significance affects to two landscape character areas	Impact on the Fylde Landscape Character Area (LCA) through the loss of mature trees and hedgerow field boundaries. Lea-Cottam Rural Urban Fringe LLCA and Fylde Farmland Local Landscape Character Area (LLCA).	<p>Mitigation planting within the Scheme</p> <p>Proposed landscape mitigation measures are shown in the Environmental Masterplan (Appendix 18.1). Mitigation includes reinstatement of trees and hedgerows to be lost. Planting of mainly native woodland, shrub, tree, hedgerow and grassland planting along the Scheme to provide screening, biodiversity enhancement.</p>	Detailed de Sign / Construction	<b>Slight</b> adverse significant affects to two landscape character areas
	Visual Amenity	<p><b>Residential Receptors: Large</b> adverse significance effects to receptors in viewpoint 1,3,5,6,7</p> <p><b>Moderate</b> adverse significant effects to receptors in viewpoint 2</p>	<p><b>Residential Receptors: Large</b> adverse significant effects to receptors in viewpoint 7 and 5</p> <p><b>Moderate</b> adverse</p>	Impacts on visual receptors would primarily arise from the removal of trees and hedgerows in the view which consequently increases or introduces the movement of traffic on the access road and the presence of a new bridge and railway station building and car park development within the view.	<p>Proposed landscape mitigation measures are shown in the Environmental Masterplan (Appendix 18.1).</p> <p>A Sedum Roof to north pitch of railway station roof would be installed.</p> <p>Bridge finish that complements Quakers Bridge would be</p>	Detailed design / Construction	<p><b>Residential Receptors: Slight</b> adverse non-significant effect for visual receptors1, 2, 3, 5, 6, 7</p> <p><b>Recreational Receptors: Slight</b> adverse non-significant effect for visual receptors 2, 12 and 14</p> <p><b>Community and</b></p>

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		<p><b>Slight</b> adverse non-significance effects to receptors in viewpoint 10,11,13</p> <p><b>Recreational Receptors:</b> <b>Large</b> adverse significant effects t at viewpoints 12 and 14</p> <p><b>Moderate</b> adverse significant effects at viewpoint 2, 8</p> <p><b>Slight</b> adverse non-significance effects to viewpoint 4, 11</p> <p><b>Community and Business Premises:</b> <b>Moderate</b> adverse significant effects at viewpoint 2, 7</p> <p><b>Neutral</b> adverse non-significance effects to viewpoint 11</p> <p><b>Users of the Local Road Network:</b> <b>Moderate</b> adverse significant effects at viewpoint 7 for cyclists</p> <p><b>Slight</b> adverse non-significance effects to viewpoint 11, 1, 5, 6 for travellers</p> <p><b>Neutral</b> adverse non-significance effects to viewpoint 13 for travellers</p>	<p>significant effects to receptors in viewpoint 1, 3, 6 and 2</p> <p><b>Recreational Receptors:</b> <b>Large</b> adverse significant effects at viewpoints 12 and 14</p> <p><b>Moderate</b> adverse significant effects at viewpoint 2</p> <p><b>Community and Business Premises:</b> <b>Moderate</b> adverse significant effects at viewpoint 1</p> <p><b>Users of the Local Road Network:</b> <b>Moderate</b> adverse significant effects at viewpoint 7 for cyclists</p>		<p>designed.</p> <p>Directional lighting to Lancashire County Council standard design would be used to minimise light spill.</p>		<p><b>Business Premises:</b> <b>Slight</b> adverse non-significant effect for visual receptor 1</p> <p><b>Users of the Local Road Network:</b> <b>Slight</b> adverse non-significant effect for visual receptor 7</p>
Ecology	Statutory Designated Sites for Nature	No significant impact	No significant impact	Haslam Park Preston LNR falls within 2km of the scheme (1.9km east of the scheme). This LNR is highly unlikely to	None required		None

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	<b>Conservation</b>			be functionally connected to the land within the Scheme due to the distance and reasons for designation. Therefore, no impacts are predicted on this LNR.			
	<b>Non-Statutory Designated Sites for Nature Conservation</b>	No significant impact	No significant impact	Non designated sites within 2km of the scheme Lancaster Canal (Whole Length in Lancashire Including Glasson Branch)  BNFL Springfields Works Ponds BHS  Deepdale Wood BHS	None required		No significant residual effects
	<b>Running water</b>	No significant impact	No significant impact	There is one minor (unnamed) watercourse within the Scheme footprint. Most of this watercourse is currently culverted under the pasture land which forms the proposed area of the car park.	The watercourse is to be protected from potential impacts via integral mitigation (e.g., good practice pollution prevention measures).	Detailed design / Construction	No significant residual effects
	<b>Standing Water</b>	No significant impact	No significant impact	One pond is located within the Scheme footprint to the south east of the site towards Lea Road. This pond only holds water on a very temporary basis (i.e., after prolonged periods of wet weather) and the vegetation within and around the pond is terrestrial and would not be classed as an important ecological feature in isolation. This pond is to be retained.  The pond within the Scheme boundary containing breeding toad populations would not be directly impacted during construction or operation.  The bridge construction over the Lancaster Canal represents a very small percentage of the total length of the canal (e.g., over 50	Integrated construction mitigation and good practice design is to be employed to avoid pollutants entering the watercourse. Whilst there may be temporary impacts (i.e., damage or loss) to the emergent vegetation on the canal margins, this is not considered to represent a significant impact. A Construction Environmental Management Plan would also be implemented to avoid, minimise or mitigate effects on the environment and surrounding area.	Construction	No significant residual effects

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				miles of the canal are navigable).			
	<b>Broad Leaved and Mixed Plantation Woodland</b>	No significant impact	No significant impact		Integral mitigation during construction (e.g., tree protection) and operation for all retained trees would avoid potential significant impacts related to changes in environmental conditions / disturbance.	Construction	No significant residual effect
	<b>Broad leaved Semi Neutral Woodland</b>	No significant impact	No significant impact		Integral mitigation during construction (e.g., tree protection) and operation for all retained trees would avoid potential significant impacts related to changes in environmental conditions / disturbance.	Construction	No significant residual effect
	<b>Scattered Broad Leaved Trees</b>	Significant at the Local level	No significant impact	3 trees to be removed	0.98ha of native tree planting and a further 0.99ha of ornamental trees. Hedgerow and tree planting and management would compensate for habitat losses upon successful establishment and maturity of the habitats.	Detailed design / Construction	No significant residual effect
	<b>Hedgerows</b>	Significant at the District level	No significant impact	Loss of 970m of hedgerow	Replacement hedgerow and tree planting (minimum of five woody species) within a combined total of 1370m. Strengthening of existing hedgerows through adoption of good management practices	Detailed design / Construction	No significant residual effect
	<b>Grassland and farmland</b>	No significant impact	No significant impact	Improved grassland – Less than local importance  Marshy grassland – Less than local importance  Poor semi-improved grassland – less than local importance  Arable land – less than local importance  Amenity grassland – less than local importance  Some loss expected to	Mitigation hierarchy would seek to avoid reduction in grassland and farmland where possible and minimise land take. Where possible temporary working areas to be restored post construction. The Scheme would also, achieve Biodiversity Net Gain – planting of wildflower meadows retention and creation of wildflower meadows.	Detailed design / Construction	No significant residual effect

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				grassland as a result of the development of the scheme.			
	<b>Swamp</b>	No significant impact	No significant impact	There are no pathways for potential impacts to the swamp habitat identified within the study area.	None required	NA	NA
	<b>Marsh/Marshy Grassland</b>	No significant impact	No significant impact		None required	NA	NA
	<b>Badger</b>	No significant impact	No significant impact	Badger absent from site and surrounds	None required	NA	NA
	<b>Bats</b>	Common pipistrelle - significant at the Local level  Daubenton's bat - significant at the Local level  Noctule - significant at the Local level  Brown long-eared bat - significant at the Local level	Significant at a Local level	The light level would not significantly impact light tolerant species (e.g., common pipistrelle and noctule) and the potential impacts to brown long-eared bats (i.e., displacement of foraging land within the car park) is not considered to be significant in consideration of the other mitigation and design measures provided.	The protection and retention of hedgerows and trees on the periphery of the construction footprint.  Lighting suitable for bats.  The creation and management of significant areas of habitat including hedgerows, trees and grasslands.  Management of the existing hedgerow resource.  Increasing potential roost features	Detailed design / Construction.	No significant residual effect
	<b>Breeding Birds</b>	Significant at the Local level	No significant impact	The habitat types (farmland and hedgerows) most common within the Scheme boundary are well represented within the wider area and the habitat loss would not significantly sever/fragment the breeding bird populations recorded.	The loss of hedgerows and trees would be compensated. Wildflower planting in road verges adjacent to hedgerows.  12 bird boxes comprising a range of box types are proposed. Boxes will target both common and declining bird species.  Avoidance of tree felling, and vegetation clearance works within the breeding bird season.	Detailed design / Construction	No significant residual effect



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	<b>Wintering Birds</b>	Significant at the Local level	No significant impact	The habitat types (farmland and hedgerows) most common within the Scheme boundary are well represented within the wider area and the habitat loss would not significantly sever/fragment the wintering bird populations recorded.	The loss of the hedgerow feeding/roosting resource for wintering birds is to be mitigated via the creation of extensive areas of new species-rich hedgerows and native trees and shrubs.	Detailed design / Construction	No significant residual effect
	<b>Barn Owls</b>	No significant impact	No significant impact	Due to the low numbers of barn owl present within the survey area and the lack of optimal foraging habitat present, it is considered that any severance/fragmentation or changes in conditions / disturbance of barn owl would not be significant during the construction or operational phases.	None required.	-	-
	<b>Great Crested Newts</b>	No significant impact	No significant impact	GCN population considered to be of Less than Local importance	None required	NA	NA
	<b>Common Toad (and other common amphibians)</b>	Significant at the Local level	Significant at the Local level	Due to the relatively low levels of activity and low night-time traffic levels as the Scheme would include an access road to the railway station, mortality incidents due to road collisions are not expected to be significant. The design for the access road includes the use of raised curbs and standard gully pots which may contribute to mortality and severance/ fragmentation of common toad habitat.	Precautionary working measures to avoid species mortality (e.g. hand searches, toolbox talks, ecological supervision).  Look to undertake construction of temporary working area compound (adjacent to P24) outside of the migration period (Feb-Apr). (to be confirmed in detailed design)  Retention, restoration, and creation of habitats and features (refuge habitats) suitable for common toad including shaded areas near the wetland to the east of the station building.	Detailed design and construction environmental management plan.	No significant residual effect
	<b>Otters</b>	Significant at the Local level	No significant impact	The design of the access road bridge crossing the canal would not hinder movement of otter along Lancaster Canal.	Disturbance impact to otters would be mitigated via the restriction of construction working to daylight hours within the 10-15m surrounding Lancaster canal. Light spill onto Lancaster Canal will be avoided during operation via a sensitive lighting design and the planting of screening belts of trees	Construction	No significant residual effect



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					along the Scheme		
	<b>Water Vole</b>	No significant impact	No significant impact	Scoped out of further assessment			
	<b>Invertebrates</b>	No significant impact	No significant impact	Scoped out of further assessment			
	<b>Hedgehog</b>	Significant at the Local level	No significant impact		Retention and creation of foraging habitats (grassland, hedgerows and trees).  Provision of nesting features (log piles and two hedgehog boxes).  Precautionary working methods during construction.	Detailed design / Construction.	No significant residual effect
	<b>Brown Hare</b>	Habitat loss and fragmentation: No significant impact  Mortality: Impacts are considered to be significant at the Local level	Non-significant impact	The cumulative impacts of habitat loss and fragmentation are considered to be most relevant to brown hare	None proposed		Significant residual impact at a Local level.
<b>Cultural Heritage</b>	<b>Archaeological Remains</b>	<b>Moderate</b> adverse significant impact – On assets 8, 9, 14, 27, 41, 42, 43, 44, 46, 47, 48, 49, 50 and 51	No significant impact		Implementation of archaeological evaluation and programme of works would be required for compound areas. This will be developed in consultation with the specialist advisor to Lancashire County Council (LCC).	Detailed design / Pre-Construction.	No significant residual impact
	<b>Historic Buildings</b>	<b>Moderate</b> adverse significant effects - Temporary removal of the possible railway milepost (Asset 52) the setting of Grade II listed Quaker's Bridge, (No.19), Darkinson Lane, Lea (Asset 22) and the Lancaster Canal (Asset 39)  Non-significant for all other buildings	<b>Moderate</b> adverse significance effects on Grade II listed Quaker's Bridge, (No.19), Darkinson Lane, Lea (Asset 22) and the Lancaster Canal (Asset 39)  Non-significant for all other buildings		Photographic survey Historic England Level 1	Pre-Construction.	<b>Moderate</b> adverse significant effects - Quaker's Bridge, (No.19), Darkinson Lane, Lea (Asset 22) and the Lancaster Canal (Asset 39).  Non-significant for all other buildings.

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	<b>Historic Landscape</b>	No significant impact	No significant impact		No mitigation required		
<b>Air Quality</b>	<b>Dust</b>	No significant impact		With the construction management measures applied, as specified in the CoCP, the likely effect of dust emissions on human health and compliance with the AQOs and amenity during construction, would have no significant impact.	Good practice mitigation to control dust emissions would be agreed through the CEMP.	Detailed design / Construction.	No significant residual dust effects
	<b>Air Quality</b>	No significant impact	No significant impact	With the construction management measures applied, as specified in the code of construction practice (CoCP), the likely effect of dust emissions on human health and compliance with the Air Quality Objectives (AQOs) and amenity during construction, would have no significant impact.	No specific mitigation required	Detailed design / Construction.	No significant residual air quality effects
	<b>Human Health</b>	No significant impact	No significant impact		Good practice mitigation would be agreed through the CEMP.	Detailed design / Construction	None
<b>Noise</b>	<b>Noise (nighttime)</b>	No significant effect	<b>Short Term Residential Receptors- Negligible adverse</b> impact at 161 properties  <b>No Change</b> at 332 properties  <b>Minor beneficial</b> impact at 33 properties  <b>Negligible beneficial</b> impact at 548	It is considered unlikely that the total number of days with a moderate or major impact would exceed ten or more nights in any 15 consecutive nights during construction.  No noise sensitive receptors are predicted to experience significant adverse effects as a result of operation of the Scheme.	Where works during such periods are required, the appointed contractor should liaise with the Planning Authority to agree working practices, and where relevant, noise limits. It would be anticipated that the appointed contractor would need to demonstrate that there is no alternative to night-time working, that best practice measure would be applied to the required works and any potential significant mitigated as much as reasonably practicable.	Construction	<b>Long Term Residential Receptors- Minor adverse</b> impact at 4 properties  <b>Negligible adverse</b> impact at 989 properties  <b>No Change</b> at 13 properties  <b>Negligible beneficial</b> impact at 72 properties  <b>Public Rights of Way</b> No long-term significant effects

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			properties		
	Noise (Daytime)	<p><b>Sample Residential Receptors-</b> Construction activities are considered to result in a significant effect.at Quaker Lodge, Leyland Bridge Barn, 1 Railway Cottages.</p>	<p><b>Short Term Residential Receptors-Negligible adverse</b> impact at 257 properties</p> <p><b>No Change</b> at 69 properties</p> <p><b>Minor beneficial</b> impact at 62 properties</p> <p><b>Negligible beneficial</b> impact at 686 properties</p> <p><b>Public Rights of Way</b> No short-term significant effects</p> <p><b>Operation Station Noise</b> No significant impacts are likely to occur at 1 Railway Cottages and 4 The Shires</p> <p><b>Operation Railway Noise</b> 1 Railway Cottages would experience non-significant <b>minor beneficial</b> impact</p>	<p>No noise sensitive receptors are predicted to experience significant adverse effects as a result of operation of the Scheme.</p> <p>All construction work would be undertaken in accordance with the best guidance measures set out in BS 5228-1 and BS 5228-2. These mitigation measures would be set out within the CEMP.</p> <p>No significant adverse operational noise effects have been identified and, therefore, no essential mitigation for operational noise is proposed</p>	<p>Detailed design / Construction</p> <p><b>Long Term Residential Receptors-Minor adverse</b> impact at 2 properties</p> <p><b>Negligible adverse</b> impact at 991 properties</p> <p><b>No Change</b> at 9 properties</p> <p><b>Negligible beneficial</b> impact at 72 properties</p> <p><b>Public Rights of Way</b> No long-term significant effects</p>

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	<b>Vibration Nuisance</b>	No potential significant vibration effects		None of the moderate impacts predicted are considered to be significant adverse effects as the duration of the impact is likely to be less than 10 days in a 15-day period or 40 days in a six-month period.	The CEMP would provide details regarding the mitigation of vibration nuisance caused by construction.	Detailed design / Construction	No predicted residual impacts
<b>Soils, Geology and Hydrogeology</b>	<b>Mineral Resources</b>	No potential significant impacts	No potential significant impacts	No mineral resources identified within the study area.			
	<b>Human Health</b>	No significant adverse impacts	No significant adverse impacts	<p>The ground investigation identified no significant sources of ground gas and as such the operational effect is considered to be <b>negligible</b>.</p> <p>The ground investigation data and analysis of soil samples has not identified pollutant linkages within the site or any exceedances of human health generic assessment criteria. Therefore, the construction effect is considered to be <b>negligible</b>.</p>	<p>Construction Environmental Management Plan</p> <p>Health and Safety Plan</p> <p>Environmental Clerk of Works (EnvCoW) present to provide advice about ecological and environmental issues during the construction of the Scheme.</p>	Detailed design, / Construction.	None
	<b>Groundwater (Secondary Aquifers)</b>	No significant impact	No significant impact		NA		None
	<b>Groundwater (Undifferentiated Aquifer)</b>	<b>Moderate</b> adverse impact - Glacial till Secondary (undifferentiated) aquifer	No significant impact		<p>Piling risk assessments would be undertaken in line with Environment Agency guidance</p> <p>A de-watering risk assessment would be undertaken</p> <p>A site walkover by the Contractor should be undertaken to determine</p>	Detailed design, / Construction.	No residual significant effects

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					<p>the nature of the groundwater features identified to determine groundwater dependency.</p> <p>A hydrogeological risk assessment to be undertaken to determine whether any further additional mitigation is required.</p> <p>Local diversions of surface water flow paths sourced from groundwater may also be implemented.</p>		
	Soil Quality	<p><b>Moderate to Large</b> significant adverse impact on Grade 3 ALC through Permanent sealing of soils</p> <p><b>Slight to moderate</b> significant adverse impact on Grade 3 ALC through temporary loss of resource and/or access</p> <p><b>Moderate to Large</b> significant adverse impact on Grade 3 ALC as previously reusable soils rendered unsuitable for reuse through excavation, stripping, storage and/or compaction</p>	No significant impact	<p>Permanent sealing of soils</p> <p>Temporary loss of resource and/or access</p> <p>Previously reusable soils rendered unsuitable for reuse through excavation, stripping, storage and/or compaction</p>	<p>During construction, the adoption of good soil management practices in accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2018) A Materials Management Plan and Soils Management Plan will be produced.</p>	Detailed design/ Construction	N/A

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Water Environment	Water Quality and Water Resources	Moderate to Large significant adverse impact on Lancaster Canal	No significant impact	As Lady Head Runnel only receives discharges from a traffic free catchment, and Savick Brook and Lancaster Canal do not receive any direct discharges, the impact during operation is negligible.	<p>Implementation of SuDs including retention pond, filter catch pits, oversized pipes and attenuation tank.</p> <p>Routine maintenance of drainage systems.</p> <p>Replacement planting around outfall structures proposed landscape mitigation measures are shown in the Environmental Masterplan (Appendix 18.1).</p> <p>Banks should be re-graded to replicate existing bank conditions, where practicable.</p> <p>In relation to culvert extension/replacements efforts would be made to maintain natural channel width and bed gradient through the culvert where possible.</p> <p>Culverts would be designed using appropriate CIRIA guidance. These would be agreed with the required statutory consultees.</p> <p>In relation to new and extended culverts an operational management and maintenance plan would be developed.</p>	Detailed design / Construction	No residual impacts
	Flood Risk and Surface water Run Off	Moderate significant adverse impact on Groundwater Flooding	Neutral non-significant adverse impact on Groundwater Flooding	<p>It is anticipated that the overall magnitude of impact on Flood Risk from the effects associated with the construction phase works would be negligible.</p> <p>The overall magnitude of impact on Flood Risk from the effects associated with the operational phase works would be negligible.</p>	No mitigation is required		No residual impacts

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	Groundwater	<p><b>Piling</b> <b>Moderate</b> significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer</p> <p><b>Slight</b> non-significant adverse impacts on Sherwood Sandstone Group Principal aquifer, Issue for Lady Head Runnel, Historical wells (outside Study Area), Lancaster Canal, Lady Head Runnel and central watercourse Western Watercourse and Savick Brook</p> <p><b>Neutral</b> non-significant adverse impacts on SPZ3</p> <p><b>Excavation of attenuation pond and underground tank</b> <b>Moderate</b> significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer</p> <p><b>Excavation of cutting for road at bridge.</b> <b>Moderate</b> significant adverse impacts on Issue for Lady Head Runnel</p> <p><b>Slight</b> non-significant adverse impacts on Issue for Central Watercourse</p> <p><b>Culvert Extension</b> <b>Moderate</b> significant</p>	<p><b>Piling</b> <b>Slight</b> non-significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer, Sherwood Sandstone Group Principal aquifer, Issue for Lady Head Runnel, Slink north of railway line, Lancaster Canal, Lady Head Runnel and central watercourse Western Watercourse and Savick Brook</p> <p><b>Permanent drainage for attenuation pond and tank</b> <b>Slight</b> non-significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer, Issue for Lady Head Runnel. Slink north of railway line, Lancaster Canal, Lady Head Runnel and Central Watercourse</p>		<p>Piling risk assessments would be undertaken in line with Environment Agency guidance</p> <p>A de-watering risk assessment would be undertaken</p> <p>A site walkover by the Contractor should be undertaken to determine the nature of the groundwater features identified to determine groundwater dependency.</p> <p>A hydrogeological risk assessment to be undertaken to determine whether any further additional mitigation is required.</p> <p>Local diversions of surface water flow paths sourced from groundwater may also be implemented.</p>	Detailed design / Construction	No residual significant impacts on groundwater



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		<p>adverse impacts on Issue for Slink north of railway line, Lancaster Canal, Lady Head Runnel and Central Watercourse</p> <p><b>Slight</b> non-significant adverse impacts on Historical walls (outside study area)</p> <p><b>Embarkments</b> <b>Slight</b> non-significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer, Issue for Lady Head Runnel, Issue for Central Watercourse, Sink north of railway line, Historical wells (outside Study Area), Lancaster Canal, Lady Head Runnel and central watercourse, Western Watercourse and Savick Brook</p> <p><b>Temporary Working Areas</b> <b>Very Large</b> significant adverse impact on Issue for Lady Head Runnel</p> <p><b>Moderate</b> significant impact on Sink north of railway line</p> <p><b>Slight</b> non-significant adverse impacts for Glacial till Secondary (undifferentiated) aquifer, Issue for Central Watercourse, Historical wells (outside Study Area), Lancaster</p>	<p><b>Permanent Embankments</b> <b>Slight</b> non-significant adverse impacts on Glacial till Secondary (undifferentiated) aquifer, Issue for Lady Head Runnel, Sink north of railway line, Lancaster Canal, Lady Head Runnel and central watercourse, Western Watercourse and Savick Brook</p> <p><b>Accidental spillages</b> <b>Slight</b> non-significant adverse impacts for Glacial till Secondary (undifferentiated) aquifer, Sherwood Sandstone Group Principal aquifer, Issue for Lady Head Runnel, Sink north of railway line, Lancaster Canal, Lady Head Runnel and central watercourse, Western Watercourse and Savick Brook</p>		

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		Canal, Lady Head Runnel and central watercourse and Western Watercourse and Savick Brook					
Traffic and Transport	Private Property and Housing	No significant effect	No significant effect		Phase traffic management on Lea Road during construction	Detailed design / Construction	No significant residual impacts
	Traffic Flows	<p><b>Moderate</b> adverse impact on pedestrians and cyclists during construction</p> <p><b>Slight</b> adverse impact on public transport during construction</p> <p><b>Negligible</b> adverse impact upon the capacity, safety or operation of the surrounding highway network</p>	<p><b>Large</b> benefit on public transport during operation</p> <p><b>Slight</b> adverse impact on public transport on pedestrians and cyclists during operation</p> <p><b>Negligible</b> adverse impact upon the capacity, safety or operation of the surrounding highway network</p>		No mitigation required		
Land use and accessibility	Community Land and Assets	No significant effect	No significant effect		<p>Replace trees on the northeast boundary of the golf course. Proposed landscape mitigation measures are shown in the Environmental Masterplan (Appendix 18.1).</p> <p>Phase traffic management on Lea Road during construction</p>	Detailed design / Construction	
	Development Land and Businesses	<b>Moderate to Large</b> significant adverse impact on Rowland Homes, Lea Road. No permanent or temporary loss of land, disruption to the	No significant effect			Detailed design	

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		<p>highways network on Lea Road.</p> <p><b>Neutral to Slight</b> non - significant adverse impact on Northern Dairy Equipment, Lea Road. No permanent or temporary loss of land, disruption to highways network in the vicinity of the Scheme.</p> <p><b>Neutral to Slight</b> non - significant adverse impact on Brylea Caravan Park, Lea Lane. No permanent or temporary loss of land, disruption to highways network in the vicinity of the Scheme.</p> <p><b>Neutral to Slight</b> non - significant adverse impact on Chamley Fields Rural Business Park, Mason Fold Farm, Lea Lane. No permanent or temporary loss of land, disruption to highways network in the vicinity of the Scheme.</p>					
	<b>Agricultural Land Holdings</b>	No significant effect	No significant effect		<p>Construction of cattle creeps and new field accesses</p> <p>Maintaining field accesses</p>	Detailed design / Construction	
	<b>Walkers, Cyclists and Horse-riders (WCH)</b>	No significant effect	<b>Moderate to Large</b> significant beneficial improvements to the Highways Network on Sidgreaves Lane, Road,		<p>The provision of the Scheme linking Cottam Link Road to improve connectivity to the active transport network</p> <p>Diversion of paths and cycle routes during construction would be implemented using the CEMP</p>	Detailed design / Construction	

ES Discipline	Sub discipline	Potential Significant Impacts		Comments	Mitigation		Predicted Residual Impacts
			<p>Lea Road and construction of new roundabout on Cottam Link Road</p> <p><b>Slight</b> non-significant beneficial impact PRowS</p> <p><b>Slight</b> non-significant beneficial Cycle routes</p> <p><b>Neutral</b> non-significant The Millennium Ribble Link/Savick Brook and the Public Rights of Way</p>				
Human Health	Air quality	<b>Negligible</b> non-significant adverse impact	<b>Negligible</b> non-significant adverse impact	Further details available in ES discipline Air Quality			
	Noise	<b>Negligible</b> non-significant adverse impact	<b>Negligible</b> non-significant adverse impact	Further details available in ES discipline Noise			
	Flood risk	<b>Negligible</b> non-significant adverse impact	<b>Negligible</b> non-significant adverse impact	Further details available in ES discipline Water Environment			

ES Discipline	Sub discipline	Potential Significant Impacts		Comments	Mitigation		Predicted Residual Impacts
	<b>Walking and Cycling</b>	<b>Negligible</b> non-significant adverse impact	<b>Major</b> significant beneficial impact with mitigation	Further details available in ES discipline Land Use and Accessibility			
	<b>Minimising car use</b>	NA	<b>Negligible</b> non-significant adverse impact	Further details available in ES discipline Traffic and Transport			
	<b>Safety</b>	NA	<b>Negligible</b> non-significant adverse impact	<p>Potential collisions as a result of increased vehicle traffic to and from the railway station</p> <p>Potential slips trips and falls in the railway station and car park</p> <p>Station and train fires</p> <p>Station crime</p>	<p>Vehicle speed limits in car parks</p> <p>Segregated footway and cycle tracks</p> <p>Safe crossing points fitted with tactile paving for visually impaired and comfortable gradients</p> <p>Public footways gritted during cold weather to limit the potential for slips trips and falls</p> <p>Dry risers for firefighting support</p> <p>Smoke detectors, fire resistant internal doors, 2m fire barrier</p> <p>Closed circuit television and outdoor lighting to deter crime</p>	Detailed design	No significant residual impacts
	<b>Employment</b>	NA	<b>Medium</b> significant beneficial impact	The railway station would improve employment opportunities indirectly. The improved connectivity would allow local residents without vehicles to commute to work.	No mitigation required	NA	No significant residual impacts

ES Discipline	Sub discipline	Potential Significant Impacts		Comments	Mitigation		Predicted Residual Impacts
Climate change	Climate resilience	No significant impact	No significant impact	Short-term effects from the construction of the Scheme are not likely to be significant. This is due to the mitigation that would be implemented, the nature of the construction activities and the dates of the construction period.	<p>Dangers of working in more extreme weather conditions to be within the Construction Environmental Management Plan</p> <p>Use of construction materials with superior properties</p> <p>Consideration of climate change projections to be within maintenance plans</p> <p>Drainage systems design to protect against a return period of 1-in-100 years flood event</p> <p>Procedures would be identified in the Construction Environmental Management Plan for severe weather events</p> <p>Regular maintenance of assets</p>	Detailed design	No significant residual impacts
	Greenhouse Gas Emission Assessment	No significant impact	No significant impact	The GHG emissions caused during the construction and operation of the Scheme are not significant when viewed against the UK carbon budget 2028 – 2032 and carbon budget for 2033 - 2037.	NA	NA	No significant residual impacts