Chapter 12
Summary

12 Summary

Introduction

12.1 **Chapters 6** to **11** of the EIA Report present the findings of the predicted effects of the proposed development on a topic-by-topic basis[1]. The significance of these effects has been assessed using criteria defined in the topic chapters. Where appropriate, the significance of effects has been categorised as major, moderate, minor or none, including a 'conversion' to these levels of significance in the case of the ecology assessment. In the context of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the EIA Regulations'), effects assessed as being of **major** or **moderate** significance are considered to be significant effects. In line with Schedule 4 of the EIA Regulations, Scottish Government Planning Advice Note 1/2013: Environmental Impact Assessment, and other relevant EIA guidance, the EIA-R has focused particularly on identifying significant environmental effects (both positive and negative).

12.2 **Table 12.1** summarises the predicted significant effects of the proposed development prior to, and following, the implementation of committed mitigation measures. A list of all committed mitigation measures and proposed monitoring identified within the EIA Report is provided in **Appendix 12.1.**

Summary of Effects

12.3 Prior to the implementation of committed mitigation, significant (i.e. major or moderate) effects are predicted in relation to:

- Landscape and Visual Amenity;
- Cultural Heritage; and
- Construction Noise.

12.4 No significant effects are predicted prior to mitigation in relation to:

- Hydrology and Water Resources;
- Ecology; and
- Access, Traffic and Transport.

12.5 Only effects which are considered to be significant prior to mitigation are presented in **Table 12.1**. All other effects are considered to be non-significant prior to mitigation and are therefore not presented.

Landscape and Visual Amenity

12.6 Overall, the proposed development will result in very localised significant adverse effects on the site of the proposed development and localised significant adverse visual effects on views within an approximate radius of 0.5km, largely experienced from the community of Glenlee.

12.7 **Major** effects are predicted during construction on the landscape character of the site the immediate locality. **Major** effects are also predicted for two viewpoints (rear of Rannoch and rear of Orrin). Construction effects will be short-term adverse and reversible.

12.8 Once operational, **Moderate** effects are predicted on the landscape character of the site and immediate locality. A **Major** effect is predicted for the viewpoint to the rear of Rannoch, and a moderate effect is predicted for the rear of Orrin. Landscape mitigation planting will be implemented during the operational phase which will help screen close proximity views, reducing the effect to the rear of Orrin to **Minor**. The mitigation planting will also help integrate looking into Glenlee substation extension in longer distance elevated view as it matures.

12.9 **Moderate** cumulative effects are predicted on the landscape character of the site, and a **Major** cumulative effect is predicted for the viewpoint to the rear of Rannoch.

Hydrology and Water Resources

12.10 With the implementation of good practice measures during construction as outlined in **Appendix 4.3**, there will be no effects on water quality, private water supplies, channel morphology, run-off rates or flood risk during construction and operation of the proposed development.

Ecology

12.11 No significant effects are predicted on habitats of conservation concern or protected species during construction or operation of the proposed development. Measures will, however, be put in place to minimise any potential effects, including pre-construction surveys, use of species licences where necessary, sensitive timing of works to avoid species breeding seasons and delivery of 'toolbox talks' for all contractors.

Cultural Heritage

12.12 It is considered likely that there will be a direct **major** effect during construction on any potential buried archaeological remains of an early (prehistoric or medieval) bloomery from ground breaking works for the Glenlee substation extension. A grid of hand-dug test-pits will be excavated across the site of the possible bloomery to establish if any remains survive and the possible extent of the site. Provision will also be made for further excavation, sampling and analysis of any significant deposits encountered. This second phase of work will also require post-excavation analysis and reporting of the results. With the implementation of the proposed mitigation measures, the significance of the residual effect will be reduced to **minor** and will not be significant. No other significant direct effects during construction or indirect effects on setting during operation of the proposed development are predicted.

Construction Noise

12.13 The construction noise assessment identified that there will be **moderate** to **major** effects on the nearby properties during construction of the proposed development. Through the installation of a noise barrier, in addition to close liaison with the local community and implementation of good practice working measures, the residual effect will be **minor**. Operational effects were scoped out of detailed assessment and no cumulative effects during construction were identified.

Access, Traffic and Transport

12.14 The assessment has considered the potential effects of construction traffic on driver delay, road safety and community impacts on the public road network in the study area, and also considered cumulative effects with a number of other schemes in the study area, including the KTR Project. No significant effects were identified prior to mitigation, however it is proposed that temporary impacts relating to an increase in construction traffic will be minimised through the implementation of the locally focused CTMP. The CTMP will promote interventions that will assist the safe and efficient transportation of components and materials to site in order to reduce the likelihood of driver delay and adverse impacts upon the communities identified within the study area. The Police and relevant roads authorities will be consulted on the CTMP, and as far as reasonably practicable, deliveries will be scheduled outwith school opening and closing times.

12.15 **Table 12.1** summarises the predicted significant effects of the proposed development prior to, and following, the implementation of committed mitigation measures.

Table 12.1: Summary of Significant Effects

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Landscape and Visual Amenity			
The site of proposed development and immediate	***Construction:*** Major	None	***Construction:*** Major

[1] The 'proposed development' includes the Glenlee substation extension (as outlined in green on Figure 4.1) together with all associated works to be undertaken within the planning application site boundary as detailed within paragraphs 4.1-4.19 of Chapter 4 unless the context indicates otherwise.

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
locality	***Operation:*** Moderate	Landscape planting	***Operation:*** Moderate
	Cumulative: Moderate	None	***Cumulative:*** Moderate
Viewpoint 1: Rear of Rannoch	***Construction:*** Major	None	***Construction:*** Major
	Operation: Major	Landscape planting	***Operation:*** Major
	Cumulative: Major	None	***Cumulative:*** Major
Viewpoint 2: Rear of Orrin	***Construction:*** Major	None	***Construction:*** Major
	Operation: Moderate	Landscape planting	***Operation:*** Minor
Cultural Heritage			
Direct (construction) effect on any buried archaeological remains of an early (prehistoric or medieval) bloomery (4)	Major	A grid of hand-dug test-pits will be excavated across the site of the possible bloomery (4) to establish if any remains survive and the possible extent of the site	Minor
Construction Noise			
Construction noise effect on nearby residential properties	Moderate to Major	Installation of noise barrier, liaison with the local community and implementation of good practice measures	Minor

Interrelated Effects

12.16 The EIA Regulations (Schedule 4, Paragraph 5) require that EIA Reports consider the interrelationships between aspects of the environment likely to be significantly affected by a development. It is considered that the following effects are interrelated:

- There is a correlation between the sensitivity of visual receptors (people) involved in recreation and tourism activities and represented by viewpoints used for the visual assessment of the proposed development. Whilst a detailed assessment of effects on recreation and tourism has not been undertaken as detailed in **Chapter 2: Approach to the EIA**, the assessment of effects presented in the assessment of landscape and visual effects takes this into account.
- There is some correlation between visual and cultural heritage effects in relation to the change in views resulting from the proposed development where these are evident from cultural heritage receptors. The effects arising from the potential effects of the proposed Glenlee substation extension on the surrounding landscape and on the settings of heritage assets are however distinct: the first is an effect on the landscape character and how the effects are perceived by people, while the second is an effect on the setting of individual or groups of heritage assets that contribute to their cultural significance or special interest and how these assets are perceived or understood and appreciated. An assessment of effects on the setting of cultural heritage features is undertaken in **Chapter 9: Cultural Heritage**, which is interrelated with the findings of the assessment in **Chapter 6: Landscape and Visual Amenity** whereby changes to views within the wider area are discussed.
- There is some correlation between likely effects on hydrology and on ecology given that changes to hydrology resulting from the proposed development could result in effects on ecological receptors, for example peatland and groundwater dependant habitats. As noted in **Chapter 7: Hydrology and Water Resources** and **Chapter 8: Ecology** there is no peat within the site, and potential effects on GWDTEs have been scoped out of detailed assessment and no significant interrelated effects are therefore considered likely. In addition, there are links between effects on ecology and ornithology in relation to the loss or reduction in quality of suitable habitats for breeding, or indirect effects on foraging due to the changes in conditions for prey items. Potential effects on ornithology have been scoped out of detailed assessment and no significant interrelated effects are considered likely.
- The properties located adjacent to the proposed development are considered likely to experience combined effects relating to a number of topics during construction. In particular it is considered that there will be a correlation between potential effects on local residential amenity resulting from temporary effects from construction noise and traffic, and the visual effect associated with construction. These effects on amenity are considered in **Chapter 6: Landscape and Visual Amenity**, **Chapter 10: Construction Noise** and **Chapter 11: Access, Traffic and Transport**.

12.17 None of the interrelated effects identified above will give rise to any additional significant effects as a result of construction of the proposed development. It is not considered likely that there will be any interrelated effects once the substation extension is operational.