

21. Summary of Significant Residual Effects

21.1 Introduction

21.1.1 This Chapter summarises both the significant adverse (Table 21-1) and beneficial (Table 21-2) residual effects that have been identified in the assessment chapters (Chapters 8 to 18) of this Environmental Statement (ES). The tables below include the impacts identified during both construction and operation which remain significant after incorporation the proposed mitigations measures (where applicable) as provided within the assessment chapters. These mitigation measures are set out in Chapter 20 (Schedule of Environmental Commitments).

21.1.2 The significant residual impacts identified in this chapter were assessed according to the methodology as outlined in each assessment chapter. Significant effects typically comprise residual effects that are within the moderate, large or very large categories. Residual impacts that have not been assessed as significant are provided within each assessment chapter but have not been reproduced here.

21.1.3 It should be noted that there were no significant residual effects identified for the following assessments:

- Cultural Heritage (Chapter 10);
- Road Drainage and the Water Environment (Chapter 11);
- Air Quality (Chapter 13); and,
- Climate Change (Chapter 18).

21.2 Summary of Significant Residual Effects

Table 21-1 Summary of Significant Residual Adverse Effects

Receptor	Summary of Significant Residual Impacts	Significance of Residual Effect
Chapter 8 - Landscape and Visual Effects		
Construction		
Visual Impact <i>Viewpoint 1 – Sheriffhall Mains</i>	Views of the Proposed Scheme would include construction activity related to the rerouting of the A6106 North in relatively close proximity. The removal of sections of Poplar trees alongside the A6106 would slightly increase visibility of the existing junction. Activity associated with construction of new road structures and SuDS basins would also be visible occupying a relatively large extent of the view, although would be seen in the context of existing traffic on the A720 Edinburgh City Bypass ('the A720'), A6106 and Sheriffhall Roundabout, and the double line of OHL towers in the foreground.	Moderate Adverse
Visual Impact <i>Viewpoint 3 – Summerside (viewpoint)</i>	From the viewpoint location there would be views of construction activity in the fore and mid ground associated with removal of vegetation, earthworks and installation of new structures and a SuDS basin. Existing vegetation would restrict and filter some views of construction activity from the viewpoint location.	Large Adverse
Visual Impact <i>Viewpoint 3 – Summerside (residential properties)</i>	Outward views from the residential properties are generally more restricted. Views from the properties themselves are heavily restricted and/or orientated east towards the A7. There would be close range views of construction activity alongside the A7 from three properties, with views from the remaining receptors to the south and east restricted by intervening vegetation and boundary walls.	Moderate Adverse
Visual Impact <i>Viewpoint 4 – Old Sheriffhall</i>	From Sheriffhall House there would be close range views of construction activity such as the movement of machinery to form earthworks and new carriageways. This activity would be short term and temporary to the rear of the property but would nevertheless represent a noticeable change. There may also be oblique filtered views of construction activity within the main view to the southeast of this property. From Old Sheriffhall Farmhouse, visibility of construction activity would be more limited. There would be oblique views of activity associated with construction of the SuDS pond to the southeast of the property. However, the main activity would occur to the northwest and would be screened by adjacent outbuildings.	Large Adverse
Operation		
Visual Impact <i>Viewpoint 1 – Sheriffhall Mains</i>	The Proposed Scheme would increase the visibility of road infrastructure and traffic, including at night, in views from this location and the residential property south of Sheriffhall Mains. The baseline view in this direction includes the A720, A6106 and associated traffic and also prominent OHL towers in the foreground, providing a context to potential change. Proposed mitigation planting would reduce the extent and level of potential impacts at Year 15 and in the long term.	Moderate Adverse (Year 1) Neutral (Year 15)

Receptor	Summary of Significant Residual Impacts	Significance of Residual Effect	
Visual Impact <i>Viewpoint 3 – Summerside (viewpoint)</i>	<p>The newly created SuDS pond would be visible in the foreground from the viewpoint location, with the elevated A720, off slip and roundabout and associated lighting and traffic in the mid ground. The removal of vegetation and increased height of road structures would represent a very noticeable change from this location.</p> <p>Proposed mitigation planting would help slightly reduce the extent of visibility of the Proposed Scheme from the viewpoint location at Year 15. However, the level of impacts from both the viewpoint location and the residential properties would be the same as at Year 1.</p>	Large Adverse (Year 1)	Large Adverse (Year 15)
Visual Impact <i>Viewpoint 4 – Old Sheriffhall</i>	<p>The completed A720 and slip roads would be in close proximity to this viewpoint, increasing the visibility of road infrastructure and associated traffic including headlights and road lighting. Removal of vegetation would also increase the extent of the view affected. The low-level earthworks of the SuDS pond to the southeast would be largely imperceptible from Sheriffhall House, but may be more visible from Old Sheriffhall Farmhouse, representing a limited change.</p> <p>Proposed mitigation planting would reduce the extent and level of potential impacts at Year 15 and in the long term.</p>	Large Adverse (Year 1)	Slight Adverse (Year 15)
Chapter 9 - Nature Conservation			
Construction & Operation			
Ancient Woodland	Direct destruction of small amounts (0.02ha, 0.04ha and 0.1ha) of three long-established plantation blocks, which are floristically-poor owing to non-native trees (mainly beech) and amounting to 0.3% of such woodland in the survey area.	Moderate Adverse	
Chapter 12 - Noise and Vibration			
Construction			
Closest residential receptors to the works	Construction noise impacts at the closest identified residential properties during the day, evening/weekend and night.	Slight to Large Adverse	
Chapter 14 - Effects on All Travellers			
Construction			
Amenity impacts on all Non-Motorised Users (NMTU) Routes	<p>There will be temporary adverse amenity impacts on all users during the Proposed Scheme construction created by a variety of factors including construction works activities (including structures, earthworks, road surfacing and ancillary works), construction materials on-site storage and construction vehicle movements (including HGVs and other heavy plant), noise, and dust emissions.</p> <p>The implementation of best practice construction measures (including the preparation and implementation of the CEMP) would seek to reduce/offset amenity change impacts on All Travellers during construction of the Proposed Scheme.</p>	Moderate Adverse	
Impacts on views for vehicle travellers on the A720	During the Proposed Scheme construction phase it is anticipated that there will be temporary adverse effects on the views from the A720 due to the works themselves, the associated traffic management and temporary signage.	Moderate Adverse	
Chapter 15 - Community and Private Assets, and Human Health			

Receptor	Summary of Significant Residual Impacts	Significance of Residual Effect
Construction & Operation		
Loss of Designated Development Land - Shawfair Park Extension 2 Site (Ec1)	There will be required land take of 27,802.92 m ² from the Shawfair Park Extension 2 Site (Ec1) (16% loss of land) to facilitate construction and accommodate the Proposed Scheme. Pre-construction consultations to be carried out with affected landowners in order to agree land take requirements, and where necessary, provide appropriate compensation.	Large Adverse
Loss of Agricultural Land – Landowner B & O	There will be required land take of 20,445.52 m ² from Landowner B & O (45% loss of land) to facilitate construction and accommodate the Proposed Scheme. Pre-construction consultations to be carried out with affected landowners in order to agree land take requirements, and where necessary, provide appropriate compensation.	Large Adverse
Loss of Agricultural Land – Landowner J	There will be complete loss of Landowner J's land (100% loss of land) to facilitate construction and accommodate the Proposed Scheme. Pre-construction consultations to be carried out with affected landowners in order to agree land take requirements, and where necessary, provide appropriate compensation.	Large Adverse
Loss of Agricultural Land – Landowner L & R	There will be required land take of 27,802.92 m ² from Landowner L & R (27% loss of land) to facilitate construction and accommodate the Proposed Scheme. Pre-construction consultations to be carried out with affected landowners in order to agree land take requirements, and where necessary, provide appropriate compensation.	Large Adverse
Loss of Agricultural Land – Landowner P	There will be required land take of 292,542.62 m ² from Landowner P (8% loss of land) to facilitate construction and accommodate the Proposed Scheme. Pre-construction consultations to be carried out with affected landowners in order to agree land take requirements, and where necessary, provide appropriate compensation.	Moderate Adverse
1 No. field accesses to/ from Landowner H & K's land from the A6106 South	One field access will be moved from the western side of the A6106 (south) to the eastern side of the A7 (south); which is a move of approximately 250m. Pre-construction consultations to be carried out with affected landowners in order to agree new access location and requirements.	Moderate Adverse
Chapter 16 – Geology and Soils		
Construction & Operation		
Prime Agricultural Land (Class1, Class 2 and Class 3.1) Soil Quality	Loss of approximately 20 ha of Prime Agricultural Land (Class1, Class 2 and Class 3.1).	Very Large Adverse
Chapter 17 – Material Assets and Waste		

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Construction		
Hazardous waste landfill capacity	Earthworks and demolition required for construction of the Proposed Scheme may result in the production of hazardous waste. The Proposed Scheme is expected to generate approximately 5,021 tonnes of hazardous waste in the form of hazardous soils and coal tar contaminated material.	Moderate Adverse

Table 21-2 Summary of Significant Residual Beneficial Effects

Receptor	Summary of Significant Residual Impacts	Significance of Effect
Chapter 14 - Effects on All Travellers		
Operation		
Impact on the amenity of the core path routes CEC4 and 4-34.	Due to the segregation of the core path routes through subways beneath the Proposed Scheme the general amenity of the routes has been increased due to the separation from traffic and road-related noise and the reduction of the visual impact of the road on the routes.	Large Beneficial
Impact on the amenity of the routes on both sides of the A7 (South)	Due to the provision of new segregated off-road routes on both sides of the A7 (South) the general amenity of the routes has been increased due to the separation from traffic and road-related noise and the reduction of the visual impact of the road on the routes.	Moderate Beneficial
Impact on the amenity of the routes on the west side of the A6106 (North)	Due to the provision of new segregated off-road routes on the west side of the A6106 (North) the general amenity of the routes has been increased due to the separation from traffic and road-related noise and the reduction of the visual impact of the road on the routes.	Moderate Beneficial
Impacts on views for vehicle travellers on the A720	Due to the new raised elevation of the A720 there will be beneficial effect on the views from the A720.	Moderate Beneficial
Driver Stress for vehicle travellers on the A720 during peak periods	For vehicle travellers on the new A720 fly-over structure during the peak periods there will be beneficial impacts due to the grade-separation of the junction with no need for drivers to reduce speeds.	Moderate Beneficial