

5.10 Strategies

Sustainable Drainage System Strategy

- 5.10.1** All available details for design and implementation of the SUDS is presented in the SUDS Strategy (Supporting Documents, Hydrology & Water Quality). The strategy outlines the layout of drainage areas and the types of systems suitable to the purpose.
- 5.10.2** The SUDS would collect rainfall and surface runoff to promote infiltration to the groundwater. The implication or risk to ground water quality has been assessed in Volume 2, Chapter 9, Section 9, Hydrology and Water Quality.

Lighting Strategy

- 5.10.3** All available details for lighting of the An Camas Mòr development, including design and implementation is presented in the Lighting Strategy (Supporting Documents, Indicative Land Use Plan Strategies) and Table 5.3. The strategy aims to provide adequate lighting while reducing light spill, energy wastage and light pollution.

Services Strategy

- 5.10.4** Services which would be installed for the residential development are potable water supply, foul drainage, telecommunication and electricity supply. Available information has informed the Services Strategy and is located in the ILUP, which describes the expected design of services.
- 5.10.5** The services corridor is currently proposed to be located from the B970, between Coylumbridge and Aviemore, over the River Drurie to the development. The services crossing of the River Drurie would be underneath the proposed footbridge, and constructed in Period A. North of the River Drurie, the services would be routed underground either along the proposed footway/cycle route or the new B970 Substation Road.
- 5.10.6** The construction method proposed to install services underground is likely to be by open trench.
- 5.10.7** The services would also be required for all site compounds during construction. Early services installment of permanent services, rather than temporary construction services, would reduce environmental disruption. The services strategy takes cognisance of phasing of the development and also of the site establishment.

Potable Water Provision

- 5.10.8** Scottish Water are to undertake a Water Impact Assessment (WIA), alongside the Drainage Impact Assessment (DIA) to consider network constraints and connection points to the existing water main infrastructure. Scottish Water currently has infrastructure improvements programmed to the water network which would provide sufficient capacity for the development. The WIA would inform the final arrangement of the water network, in terms of connection point and any offsite network improvements that may be

necessary to ensure there are no network constraints between a new water treatment facility and An Camas Mòr.

Sewage Treatment and Foul Drainage

- 5.10.9** The Scottish Water foul network from Coylumbridge and through Aviemore is a network of gravity drains leading to pumping stations. The Development Impact Assessment process would confirm the effect of connecting An Camas Mòr to the existing infrastructure, in terms of pipe sizes and pump capacities. Completion of the DIA would inform the final arrangement of the foul drainage network and where connection would be made.
- 5.10.10** Foul water drains are to be laid in same trench as Surface Water drains, at a depth of 1.5m to 4m.

Telecommunications

- 5.10.11** Openreach Newsites have confirmed that connection to the existing telecommunications infrastructure is acceptable. There are options available for the development, in terms of telecommunications infrastructure; however this is more in line with provider rather than infrastructure connection.

Electricity

- 5.10.12** There is a need for improvements to the substation at Rothiemurchus, as the substation network supplying Aviemore is currently reaching its limit. Improvements to the substation would take the An Camas Mòr development into consideration and Scottish and Southern Energy have been involved in the development of the strategy for providing electricity to the Proposed Development.

Development Phases and Construction and Development Activities

Table 5.3: Development Phases (Period), Construction and Development Activities as illustrated in the Indicative Land Use Plan Drawings

Period A 2006 – 2011	Period B 2011-2016	Period C 2016 – 2018	Period D 2018 - 2027
<p>Areas and Units: This is the total development area and number of units for each period. Areas include local roads and open space but does not include the high street/ local roads, school, hotel or community building.</p>			
<ul style="list-style-type: none"> ▪ 120 units ▪ 4.5 ha 	<ul style="list-style-type: none"> ▪ 310 units ▪ 11.7 ha 	<ul style="list-style-type: none"> ▪ 200 units ▪ 7.5 ha 	<ul style="list-style-type: none"> ▪ 870 units ▪ 46.6 ha
<ul style="list-style-type: none"> ▪ Vegetation Clearance, Tree Removal, Topsoil Removal and Excavation 			
<ul style="list-style-type: none"> ▪ Area required for Period A activities listed below, particularly including: ▪ for site establishment and site compounds; ▪ housing developments; ▪ pedestrian and cycle paths; ▪ River Crossings. 	<ul style="list-style-type: none"> ▪ Extended throughout the development area for Period B. 	<ul style="list-style-type: none"> ▪ Extended throughout the development area for Period C. 	<ul style="list-style-type: none"> ▪ Extended throughout the development area for Period D.
<ul style="list-style-type: none"> ▪ New main pedestrian and cycleway routes. All paths are separate from roads 			
<ul style="list-style-type: none"> ▪ 4 paths, leading from the central location of the development: ▪ south-east to connect to the B970 (south) footway/ cycleway network, including construction of a footbridge over the River Drueie; ▪ Total Length of 1700m ▪ South-west to Coylumbridge, parallel to the B970; ▪ Total Length of 1500m ▪ north to the boundary of the development site; ▪ Total Length of 750m ▪ Connection of the north and south-east following the scenic route of the escarpment; ▪ Total Length of 3950m. 	<ul style="list-style-type: none"> ▪ New central path within the increased development area which connects to Period A routes. ▪ Total Length of 400m. 	<ul style="list-style-type: none"> ▪ Central path along the developing high street to connect the eastern and western perimeter of the Site ▪ Parallel with new bus route ▪ Total Length of 400m. 	<ul style="list-style-type: none"> ▪ relocation of path section along the eastern end of the high street; ▪ Connection of northern and southern paths, following the eastern perimeter. ▪ Total Length of 1800m.
<ul style="list-style-type: none"> ▪ Relocation / Upgrade of B970 Coylumbridge Road 			
<ul style="list-style-type: none"> ▪ Relocation of B970 Coylumbridge Road at 	/	/	/

Period A 2006 – 2011	Period B 2011-2016	Period C 2016 – 2018	Period D 2018 - 2027
<p>the southern connection to Coylumbridge. Relocation is to the east of the existing road.</p> <ul style="list-style-type: none"> Total Length of 650m. 			
<ul style="list-style-type: none"> Road Closure of existing Coylumbridge Road 			
<ul style="list-style-type: none"> existing B970 Coylumbridge Road would have restricted access. Access would be from the north for properties fronting road. 	/	/	/
<ul style="list-style-type: none"> Upgrade existing B970 connection from development, south to Coylumbridge 			
<ul style="list-style-type: none"> upgrade from bus route and B970 junction, south to Coylumbridge widened to 6m proposed widening on western side Total Length of 1500m shared use by construction and public traffic. 	<ul style="list-style-type: none"> extension of upgrade north of junction with bus route widened to 6m proposed widening on the western side Total Length of 470m shared use by construction and public traffic. 	Used for public traffic only, not construction.	Used for public traffic only, not construction.
<ul style="list-style-type: none"> New B970 Substation Route 			
<ul style="list-style-type: none"> construction of foundations of river crossing over River Druie. 	/	<ul style="list-style-type: none"> Connection from junction with upgraded B970 on east of site to the B970 (south), past the substation and crossing the River Druie Total Length of 1700m parallel to foot/cycle path developed in Period A construction to binder course level Construction of vehicle bridge over the River Druie. use by 	<ul style="list-style-type: none"> Upgrade to adoptable standards for use by public traffic shared use by construction and public traffic.

Period A 2006 – 2011	Period B 2011-2016	Period C 2016 – 2018	Period D 2018 - 2027
		construction traffic only	
<ul style="list-style-type: none"> Bus Route within the Proposed Development 			
Route developed from new junction with B970 to end of High Street Includes spur and bus turning Total Length of 400m.	<ul style="list-style-type: none"> extension from bus turning, to new junction with B970 north; Total Length of 800m. 	<ul style="list-style-type: none"> Extension from bus turning eastwards along high street Parallel to foot/ cycle path Bus turning point and connection with cycle path Total Length of 400m. 	<ul style="list-style-type: none"> Extension throughout development Provides access from high, medium and low density housing Connection to the adoptable B970 Substation Route Total Length of 1500m.
<ul style="list-style-type: none"> River crossings: vehicles and pedestrian bridges 			
<ul style="list-style-type: none"> New footbridge / cycleway constructed over the River Druie. Part of the footpath from development to B970 south Provides support for the services Foundations of B970 Substation Route vehicles bridge constructed over the River Druie. 	/	<ul style="list-style-type: none"> New road bridge for B970 Substation Route constructed over the River Druie Use by construction traffic only. 	<ul style="list-style-type: none"> Road bridge completed to roads authority standard shared use by construction and public traffic.
<ul style="list-style-type: none"> High density zone which would widen and extend west in each phase of development (The total area includes town houses and linked houses, 2.5 to 3.5 storeys high, 10-15 m high, includes open activity space and tree planted areas) Unit numbers are rounded to the nearest whole number 			
<ul style="list-style-type: none"> 2.0 ha 80 units 	<ul style="list-style-type: none"> 4.8 ha 190 units 	<ul style="list-style-type: none"> 3.1 ha 120 units 	<ul style="list-style-type: none"> 6.8 270 units
<ul style="list-style-type: none"> High Street Zone in high density housing area. (The zone includes apartments, possible mixed use ground floors, hotel, pub, cafe, community buildings) 			
<ul style="list-style-type: none"> Medium density zone which would extend north and south in each phases of development (The zone includes detached and linked houses, 1.5 to 2.5 storeys, 6-10m high, open activity space and woodland areas). Unit numbers are rounded to the nearest whole number. 			
<ul style="list-style-type: none"> 1.0 ha 20 units 	<ul style="list-style-type: none"> 3.9 ha 80 units 	<ul style="list-style-type: none"> 2.9 ha 60 units 	<ul style="list-style-type: none"> 9.8 ha 200 units
<ul style="list-style-type: none"> Lower density zone would extend north and south in each phases of development (The zone includes detached houses 1-2 storeys, 4-8m high, open activity space and woodland areas). Unit numbers are rounded to the nearest whole number 			
<ul style="list-style-type: none"> 1.5 ha 20 units 	<ul style="list-style-type: none"> Extension north and south 3.0 ha 40 units 	<ul style="list-style-type: none"> Extension north and south 1.5 ha 20 units 	<ul style="list-style-type: none"> Extension north and south 29.9ha 400 units
<ul style="list-style-type: none"> playing fields reservation 			
<ul style="list-style-type: none"> school site reservation 			
<ul style="list-style-type: none"> Sustainable Drainage System (SuDS) 			

Period A 2006 – 2011	Period B 2011-2016	Period C 2016 – 2018	Period D 2018 - 2027
<p>Detailed design of SuDS is being developed; as such the following details are in accordance with the SuDS strategy and may be subject to change.</p>			
<ul style="list-style-type: none"> ▪ Form surface network ▪ infiltration trenches to be installed alongside the local streets and major roads ▪ Infiltration systems to be installed in gardens of lower and medium density housing to accept drainage from roofs and curtilage. ▪ Permeable surfacing would be implemented on streets in low density areas to allow direct infiltration. ▪ SuDS for the public areas including the B970 Substation Route, bus routes, car parks and foot/cycle paths are to be developed in consultation with THC. 	<ul style="list-style-type: none"> ▪ Extension of network along the development of roads and in housing areas. 	<ul style="list-style-type: none"> ▪ Extension of network along the development of roads and in housing areas ▪ Temporary construction phase SUDS implemented along new B970 Substation Route for construction traffic. 	<ul style="list-style-type: none"> ▪ Extension of network along the development of roads and in housing areas ▪ Discrete Infiltration Areas or Infiltration Trenches would be installed along the bus route. ▪ Convert construction stage / implement final SUDS for major roads.
<ul style="list-style-type: none"> ▪ Services include potable water, foul drainage, electricity and telecommunications <p>All services are to follow the same route proposed below. Detailed design of the Services is being developed; as such the following details are based on Services Strategy and may be subject to change.</p>			
<ul style="list-style-type: none"> ▪ New services infrastructure laid within service corridors to Period A Development ▪ services corridor would follow the route of the new B970 Substation Route and would cross the River Drurie via the foot/cycle bridge. . ▪ Upgrade of the Scottish hydro-electric substation at the Rothiemurchus Fisheries ▪ telecommunication connection to existing network 	<ul style="list-style-type: none"> ▪ New services infrastructure laid within service corridors to Period B Development ▪ expand foul network ▪ expand terminal pumping 	<ul style="list-style-type: none"> ▪ Expansion of services infrastructure into Period C Development ▪ expand foul network ▪ expand terminal pumping 	<ul style="list-style-type: none"> ▪ Expansion of services infrastructure into Period D Development ▪ expand foul network ▪ expand terminal pumping

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<ul style="list-style-type: none"> ▪ Implement a new water main along the service corridor ▪ Connection of the new main to Scottish Water potable water existing infrastructure in the verge of the B970 Ski Road. ▪ Foul network constructed to terminal pumping station ▪ Construction of foul rising main from terminal pumping station to Scottish water network ▪ Connection of foul drainage to existing infrastructure. Location of connection has not yet been determined. 			
<ul style="list-style-type: none"> ▪ Lighting Detailed design of lighting is still being developed, as such the following details are in accordance with the Lighting Strategy presented in Section XX, but may be subject to change. Please also refer to section XX for further discussion. 			

Period A 2006 – 2011	Period B 2011-2016	Period C 2016 – 2018	Period D 2018 - 2027
<ul style="list-style-type: none"> ▪ Lighting infrastructure to extent of Period A development ▪ New Substation Route and Coylumbridge Road alignments would not be lit for motor vehicles ▪ Adjacent pedestrian/ cycle ways would not be lit ▪ Provided at road junctions with the B970 ▪ New proposed roundabout junctions with An Camas Mòr Main street / bus route ▪ Pedestrian crossing points, of which locations are yet to be determined ▪ Lighting along main street (bus route) and High Street ▪ Lighting of minor streets and adjacent to defined car parking, service bays and other public areas. ▪ Illumination of road signage and signing bollards as required by legislation. 	<ul style="list-style-type: none"> ▪ Lighting infrastructure to extent of Period B development 	<ul style="list-style-type: none"> ▪ Lighting infrastructure to extent of Period C development 	<ul style="list-style-type: none"> ▪ Lighting infrastructure to extent of Period D development
<ul style="list-style-type: none"> ▪ Landscaping and Revegetation 			
<ul style="list-style-type: none"> ▪ public open space with trees ▪ domestic gardens ▪ retention of existing geological features, particularly kettle holes, as a landscape feature. 	<ul style="list-style-type: none"> ▪ To extent of Period B development. 	<ul style="list-style-type: none"> ▪ To extent of Period C development. 	<ul style="list-style-type: none"> ▪ To extent of Period D development.