

Agenda Item	6.2
Report No	PLS 055/19

HIGHLAND COUNCIL

Committee: South Planning Applications Committee

Date: 7 August 2019

Report Title: 18/05427/S36: ILI (Highlands PSH) Ltd
Land 630m east of Park Cottage, Dores

Report By: Area Planning Manager – South

Purpose/Executive Summary

Description: To construct and operate a pumped storage hydro scheme approximately 14km SW of Inverness.

Ward: 12 – Aird and Loch Ness

Development category: Major Development

Reason referred to Committee: Application under Section 36 of the Electricity Act

Recommendation

Members are asked to agree the recommendation to **Raise no Objection** as set out in section 11 of the report.

1. PROPOSED DEVELOPMENT

- 1.1 The proposal is identified as a “national development” in National Planning Framework 3 and one that will be determined by Scottish Ministers under Section 36 of the Electricity Act 1989. However, if consented, Scottish Ministers will issue a Direction under Section 57(2) of the Town and Country Planning (Scotland) Act 1997 that Planning Permission be deemed to be granted for the development.
- 1.2 Consent for abstraction, diversion and use of water for generating electricity is also being sought under Section 10(5) and Schedule 5 of the Electricity Act 1989. This requires licences from Scottish Environmental Protection Agency (SEPA) under the Water Environment (Controlled Activities) (Scotland) Regulations 2006 (CAR).
- 1.3 The Council at this stage is a consultee on the proposed development. Should the Council raise an objection to this Section 36 application, Scottish Ministers will be required to hold a Public Local Inquiry on the proposed development.
- 1.4 The application is supported by an Environmental Impact Assessment Report (EIAR) and comprises a number of different elements, including above and below ground infrastructure which will comprise the pumped hydro scheme.
- 1.5 The primary function of the proposed development would be to extract, store and release energy to/from the electricity transmission system as required to help balance supply and demand for power at a national scale.
- 1.6 The principal components, which are described in more detail in Appendix 2 are as follows:

Upper Reservoir/Headpond – A new structure for storing approx. 5 million m³ of water located roughly between Loch Ashie and Lochan Eoin Ruadha;

Embankment Structure – to hold the reservoir described above, this will measure 1900m in length by 600m and a footprint of 93ha, measuring 39m in height at its extent;

Headpond Inlet Structure – Including an intake building, shaft within the reservoir to direct water into the headrace tunnel and underground waterway system;

Underground Waterway System – Underground caverns and tunnels carrying water between the upper reservoir to direct water into the headrace tunnel and underground cavern power station;

Surge Shaft and Ventilation Shafts – This would be required to respond to fluctuations in pressure within the tunnels and to allow air to circulate in the underground access tunnels;

Access Tunnels – All access for maintenance and operational purposes of the underground elements of the scheme;

Tailpond/Lower Reservoir – Submerged within Loch Ness, will include screens to allow controlled release of water;

Lower Control Works – Outlet structures includes administration buildings, welfare facilities etc for operation and maintenance of the scheme;

Jetty – Constructed on the shore of Loch Ness at the lower control works;

Access Tracks – Access will be required to the upper reservoir and lower control works, a variety of tracks are proposed in part using existing routes as well as new permanent and temporary tracks;

Borrow Pits – may be necessary to provide aggregate to supply material for the scheme;

Road Re-alignment – The head pond will be located over a section of the C1064, this will therefore require to be re-routed should the development be permitted.

- 1.7 In addition to the above, there will be a need for temporary and permanent areas of hardstanding to be used as laydown areas/construction compounds, four of which are proposed across the scheme, described in further detail later in the report.
- 1.8 It is anticipated that the construction period would extend over six years in phases. Normal day time construction shifts appear to generally apply for the surface works and reservoir construction taking into account weather and seasons. Underground construction operations are expected to continue 24 hours a day, 7 days a week. This would of course be dependant on restrictions in terms of any operation timing being restricted due to bird breeding seasons, for example within proximity to any protected sites.
- 1.9 The development also comprises underground infrastructure, including tunnels, surge shafts and cavern chambers, further detail on this infrastructure can be found in Appendix 2. The installation of this will result in a significant amount of spoil which would be removed via the tunnel portal. Where possible excavated material is to be re-used in the construction of the embankment which holds the reservoir.
- 1.10 Supporting Information: The application has a number of supporting submissions the principal one being the EIAR which considers the following key matters: -
- Water Environment
 - Spoil management
 - Landscape
 - Visual amenity
 - Terrestrial ecology
 - Ornithology
 - Aquatic ecology
 - Fish
 - Geology
 - Cultural heritage
 - Traffic and transport
 - Noise and vibration
 - Land use and recreation
 - Socio-economics and Tourism
 - Forestry
 - Cumulative Effects

Also submitted are:

- Planning Statement

- Pre-Application Consultation Report

- 1.11 The EIAR has been based upon the worst case scenario, also referred to as the 'Design Envelope'. The final decision remains over the actual project design taking into account grid requirements, financial decisions and engineering/geological knowledge.
- 1.12 Variations: Submission of supporting information to address consultation responses, amended visualisations

2. SITE DESCRIPTION

- 2.1 The total site area measures approximately 950 hectares and is located to the south-east-west of Dores village. The application site is extensive and covers a proportion of Ashie Moor, Dirr Wood, Balnafoich, Drummond and Kindrummond. The B862, which is part of General Wades Military Road network is located within the site and along the shore of Loch Ness. Lochan na Curra is located within the site with Lochan an Eoin Ruadha and Loch Duntelchaig beyond just outwith the site boundary. Loch Ashie is located to the east.
- 2.2 The lowest point of the development site is on the shore of Loch Ness at approximately 15m AOD rising across the extent of the site up to Ashie Moor, the highest point of which is 262m AOD. The site covers the majority of Dirr Wood and there are a scattering of residential properties surrounding or within close proximity to the site. The village of Dores is located on the edge of the western boundary of the site. Ashie Moor to the south of the site has features of historical interest including the remains of a fort, burnt mound and hut circles/field system.
- 2.3 Loch Ashie SPA and SSSI are located within the application site. The site is also subject to designated areas of Long Established Woodland of plantation origin. The site will also accommodate a number of protected habitats, valued peatlands, Ground Water Dependent Terrestrial Eco-systems (GWDTEs); and protected species, including numerous ornithological interests from the SPA and SSSI. The site is also home to a number of Scheduled Ancient Monuments; and the entire site is located within the Loch Ness and Loch Duntelchaig Special Landscape Area.
- 2.4 The inlet structure is to sit on the reservoir at the head of the embankment; the realigned road would be located to the west of the head pond. The head pond area is currently characterised by forestry plantation and open, undulating farmland. Residential development in the area is relatively limited. The nearest property to the head pond is the Ach-na-Sidhe B&B which would sit below the embankment.
- 2.5 The landscape to the east of the development site comprises the 'Seven Lochs' which comprise a network of low lying lochs, with Lochs Duntelchaig and Ashie providing a water supply to Inverness and surrounds.
- 2.6 The land to the west of the embankment slopes down toward Loch Ness and Dores village. This area largely comprises forestry and open farmland/pasture which is mainly flat and gently undulating for the most part. The local road network and existing tracks cross the site. This includes the B862 main Inverness to Dores

road; the C1064 General Wades Military Road (partial realignment proposed) and the C1076. A forestry track at Dirr Wood crosses much of the site between the headpond and Dores village.

- 2.7 The lower development area on the shore of Loch Ness slopes from the public road down to the shore; it is relatively steep and is largely tree covered at the road boundary which is then grass covered down to the shore. The fish farm offshore and onshore compound area is located to the south west of the proposed outfall and lower reservoir area. There has therefore been some development on shore nearby the site.
- 2.8 The A82 runs along the opposite (west) side of Loch Ness. There are a number of lay-bys that include interpretation boards overlooking the loch, which are well used by tourists. The west side of the A82 is elevated and includes the settlement of Abriachan that has views across the Loch towards the development site and the Farr and Glen Kyllachy windfarms beyond. The A82 provides the main route along the west side of Loch Ness toward destinations such as Urquhart Castle, and is one of the main tourist routes to Fort William and Skye.

3. PLANNING HISTORY

- 3.1 02.11.2017 17/04775/SCOP - Red John Pumped Storage Hydro Decision Issued
- 3.2 26.10.2017 17/04043/PREAPP - Pumped storage hydro scheme with an approximate capacity of 400MW. Closed

4. PUBLIC PARTICIPATION

- 4.1 Advertised: Inverness Courier, and The Herald and Edinburgh Gazette
Date Advertised: 10.11.2018, 27.11.2018 and 19.11.2018
- 4.2 Further information Advertised: Inverness Courier and Edinburgh Gazette
Date Further Info Advertised: 19.04.2019 and 23.04.2019
- 4.3 Four representations against the proposal were received by the Council and one petition signed by 18 people relating specifically to the historic and cultural heritage of the area and the use of Gaelic within the scheme – this petition is supported by Strathnairn Community Council, Inverness West CC and Abriachan Forest Trust.
- 4.4 One public representation made to the Energy Consents Unit, also submitted to the Planning Authority, is an objection to the scheme.
- 4.5 Material considerations raised are summarised as follows:
- a) Landscape and Visual Impacts, including - Potential blight experienced by the nearest property, scale of development beyond what was initially envisaged; South Loch Ness has amongst the highest concentrations of energy projects in Scotland, do not need further pylons and access roads through pristine areas
 - b) Roads and Transport – Road safety issues from increase in traffic including from workers, request for community liaison group requiring notification prior to

large vehicular movements over the road network

- c) Detailed CEMP should be secured
- d) Mitigation should be put in place for cyclists
- e) Environmental issues on site which has wildlife and fauna. Disagree with the findings of the Terrestrial Ecology section of the EIAR, particularly with regard to otter movements/corridors, spraints and food supply from waterbodies
- f) Is compensation in terms of planting, bat boxes etc. sufficient where habitats are being lost – note compensation is not a beneficial effect of the development
- g) Ornithology - section of the EIAR – note survey work being undertaken in a dry spell in 2018, and that there are known barn owls and red kites in vicinity of the site which will be impacted.
- h) Peat - Land use and soil quality other than peat are not considered, nor the loss of land suitable for forestry
- i) Noise and Vibrations - Unclear how much disturbance will be caused by noise and vibration with the exception of the noted receptors
- j) Construction impacts over 6 years, 24 hours a day, 7 days a week
- k) Waste - Issue with disposal of waste material
- l) Historic/Cultural Environment – Culturally sensitive naming of the scheme, impacts on archaeological monuments and features in the area which should be protected. Cathair Fhionn not been included as part of the EIAR. Sites connected to Fionn MacCumhail are of significance within Gaelic Scotland – this should be excavated, moved and rebuilt, within sight of the battlefield
- m) Cumulative Effect of developments in the area – particularly with Scottish Water plans to build a pumping station nearby
- n) Concern raised over the potential for a breach in the embankment should there be any seismic activity and the proximity to residential development
- o) Potential security issues
- p) The scheme does not generate new power to the grid, although there is a need for power storage to balance the grid, this has not been made clear to stakeholders and a lack of carbon calculations to determine whether the project will give rise to a net benefit in tackling climate change.

4.6 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam.

5. CONSULTATIONS

Consultations undertaken by The Highland Council

5.1 **Dores and Essich Community Council:** *In order to mitigate the effects of climate change and global warming, increased reliance needs to be placed on generating electricity from renewable sources, as is expressed in Scottish Government policy.*

- *Believe that pumped storage hydro schemes potentially have an important*

role to play in supporting such a policy as, in effect, they can be used to store the excess electricity generated by renewables when demand is low.

- DECC considers it regrettable that scheme Option A was rejected in favour of scheme Option B without sufficient consultation with the community as to the inherent risks which have since become apparent.
- If scheme Option A were to have been promoted DECC would be minded to support this proposal, subject to satisfactory scrutiny of the detailed plans.
- Since scheme Option B remains the chosen option, DECC has serious concerns about the head pond being located directly above the village of Dores and over a known geological fault. After careful consideration, DECC has resolved to **object** to this proposal due to the lack of compelling evidence as to how these concerns can be mitigated and due to the lack of a satisfactory insurance-backed indemnity to compensate any local residents in the event of them being affected by a breach in the head pond.
- Irrespective of which option is finally chosen, DECC would object to the proposals unless the following conditions were placed on the developer:
 - i. The setting up of a satisfactory and enforceable traffic management scheme during the construction phase;
 - ii. The setting up of a satisfactory and enforceable noise, dust and vibration mitigation scheme during the construction phase;
 - iii. Satisfactory architectural treatment (which may include screening) of any prominent structures at the head pond and the waterside site.
 - iv. The signing of a satisfactory legally binding agreement with the developer regarding community benefit and community investment in the project.

In the event that consent is approved Dores CC also provides a list of conditions and recommendations with regard to the local road network which they would wish to see embedded within any consent.

Other comments include that there should be prior warning for any blasting taking place on site, working day, and days of the week should be restricted.

Comments are included regarding all above ground buildings requiring to be of an acceptable architectural standard which reflects the sensitivity of the natural beauty of the area, this includes undergrounding of the grid connection to Knocknagael.

Although Community Benefit and Community Investment are not material planning considerations in themselves, they should be taken into account under the above heading which is now a material planning consideration.

The area delineated for the spreading of spillage material contains neither evidence of a previous township despite not being recorded in the EIA, nor the Council's list of archaeological sites.

This township area requires proper surveying and recording and potentially preservation.

Any proven blight on properties should be dealt with in a sympathetic way and we would point to the Community Compensation Scheme currently in place in England as an example of best practice on how to compensate homes and businesses.

5.2 **Glenurquhart Community Council** do not consider that it will have any direct impact upon the Community Council area. Given that the proposed scheme will be

required to make it possible for the renewables network to function, suggest that some form of community benefit should accrue to all the local communities.

5.3 **Inverness West Community Council** note that it's area includes the hanging valley of Abriachan which shares many natural history and cultural features with the scheme area, note that it is agreed in representations received relating to the language and Gaelic cultural heritage of the area that 'Red John' is an inappropriate name for the scheme and that the name and any new geographical features to be created by its construction should sensitively and accurately reflect the rich natural heritage of the area. Also note that the lengthy construction period, extent of land involved and the sensitivity of some of the features identified would merit the appointment of an archaeological and ecological clerk of works to supervise construction work daily, ensuring compliance with all relevant planning conditions.

5.4 **Stratherrick and Foyers Community Council** commented that:

- Previous experience in the area with other developments that traffic management plans have not been enforced, concern raised over this. Seek further clarity on how the developers and contractors intend to monitor and enforce speed of contractors' vehicles. Suggest contractors' vehicles being identifiable to Liaison Groups.
- Note that roads are single track with sections in a poor state of repair. Note that there has been one road traffic collision on the B851 therefore consideration requires to be given to road improvements such as additional passing places and increased signage.
- Timing of deliveries does not take into account the school bus for transport in the local area of Stratherrick Primary, or the bus services which carry pupils to the Inverness Royal Academy on the B862 and B861.
- Of the 4 proposed routes to be used, locals could be disrupted going to Inverness, question whether all routes will be disrupted at the same time, and question how residents will be communicated with to plan journeys ahead.
- Suggestion of Light Signs at strategic junctions for alerting locals of any delays to be experienced on the local road network.

5.5 **Strathnairn Community Council** object to the scheme on the basis that:

- No information provided on the quantity of traffic to be generated to import material required for the concrete lining to all tunnels and shafts including sand.
- All traffic routed along the B851 which is not suitable for heavy traffic which is already struggling with heavy vehicles
- Route passes primary schools and a play area shared with cyclists, cars, vans and heavy lorries with the mix of traffic causing concern particularly for children walking to and from school.
- To avoid contamination water is to be transferred back into Loch Ness, the head pond should be considered as landfill with appropriate lining to prevent

water seeping into the ground water.

5.6 **Access Officer** objects unless conditions are attached and advises that:

- Proposed temporary and permanent diversions of the Core Paths, long distance trails and deletion of several paths means that proposals will have a significant and detrimental medium and long term impact on public access. The proposed Outline Access Management Plan is unacceptable. Comment that the Council object to the proposals, or recommend a suspensive condition requiring more detailed and acceptable access management proposals that will have a less significant detrimental impact on public access. A strong preference for further information up front is recommended within the consultation response.
- It is recommended that the consent be conditioned to secure the diversion of Core Paths and that the developer is required to pay for such Orders whether or not the Orders are successful, and that the developer should be required to install a traffic-free, off-road 2m wide path suitable for walkers, cyclists and horse riders that the operators maintain for the lifespan of the scheme.

5.7 **Contaminated Land Team** has no objection subject to conditions. It identifies that records indicate that part of the application site has historic use as a refuse tip which may have resulted in land contamination. An informative is recommended to be attached to the permission.

5.8 **Development Plans Team** has no objection noting that the proposal offers an opportunity to contribute to the decarbonisation of energy in Scotland through its potential to offer stability of supply for renewable energy generation.

5.9 **Environmental Health** considers that based on the low background levels in this area and the likely duration of construction works, noise from the construction phase of the development is likely to have a detrimental effect on the day time amenity of local residents. This may be worsened if it is found that night-time construction is proposed. Conditions are recommended.

Further information was submitted by the developer; Environmental Health further commented as follows:

- Developer requested a relaxation for higher limits for the construction of baffle mounds, an amended condition is recommended
- Given the likely impact of daytime works, we require to ensure that night time works do not impact further on noise sensitive properties. Condition recommended
- Given the potential impact of daytime construction works the intention is to provide an adequate period of respite outwith usual working hours. Recommend a condition is attached.
- Condition recommended limiting operational vibration from the development in the interest of amenity of nearby residents.

- 5.10 **Flood Risk Management Team** has no objections on flood risk grounds subject to conditions, this includes further detail on watercourse crossings and surface water, that a condition is attached limiting when the scheme can operate depending on water levels within Loch . The team were also asked to comment on the breach modelling. It was noted that dams associated with the reservoir will come under the jurisdiction of the Reservoirs Act which employs strict standards and is regulated by SEPA. In designing reservoirs it is a requirement to consider the impact of breach scenarios, in this case due to strict Regulations imposed risk of a breach is considered to be acceptably low.
- 5.11 **Forestry Officer** has objections subject to conditions. It was commented that proactive woodland management of retained woodland, detailed restocking plans and detailed compensatory planting will be required; further detail required on restocking proposals including, the timing of this, ground preparation proposals, tree protection measures and ongoing maintenance. Following the currently proposed restocking it is identified that there is a shortfall of woodland cover of 12.1ha and that the applicant will therefore require to identify an additional 12.1ha of compensatory planting – it is noted that this is to be agreed with the Forestry Commission.
- 5.12 **Historic Environment Team** has no objections subject to conditions; it agrees with the recommendations of the EIAR however disagree with the recommendation to record assets only with a Watching Brief. For all known assets, or areas where it is highly likely that assets will be identified, evaluation would be appropriate in the first instance. Extensive mitigation required in the area where the Bronze Age hoard was identified. Conditions are recommended.
- 5.13 **Landscape Officer** has no objection. It was initially considered that a number of aspects of the development created unacceptable impacts on the landscape and visual resource of the local area but that there were opportunities for improvements which could be explored across the proposed design including improvements to the embankment, structures across the site, the design of the proposed road re-alignment; and landscape impacts through woodland removal.
- Further information was submitted which confirmed that building scale and design could be amended and that the road geometry and design could be altered . This was not considered to go far enough and further information and visualisations were submitted demonstrating that the landscape embankment could have a more natural profile, and that Compound 1 and the battery house can be set down in the hillside to reduce its visual prominence. The employment of a Landscape Architect is welcomed.
- 5.14 **Transport Planning Team** has no objection subject to conditions and delivery of improvements to the local road network/South Loch Ness Road Improvement Strategy. It was commented that the increased number and type of vehicles is considered to have a significant material impact on other users/residents. It is recommended that there should be a commitment for improvements within the existing residential communities along the proposed access routes, particularly given the works are predicated as being up to 6 years. Construction requiring access along the southern section of the C1064 between the B862 and Compound 1 would require to be upgraded to an agreed standard as per the new realigned

section of the same route. Predicted numbers will be a significant change to what current users, residents and businesses currently experience. Conditions are recommended which require further detail on a package of physical road improvements and a Construction Traffic Management Plan which shall include a specific section on Workforce Access Management.

Consultations undertaken by Energy Consent Unit

- 5.15 **Dores and Essich Community Council:** *In order to mitigate the effects of climate change and global warming, increased reliance need to be placed on generating electricity from renewable sources, as is expressed in Scottish Government policy. It also believes that pumped storage hydro schemes potentially have an important role to play in supporting such a policy as, in effect, they can be used to store the excess electricity generated by renewables when demand is low. However, when such a scheme is proposed in its area, DECC has a duty to its residents to look critically at the plans, to assess the impact of the scheme on the local community, to listen to the views and concerns of those residents and, base on all this information, to make representations to the developer, Highland Council and to the Energy Consents Unit.*

The following matters of concern were identified:

Traffic - *Over the six year construction period, significant volumes of traffic will be generated both within and around Dores village and the surrounding area. DECC would expect significant appropriate mitigation measures to deal with the issues arising.*

Noise and vibration - *Highland Council's Environmental Health team has produced an initial response which proposes a number of stringent conditions and control measures on the development in the event of approval and we fully support them in this matter.*

Visual impact - *Although not visible from the village, locals have drawn attention to the impact of the head pond embankment structures and hard landscaping, and the potential impacts on amenity and tourism in this world famous location. Similarly the tail pond structures which will be visible from the slipway on the beach have been commented upon.*

We would request that due consideration is required to soften the visual impact in this area of outstanding natural beauty and that all buildings visible from outwith the site should be of a high standard of design and specification reflecting the special character of the landscape.

Flood risk - *This is an extremely difficult issue for us to reach a conclusion on as most of the relevant data is unavailable due to national security reasons. However concerns have been raised about the choice of location directly above the village and the unlikely, but still theoretically possible breach of the head pond structure. Despite assurances from the developers' professional team that the dam will be built to the very highest standards and subject to stringent statutory controls over its operation and management, matters such as the absence of an external spillway, the potential effect of seismic activity (especially as the dam embankment will be directly over an existing geological fault) and possible blight affecting village*

properties, remain as matters of concern. DECC is continuing in its efforts to obtain further comfort from the developer on these matters, and the developers have stated a willingness to sign up to a section 75 which would create an appropriate level of insurance cover in the form of a burden. We would ask that this is supported and put in place by either the ECU or Highland Council, or if the case may be, some other form of legal instrument to the same effect.

It should be noted that the developer set out two schemes in the run-up to the planning application (Options A and B). Option B was selected by the developer as the preferred scheme. Option A would have placed the head pond further to the south west and with a lower embankment height (by some 13 metres or so) but this was ruled out before the planning application was lodged. With hindsight, this is unfortunate since most of the above concerns (apart from traffic) might have been considerably mitigated.

- 5.16 **British Telecom** has no objection on the basis the development and buildings do not interfere with transmission.
- 5.17 **Crown Estate Scotland** confirms that it would not be impacted by the development.
- 5.18 **Forestry Commission** has no objection and state that the Scottish Government's Control of Woodland Removal Policy includes a strong presumption in favour of protecting Scotland's woodland resources particularly those listed on the Ancient Woodland Inventory as ancient semi-natural woodlands. It is commented that the commitment to enhancing native woodland through removal of invasive species, controlling browsing pressure, and to enhancing juniper habitat and improving the appearance of the woodland is welcomed. The commitment to compensate for woodland loss with 89.6ha of compensatory planting to be delivered within the application site. Conditions are recommended securing the level of off-site planting and timing of all re-stocking proposals.
- 5.19 **Highlands and Islands Airport** has no objections.
- 5.20 **Historic Environment Scotland** has no objection and consider that the chosen location of the development will not have a significant adverse impact on the setting of Caisteal an Dunriachaidh or the integrity of the setting of this Scheduled Ancient Monument and therefore does not raise issues of national interest. Note that consideration should be given to the woodland restructuring design to assess the level of impact that planting may have on the setting of the fort.
- With regard to Urquhart Castle it is noted that due to the distance from the castle HES content that the limited visibility of the construction and operational effects of the development will not have an adverse impact on the integrity of the setting of the monument and does not raise issues of national interest.
- Comments on West Town Hut Circles and Ring Cairn HES confirm that they are content that the development will not impact on the key characteristics of the settings of the monuments - the development is unlikely to have an adverse impact on the setting of the monuments and does not raise issues of national interest.
- 5.21 **Joint Radio Company** has no objection.

- 5.22 **Mountaineering Scotland** comment that the impact on the climbing crag at Duntelchaig has not been assessed. Climbers have not been included in the assessment of noise and vibration, a sudden explosion has the potential to alarm climbers if not expected.
- 5.23 **National Air Traffic Services** has no objection as the proposal does not conflict with safeguarding criteria.
- 5.24 **Ness District Salmon Fishery Board** object to the proposals and comment that a number of statements within the EIAR are disagreed with (this is highlighted in detail within the response). It is concluded that the NDSFB is not of the view that the EIAR in its current form gives an accurate assessment of the potential impacts which the proposed scheme may have on salmon and the sea trout population in the Loch Ness system. Further detailed information regarding the migratory routes and behaviour of both adult and juvenile salmon (and sea trout) in Loch Ness is required to allow a robust assessment of the potential impacts to be made.
- 5.25 **Peat Adviser (AM Geomorphology)** has no objection subject to conditions. They advise that a full Peat Landslide Hazard and Risk Assessment is not required if minor revisions to the EIAR were submitted. It is recommended that a condition is attached to the consent to provide further information on the ground risks associated with peat excavation, storage and reinstatement and appropriate mitigation measures to minimise these risks, both to the environment and site personnel.
- 5.26 **RSPB** has no objection subject to conditions. It is confirmed that Slavonian grebe, black throated and red-throated divers are known to breed or frequent all the lochs surrounding Loch Duntelchaig and that construction of the scheme is likely to lead to disturbance to a qualifying feature of the SLA. Therefore robust mitigation including timing of rock blasting, maintaining a distance from the site in bird breeding season will be required. Mitigation relating to all birds, which also include black grouse, waders, hen harrier and possibly Scottish Crossbill should be submitted in an updated Species Protection and Habitat Management Plan which, once agreed will require to be implemented.
- 5.27 **Scottish Canoe Association** has made no comment.
- 5.28 **Scottish Hydro Electric** object to the proposals due to the proximity of the scheme to the existing Foyers hydro scheme and for the potential impacts which the development may have on the operation of this. Further information was requested clarifying how the two schemes could work together.
- 5.29 **Scottish Water** has no objection., It is commented that the site falls within the drinking water catchments of Loch Duntelchaig, Loch Ashie and Loch Ness. Concerns are raised on the impact the development could have on the public drinking water supply. Scottish Water therefore seek assurance that the system is closed in order that it will not speed aquatic invasive Non-Native Species so that there is no potential for these to migrate to Loch Ashie via the scheme. Scottish Water note that there is potential upgrades coming forward in the area and would welcome discussion with the developer as to how both developments can be

delivered.

5.30 **Scotways** do not object but required further clarity over phases in which route diversions are to be constructed. It is acknowledged that the Highland Council Access Officer is the main point of contact and further consultation with Scotways would be welcomed.

5.31 **SEPA** has no objection subject to conditions. It confirms that it is likely the development is capable of being authorised under CAR Licensing.

SEPA comment that there should be improvements to the Allt a' Mhinisteir Burn giving it a more natural plan form. Note that all excavation works should be at least 100m from the top of the bank to any watercourse and outwith the functional flood plain.

It recommends that Allt a Chruinachd burn is re-routed so that it discharges outwith the works area.

Comments were received on the design of watercourses, culverts and any new bridges, further detail should be submitted and a condition it recommended.

Groundwater levels at the Kindrummond borehole will require to be monitored during the low pressure tunnel and power chamber construction.

SEPA require the applicant to demonstrate that it is necessary to use the 6.8 million tonnes of spoil in the site. If there is a need to remove material from the site SEPA will require to be consulted on this.

SEPA is content that the development avoids impacts on deep peat, a Peat Management Plan will require to be agreed and conditions to secure.

There will be loss of GWDTEs with the headpond area, compensation for this loss will be required, a finalised Landscape and Ecological Management Plan should be secured.

There will be a requirement to confirm that all pollution prevention measures will be controlled by SEPA through a CAR Construction Site Licence.

Finally, comments on flood risk include that the owner/operator/applicant of a reservoir has a legal responsibility to comply with the requirements of the Reservoirs (Scotland) Act 2011. SEPA note from their guidance that the probability of failure of a reservoir structure managed under the 2011 Act is considered to be so low that it is beyond the scope of likely probabilities considered within the Scottish Planning Flood Risk Framework; confirm the as a result the reservoir breach analysis is not considered when providing advice on flood risk.

5.32 **SNH** has no objections subject to conditions. It comments that there are a number of natural heritage assets which will be affected by the proposal however it is not considered that these warrant detailed advice from SNH.

Protected Species are present on site, through pre-construction surveys, the application of standard conditions as agreed between Heads of Planning Scotland and the Energy Consents Unit will ensure impacts on these species will be minimised.

5.33 **Transport Scotland** has no objection subject to conditions. It is noted that the two locations to which the increase in daily vehicles is at Inshes, and approx. 7km south of Daviot. The proposed 850 generated trip routes along the A9 would result in a maximum 8% increase on the trunk road and an increase of a maximum of 16% in HGV movements across the trunk road. It is considered that the increase in levels are below the IEMA Guideline of 30% and are satisfied that there will be no significant traffic or related environmental impact on the A9(T).

With regard to abnormal loads, no detail on the tunnel boring machine and other components to be transported to site has been submitted, it is noted that within the Abnormal Load Route that an analysis has not been undertaken on the relevant section of the A9(T).

5.34 **Visit Scotland** has no objection. It is suggested that a tourism impact assessment should be submitted to consider potential adverse local impacts on tourism as a result of the development. Any impacts on tourism should be considered whether visually, environmentally and economically. Impacts on tourism and subsequently the local economy should be considered.

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application:

6.1 Highland Wide Local Development Plan 2012

28 - Sustainable Design

29 - Design Quality & Place-making

30 - Physical Constraints

31 - Developer Contributions

52 - Principle of Development in Woodland

54 - Mineral Wastes

55 - Peat and Soils

57 - Natural, Built & Cultural Heritage

58 - Protected Species

59 - Other important Species

60 - Other Importance Habitats

61 - Landscape

62 - Geodiversity

63 - Water Environment

64 - Flood Risk

65 - Waste Water Treatment

66 - Surface Water Drainage

67 - Renewable Energy Developments including significant effects on: -

- Natural, Built and Cultural Heritage
- Other Species and Habitat Interests
- Landscape and Visual Impact
- Amenity at Sensitive Locations
- Safety and Amenity of Individuals and Individual Properties
- The Water Environment
- Safety of Airport, Defence and Emergency Service Operations
- The Operational Efficiency of Other Communications

- The Quantity and Quality of Public Access
- Other Tourism and Recreation Interests
- Traffic and Transport Interests

72 - Pollution

73 - Air Quality

77 - Public Access

78 - Long Distance Routes

6.2 **Inner Moray Firth Local Development Plan (2015):**

No relevant site specific policies, refer to HwLDP

6.3 **Highland Council Supplementary Planning Policy Guidance**

Construction Environmental Management Process for Large Scale Projects (August 2010)

Highland's Statutorily Protected Species (March 2013)

Managing Waste in New Developments (March 2013)

Physical Constraints (March 2013)

Special Landscape Area Citations (June 2011)

Standards for Archaeological Work (March 2012)

Sustainable Design Guide (Jan 2013)

Trees, Woodlands and Development (Jan 2013)

7. **OTHER RELEVANT MATERIAL POLICY**

Highland Renewable Energy Strategy (HRES) (2006)

- 7.1 The Highland Renewable Energy Strategy (HRES) which highlights the potential for pump store technology advising that such proposals are to be considered on its individual merits.

Scottish Government Planning Policy and Guidance

- 7.2 National Planning Framework 3

Scottish Planning Policy

Control of Woodland Policy

Scottish Energy Strategy: The future of energy in Scotland (2017)

8. **ASSESSMENT**

- 8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise. The Council adopts this approach to its assessment of Section 36 applications, when formulating its response to Scottish Ministers.

Determining Issues

- 8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

- 8.3 The key considerations in this case are:
- a) National Policy
 - SPP
 - Scottish Energy Strategy
 - b) Development Plan
 - c) Design and Layout
 - d) Access and Traffic Impacts
 - e) Public Access
 - f) Hydrology and Flood Risk
 - g) Spoil/Peat Management
 - h) Natural Heritage
 - i) Fishing Interests
 - j) Trees and woodland
 - k) Landscape and Visual Impact
 - l) Cultural Heritage and Historic Environment
 - m) Cumulative effects
 - n) Noise and Vibration
 - o) Socio Economics and Tourism
 - p) Other material considerations
 - q) Non-material considerations

National Policy

Scottish Planning Policy

- 8.4 The Scottish Government's positive approach to Renewable Energy is set out in Scottish Planning Policy (SPP) with further advice on renewable energy targets set out in its most recent publication – Scottish Energy Strategy 2017. This reconfirms for example the target of generating the 100% of Scottish demand from renewable energy by 2020. The target is not a cap. Furthermore that by 2030 50% of all energy is expected to be derived from renewables.
- 8.5 There is expectation that the energy targets will be met from a mix of technologies. In particular it highlights the benefits of pumped store that “can store large amounts of power, releasing that energy when demand on the system is high.” The Scottish Government has highlighted the importance of the need of such technology with its identification of such projects being “national development” within the National Planning Framework.

- 8.6 SPP advises that “Planning Authorities should support the development of a diverse range of technologies, guide development to appropriate locations and provide clarity on the issues that will be taken into account when specific proposals are assessed. Development Plans should support all scales of development associated with the generation of energy and heat from renewable resources ensuring that the area’s renewable energy potential is realised and optimised in a way that takes account of relevant economic, social, environmental and transport issues and maximises benefit.” These elements are presented within the applicant’s EIAR and considered within this assessment.

Scottish Energy Strategy

- 8.7 This document sets out Scotland’s Energy Strategy until 2050 which sets targets such as 50% of Scotland’s heat, transport and electricity consumption to be supplied from renewable resources. It is noted that to deal with fluctuations in energy demand the UK has stores of oil, gas, petroleum and coal in order to help manage seasonal demand. Pumped hydro storage facilities are identified as potentially having an important bearing on Scotland’s low carbon future. In this instance - electricity would be stored within a body of water and released, generating electricity. The water is then returned and the process can occur over and over again. As fossil fuels deplete other technologies require to be advanced to replace them. Pumped hydro is one option which can be utilised.

Development Plan

- 8.8 The application needs to be assessed principally within the terms of Policy 67 of the Highland wide Local Development Plan (HwLDP). Other policies set out in the HwLDP, as highlighted earlier in this report, relate to the assessment of key factors which are material considerations as noted within this key policy; in particular Policy 61, since the development site lies within the Loch Ness and Duntelchaig SLA. Compatibility with the criteria The compatibility of the development with these considerations will be addressed throughout this report.
- 8.9 Policy 67 of the Development Plan recognises the strategy developed by the Council on a range of renewable energy technologies. This is set out within the Highland Renewable Energy Strategy (HRES) which highlights the potential for pump store technology advising that such proposals are to be considered on its individual merits. There are additional benefits from such investment as highlighted in the HRES, noted earlier, which include for example ‘Education and Training,’ ‘Community Benefit’ and ‘Local Content’. These remain important considerations.
- 8.10 Policy 67 highlights that the Council will consider the contribution of the project towards renewable energy targets, positive and negative effects on the local and national economy and other material consideration including making effective use of existing and proposed infrastructure and facilities. In that context the Council will support proposals where it is satisfied they are located, sited and designed such as they will not be significantly detrimental overall individually or cumulatively with other developments having regard to the 11 specified criteria contained with the Policy.

- 8.11 If the Council is satisfied on these matters then the application will accord with the Development Plan.

Design and Layout

- 8.12 The application has been developed as part of a feasibility and design project making reasonable assumptions based on current knowledge and engineering design. The scale of the current application has been set as an upper limit, but potentially could be less.
- 8.13 The principal generating elements of the development will be accommodated underground. The above ground elements would by condition require to be submitted to the Planning Authority for approval. Further details on each of the above and below ground component parts of the scheme can be found in Appendix 2.

Access and Traffic Impacts

- 8.14 Due to the size of the site and spread of construction and compound areas across the site and local area, alongside the number of construction workers and time period in which the development is to be under construction (expected to be six years), access and traffic are understandably identified as being of significant concern to local communities. The EIAR presents the worse-case traffic impacts which would be generated by the development. Initially, the Transport Planning Team objected to proposals until further clarity was provided on the predicted construction vehicle numbers, and that any permission granted should be subject to conditions and informatives.
- 8.15 The information submitted suggests that the main route for construction traffic will be from the south with traffic leaving the A9(T) at Daviot, travelling westerly along the B851 then joining the B862 heading northwards through Torness, then accessing the development site via the C1064 which is the single track road running to the south of Dores, and north of Loch Ashie and Loch Duntelchaig.
- 8.16 With regard to Trunk Road impacts, Transport Scotland confirm that based on the worse-case scenario, the development will generate an overall trip increase over what is currently experienced of 8%. HGV traffic will increase by 16%. They do not consider this significant and have no objections to the proposals subject to conditions which secure detail on abnormal deliveries. It is recommended these are attached to any consent granted.
- 8.17 The impacts on the local road network over which the Council have responsibility are more significant. It is suggested within the EIAR that during the busiest months on the routes identified that access for construction purposes could be anywhere between a 68% - 337% increase in general traffic (based on workers travelling one person per car) and a 141% - 1329% increase to HGVs. This is considered to be significant and could have a material impact on other road users, residents and landowners. It should be noted however that this would be an absolute worse case scenario.

- 8.18 While construction traffic is to be limited to the A9 – B851 – B862 route identified above, it is stated that the workforce and general deliveries would not be required to adhere to this route, therefore this traffic could be using any public road to and from the site. It is considered that the routes which are most likely to be impacted are from Inverness; for example the B862 through Dores and the C1064. It is noted within the information that to reduce workforce traffic that minibus or coach services may be provided, however there is no clear commitment to this with the workforce predicted to peak at 390 staff. Such trip numbers will be significant in the local area. Further to the above it is noted that some abnormal loads will require to be routed through Dores to Compound 2 of the scheme due to issues over improvements which will be required to the main route and landownership. It may be possible to utilise the Caledonian Canal for deliveries however, again at this time there is no commitment to do this.
- 8.19 To mitigate against the increase in traffic and improve road safety it is considered necessary that a package of road improvements should be secured in the event that consent is granted. This would be inline with the South Loch Ness Road Improvement Strategy, with communities impacted by vehicular movements generated by the development requiring road improvements/upgrades.
- 8.20 Community Services which is co-ordinating the delivery of the South Loch Ness Road Improvement Strategy is of the view that there are numerous sections of the local road network which are not suitable in their current form to safely and suitably cater for the significant transport impacts which it is proposed will arise from the development. It is considered that sections of the road network, in its current form within villages and open road sections at present have substandard width, geometry and structural integrity to safely and suitably cater for the resultant, prolonged predicted transport impacts.
- 8.21 Where development proposals have the potential to affect the performance and safety standards of the public road it is appropriate to seek proportionate and commensurate road mitigation measures to offset such adverse impacts. Without road mitigation it is expected that sections of the road network will deteriorate beyond economical repair and have reduced road safety standards. The Transport Planning Team is of the view that sections of the road network are not currently fit for use, particularly to accommodate high intensity and prolonged HGVs. Alongside the need to secure a Construction Traffic Management Plan (CTMP), the developer was asked to consider providing improvements such as Village Improvement Schemes at Holm – Dores, Scaniport, Dores Village, Inverarnie and Farr Village, Croachy Village and a village gateway on Essich Road. Safety enhancements at Aldourie Primary School were also suggested.
- 8.22 Improvements to the B862 single track road above Dores, Loch Ceo Glais, Whitemill Bridge to Inverarnie, Brinmore Bend improvement, works to Calanour twin track on the B851 were also highlighted.
- 8.23 With regard to the CTMP it is confirmed that, once a contractor is appointed the developer will investigate park and ride facilities. The principle of this is acceptable, however no detail on where the car parking area is to be provided have been submitted, this would require the submission of a planning application in

future. In response to the gateway features and improvements, the developers do not disagree to provide proportionate upgrades where the local road network will be impacted. The impact on the road network will be informed by a CTMP which will require include detail on workforce traffic. The actual impact on particular parts of the local road network is uncertain at present and it would be unreasonable to pin down specific improvements within particular areas/communities at this time. A package of road improvements will require to be agreed with the Transport Planning Team and Community Services and it is recommended that this is secured by condition.

- 8.24 As highlighted in representations, any consent should be conditioned to establish a local liaison group, allowing the community to be kept informed of roads and traffic information as the scheme is being built out, and the developer can also seek feedback on any issues resulting from the works. Restrictions on the C1076, C1068, B861 and U1084 would also require to be controlled by condition.
- 8.25 The head pond would be located over the existing C1064 (General Wades) public road, it is therefore proposed to realign this between the junction with the C1076 just to the north west of Loch Ashie, this will shift in a westerly direction, sitting to the west of the bottom of the head pond embankment, re-joining the existing road just north of Loch na Curra. A small section being retained to provide continual access to Ach-na-Sidhe B&B. It is noted that the road is to be re-built like-for-like to Council specification with agreement of the Roads Authority. The road is to be delivered before any other construction works which will allow contractors to use part of the existing road as a haul road during construction works.
- 8.26 The Transport Planning Team do not have any objections in principle to the road realignment and building it to standard is welcomed. Current drawings imply a straight road running alongside the head pond and embankment in a linear fashion. The Council will require further detail on the finalised design, but it should be noted that the current alignment is not considered acceptable for visual amenity reasons and it is expected that the final road design include gentle bends, inclines and dips to avoid such engineered straight lines and therefore a better fit with the landscape. Should an appropriate design standard be submitted (which would also require Road Construction Consent) the realignment is not considered to raise any significant issue.

Public Access

- 8.27 The development will impact upon existing core paths and long distance routes; the IN12.04 (Kindrummond to Dirr Wood) and IN12.05 (Drummashie Moor) Core Paths that will be permanently diverted and the South Loch Ness Trail (Loch Tarff – Torbreck) will be temporarily diverted during the proposed pre-construction works. A small diversion to the Trail of Seven Lochs is also proposed.
- 8.28 The diversions are proposed as these Core Paths will be within close proximity to the head pond and construction tracks and compounds. Ultimately however the new sections will tie back into the original Core Path network. The developer considers that this is in order to maintain public safety during the construction phase. Scotways has requested further clarity over the Access Management Plans and the Council's Access Officer is of the view that the current Outdoor Access

Management Plan is insufficient. It is therefore recommended that a condition is attached to any consent to secure an amended Outdoor Access Management Plan.

Hydrology and Flood Risk

- 8.29 The development itself involves the storage and release of water from a man-made reservoir into Loch Ness. Such matters are addressed in the main by SEPA under the Controlled Activities Regulations (CAR) licensing process and the requirements of the Water Framework Directive. SEPA did not raise any objection to the development and has highlighted that fisheries, third party water users and protected species and habitats within the bed and banks of the water body and inundation area are assessed as part of this process. It also controls the rate at which water will be abstracted, fish passages, compensation flow and method statements and the timing of works which will directly impact the loch and therefore conditions for these elements will not be required.
- 8.30 Scottish Water highlighted that the proposed site falls within the drinking water catchments within which Scottish Water abstractions from Loch Duntelchaig, Loch Ashie and Loch Ness. Concern is raised over the location of the works within proximity to the above lochs and the impact which this could have on public water supplies. Reference is made to a commitment by Scottish Water to deliver a supplementary supply to Loch Ashie Water Treatment Works from Loch Ness. Scottish Water request involvement at the more detailed design stages to determine the most appropriate proposals and mitigation within the catchment to protect water quality and quantity, and request that it is made aware of works commencing on site. It is clarified within the response that the proposed route of the Scottish Water infrastructure will require to be altered to avoid any clash with construction works and acknowledge that continued coordination is required between both project teams.
- 8.31 The Flood Team commented on proposals requesting further clarification on flood risk. It was confirmed that the scheme will cease to operate when flood levels within Loch Ness reach the current predicted 1 in 10 year flood level, this will ensure that the scheme will not have an impact on downstream water levels during high-flow events. Conditions are recommended to ensure that there is no discharge from the scheme when the water level of Loch Ness is at, or above 17.6m AOD, and that all new watercourse crossings shall be designed to convey the 1 in 20 years plus climate change flow. Conditions are also recommended by the Flood Team to secure further detail on surface water drainage – in the event that consent is granted it is recommended that these conditions are attached.

Spoil Management Peat Management/Peat Slide Risk

- 8.32 The development will result in a significant amount of spoil from the tunnels, surge shaft, ventilation shaft and cavern chambers that would be removed via the tunnel portals. A Material Management Appraisal was included within the EIAR. This estimates that approximately 6.8 million tonnes of spoil will be generated by the development. A significant proportion of this is to be used in the construction of the head pond embankment and landscape embankment. SEPA advised that the ECU and Planning Authority should be content that the embankment is necessary in

order for SEPA to accept the re-use of the material in this way and not to consider the excess material as waste. It is considered that the embankment is necessary and is a requirement of the Reservoirs Act to hold the structure in place; the landscape embankment is necessary to secure replanting, and to assist the development in assimilating into its surroundings. SEPA recommend a condition is attached to any consent issued which requires consultation with them should any spoil/excavated material on site require to be used for any other purpose.

- 8.33 It is anticipated that the material will be moved across the site from the tail pond to the head pond by use of conveyors in order to reduce vehicular movements across the site, an indicative route is within the working width of the temporary and permanent access tracks which are described above. The average predicted number of vehicles transporting spoil across the site day-to-day has not been provided by the developer, although for the most part this will take place across the permanent and temporary access tracks which are to be provided and thereby minimising the impact on the public road network. If consented, it will be a requirement of the developer to provide a final transport and re-use of spoil management plan prior to commencement of the main underground works.
- 8.34 The footprint of the development will impact on peat, particularly through the construction of the dam and head pond. SEPA highlight that the draft Peat Management Plan provides a good level of detail and that it is content that suitable peat probing information has been collected to inform the development layout, with the exception of a linear pocket within the head pond works area. SEPA is content that the development avoids impacts on deep peat, nonetheless it is considered the total quantity of peat to be disturbed which is approximately 170,000m³ is still significant. SEPA requests a finalised Peat Management Plan.
- 8.35 The Scottish Government also requires to consider the risk of peat landslide events for elements of the proposal and its infrastructure. Peat Landslide Hazard and Risk Assessment(s) (PLHRAs) have been submitted by developers as part of the EIA assessment. The ECDU commissioned AM Geomorphology Ltd to technically assess the submission.
- 8.36 The Government's peat adviser concludes that the EIAR omits the need for a PLHRA and should be amended to address this. That said, it is not considered that a full PLHRA is required as the extent of peat within the site is limited with the exception of the head pond area. It is also noted that storage of peat is to be within the proposed head pond excavation area and re-used through emplacement in a hollow which is likely to minimise stability risks. Further information is required with regard to how peat depth and other soil calculations were undertaken, and a condition is recommended which requires a geotechnical risk register to be prepared detailing ground risks associated with peat excavation, storage, and reinstatement and appropriate mitigation measures to minimise these risks.

Natural Heritage

- 8.37 There are natural heritage designations located within and nearby the site which have the potential to be impacted, these include:
- Creag nan Clag SSSI – designated for rare lichens, geological interests

- Loch Ruthven SAC and SSSI – Otters, aquatic vegetation
- Urquhart Bay Wood SAC and SSSI – Woodland
- Ness Woods SAC – Woodland habitats
- Loch Ashie SPA and SSSI – Slavonian grebe
- Loch Ruthven SAC, SPA, Ramsar, SSSI – Otters, mesotrophic loch habitat
- North Inverness Lochs SPA – Slavonian grebe

8.38 In addition to the above formal designations, there are other waterbodies including Loch Ness, Loch Duntelchaig, Park Pond, Loch na Curra, Lochan an Eoin Ruadha which are identified as having ornithological interests as nesting areas for birds.

8.39 While the Loch Ashie SPA and SSSI are not located within the site, they are immediately adjacent to it, and any qualifying features of the designated site have the potential to be detrimentally impacted by development. The site is designated for its Slavonian grebe and is identified as the most important known moult site in Scotland. The birds are a protected species, and under the provisions of Policy 58 – Protected Species, it is stated that protected species surveys should be undertaken to establish any presence and mitigation measures should be identified which safeguard and protect such species. This has been done and the results contained within the EIAR.

8.40 SNH has confirmed that it is content that adequate surveys have been undertaken and recommend that any consent is subject to conditions which tie the developer to the mitigation identified within the EIAR.

8.41 RSPB commented that Slavonian grebe and black-throated and red-throated divers are known to frequent the area and that without robust mitigation the construction of the scheme would lead to the disturbance on nearby breeding pairs of protected birds. Commitment to undertake blasting works outwith the moulting period of Slavonian grebe (15 August – 21 October) is welcomed. Breeding divers should be given a 750m buffer where construction, blasting and felling operations are not undertaken during the breeding season (1 April – 31 July). Mitigation is also proposed where black grouse are present, alongside keeping outwith breeding seasons and retaining a buffer; mitigation is also recommended with regard restricting forestry to encourage connections between lek sites and sources of food. Consultees have raised no objection which suggests that the development would not have a significantly detrimental impact on the natural heritage assets of the area if robust mitigation is submitted within a Species Protection Plan. This will require agreement from SNH prior to any works commencing on site.. Signs of badger, otter, pine marten, red squirrel and water vole were all found within the study area. SNH agrees with the conclusions of the EIAR and recommends that conditions are attached which tie the developer to the mitigation measures identified within their report.

8.42 In addition to consideration of protected birds the EIAR identifies that there are other animals within, or within vicinity of the site including bats, badger, pine marten, otter, red squirrel, reptiles and butterfly/dragonfly/damselflies. SNH agrees with the conclusions of the EIAR and recommends that conditions are attached which tie the developer to the mitigation measures identified within their report.

- 8.43 Any additional appropriate mitigation should be written and included in the final Construction Environmental Management Plan (CEMP). Overall such an approach recognises the value of any project approval requiring the appointment of an Ecological Clerk of Works (ECOW); such a post should be full-time with powers to stop construction work if necessary.

Fishing Interests

- 8.44 Loch Ness has a number of fishing interests which have the potential to be impacted by the development. The Loch forms a migratory route and refuge for Atlantic Salmon and Sea Trout with Fresh Water Pearl Mussel also having the potential to be impacted within the River Moriston SAC which is within the wider Ness Catchment. SNH did not raise concern with the impact on the SAC.
- 8.45 The Ness District Salmon Fishery Board (NDSFB) do not agree that the EIAR gives an accurate assessment of the impacts of the development on salmon and sea trout populations within the Ness system and requested further information. Further technical notes were provided for consideration. While concern has clearly been highlighted, as noted in paragraph 8.44 above, SEPA confirm that under CAR licencing it will control abstraction rates, fish passages and impact on protected species, the technical detail of which will all requires to be assessed and consented by SEPA to ensure appropriate environmental management within the water environment. These would be matters outwith the remit of the Planning Authority and it would be the responsibility of the developer to ensure that fishing interests are protected to be capable of CAR authorisation.

Trees and Woodland

- 8.46 Within the application site there are a range of commercial conifer plantations of varying age and species mainly on the east side of the B862 Dores – Errogie Road. According to the EIAR 58.7% of the site is covered in woodland. Proposals will require felling of 161.7ha of woodland, with a further 10.7ha being felled for landscaping purposes; (172.4ha of woodland in total to be felled). Of this, 8.7ha is of ancient semi natural woodland and 134.7ha of this is long established plantation origin woodland. This amount of felling will have a significant impact. Within the application site there is a range of commercial conifer plantations with a wide age class range and species composition mainly located on the east side of the B862 Dores to Errogie Road. To the west of the B862 is largely native broad leaf woodland with some smaller areas of commercial plantation. It is acknowledged that some areas of the woodland have become over mature and would benefit from positive management; areas of deep peat restrict growth in other areas.
- 8.47 Given the extent of woodland to be removed (in excess of 0.1 ha) the Scottish Government Control of Woodland Removal Policy applies. This states that removal should only be permitted where it would achieve significant and clearly defined additional public benefits. Where tree felling of this scale is accepted; compensatory planting is required. There are compensatory tree planting proposals within the EIAR, however the Forestry Officer notes that there is a shortfall of 12.1 ha of compensatory planting within the site. It is acknowledged that the shortfall is to be provided off-site and to be agreed with the Forestry

Commission; further detail on compensatory planting and restocking will require to be controlled by condition.

- 8.48 As above, the loss of trees is only supported under the Scottish Government's Control of Woodland Policy where there is a wider public benefit. As highlighted in the sections above, it is a priority of the Scottish Government to generate 50% of Scotland's overall energy consumption from renewable sources, completely decarbonising the energy system by 2050. This development will create an energy store for the release of a renewable energy source where demand for energy is at its peak. While the loss of trees is unfortunate to accommodate any development, the need to meet the government's renewable energy targets to mitigate against the depletion and near exhaustion of natural resources is considered to be of a greater public benefit. The loss of trees is of course only acceptable where there is sufficient compensatory planting. In this instance both the Council's Forestry Officer and Forestry Commission Scotland do not object to proposals, but will require further information on the extent and location of the replanting to be submitted and agreed.

Landscape and Visual Impact

- 8.49 A Landscape and Visual Impact Assessment (LVIA) forms part of the EIAR. The purpose of LVIA is to identify and record the potential significant effects of the proposed development on the receiving environment, including the landscape, landscape character, special designations, views and amenity.
- 8.50 The application site lies wholly within the Loch Ness and Duntelchaig Special Landscape Area and therefore development should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed, and should include consideration of the appropriate scale, form, pattern and construction materials. Those undertaking development within such area should include measures to enhance the landscape characteristics of the area.
- 8.51 This area is dominated by the vast linear feature of Loch Ness and its dramatic landform trench, flanked by steep, towering wooded slopes that lead to undulating moorland ridges and a contrasting remote interior plateau of upland lochs, small woods and rocky knolls.
- 8.52 The key landscape and visual characteristics are described as striking, linear landform trench containing Loch Ness offers a dramatic sequence of landscape elements along its 23 mile length. The horizontal water's surface combines with adjacent steep slopes to create a simple and distinctive profile of contrasting planes and edges. To the east of Loch Ness an undulating moorland plateau is characterised by rocky knolls and small scale woods and forests, and peppered with upland lochs, creates an intricate landscape mosaic which contrasts strongly with the adjacent simple drama of the Great Glen. This comprises the main characteristic of the development site within the SLA.

Landscape Impact

- 8.53 Both sides of Loch Ness are sensitive to the introduction of built development which would intrude on views up and down the loch and also across the loch. The area is sensitive to any development which would require significant modification to the landform of the Great Glen and surrounding moorland plateau and any large scale buildings or structures may interrupt the simple lines of the moorland skyline ridges and reduce their contribution as a defining edge of the glen. Consideration requires to be given to the visual prominence of the scheme upon the glen sides and slopes, and how this might affect the apparent bounding edge of the glen. Consideration also requires to be given to the potential impacts on the sense of openness and wildness within the moorland parts of this part of the SLA.
- 8.54 In addition to the SLA, the head pond sits within the Flat Moorland Plateau with Woodland LCT, in proximity to Farmed and Wooded Foothills and the broad, Steep Sided Glen. Key Characteristics of the LCTs are set out in SNH's Landscape Character Assessments. In view of the nature of the earthworks required for the construction of the head pond and landscape embankment, the following aspects are highlighted:
- 8.55 Flat Moorland Plateau with Woodland
- A predominantly horizontal skyline, with a general lack of features of known scale resulting in it being often difficult to determine distance or relative size.
 - a simple landscape with little diversity and where it is often difficult to orientate oneself
 - a strong perception of remoteness
- 8.56 Farmed and Wooded Foothills:
- Typified by low rocky hills with complex and irregular landform of steep sided slopes, rocky ridges and peaks.
 - Generally open upper slopes - offering extensive and panoramic views which convey a sense of exposure.
 - Boundary with the Flat Moorland Plateau with Woodland area marked by conifer plantations.
- 8.57 Broad Steep Sided Glen:
- long even skylines create a very strong sense of linear enclosure
- 8.58 The EIAR considers that, during construction the development will have moderate adverse effects on the landscape character of the Broad Steep-Sided Glen and Flat Moorland Plateau with Woodland. It is considered that this is underplayed as the tree removal in itself will have a significant impact on the landscape characteristics, as will the construction of the head pond and the siting of Compound 1 and associated structures, alongside the extensive amount of parking available which will have an impact in itself, particularly when viewed from areas on

the opposite (west) side of Loch Ness.

8.59 Another characteristic as highlighted above is the Rocky Moorland Plateau and Rocky Moorland Plateau with Woodland, impacts from most of the viewpoints is assessed within the EIAR as having Minor Adverse effects. It is considered that effects will not be minor as the overall scheme is extensive and of a significant scale when considering the other necessary above ground elements of the scheme aside from the head pond; however once the development is operating, and the extent of compounds, temporary access tracks has been reduced, alongside the re-planting of extensive areas of woodland, the development is likely to be accommodated within the landscape without adversely affecting the landscape characteristics of the wider SLA.

8.60 With regard to the Farmed Wooded Foothills, impacts within the EIAR imply that the development will have a negligible effect on this landscape characteristic. Following completion of the development, this is likely to be the case given the development of the lower slopes toward Loch Ness will predominantly be underground. It was however necessary for the developer to demonstrate that the structures on Compound 1 can be reduced and set within the hillside. Cross sections were submitted which include landscaping and possible use of turf/grass roof in order to minimise localised impacts in this area. It is considered that, at Year 15 - the landscape is capable of accommodating the development without significantly impacting on the landscape characteristics, and that the landscape can accommodate the development; however there will be a number of years of construction impacts which are unavoidable where there will be localised visual impacts.

Visual Amenity

8.61 The effects on visual amenity relate to changes to available views rather than perceived changes to whole areas of a distinctive landscape character. 13 viewpoints (VPs) were selected in order to assess visual and landscape impact, following discussion. The viewpoints have been assessed at Year 1, and Year 15. This is considered appropriate as it will take sometime for the proposed landscaping and tree re-planting to become established. This allows for an assessment of the impacts within the first year of operation, which would not be representative of the long term visual impacts.

8.62 While it must be recognised that the visualisations do not provide the entire context when not viewed on site, they do however demonstrate the predicted effects well. The following VPs are considered the most relevant for this application:

- VP 1 – Adjacent to Ach-na-Sidhe B&B
- VP 2 – Abriachan
- VP 5 – Trail of Seven Lochs
- VP 6 – Creag nan Clag

- VP 9 – Urquhart Castle
- VP 11 – Caisteal an Dunriachaidh

VP 1 – Adjacent to Ach-na-Sidhe B&B

- 8.63 This VP has been chosen as it is considered that the development will have a significant adverse impact on Ach-na-Sidhe B&B due to the proximity of the property to the main extent of the head pond embankment and the inlet structure sitting on top of this. Initially, the information and visualisations implied a straight slope at the extent of the head pond embankment. Concern was raised over the proposed inlet structure which was sky-lining in this location and sitting well above the property. There was an over-dominance of deer and security fences on the embankment which appeared oppressive when viewed next to the landscape and visual amenity which this property currently enjoys.
- 8.64 The developer has confirmed that it can remove much of the linear fencing and relocate it across the slope in order to minimise the impact from the property. It has also been confirmed that the slope can be regraded to a more natural form than originally proposed with the result of providing a more natural backdrop to the property. The re-location of the inlet takes the structure off the skyline which minimises the visual impact and dominance of the structure on the property. The environment surrounding the property will change significantly, and there will be significant visual impacts particularly during the construction period. It is understood that discussions with the owners are ongoing, however following the completion and first year of operation of the development, it is not considered that the visual impact on the property would warrant objecting to the scheme overall.

VP 2 - Abriachan

- 8.65 The extent of the entire development will be visible from this viewpoint. It is therefore considered that during construction, and in the first year of operation, the development will have a Major Adverse impact on visual amenity of the community of Abriachan. Based on the initial submission, this was of concern due to the sky-lining of the head pond intake, also visible was structures at Compound 1 and the shore side structures at the outfall with the loch. At year 1 the impacts on visual amenity are likely to be significantly adverse; the tree removal in itself will change current landscape character from this viewpoint, particularly at the head pond area where an area of Long Established Woodland will require to be removed to accommodate this part of the development. To the south of the head pond is largely open and will not be impacted by the development. An area of Scots Pine/mixed broadleaves which is located to the north east of the head pond will be retained and enhanced; this will not therefore be lost from the hillside.
- 8.66 The final design of all structures including at the inlet, shore side and Compound 1 will be key to reducing visual impacts. From this viewpoint, the head pond and embankment are not considered to be significant due to the proposed amelioration of the slope which the developer now proposes. As Compound 1 sits lower than Abriachan the top of the structure would be highly visible. The developer has made

a commitment to site this within the slope and provide landscaping around the building which includes a green roof. The extent of Compound 1 will be significantly reduced once construction has ceased. Further detail on the structure and surface treatment to the compound will require to be secured should consent be granted.

VP 5 – Trail of Seven Lochs

- 8.67 This VP is taken from the North East of Loch Duntelchaig and from a prominent position on the Trail of Sevens Lochs route. The impacts at year 15 are not considered significant; the head pond and intake will sit with a hill in the backdrop which will soften the visual impact of the structure. The head pond will sit above the low lying man-made lochs which could detract from the more naturally formed Loch Duntelchaig, and Loch a'Choire which sit in the foreground from this viewpoint, however the planting at Year 15 will reduce this impact. It is not considered that the development would detrimentally impact on visual amenity from this viewpoint.

VP 6 – Creag nan Clag

- 8.68 This is an elevated viewpoint; the scheme sits with Loch Duntelchaig and Loch na Geadas in the foreground. Loch Eion Ruadha, Loch na Curra and Loch Ashie appear from this viewpoint to sit at a more elevated position. It is considered that the landscape can accommodate the head pond from this viewpoint, and that once the development is operational it will not have a significantly detrimental impact on the area from this elevated position. It is noted that the edges of the head pond are not as natural as the aforementioned lochs. An initial concern from this viewpoint was the unnatural engineered finish of the embankment when viewed in context with the adjacent lochs. Planting from trees and shrubs will throw shade and light onto the head pond, as will the now proposed amelioration of the slopes which should naturalise the site from this viewpoint.

VP 9 – Urqhuart Castle

- 8.69 Due to the distance of the Castle from the development site, the impacts are limited, however, concern was initially raised due to the sky-lining of the building which detracts from the natural setting when looking down the loch from the Castle. While Historic Environment Scotland did not object to the proposals or consider that there would be an impact on the setting of the Scheduled Ancient Monument, concern was raised relating to the number of visual receptors who visit the site and look down the loch from this vantage point. It was considered that the visible and sky-lining building detracts from the existing naturalness of the loch. The commitment to reduce the building scale, re-orientation and design takes this completely off the skyline and the visual impact from this viewpoint is no longer a significant concern from this distance; the Castle being approximately 9km (6 miles) from the head pond embankment (as the crow flies).

VP 11 - Caisteal an Dunriachaidh

- 8.70 has been chosen due to the cultural heritage significance of the former fort, and the proximity of this to the head pond intake. The location of the development was

partly informed by the need to avoid this feature. Again, the developer submits that the geometry of the embankment can be graded in such a way that it appears more natural than is implied in the initial submission. This should reduce the visual impact in terms of the unnaturalness of the slopes across the head pond. Following Year 15 once the trees have grown, there will still be visual impact however it is not considered that the development will significantly detract from the cultural heritage feature.

- 8.71 Since the original submission, and due to concerns over the structures and geometry of the head pond embankment, there have been changes to the proposed design of the scheme. The scale of the intake structure has been reduced and re-orientated which reduces the visual impact across all of the viewpoints, and the materials and final design will be key to ensuring the visual impact is minimised. It is encouraging that the scale of the building has been reduced from the original design envelope parameters and that the building will no longer skyline from important viewpoints. The original submission also implied a straight engineered slope in an otherwise natural landscape setting. The developer has demonstrated that it can ameliorate and grade the slope in order that it is more natural. It has been advised that varied planting and varied species across the site will also help to accommodate this. The developer has committed to employing a Landscape Architect in order to ensure that this is achieved and further detail on the finalised sections through the site, and siting and design of all structures will require to be agreed in advance of works commencing on site.
- 8.72 It is therefore acknowledged that, while the landscape and visual amenity will be impacted during construction, the landscape can accommodate the development in the longer term and that there are no reasonable grounds to recommend an objection to the proposals based on visual amenity.

Cultural Heritage and Historic Environment

- 8.73 The proposal could directly impact on Scheduled Ancient Monuments within the site boundary:
- Caisteal an Dunriachaidh, fort 1520m N of Achnabat (SM 11817)
 - Achanabat, cairn 960m N of (SM 11799)
 - Achnabat, hut circle 1065m N of (SM 11828)
 - Achnabat, hut circle 815m NNE of (SM 11827)

In addition to the above there are also a number of designated sites both inside and outwith the site boundary, the setting of which could be affected by the proposed development, in particular these are identified as:

- West Town, five hut circles 480m WSW of (SM 11813)
 - West Town, ring cairn 240m SW of (SM 11551)
 - Urquhart Castle (SM 90309 and Property in Care of Scottish Ministers)
- 8.74 The closest feature to be impacted by the development due to the proximity to the head pond is Caisteal an Dunriachaidh which is identified as a former fort. Historic Environment Scotland does not consider that the impacts on the setting of this would be significant. The extent of the embankment structure at the head pond will

be highly visible from the former fort. While it is considered that this is a culturally significant historic feature, it will not have the same scale of visitors, or receptors as an attraction such as Urquhart Castle.

- 8.75 The SLA citation recognises the importance of the historic and cultural environment in this area. It is summarised that, in this area there are numerous roundhouses and field systems, interspersed with ritual and burial monuments such as burial cairns and burnt mounds. This indicates that the area was highly significant in prehistory supporting a large population. A representation was made by Strathnairn Heritage Association regarding the loss and destruction of archaeology which includes Buaille a Chomhraig, Clach na Brataich and Cathair Fhionn. Further concern was also highlighted within a further representation and associated petition raising concern relating to the Gaelic cultural heritage of the area.
- 8.76 In response to the loss of Cathair Fhionn specifically, the agent states that, at present, it is not currently known what survives of this monument, as no slabs were discovered during the initial walkover survey. The developer confirmed that, in the event that there are remaining slabs on site that they could be relocated, and this could form part of an art project for the local community and schools.
- 8.77 In relation to Buaille a Chomhraig and Clach na Brataich, it is confirmed that these assets will not be impacted.

Cumulative effects of development

- 8.78 There are a number of developments in the surrounding area which have been considered within the supporting EIAR. The main developments of significance which could conflict with the delivery of the pumped hydro scheme in terms of construction traffic etc, and cumulative impact visually following completion of the developments, include:
- New Underground Water Main (Scottish Water)
 - 445 new homes on the south side of Inverness B862
 - Ness Castle (Phase 2) 137 homes off the B862
 - Coire Glas – Pumped Storage Scheme at North Laggan (potential transport implications on the road network)
- 8.79 The Scottish Water development has the potential to have the main impact in terms of conflict with the construction of the hydro scheme. A Screening Request was submitted in 2016 which detailed a water main from Loch Ashie to Dores village. Discussions are ongoing but there has been no further formal submission regarding this development. That said, it is likely to come forward in near future and therefore has the potential to conflict with the hydro scheme. Based on the information which was submitted in 2016 by Scottish Water the main would cross the site from the northerly point of Loch Ashie, across Drummashie Moor and into Dirr Wood, connecting to the southern end of Dores. While the preference would be for the two schemes to be delivered concurrently, this cannot be guaranteed and is out with the control of the Council and the developer.

Noise and Vibration

- 8.80 The development will involve excavation of ground, and rock blasting. Further to this, much of the development is underground, which will involve tunnel boring and blasting. These activities will give rise to noise and vibration effects during the construction phase and are likely to impact on the amenity of local residents and those staying in the area. Environmental Health initially raised concern over the disturbance which could be experienced at noise sensitive properties during both construction and operational phases. Concern was also raised over the information stating that tunnelling could be a 24 hours operation, with no further detail provided for night time construction noise.
- 8.81 The view of Environmental Health was that based on the low background levels in the area, and the likely duration of construction works, noise is likely to have a detrimental effect on the day time amenity of local residents unless significant mitigation measures are implemented. Conditions were recommended in order to ensure that noise arising from the development is controlled and that a community liaison group is set up in order that there is a forum for local residents.
- 8.82 With regard to vibration, Environmental Health commented that due to the separation distances involved that vibration levels are unlikely to exceed the relevant 'nuisance criteria'. Nevertheless, due to the anticipated construction period Environmental Health recommend that a condition is added which restricts the vibration levels that can be experienced at noise sensitive properties. It is also noted that Environmental Health has powers under the Control of Pollution Act (1974) to introduce additional controls, the need for which may arise should complaints be received.
- 8.83 The developer was initially of the view that limiting the noise which can be heard to 55dB 1 hr LAeq as recommended by Environmental Health was onerous and would prolong the construction period significantly as it would reduce the hours in which louder construction operations could be undertaken. Following on from this, and setting the noise parameters inline with what is acceptable at mineral workings/quarry sites, Environmental Health has recommended that noise levels are restricted on a daily basis, and set the maximum noise level which can be generated in order to ensure that there is not constant noise and vibration experienced by the local community. The establishment of a Community Liaison group will be useful in informing locals when operations are being undertaken which may generate higher noise or vibration levels, particularly when constructing baffle mounds, the purpose of which is to reduce the strength of air borne sound. Environmental Health do not agree to the extension of 1hr noise related activities to 10 hours as requested by the developer but agree that there may be scope to increase this with written permission.
- 8.84 Environmental Health has recommended conditions to limit noise and vibration on site. The developer will not be able to diverge from these unless with prior written agreement. Establishing a community liaison group should allow local residents to be kept informed of any blasting and increase in noise to be experienced. Environmental Health seek to minimise noise and vibration throughout the construction period in the interest of amenity and have set the parameters within

which the development must adhere in terms of noise and vibration. It considered that, the impact on amenity will not be significantly detrimental subject to contractors keeping within the prescribed limits unless Environmental Health agrees otherwise.

Socio Economics and Tourism

- 8.85 The development is expected to create up to 390 jobs at the peak of the construction phase, with the average number employed across the duration of construction being 205. The EIA highlights the impacts that this would have on the wider local economy in terms of increased use of local business from construction workers in terms of accommodation and further passing trade. The development is expected to operate for a period of up to 125 years, maintenance will be ongoing and it is expected that electrical plant will require refurbishment or an overhaul every 25 years. It is estimated that for the duration of operation 5 – 10 permanent jobs will be created on site. Jobs would also be created at the time of decommissioning, albeit significantly into the future.
- 8.86 With regard to tourism the developer has undertaken a review of tourist destinations in the area. Urquhart Castle is the most visited tourist attraction in the area and will have the highest number of receptors to be impacted. This would particularly be with regard to the construction phases from on loch vessels. It is considered within the EIA that, as the boats are not stationary the impact would be Minor Adverse, or not significant. While not specifically tourist attractions, there will be some impact on views experienced from users of for the Great Glen Way, or walkers on the Trail of Seven Lochs for example. Within a wider context, the development site forms a small part of a vast landscape; the development may temporarily impact on the appreciation of an area of the loch, however it is unlikely that this temporary impact on visual amenity will discourage tourists from visiting the area.
- 8.87 Due to the potential employment which will be generated locally, and the potential for local business to be further supported (particularly outwith the summer months) the temporary visual impacts which will be experienced by tourists, should not detrimentally impact the local economy and it is not considered that an objection should be raised on the grounds of issues around local socio-economics or tourism.

Other material considerations

- 8.88 There are no other material considerations.

Non Material Planning Considerations

- 8.89 Concern has been raised over the possibility of a breach in the reservoir causing flood risk to the surrounding area and Dores village itself. It has been commented that, as a new reservoir, the dams associated with the reservoir will come under the jurisdiction of the Reservoirs Act which employs very strict standards. This is regulated by SEPA. When designing a new reservoir the impact of a breach scenario requires to be considered. The plans identify two areas within the head pond which shows the direction water would flow away from Dores village. The

design, construction, maintenance and monitoring of reservoirs is tightly regulated. With this in mind, the EIAR considers that the risk of a breach is acceptably low. The reservoir would have to comply with strict standards and would be signed off by a Reservoir Engineer, with the developer required to appoint a Supervising Engineer from a panel of engineers who are pre-approved by the Scottish Government. They will be responsible for monitoring and inspecting the development in operation. While it is appreciated that the risk of a breach is of concern to the local community, the Council must rely on the robustness of the relevant legislation and the technical design that is a separate process to planning. The technical engineering of the head pond and compliance with the Reservoirs Act is not something which can be controlled by the Planning Authority.

Conclusion

- 8.90 Pumped storage hydro schemes provide an ability to consume and store large quantities of energy, making them the most flexible of all electricity generation technologies. The role which pumped storage hydro has traditionally played in power network management is primarily in managing relatively short term differences between electricity supply (generation) and demand (consumption). However, as the proportion of electricity generated from less-flexible renewable sources rises, this role will become increasingly important.
- 8.91 Within the National Planning Framework (2014) Scottish Planning Policy (2014) and Scottish Energy Strategy (2017) there is considerable support for renewable energy development and projects that help to maximise renewable energy capabilities. The Council too within its Development Plan (Policy 67 of the HwLDP) and the Highland Renewable Energy Strategy has policies to support renewable energy development, including pumped storage. This support is not unconditional, requiring the full assessment of projects against a number of planning criteria which must safeguard the local environment and consider balancing arguments in respect of its economic and social impacts.
- 8.92 The application has drawn a number of objections particularly from parties who live in the vicinity of the development. It also has an objection from Dores and Essich and neighbouring Community Councils. A significant concern is the impact of the proposed construction works associated with this project including the impacts on local access roads which currently serves the local community. This will impact on the quiet rural amenity which residents enjoy and on which many rely for their tourist enterprises.
- 8.93 No specific commitments have been made by the developer at this time to minimise the impacts on the local road network. However options being explored include an off-site parking area with construction workers being bussed to the site, the bus then being handed over to Farr Primary School. The use of the canal is to be further explored alongside the use of conveyors for transporting material across the area. The developer is also agreeable to providing proportionate road improvements which would be informed by the outcomes of a detailed Construction Traffic Management Plan; in agreeing road improvements the development will leave an improved road network as a legacy. Temporary access tracks between the Lower and Upper Reservoirs will reduce impacts slightly, and the commitment to re-align the public road prior to other works commencing allow the existing

section of road to be used as a haul road, again further reducing the impacts.

- 8.94 It is acknowledged that there will be a number of impacts on valued tourist resources in the locality. This includes visibility from the Great Glen Way, other footpath routes/trails and recreational sailing interests as well as chartered boat tours within Loch Ness. The impacts will be with regard to visual amenity during the construction period and at a distance. As such visual impacts are not considered to detrimentally impact on these resources given the scale of the loch and surrounding landscape, the development appearing relatively localised from distance.
- 8.95 SEPA and SNH have not objected to the application, recognising that their interests in the local water environment, peat, habitats and a range of protected species can all be managed effectively using planning conditions; the principal requirements of which can be contained within a site specific Construction and Environmental Management Document (CEMD), a Peat Management Plan and a Habitat Management Plan all of which can be approved prior to the commencement of development.
- 8.96 The impact of the development on the local economy is likely to be largely positive. There is potential for local residents to gain from an investment of this magnitude including through direct and indirect employment and potential for increased use of local business.
- 8.97 The main impacts of the development are clear and understandable. There are also considerable benefits with this type of project and strong support for such investment within Government and Council policy. It is considered that taking into account all these factors that the proposal can be supported in the context of the Council's Development Plan and in particular Policy 67 - Renewable Energy.
- 8.98 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and on balance is acceptable in terms of all other applicable material considerations.

9. IMPLICATIONS

- 9.1 Resource: Not applicable
- 9.2 Legal: Not applicable
- 9.3 Community (Equality, Poverty and Rural): Not applicable
- 9.4 Climate Change/Carbon Clever: Not applicable
- 9.5 Risk: Not applicable
- 9.6 Gaelic: Not applicable

10. RECOMMENDATION

Action required before decision issued Y

Notification to Scottish Ministers Y

Conclusion of Section 75 Obligation N

Subject to the above, it is recommended The Council **Raise no Objection**, subject to the following:

Conditions and Reasons

1. The Development shall be carried out in accordance with the plans and details set out in the Application, Environmental Impact Assessment Report, dated November 2018 and Further Environmental Information (including the submitted Schedule of Mitigation and any amendments made to this through the Further Environmental Information dated May 2019) and in compliance with the following conditions.

Reason: To identify the terms of the development consent and the need for additional approvals.

2. No development shall commence until the final design details for the following elements of the development have been submitted to, and agreed in writing by, the Planning Authority:
 - Embankment and upper reservoir, including intakes and spillway;
 - Tunnel portals and vent shafts;
 - Cavern power station, substation and welfare facilities;
 - Tail race;
 - Temporary and permanent jetty and supporting quayside infrastructure on Loch Ness
 - All above ground facilities including administration buildings and associated external infrastructure and parking areas;
 - All roads, access tracks and water-crossings serving the Development including details on amendments to core paths and local forestry tracks;
 - Detail on the design of the section of the C0164 public road to be realigned
 - Borrow pits;
 - Site establishment areas;
 - Site compounds and work camps;
 - All site boundary treatments and external lighting provisions;
 - All mitigation measures to be implemented in association with the project as set out in the Environmental Impact Assessment Report, or as amended by the above plans or agreed with statutory consultees prior to determination and not specified in this consent;

All work shall thereafter be carried out in accordance with the approved design details.

Reason: To ensure the final design details of the Development have regard for rural setting of the Development Site within a Special Landscape Area and the commitment to high quality design as set out in the Environmental Impact Assessment Report and the Further Environmental Information Report.

3. No development shall commence until a site specific Soil and Peat Management Plan which includes detail of how disruption to peatland will be minimised has been submitted to, and agreed in writing by, the Planning Authority. For the avoidance of doubt the Peat Management Plan shall include:
 - i) Finalised details of any temporary peat storage areas which are out with the footprint of the headpond.
 - ii) Finalised details of the peat re-use proposals between the embankments including finalised detailed layout and construction plans.
 - iii) Finalised proposal for peat disturbance within the inundation areas. This shall demonstrate that peat disturbance has been minimised as much as possible.
 - iv) Details shall include a geotechnical risk register which shall include detail on the ground risks associated with peat excavation, storage and reinstatement and mitigation measures proposed to minimise risks identified to the environment and site personnel

For the avoidance of doubt any landscape embankments should not be built of peat, however peat could be used to dress the surface on lower slopes, if measures are taken to ensure that it is hydrological conductivity with the water table and stays wet. Thereafter all work must be carried out in accordance with the approved Plan.

Reason: To ensure that the construction minimises in so far as reasonably practicable its impact on the local peat resource and in the interest of the safety of the environment and personnel.

4. No development shall commence until a programme of work for the evaluation, preservation and recording of any archaeological and historic features affected by the proposed development, including a timetable for investigation, all in accordance with The Highland Council Standards for Archaeological Work, has been submitted to, and agreed in writing by, the Planning Authority.

The approved programme shall be implemented in accordance with the agreed timetable for investigation. For the avoidance of doubt, a methodology statement, and detail on plan shall be provided on the relocation of any assets including Cathair Fhionn in consultation with the local community Gaelic group.

Reason: In order to preserve the archaeological and historical interest of the Site and to ensure that the cultural heritage of the area is not significantly detrimentally impacted and in accordance with the mitigation outlined in in the submitted Further Environmental Information should archaeological investigation find that there are remains of Cathair Fhionn which is of local historic interest.

5. No development shall commence until a finalised Construction and Environmental Management Plan (CEMP) has been submitted to, and agreed in writing by, the

Planning Authority. The CEMP shall as a minimum provide for the following: -

- An updated Schedule of Mitigation and processes to control changes from the agreed Schedule of Mitigation programme for environmental auditing and monitoring in and around the Site, before and during construction and for 18 months after the development and all onsite mitigation works and post construction restoration works are completed, the date of which shall be notified to the planning authority, to include the establishment of an environmental checklist, to monitor and input into the planning of construction activities and ensure implementation of all environmental mitigation measures.
- Production of an environmental and ecological constraints plan highlighting all environmental buffers within the development site, micro-siting restrictions for all track developments across the site and any agreed exceptions agreed with the planning authority in consultation with SEPA, SNH and other relevant bodies.
- Details of all pre construction surveys of wildlife and plants, together with appropriate mitigation measures for all protected species to ensure all contractors are made aware of the possible presence of and the required mitigation and the laws for protected species.
- A site specific statement outlining drainage and sediment management for all construction areas and measures to limit above ground construction activities during periods of high rainfall, including weather forecasting and actions to be taken in advance of adverse forecasts.
- Working arrangements, including a programme for the phasing of operations, and particularly the movement of plant, materials and rock into, across and out of the site to minimise, so far as reasonably possible, impact on communities or businesses adjacent to or in close proximity to the Site.
- Waste Management and Pollution Controls including contingency plans in case of pollution incidents.
- A Noise Management Plan, including details of the timing and methodology of any blasting associated with the development, outlining steps to be taken to reasonably minimise all principal sources of noise, and vibration activities that are likely to be audible beyond the Site boundary. The Noise Management Plan shall also include measures for community liaison to advise on the timing and duration of blasting activities.
- Measures to control the emission of dust and dirt during construction.
- Provision of welfare facilities on site during construction and the means of disposal of foul drainage.
- Measures to protect all existing public water, private water and drainage arrangements, with suitable back up arrangements in case of any disruption to these provisions from construction activity.
- Wheel washing facilities to prevent vehicles associated with the construction from depositing mud or dirt on the public road network when leaving the Site.
- Lighting for construction activities which will minimise illumination, glare or light spillage out-with the site boundary.
- Post construction site restoration plan to include full details of any landscaping, reduction in track sizes, borrow pit restoration and removal of

any and all temporary structures placed on the site for the purposes of construction.

- Full details of the removal and shredding of tree stumps and brash from the site.

All works must be carried out in accordance with the approved CEMP.

Reason: To ensure the impacts of construction are well understood by all parties involved with the construction of the project and that best practices are deployed to mitigate the expected impacts of the Development on the local environment both generally and with regard to specific resources or features.

6. There shall be no Commencement of Development until an independent Ecological Clerk of Works (“ECoW”) has been appointed, such appointment to be approved in writing by the Planning Authority. The terms of appointment shall:
- (a) Impose a duty to monitor compliance with the ecological, ornithological and hydrological commitments provided in the Environmental Impact Assessment Report entitled Environmental Statement dated November 2018 and Further Environmental Information dated May 2019 lodged in support of the application and the Construction Environmental Management Plan, Peat Management Plan, Habitat Management Plan, Landscape and Ecological Management Plan, Species Protection Plan, Bird Protection Plan, Water Quality Management Plan and other plans approved in terms of the conditions of this permission (“the ECoW Works”);
 - (b) Require the ECoW to report to the nominated construction project manager any incidences of non-compliance with the ECoW Works at the earliest practical opportunity and stop the job where any breach has been identified until the time that it has been reviewed by the construction project manager; and
 - (c) Require the ECoW to report to the appropriate statutory body any incidences of non-compliance with the ECoW Works at the earliest practical opportunity.

The ECoW shall be appointed on the approved terms throughout the period from Commencement of Development, throughout any period of construction activity, during any period of post construction restoration works approved as part of the Construction Method Statement and during the establishment of the Habitat Management Plan.

Reason: To protect ecological interests.

7. No development shall commence until a site specific scheme for the working and restoration of each borrow pit forming part of the Development has been submitted to and approved in writing by the Planning Authority in consultation with SEPA. The scheme shall include;
- i) A detailed prioritisation plan for all borrow pits on site;
 - ii) A detailed working method statement based on site survey information and ground investigations;
 - iii) Details of the handling of any overburden (including peat, soil and rock);
 - iv) Drainage, including measures to prevent surrounding areas of peatland,

water dependant sensitive habitats and Ground Water Dependant Terrestrial Ecosystems (GWDTE) from drying out;

- v) A programme of implementation of the works described in the scheme; and
- vi) Full details of the reinstatement, restoration and aftercare of the borrow pit(s) at the end of the construction period, to include topographic surveys of pre-construction profiles, and details of topographical surveys to be undertaken of the restored borrow pit profiles.

The approved scheme shall thereafter be implemented in full.

Reason: To ensure that excavation of materials from the borrow pit(s) is carried out in a manner that minimises the impact on road safety, amenity and the environment, and that the mitigation measures contained in the Environmental Statement accompanying the application, or as otherwise agreed, are fully implemented. To secure the restoration of borrow pit(s) at the end of the construction period.

8. No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and agreed in writing by, the Planning The CTMP, which shall be implemented as approved during all period of construction and decommissioning, must include:

- A description of all measures to be implemented by the developer in order to manage traffic during the construction phase (incl. routing strategies), with any additional or temporary signage and traffic control undertaken by a recognised qualified traffic management consultant;
- The identification and delivery of agreed upgrades to the public road network to ensure they are to a standard capable of accommodating construction related traffic (including the formation or improvement of any junctions leading from the site to the public road) to the satisfaction of The Highland Council and Transport Scotland, including;
 - i) An initial route assessment report for abnormal loads and construction traffic, including swept path analysis and details of the movement of any street furniture, any traffic management measures and any upgrades and mitigations measures as necessary;
 - ii) A videoed trial run to confirm the ability of the local road network to cater for abnormal indivisible load deliveries. Eight weeks notice of this trial run must be made to the local Roads Authority who must be in attendance;
 - iii) No deliveries by abnormal indivisible loads shall take place until a final assessment of the capacity of existing bridges and structures along the abnormal indivisible load delivery route is carried out and submitted to and approved by the Planning Authority and full engineering details and drawings of any works required to such structures to accommodate the passage of abnormal indivisible loads have been submitted to and approved by the planning authority, thereafter the approved works shall be completed prior to the abnormal indivisible load deliveries to the site.
- A risk assessment for the transportation of abnormal loads to site during

daylight hours and hours of darkness;

- Details for the delivery, storage, loading and unloading of plant and materials to be used in constructing the development, with particular regard for the deployment of HGV's and any abnormal loads.
- A contingency plan prepared by the abnormal load haulier. The plan shall be adopted only after consultation and agreement with the Police and the respective roads authorities. It shall include measures to deal with any haulage incidents that may result in public roads becoming temporarily closed or restricted.
- A procedure for the regular monitoring of road conditions and the implementation of any remedial works required during construction / decommissioning periods.
- A detailed protocol for the delivery of abnormal loads/vehicles, prepared in consultation and agreement with interested parties. The protocol shall identify any requirement for convoy working and/or escorting of vehicles and include arrangements to provide advance notice of abnormal load movements in the local media. Temporary signage, in the form of demountable signs or similar approved, shall be established, when required, to alert road users and local residents of expected abnormal load movements. All such movements on Council maintained roads shall take place out with peak times on the network, including school travel times, and shall avoid local community events.
- Details of appropriate traffic management which shall be established and maintained at the site access for the duration of the construction period. Full details shall be submitted for the prior approval of The Highland Council, as roads authority.
- Wheel washing measures to ensure water and debris are prevented from discharging from the site onto the public road;
- Measures to ensure that construction traffic adheres to agreed routes.
- A concluded agreement in accordance with Section 96 of the Roads (Scotland) Act 1984 under which the developer is responsible for the repair of any damage to the local road network that can reasonably be attributed to construction related traffic. As part of this agreement, pre-start and post-construction road condition surveys must be carried out by the developer, to the satisfaction of the Roads Authority. It will also require the submission of an appropriate financial bond acceptable to the Council in respect of the risk of any road reconstruction works.
- A Workforce Access Management Plan that sets out all the measures that will be implemented and all steps taken to require adherence to those measures by the workforce when travelling to and from the development site including detail on measures which require the workforce to utilise communal transport options
- On plan detail on sensitive locations along the proposed routes including in front of primary schools
- Consideration of the development of the new underground water main scheme from Dores to Loch Ashie and the potential cumulative transportation impacts and demonstration that construction conflicts on roads and paths are avoided in the area.

Reason: To maintain safety for road traffic and the traffic moving to and from the development, and to ensure that the transportation of abnormal loads will not have any detrimental effect on the road network.

9. No development shall commence until a package of physical road improvements has been submitted to, and agreed in writing by, the Planning Authority which is proportionate and directly attributed to the Development. The agreed road improvements shall be implemented and operational prior to any construction works commencing on the development site.

Reason: In order to secure a proportionate level of road improvements to safeguard the local road network and local communities due to the increased numbers of HGV and workers traffic which will be generated and the ability of the network to cope with the increased vehicular movements.

10. For the avoidance of doubt the C1076, C1068, B861 and U1084 shall at no time be utilised for construction access purposes for the development and all construction related traffic should be prevented from utilising these routes.

Reason: To ensure that construction traffic will not have any detrimental effect on the road and in the interest of road safety.

11. During the delivery period of abnormal loads any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised traffic management consultant, to be approved by Transport Scotland before delivery commences.

Reason: To ensure that the transportation will not have any detrimental effect on the road and structures along the route.

12. No development shall commence until an Access Management Plan has been submitted to, and agreed in writing by, the Planning Authority. The plan should ensure that public access is retained in the vicinity of the entire development site during construction, and thereafter that suitable public access is provided during the operational phase of the development. For the avoidance of doubt an updated Access Management Plan shall include:

- i) Detail on design, materials and drainage features as set out in the Lowland Path Construction guide and Upland Path Construction Standards. For the avoidance of doubt this shall include detail on the base, sub-base and surface material which will require to be processed on-site and used to reinstate paths and tracks to the stated and recognised standards.
- ii) Detail on plan of the construction of all paths and drainage features as well as the reinstatement and upgrading of existing paths and tracks.

The agreed plan shall thereafter be implemented.

Reason: To ensure that the development is adequately connected with existing and proposed pedestrian and cycle routes and to accord with the Land Reform

(Scotland) Act 2003.

13. No development shall commence until a scheme for the establishment and management of a Community Liaison Group (CLG) has been submitted to, and agreed in writing by, the Planning Authority. The purpose of the CLG shall be to discuss the progress of both the construction of the development and in the first two years of operation. The CLG shall sustain an open invitation to representatives of Dores and Essich Community Council, Stratherrick and Foyers Community Council, Strathnairn Community Council; Elected Members of the Highland Council representing the Aird and Loch Ness Ward; and residents within 5km of the development site.

The agreed plan shall thereafter be implemented, including a general timetable to ensure meetings are held in advance of critical periods of construction activity or on a reasonably regular basis to facilitate purposeful community engagement.

Reason: To provide for effective community consultation on the development and operation of the substation in its early years.

14. Noise arising from construction works associated with this development shall not exceed the following limits as calculated or measured at the curtilage of any noise sensitive property: -

- i) Monday to Friday 8am to 6pm 55dB, LAeq 1 hour
- ii) Monday to Friday 6pm to 10pm, 45dB LAeq 1 hour
- iii) Saturdays 8am to 1pm, 55dB LAeq 1 hour
- iv) Saturdays 1 pm to 6pm, 45dB LAeq 1 hour
- v) Out-with the above times, noise from construction related activities shall not exceed 35dB LAeq 1 hour
- vi) Noise levels from the construction of baffle mounds may exceed 55dB LAeq 1 hour but not 70dB LAeq 1 hour for up to 8 weeks in any year.

You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the curtilage of any noise sensitive property should not take place at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended) unless otherwise agreed in writing by the Environmental Health Authority.

Reason: In order to limit the duration and frequency of noise from construction related activities in the interest of community and residential amenity.

15. The peak particle velocity generated by construction activities shall not exceed 5mm per second as measured at any dwelling or other sensitive property. This applies to all operations other than blasting. For blasting, it is expected that the best practicable measures will be employed to minimise the impact of noise and vibration.

For activities where vibration is perceptible at any sensitive property, the hours of operation shall be as follows: -

- i) Monday to Friday 8am to 6pm

- ii) Saturdays 8am to 1 pm

At all other times and including Easter and Christmas/New Year public holidays; operations for which vibration is perceptible within any noise sensitive property are not permitted.

Reason: In order to limit the duration and frequency of vibration from construction related activities in the interest of community and residential amenity.

16. All plant, machinery and equipment associated with this development shall be so installed, maintained and operated such that the following standards are met: -
- a) Between 2300 hrs and 0700 hrs, any associated operating noise must not exceed NR 20 when measured or calculated within the bedroom of any noise-sensitive premises with windows open for ventilation purposes.
 - b) Between 0700 hrs and 2300 hrs the operating noise Rating level must not exceed the Background noise level by more than 5dB(A) including any characteristics penalty. Terms and measurements to be in accordance with 4142: 2014 Methods for Rating Industrial & Commercial Sound.

Reason: In the interest of community and residential amenity.

17. Vibration arising from construction works associated with this development shall not exceed the following limits as measured or calculated at any noise sensitive in accordance with BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration
- i) Monday to Friday from 8am to 6pm the peak particle velocity shall not exceed $5 \text{ mm}\cdot\text{s}^{-1}$
 - ii) Saturdays from 8am to 1pm the peak particle velocity shall not exceed $5 \text{ mm}\cdot\text{s}^{-1}$
 - iii) Out-with the above times, the peak particle velocity shall not exceed $0.3 \text{ mm}\cdot\text{s}^{-1}$

The above limits apply to all construction activities other than blasting. For blasting, it is expected that the best practicable measures will be employed to minimise the impact of noise and vibration.

Reason: In the interest of community and residential amenity.

18. During operation of the development the vibration dose value generated by this development shall not exceed $0.1 \text{ m}\cdot\text{s}^{-1.75}$ as measured or calculated in accordance with BS 6472-2-2008 Part 1 Vibration sources other than blasting. Unless there is a clear difference between night time and day time operational activities this standard shall apply to both periods.

Reason: In the interest of community and residential amenity.

19. No development shall commence until a method statement has been submitted to and approved in writing by the Planning Authority, detailing all mitigation measures to be delivered to secure the quality, quantity and continuity of water supplies to

properties which are served by private water supplies at the date of this consent and which may be affected by the Development. The method statement shall include water quality sampling methods and shall specify abstraction points. The approved method statement shall thereafter be implemented in full.

Reason: To maintain a secure and adequate quality water supply to all properties with private water supplies which may be affected by the development.

20. No development shall commence until detail on the final design of all permanent and temporary compound areas has been submitted to, and agreed in writing by, the Planning Authority. For the avoidance of doubt this shall include:

- i) Detail on plan of a buffer of at least 10m between the top of the banks of all watercourse and excavation works
- ii) Demonstration on plan that areas of flood risk are avoided
- iii) Detail on the location and design of surface water drainage to be inline with SUDs principles as per CIRIA SUDs Manual C753.
- iv) Demonstration that all surface water from new areas of hardstanding on site shall be collected, treated and discharged at the pre-development greenfield rate
- v) The final layout of compound 1 shall be amended to avoid direct impacts on a M6 flush and minimise the impacts on the W4c wet woodland.

For the avoidance of doubt the final layout of compound 4 shall be amended to avoid direct impacts on an area of M23a and direct impacts on an M6 Flush. The development shall thereafter progress in accordance with the approved details.

Reason: In order to allow the Planning Authority and SEPA to consider the matters in further detail as no information has been submitted and in order to minimise flood risk and detrimental impact on GWDTEs.

21. No development shall commence until full details of the Allt a Chruinachd burn diversion has been submitted to, and agreed in writing by, the Planning Authority. For the avoidance of doubt the detail shall include:

- i) photographs of the burn in its current position,
- ii) plans showing the proposed diversion and;
- iii) proposed protective buffers to be put around the burn to protect it from surrounding engineering works.

For the avoidance of doubt the agreed details shall have been implemented at the burn prior to any other works commencing on site.

Reason: In order to allow the Planning Authority and SEPA to consider the matter in further detail as no detail has been submitted.

22. No development shall commence until a Material Management Plan has been submitted to, and agreed in writing by, the Planning Authority in consultation with SEPA. Detail should include:

- i) Volume of material to be used

- ii) The manner in which it is to be used
- iii) Justification for the need for works

For the avoidance of doubt there shall be no long term storage of material on site and material should only be stored temporarily within the identified construction areas or within the head pond area and no material shall be used out with the head pond and landscape embankment without the prior written agreement of the Planning Authority.

Reason: In order to ensure that all spoil and material is appropriately managed.

23. No development shall commence until a Landscape and Ecological Management Plan has been submitted to, and agreed in writing by, the Planning Authority in consultation with SNH and SEPA. The approved plan will be reviewed and updated by the Developer to reflect ground condition surveys undertaken. For the avoidance of doubt the plan shall be updated to include:

- i) Proposals for the enhancement of existing GWDTE habitats
- ii) Demonstration of how new woodland planting follows SEPAs 'Practical guide for Forest Managements to assess and protect GWDTE when preparing woodland creation proposals.' And how this protects existing GWDTE habitats.
- iii) Plans for a programme of invasive non-native species removal from the area and;
- iv) Any other environmental improvements that can be delivered to offset impacts.

Reason: In order to allow the Planning Authority and SEPA to consider the matter in further detail in the interest of the water and natural environment

24. No development shall commence until a Compensatory Planting Plan has been submitted to and, following consultation with Forestry Commission Scotland (FCS), approved in writing by the Planning Authority. The Compensatory Planting Plan must provide for compensatory planting of no less than 415 hectares to replace existing forest areas that are to be removed to accommodate the development and must include as a minimum:

a) Full details of the proposed planting within the application site, including:

- i) the location of any and all area(s) to be planted,
- ii) the landowners and occupiers of the land to be planted; and
- iii) copies of the land agreements in place with the relevant landowner(s) which allow delivery of the compensatory planting;

b) If the compensatory planting will not take place wholly within the application site, the following details require to be submitted and approved by the Planning Authority:

- i) the location of any alternative area(s) to be planted;

- ii) the landowners and occupiers of the land to be planted; and
 - iii) copies of the land agreements in place with the relevant landowner(s) which allow delivery of the compensatory planting.
- c) detail of the associated timescales for implementing the compensatory planting including any phasing,;
- d) detail of any statutory consents required to carry out the compensatory planting
- e) proposals for the maintenance, for a minimum period of 10 years, and establishment of the compensatory planting, including the frequency of checks, suitable triggers for any necessary replacement planting (including timing of the aforementioned planting), fencing, ground preparation and drainage
- f) proposals for reporting to the Planning Authority and FCS on compliance with timescales for obtaining the necessary consents and thereafter implementation of the compensatory planting scheme

The approved Plan shall be implemented in during the first planting season following the commencement of development, unless otherwise agreed in writing by the Planning Authority after consultation with Forestry Commission Scotland Conservator.

Reason: To protect Scotland's woodland resource, in accordance with the Scottish Government's policy on the Control of Woodland Removal.

25. Prior to any site excavation or groundworks, a Tree Protection Plan, in accordance with BS5837:2012 (Trees in Relation to Design, Demolition and Construction), shall be submitted to, and agreed in writing by, the Planning Authority. All retained trees are to be protected against construction damage using protective barriers located beyond the Root Protection Area. Barriers are to remain in place throughout the construction period and must not be moved or removed without the prior written agreement of the Planning Authority.

Reason: To ensure the protection of retained trees during construction and thereafter.

26. For the avoidance of doubt, the scheme shall not operate when the water level in Loch Ness is at, or above 17.6m AOD.

Reason: In order to ensure that the development will not have an impact on downstream water levels during high flow events.

27. There shall be no Commencement of Development until a Restoration Plan (RP) for the Site has been submitted to, and approved in writing by, the Planning Authority to be implemented if, following a meaningful start to the development construction progress pauses for a period of time in excess of 12 months. The RP shall include the following:

- a) A scheme for the restoration of the site to be completed within 18 months following no construction works being carried out for a period of 12 months. This shall take account of best practice in restoration prevailing at the time and measures that site specific conditions, identified during construction of

the site, and subsequent operation and monitoring of the Development are given due consideration. A copy shall be submitted to the Planning Authority for its written approval, in consultation with SNH and SEPA;

- b) justification for retention of any relevant elements of the Development;
- c) the treatment of disturbed ground surfaces;
- d) environmental management provisions;
- e) a traffic management plan to address any traffic impact issues during the decommissioning period.
- f) full details of a guarantee, bond or other financial provision to be put in place to cover all of the site restoration measures outlined in the Restoration Plan approved under this permission have been submitted to, and approved in writing by, the Planning Authority.

Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under this condition is sufficient to meet the full estimated costs of all, dismantling, removal, disposal, site restoration, remediation and incidental work, as well as associated professional costs, has been submitted to, and approved in writing by, the Planning Authority. The guarantee, bond or other financial provision shall remain in place until the completion of the development.

This condition shall not apply if the delay in development is out with the applicant's control or as a consequence of any emergency or requirement of statutory bodies. In these instances the Planning Authority shall be informed of the construction shutdowns, reasons for the shut downs and timescales for site shut downs within 3 months of the shut down.

The RP shall be implemented as approved.

Reason: To ensure that all redundant aspects of infrastructure and associated development are removed from site should the development not progress following a meaningful start to the development; in the interests of safety, amenity and environmental protection.

FOOTNOTE TO APPLICANT

SEPA

Environmental Improvements

The adjacent Big Burn water body (ID 20260) is downgraded as a result of weir to the road bridge at Dumdevan. The Highland Council is currently proposing works to improve the weir and as part of this we are seeking that a fish pass is installed. We would welcome any support the developer could give to this work as a way to offset impacts. The Developer should contact our Jenny Davies to discuss this further.

Regulatory requirements

All new reservoirs are required to be registered with SEPA under the Reservoirs Act 2011. Please see our [website](#) for further information.

As you know authorisation is required under the Water Environment (Controlled Activities) Scotland Regulations (CAR) for the abstraction and discharge from Loch Ness. You should continue pre-application consultation with our Ross Hall. A CAR construction site licence will be required for management of surface water run-off from the construction site; see SEPA's [Sector Specific Guidance: Construction Sites \(WAT-SG-75\)](#) for details. In this case where the development is very large and will result in significant areas of soil and peat stripping and it is located on or near steep ground and important aquatic environments such as Loch Ness and the nearby drinking water supply ensuring good surface water management will be very important. Other CAR authorisations may be required for works such as abstractions for potable water, foul drainage discharges or watercourse crossings. Management of surplus peat or soils may require an exemption under The Waste Management Licensing (Scotland) Regulations 2011. Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012. Waste transfer notes will be removed to move waste material. Details of other general regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website.

If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory Services team in your local SEPA office at: Graesser House, Fodderty Way, Dingwall Business Park, Dingwall, IV15 9XB - Tel: 01349 862021.

Scottish Water

We would like to take the opportunity, to request that in advance of any works commencing on site, Scottish Water is notified at protectdwsources@scottishwater.co.uk. This will enable us to be aware of activities in the catchment and to determine if a site meeting would be appropriate and beneficial.

You are advised that a supply and connection to Scottish Water infrastructure is dependent on sufficient spare capacity at the time of the application for connection to Scottish Water. The granting of planning permission does not guarantee a connection. Any enquiries with regards to sewerage connection and/or water supply should be directed to Scottish Water on 0845 601 8855.

Local Roads Authority Consent

Road Construction Consent

A Road Construction Consent Application will need to be made to Highland Council for the proposed realignment of the C1064. The process for making such an application is set out on our website at:

<https://www.highland.gov.uk/info/20005/roadsandpavements067/roadconstructionconsent>

No work should commence to deliver that realignment until the Road Construction Consent has been approved by Highland Council and a permit to work on the public road has been submitted and approved.

Before any works are undertaken on or immediately adjacent to the public road, an application for a Road Opening Permit should be submitted to and approved by the Local Roads Authority. Further information can be found here:

<https://www.highland.gov.uk/info/20005/roads> and [pavements/101/permitsforworkingonpublicroads/2](https://www.highland.gov.uk/info/20005/pavements/101/permitsforworkingonpublicroads/2)

Road Closures

No closures of the local public road network should be implemented until a permit to close the road has been submitted to and approved by the Local Roads Authority and the procedures required to close a road have been satisfactorily completed. Details on making such an application can be found on the Highland Council website at <https://www.highland.gov.uk/info/20005/roadsandpavements/101/permitsforworkingonpublicroads/3>

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at: <http://www.highland.gov.uk/yourenvironment/roadsandtransport>

Application forms and guidance notes for access-related consents can be downloaded from:

http://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_working_on_public_roads/2

Mud & Debris on Road

Please note that it is an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

Designation: Area Planning Manager – South

Author: Laura Stewart

Background Papers: Documents referred to in report and in case file.

Relevant Plans:

Plan 1 – RJ_18030_EIA_1.1_v2 – Location Plan

Plan 2 – RJ_181030_EIA_2.1_v2 - Location Plan

Plan 3 – RJ-181004_EIA2.4_v1 – Above Ground Site Layout

Plan 4 – RJ_181004_EIA2.5_v1 – Below Ground Site Layout

Plan 5 – RJ_181004_EIA2.10_v1 – Head pond Layout

Plan 6 – RJ_181004_EIA2.12_v1 – Outfall Section

Plan 7 – RJ_181004_EIA2.14_v1 – Overall Cross Section

Plan 8 - RJ_181004_EIA2.15_v1 – Power Cavern Section

Plan 9 - RJ_181004_EIA2.16_v1 – Tunnel Section

- Plan 10 - RJ_181004_EIA2.19_v1 – Compound 1 Layout
- Plan 11 - RJ_181004_EIA2.21_v1 – Road Realignment
- Plan 12 - RJ_181004_EIA2.22_v1 – Access Tracks Layout
- Plan 13 – RJ_181031_EIA_15.1v2 – Road Hierarchy
- Plan 14 – RJ_181031_EIA_11.2_v2 – Landscape Character Types

Appendix 2 – Principal Components of the Proposed Development.

Head pond/Upper Reservoir

This is to be an entirely manmade waterbody to hold approximately 5 million m³ and would be located to the south eastern extent of the site and roughly between Loch Ashie and Lochan an Eoin Ruadha. During operation the bottom water level would be 249m AOD and the top working level would be 269m AOD effectively, a difference of 20m at its fullest and emptiest. A 4m freeboard will also be accommodated within this which allows additional height above the flood level to further safeguard the area in a flood event. The body of water will be held by an engineered **embankment** this is to measure 1900m (1.9km) in total length, 600m wide and up to 39m high at its extent (at the end closest to Ach-an-Sidhe B&B) with an overall footprint of 93ha. The embankment will be a built up earth and rock filled structure with the exception of the southern edge where there will be an area of cut into the existing ground level. Security fencing is proposed across the embankment. A **Head pond Inlet structure** will house equipment which allows the release of water into a spillway inlet and the underground **High Pressure Tunnel**. While this will be largely located within the head pond, it is anticipated that this could have a height of above 8m above the embankment.

Tail pond/Lower Reservoir

This is to be submerged within Loch Ness and is the permanent structure which will be 15m deep; extending a maximum of 45m into Loch Ness; most of the structure is to be located beneath the water level of Loch Ness. This structure will comprise an inclined screen which is to measure approximately 90m in width and will reduce the velocity at which water enters Loch Ness when pushed out of the low pressure tunnel. **Temporary and permanent jetties** located on Loch Ness will be located adjacent to the Tail pond Inlet; these are required for construction and construction traffic purposes. A **cofferdam** will require to be engineered, this is a temporary area pumped dry to allow for the development of the tail pond/outlet structure. **Operational buildings** will contain the mechanical equipment for operating the gate within the Low Pressure Tunnel. This is to measure 5m in height above ground level, is 15m wide and 8m in length. It is noted that there may be other operational buildings including control room facilities and workshops; detail is not provided on these.

Underground Infrastructure

The scheme would not be able to operate and be maintained without underground infrastructure which connects the upper and lower reservoirs; this includes an **Underground Waterway System** comprising underground caverns and tunnels carrying water between the upper reservoir and lower reservoir, through the underground cavern power station; **Surge tanks** which are required to respond to the fluctuations in pressure within the tunnels; and a **power cavern** will contain the mechanical and electrical equipment for generating electricity. This is located 200m beneath the existing ground level and will contain the Transformer Gallery which could measure up to 120m long, up to

20m wide and 30m in height. **Tunnel Portals**, located within the area of Compound 1 would be provided for accessing the underground power plant and would be retained in the operational phase.

Construction Compounds

Four areas are identified for equipment and material storage, access to Waterways and Tunnels, site office and welfare facilities across the site. The compound areas are to be reduced in size or removed entirely following completion of the development. An overview of the compound need, size and location is summarised below.

- Compound 1 is the main compound which includes an office, welfare, construction access, screening area and temporary materials storage. Located within the existing Dirr Wood measures 210,000m².
- Compound 2 will be located at the Tail pond required for tunnel access, laydown area, work yard, temporary tunnelling works, offices and temporary material storage, located on the Shore of Loch Ness nearby the Caledonia fish farm measuring 32,000m².
- Compound 3 is for temporary construction and material storage located on each side of the B862 near Balnafoich, measuring 80,000m².
- Compound 4 is permanent and part temporary for construction and operation of the head pond with potential access to the access shaft and temporary storage of materials. This would be located at the south western edge of the head pond and currently forms part of Dirr Wood, measuring 60,000m².

Borrow Pits

The opening of new borrow pits and the extent of these should be limited given the amount of spoil which requires to be unearthed for the head pond. It is noted that on site borrow pits are to be used as far as possible to minimise the requirement to import material to the site at the start of construction. These are located within the head pond area, with a second borrow pit being located along a private road at Park which is located to the west of the head pond and immediate east of temporary compound 4. Further detail will be required on specific locations of these which would require to be conditioned to secure.

Access Tracks

The project advances a series of **access tracks**, principally and initially required for construction, with a significantly lesser requirement for operational needs. A permanent access track is to be constructed between Compound 1 and Compound 4 which is located adjacent to the head pond. This will follow the existing forest road connecting to the realigned C1064 at a new crossing which is to be provided before ending at the southern edge of the head pond compound 4. It is anticipated that the permanent track will require a working width of 50m in order to allow for 2 way vehicular access, drainage, a conveyor, material storage and the working width for installing the spillway. The 50m width includes

a temporary storage area, drainage ditch etc, therefore only the track extension will be retained with the storage area being reduced, a drainage ditch being provided and the spillway pipe being buried on completion. It is noted within the EIAR that this could all be reduced in extent

Road Crossings

Road crossings are proposed to allow for the movement of construction across new access tracks between the compounds; these are to be signed, with traffic lights and line painted. These are located at junctions between the temporary access track and public roads which require to be crossed between the head pond and outfall.

Temporary Track – Tail Pond to Main Compound (no.1)

A temporary access track is required between the tail pond and main compound no.1. This will cross the B852 twice, pass through Durr Wood and connect to the south west corner of Compound no.1; this is to measure a maximum of 30m in width and will allow two way traffic, drainage, conveyor and again working width for installing the spillway. Materials will not require to be stored within the corridor of this section of track which is why the width is 20m less than the permanent section of track described above. This will be removed following completion of construction.

Other Ancillary Tracks

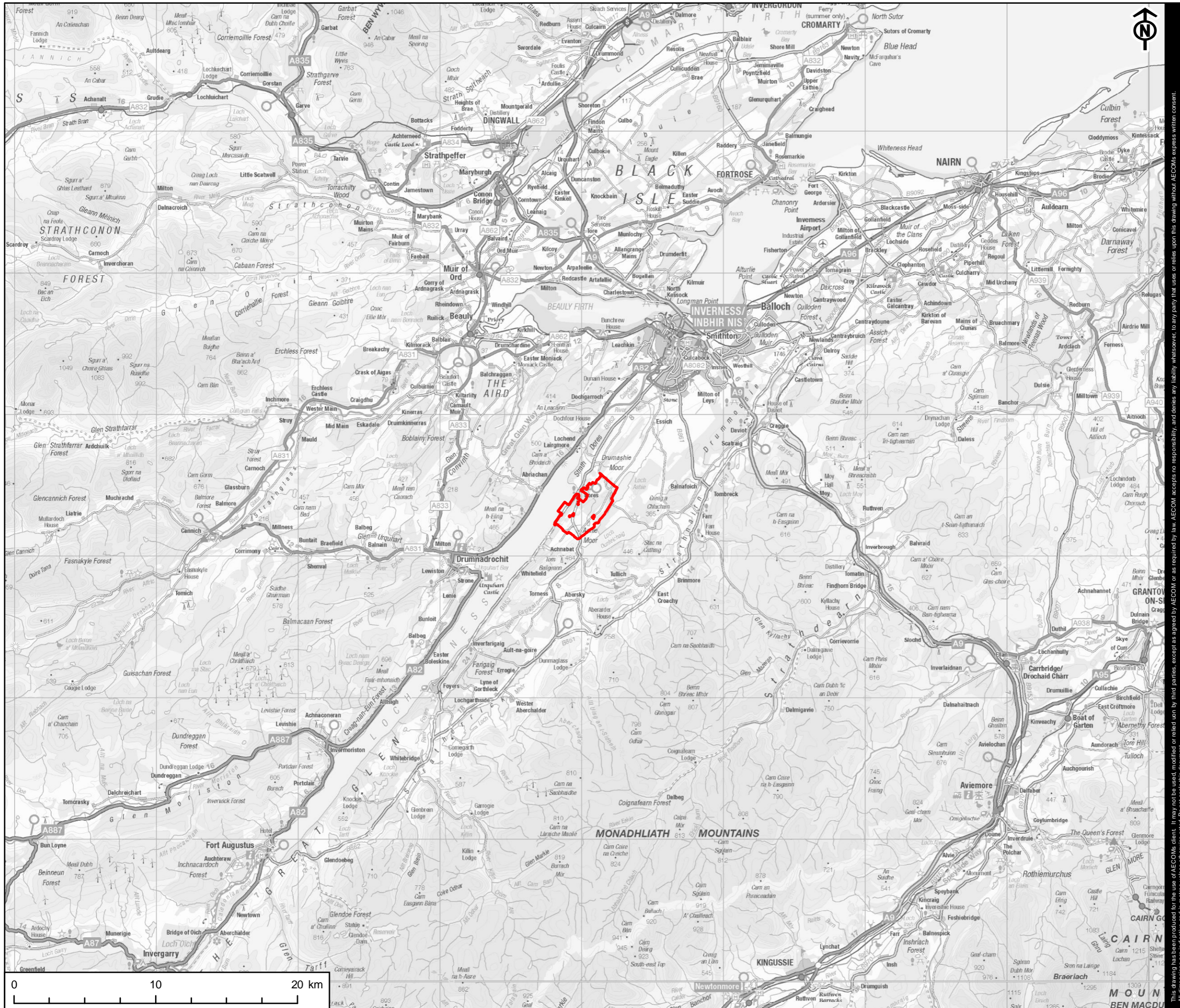
Other ancillary access tracks will be required during the construction phase, these are to be reinstated once the site specific works have been completed, and an example of this would be where access is required to work areas within the head pond.

PROJECT
RED JOHN PUMPED STORAGE HYDRO

CLIENT
ILI (Highlands PSH) Ltd.

KEY
Development Site boundary

Project Management Initials: CA Designer: LC Checked: SY Approved: CS



TITLE
FIGURE 1.1
SITE LOCATION PLAN

REFERENCE
RJ_181030_EIA_1.1_v2

SHEET NUMBER
1 of 1

DATE
30/10/18

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Scale @ A3 1:250,000

PROJECT
RED JOHN PUMPED STORAGE HYDRO

CLIENT
ILI (Highlands PSH) Ltd.

KEY

- Development Site boundary
- Excluded from Development Site boundary

TITLE
FIGURE 1.2
THE PROPOSED DEVELOPMENT SITE

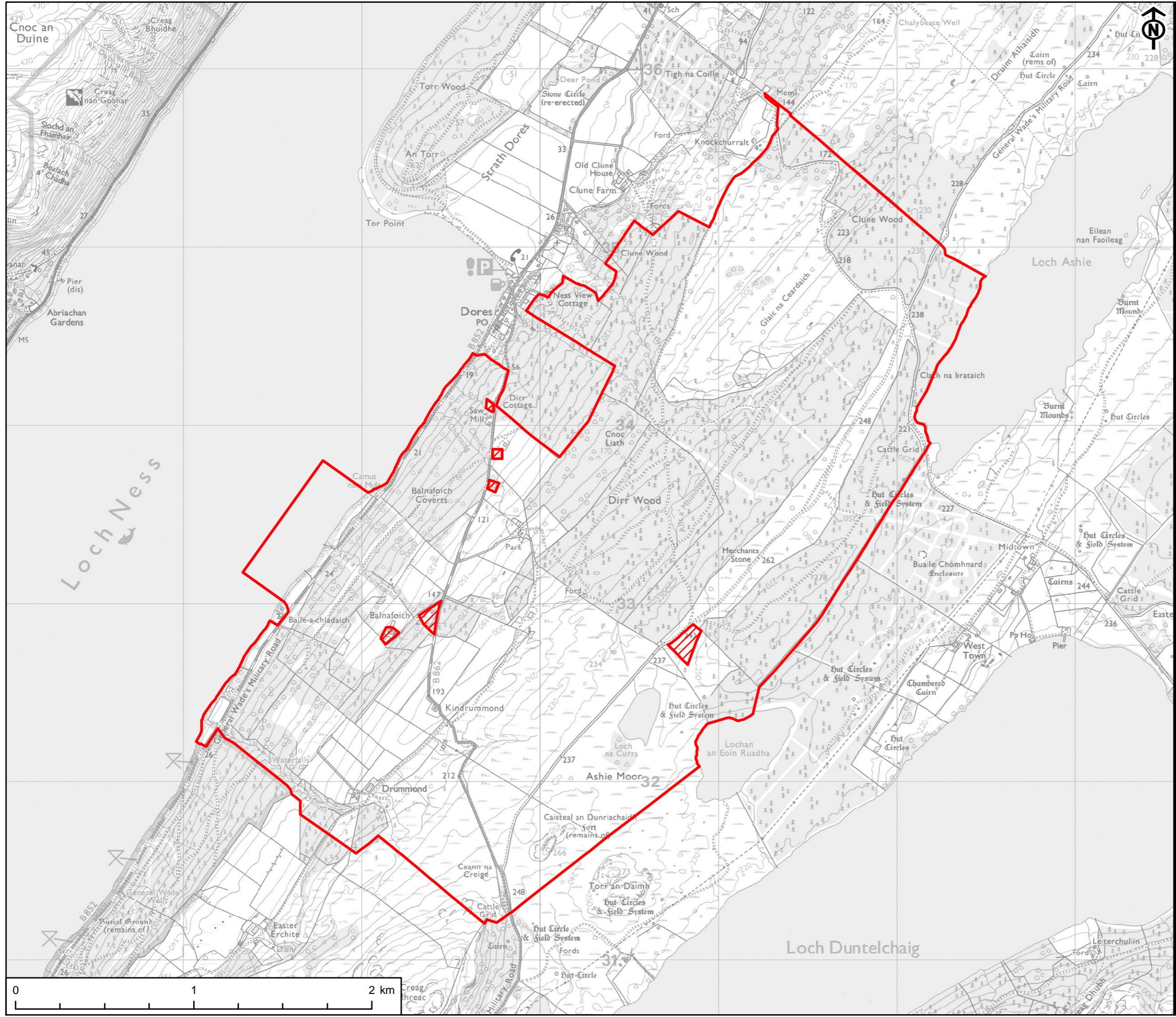
REFERENCE
RJ_181030_EIA_1.2_v2

SHEET NUMBER
1 of 1

DATE
30/10/18

Project Management Initials: CA Designer: LC Checked: SY Approved: CS

Scale @ A3 1:20,000



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PROJECT
RED JOHN PUMPED STORAGE HYDRO

CLIENT
ILI (Highlands PSH) Ltd.

KEY

- Development Site Boundary
- Public Road - Permanent Realignment
- Access Road - Permanent
- - - Access Road - Temporary
- ▭ Headpond & Water Surface
- Tunnel Access Portal
- T/P Temporary Construction or Permanent Compounds
- ▭ Area Excluded From Development Site Boundary

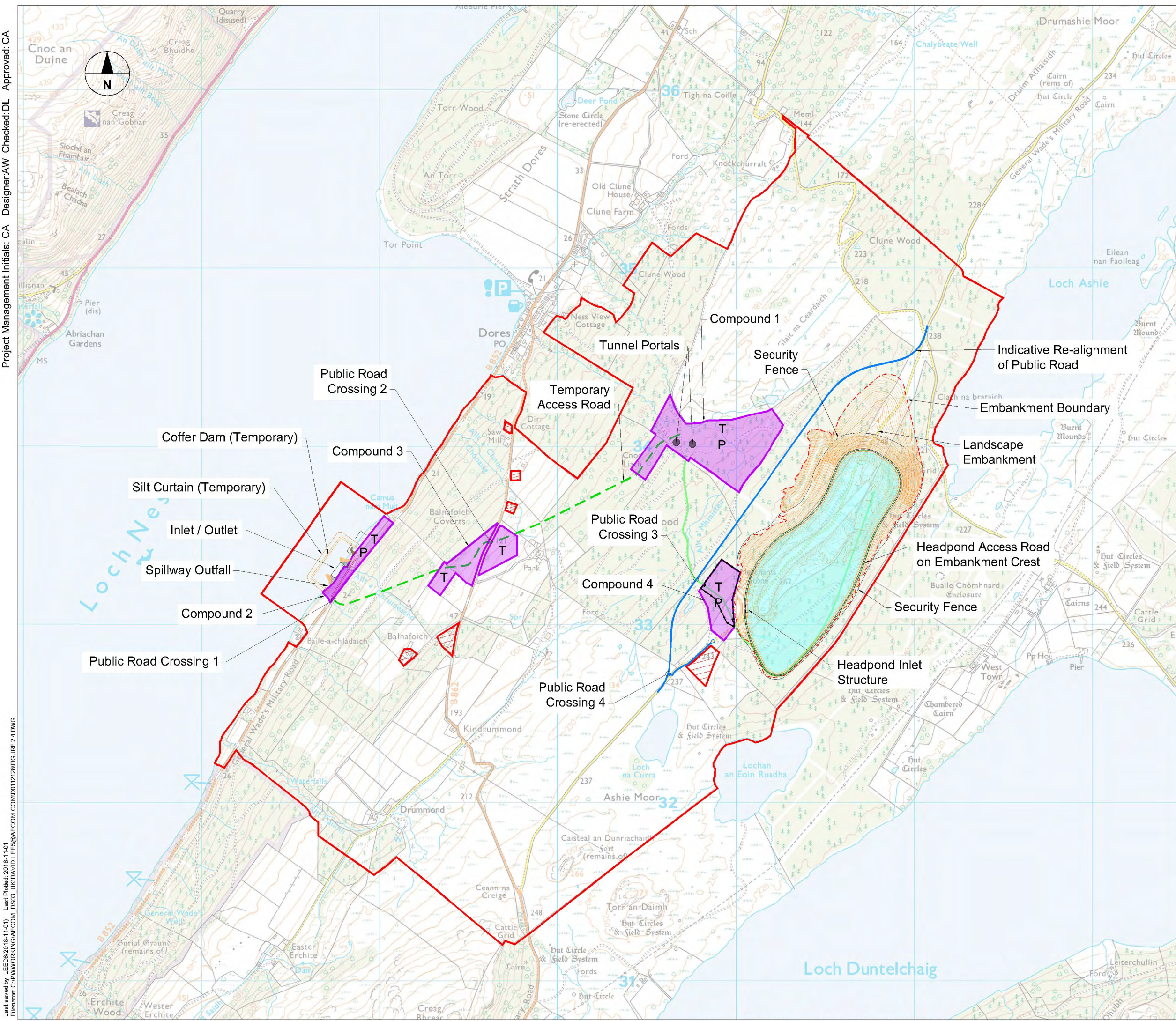
NOTES

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2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE
FIGURE 2.4
THE DEVELOPMENT LAYOUT
ABOVE GROUND

REFERENCE
RJ_181004_EIA2.4_v1

SHEET NUMBER 1 of 1
DATE 04/10/18



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Last saved by: LEE06(2018-11-01) Last Plotted: 2018-11-01
Filename: C:\P\WORKING\AECOM_DS03_UK\DAVID.LEE5@AECOM.COM\112128\Figure 2.4.DWG

PROJECT
 RED JOHN PUMPED STORAGE HYDRO
CLIENT
 ILI (Highlands PSH) Ltd.
KEY

- Development Site Boundary
- Access Tunnel
- Construction Tunnel
- - - High Pressure Tunnel
- - - Low Pressure Tunnel
- Power Cavern (Underground)
- Spillway (Underground)
- Area Excluded From Development Site Boundary

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.5
 THE DEVELOPMENT LAYOUT
 BELOW GROUND

REFERENCE

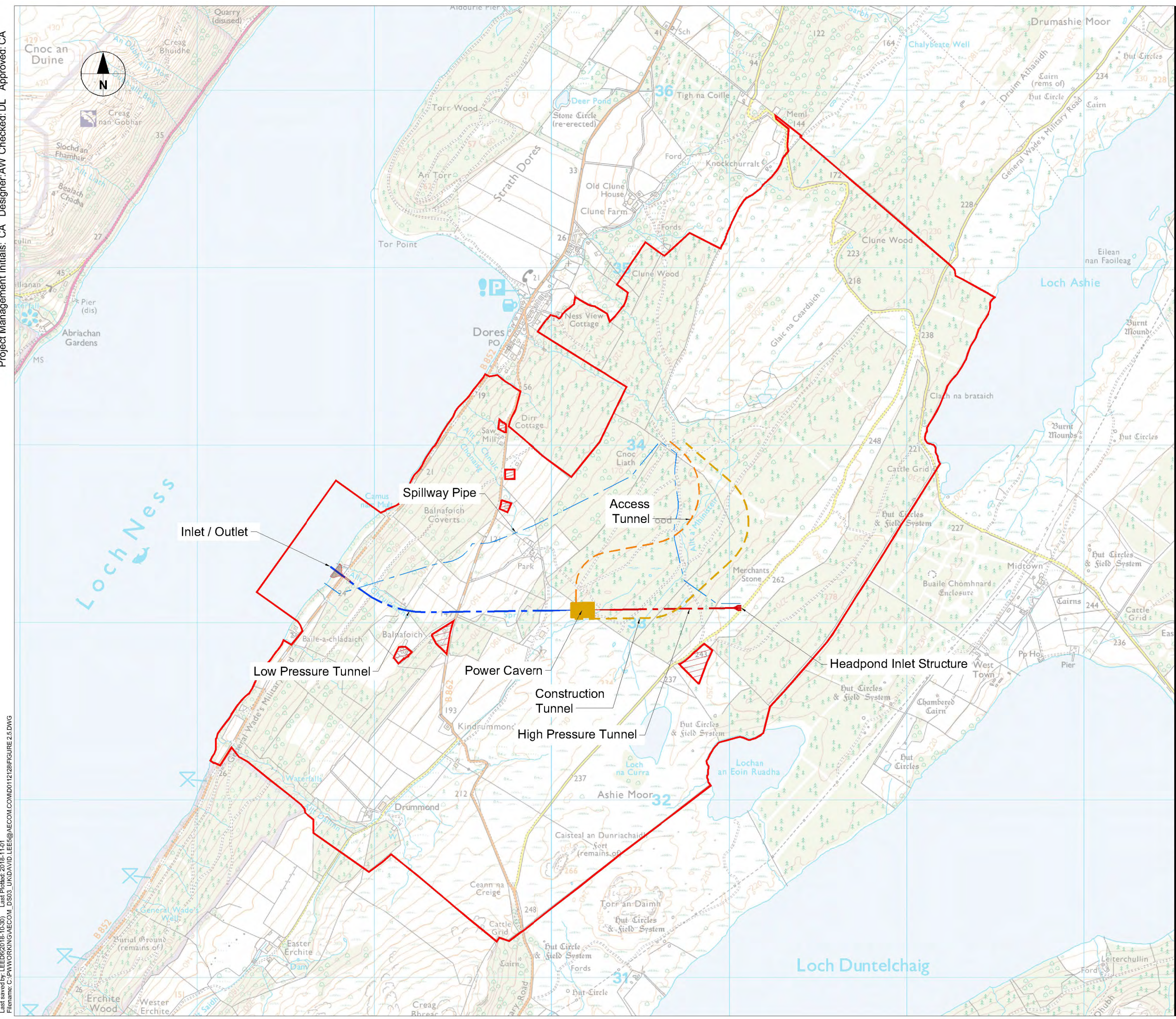
RJ_181004_EIA2.5_v1

SHEET NUMBER

1 of 1

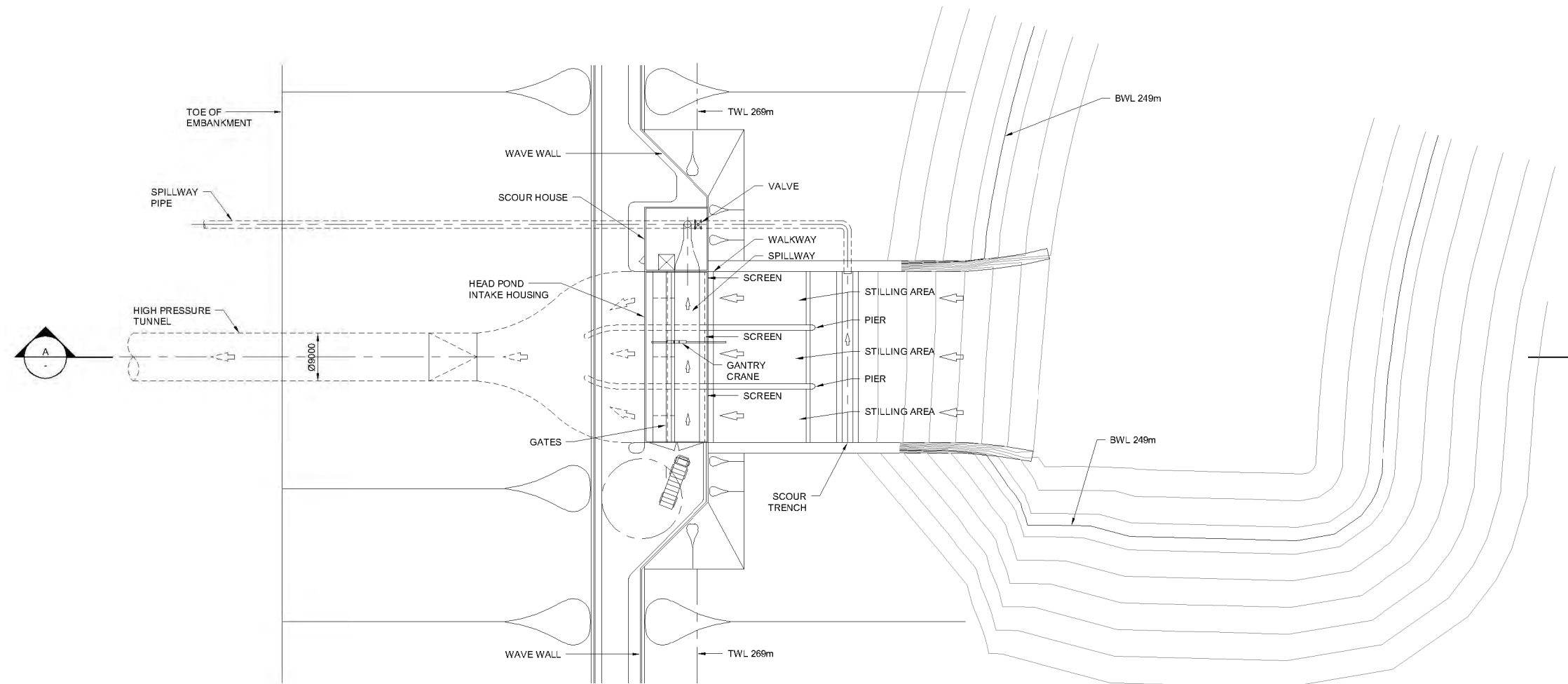
DATE

04/10/18

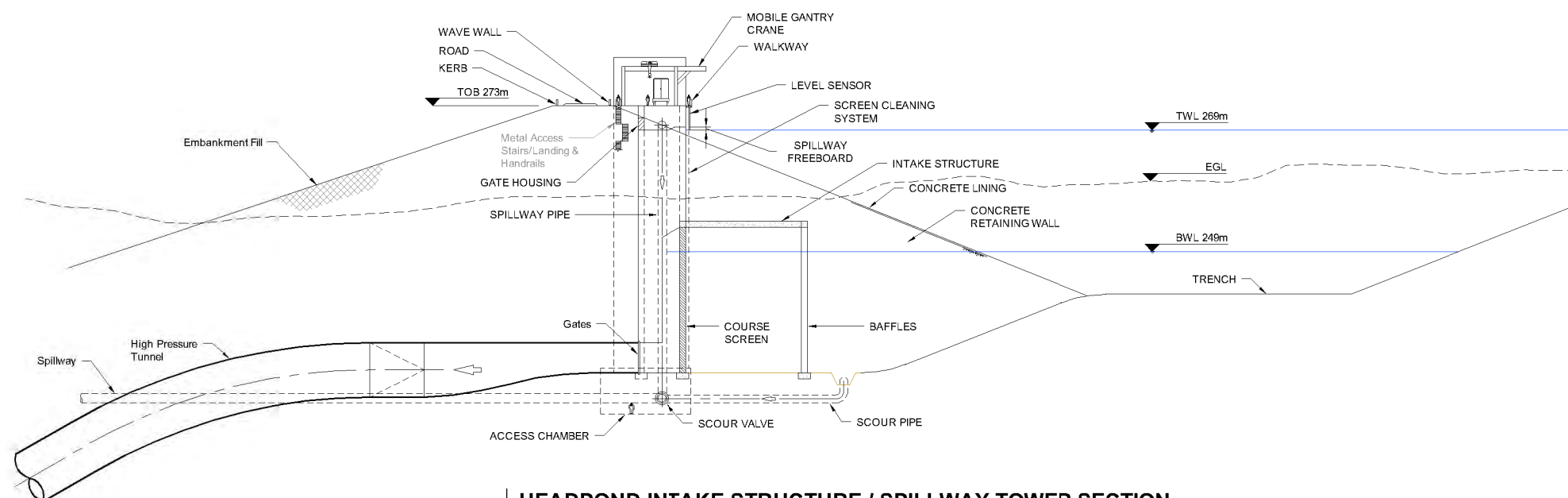


Project Management Initials: CA Designer:AW Checked:DL Approved:CA
 Last saved by: LEE062018_1020 Last Plotted: 2018-11-01
 Filename: C:\P\WORKING\AECOM_DS03_URD\DATA\LEE@AECOM.COM\12128\FIGURE 2.5.DWG

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PLAN OF HEADPOND INTAKE STRUCTURE / SPILLWAY TOWER
 1:500



HEADPOND INTAKE STRUCTURE / SPILLWAY TOWER SECTION
 1:500

REFERENCES

- TOB Top Of Embankment Level
- TWL Top Water Level (Headpond)
- BWL Bottom Water Level (Headpond)
- EGL Existing Ground Level

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.10
 INDICATIVE HEADPOND
 INLET / OUTLET STRUCTURE

REFERENCE

RJ_181004_EIA2.10_v1

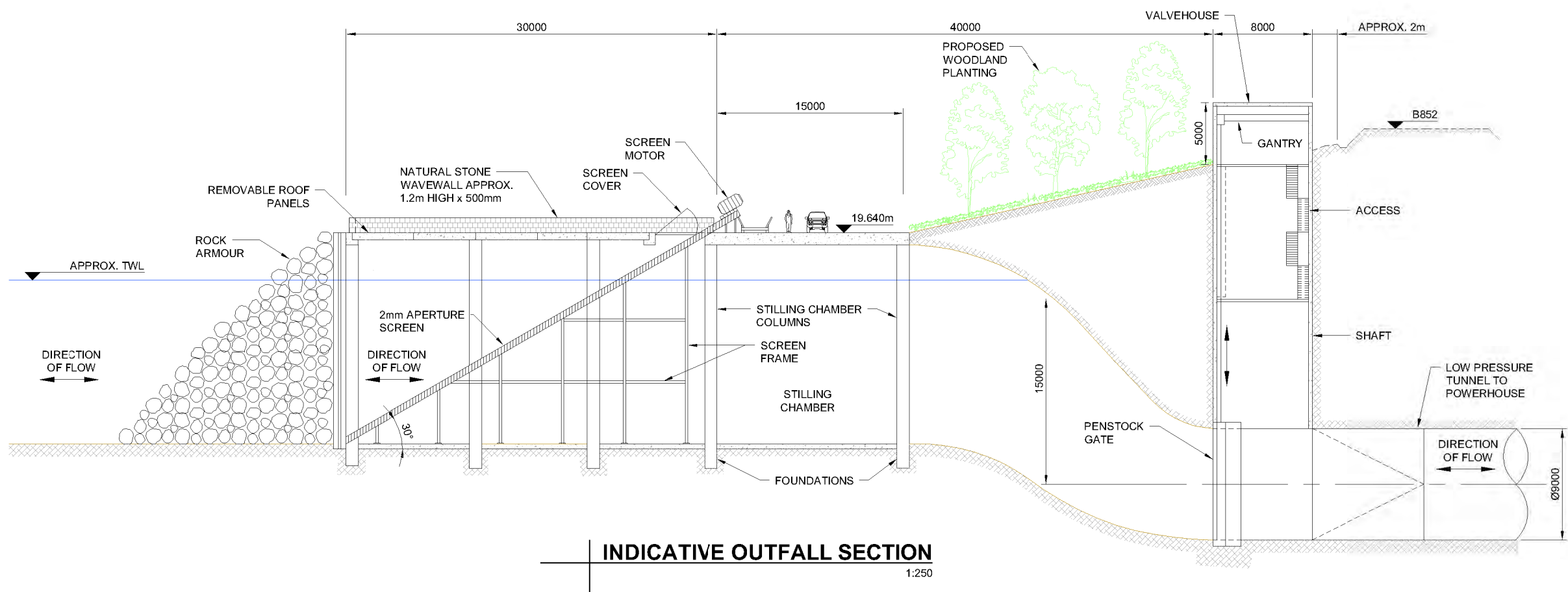
SHEET NUMBER

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DATE

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INDICATIVE OUTFALL SECTION
 1:250

REFERENCES

TWL Top Water Level (Loch Ness)

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.12
 INDICATIVE TAILPOND
 INLET / OUTLET SCREEN

REFERENCE

RJ_181004_EIA2.12_v1

SHEET NUMBER

1 of 1

DATE

04/10/18

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Last saved by: JAMES.SCOTT(2018-10-26) Last Plotted: 2018-11-01
 Filename: C:\P\WORKING\AECOM_DS03_UK\JAMES.SCOTT2@AECOM.COM\011212\Figure 2.12.DWG

PROJECT
 RED JOHN PUMPED STORAGE HYDRO
 CLIENT
 ILI (Highlands PSH) Ltd.
 KEY

- Embankment Section
- High Pressure Tunnel
- Power Cavern (Underground)
- Surge Tank (Underground)
- Low Pressure Tunnel

REFERENCES

- TOB Top Of Embankment Level
- TWL Top Water Level (Headpond)
- BWL Bottom Water Level (Headpond)

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.14
 CROSS- SECTION OF THE DEVELOPMENT

REFERENCES

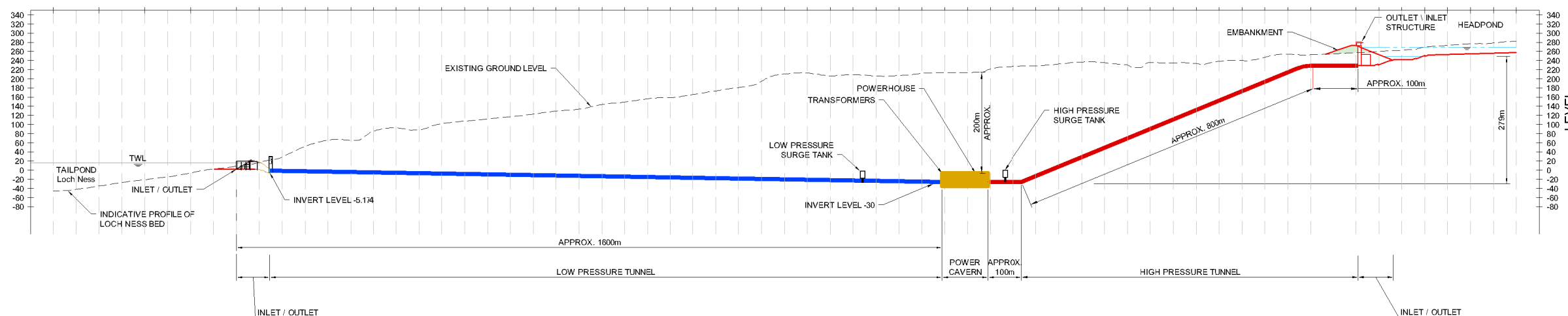
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SHEET NUMBER

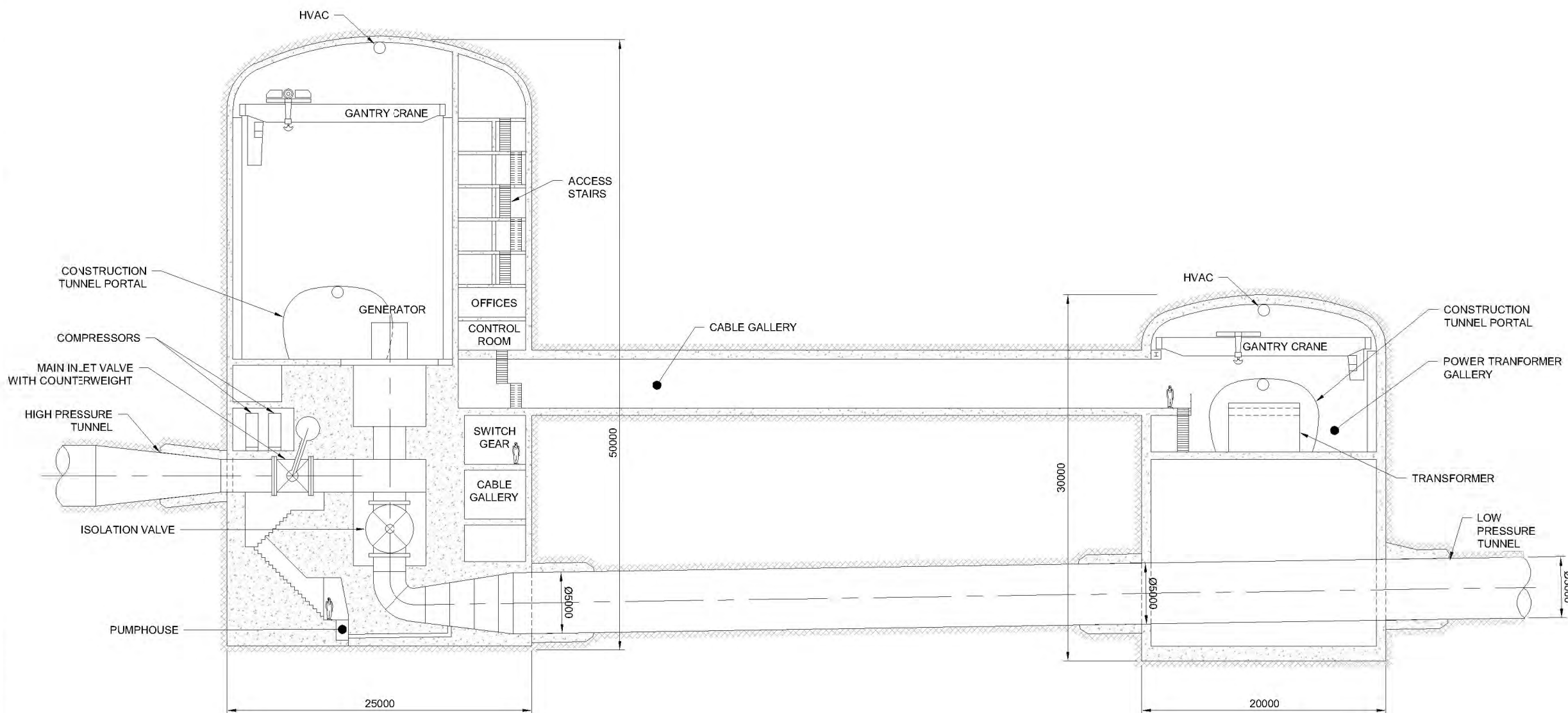
1 of 1

DATE

04/10/18



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INDICATIVE POWER CAVERN SECTION
 1:250

REFERENCES

HVAC Heat Ventilation Air Conditioning

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.15
 INDICATIVE POWER CAVERN SECTION

REFERENCE

RJ_181004_EIA2.15_v1

SHEET NUMBER

1 of 1

DATE

04/10/18

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Last saved by: JAMES.SCOTT(2018-10-26) Last Plotter: 2018-11-01
 Filename: C:\P\WORKING\AECOM_DS03_U\JAMES.SCOTT\20181026\Figure 2.15.DWG

PROJECT
 RED JOHN PUMPED STORAGE HYDRO
 CLIENT
 ILI (Highlands PSH) Ltd.
 KEY

- Development Site Boundary
- Access Tunnel
- Construction Tunnel
- High Pressure Tunnel
- Low Pressure Tunnel
- Power Cavern (Underground)
- Area Excluded From Development Site Boundary

REFERENCES

HVAC Heat Ventilation Air Conditioning
 HV High Voltage Cables

NOTES

- All dimensions are indicative and in metres unless otherwise noted. Do not scale.
- All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.16
 WATERWAYS AND TUNNELS SECTION

REFERENCE

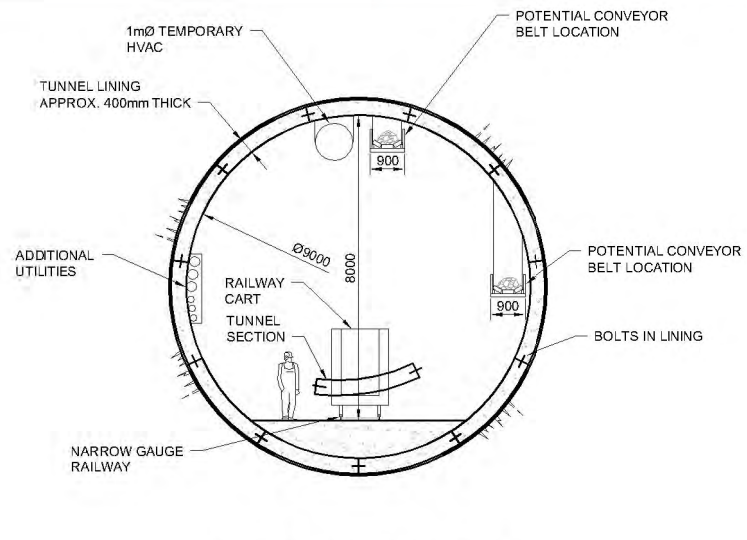
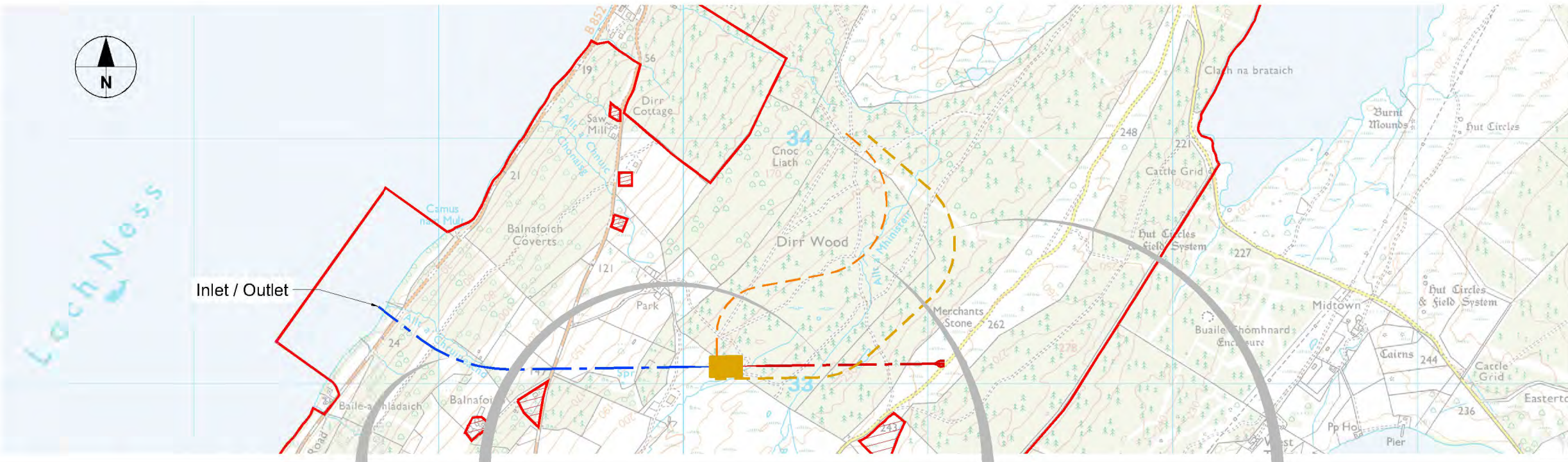
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SHEET NUMBER

1 of 1

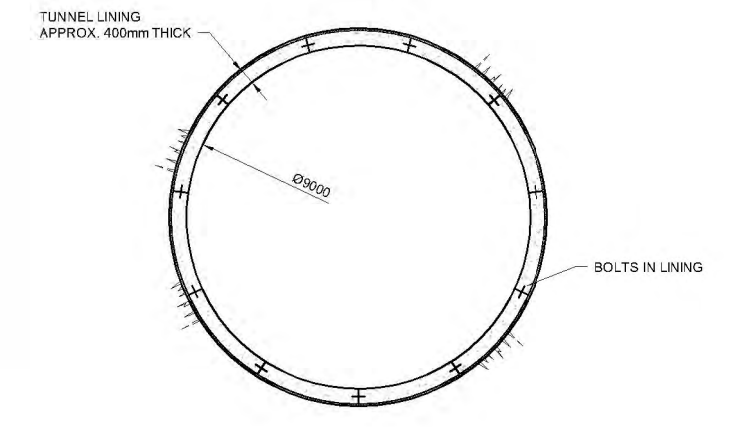
DATE

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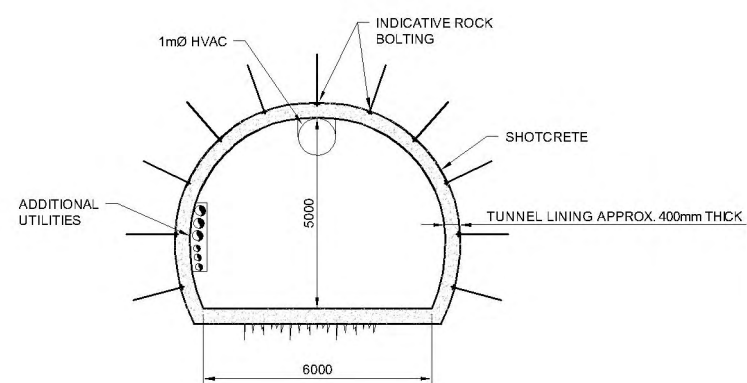
**INDICATIVE SECTION
 WATERWAY TUNNEL**

CONSTRUCTION



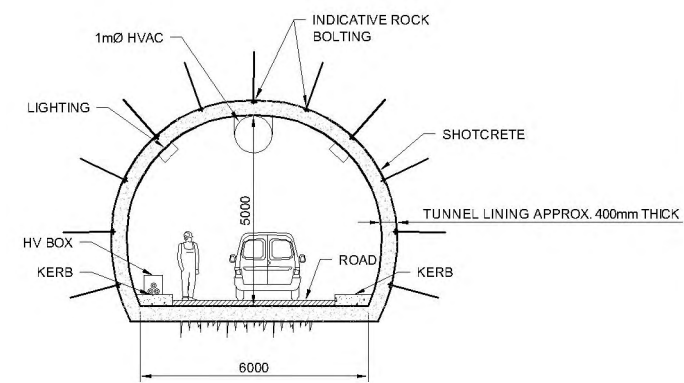
**INDICATIVE SECTION
 WATERWAY TUNNEL**

OPERATION



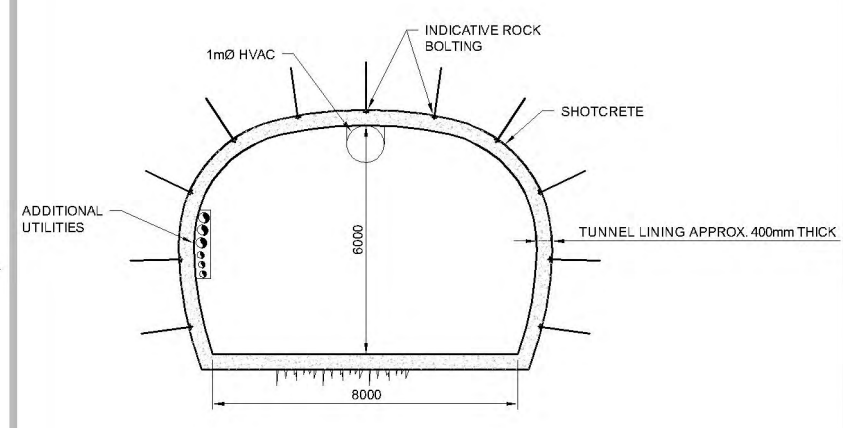
**INDICATIVE SECTION
 ACCESS TUNNEL**

CONSTRUCTION



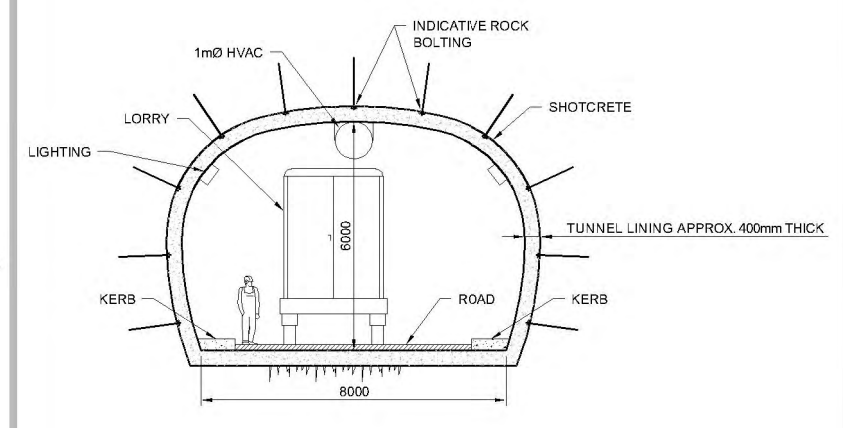
**INDICATIVE SECTION
 ACCESS TUNNEL**

OPERATION



**INDICATIVE SECTION
 CONSTRUCTION TUNNEL**

CONSTRUCTION

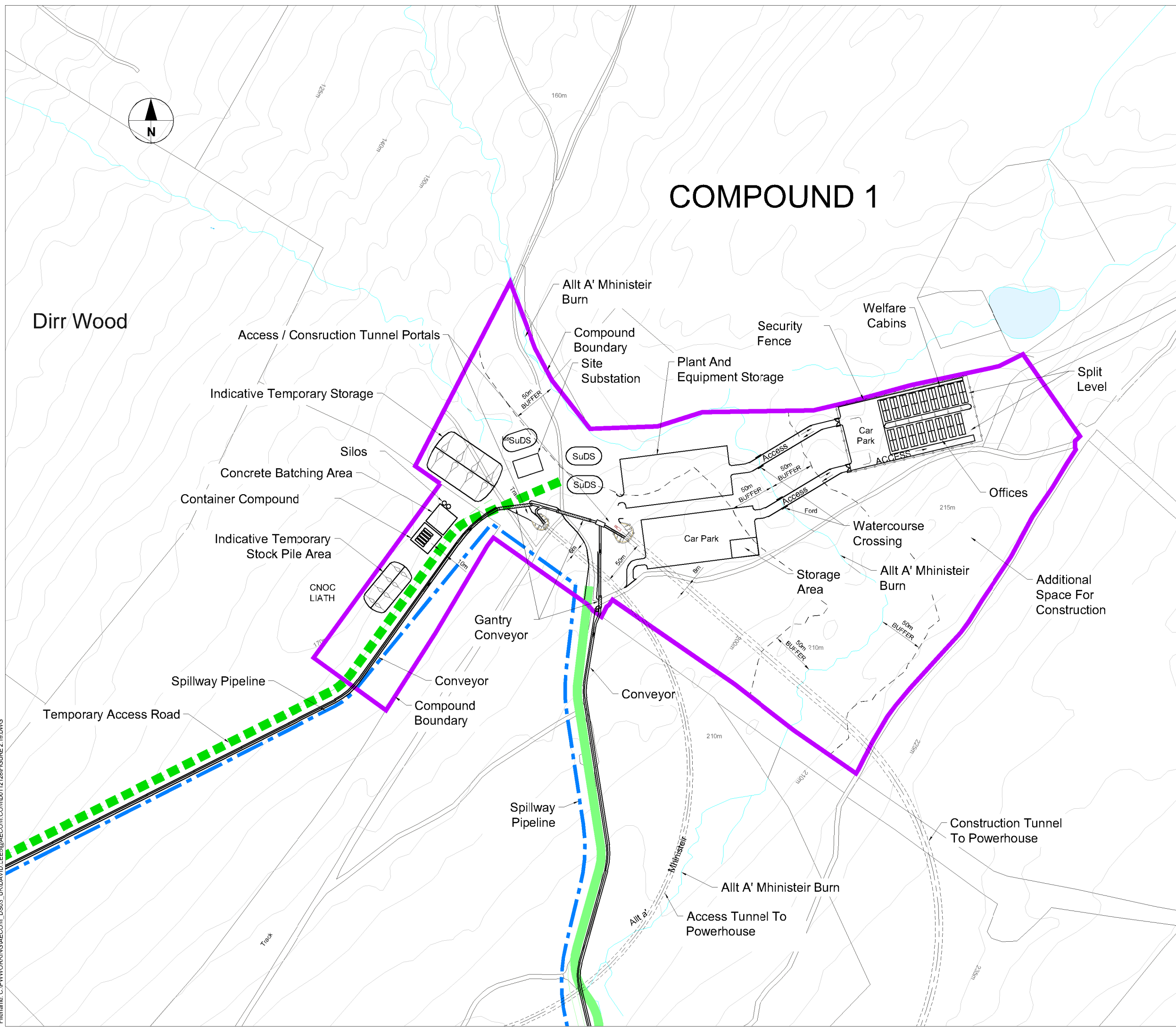


**INDICATIVE SECTION
 CONSTRUCTION TUNNEL**

OPERATION

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 Filename: C:\P\WORKING\AECOM_DS03_UK\DAVID.LEE@AECOM.COM\112128\FIGURE 2.16.DWG



- NOTES**
1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
 2. All levels in metres and reduced to ordnance datum unless otherwise noted.
 3. Indicative layout to be confirmed by contractor.

TITLE
FIGURE 2.19
COMPOUND 1 - INDICATIVE LAYOUT
CONSTRUCTION PHASE

REFERENCE
RJ_181004_EIA2.19_v1

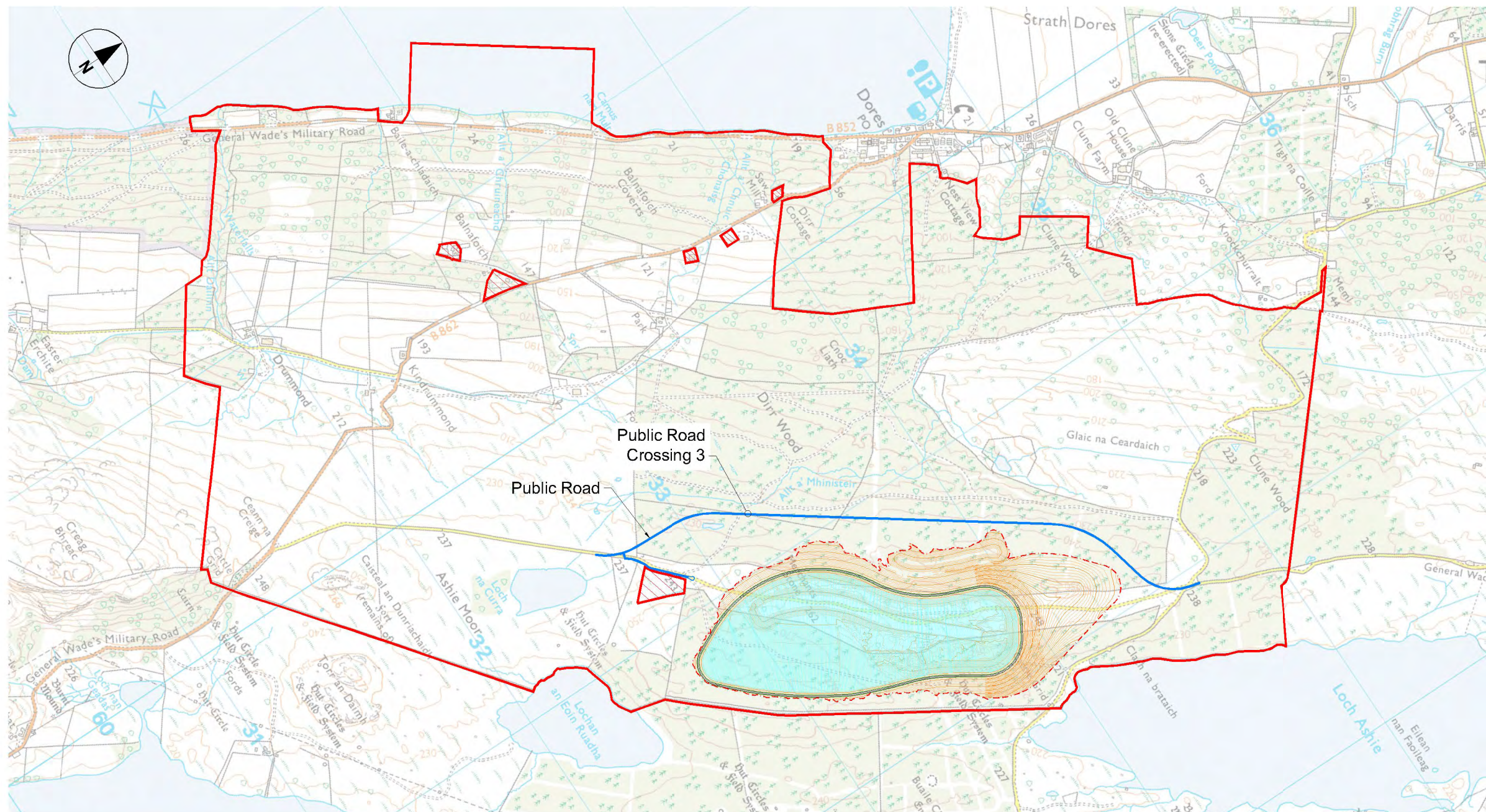
SHEET NUMBER
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DATE
04/10/18

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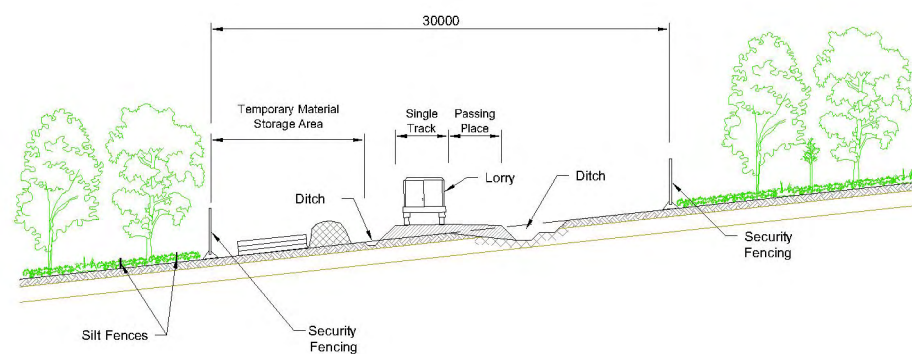
PROJECT
 RED JOHN PUMPED STORAGE HYDRO
 CLIENT
 ILI (Highlands PSH) Ltd.
 KEY

- Development Site Boundary
- Public Realignment - Permanent
- Headpond & Water Surface
- Area Excluded From Development Site Boundary

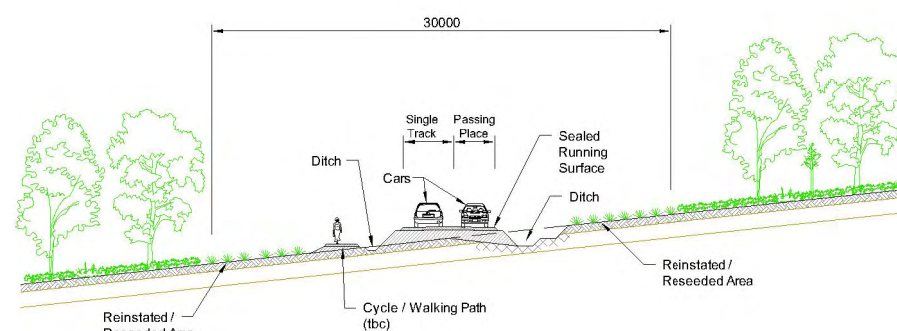


NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.



INDICATIVE PUBLIC ROAD SECTION
CONSTRUCTION
 Scale 1:250



INDICATIVE PUBLIC ROAD SECTION
OPERATION
 Scale 1:250

TITLE
 FIGURE 2.21
 C1064 REALIGNMENT
 INDICATIVE ARRANGEMENT

REFERENCE
 RJ_181004_EIA2.21_v1

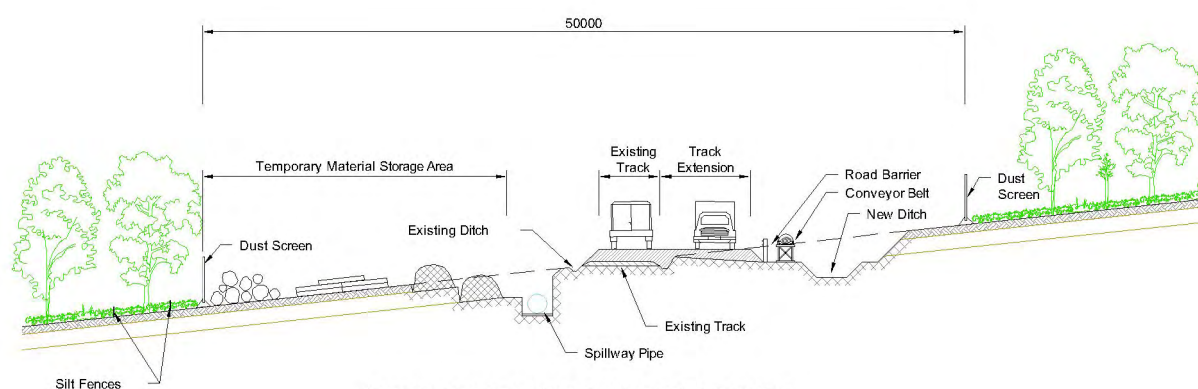
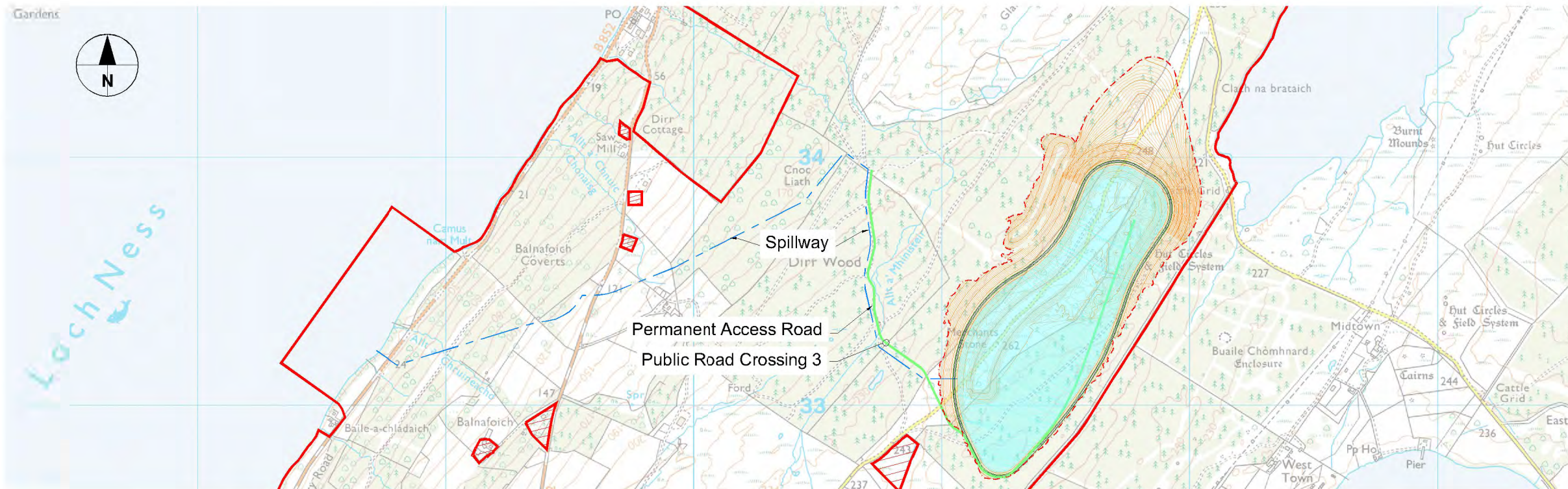
SHEET NUMBER
 1 of 1

DATE
 04/10/18

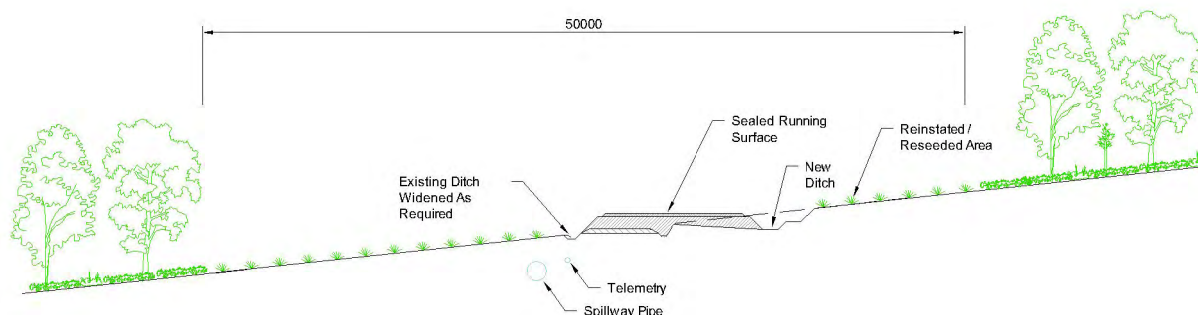
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PROJECT
 RED JOHN PUMPED STORAGE HYDRO
 CLIENT
 ILI (Highlands PSH) Ltd.
 KEY

- Development Site Boundary
- Access Road - Permanent
- Spillway Outfall Pipeline
- Headpond & Water Surface
- Area Excluded From Development Site Boundary



**INDICATIVE ARRANGEMENT FOR
 PERMANENT ACCESS TRACK
 CONSTRUCTION**
 Scale 1:250



**INDICATIVE ARRANGEMENT FOR
 PERMANENT ACCESS TRACK
 OPERATION**
 Scale 1:250

NOTES

1. All dimensions are indicative and in metres unless otherwise noted. Do not scale.
2. All levels in metres and reduced to ordnance datum unless otherwise noted.

TITLE

FIGURE 2.22
 PERMANENT ACCESS TRACK

REFERENCE

RJ_181004_EIA2.22_v1

SHEET NUMBER

1 of 1

DATE

04/10/18

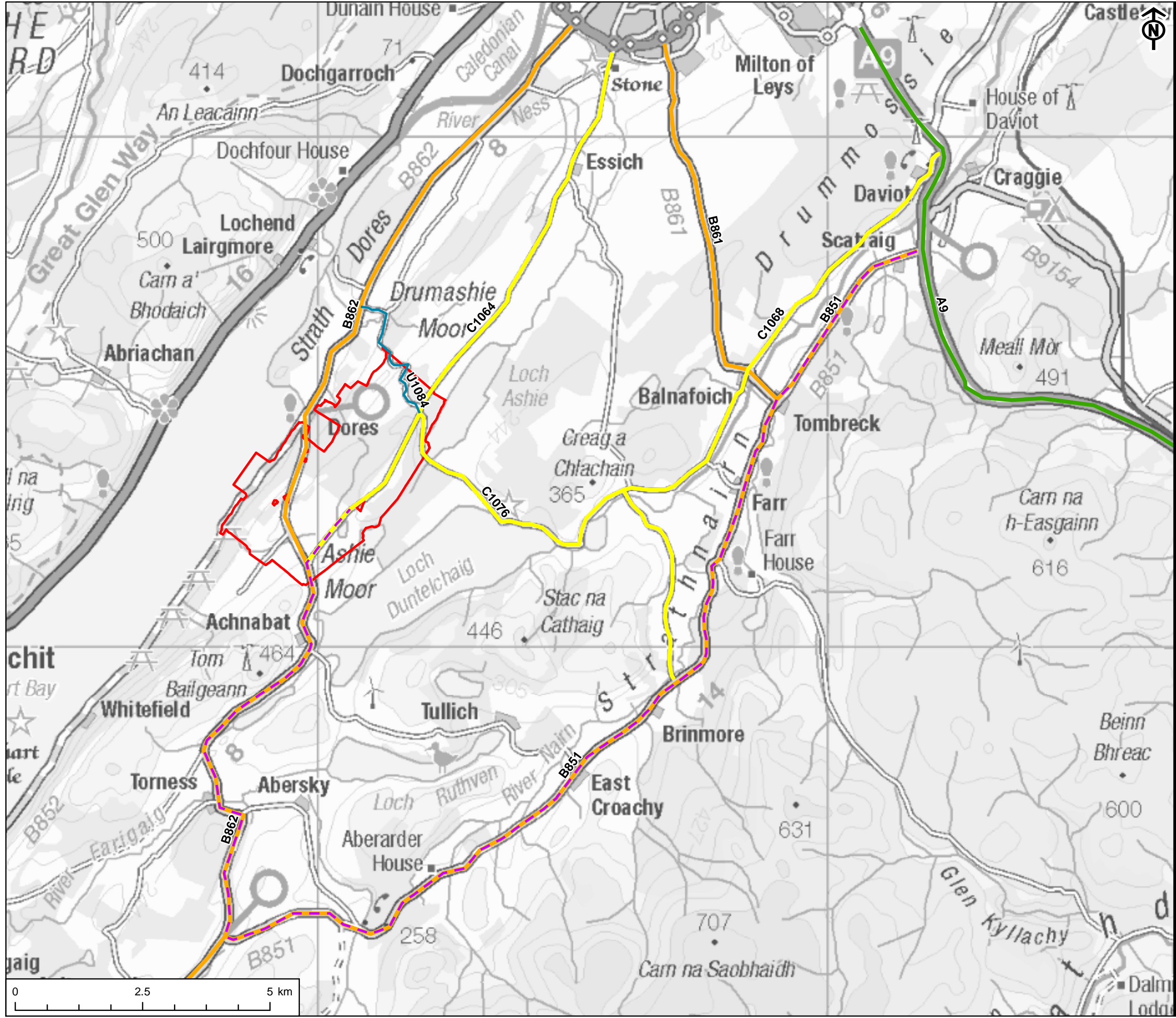
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PROJECT
RED JOHN PUMPED STORAGE HYDRO

CLIENT
ILI (Highlands PSH) Ltd.

- KEY
- Development Site boundary
 - Excluded from Development Site boundary
 - Construction traffic route
 - Trunk road
 - B Class (Secondary road)
 - C Class (Tertiary road)
 - Unclassified road

Project Management Initials: CA Designer: LC Checked: SY Approved: CA



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TITLE
FIGURE 15.1.1
CONSTRUCTION TRAFFIC ROUTE

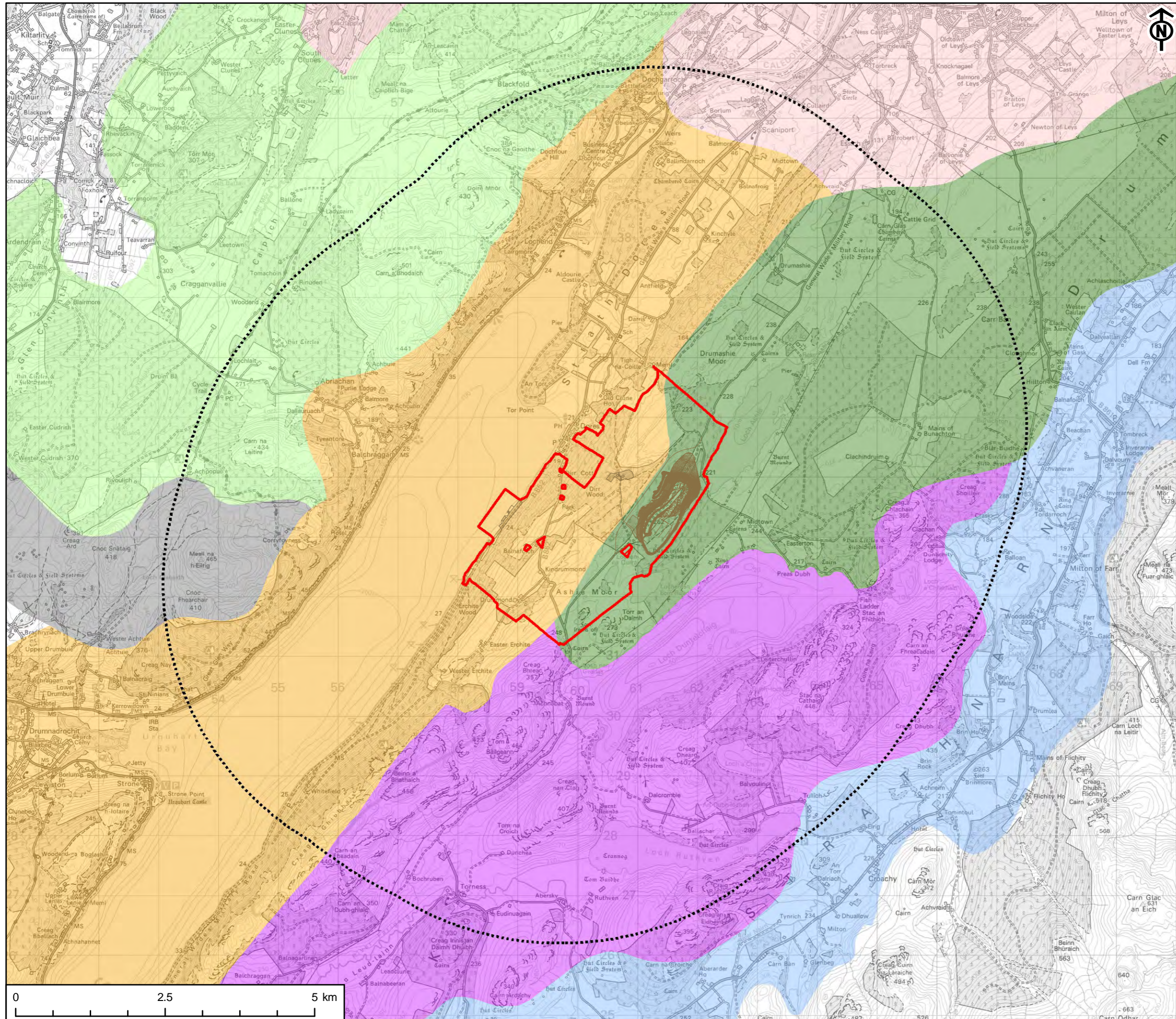
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31/10/18

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Scale @ A3 1:60,000

