Stephen Bank to Carkin Moor

Table 5-8: Summary of preliminary assessment of likely significant environmental effects – Stephen Bank to Carkin Moor

Factor	Preliminary assessment of likely significant environmental effects		
	Construction stage	Operation stage	
Air Quality	 Preliminary assessment for air quality has been undertaken on the basis of the whole route (see route wide table above). 	 Preliminary assessment for air quality has been undertaken on the basis of the whole route (see route wide table above). 	
Biodiversity	 There is the potential for likely significant effects due to loss of Priority Habitats. Subject to further design and mitigation. 	 There is the potential for likely significant effects due to loss of Priority Habitats. Subject to further design and mitigation. 	
	 Effects will be the same as route wide table above on bat roosts and bat activity, barn owls, amphibians (including great crested newt), reptiles and terrestrial invertebrates subject to ongoing surveys. Effects will be the same as route wide table above on red squirrel and other terrestrial mammal species due to habitat loss and possible fragmentation impacts. 	 Effects will be the same as route wide table above on bat roosts and bat activity, barn owls, wintering birds, breeding birds, amphibians (including great crested newt), reptiles and terrestrial invertebrates subject to ongoing surveys. Effects will be the same as route wide table above on red squirrel and other terrestrial mammal species due to habitat loss and possible fragmentation impacts. 	
Climate	No likely significant effects anticipated.	No likely significant effects anticipated.	
Cultural Heritage	Permanent significant adverse effects are anticipated at the Roman Fort and Prehistoric	No likely significant effects anticipated.	

Factor	Preliminary assessment of likely significant environmental effects	
	Construction stage	Operation stage
	 enclosed settlement 400m west of Carkin. Subject to on-going mitigation design and further assessment. Permanent significant adverse effects are anticipated to affect the Roman vicus at Carkin Moor Fort. Subject to ongoing design and assessment. 	
Geology and Soils	 Likely significant effects due to the potential permanent land take and loss of high and medium value agricultural soil resource (Grade 3a and 3b agricultural land). 	No likely significant effects anticipated.
Landscape and Visual Effects	 Likely significant effects on a localised part of Moors Fringe landscape character type Likely significant effects on residents of West Layton along West Lane, Browson Bank, Dunsa Bank, the Fox Grove Area, Monks Rest Farm and near Carkin Moor Farm Likely significant effects on users of PRoW west of West Layton, PRoW east of West Layton, PRoW south of the A66 Likely significant effects on visitors to Mainsgill Farm Shop and Fox Hall Inn 	 Likely significant effects at year 1 on: A localised part of Moors Fringe landscape character type Residents at Browson Bank, Dunsa Bank and Monks Rest Farm Users of PRoW west of West Layton, PRoW east of West Layton, PRoW 20.55/1/1 and 20.55/6/1 south of the A66 Visitors to Mainsgill Farm Shop Likely significant effects at year 15 on: A localised part of Moors Fringe landscape character type Residents at Monks Rest Farm Users of PRoW 20.55/1/1 and 20.55/6/1 south of the A66 Visitors to Mainsgill Farm Shop
Material Assets and Waste	 Preliminary assessment for material assets and waste has been undertaken on the basis of the whole route (see route wide table above). 	Preliminary assessment for material assets and waste has been undertaken on the basis of the whole route (see route wide table above).

Factor	Preliminary assessment of likely significant environmental effects	
	Construction stage	Operation stage
Noise and Vibration	 There is potential for significant effects across the scheme. Effects will be temporary and localized depending on the specific activity and construction stage. The location and duration of these effects are yet to be determined and are subject to further assessment. 	 Significant adverse effects are predicted to 26 residential receptors and one non-residential receptor. Subject to on-going mitigation design and further assessment. Significant beneficial effects are predicted to eight residential receptors.
Population and Human Health	 Walkers, cyclists and horse riders – potential likely significant effects due to the severance of PRoW and other WCH provisions due to the land required for the construction of the project. Agricultural land holdings – potential likely significant effects due to the loss of or damage to key characteristics, features or elements of the agricultural holding and potential effect of this change on viability. FP 20.23/8/1 - potential likely significant effects as the Footpath will be severed by the draft DCO boundary. BW 20.23/5/1 - potential likely significant effects as the Bridleway will be severed by the draft DCO boundary. Potentially negative effects on mental wellbeing due to a perceived reduction in the quality of the living environment and concerns about air quality and road safety due to increased HGV movements. Residents of rural properties, potentially negative health effects on wellbeing and quality of life due to noise effects. Rural communities – potentially negative health effect due to severance caused by construction 	 Walkers, cyclists and horse riders – potential for beneficial significant effects if additional formal crossing points are introduced across the A66, that will bring improvements to WCH journey times, in some cases. However, there is also the potential for adverse significant effects due to increased journey times dependent upon the permanent scheme design. Residents of rural properties, potentially negative health effects due to impacts on quality of life from noise and visual effects. Rural communities - potentially positive health effect due to improved access to community facilities resulting from improved traffic flows on the A66.

Factor	Preliminary assessment of likely significant environmental effects		
	Construction stage	Operation stage	
	activities and traffic, leading to reduced access to services and facilities.		
Road Drainage and the Water Environment	No likely significant effects anticipated.	No likely significant effects anticipated.	