

Agenda Item	4.1
Report No	PLN/024/20

HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date: 26 June 2020

Report Title: 20/00616/FUL: Highlands and Islands Enterprise
Land 2600m South West of Dunbuie, Talmine, Tongue

Report By: Acting Head of Development Management – Highland

1. Purpose/Executive Summary

- 1.1 **Description:** Construction of vertical launch space port with launch operations control centre, site integration facility, launch pad complex, antenna park, access road, fencing, services and associated infrastructure
- 1.2 **Ward:** 01 – North, West and Central Sutherland

Development category: Major

Reason referred to Committee: Major development and more than 8 objections

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 is acceptable in terms of all other applicable material considerations.

2. Recommendations

- 2.1 Members are asked to agree the recommendation to Grant planning permission as set out in section 11 of the report.

3. PROPOSED DEVELOPMENT

3.1 The development comprises the erection of a vertical launch facility to allow for the launch of small satellites into space. The intention is that the site would facilitate use by several launch service providers using different launch vehicles. The launch vehicles from the site would launch at a trajectory of between 83° and 98° north, carrying earth monitoring satellites at a frequency of no more than 12 launches per calendar year.

3.2 The key elements of the development include:

- Launch Operations Control Centre – this is where launch and range control operations would take place and where a small viewing area would be located. The building would be 19.6m X 27.9m and have a maximum height of 7m. It will be finished in grey metal cladding and have a green roof which slopes to the ground to facilitate integration with the landscape. Ancillary infrastructure includes:
 - an outdoor plant area;
 - 20 car parking spaces;
 - buried bulk fire suppression tanks;
 - lightning protection; and
 - a solar photovoltaic installation.
- Launch Site Integration Facility – this is where the launch vehicles would be assembled, and the payload is loaded into the launch vehicle. The building would be 44,7 x 32.6m and have a maximum height of 11m. The walls will be finished in grey metal cladding and the roof will be finished in green metal cladding. The building would have ancillary infrastructure including
 - an outdoor plant area;
 - 19 car parking spaces;
 - buried bulk fire suppression tanks;
 - lightning protection; and
 - a solar photovoltaic installation.

The service yard at the Launch Site Integration Facility would be enclosed with a 2.4m high fence.

- Launch Pad Complex – this is where the launch vehicles will take off from. The complex will comprise:
 - launch pad comprising of a 333m² area of concrete and a 1,500m² area of gravel;
 - fuel, oxidiser and chemical storage tanks and associated bunding (for the storage of liquid oxygen, BioLPG, Rocket Propellant, Liquid Nitrogen, and Gaseous Helium);
 - propellant conditioning plant;
 - water deluge system (comprising a 50,000 litre capacity steel tank, 5m I height);
 - strongback (comprising a 22m tower used to help erect and support the launch vehicle. This will only be in a vertical position on launch day);
 - flame diverter (approximately 2.6m in height);
 - lightning protection (comprising a 40m retractable lightning protection tower);
 - proprietary rail system (to carry the launch vehicle from the Launch Site Integration Facility to the launch pad);

- Mobile Heating, Ventilation and Air Conditioning System.
- Antenna Park – comprising an area of hard standing where telemetry and radar devices would be sited. The exact arrangement of this area would be subject to the requirements of the launch service operator. The area will be enclosed with a 2.4m high fence; and
- Access Road – this would be a 2.5km length of road. The road would generally be of 4m in width with localised widenings. 1.6km of the 2.5km road would be a floating road. The remainder of the road would comprise asphalt, concrete and unbound surfacing. The access road will require 3 watercourse crossings which will be via open bottom, half barrel culverts.

For the purposes of the assessment of the application it has been assumed that a launch vehicle of 19m in height and a diameter of 1.3m will be used. The site has been designed in a manner to allow launches of rockets fuelled by a mix of liquid oxygen (LOX) and bio-Liquified Petroleum Gas (BioLPG) or LOX and Rocket Propellant 1 (RP-1).

3.3 The applicant states that the North of Scotland is one of the only suitable areas of the UK for the location of a vertical launch facility. It further sets out that the north of Scotland is one of few suitable areas in Europe for the location of such a development. The applicant also explains that the locational suitability of a vertical launch facility is dictated by geography and physics of a vertical launch. The matters considered by the applicant include:

- Launches require to have a northerly ground track to access sun-synchronous and polar orbits efficiently. These are the most commercially desirable orbits for small satellites;
- Launch vehicles are not permitted to fly over permanently populated areas for safety reasons;

As a result of these factors, the location for a vertical launch facility requires to have a north facing coast.

3.4 When considering specific sites for a vertical launch facility in the north of Scotland, the National Space Technology Programme undertook a series of five reports which considered sites for a vertical launch facility. One of the reports, known as the SCEPTRE Report was published in 2017. This considered a range of issues including environmental impact. The report identified the Mhoine peninsular as one of three of the most promising sites. This list also included the Shetland Isles and Scolpaig, North Uist.

3.5 Access to the site would be via a new junction on the A838. There is no existing infrastructure on the site. It is proposed that potable water would be stored in 21,000 litre tanks within the Launch Operations Control Centre. A new electricity connection for the site will be required. New telecom connections will be required, and these would terminate at the launch control building. Waste water treatment will be via a private system discharging to a suitable watercourse or via groundwater.

3.6 The applicant held two public exhibitions to seek the views of the local community. These were held at Melness Community Centre on 02 October and 25 November 2019. Further to this the applicant carried out consultation events in Thurso (04 November 2019), Skerry (05 November 2019), Tongue (06 November 2019), and Durness (07 November 2019). Other consultation activities have also been undertaken.

- 3.7 The applicant utilised the Council's Pre-Application Advice Service for Major Developments twice in advance of the submission. The summary of the advice is provided below:
- "The unique UK level development of the UKVL facility near Melness, is considered to present very significant potential development opportunities for the economy and skills base of the population of north west Sutherland, as well as also impacting on larger centres such as Dounreay/Thurso, and Inverness.*
- The proposal is also very likely to have unique challenges within an area notable for its natural heritage interests and wild and largely undeveloped landscape. The development of this facility has the potential to create numerous jobs in the area both directly and indirectly and could have other positive impacts on the entire north Highlands area, helping to consolidate the wider area's position as a leader in advanced technologies."*
- 3.8 The application is supported by an Environmental Impact Assessment Report (EIAR) which contains chapters on Seascape, Landscape and Visual Impacts; Ecology; Ornithology; Water Resources; Air Quality; Noise and Vibration; Cultural Heritage and Archaeology; Traffic and Transport; Climate Change; Major Accidents and Disasters; Transboundary Considerations and a Schedule of Mitigation. The application is also accompanied by a Planning Statement; Design and Access Statement; Road Alignment details; Drainage Impact Assessment; Socio-economic Statement; and Economic Impact Statement.
- 3.9 The proposed development does not have a pre-determined operational life. However, the applicant has stated that following a period of 5 years of inactivity at the site, the site would be decommissioned. The applicant acknowledges that these matters related to decommissioning will not be confirmed until the time of the submission of the decommissioning and restoration plan.
- 3.10 The applicant anticipates that the construction period will last 15 months. This period can be defined as three key phases: Enabling Works; Main Construction Activities; and Site Demobilisation and Reinstatement. The applicant has stated it will utilise a Construction Environment Management Document throughout the construction period. This would require to be approved by the Council, in consultation with relevant statutory bodies before the start of development.
- 3.11 No modifications have been made to the proposed development since validation of the application. The applicant has however provided clarifications on the proposed approach to visitor management in response to the consultee comments from Scottish Natural Heritage. This information did not change the scope of the development.
- 3.12 To allow the proposed development to operate several licences require to be granted under the provisions of The Space Industry Act 2018. The regulations which detail the absolute requirements of the licencing procedures are to be published in 2020. Between the owner and operator of the vertical launch facility the following licences will be required:
- Operator licence – this will cover launch vehicle(s) and an operator license will also be required for the payload(s)
 - Spaceport licence – the will cover the operation of the spaceport site itself
 - Range services licence – this will cover the area of land, sea or air that will require to be cleared prior to a during the launch to enable the launch to take place safely.

These licences will be regulated by the United Kingdom Space Agency (UKSA).

3.13

Further to licences under the Space Industry Act 2018, several other licences would be required, including but not limited to:

- Marine Licence – this would consider the deposit of objects from space vehicles in the marine environment. This is regulated by Marine Scotland
- Approval of a Planned and Permanent Redistribution of Air Traffic - will be required though what is known by as the CAP1616 process which is regulated by the Civil Aviation Authority.
- Controlled Activities Regulations Licences – will be required in relation to discharges to the watercourse and temporary abstraction. A Construction Site Licence will also be required.

3.14

On 28 May 2020, the Highland Council were served with a direction from Scottish Government. This states that if The Highland Council are minded to grant planning permission for the proposed vertical launch facility, we are required to notify Scottish Ministers. This Direction does not commit Scottish Ministers to calling in the application, but it does reserve their right to intervene. The Direction has been served to assist in providing an overview of applications for spaceport development in the planning system.

4. SITE DESCRIPTION

4.1

The site is located on the A'Mhoine peninsula and extends to approximately 307ha with the built development and infrastructure covering 3.13ha (Chapter 5, Table 5.23 of the EIAR). There are a number of properties in the settlements to the north east and east of the application site. The settlements include Midtown (3.8km), Skinnnet (4.2km), Talmine (3.7km), Achinhuagh (3.8km), Midfield (4.2km), Achinver (3.1km), Strathan (3.5km) and West Strathan (1.8km). Tongue is located 4.1km to the east of the site across the Kyle of Tongue. The closest property is 1.75km from the application site boundary. The area to the north west, west and south of the proposed development is sparsely populated.

4.2

The site is bounded to the south by the A838 road. The site itself comprises undeveloped sweeping moorland which varies in vegetation cover with underlying peat. There are a number of watercourses which run through the site including: Feith an Laisg, Alltan Dubh, Allt Unnis Choinnich and Allt an Loin Chaoil.

4.3

In terms of sites designated for ecological value, the application site contains part of the Caithness and Sutherland Peatlands Special Area of Conservation and Ramsar site as well as the Ben Hutig and A' Mhoine Sites of Special Scientific Interest. It should however be noted that the built infrastructure of the proposed development lies outwith the designated sites. The Inverhope Site of Special Scientific Interest lies to the west of the site.

4.4

Sites designated for ornithological interest within the application site include Caithness and Sutherland Peatlands Special Protection Area and Ramsar site as well as the Ben Hutig Site of Special Scientific Interest. It should however be noted that the built infrastructure of the proposed development lies outwith the designated sites. The North Sutherland Coastal Islands Special Protection Area lies to the north west of the site.

- 4.5 The Kyle of Tongue National Scenic Area (NSA) is located approximately 1.7 km to the east of the site at its closest point and also extends north east of the site. The Eriboll East and Witten Head Special Landscape Area is located to the north and east of the site.
- 4.6 The Ben Hope and Ben Loyal Wild Land Area (WLA) lies approximately 0.4 km south of the site boundary.
- 4.7 The application site and the surrounds accommodate valued habitats including: ground water dependent terrestrial ecosystems (GWDTEs); bog; heath; and flush. The site is used by protected species, including but not limited to otter, reptiles and water voles. The site and wider area also carries a number of ornithological interests including but not limited to merlin, white tailed eagle, golden eagle, greenshank, red-throated diver, greylag goose, golden plover, green shank, peregrine, pink footed goose, hen harrier, barnacle goose, short-eared owl, and dunlin.
- 4.8 Much of the application site is covered in peat. The peat depths on the site vary between 0.35m to 4.45m in depth. The majority of the infrastructure on the site is on areas of peat less than 1.5m in depth.
- 4.9 The site is within an area which contains a number of tourist and recreation assets. These include but are not limited to walkers upon Munros and Corbetts and local hill tops as well as promoted routes on the local road network. The Land Reform (Scotland) Act also allows for significant access rights for walkers across this countryside.
- 4.10 The surrounding area contains a number of historic environment features. The applicant has carried out an assessment based on an Inner Study Area (i.e. within 2km of the application site) and outer study area (i.e. within 10km of the application site). The inner study area includes Moine House as a listed building and a number of other assets that are non-designated. The outer study area contains further listed buildings, scheduled monuments and other assets that are non-designated.

5. PLANNING HISTORY

- | | | | | |
|-----|------------|--|------------|---------|
| 5.1 | 08.10.2019 | 19/04008/PAN Erection of vertical launch space port comprising assembly building with ancillary structures, launch operations and control centre, access roads and car parking, antenna farms, commodity farms, launch pad complex, launch towers, safety and security fencing and associated infrastructure | Closed | |
| 5.2 | 23.07.2019 | 19/02703/SCOP Proposing to develop a space hub | EIA Issued | Scoping |
| 5.3 | 05.02.2019 | 18/05855/PREAPP Project aims to launch satellites into Earth orbit from the territory of the United Kingdom | Closed | |
| 5.4 | 06.03.2017 | 17/00124/PREAPP Project aims to launch satellites into Earth orbit from the territory of the United Kingdom. The project comprises a new junction off the A838 road, a 70m diameter | Closed | |

concrete launch pad with an associated access road, approximately 2km in length, security and assembly buildings, hard standing areas, security fencing and surface water drainage facilities. Major Pre-Application Advice Service Meeting contact Kellie Kotze for further details.

6. PUBLIC PARTICIPATION

6.1 Advertised: Environmental Impact Assessment Application, and Schedule 3 Development

Date Advertised: 14.02.2019

Representation deadline: 15.03.2020

Timeous representations: 575 (457 in objection, 118 in support)

Late representations: 15 (11 objections, 3 support and 1 petition in support including 513 signatures at the time it was submitted)

6.2 Material considerations raised are summarised as follows:

Matters raised in objection to the application:

- a) Impact on climate change as a result of the construction and operation of the proposed development;
- b) Impact on natural heritage (including qualifying features of designated sites, protected species and ornithology);
- c) Impact on peat land;
- d) Economic benefit does not outweigh environmental impact;
- e) Impact on amenity (noise);
- f) Impact on tourism;
- g) Impact on traffic and transport;
- h) Adverse landscape and visual impact;
- i) Impact of visitor management;
- j) concern over this being the first element of a larger development;
- k) risk to human health;
- l) Contrary to the Development Plan;
- m) Loss of croft land;
- n) Lack of details on restoration of the site;
- o) Impact on potential world heritage site designation;
- p) Impact on dark skies
- q) Risk of flooding
- r) Impact on fisheries
- s) Impact on public access
- t) Impact on built and cultural heritage

Matters raised in support of the application:

- a) Limited visual impact;
- b) Economic benefit (jobs, population growth, regeneration);
- c) Limited environmental impact due to the proposed approach to the construction and restoration of the site;
- d) Potential for the development to strengthen a fragile area;
- e) Potential tourism benefits;

- 6.3 It should be noted that some letters of support were also submitted as an addendum to a letter. These have not been considered as they were dated in advance of the submission of the application.
- 6.4 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.

7. CONSULTATIONS

- 7.1 **Tongue Community Council** support the application. It requests that a condition is attached to require a socio-economic study of the impact of employment at the site particularly in regard to housing and the impact on the community. It requests that any developer contributions arising from the development are spent within the area and that any contributions from launch costs are a minimum of 1% of each launch or £5,0000 for each launch, whichever is the greater.
- 7.2 **Bettyhill, Strathnavar & Altnaharra Community Council** support the application. It considers the proposal will: provide a variety of jobs; help diversification of the local economy; be a tourist facility and give support to the popularity of the NC500 route; and provide enhancement of local infrastructure. Further it considers the proposal to be a high value asset and the small footprint minimises environmental concerns.
- 7.3 **Durness Community Council** support the application due to the jobs it will bring to the area.
- 7.4 **Access Officer** does not object to the application. He notes the proposed restriction on public access rights of approximately 7hrs per launch event is not significant, subject to access along the A838 being retained.
- 7.5 **Contaminated Land** do not object to the application. It notes that their records do not have any previous industrial / commercial uses that would cause land contamination.
- 7.6 **Environmental Health Officer** does not object to the application.
- 7.7 **Flood Team** do not object to the application. It is satisfied that the risk of flooding of the development is low. It requests conditions to secure: no site infrastructure, with the exception of any watercourse crossings, within 10m from the top of the bank of any watercourses; and that all watercourse crossings are designed to ensure they do not impede a 1 in 200 year plus climate change flow and include an appropriate level of freeboard.
- It notes that the final drainage design will need to ensure post development discharge rate does not exceed the pre-development greenfield run off rate. A condition is sought to secure the final details of the drainage design.
- 7.8 **Forestry Officer** does not object to the application.
- 7.9 **Historic Environment Team** do not object to the application. It notes that no major impacts on the historic environment are predicted and it welcomes the proposed mitigation to safeguard the three shielings. A condition is requested to secure a programme of work for the protection and investigation of historic features within the site.

- 7.10 **Transport Planning** do not object to the application. It highlights that while the Naver Bridge is scheduled for replacement, it is currently not suitable for a large number of HGV movements. As a result a scheme of mitigation will be required for to ensure the safety and condition of the bridge, inclusive of any mitigation work.
- It notes that the daily average traffic flows on the A838 and A836 are less than 1000 vehicles per day and the number of existing HGV movements is also low. On the A836 close to Skelpick and the Naver Bridge the average daily HGV flow was 13 vehicles. It notes that peak HGV movements occur in Month 4 when 82 HGV movements per day are estimated (42 inbound and 42 outbound). This compares to the existing daily HGV flow of 13. It considers that the impacts requiring mitigation will be related to the structural condition of the roads used for the construction traffic and on road safety and the free flow of traffic particularly within the settlements and at schools. It has agreed the 17 passing places which require to be upgraded. A condition is requested to secure a construction traffic management plan.
- During the operational period it notes that the peak average daily movements are estimated 94 per day (ie. 47 vehicles in). A condition requiring a Travel Plan to deal with the site operational staff during the launch campaign period is requested. It considers that no other mitigation is required to address the impact of the traffic generated by the operational staff.
- The parking level is considered to be sufficient but requires some layout amendments. A condition is sought to ensure the level of parking proposed and enhancements to the staff parking layout.
- It notes the difficulty in predicting the numbers of spectators that will be attracted to the vicinity of the site to view the launches. A peak is expected for the first few launches and then it seems likely that the numbers will reduce considerably. It notes that the predicted mode split for visitors to the site as being unrealistic and considers that a condition to secure a visitor management plan and parking control, with associated mitigation will be required. This would also require a Launch Day Traffic Management Plan.
- 7.11 **Civil Aviation Authority** do not object to the application
- 7.12 **Crofting Commission** do not object to the application. It notes that this is land that is more suitable from a crofting perspective for other developments than that of better quality croftland. It states that the land has been classified as 6.3 in terms of Land Capability for Agriculture in Scotland which entails it is only suitable for rough grazing and not capable of agricultural improvement. It notes that as it is common grazing land it is used for traditional stock rearing of sheep and cattle, and there may be continuation of some traditional peat cutting for domestic purposes. It explains that there are 82 croft holdings that have shared grazings rights on the common grazing but a minority of these will currently be used for traditional grazings purposes. It considers that based on current grazings use, the proposed development would not appear to have a major impact upon customary crofting practices. It recognises that there will be loss of land but explains that the use of land for traditional pastoral purposes has declined. It has set out that one crofters use of the common grazings will be directly affected by the development. The Crofting Commission consider that any loss of land is outweighed by the wider social and economic benefits that will be derived from the potential development.
- It recognises that the land requires to be utilised in a manner that enables the continuity and development of the community. Employment opportunities and the development of the wider economy are important for crofting and enabling the

retention of active crofters and crofting families within crofting communities. It explains that it understands that the proposed development will offer employment opportunities. It considers that the proposed development has the potential to assist the retention of an active crofting population to invest in croft housing and the management of croftland.

It notes the potential disturbance to livestock and considers that consultation should be undertaken with an appropriate veterinary authority.

It concludes that in terms of sustaining active crofting communities in economically fragile areas, sometimes the loss of some croft land and its associated environmental benefits has to be countenanced and effected.

- 7.13 **Health and Safety Executive (Hazardous Substances)** has no comment to make on the application.
- 7.14 **Highlands and Islands Airports Limited** do not object to the application. It notes that the development would not infringe safeguarding criteria for Wick Airport. It requires continued engagement regarding launch notification procedures.
- 7.15 **Historic Environment Scotland** do not object to the application. It agrees with the methodology used to undertake the assessment of built and cultural heritage. It notes that there would be a minor effect on the settings of: Caisteal Bharraich Tower (SM1896), Tongue House (LB18458), Tongue House (GDL375), and Tongue Parish Church (Church of Scotland), burial ground and gatepiers (LB18456). It considers that the degree of change to the view in the setting of these features is low. It notes that the Noise and Vibration Assessment concludes that the proposal will have no adverse effect on the designated heritage assets in the outer study area.
- 7.16 **Marine Scotland (Licensing Operations Team)** do not object to the application. It notes that the deposit of objects from space vehicles, such as the rocket stages, in the marine environment would require a marine licence.
- 7.17 **Ministry of Defence (Defence Infrastructure Organisation)** do not object to the application. It notes that the application is outside of any Ministry of Defence safeguarding areas.
- 7.18 **National Air Traffic Services** do not object to the application. It notes that the proposed development does not conflict with its safeguarding criteria.
- 7.19 **Office for Nuclear Regulation** did not respond to the consultation
- 7.20 **Scottish Environment Protection Agency (SEPA)** object to the application unless conditions are applied.

It considers that the impact on peat in relation to the proposal is compliant with the Development Plan and Scottish Planning Policy as the development has: avoided locating development on areas of deepest peat; avoided areas of undisturbed peat where possible; minimised the footprint of the development; sought to employ construction techniques to minimise impacts on peat. It requests a condition to ensure the foundations for the Launch Operations Control Centre and the rail track are piled foundations.

The 23,714m³ of peat to be excavated is noted, with 5,000m³ of this to be used in reinstatement works post construction. It welcomes the use of the remaining 18,443m³ of peat being used in peatland restoration works over an area of around 20.5 hectares of damaged peatland. It welcomes the provisions of the Outline

Habitat Management Plan which will facilitate the restoration of 67.5ha of degraded peatland. It requests conditions to secure a finalised Peat Management Plan and a Habitat Management Plan.

It understands that the amount of carbon lost through construction as a result of peat excavation should be sequestered back into the peat as a result of the proposed restoration works. It questions whether it would be possible to increase the area of peatland management to maximise carbon sequestration to the future level of activity of the development.

It notes that the only significant loss of Ground Water Dependant Terrestrial Ecosystems on the site is the M6 flush to the north of the Launch Site Integration Facility building. However, it considers the loss of the habitat acceptable if impacts are minimised and suitably compensated. A condition is sought to ensure drainage plans are produced which would treat the distinct channel of M6 flush is treated like a watercourse.

It is content that the development minimises impacts on the water environment. It requests a condition to secure the design details of watercourse crossings. It welcomes the buffer of at least 50m between infrastructure and watercourses. It notes that the launch pad is only 40m away from a watercourse but considers this is acceptable due to the impact having this in a different location would cause.

The need for water abstraction for a temporary period during construction is acknowledged and it advises that it is likely it would be capable of being authorised by SEPA.

In terms of surface water, it is content that the approach to surface water drainage will provide adequate treatment of run-off while minimising impacts on local habitats and peatland. It requests a condition to secure the final detailed design of the surface water drainage features. It explains that the deluge drainage system in operation at the launch pad will be treated using an oil interceptor and filter drain prior to discharge to a local watercourse. It request a condition to secure monitoring of the discharge post launch, with the need for review and mitigation if required.

Foul water drainage is considered acceptable by SEPA however, it requests that an alternative solution which will have a lower impact on the environment is achievable that it should be implemented. A condition is requested to secure this.

It requests conditions to ensure the mitigation outlined in the Schedule of Mitigation is secured. Further it considers a condition should limit development to only the areas identified in the Extent of Works Plan.

Confirmation is provided that the level of fuels, oxidisers and other chemicals store on site are at a level at which the Control of Major Accident Hazard regulations apply.

It requests that should the development not be used for a period of 5 years that the site should be decommissioned. It also recommends a bond to ensure adequate funds are in place to ensure suitable restoration.

SEPA assume a visitor management plan will be secured by condition along with environmental monitoring of the plan.

- 7.21 **Scottish Natural Heritage (SNH)** object to the application unless the development is constructed and operated strictly in accordance with the mitigation detailed in their response. Initially it objected on the lack of information related to visitor management in relation to the impact on European designated sites. The applicant subsequently provided SNH with a document clarifying how the visitor management strategy could be implemented. Following that document being provided SNH

consider that there would be no likely significant effect on the integrity of the European designated sites subject to mitigation be secured as a condition and the mitigation being strictly implemented. A detailed Visitor Management Plan, Construction Environmental Management Plan (including species protection plans) and provision of an Ecological Clerk of Works require to be secured by condition.

It notes some effects on the qualities of the Kyle of Tongue National Scenic Area but it considers that the special qualities of the National Scenic Area will remain well expressed. To ensure this is the case it requires conditions to ensure the retraction of the lightning tower when the rocket is not on the launch pad and a detailed lighting plan be produced and implemented.

It is in agreement with the conclusions of the assessment on the impact on Wild Land Areas produced by the application that the proposal would not have a significant effect on the wild land area qualities of the Ben Hope – Ben Loyal Wild Land Area (WLA38).

Advice is provided setting out that a decommissioning plan is sought and accompanied by an appropriate bond.

7.22 **Scottish Water** did not respond to the consultation.

7.23 **Transport Scotland** do not object to the application. It requests conditions to secure a construction traffic management plan and a launch day traffic management plan.

8. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

8.1 Highland Wide Local Development Plan 2012

- 28 - Sustainable Design
- 29 - Design Quality and Place-making
- 30 - Physical Constraints
- 31 - Developer Contributions
- 36 - Development in the Wider Countryside
- 47 - Safeguarding Inbye/Appportioned Croftland
- 55 - Peat and Soils
- 56 - Travel
- 57 - Natural, Built and Cultural Heritage
- 58 - Protected Species
- 59 - Other important Species
- 60 - Other Importance Habitats
- 61 - Landscape
- 63 - Water Environment
- 64 - Flood Risk
- 65 - Waste Water Treatment
- 66 - Surface Water Drainage
- 72 - Pollution
- 73 - Air Quality
- 77 - Public Access

8.2 **Caithness and Sutherland Local Development Plan 2018**

The proposal is within an area identified for Flexible Community Led Development but is neither allocated or safeguarded for development by an allocation within the Local Development Plan. There are no specific policies relevant to the proposal included within the Caithness and Sutherland Local Development Plan. However, the Local Development Plan identifies Special Landscape Areas within the plan area.

8.5 **Highland Council Supplementary Planning Policy Guidance**

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

Developer Contributions (November 2018)

Flood Risk and Drainage Impact Assessment (Jan 2013)

Highland Historic Environment Strategy (Jan 2013)

Highland's Statutorily Protected Species (March 2013)

Managing Waste in New Developments (March 2013)

Physical Constraints (March 2013)

Public Art Strategy (March 2013)

Special Landscape Area Citations (June 2011)

Standards for Archaeological Work (March 2012)

Sustainable Design Guide (Jan 2013)

9. **OTHER MATERIAL POLICY CONSIDERATIONS**

- 9.1
 - National Planning Framework for Scotland 3
 - Scottish Planning Policy
 - Planning Advice Note (PAN) 1/2011: planning and noise
 - Circular 1/2017 – Environmental Impact Assessment
 - PAN 60 – Planning for Natural Heritage
 - National Space Policy (UK Government)

10. **PLANNING APPRAISAL**

- 10.1 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.

Determining Issues

- 10.2 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

- 10.3 The key considerations in this case are:
 - a) Development Plan and other planning policy;
 - b) Economic Development;
 - c) Construction;
 - d) Roads, Transport and Wider Access;
 - e) Water, Flood Risk, Drainage and Peat (inc carbon emissions);
 - f) Natural Heritage including ornithology;
 - g) Built and Cultural Heritage;
 - h) Design, Landscape and Visual Impact (including Wild Land Areas);

- i) Impact on Croft Land;
- j) Noise and Air Quality;
- k) Other material considerations.

Development plan/other planning policy

- 10.4 The Development Plan comprises the adopted Highland-wide Local Development Plan (HwLDP), Caithness and Sutherland Local Development Plan (CASPlan) and all statutorily adopted supplementary guidance. There are no site specific policies affecting this application site within the Caithness and Sutherland Local Development Plan.
- 10.5 The most relevant policies for determination of the application is set out in the Highland-wide Local Development Plan. The primary policy for determination of the application in so far as it relates to the location of the development is Policy 36 (Wider Countryside). The preamble to Policy 36 sets out that the Council supports development of rural areas because this will help to maintain population, infrastructure and services. This policy requires consideration of the extent which developments are acceptable in terms of siting and design; pattern of development; compatibility with landscape character and capacity; loss of locally important croft land; and servicing. It states that regard will be had to development in Fragile Areas (the development is within a Fragile Area as defined by HIE) in relation to maintaining population and services by helping to re-populate communities and strengthen services. These matters are considered in this report. Any development assessed against this policy also requires to be considered against all other relevant policies of the HwLDP. Such an approach is consistent with the concept of Sustainable Design (Policy 28) and aim of Scottish Planning Policy to achieve the right development in the right place; it is not to allow development at any cost.
- 10.6 A number of other relevant policies are contained within the HwLDP and required to be considered. If the Council is satisfied that the development will not be judged significantly detrimental under the terms of the policies of the HwLDP then the application will accord with the Development Plan.

Caithness and Sutherland Local Development Plan (CASPlan)

- 10.7 The CASPlan states that Special Landscape Areas (SLAs) are regionally valuable landscapes which are intended to protect and enhance unique and important landscape qualities and encourage the enjoyment of these areas. The boundaries of the SLAs are set out in the CASPlan. Policy 57 of the HwLDP provides for the protection of these areas and is accompanied by a background paper "The Assessment of Highland Special Landscape Areas" - both of these are used to assess the landscape impact of any proposal on the integrity of a SLA.
- 10.8 The CASPlan Vision and Spatial Strategy for the area for the area sets out a series of outcomes related to communities, employment, connectivity, and environment and heritage. The contribution of the proposal will be considered through the material consideration pertinent to the determination of the application.

Scottish Planning Policy

- 10.10 Scottish Planning Policy (SPP) advances principal policies on Sustainability and Placemaking, and subject policies on A Successful, Sustainable Place; A Low Carbon Place; A Natural, Resilient Place; and A Connected Place. It also highlights that the Development Plan continues to be the starting point of decision making on

planning applications. The content of SPP is a material consideration that carries significant weight, but not more than the Development Plan, although it is for the decision maker to determine the appropriate weight to be afforded to it in each case.

- 10.11 Through the presumption in favour of development that contributes to sustainable development, SPP is clear that the planning system should support economically, environmentally and socially sustainable places by enabling development that balances the costs and benefits of a proposal over the longer term. SPP states that decisions should be guided by principles set out in Paragraph 29 which includes consideration of net economic benefit; efficient use of existing land capacities; supporting climate change mitigation and adaptation; and protection, enhancement and promotion of access to natural heritage. SPP recognises that the need for energy and the need to protect and enhance Scotland's natural and historic environment must be regarded as compatible goals. National policies highlight potential areas of conflict but also advise that detrimental effects can often be mitigated or effective planning conditions can be used to overcome potential objections to development.
- 10.12 While it is currently under review, the Government's approach to spatial planning in Scotland, National Planning Framework 3 (NPF3) is a material consideration that should be afforded weight in the planning balance.

Other relevant policy

- 10.13 The National Space Policy was published by the UK Government in 2015. The policy sets out the roles and responsibilities for space in the UK. In doing so it highlights that the UK Space Agency (UKSA) is responsible for the government's civil space programmes including policy, regulation and delivery. This sets out the recognition of the strategic importance of space to the UK.
- 10.14 The Paris Agreement sets out a framework to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C. Through this Agreement, Local Authorities were invited to scale up efforts and support actions to reduce emissions; build resilience and decrease vulnerability to the adverse effects of climate change.
- 10.15 Further to the above, in late 2019 the Scottish Government's targets for reduction in gases were amended by The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019. This sets targets to reduce Scotland's emissions of all greenhouse gases to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, 90% by 2040. When reaching a decision on applications, Members will be required to consider whether the development facilitates a reduction in greenhouse gases or if not whether mitigation can be put in place to off-set the impacts of the proposed development.

Economic Development

- 10.16 Notwithstanding any significant impacts that this proposal may have upon the other matters, the development could be seen to be compatible with Scottish Government policy and guidance due to the economic benefits and opportunities which may be afforded by such a proposal. These have been both supported and contested in representations to the application.

- 10.17 The proposal for a vertical launch facility for the launch of small earth monitoring satellites into space would be the first of its kind in the UK or Europe. There are limited other similar facilities in the world with only two that could be comparable: Rocket Lab at Mahia Peninsula North Island New Zealand; and Pacific Spaceport Kodiak Island Alaska.
- 10.18 The applicant has submitted an Economic Impact Assessment in support of the application. The assessment undertaken by the applicant has identified that jobs would be secured and created as a result of the proposed development. This includes jobs at the development site during construction, operation, and in tourism and fabrication. The assessment has estimated that by 2024, across Scotland a total of 177.3 full time equivalent jobs would be supported, with 139.5 of these in the Highlands and Islands. It is estimated that 61.1 full time equivalent posts could be in Caithness and Sutherland of which 43.6 posts could be in Melness and Tongue. When taking into consideration the indirect and induced activity elsewhere in the supply chain for the proposed development, the applicant estimates that by 2024 the development would support 254.2 full time equivalent posts in the Highlands and Islands.
- 10.19 Representations have challenged these figures and consider that these are over inflated or that the higher skilled jobs would not be available to existing residents in the local area. Many have cited academic research into economic benefits of the which was carried out in 2019.
- 10.20 Overall, the applicants' assessment estimates that the Gross Value Added of the proposed development to the Highlands and Islands is £17.3m by 2024. When taking into account indirect and induced activity elsewhere £28.4m
- 10.21 Representations have challenged these figures and consider that these are over inflated or that the higher skilled jobs would not be available to existing residents in the local area. Many have cited academic research into economic benefits of the which was carried out in 2019. Representations have also highlighted the potential impact on tourism of the proposed development, particularly as a result of impact on the landscape and ecotourism in relation to the Mhoine peninsula and the North West Geopark.
- 10.22 As well as figures presented in the Economic Impact Assessment, the applicant has highlighted other potential socio-economic benefits of the proposed development including, benefits to young people and wider community benefits such as the potential to facilitate a reversal of the population decline in the area and how this can help sustain local services.

Construction

- 10.23 It is anticipated that the construction period for the development would take 15 months.
- 10.24 Developers have to comply with reasonable operational practices with regard to construction noise so as not to cause nuisance. Section 60 of the Control of Pollution Act 1974 sets restrictions in terms of hours of operation, plant and equipment used and noise levels etc. and is enforceable via Environmental Health. Some flexibility may be required at particular points within the construction period as activities may involve specialist labour and could be weather dependent.

Generally given the location of the proposed development it is not considered that the construction of the proposed development will have an adverse impact on residential amenity.

- 10.25 The project anticipates the deployment of a Construction Environmental Management Document (CEMD) in association with the successful contractor engaged. This should include a site specific environmental management procedures which can be finalised and agreed through appropriate planning conditions with the local Planning Authority and relevant statutory consultees. For the avoidance of any doubt submissions are expected to be “plan based” highlighting the measures being deployed to safeguard specific local environmental resources and not simply re-state best practice manuals. Due to the scale of the development SEPA will control pollution prevention measures relating to surface water run off via a Controlled Activities Regulations Construction Site Licence.
- 10.26 In addition to the requirement for submission and agreement on a CEMD, the Council will require the applicant to enter into legal agreements and provide financial bonds with regard to its use of the local road network (Wear and Tear Agreement) and final site restoration (Restoration Bond). In this manner the site can be best protected from the impacts of construction and for disturbed ground to be effectively restored post construction and operational phases.
- 10.27 Should the development be granted consent, a Community Liaison Group should be set up to ensure that the community council and other stakeholders are kept up to date and consulted before and during the construction period.

Roads, Transport and Wider Access

- 10.28 The access to the site will be taken from the A838. The applicant is seeking to use a model of operation which allows multiple Launch Service Providers (LSP). In the EIAR it is assumed that the LSP will transport the rockets to the site in a number of parts and then the rocket will be assembled on site in the Launch Site Integration Facility. The routes to the application site have a number of constraints which the applicant has been made aware of through consultation with the Council. The applicant has identified their route to site for construction and operation of the development will be via the A9 and A836 before continuing onto the A838 to the site.
- 10.29 In support of the application, the applicant undertook automated traffic counts on the A838 east of the site, A836 and A839 during June 2019. This month is considered a neutral month for traffic counts and it will include a proportion of tourist traffic. The counts demonstrated that the 24-hour daily average traffic flows on the A838 and A836 are less than 1000 vehicles per day. Transport Planning note that this is relatively low for A class routes. The number of existing HGV movements was recorded as being low with average number of HGV movements being 13 on the A836 close to Skelpick and the Naver Bridge.
- 10.30 During construction HGV movements will peak in month 4 of the construction programme when 82 HGV movements per day are estimated (42 inbound and 42 outbound). This compares to the existing daily HGV flow of 13. Throughout the full 15 months of the estimated programme the increase in HGV traffic is greater than 30% and is therefore significant. Transport Planning consider the impact in HGV movement is ‘extra-ordinary’ in terms of Section 96 of the Roads (Scotland) Act

1984 where the applicant do not consider the effect is significant. The view of Transport Planning is supported and mitigation for the impacts of development is required during the construction period.

- 10.31 The Naver Bridge on the A836 near Bettyhill may not be suitable for significant numbers of HGV vehicles in its current form due to the design and strength of the bridge. It is programmed to be replaced by the Council. Construction is scheduled to commence in 2023/24 with a total estimated scheme cost of £7M. The applicant has commenced an assessment of the load of the bridge but it has not yet been completed. Given the nature of the structure and the lifeline link it provides for communities, is it hugely important that the proposed development does not have an adverse impact on either the safety or undue deterioration of the bridge. The applicant has been made aware that it is possible that the structure could be assessed as not suitable to support the short-term increase in HGV loading required for construction of the Space Hub. If appropriate mitigation to resolve this issue is not identified and provided prior to commencement of works, then the development will not be allowed to commence until the Naver Bridge has been replaced. These matters have been highlighted to the applicant and any mitigation required will be secured by condition.
- 10.32 During the operation of the development limited HGV movement is anticipated, with an average of 4 HGV movements per day during launch campaigns. Given the scale of the development operation, no abnormal loads are proposed during the operation of the development. Some of these movements will include hazardous loads of Kerosene, Liquified Petroleum Gas, LOX and liquid nitrogen. Transport Planning have accepted that no further assessment is required due to the type and quantity of the proposed propellants.
- 10.33 It is estimated that an average of 94 vehicle movements for staff will occur during launch events. 39 car parking spaces are to be provided on site to accommodate the staff. This is considered acceptable to Transport Planning. However, the layout of the car parking and approach to staff travel to promote the use of sustainable modes of transport requires to be refined. This can be secured by conditions which require a workforce travel plan and a finalised layout of the car parks.
- 10.34 As stated by Transport Planning, the potential spectator traffic generated by the development on launch days is likely to have a significant impact on the operation of the surrounding road network regarding traffic capacity and access for emergency services particularly during the early phases. While visitors are not being directly invited by the site operation they are highly likely as a consequence of the development.
- 10.35 The applicant anticipates that a peak in visitors to the site for the first launches and then it seems likely that the numbers will reduce considerably. The Transport Assessment estimates that a total of 1100 spectators will visit the site for the launches. In doing so, it has been assumed with 805 traveling by car (4 in each car) and 295 travelling by coach (59 per coach). This is considered to be an over ambitious modal split. Transport Planning consider that it could be assumed that around 20% of spectators will visit in small buses of around 16 people with the remaining numbers traveling by car with an average occupancy rate of 2.5. This would equate to 14 minibus trips and 352 car trips to the site. This is a total of 732 movements rather than the 450 movements identified by the applicant. Transport Planning consider that the volume of spectator traffic for the first launches has the capability of having a severe, albeit short term impact on the local road network.

The impact may be particularly acute given the routes in the area have single track sections which, if blocked, would lead to impacts on other fragile routes. Without significant traffic and visitor management this impact would not be acceptable. It is considered that the provision of parking at suitable locations to view the launch (including provision for parking of campervans), park and ride facilities, and the use of more sustainable forms of travel would reduce the impacts. This will require significant investment by the applicant and potentially require further planning applications. A Visitor Management Plan can secure details of such mitigation, however certain interventions may require their own standalone planning permission. These will be judged on a case by case basis, however the cumulative effects of these will need to be considered in the context of the EIAR which has been produced for this application.

- 10.36 Transport Scotland do not consider there to be significant effects on the trunk road network. It does however request conditions to secure details of a Visitor Management Plan and a Construction Traffic Management Plan.
- 10.37 In terms of recreational access to the outdoors there is little or no known recreational access use of the land within the redline boundary of this application. The majority of the application site will continue to be accessible in relation to the access rights afforded by the Land Reform (Scotland) Act 2003. However, it is noted that access can be restricted by provisions set out in the Space Industry Act 2018 with regard to particular elements of the spaceport and its operational area.
- 10.38 Depending on how launch day activities are managed, there is potential for disruption for recreational users of the A838. The route forms part of the NC500 and is increasingly a route for cycle touring. It is noted that disruption to these users, even if only for short periods of time, is more significant as cyclists have limited protection from the elements. Therefore any Visitor Management Plan must ensure it caters for all users of the road network.
- 10.39 The Access Officer has requested that provision is made for non-motorised users into the site itself along the access track. While this would normally be supported on developments such as wind farms, there is a risk that given the location of the proposed development this would allow for potentially easier access to the surrounding European designated site. This is not appropriate given the potential damage that could be caused by an increase in walkers across the areas which contain qualifying features.
- 10.40 Overall, it is considered that while the development will challenge the capacity of the existing infrastructure in the area, through both the construction and operational phases of the development, an appropriate package of mitigation can be secured by condition. The mitigation has the potential to make significant improvements to the existing road infrastructure in the area which will have benefits for both local road users and tourists.

Water, Flood Risk, Drainage and Peat

- 10.41 SEPA are satisfied that the development minimised direct impacts on the water environment. Two significant watercourse crossings (over the Allt Alasdair Chattaich and the Allt an Dubh), and nine more minor crossings of man-made ditches are required. Both SEPA and the Flood Team are generally content with the level of detail provided. The crossings will include circular culverts and single

span bridges in the form of half barrel culverts. Nevertheless, conditions will be applied to ensure that the crossings are appropriately designed and sized in order to avoid the risk of flooding.

- 10.42 The EIAR is clear that a Construction Environmental Management Document / Plan (CEMD) will be in place to ensure that potential sources of pollution on site can be effectively managed throughout construction. An outline CEMD is contained within the Technical Appendix to the EIAR, this is broadly acceptable. The CEMD needs to be secured by planning condition. This will ensure the agreement of construction methodologies with statutory agencies following appointment of the contractor and prior to the start of development or works. In addition to this given the scale of the project a Construction Site Licence will be required. This process is regulated by SEPA under the Controlled Activities Regulations.
- 10.43 The applicant has submitted details of the proposed surface water treatment. This includes the use of a green roof on the Launch Operations Controls Centre, swales, permeable surfaces, filter trenches and a wetland. SEPA are content that the approach taken should provide adequate treatment of surface run-off while minimising impacts on local habitats and peatland. Details of the SuDS plan can be secured by condition to allow final assessment by SEPA and the THC Flood Risk Management Team. The SuDS will not be adopted by the Council, but it will still require to be designed in a manner which accords with the CIRIA SUDS Manual.
- 10.44 The nature of the development requires a deluge system. This will release a significant amount of water across the launch pad and surrounding area during the launch of any rocket. The tank used to store the water will have a capacity of 50,000 litres. This water will be used to dampen acoustic loads on the launch pad and reduce the temperature of the exhaust gases from the rocket, thus providing a level of protection to the surrounding habitats. Given the rate of water discharge it is anticipated that there may be limited areas of surface water flooding in the vicinity of the launch pad.
- 10.45 Use of a deluge system has significant benefits to the environment but it also requires careful monitoring in relation to the water environment and habitats. The EIAR identifies that the deluge system will utilise rain water topped up with mains water. Further, it will collect and filter the water used for deluge purposes at each launch. Given the combined nature of the system an overflow system, which discharges to a local watercourse, is required. The applicant has set out that the level of contaminants from the overflow are expected to be minimal. Watercourse monitoring will be required to ensure that this is the case and if required modifications to the treatment system will have to be implemented. If the deluge system needs draining or cleaning, the water will be removed and disposed of at a suitably licensed facility and not discharged to the watercourse. This can be secured by condition.
- 10.46 The site infrastructure is not considered to be at risk of flooding. However the use of the deluge system during launch highlights that there may be areas of surface water flooding. It is proposed that any watercourse crossings are designed to accommodate a 1 in 200 year flood event plus and allowance for climate change. Further, the development proposes the use of Sustainable Drainage Systems (SuDS) to attenuate run off and filter out any potential pollutants. Details of the SuDS plan can be secured by condition to allow final assessment by SEPA and the THC Flood Risk Management Team.

- 10.47 In relation to waste (foul) water from the proposed development, it is anticipated that buildings will be served by a waste water treatment plant which reduces ammonia to a maximum of 5 mg/l with discharge to a watercourse. SEPA consider that this would be able to be authorised under a Controlled Activities Regulations Licence. The applicant has however identified that it may be possible to modify this system so that it could discharge to land closer to the buildings. SEPA and the Council would welcome this approach but would be content with the proposed system given the low level of contaminant. A condition will be applied to set out that the proposed solution can be implemented unless an alternative solution, which has less impact on the environment, is found to be deliverable.
- 10.48 The application site, and the surrounding area, is home to a number of Ground Water Dependent Terrestrial Ecosystems (GWDTEs). There have been extensive discussions between the applicant and SEPA at the pre-application stage in relation to site layout and GWDTEs. While impacts on GWDTEs have largely been avoided or minimised, there is an area of M6c (flush habitat) that will be lost to the north of the Launch Site Integration Facility. SEPA are however content that, subject to the impacts being minimised by design of the drainage system in this area, the loss is acceptable. Further they welcome the peatland improvement works being undertaken and consider that this will provide suitable compensation for the loss of the GWDTE.
- 10.49 Peat is a hugely important resource to the sequestration of carbon. It is also host to a number of unique and protected habitats. It is clear that impacts on peat are unavoidable if the proposed development were permitted and this matter is of concern as highlighted in a significant number of representations. However, SEPA consider that, in so far as it relates to their interests, the proposal accords with the requirements of the HwLDP and Scottish Planning Policy. It considers this to be the case for the following reasons:
- Avoidance of development on the areas of deepest peat by measures such as moving the access track between the main road and first watercourse crossing further west;
 - Avoidance of undisturbed peatland where possible by measures such as moving the LOCC building, construction compound and turning head onto areas of peatland which has been impacted by peat cutting and road works;
 - Minimisation of the footprint of the development by reducing the width of the access track and moving the access track and rail line into the same development corridor; and
 - Proposals to employ construction techniques to minimise impacts including putting in place suitable drainage, the use of floating track and piling of building and infrastructure foundations.
- 10.50 Peat probing has been undertaken across the locations of the proposed site infrastructure. Based on this the outline Peat Management Plan (oPMP) set out in Technical Appendix 5.9 of the EIAR, estimates that 23,417m³ of peat will be excavated to allow the construction of the development. The oPMP highlights that 4,974m³ of excavated peat will be acrotelmic peat and the remaining 18,443m³ is catetelmic peat. The OPMP anticipates that all of the excavated peat can be reused within 300m of the application site boundary, with 13,495m³ to be used for restoration within the site and a further 11,263m³ could be used to restore peat cuttings adjacent to the site. Overall the site will lead to a loss of 3.1ha of peatland habitat as a result of the proposed development. The applicant has however committed to offsetting this loss through peatland restoration works adjacent to the

proposed site where there are historic peat cuttings and areas where peat has been disturbed as a result of road improvements. Overall, the applicant anticipates that there 20.5ha of damaged peatland will be improved as mitigation for the construction of the proposed development. This is welcomed by both SEPA and the Council. To ensure works are limited to the areas identified for disturbance, no micro-siting will be permissible and works will all require to be undertaken within the areas identified on the Extent of Works plan.

- 10.51 To mitigate the impact of the operation of the development, the outline Habitat Management Plan (Technical Appendix 5.8) sets out that there is the potential of further peatland habitat improvement 67.5ha through blanket bog restoration. This would include re-wetting of previous peat cuttings and drained areas. The areas identified for these works may not extend to the full 67.5ha but the pockets of restoration within this area would likely contribute to overall enhancement.
- 10.52 The applicant has undertaken a Carbon Calculator style assessment based upon the Carbon Calculator for Wind Farms on Scottish Peatland. Representations to the application have highlighted the risk of carbon release as a result of the proposed construction and operation of the proposed development. SEPA have noted that the assessment undertaken by the applicant demonstrates that over the lifetime of the project the amount of carbon lost from construction works should be sequestered back into the peat as a result of the proposed restoration works. It would however be necessary to ensure that further peatland restoration is undertaken to mitigate the impacts of the operation of the development where further greenhouse gases would be released. SEPA consider additional peatland restoration should be secured through a finalised Habitat Management Plan. It is anticipated that the level of greenhouse gas emissions would be lower if a fuel mix of liquid oxygen (LOX) and bio-Liquefied Petroleum Gas (BioLPG) is used rather than a mix of LOX and Rocket Propellant 1 (RP-1). This is however outwith the control of the planning system and matters such as this would likely be controlled by regulations to be brought forward under the Space Industry Act 2018.
- 10.53 Representations have raised concerns with regard to the risk of a major disaster on the site which could potentially lead to a fire which would affect the surrounding peatland. The applicant has undertaken an assessment of Major Accident to the Environment (MATTE). This assessment considers the impact of a range of different accidents which may occur during construction and operation of the proposed development. This assessment acknowledges, that based up the methodology set out in the EIAR, that there are potential significant environmental effects if: there is a major fire on site during the construction and decommissioning phases; there is an anomaly in the launch vehicle which resulted in physical damage to adjacent peat areas, presence of debris, contamination of fuel and payload hazardous materials, and peat fire; and / or release of fuels, resulting major fire. However, it should be noted that these matters related to site safety and environmental impacts as a result of a MATTE, will be considered further through the safety case and the Assessment of Environmental Effects which are required for the Operator, Spaceport and Range Services licences required under the Space Industry Act. This will be assessed by the UK Space Agency who are the competent authority in relation to such matters.
- 10.54 Representations have set out that the cumulative impact of this and other potential spaceport facilities in Scotland could be significant. This is not disputed, however no other proposal is as advanced as this project. Therefore it would be for the remaining developments to ensure that the cumulative effects are fully taken into

account. For this proposed development it is considered that, on balance, the carbon release can be managed by the use of an appropriate Peat Management Plan and through an augmented Habitat Management Plan.

10.55 SEPA have noted that a range of fuels, oxidisers and other chemicals will be stored on site. SEPA have set out that the amount of these to be stored on site fall below the threshold at which the Control of Major Accident Hazard (COMAH) regulations apply. It welcomes the use of above ground storage for the kerosene based RP-1 fuel and the fuel for the generators. The storage arrangements for all fuels and chemicals will be required to comply with General Binding Rules set out in the Controlled Activities Regulations. This sets out that appropriate impermeable bunds are required around the storage areas

10.56 Private water supplies are not anticipated to be affected by the proposed development.

10.57 A Marine Environmental Risk Assessment (MERA) has been undertaken by the applicant. This identifies a number of risks to the marine environment, such as debris impact on marine ecology, collision risk to marine users and release of unspent fuel from deposited rocket parts. On the basis of 12 launches per year, 5 tonnes of carbon fibre reinforced plastic and 7 tonnes of metal alloy would be dropped into the sea per annum. The MERA sets out that the level of unspent fuel would likely be limited and would be diluted by the volume of water. The deposit of objects from space vehicles in the marine environment would require a marine licence in the following circumstances:

- Within 12nm under article 21(1) of the Marine Scotland Act 2010
- Between 12 and 200nm under article 66(1) of the Marine and Coastal Access Act 2009
- Outwith 200nm under article 21(2) of the Marine Scotland Act 2010

The risk to mariners would be regulated by the UK Space Agency through their licencing procedures.

10.58 Given the route of the rocket over international waters, these effects on the Marine Environment are transboundary effects. While the effects were not identified as significant, the Council nevertheless notified Scottish Ministers in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. In doing so the Council were required to come to a conclusion on matters related to Transboundary Effects. In doing so the following effects were considered:

- Unspent fuel – the planning authority agree with the findings of the EIAR that this will not have an impact based upon the content of the MERA.
- Marine debris impact of marine ecology – the planning authority consider that space debris poses a risk to marine life through direct collision and through ingestion of macro and microplastics. The planning authority note that as a result of the proposed 12 launches per annum a minimum of 5 tonnes of carbon fibre reinforced plastic and 7 tonnes of metal alloy will be dropped into the sea. The planning authority can not conclude from the information within the EIAR whether this is a significant increase on current level of debris but note that the risk is proportional to the number of launches. The planning authority intend to condition that no more than 12 launches can be undertaken per annum.

- Collusion risk of marine debris to marine users - The MERA states that it is 'likely that a mariner notice will be issued' to mitigate the risk of this collision. Also the predicted debris corridor communicated in notice should be specific to each launch and should ideally represent a much higher resolution than the predicted debris corridor described in the MERA. The planning authority are currently considering whether this is a matter which can / should be controlled via the planning system or by the license required under the Space Industry Act.

It is acknowledged that whilst there are transboundary effects, these are not considered significant in EIA terms.

- 10.59 In response to this the Scottish Government set out that the Council's conclusions seem reasonable. The Scottish Government notified the UK Government (UK Space Agency) about the application. It set out that the UK Space Agency are in discussions on spaceports with the Icelandic, Faroese, Danish and Norwegian governments. It confirmed that there is no requirement to consult them at this stage. The UK Space Agency set out to the Scottish Government that the Space Industry Act 2018 establishes public safety as the primary duty of the regulator with regards to spaceflight activities and extensive regulations and guidance will be put in place to secure this.

Natural Heritage including ornithology

- 10.60 The EIA Report has identified and assessed impacts on protected species, ornithology, ecology and designated sites. Concern has been raised in representations in relation to the impact on all of these matters.
- 10.61 The site contains elements of the Caithness and Sutherland Peatlands Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar site. These are European designated sites, however it should be noted that through mitigation by design the site infrastructure does not infringe on the boundaries of these designations. In addition elements of the Ben Hutig and A' Mhoine Sites of Special Scientific Interest (SSSI) are within the site boundary but not affected by site infrastructure. The Inverhope SSSI lies to the west of the site.
- 10.62 The applicant considers that without mitigation there will be significant environmental effects on the European designated sites in addition to effects on the associated SSSIs within the application site boundary. This is not disputed. However, after the application of mitigation the applicant considers that the effects would not be significant.
- 10.63 In the initial response to the application SNH highlighted that the application infrastructure comes to approximately 100m from the boundary of the designated sites and it welcomed the mitigation by design to avoid direct impact on the designated sites through the layout of the development.
- 10.64 The status of the following sites means that the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply or, for reserved matters, The Conservation of Habitats and Species Regulations 2017. Consequently, the Council is required to consider the effect of the proposal on the SAC and SPAs detailed below before it can be consented (commonly known as Habitats Regulations Appraisal). This is contained in Appendix 2 of this report and is based upon the advice from SNH.

10.65 For the avoidance of repetition in this report, and as a result of the way in which both the applicant and SNH have assessed the impacts of the proposed development, the affects of the SSSIs are considered alongside the European designated sites. The Appropriate Assessment only considers the impact on the European designated sites.

10.66 In relation to the construction period for the proposed development. The view of SNH is accepted which set out that in relation to Caithness and Sutherland SAC, SPA site a likely significant effect on the above species can be concluded but information provided shows that an adverse effect on site integrity can be avoided. This is as a result of the following mitigation:

- The detailed CEMP, should be agreed with THC, in consultation with SNH prior to the commencement of works;
- The ECOW should have the authority to intervene during construction including the powers to 'stop the job'
- Implementation of the Species Protection Plans for Otters and Breeding Bird Protection Plan should be conditions of planning consent.

The above mitigation can be secured by condition and is equally as applicable to minimising the impacts of construction on the qualifying features of the SSSIs.

10.67 In relation to the operational phase of the development, the impact on the European designated sites will be required to be mitigated through appropriate visitor management as the planned activities take place within the confines of the red line boundary and therefore avoid the protected area and its qualifying interests. The entire Launch Exclusion Zone (LEZ) will require to be managed to avoid impact on the qualifying interests of the designated sites. The LEZ extends to 1.8km from the launch pad. The LEZ has been identified based upon the Federal Aviation Administration Regulations from the United States of America, however the rockets capable of being launched from the proposed development site are of a much smaller scale than those set out in the LEZ. The applicant has set out that it is likely that the LEZ area will reduce in scale when the relevant regulations are published by the UK Space Agency. It is understood from the UK Space Agency that the LEZ will be based upon the safety case required to meet with Sections 9 (Grant of Operators: Safety) and 10 (Grant of Spaceport Licence) in the Space Industry Act 2018.

10.68 In the SNH response of 12 March 2020, it set out that the habitat features of the designated sites are extremely susceptible to physical damage from people and vehicles. Therefore, it considers that it needed a further degree of certainty over the management of visitors and the implications for the qualifying features of the European designated sites prior to reaching a conclusion on the likely significant effects. In doing so it sought either:

1. Confirmation from the Council whether it was certain visitor management will be considered as part of the licensing of the site as a spaceport through the UK Space Agency; or
2. Further details of how the LEZ area will be observed, cleared and policed.

10.69 Given both the Council and the UK Space Agency are competent authorities in relation to the application of the Conservation (Natural Habitats, &C.) Regulations 1994, the Council took external legal advice in relation to the point 1 above. In doing so the Council sought advice on the following matters:

1. Considering Regulation 53 of the EIA Regulations 2017 and Regulation 52 of the Conservation (Natural Habitats, &c.) Regulations 1994, is Counsel of the opinion that a Habitat Regulations Appraisal is required to be undertaken to determine the impact of visitors on the SAC/SPA/SSSI as a result of the operation of the spaceport prior to determination of the planning application by THC?; and
2. If the answer to Q1 is no, is Counsel of the opinion that a Habitat Regulations Appraisal is required to be undertaken to determine the impact of visitors on the SAC/SPA/SSSI as a result of the operation of the spaceport prior to determination of the spaceport licence by the UK Space Agency, as regulator, under the Space Industry Act 2018 and associated regulations?

10.70 In summary the advice provided by external legal advisors set out that

- the potential effect of visitors on the designated site which are environmental issues and there is no clear reason to me why the planning authority would not be reasonably well-placed authority to assess these;
- in theory it could be possible that the planning authority does not, itself, require to undertake an assessment prior to granting permission, however this could only be justified if it was clear that another authority had responsibility and it was agreed that it was the more appropriate authority to carry out the assessment;
- Therefore it is not clear that there is currently the necessary certainty of the division of responsibilities referred to in the SNH letter for the Council not to require an appraisal of the potential effect of visitors to the site before determining the application.

The applicant sought its own legal advice on this matter and it conflicted with the advice secured by the Council. However, the precautionary approach set out in advice received by the Council is accepted. It is however noted that the UK Space Agency as the regulator of space flight will be required to undertake an Appropriate Assessment prior to the determination of any granting of a licence. Equally they would be permitted to adopt an Appropriate Assessment undertaken by another Competent Authority i.e. The Highland Council.

10.71 In advance of the receipt of this advice the Planning Authority had encouraged the applicant to consider providing clarifications to how visitors would be managed in so far as it relates to avoidance of impact on the European designated sites. On receipt of the legal advice, the applicant worked with SNH to produce a clarifications document for how the provisions of the Visitor Management Strategy could be implemented. However, while it has informed the second response from SNH to the application, it is clear that this is just one option for visitor management and other options for visitor management may be developed by the applicant and the Launch Service Operator to avoid impacts on the European designated site. This will also be required to evolve over time to ensure the methods for visitor management remain practicable and workable and controls can be put in place to secure this via condition.

10.72 The clarifications document set out that for the period of launch identified in the Visitor Management Strategy, which extends to 6 hours in advance of the launch, that a system of deter, detect, delay, respond / removal for people who were seeking to enter the LEZ. The clarifications documents considered a series of scenarios to explain what methods may be employed and how they could be

undertaken. The document is not considered to provide any different measures beyond what was contained within Visitor Management Strategy of the EIAR. It does however set out how these could be implemented. The submitted clarifications document does not lead the applicant to a different conclusion on significance of effect in relation to EIA, however it shows how they reached a conclusion of no likely significant effect on the European designated sites.

10.73 Following receipt of these clarifications, SNH do not consider there to be likely significant effects on the qualifying interests of the designated sites if the development is undertaken in strict accordance with the following mitigation:

- A detailed Visitor Management Plan (VMP) should be agreed by The Highland Council, in consultation with SNH, at least six months prior to the first launch taking place. This should include an agreed post launch review arrangement and a monitoring protocol for the SAC and SPA qualifying interests. The VMP should also provide for the necessary changes in visitor management as identified by SNH, for the duration the site is in use. This is to ensure the principles in the Visitor Management Strategy – Clarifications document (May 2020) are carried forward to the detailed Visitor Management Plan and to allow sufficient time for planning and implementation. The inclusion of suitable reviews of impacts post launch, and appropriate monitoring of qualifying habitats and species is required to inform, and where necessary change, future visitor management. Changes may be required in response to predicted effects and effects which have not been predicted due to the novelty of the proposal, the evolution of technologies, changes in visitor behaviour and unforeseen factors.

The above mitigation can be secured by condition and is equally as applicable to minimising the impacts of construction on the qualifying features of the SSSIs. It should be noted that in broad terms the applicant had committed to the production of a Visitor Management Plan via the Visitor Management Strategy set out in the Technical Appendix 2.2 of the EIAR. The clarifications document has however allowed SNH to consider at an earlier stage in the process what the appropriate principles are for Visitor Management.

10.74 A late representation to the application has questioned whether the document submitted by the applicant is Supplementary Information under the EIA Regulations and whether this required advertisement. The Planning Authority consider that the document provides clarifications, does not change the scope of the development, nor does it alter the conclusions of the EIAR. Therefore, the Planning Authority do not consider it to be Supplementary Information in terms of the EIA Regulations.

10.75 The final European designated site to be considered is the North Sutherland Coastal Islands SPA which lies to the north west of the application site. The site is designated for the wintering population of barnacle geese. The birds were not recorded as flying over or feeding in the application site during site surveys. The EIAR concludes that there would be no likely significant effect on the qualifying features of the designated site due to low frequency of launches and distance to the nearest feeding sites. SNH are content with the assessment.

10.76 SNH agree that the geological features of the Ben Hutig SSSI will not be affected by the development

- 10.77 Outwith the designated sites, the EIAR has assessed and identified impacts on protected species and habitats. Consideration has been given to peat, water vole, deer, seals, reptiles, aquatic ecology and otter. Without mitigation significant effects have been identified in relation to the following matters:
- Fragmentation of otter habitat during construction;
 - Disturbance of water vole through piling during construction;
 - Fragmentation of water vole habitat during construction;
 - Disturbance of water vole through launch activities;
- To minimise these effects a range of mitigation, beyond standard good construction practice, is proposed including Species Protection Plans, Habitat Management and design of culverts. These types of mitigation have been shown to work effectively on other large scale construction projects across Highland and there therefore accepted. However, this specific mitigation is required to be supported by ongoing monitoring in the run up to and during the construction period. This can be secured by an Ecological Clerk of Works who will be required to have stop the job / activity powers if there is a breach of environmental legislation or risk to protected habitats or species.
- 10.78 Representations have raised concern about the adequacy of the ornithology chapter of the EIAR. In particular concern is raised around the robustness of assumptions made in the assessments and the level of survey work and the knock on implications of this for the conclusions reached on significance of effect. It is understood that the methodology and scope of the EIAR as well as the supporting survey work had been agreed with SNH in advance of the submission of the application. SNH have not objected on these grounds.
- 10.79 The applicant has undertaken a series of ornithological surveys including: vantage point survey; moorland breeding bird survey; breeding raptor survey; breeding eagle survey; breeding diver survey; and goose foraging survey. The surveys and subsequent assessments identified potential significant effects on the following ornithological receptors if mitigation is not applied:
- Merlin (habitat loss and disturbance / displacement)
 - Golden eagle (habitat loss and disturbance / displacement)
 - White-tailed eagle (habitat loss and disturbance / displacement)
 - Greenshank (habitat loss and disturbance / displacement)
 - Red throated diver (disturbance / displacement)
 - Golden plover (habitat loss and disturbance / displacement)
 - Dunlin (habitat loss and disturbance / displacement).
- 10.80 There is potential for likely significant effects as a result of displacement / disturbance, if mitigation is not applied on the following ornithological receptors during operation:
- Merlin
 - Golden eagle
 - White-tailed eagle
 - Greenshank
 - Red throated diver
 - Golden plover
 - Dunlin.

- 10.81 The applicant has not undertaken a cumulative assessment of the effects on ornithology in combination with other developments that would impact on the same birds which use the application site. The applicant has justified this due to the location of the proposed development in relation to developments which the application could be considered in combination with. Representations disagree with this approach. It is noted that the proposal is somewhat remote from other developments which may have an in combination effect.
- 10.82 During the construction phase mitigation such as the use of a pre-commencement bird survey work, walk over surveys during construction, limitations to vegetation removal, application of buffer zones around any nests, species protection plans and limitation of works during the bird breeding season is proposed. The applicant has identified that if this mitigation is carried out then there would not be a significant effect on ornithology.
- 10.83 During operation of the development, the effects would be related to disturbance / displacement rather than habitat loss. However, in this phase there will need to be significant monitoring of ornithological populations, restrictions on drone use for monitoring of the site (including for purposes of visitor management), use of species protection plans and a visitor management plan (discussed in paras 10.67-1073). With this mitigation in place, the applicant does not consider there would be significant effects on ornithological interests during operation of the development.
- 10.84 Representations have raised concerns with regard to the impacts on the North West Highlands Geopark. The site infrastructure appears to be outwith the area covered by the Geopark, it is not envisaged that the proposal would have a direct impact on the Geopark.
- 10.85 The Peatlands Partnership have been progressing the case for the designation of the Flow Country as a World Heritage site since the late 1990's. The Peatlands Partnership includes the following bodies / organisations:
- Scottish Natural Heritage;
 - Highland Council;
 - Forestry Commission (Scotland);
 - RSPB Scotland;
 - Plantlife Scotland;
 - The Environmental Research Institute;
 - Northern Deer Management Group;
 - Flow Country Rivers Trust;
 - The Highland Third Sector Interface; and
 - Highlands and Islands Enterprise.
- It also liaises with local community groups, the Scottish Government's Rural Payments and Inspections Directorate and the North Sutherland Community Forest Trust.
- 10.86 Representations have raised concerns that the proposed development would have an impact on the site's status as an emerging World Heritage Site. The reason for seeking designation of the Flow Country as a World Heritage Site relates to the quality and extent of the blanket bog habitat. It is not possible, due to the lack of a formal designation along with supporting qualities / citations, at this stage to assess the potential impacts on any potential World Heritage Site resulting from any current adjacent or proposed developments. Inevitably this means that there is a risk that land use change prior to possible nomination and inscription may compromise

areas which might otherwise have been included within the site boundary. However, as discussed at length earlier in this report, the impacts on the habitats for which the Flow Country are famed can be minimised.

- 10.87 Overall, it is recognised that there will be impacts on natural heritage as a result of the proposed development both through the construction and operations phases of the development. There is however, workable and practical mitigation that can be put in place to minimise the environmental effects. This requires to be given some considerable weight in the decision making process.

Built and Cultural Heritage

- 10.88 The area has a number of built and cultural heritage features of value including scheduled monuments, listed buildings and an inventory garden and designed landscape. The EIAR has undertaken an assessment of the direct and indirect impacts upon such assets. In undertaking the assessment the applicant has focused on the designated heritage assets within 10km of the site boundary during both the construction and operation of the development.
- 10.89 Historic Environment Scotland and the Council's Historic Environment Team have not raised concerns with the methodology used to undertake the assessment. In relation to assets within the interest of Historic Environment Scotland, minor effects have been noted by the applicant and Historic Environment Scotland do not disagree with the findings of the assessment on either direct or indirect
- 10.90 In relation to impacts within the remit of the Council, it is noted that three sheilings are within the application site, the applicant plans to preserve these in situ. This is welcomed. To achieve this the applicant will be required to mark out the locations of the sheilings with high visibility markers 5m from the edge of the assets to ensure they are protected from construction.
- 10.91 The nearest listed building to the proposed development is Moine House, approximately 2km to the west of the site access, which is category C listed. The building is on the at risk register and comprises an unroofed state. Originally built to mark the halfway point across the Moine. It is understood the building was built to commemorate the opening of the first road across the Moine in 1830. It is a clear landmark given its position in the landscape. Given the buildings relationship with the road, while there will be visibility of the proposed development, it is not considered that it will affect the setting of the listed building.
- 10.92 Subject to the mitigation set out in paragraph 10.94, it is not considered that there will be significant effects on built and cultural heritage.

Design, Landscape and Visual Impact (including Wild Land Areas)

- 10.93 The development has been designed to avoid key site constraints such as the steep slopes, areas of deep peat and watercourses.
- 10.94 There will be two buildings on the site, the Launch Operations Control Centre (LOCC) and the Launch Site Integration Facility (LSIF). The LOCC is approximately 100m to the north of the A838. At its highest point, the building would be 7m tall, with the building sloping down to ground level on the side of the building which faces the A838. The building will have a footprint of 19.6m x 27.9m. A green roof

will be used to help integrate the development into the landscape. Ensuring appropriate curves and mixes of curves during the excavation of this part of the site will be critical to ensuring this mitigation is effective. The walls will be clad in grey metal. Due to the location of the building within a dip in the site surrounded by mounding will assist in reducing the visual impact of the buildings and it would appear as a minor addition to the landscape.

- 10.95 The LSIF is a larger building, located approximately 1.7km north of the A838, which will be used for assembly of the launch vehicles. The asymmetrical roof reaches a maximum height of 10.9m above finished ground levels. The footprint of the building extends to 44.7m x 32.6m. The building is orientated north to south and will be clad in grey metal with a green metal roof. While a standard metal clad shed could have been chosen for the site, the proposed design is considered more sympathetic to its surroundings which includes the rising landform of Ben Hutig which forms a backdrop to the development. This is welcomed. A condition will be set out to secure final material finishes for all buildings. This will also include a requirement for the buildings have a matt finish.
- 10.96 Other more significant vertical structures within the site include the antenna park, lightning tower and strongback. While these are relatively slimline structures, on launch days the launch vehicle, which has an indicative diameter of 1.3m, will also be a notable feature on the site. The lightning tower extends to 40m in height when the rocket is in the strongback but this retracts to 20m on non-launch days. The strongback while reaching a height of 22m when erected, it lies horizontally during non-launch events. The lighting within the antenna park also reduces in height from 15m down to 5m during non-launch events. While the structures only need to be erected to their full extent on the day of the launch, which will be limited to 12 per year, the retraction of these structures will be secured by condition as per the advice of SNH in relation to mitigation of the impacts on the National Scenic Area.
- 10.97 A total of 14 viewpoints across a study area of 15km have been assessed with regard to landscape and visual impact during both launch day and non-launch day scenarios. These viewpoints are representative of a range of receptors including recreational users of the outdoors, road users and residents. The expected impact of the development can be understood from the ZTV which shows the combined visibility of all built elements of the proposed development (Figure 4.11) in the EIAR. This identifies that visibility of the proposed development runs in three broad corridors running from north east to south west. The first corridor of visibility runs through the site, a further corridor of visibility runs to the east of the Kyle of Tongue and the final corridor of visibility is to the west of Loch Erribol. Each broad corridor of theoretical visibility is defined by the topography of the area. It should be noted that the ZTV does not indicate how much of the development is visible, for example it could be that the whole building or just part of the roofline is visible.
- 10.98 The methodology for the Landscape and Visual Impact Assessment generally follows that set out in Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3). As set out in para 3.32 of GLVIA 3 the "LVIA should always clearly distinguish clearly between what are considered to be significant and non-significant effects." The applicant clearly sets out what the assessor considers to be a significant effect following the combination of judgements (Sensitivity and Magnitude). It appears that the applicant has applied a threshold of anything being of moderate impact or below as being not significant. It has therefore considered

anything of moderate / major and above to be a significant effect. THC is of the view that Moderate effects can be significant but this needs to be considered on a viewpoint by viewpoint basis.

- 10.99 In the assessment of each viewpoint, the applicant has come to a judgement as to whether the effect is significant or not. This is undertaken on a viewpoint by viewpoint and case by case basis. In assessing visual impacts in particular, it is important to consider that the viewpoint is representative of particular receptors i.e. people who would be at that point and experiencing that view of the landscape not just in that single view but in taking in their entire surroundings.
- 10.100 A key consideration in the effects on receptors is the sequential effect when travelling through and area on the local road network both by individuals who live and work in the area and tourists. Those travelling scenic routes, whether designated as such or not, have a higher sensitivity to views. While a driver of a vehicle is likely to be concentrated on the view immediately in front, passengers have a greater scope for looking at their surroundings. In addition the area is regularly frequented by cyclists. As such it is considered that road users are high susceptibility receptors. The applicant has referred to some road users as medium sensitivity receptors.
- 10.101 There are few instances when the development as a whole would be seen. The majority of instances where one would view the development as a whole would be to the south and east of the proposed development. Given the height of the proposed site infrastructure in closer views, particularly from the A838 to the south of the site, the development would appear as a stark new feature, however it will be backdropped and from the majority of views it the development is not of a scale where it would break the skyline. It will be visible from the road network as well as a range of routes used by recreational users of the outdoors. The design of the development is best demonstrated from the visuals for viewpoint (VP) 4 to the A838 to the south of the site.

Landscape and Seascape

- 10.102 The development sits within the Sweeping Moorland and Flows Landscape Character Type (LCT). This is characterised by a smooth and gently undulating landform, with long, low and largely uninterrupted skylines offering extensive views. The LCT gives consistent views to the distant lone mountains and rugged mountain massif LCTs. Across the whole LCT there is strong sense of remoteness.
- 10.103 Wrapping around the application site to the north, south and west is the Rocky Hills and Moorland LCT. This is characterised by rocky outcrops and moorland. It is punctured by distinctive hills such as Ben Hutig. The LCT provides a transition between the sweeping moorland and flows to the lone mountains to the south. Beyond the LCT to the north and east lie smaller landscape character types of Sandy Beaches and Dunes LCT, High Cliffs and Sheltered Bays LCT and Coastal Crofts and Small Farms LCT. The Kyles and Sea Lochs Coastal Character type runs to the north west and north east of the site where the land meets the sea.
- 10.104 Further to the south is the Lone Mountains LCT which contains Ben Hope, Ben Loyal and Ben Beinn Stumanadh.

- 10.105 The applicant has identified that the above landscape character types and coastal character types will all be significantly impacted during operation of development on launch day scenarios. The landscape effects are limited to the Rocky Hills and Moorland and Sweeping Moorland and Flows LCTs on non-launch days.
- 10.106 The applicant considers that the vertical elements and the buildings of the development would have an impact on the perceived remoteness and wildness of the area. This is not disputed. Of particular concern is the artificial lighting required on the site and the effect that this could have on these qualities due to the general lack of lighting in the vicinity of the development. While the lighting is required during launch scenarios, the lighting should be as minimal as possible in both scenarios to minimise the impact on the sense of remoteness and wildness in hours of darkness. The mitigation by design of the retractable elements, the design, scale and location of buildings is considered to reduce the landscape and seascape impacts.
- 10.107 To the south and east of the application site lies the Kyle of Tongue National Scenic Area (NSA). The special qualities of the NSA are:
- An ever-present backdrop of mountains;
 - The Kyle – a link from an inhabited coast to a wild, moorland;
 - Scale, from domestic to monumental;
 - The constantly changing character of the Kyle;
 - Rich variety of coastal scenery;
 - Distinct pattern of settlement.
- 10.108 SNH agree with the overall assessment findings of the assessment undertaken against the special qualities, however they have some concerns with the application of the assessment of the special qualities. SNH consider that the special quality of “The Kyle – a link from an inhabited coast to a wild, moorland” should have also been scoped in for assessment due to the likelihood of significant adverse effect. The position of SNH is accepted on this matter. While predominantly outwith the NSA, the moorland of Mhoine is important to the setting of the NSA. While it is considered that the effects on this special quality have been underplayed by the applicant, it is accepted by SNH that the special quality remains well expressed.
- 10.109 The applicant has not considered there to be a significant effect on any of the special qualities of the NSA. It notes that from the areas of the NSA closest to the development there would be limited visibility of the proposed development, which would largely be limited to the launch day scenarios when the lightning tower is at its full height and it extends above the skyline in some views. It should however the development would occupy a limited field of view in a wider panorama. It is considered that the lighting required within the development will exacerbate the impacts on the special qualities, however not to a point where the special qualities will be diluted. It is considered that this would be particularly noticeable in those elevated locations to the east of the site, such as Ben Tongue (VP14). A scheme of mitigation can however be secured by condition. From the south of the NSA, around Ben Loyal and Ben Hope, it is considered that while the proposed development will be visible, it is not considered to be of a scale or design that would draw the eye in a manner which would significantly detract from the special qualities of the NSA. Overall, while there are some localised impacts, due to the mitigation by design the proposed development is considered to safeguard the character and appearance of the NSA.

- 10.110 The Eribol East and Whiten Head Special Landscape Area (SLA), lies to the north and west of the proposed development site. Visibility of the proposed development from within the SLA is very limited, however the SLA is one which is also appreciated from a distance. When viewing the SLA from the A838, one would likely see the development in the context of the SNL. The development is not anticipated to effect the sharp transition between the A' Mhoine peninsula and Loch Eriboll. The applicant has identified a significant, albeit short lived, effect on the perception of naturalness, remoteness and wildness of the SLA on launch days. Given the duration of the impact the development would not effect the special qualities of the SLA to an extent it would effect the integrity of the SLA. Due to a lack of visibility it is not considered that the Oldshoremore, Cape Wrath and Durness SLA to the west nor the Farr Bay, Strathy and Portskerra SLA to the east will be effected by the proposed development.
- 10.111 No element of the proposed development is within a Wild Land Area (WLA), however it is in very close proximity to the Ben Loyal – Ben Hope (WLA38). As it is not within a Wild Land Area it is considered that Paragraph 215 of Scottish Planning Policy does not apply. However, wild land is an important asset and in assessing the application, the following matters require consideration:
- Introduction of infrastructure into views from the wild land area; and
 - Introduction of a contemporary land use visible from the wild land area potentially affecting the perceptual qualities of wildness.
- 10.112 A Wild Land Assessment has been carried out by the applicant and SNH have commented on this. SNH consider that that there will be some localised significant effects during launch times on WLA38. It does however note that these will not be to the degree (magnitude and duration) that they would have a significant impact on the wild land qualities. This is inline with the findings of the applicants' assessment. Representations have raised concerns with the findings of the assessment undertaken by the applicant and consider that the proposed development will have a significant adverse impact on the qualities of the Wild Land Area.
- 10.113 Scottish Natural Heritage (SNH) published descriptors for each of the 42 Wild Land Areas across Scotland in January 2017. These descriptors set out wild land qualities for each of the Wild Land Areas and are based on the particular combinations of the wild land attributes and influence when experienced.
- 10.114 The special qualities of WLA38 are:
1. A striking, awe inspiring contrast between isolated mountains and open peatland;
 2. Towering, steep rocky mountains that are arresting and attract hill walkers;
 3. Rugged, rocky knolls, crags and plateaux conveying a strong sense of naturalness;
 4. Extensive, exposed peatland and lochs that are awe-inspiring in their simplicity and openness;
 5. Native woodland highlighting landscape features and contributing cumulatively to the sense of naturalness; and
 6. An interior possessing strong qualities of sanctuary and solitude, away from the mountain foci near the WLA margins.

- 10.115 In its assessment the applicant has considered the impacts on each quality of the wild land area during the construction phase, operational phases (launch day scenario and non-launch day scenario) and decommissioning phase. It is considered effects on the Wild Land Area during construction and decommissioning would be the similar.
- 10.116 Wild Land Quality 1 of WLA 38 is “A striking, awe inspiring contrast between isolated mountains and open peatland”. This quality is expressed within the wild land area but it is recognised that the contrast between the lone mountains and the peatland flows outwith the WLA extend beyond the WLA. Given the location of the proposed development, it is considered that there would be a significant effect on the expression of this wild land quality when viewed from the area to the immediate south of the proposed development during the operational phase of the development. The applicant considers that this effect will reduce with distance as one travels further into the interior of the wild land. On launch days the effects would be more pronounced given the additional vehicle movements and activity as well as lighting requirements. The launch scenario would be for a limited timeframe, between 6 and 3 hours before launch and a short period after the launch. As set out earlier in the report, the lighting requires further mitigation and this can be secured by condition. While a reduction in the length of time which lighting would be on or the level of lighting generally on the site would reduce the impact, it is not considered it would take it below the level of significance currently identified within the EIAR. It is noted that the wild land descriptor identifies that at elevated views within the WLA, one would experience distant features and human artefacts, such as the telecoms mast on Ben Tongue as well as some large scale wind farms and conifer plantations. The proposed development would introduce a further human intervention into the landscape. It is not considered it would draw the eye to the extent other types of development in such landscapes would, for example a wind farm, it would however be a new feature which contrasts to the open moorland which forms the fringes of the WLA. SNH do not consider there to be a significant effect on this quality of the WLA.
- 10.117 WLA quality 2 is “Towering, steep rocky mountains that are arresting and attract hill walkers”. When considering the impact on this quality, there requires to be a degree of understanding of where one would experience this quality from both within and outwith the WLA. When viewing the proposed development from Ben Hope and Ben Loyal, the development would contribute to the level of distant features and human artefacts as set out in the consideration of WLA quality 1. It is considered that while the verticality of the proposed development will contrast with the flows landscape when viewed from the elevated locations within the WLA, Quality 2 will not be experienced to such an extent from other areas within the WLA. The applicant considers that the effect on non launch days would be minor (not significant) and on launch days it would be major / moderate (significant). This is considered to be a reasonable assessment of the effects on this quality given the increased elements in the view and increased activities on launch days.
- 10.118 WLA quality 3 is “Rugged, rocky knolls, crags and plateaux conveying a strong sense of naturalness”. From the areas within the WLA where this quality can be experienced it is noted from the ZTV that there is more restricted visibility with the exception of more elevated summits such a Cnoc Lon Nan Eildean. The launch vehicle however will be visible, and potentially audible, for a period of time. The

applicant has identified moderate (not significant) effects for non-launch days and major / moderate (significant) effects on launch days due to increased activity. This is accepted.

- 10.119 WLA quality 4 is “Extensive, exposed peatland and lochs that are awe-inspiring in their simplicity and openness”. This quality is expressed on the low lying peatland both within and outwith the wild land area and is highly susceptible to change. SNH consider that the development would interrupt the wide sense of awe and simplicity. SNH note that the visibility of the scheme within a limited distance. The applicant has identified that there would be a moderate (not significant) effect on non-launch days and a major / moderate (significant) effect on launch days with this reducing to a moderate to no effect further into the WLA. While this is understood it is considered that the launch day effects in closer proximity to the WLA may be major (significant) rather than major / moderate.
- 10.120 WLA quality 5 is “Native woodland highlighting landscape features and contributing cumulatively to the sense of naturalness”. It is not considered that this quality of the WLA will be affected by the development.
- 10.121 WLA quality 6 is “An interior possessing strong qualities of sanctuary and solitude, away from the mountain foci near the WLA margins”. SNH have noted that the access track to the LSIF may be visible from elevated positions and that lighting during launch events after dusk may have a greater effect on the sense of solitude which is a key component of this quality. The lighting effects could be reduced through a revised lighting strategy. The applicant has identified that the effects on launch days would range from moderate to none. It is considered that this is a fair assessment but without further mitigation of the lighting during launch events after dusk the impacts may be considered moderate over a wider area of the WLA than anticipated by the applicant. The applicant has not identified significant effects during the non-launch scenario.
- 10.122 Overall, it is considered that there are some significant residual effects on the qualities of WLA as a result of the proposed development. However, through the mitigation by design of the proposed development and further mitigation proposed such as a revised lighting scheme which would seek to reduce the length lighting would be required for these effects can be substantially overcome.
- 10.123 The significant effects identified in the LVIA are not disputed. Unsurprisingly, as visual impact assessment is largely subjective and dependant on the application of professional judgement, there is a difference between the applicant’s assessment and that of the Planning Authority, however these differences are limited. The visual impacts anticipated during construction and decommissioning are noted. The table below identifies the significance of visual effects as identified by the applicant and the Council. Those highlighted in bold are identified as significant effects. The effects highlighted in grey are where there are differences between the assessment of the applicant and the assessment of the Planning Authority:

<u>Viewpoint</u>	<u>Applicant</u> <u>/ THC</u>	<u>Non-Launch</u>	<u>Launch</u>
1	Applicant	Minor	Major
	THC	Minor	Major

2	Applicant	None	Major
	THC	None	Major
3	Applicant	Major	Major
	THC	Major	Major
4	Applicant	Major	Major
	THC	Major	Major
5	Applicant	Slight	Major / Moderate
	THC	Moderate	Major / Moderate
6	Applicant	Slight	Major / Moderate
	THC	Moderate	Major / Moderate
7	Applicant	Slight	Major / Moderate
	THC	Slight	Major / Moderate
8	Applicant	Major / Moderate	Major
	THC	Major	Major
9	Applicant	Moderate	Major / Moderate
	THC	Moderate	Major / Moderate
10	Applicant	Moderate	Major / Moderate
	THC	Moderate	Major / Moderate
11	Applicant	Major / Moderate	Major
	THC	Major / Moderate	Major
12	Applicant	Moderate / minor	Moderate
	THC	Moderate / minor	Moderate
13	Applicant	Major / Moderate	Major / Moderate
	THC	Major / Moderate	Major / Moderate
14	Applicant	Moderate	Major / Moderate
	THC	Major / Moderate	Major / Moderate

10.124 From the table above it is noted that there are significant visual effects on recreational users of the outdoors and road users at a number of representative viewpoints. There are differences in opinion between the Council and the applicant at the following viewpoints:

- Viewpoint 5 (Summit of Ben Hope) – The viewpoint is located on the most northerly Munro, some 11.6km from the proposed development site and wide panoramic views are available. It is considered that there is a slight magnitude of change in the view when looking toward the proposed development during a non-launch event scenario. It is considered that the proposed development would lead to a discernible alteration in the view when looking north toward the development. It is however agreed that the composition of the baseline view would remain broadly consistent. The high sensitivity of the receptor combined with the magnitude of change would lead to a moderate, but not significant effect, at this viewpoint during a non-launch event scenario.
- Viewpoint 6 (Summit of Ben Loyal) – The viewpoint is slightly further away than Ben Hope the most northerly Corbett at 11.8km from the proposed development site, but it is a popular location given its position as the most northerly Corbett. During a non-launch event scenario, it is considered that there would be a slight magnitude of change in the view when looking toward the proposed development. It is considered that the proposed development would lead to a discernible alteration in the view when looking toward the proposed development. The underlying composition of the baseline view would remain broadly consistent. The high sensitivity of the receptor combined with the magnitude of change would lead to a moderate, but not significant effect, at this viewpoint during a non-launch event scenario.
- Viewpoint 8 (Ben Hutig) – When traversing the hill toward the summit there is little to no visibility of the development during the non-launch scenario. However, at the summit it is considered that there would be a substantial magnitude of change in both the launch and non-launch scenarios. From the summit there would be a considerable alteration to the existing view and a substantial change to the baseline. This, combined with the high sensitivity of the receptor, would lead to a major (significant) impact during the non-launch scenario. It is however noted that it is unlikely to be as popular as other summits in the area given it is not a Munro or Corbett. It does however have some local value.
- Viewpoint 14 (Ben Tongue) – when traversing the route toward the summit, one would have some visibility of the proposed development when one turns around to take in the surroundings during a pause in the walk on the ascent and during the descent. Visibility however would not be consistent on either the ascent or descent. At the summit, it is considered that the proposed development would lead to the partial alteration of the view given the potential visibility of the access track as well as the building and structures within the site. This would introduce a development which runs broadly north to south, in contrast to other built features in the landscape which run east to west. Therefore, while the moderate magnitude of impact combined with the high sensitivity of the receptor would lead to a major / moderate (significant) effect rather than the moderate effect identified for a non-launch scenario.

10.125 Representations have highlighted that there may be times where the site is prepared for launch and then due to weather, or other reasons, the launch can not go ahead. These representations consider that as a result the mitigation relied upon by the applicant, that the launch period effects will be for a short duration, underplays the effect of the proposed development. The launch roll out period where the Launch Vehicle is in the strongback would be a relatively short duration of approximately 6 hours. It is understood that if a launch is aborted, that the rocket could be taken back down from the strongback, and the relevant structures

retracted, thus reducing the impact. The applicant is proposing an Operational Environmental Management Plan. It is considered that mitigation of visual impacts of launch abortions can be secured through such a document.

- 10.126 The applicant has considered the visual impacts on the A838, A836 and recreational routes in the area. The A838 and A836 forms part of the NC500 tourist route. There will be visibility of the proposed development over a short but sensitive section of this route toward the east of the Kyle of Tongue and across A' Mhoine between Moine House and An Dubh Loch. In this section of the route it is considered that the effects of the development would range from moderate/major to major during the launch and non-launch scenarios. It is considered that while there will be a localised impact, it is not considered that the impact of the development would effect the impact on the route as a whole. The impacts on the recreational routes are noted.
- 10.127 While there are differences in opinion on the visual impacts at some limited viewpoints during the non-launch scenario, overall it is considered that the development has been designed in a manner which integrates significant mitigation. This includes the use of sensitively designed buildings, retractable vertical infrastructure (lighting tower, strongback and aerial park lighting columns), and an access road finished in a recessive material. As set out in the earlier sections of this report related to landscape, landscape designation and wild land, lighting of the site, during both launch and non-launch scenarios, will have a notable visual impact. This requires further mitigation which can be secured by condition. Subject to the aforementioned mitigation, although significant visual effects have been identified they are considered to be acceptable.

Impact on Croft Land

- 10.128 The proposed development is located on common grazings. The Council recognises the core component that crofting plays in the communities of Highland. The land is suitable for rough grazing and is not capable of agricultural improvement. The Crofting Commission has identified that there are 82 croft holdings that have shared grazings rights on the common grazing but notes a minority of these will currently be used for traditional grazings purposes.
- 10.129 Representations have been received in relation to the impact of the development on crofting use. Given the proposed development and the current grazings use, the Crofters Commission do not considered that the proposed development would have a major impact on current grazing uses. It notes that there is one crofter whose use of the common grazings will be impacted but the loss of land to the proposed development would be outweighed by the wider social and economic benefits. The position of the Crofting Commission is accepted.
- 10.130 A separate process will be required in relation to use of the land for a non-crofting purpose. The Crofting Commission notes the potential disturbance to livestock and considers that consultation should be undertaken with an appropriate veterinary authority. The applicant is currently in discussions with crofters in relation to livestock management with regard to launch events.

Noise and Air Quality

- 10.131 The applicant has undertaken an assessment of the impact of noise as a result of the construction and operation of the proposed development. It is noted that there will be noise as a result of construction, as set out in paragraph 10.24, this can be controlled by Section 60 of the Control of Pollution Act 1974.
- 10.132 Operational noise for such a facility will largely be limited to the launch. There will be some noise from plant associated with the building and assembly of the launch vehicles; however, this is anticipated to be limited and would be unlikely to affect noise sensitive receptors due to the location of the facility.
- 10.133 The assessment has considered the noise impacts at a range of noise sensitive receptors including at West Strathan, East Strathan, Talmine and Midtown. In doing so, the applicant has identified the potential noise levels during launch and during flight at a range of altitudes. It is anticipated that the noise from the launch and flight will be experienced for up to 70 seconds, up to 12 times per calendar year. The 70 second period is considered as the likely length of time until which the launch vehicle will reach an altitude of 10,600m. At this altitude, it is predicted that noise levels at the residential receptors will be no higher than the background noise levels. At the closest noise sensitive receptors, the noise at launch is anticipated to be between 100-110db, by the time the launch vehicle reaches 5202m altitude, the noise would reduce to between 70-80db. Further to launches, the rocket will also pass the sound barrier and therefore create a sonic boom. The level of noise from the sonic boom will reach between 127db and 144db and last for a period of 0.2 seconds. These impacts are considered to be significant albeit short lived.
- 10.134 Given the level of potential noise impacts, it is considered appropriate that noise monitoring is undertaken during launch activities to verify the findings of the noise assessment. If it is found that the noise emissions are higher than that predicted by the EIAR, a scheme of mitigation for the affected noise sensitive receptors may be required.
- 10.135 The applicant has undertaken an assessment of the potential effects of the development on air quality during the construction and operational phases of the development. Environmental Health have not raised any concerns in relation to noise or air quality.

Other material considerations

- 10.136 Those consultees with an interest in aviation have not raised concern with regard to the proposed development. The applicant will be required to follow the process under CAP1616: Airspace change, which is regulated by the Civil Aviation, to change the notified airspace design and planned and permanent redistribution of air traffic.
- 10.137 Representations have raised concern about the proposed development being determined by a Local Authority rather than the Scottish Government given the potential national importance of such a facility. As set out in paragraph 3.14 of this report, the Highland Council were served with a direction from the Scottish Government. This states that if the Highland Council are minded to grant planning permission for the proposed vertical launch facility, we are required to notify Scottish Ministers. The Direction has been served to assist in providing an overview of applications for spaceport development in the planning system. Further on 11 June 2020, The Town

and Country Planning (Notification of Applications) (Spaceport Related Developments) (Scotland) Direction 2020. This requires planning authorities in Scotland to advise Scottish Ministers of receipt of any new planning application for a spaceport related development that comes into the planning system. The purpose of that direction is to enable a national overview of spaceport related developments in the planning system to be created.

- 10.138 Given the complexity of major developments, and to assist in the discharge of conditions, the Planning Authority seek that the developer employs a Planning Monitoring Officer (PMO). The role of the PMO, amongst other things, will include the monitoring of, and enforcement of compliance with, all conditions, agreements and obligations related to this permission (or any superseding or related permissions) and shall include the provision of a monthly compliance report to the Planning Authority during the construction period and annual reports thereafter.
- 10.139 The applicant has advised that the development has a nominal operational period of 50 years but it is not applying for a temporary planning permission. If the development is no longer in operational use the proposed development will require to be decommissioned and the site reinstated. The applicant has committed to decommissioning and reinstatement if the proposed development is not used for vertical launches for a period of 5 years. A scheme for decommissioning and restoration can be secured by condition. This will be accompanied by a financial guarantee to cover the costs of decommissioning and restoration.
- 10.140 Representations are concerned that if planning permission is granted then further associated development would be follow on and the number of launches from the site will increase. The application in front of the Planning Authority has a relatively narrow scope and the assessment has been based upon the parameters set out in the EIAR. If further development and intensification of the use of the site is sought, a further planning application and assessment of the environmental effects would be required.
- 10.141 The engineering of the development has caused some concern in those making representations to the application. This is a new and unique development type in Scotland and therefore the designers of the scheme will have to be confident that the engineering solution is appropriate. As it relates to the buildings these matters will be tested through the building warrant process but for infrastructure such as the launch pad, this will likely be required to be considered through the safety case for the required licences.

Non-material considerations

- 10.142 In line with Council policy and practice, community benefit considerations are undertaken as a separate exercise and generally parallel to the planning process. It is understood that Tongue Community Council's response relates to this matter.
- 10.143 While certain matters of safety and human health have been considered in this report, there are other regulatory functions which control these issues.

Matters to be secured by Section 75 Agreement

- 10.144 None

11. CONCLUSION

- 11.1 The proposed development is a unique and if permitted could be one of the first developments of its kind in Europe. However, as with all applications, the benefits of the proposal must be weighed against potential drawbacks and then considered in the round, taking account of the relevant policies of the Development Plan.
- 11.2 The development has attracted a large number of objections from across the world but also a level of support has been demonstrated. There is also support for the development from Tongue Community Council as well as other surrounding community councils across Caithness and north Sutherland. Consultee comments have been addressed in the report and subject to a number of conditions and development of the proposals in accordance with the required conditions there are no outstanding objections to the proposed development from consultees.
- 11.3 This is a scheme that will be significantly regulated by other authorities including SEPA, SNH, Marine Scotland, CAA and the UK Space Agency.
- 11.4 The proposal has a number of challenges in terms of access, landscape and visual impact and environmental impacts where there will be residual significant effects. The development also has a number of benefits, not least the potential economic benefits. The applicant has committed to a range of mitigation in the Environmental Impact Assessment Report. This will require to be followed through and further mitigation, as identified by the Planning Authority and consultees requires to be implemented timeously. With application of the required mitigation, it is considered that, on balance, the development can be considered to accord with the policies of the Development Plan.
- 11.5 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 is acceptable in terms of all other applicable material considerations.

12. IMPLICATIONS

- 12.1 Resource: Not applicable.
- 12.2 Legal: Not applicable.
- 12.3 Community (Equality, Poverty and Rural): Not applicable.
- 12.4 Climate Change/Carbon Clever: The proposed development will likely release carbon as a result of construction and operation. Conditions are proposed to minimise release of carbon through the construction period and secure peat land and blanket bog restoration to sequester carbon.
- 12.5 Risk: Not applicable.
- 12.6 Gaelic: Not applicable.

13. RECOMMENDATION

Action required before decision Y issued

Notification to Scottish Ministers	Y	As per paragraph 3.14 of this report if Members are minded to grant planning permission for the application, the Council are required to notify Scottish Ministers
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Subject to the above, it is recommended that planning permission be **Granted,** subject to the following:

Conditions and Reasons

1. Planning permission is hereby granted for the construction of vertical launch spaceport with launch operations control centre, site integration facility, launch pad complex, antenna park, access road, fencing, services and associated infrastructure to be constructed on an area of ground covering 307ha.

For the avoidance of doubt, no more than 12 launches may take place in any calendar year.

Reason: To clarify the terms of the permission granted.

2. The Operator shall, at all times after the first launch campaign, record information regarding the details of each launch, inclusive of dates and times of each launch and length of each stage of launch campaign, from the site and retain the information in perpetuity. For the avoidance of doubt the applicant shall also record and retain information in relation to aborted / scrubbed launches. The information shall be made available to the Planning Authority within one month of any request by them.

In the event that no launch activity takes place from the site for a period of 5 years, or the operator, leaseholder and / or landlord advises that the development is no longer going to be operated, whichever is earliest, a scheme shall be submitted to the Planning Authority for its written approval detailing how the development will be decommissioned. The scheme shall be prepared in accordance with legislative requirements and published best practice at time of decommissioning. The scheme shall include details about how all elements of the development are to be decommissioned, including where necessary details of:

- a) justification for retention of any relevant elements of the development;
- b) the treatment of disturbed ground surfaces;
- c) management and timing of the works;
- d) environmental management provisions;
- e) a traffic management plan to address any traffic impact issues during the decommissioning period.

Thereafter the scheme shall be implemented in accordance with the approved details and timetable.

Reason: To ensure that should the spaceport no longer be required an appropriate mechanism is in place for decommissioning of the development.

3. No development shall commence until:

i. Full details of a guarantee, bond or other financial provision to be put in place to cover all of the decommissioning and Site restoration measures outlined in the Decommissioning and Restoration Plan approved under condition 2 of this permission have been submitted to, and approved in writing by, the planning authority. For the avoidance of doubt the bond must be able to be called upon by The Highland Council and be enforceable against the operator and landowner and/or leaseholder; and

ii. Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under part (i) above is sufficient to meet the full estimated costs of all decommissioning, 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; and

iii. Documentary evidence that the guarantee, bond or other financial provision approved under parts (i) and (ii) above is in place has been submitted to, and confirmation in writing that the financial provision is satisfactory has been issued by, the planning authority.

Thereafter, the Operator, and Leaseholder and/or Landowner, shall:

i. Ensure that the guarantee, bond or other financial provision is maintained throughout the duration of this permission; and

ii. Pay for the guarantee, bond or other financial provision to be subject to a review five years after the commencement of development and every five years thereafter until such time as the wind farm is decommissioned and the Site restored.

Each review shall be:

a) conducted by a suitably qualified independent professional; and

b) published within three months of each five year period ending, with a copy submitted upon its publication to both the landowner(s) and the Planning Authority; and

c) approved in writing by the planning authority without amendment or, as the case may be, approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part (c) above recommends that the amount of the guarantee, bond or other financial provision should be altered (be that an increase or decrease) or the framework governing the bond or other financial provision requires to be amended, the Operator, and Leaseholder and/or Landowner shall do

so within one month of receiving that written approval, or another timescale as may be agreed in writing by the planning authority, and in accordance with the recommendations contained therein.

Reason: To ensure that there are sufficient funds to secure performance of the decommissioning and restoration conditions.

4. No building shall be erected on the site until full details of materials for all buildings and structures on the site have been submitted to and approved in writing by the Planning Authority. For the avoidance any metal cladding of the buildings shall be of a matt or semi-matt non-reflective finish. Thereafter, development shall progress in accordance with these approved details.

Reason: In the interests of the character and appearance of the area.

5. None of the buildings or structures on the site shall display any name, logo, sign or other advertisement (other than health and safety signage) unless otherwise approved in advance in writing by the Planning Authority.

Reason: In the interests of the character and appearance of the area.

6. Any and all permanent cables, with the exception of final connections, between the Launch Operations Control Centre, Launch Pad Complex, Launch Site Integration Facility and Antenna Park on site shall be installed and kept underground.

Reason: In the interests of visual amenity.

7. Construction of the Launch Operations Control Centre, Launch Site Integration Facility and Launch Pad Complex or ancillary infrastructure shall not commence until final details of:
 - a) any and all external lighting to be used during the operation of the site. For the avoidance of doubt this shall ensure that the use of lighting within the site is minimised in terms of lighting intensity and duration of lighting for both launch and non-launch scenarios;
 - b) fencing;
 - c) paths; and
 - d) any other ancillary elements of the development,

have been submitted to, and approved in writing by, the Planning Authority.

Thereafter, development shall progress in accordance with these approved details.

Reason: In the interests of the character and appearance of the area.

8. No development shall commence until a Construction Environment Management Document (CEMD) has been submitted to and approved in writing by the Planning Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved CEMD, subject to any variations approved in writing by the Planning Authority. The CEMD shall include:
 - a) details of the phasing of construction works;
 - b) details of the formation of temporary construction compounds, access tracks and any areas of hardstanding;

- c) details of the temporary site compound including temporary structures/buildings, fencing, parking and storage provision to be used in connection with the construction of the development;
- d) details of the maintenance of visibility splays on the entrance to the site;
- e) details of the method of construction of the launch pad and all foundations;
- f) details of the method of working cable trenches;
- g) details of the method of construction and erection of the buildings;
- h) details of dust management;
- i) details of pollution control: protection of the water environment, bunding of fuel storage areas, surface water drainage, sewage disposal and discharge of foul drainage;
- j) details of temporary site illumination during the construction period;
- k) details of timing of works;
- l) details of surface treatments and the construction of all hard surfaces and access tracks between each element of the proposed development This shall include details of the tracks in a dark, non-reflective finish with details of the chemical properties of any and all imported stone provided;
- m) details of routeing of onsite cabling;
- n) details of emergency procedures and pollution response plans;
- o) siting and details of wheel washing facilities;
- p) cleaning of site entrances, site tracks and the adjacent public highway and the sheeting of all HGVs taking spoil or construction materials to/from the site to prevent spillage or deposit of any materials on the highway;
- q) details and implementation and a timetable for post construction restoration/reinstatement of the temporary working areas, and the construction compound;
- r) details of working practices for protecting nearby residential dwellings, including general measures to control noise and vibration arising from on-site activities, to be adopted as set out in British Standard 5228 Part 1: 2009;
- s) details of the location of fencing to be erected around designated features within and adjacent to the site inclusive of areas of blanket bog;
- t) a Species Protection Plan
- u) a Breeding Bird Protection Plan;
- v) details of areas on the site designated for the storage, loading, off-loading, parking and manoeuvring of heavy duty plant, equipment and vehicles.

Reason: To ensure a satisfactory level of environmental protection and to minimise disturbance to local residents during the construction process.

9. Development shall not commence until an independent Environmental 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 dated February 2020 lodged in support of the application and the Construction Environmental Management Plan, Species Protection Plan, Breeding Bird Protection Plan, Water Quality Management Plan, Peat Management Plan Habitat 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, and during any period of post construction restoration works approved as part of the Construction Environmental Management Document and the establishment of the Habitat Management Plan.

Reason: To protect ecological interests.

10. No development shall commence until pre-construction surveys have been carried out by a suitably qualified person, in accordance with the submitted Species Protection Plan comprising:

- a) in the spring before construction commences, raptor, diver and breeding bird surveys of the site plus appropriate buffers (2 km for breeding raptors, 500 m for breeding waders and 1 km for breeding divers)
- b) an otter survey along all watercourses within 250 m of the works area.
- c) a water vole survey along all watercourses within 50 m of the works area
- d) a Breeding Bird Survey;
- e) a pre-works check for adder along all riverbanks within 30 m of water crossings.

Thereafter Species Protection Plans (inclusive of a Breeding Bird Protection Plan) for the species surveyed shall be submitted to and approved in writing by the Planning Authority, in consultation with SNH, prior to the commencement of development. Thereafter, the approved species protection plans shall be implemented in full.

Reason: In the interests of nature conservation.

11. No later than 6 months prior to the first launch from the site, a visitor management plan (VMP) shall be submitted to and approved in writing by the Planning Authority in consultation with SNH, Transport Scotland, and emergency services.

The VMP shall be based on the principles set out in the Visitor Management Strategy submitted with the Environmental Impact Assessment Report as clarified by the Scenario Planning with Supporting Planning Assumptions document (May 2020) and shall set out the proposed management of visitors to the site and the launch exclusion zone for the period of the launch campaign.

The approved VMP shall include:

- a) The period of the launch campaign;
- b) Details of how visitors will be managed during launch and non-launch scenarios across the application site and the Launch Exclusion Zone, having particular regard to the impact of visitor management on the qualifying features of the Caithness and Sutherland SAC, SPA and Ramsar site;

- c) The estimated visitor numbers, proposed viewing areas, visitor traffic routes to these areas and the traffic generation on these routes;
- d) The size, layout and location of the car, campervan and coach parking required to accommodate the estimated visitors at or close to the viewing areas and details of suitable accessible routes for pedestrians from the parking to the viewing areas;
- e) Provision of the agreed visitor facilities (including parking facilities) prior to launch;
- f) Measures to encourage sustainable transport to the site including remote park and ride and provision of public transport services from rail stations and larger settlements within Caithness and Sutherland;
- g) Proposals for a suitable Traffic Regulation Order mechanism to control stopping and waiting on the A838 (and at other locations which are identified as likely to be impacted by uncontrolled parking in the vicinity of the launch site). This shall include any associated signage;
- h) Proposals for any byelaws (not relevant to the Space Industry Act 2018) to establish the Launch Exclusion Zone which will impact on the public road network;
- i) Security measures which may affect the free flow of traffic on the public road;
- j) Proposals of road signage to inform and warn road users on the main visitor routes and within the settlements of Melness, Talmine and Tongue and to redirect road users where required, including any signage on the public road required for the Launch Exclusion Zone; and
- k) Proposals for a public information protocol and a communications strategy (including a website) to provide information on the traffic management proposals.

Thereafter the approved VMP shall be implemented in full.

The VMP will also include provision for monitoring of visitor management and a review of the VMP shall be undertaken, in consultation with the Council, SNH, Transport Scotland, and emergency services following each launch during the first year of launches. Thereafter, monitoring and review of the visitor management plan will take place at the end of the 2nd and 5th year of operation and thereafter every 5th anniversary of the first launch from the development or 6 months in advance of the first launch by any new Launch Site Operator.

Following each review of the VMP, the revised VMP shall be submitted for the written approval of the Planning Authority in consultation with SNH, Transport Scotland, and emergency services. Thereafter the revised VMP shall be implemented in full.

Reason: To ensure that visitors are managed in a manner which would not have an adverse effect on the qualifying features of Caithness and Sutherland Peatlands Special Protection Area and Caithness and Sutherland Peatlands Special Area of Conservation, or on the local road network. To ensure the principles in the Visitor Management Strategy submitted with the Environmental Impact Assessment Report as clarified by the Scenario Planning with Supporting Planning Assumptions document (May 2020) are carried forward to the detailed Visitor Management Plan and to allow sufficient time for planning and implementation. The inclusion of suitable reviews of impacts post launch, and appropriate monitoring of qualifying

habitats and species is required to inform, and where necessary change, future visitor management. Changes may be required in response to predicted effects and effects which have not been predicted due to the novelty of the proposal, the evolution of technologies, changes in visitor behaviour and unforeseen factors.

12. No development or work shall (including site clearance) shall commence until a programme of work for the protection of historic features affected by the proposed development, including a timetable for investigation, has been submitted to and approved in writing by the Planning Authority. The approved programme shall be implemented in accordance with the agreed timetable for investigation.

Reason: In order to protect the historic interest of the site.

13. There shall be no Commencement of Development until a Community Liaison Group has been established, the remit and membership of which shall be submitted to and approved in writing by the Planning Authority. The scheme shall set out how the community is to be kept informed of project progress, how it will allow advanced dialogue on the provision of all transport-related mitigation measures and other mitigation measures and keep under review the timing of the delivery of components during construction and launch events. This should also ensure that local events and tourist seasons are considered and appropriate measures to co-ordinate activities on the site during construction and operation of the development with these and any other major projects in the area to manage conflict between construction traffic, operational traffic and the increased traffic generated by such events/seasons/developments. The scheme shall be implemented as approved.

Reason: To assist project implementation and operation, ensuring community dialogue and the delivery of appropriate mitigation measures for example to minimise potential hazards to road users, including pedestrians, travelling on the road networks.

14. No development shall commence until full details of all surface water drainage provision within the application site have been submitted to and approved in writing by the Planning Authority. The details shall:
- i. be based on principles outlined on the Surface Water Plan (Drawing SK-C-SW001)
 - ii. accord with the principles of Sustainable Drainage Systems (SUDS) and be designed to the standards outlined in The CIRIA SUDS Manual any superseding guidance prevailing at the time,
 - iii. include final details of the drainage feature to the east of the LOCC;
 - iv. make provision for the flush habitat north of the LSIF building to be treated like a watercourse and be crossed by a series of closed culverts to minimise impacts on it and maintain local hydrology

The submission shall be supported by a revised Drainage Impact Assessment (inclusive of any revised modelling) to ensure the final design does not have an adverse impact on flood risk, drainage and M6 flush habitat with all discharge rates not exceeding greenfield run off rates.

Thereafter, only the approved details shall be implemented and all surface water drainage provision shall be completed prior to the first occupation of any part of the development.

Reason: To ensure that surface water drainage is provided timeously and complies with the principles of SUDS; in order to protect the water environment.

15. No development shall commence until the Planning Authority has approved in writing the terms of appointment by the Company of an independent and suitably qualified to assist the Planning Authority in monitoring compliance with the terms of the deemed planning permission and conditions attached to this consent ("PMO"). The terms of appointment shall;
- a. Impose a duty to monitor compliance with the terms of the deemed planning permission and conditions attached to this consent throughout the construction and operation of the proposed development;
 - b. Require the PMO to submit a monthly report to the Planning Authority summarising works undertaken on site during construction of the development and then provide an annual report of activities on the site and compliance with conditions; and
 - c. Require the PMO to report to the Planning Authority any incidences of non-compliance with the terms of the terms of the planning permission and conditions attached to this consent at the earliest practical opportunity.

The PMO shall be appointed on the approved terms throughout the period from Commencement of Development to the time which the development is no longer in operation.

Reason: To enable the development to be suitably monitored to ensure compliance with the planning permission granted.

16. No development shall commence until a structural assessment of the Naver Bridge, which shall include an assessment of any and all loads which will be transported across the bridge (inclusive of construction vehicles, plant and machinery) which may be used in the construction of the, has been submitted to and agreed in writing by the Planning Authority.

Thereafter, no development shall commence until either:

- a. the existing Naver Bridge has been replaced; or
- b. a scheme of mitigation to safeguard the safety and the condition of the bridge during the period of construction traffic has been submitted to and agreed in writing by the Planning Authority. The scheme of mitigation shall be informed by the structural assessment and it shall include:
 - i. a pre-start inspection;
 - ii. arrangements for undertaking regular inspection of the bridge;
 - iii. arrangements for reporting any deterioration and for carrying out maintenance due to the extraordinary level of traffic;
 - iv. arrangements for an inspection post-construction;
 - v. consideration of Traffic Management measures for Heavy Goods Vehicles during construction of the development; and
 - vi. details of any necessary works to the bridge and the road over the bridge and the immediate approach to the bridge in order to facilitate the safe passage of the proposed construction traffic.

Thereafter no development shall commence until the agreed scheme of mitigation has been implemented to a timetable to be agreed with the Planning Authority.

Reason: To ensure the free flow and safety of the local road network

17. No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to and approved in writing by the Planning Authority. The CTMP shall include:
- a) A Section 96 Wear and Tear Agreement including provision of a suitable bond. This shall be provided and will cover the construction routes on the local road network, including but not limited to A836 and A838 from Bettyhill to the site, as set out below;
 - b) Identification of the routes to be used for construction HGV traffic which shall not include any use of the A838 west of the site access and the A836 to Lairg;
 - c) Identification of any abnormal indivisible loads (such as cranes and low loaders with construction plant) and the routes to be used by these vehicles;
 - d) Identification of the structures along the construction traffic routes and agreement with The Council's structures section regarding any required inspection of these structures. Identification and provision of any required mitigation at the structures inclusive of any traffic management that may be required;
 - e) Identification of a scheme of mitigation to provide improved inter-visible passing places (suitable for HGVs) within the existing road boundary on any single track sections of the construction routes in general accordance with Figure 5.1 of The Council's Roads and Transport Guidelines. The mitigation shall then be delivered prior to commencement of the development;
 - f) Proposals for ensuring that construction HGV traffic adheres to the agreed routes;
 - g) A pre-start inspection of the agreed routes (this shall be a video inspection with a method for establishing location by GPS coordinate and/or chainage). Any areas of significant deterioration shall be recorded photographically with an accurate location and suitable written commentary. Ideally all inspections should be undertaken jointly with The Council and at least 7 days notice shall be given to enable this;
 - h) Monthly inspection reports of the agreed routes;
 - i) A method of reporting and repairing defects found on the agreed routes;
 - j) A final inspection and report on the condition of the agreed routes within 1 month of completion of the development;
 - k) Provision of suitable measures to remove the depositing of debris on the public road, which may include use of a vacuum road sweeper (or a wheel wash within the site) if required by The Council due to problems with mud on the road;
 - l) A scheme of temporary signage and other temporary mitigation traffic management or works such as a voluntary 20mph speed limit required for the construction HGVs. Proposals for the following settlements shall be considered – Tongue, Bettyhill, Reay and Thurso;
 - m) Specific traffic management proposals are required for Tongue primary school, Farr High School at Bettyhill and Reay primary school. HGV construction traffic should avoid school start and finish periods whenever possible;
 - n) A suitable point of contact for The Council and for members of the public regarding construction traffic movements and any impacts on the public road; and

- o) Details of how complaints regarding construction traffic and damage to the road will be dealt with and how the community and wider public will be kept informed of any significant traffic movements.

Thereafter the approved CTMP shall be implemented in full prior to the commencement of the development.

Reason: to ensure the free flow and safety of the local and trunk road networks during the construction period.

18. The development shall not be brought into use as a spaceport until a practicable Workforce Travel Plan has been submitted to and approved in writing by the Planning Authority. The Plan shall detail the following measures:
- a) The name and contact details of an appointed Travel Plan Co-ordinator;
 - b) The proposed objectives and targets for staff travel, including targets to reduce access being taken to the development by staff and visitors in private cars, encourage practicable access options to the development by sustainable and active transport and for avoiding parking overspill onto the adjacent public roads;
 - c) Details of measures to be taken to meet the proposed targets;
 - d) Details of monitoring that will be undertaken to measure the success of the Travel Plan against the approved targets;
 - e) Details of the reporting of the monitoring of the Workforce Travel Plan, which shall be annually from the date of the first use of the development as a spaceport. This report shall include details of any further mitigation measures required to ensure the targets in the Workforce Travel Plan can be met.

Thereafter the Workforce Travel Plan shall be implemented prior to first use of the development as a spaceport.

Reason: To reduce the reliance on private cars and encourage modal shift to sustainable and active transport.

19. No development shall commence on the car park until a detailed scheme for the car parking spaces, detailing no fewer than 39 parking spaces inclusive of appropriately located disabled parking spaces in accordance with the Roads and Transportation Guidelines for New Development, has been submitted to and approved in writing by the Planning Authority. The approved scheme shall be implemented prior to first occupation of the phase of the development to which it relates, thereafter being maintained for this use in perpetuity.

Reason: To ensure adequate provision of car parking.

20. No development shall commence until a scheme for the delivery of 17 passing places to a design and specification agreed with The Council, in general accordance with the Pell Frishmann Passing Place Review Rev B dated 24/03/20, has been submitted to and approved in writing by the Planning Authority and has been implemented to the satisfaction of the Planning Authority.

Reason: To ensure that the consequences for the local road network as a result of construction traffic from the proposed development are addressed.

21. The development shall not be brought into use as a spaceport until a Launch Event Visitor Management Group is established by the Launch Site Operator in collaboration with The Council, SEPA, SNH, Sutherland Access Panel, Emergency Services, and local Community Councils.
- The group shall act as a vehicle to develop and review the effectiveness of the Visitor Management Plan to avoid conflicts in launch campaign visitor management which may lead to damage to the Natura 2000 sites, disturb protected species and / or create parking and traffic management problems.
- The Launch Event Visitor Management Group, or element of any combined liaison group relating to this development, shall be maintained in perpetuity with the first meeting to take place within 6 months of commencement of development and meetings then being held at least once every three months prior to the first launch campaign to develop the Visitor Management Plan; after the first launch and after every third launch thereafter within the first year of operation. Thereafter the Launch Campaign Visitor Management Group shall meet at least once every six months.
- Reason:** To assist with the provision of mitigation measures to minimise the potential for conflict of events which may lead to traffic management problems.
22. No development shall commence until a foundation plan has been submitted and approved in writing by the Planning Authority in consultation with SEPA. The plan will include, but not limited to, pile foundations for the Launch Operations Control Centre, the Launch Pad and the rail track. Thereafter the foundation plan shall be implemented.
- Reason:** To limit the impact of the proposed development on the peat resource and minimise carbon loss.
23. Prior to the commencement of the development (including any engineering works) of the development, a Peat Management Plan shall be submitted to and approved in writing by the Planning Authority in consultation with the SEPA and SNH. The Peat Management Plan shall include:
- a) the volume of peat disturbed by the development (re-estimated following any further ground investigations and any further measures to reduce peat disturbance);
 - b) the volume of peat to be reused during reinstatement works, and in restoration and remediation of damaged and degraded peat within the site and within the vicinity of the site;
 - c) a plan identifying where and how disturbed peat can be reused in site reinstatement works;
- Thereafter the approved peat management plan shall be implemented in full.
- Reason:** To ensure the development of the site limits impact on the peat resource and minimises carbon loss.
24. No development shall commence until a Stage 1 Nature Conservation Management Plan (including Habitat Management Plan and restoration) has been submitted to and approved in writing by the Planning Authority in consultation with SNH and

SEPA. The Nature Conservation Management Plan shall set out proposed long term management for the application site and immediate vicinity and shall provide for the management, monitoring and reporting of terrestrial and aquatic habitats on site. Specifically this shall include management, monitoring and reporting of:

- i. peatland restoration of, as a minimum the areas shown in Figure 5.11 of the EIA Report, with the first phase of works to be completed within one year of the operation of the site;
- ii. water quality (across the whole site but with a focus on water quality following launch events in the vicinity of the launch pad and the watercourse into which the overflow from the deluge water will discharge);
- iii. impact of the proposed development on blanket bog.

This shall be based on the principles of the Outline Habitat Management Plan and shall ensure that any and all management, monitoring and reporting shall be undertaken with the aim to protect and enhance the habitat and biodiversity of the site and the surrounding area, with a particular view to maximising sequestration of the carbon released as a result of the construction and operation of the proposed development. The HMP within the conservation management plan shall include:

- a) a summary of the baseline habitat conditions on site including sensitive habitats and/or designated sites;
- b) a summary of the protected species survey data and review of any species most likely to be impacted by the development;
- c) a summary of the relevant legislation, planning policy and best practice guidance related to the development;
- d) detailed management and mitigation measures for habitat reinstatement and enhancement; and
- e) detailed monitoring measures and reporting prescriptions.

The approved Nature Conservation Management Plan will be reviewed and updated by the Developer to reflect ground condition surveys undertaken during construction and prior to the first launch campaign and shall be submitted to the Planning Authority for its written approval in consultation with SNH and SEPA prior to the first launch campaign, as the Stage 2 Nature Conservation Management Plan.

In furtherance of the aim and for the better implementation and review of the Nature Conservation Management Plan Steering Group (NCPM SG) shall be formed prior to the commencement of any development. The membership of this NCMP SG will include representatives of the Developer, the Planning Authority and SNH. The NCMP SG will meet annually but it is expected that its consideration of relevant matters will be primarily by exchange of correspondence.

The Stage 2 Nature Conservation Management Plan shall be further reviewed by the Developer at a frequency of no longer than the 5 year anniversary of the first launch date, and no longer than every 6 years thereafter until the Development is no longer in operation. The Developer shall submit a stage reviewed Nature Conservation Management Plan following each such Nature Conservation Management Plan monitoring year as provided for in the Nature Conservation Management Plan for approval in writing by the Planning Authority in consultation with SNH and SEPA. Mitigation identified through the reviewed Nature Conservation Management Plans shall be implemented in full by the Developer, unless otherwise agreed in writing by the Planning Authority in consultation with SNH and SEPA.

NCMP monitoring shall be carried out by the Developer in operational years 1, 5, 10, 15 and 25 and shall be reported to the Planning Authority, the NCMP Steering Group in writing by the Developer.

The Developer shall submit a monitoring report to the Planning Authority, SNH and SEPA on the ongoing implementation of the approved Nature Conservation Management Plan which will be provided no later than 6 months after the end of each NCMP monitoring year. The monitoring report shall present an assessment of the implementation of the Nature Conservation Management Plan, including -

- a. an assessment of the implementation of the Nature Conservation Management Plan, and any reviewed such plan, in relation to the aims and objectives of the plan;
- b. the levels, of habitat restoration delivered on site, and
- c. the results of any monitoring and surveys required in compliance with the conditions of this deemed planning permission.

If a monitoring report identifies that the implementation of the Nature Conservation Management Plan is not meeting the aims and objectives of the Habitat Management Plan then this shall be reported by the Developer to the HMP SG along with details of the proposed mitigation and any other works considered to be required to ensure the aims and objectives of the approved Habitat Management Plan will be met within 6 months of the relevant monitoring report being so submitted. The HMP SG will review such proposals and make recommendations thereon. The Developer shall then finalise proposed mitigation and other works, incorporate changes into an updated Habitat Management Plan which shall be submitted to the Planning Authority within 12 months of the relevant monitoring report for written approval in consultation with SNH and SEPA.

Unless otherwise agreed in advance in writing with the Planning Authority after consultation with SNH and SEPA, the approved Habitat Management Plan, each approved reviewed Habitat Management Plan and updated mitigation and works to achieve same shall be implemented in full by the Developer.

Reason: In the interests of good land management, the protection of habitats, carbon sequestration and to minimise the impacts on the qualifying interests of the Caithness and Sutherland Peatlands Special Area of Conservation.

25. No development shall commence until details of any and all watercourse crossings have been submitted to and approved in writing by the Planning Authority. All watercourse crossings shall be designed to ensure they do not impede a 1 in 200 year plus climate change flow, include an appropriate level of freeboard and include formal mammal passages if a sufficient bank would be maintained under flood conditions.

Reason: In the interests of ensuring the risk of flooding is not increased as a result of the development.

26. For the avoidance of doubt when the water deluge system is being maintained (inclusive of drainage or cleaning) the water shall not be discharged to a local watercourse and shall be removed or disposed at a suitably licenced facility.

Reason: To ensure that the quality of the water environment is protected.

27. No development shall commence until a Foul Drainage Plan is submitted to and approved in writing by the Planning Authority in consultation with SEPA.

Foul drainage shall be implemented in line with Drawing SK-C-FW001 "Foul Drainage Plan" unless an alternative solution, which is demonstrated to have less impact on the environment, is agreed by the Planning Authority in consultation with SEPA.

Thereafter the approved foul drainage solution shall be implemented prior to the development being brought into use as a spaceport.

Reason: To ensure that the quality of the water environment is protected.

28. No works or development, with the exception of surface water drainage infrastructure, foul drainage, nature conservation and habitat management shall be undertaken outwith areas identified for construction works on the approved Extent of Works Plan (approved drawing etc 19.02.P17), the areas of which shall be marked out on the site. For the avoidance of doubt storage of material may take place within 10m of the top of the bank of any watercourse or waterbody unless otherwise agreed in writing by SEPA and The Highland Council's Flood Risk Management Team.

Reason: To ensure the impact of construction on the surrounding environment is managed.

29. No development shall commence until an updated Schedule of Mitigation has been submitted to and approved in writing by the Planning Authority in consultation with SNH and SEPA. The document shall include provision for :

- a) An updated Schedule of Mitigation (SM) including all mitigation identified in the Environmental Impact Assessment Report and any additional mitigation otherwise included as conditions on this planning permission;
- b) A timetable for the implementation of each element of mitigation;
- c) Processes to control / action changes from the agreed Schedule of Mitigation.

Thereafter all mitigation identified in the approved document shall be implemented in full in accordance with the timescales included in the schedule of mitigation.

Reason: to ensure the delivery of required mitigation to ensure the impacts of the proposed development on the receiving environment are managed.

30. No development shall commence until a programme for monitoring the effect of discharge of deluge water from the launch pad on the watercourse is agreed by the Planning Authority in consultation with SEPA. Should the monitoring show that the discharge includes contaminants above a concentration which could cause pollution then a modification to the treatment approach will be required

Reason: To ensure no adverse environmental impacts arise from the operation of the water deluge system.

31. No development shall commence on until a scheme for monitoring noise from launch vehicles during the first year of operation has been submitted to, and agreed in writing by, the Planning Authority. Within six months of the first anniversary of the first launch from the space port, a report that compares the predicted effects contained with the EIAR submitted in support of this application and identifies any further mitigation deemed necessary to protect sensitive receptors, including a programme for implementation, shall be submitted to, and agreed in writing by, the Planning Authority. Any agreed mitigation shall be implemented in accordance with the agreed programme.

Reason: To protect the amenity of sensitive receptors from operational noise that was not predicted.

32. No development or works shall commence until an Operational Environmental Management Plan (OEMP) has been submitted to, and approved in writing by, the Planning Authority. The OEMP shall include, but will not necessarily be limited to:
- a. an overview of the environmental conditions attached to the planning permission and the measures which will be implemented to ensure the proposal is operated in accordance with the terms of the planning permission;
 - b. A description of all key operating procedures for the site with reference to environmental management and control;
 - c. A site log sheet for emissions showing which items of plant will be operational at each stage of operation, anticipated sources of emissions, associated emissions points that will be in use and details of abatement which will be applied during operation;
 - d. Description of controls that will be in place during operation of the site and monitoring regimes which will be implemented during the operating period to record activities, emissions and any activities requiring information to be generated to meet planning permission or licencing requirements;
 - e. Processes to control / action changes as a result of unexpected events during operation.

The Operational Environmental Management Plan shall be implemented as approved, ensuring all on site staff are familiar with and adhere to its terms.

The OEMP shall be reviewed every 5 years from the date of the approval of the permission to ensure that it remains in line with good practice. The reviewed and updated documents shall be submitted and approved in writing to the Planning Authority by 01 March of any review year.

Reason: In order to enable the Planning Authority to adequately control the development and to minimise its impact on the nature conservation and amenities of the local area.

33. At all times outwith a launch event, which for the purposes of this condition is defined as the period of time when the launch vehicle is required to be in a vertical position within the Launch Pad Complex for operation reasons, the lightning tower, strongback and lighting columns within the antenna park shall be retracted to their lowest height.

Reason: to ensure visual impacts are minimised.

REASON FOR DECISION

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 is acceptable in terms of all other applicable material considerations.

REASONED CONCLUSION

The Council's assessment of the information presented within the EIA Report and other environmental information in relation to the development is contained within the Report of Handling. Residual significant effects have been identified in relation to landscape and visual effects, noise, traffic, major accidents and disasters and greenhouse gases.

The Council is satisfied that this reasoned conclusion is still up to date.

The Council is satisfied that other effects/issues can be addressed by way of mitigation. A detailed description of the proposed mitigation is contained within Chapter 15 of the EIA Report and the Report of Handling.

The Council has incorporated the requirement for a schedule of mitigation within the conditions of this permission. Monitoring has been secured through Conditions 2, 8, 9, 11, 15, 18, 19, 24, 29, 30, 31, and 32 of this permission.

All documents can be viewed online at <https://wam.highland.gov.uk/wam/> and searching using the case reference number.

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.
2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Accordance with Approved Plans and Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (paragraph 259), planning permission does not remove the liability position of developers or owners in relation to flood risk.

Scottish Water

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.

Septic Tanks and Soakaways

Where a private foul drainage solution is proposed, you will require separate consent from the Scottish Environment Protection Agency (SEPA). Planning permission does not guarantee that approval will be given by SEPA and as such you are advised to contact them direct to discuss the matter (01349 862021).

Local Roads Authority Consent

In addition to planning permission, you may require one or more separate consents (such as road construction consent, dropped kerb consent, a road openings permit, occupation of the road permit etc.) from the Area Roads Team prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local Area Roads office for further guidance at the earliest opportunity.

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 and 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.

Construction Hours and Noise-Generating Activities: 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 boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or 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).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact env.health@highland.gov.uk for more information.

Protected Species – Halting of Work

You are advised that work on site must stop immediately, and Scottish Natural Heritage must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected species and developer responsibilities is available from SNH: www.snh.gov.uk/protecting-scotlands-nature/protected-species

Other Licences and Regulatory Procedures

To allow the proposed development to operate a number of licences require to be granted. These include:

- Operator licence regulated by the UK Space Agency
- Spaceport licence regulated by the UK Space Agency
- Range services licence under regulated by the UK Space Agency 2018
- Marine Licence regulated by Marine Scotland

- Planned and Permanent Redistribution of Air Traffic (CAP1616) regulated by the Civil Aviation Authority.
 - Controlled Activities Regulations Licences Regulated by SEPA
- The applicant will be required to ensure these and any other relevant regulatory regimes are followed and appropriate consents / licences in place prior to the operation of the proposed development.

Designation: Acting Head of Development Management – Highland

Author: Simon Hindson

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

Relevant Plans:

- Plan 1 - UKVLS-NOR-ZZ-ZZ-DR-A-90051 REV P03 – Site Location Plan
- Plan 2 - UKVLS-NOR-ZZ-ZZ-DR-A-90054 REV P06 – Site Layout Plan
- Plan 3 - UKVLS-NOR-ZZ-ZZ-DR-A-90055 REV P06 - Site Plan As Proposed Launch Operations Control Centre
- Plan 4 - UKVLS-NOR-ZZ-ZZ-DR-A-90056 REV P06 - Site Plan As Proposed Launch Site Integration Facility
- Plan 5 - UKVLS-NOR-ZZ-ZZ-DR-A-90057 REV P06 - Site Plan As Proposed Launch Pad Complex
- Plan 6 - UKVLS-NOR-CC-ZZ-DR-A-00103 REV P03 – Launch Operation Control Building Elevations East / West
- Plan 7 - UKVLS-NOR-CC-ZZ-DR-A-00104 REV P04 - Launch Operation Control Building Elevations North South
- Plan 8 - UKVLS-NOR-CC-ZZ-DR-A-00105 REV P04 - Launch Operation Control Building Elevations
- Plan 9 - UKVLS-NOR-CC-00-DR-A-00001 REV P05 - Launch Operation Control Building Floor Plans
- Plan 10 - UKVLS-NOR-VF-ZZ-DR-A-00104 REV P04 - Launch Site Integration Facility Elevations East / West
- Plan 11 - UKVLS-NOR-VF-ZZ-DR-A-00105 REV P04 - Launch Site Integration Facility Elevations North / South
- Plan 12 - UKVLS-NOR-VF-00-DR-A-00001 REV P016 – Launch Site Integration Facility Floor Plan
- Plan 13 - UKVLS-NOR-VF-ZZ-DR-A-00106 REV P04 - Launch Pad Complex Elevations
- Plan 14 - UKVLS-NOR-VF-ZZ-DR-A-00107 REV P04 - Launch Pad Complex Elevations (Reduced)
- Plan 15 - UKVLS-ARP-ZZ-XX-DR-C-0001 REV P02 – Access Road Layout
- Plan 16 - UKVLS-ARP-ZZ-ZZ-DR-E-2101 REV P02 - Access Road and Site Infrastructure Proposed Contours

Appendix 2 - Appropriate Assessment

Construction of vertical launch space port with launch operations control centre, site integration facility, launch pad complex, antenna park, access road, fencing, services and associated infrastructure

20/00616/FUL

CONSIDERATION OF PROPOSALS AFFECTING EUROPEAN SITES

Caithness and Sutherland Peatlands Special Protection Area

Caithness and Sutherland Peatlands Special Area of Conservation

North Sutherland Coastal Islands SPA Special Protection Area

The status of Caithness and Sutherland Peatlands Special Protection Area, Caithness and Sutherland Peatlands Special Area of Conservation, and North Sutherland Coastal Islands SPA Special Protection Area means that the requirements of the Conservation (Natural Habitats, & c.) Regulations 1994 as amended (the 'Habitats Regulations') or, for reserved matters the Conservation of Habitats and Species Regulations 2017 as amended apply.

This means that where the conclusion reached by the Council on a development proposal unconnected with the nature conservation management of a Natura 2000 site is that it is likely to have a significant effect on those sites, it must undertake an Appropriate Assessment of the implications for the conservation interests for which the areas have been designated. The need for Appropriate Assessment extends to plans or projects out with the boundary of the site in order to determine their implications for the interest protected within the site.

This means that the Council, as competent authority, has a duty to:

- Determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
- Determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
- Make an Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.

The competent authority can only agree to the proposal after having ascertained that it will not have an adverse effect on the integrity of the sites. If this is not the case and there are not alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.

Screening of Likely Significant Effects

It is evident that the proposal is not connected with or necessary to site management for conservation, hence further consideration is required. The proposed vertical launch facility has the potential to have a likely significant effect on the qualifying interests due to impacts arising from construction, operation and decommissioning of the Proposed Development. The Council is therefore required to undertake an appropriate assessment of the implications of the proposal on the above named European designated sites.

Caithness and Sutherland SPA

SNH have advised that the proposal is likely to have a significant effect on the following qualifying interests of the Caithness and Sutherland Peatlands SPA:

- Dunlin *Calidris alpina schinzii*
- Golden Plover *Pluvialis apricaria*
- Greenshank *Tringa nebularia*

The proposal has the potential to disturb/displace greenshank, golden plover and dunlin during both the construction and operation of the space hub. This will adversely impact on the following conservation objectives:

- Distribution of species within the site;
- Distribution and extent of habitats supporting the species; and
- No significant disturbance of the species.

As a result of the likely significant effects, as competent authority, The Highland Council is **required** to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests.

Caithness and Sutherland SAC

SNH have advised that the proposal is likely to have a significant effect on the following qualifying interests of the Caithness and Sutherland Peatlands SAC:

- Blanket bogs
- Depressions on peat substrates of the *Rhynchosporion*
- Natural dystrophic lakes and ponds,
- Northern Atlantic wet heaths,
- Otter.

As a result of the likely significant effects, as competent authority, The Highland Council is **required** to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests.

North Sutherland Coastal Islands SPA

SNH have advised that the site, is protected for its wintering population of barnacle geese which roost on the islands of Eilean Hoan and Eilean nan Ron. The birds generally feed on improved land around the Kyle of Tongue with the nearest feeding location being approximately 4.5 km from the proposed development site.

The surveys included in the EIAR did not record any barnacle geese flying through or feeding in the development area. Regarding feeding sites, disturbance due to noise was considered to be the only potential impact. It is concluded in the EIAR that due to the distance of the nearest feeding sites from the development and the low frequency of the launches that there will not be a significant effect. We are content with this assessment and therefore **no likely significant effect** can be concluded.

As a result of the lack of likely significant effects, as competent authority, The Highland Council is **not required** to carry out an appropriate assessment in view of the site's conservation objectives for its qualifying interests and can be scoped out if the appropriate assessment

APPROPRIATE ASSESSMENT

While the responsibility to carry out the Appropriate Assessment rests with the Council, advice contained within Circular 6/1995 is that the assessment can be based on the information submitted from other agencies. In this case, the Appropriate Assessment is informed by information supplied by SNH, the applicant and various published information.

Caithness and Sutherland Peatlands SAC

In its response to the Council of 12 March 2020, SNH advised that the proposal is likely to have a significant effect on the qualifying interests of the SAC during construction. Their advice is set out below:

For the construction phase a likely significant effect on the habitats above can be concluded but information provided shows that the adverse effect on site integrity can be avoided. The outline Construction Environment Management Plan (CEMP) provides adequate mitigation and the principles it contains should be worked through to the detail stage. It will also be essential that the on-site Environmental Clerk of Works (ECOW) has the authority to intervene if environmental risks are being taken or damage caused. The mitigation measures below should be conditioned to ensure the following habitat conservation objectives are met and avoid an adverse effect on site integrity for these habitats:

- *Distribution of the habitats within site.*
- *Structure and function of the habitats.*
- *Processes supporting the habitats.*

Regarding otter, a likely significant effect can be concluded but information provided shows that an adverse effect on site integrity can be avoided. An otter survey has been carried out and Species Protection Plan (SPP) produced. The field survey area included all watercourses within the red-line boundary together with a wider 2.2km buffer around the centre point of the proposed launch pad. Three records of otter activity (spraints) were found within the red line boundary and two in the wider survey area to the north-west. No holts or rest sites were found.

The SPP proposes mitigation including pre-construction survey, tool-box talks, presence of an ECOW and other suitable, good-practice measures. The survey appears competent and the mitigation in the SPP will ensure the following conservation objectives are met and will avoid an adverse effect on site integrity for this species:

- *Distribution of the species within the site.*
- *No significant disturbance of the species.*

Further to the above advice SNH advised that the proposal should be conditions so that the works are undertaken strictly in accordance with the below mitigation:

	Mitigation	Reason
1.	The detailed CEMP, should be agreed with THC, in consultation with SNH prior to the commencement of works.	To ensure suitable mitigation is included in the final, detailed CEMP to avoid damage to the qualifying interests.

2.	The ECOW should have the authority to intervene during construction including the powers to 'stop the job'.	To ensure the CEMP and other relevant mitigation is being adhered to.
3.	Implementation of the Species Protection Plan should be a condition of planning consent.	To protect otter from disturbance.

In its response to the Council of 12 March 2020, SNH advised that the proposal is likely to have a significant effect on the qualifying interests of the SAC during operation as a result of potential visitors to the site. It noted that "the combination of the lack of detail over how this area will be observed, cleared and policed and the sensitivity of the habitats involved provides a likely high but unquantifiable risk." However, it was not able to conclude whether there was a likely significant effect as it considered further information was required on the above matters. The applicant provided a clarifications document for how the provisions of the Visitor Management Strategy could be implemented, this allowed SNH to reach a conclusion on the likely significant effects of the SAC. In a letter dated 28 May 2020, SNH advised:

During the operational phase most of the planned activities take place within the confines of the application red line boundary and therefore avoid the protected area and its qualifying features. However, visitor management will be required over a much wider area which includes the Launch Exclusion Zone (LEZ), currently expected to cover a 1.8km radius, as well as an additional area between the A838 and the LEZ. This will include an area well in excess of 1000ha within both the protected areas.

The features above are extremely susceptible to physical damage from vehicles and from people even in relatively small numbers. An outline Visitor Management Strategy was produced and is included in the EIAR.

The revised Visitor Management Strategy, 28 May 2020, sets out the principles by which visitors will be managed. The principles follow a "Deter, Detect, Delay, Respond/Removal" model which is focussed on the early stages, as well as providing and promoting offsite viewing alternatives. The additional information includes further detail on how individuals will be removed from the site including a commitment to do this on foot by suitably trained and equipped individuals. Vehicles will only be used in an emergency situation (where there is threat to life), an appropriate type of vehicle will be agreed through the final Visitor Management Plan and vehicle operators will be suitably trained. In the unlikely event that vehicles are deployed they will be carefully driven, avoiding soft, wet areas and not damaging the vegetation surface. Furthermore, in the unlikely event that a vehicle needs to be used, it will take the least damaging route in and out, informed again by operator training. All of this substantially reduces the likelihood of vehicle impacts to the vegetation and of repeat damage to the same locations.

Post launch reviews will be put in place to assess the effectiveness of the Visitor Management Plan after each launch event and a habitat monitoring protocol will be agreed to assess the levels of impact on the qualifying interests. SNH should have the opportunity to input to both the post launch reviews and the assessment of the annual monitoring to advise on the impacts, including cumulative impacts, and the measures required to further reduce any effects to a minimal level. If these measures are adopted into the final Visitor Management Plan, at least six months prior to the first launch, to allow time for planning and implementation, then the combined measures would be sufficient to avoid an adverse effect on site integrity for the habitats listed above.

Further to the above advice SNH advised that the proposal should be conditions so that the works are undertaken strictly in accordance with the below mitigation:

	Mitigation	Reason
1.	A detailed Visitor Management Plan should be agreed by The Highland Council, in consultation with SNH, at least six months prior to the first launch taking place. This should include an agreed post launch review arrangement and a monitoring protocol for the SAC and SPA qualifying interests. The VMP should also provide for the necessary changes in visitor management as identified by SNH, for the duration the site is in use.	To ensure the principles in the revised Visitor Management Strategy (May 2020) are carried forward to the detailed Visitor Management Plan and to allow sufficient time for planning and implementation. The inclusion of suitable reviews of impacts post launch, and appropriate monitoring of qualifying habitats and species is required to inform, and where necessary change, future visitor management. Changes may

It is concluded that by the development being undertaken strictly in accordance with the above mitigation during the construction and operational phases of the development the combined measures would be sufficient to avoid an adverse effect on site integrity for the habitats and species listed above.

Caithness and Sutherland Peatlands SPA

In its response to the Council of 12 March 2020, SNH advised that the proposal is likely to have a significant effect on the qualifying interests of the SAC during construction. Their advice is set out below:

For the construction phase a likely significant effect on the above species can be concluded but information provided shows that an adverse effect on site integrity can be avoided. Disturbance can be mitigated by the measures included in the outline CEMP & Species Protection Plans (SPP). The SPP contains reference to the intention to provide a Breeding Bird Protection Plan (BBPP). The detailed CEMP and BBPP, to be developed, should also be agreed with THC, in consultation with SNH, to ensure mitigation is followed through and, where necessary, clarified prior to commencement of works. This includes necessary measures to avoid disturbance such as pre-commencement surveys, setting out exclusion zones and adherence to limitations on timing of works.

As for SAC habitats above it is essential that the ECOW has the authority to enforce measures identified to protect the breeding birds. In addition to the measures in 3.1.1 above, the following mitigation measures should be conditioned:

	Mitigation	Reason
1.	The Species Protection Plan (SPP) contains reference to the intention to provide a Breeding Bird Protection Plan (BBPP). The latter should be agreed with THC, in consultation with SNH prior to the commencement of works.	To ensure mitigation is followed through, and where necessary clarified prior to commencement of works. This includes necessary measures to avoid disturbance which may include restrictions to the construction period.

For the operational period, in its response to the Council of 12 March 2020, SNH advised that:

Disturbance through noise from launches has been evaluated in the EIAR and although the noise events are extremely loud they will be very short-lived. From our own experience of blasting for construction and from military jets, it appears that sudden, loud noise events have short-term effects and do not appear to result in the permanent displacement of breeding birds. Therefore, our advice is that there is no basis for concluding adverse impact from the launches themselves.

SNH further advised that the proposal is likely to have a significant effect on the qualifying interests of the SPA during operation as a result of potential visitors to the site. It noted that “the combination of the lack of detail over how this area will be observed, cleared and policed and the sensitivity of the habitats involved provides a likely high but unquantifiable risk.” However, it was not able to conclude whether there was a likely significant effect as it considered further information was required on the above matters. The applicant provided a clarifications document for how the provisions of the Visitor Management Strategy could be implemented, this allowed SNH to reach a conclusion on the likely significant effects of the SPA. In a letter dated 28 May 2020, SNH advised:

During the operational phase most of the planned activities take place within the confines of the application red line boundary and therefore avoid the protected area and its qualifying features. However, visitor management will be required over a much wider area which includes the Launch Exclusion Zone (LEZ), currently expected to cover a 1.8km radius, as well as an additional area between the A838 and the LEZ. This will include an area well in excess of 1000ha within both the protected areas.

The features above are extremely susceptible to physical damage from vehicles and from people even in relatively small numbers. An outline Visitor Management Strategy was produced and is included in the EIAR.

The revised Visitor Management Strategy, 28 May 2020, sets out the principles by which visitors will be managed. The principles follow a “Deter, Detect, Delay, Respond/Removal” model which is focussed on the early stages, as well as providing and promoting offsite viewing alternatives. The additional information includes further detail on how individuals will be removed from the site including a commitment to do this on foot by suitably trained and equipped individuals. Vehicles will only be used in an emergency situation (where there is threat to life), an appropriate type of vehicle will be agreed through the final Visitor Management Plan and vehicle operators will be suitably trained. In the unlikely event that vehicles are deployed they will be carefully driven, avoiding soft, wet areas and not

damaging the vegetation surface. Furthermore, in the unlikely event that a vehicle needs to be used, it will take the least damaging route in and out, informed again by operator training. All of this substantially reduces the likelihood of vehicle impacts to the vegetation and of repeat damage to the same locations.

Post launch reviews will be put in place to assess the effectiveness of the Visitor Management Plan after each launch event and a habitat monitoring protocol will be agreed to assess the levels of impact on the qualifying interests. SNH should have the opportunity to input to both the post launch reviews and the assessment of the annual monitoring to advise on the impacts, including cumulative impacts, and the measures required to further reduce any effects to a minimal level. If these measures are adopted into the final Visitor Management Plan, at least six months prior to the first launch, to allow time for planning and implementation, then the combined measures would be sufficient to avoid an adverse effect on site integrity for the habitats listed above.

Further to the above advice SNH advised that the proposal should be conditions so that the works are undertaken strictly in accordance with the below mitigation:

	Mitigation	Reason
1.	A detailed Visitor Management Plan should be agreed by The Highland Council, in consultation with SNH, at least six months prior to the first launch taking place. This should include an agreed post launch review arrangement and a monitoring protocol for the SAC and SPA qualifying interests. The VMP should also provide for the necessary changes in visitor management as identified by SNH, for the duration the site is in use.	To ensure the principles in the revised Visitor Management Strategy (May 2020) are carried forward to the detailed Visitor Management Plan and to allow sufficient time for planning and implementation. The inclusion of suitable reviews of impacts post launch, and appropriate monitoring of qualifying habitats and species is required to inform, and where necessary change, future visitor management. Changes may

It is concluded that by the development being undertaken strictly in accordance with the above mitigation during the construction and operational phases of the development the combined measured would be sufficient to avoid an adverse effect on site integrity for the bird species listed above.

HIGHLAND COUNCIL APPRAISAL OF THE PROPOSAL

- The proposal is not directly connected with or necessary to site management for conservation;
- The proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; therefore;
- An Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives is provided below.

The impacts on the Caithness and Sutherland SAC and the Caithness and Sutherland SPA are considered in terms of the different phases of the development where different impacts would likely arise. i.e. the construction phase; operational phase and the decommissioning phase. The mitigation proposed by SNH should be sufficient to address any significant risk and avoid an impact on the integrity of the designated sites and their qualifying features.

Overall, it can be therefore concluded that while likely significant effects have been identified during both the construction and operational phases of the development. there will not be an adverse effect on site integrity of either the Caithness and Sutherland SAC or the Caithness and Sutherland SPA if the mitigation set out within the appropriate assessment is applied.



LOCATION PLAN - 1:50000 AT A1

1:50000



DATE	REVISION	REV	DRW	CHK
06.01.2020	ISSUED FOR PLANNING	P01	LB	CH
15.01.2020	PROJECT TITLE UPDATED	P02	CH	CH
20.01.2020	TITLE BOX UPDATED	P03	LB	CH

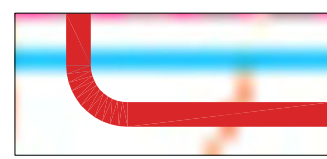
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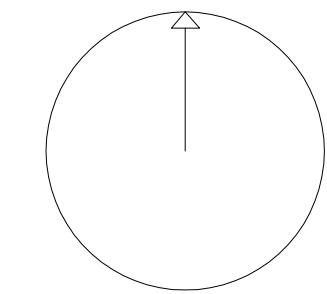
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Keyplan

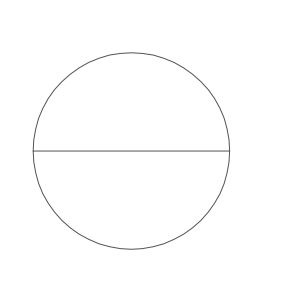


RED LINE
DENOTES
APPLICATION SITE
BOUNDARY

North Arrow



Detail Symbol



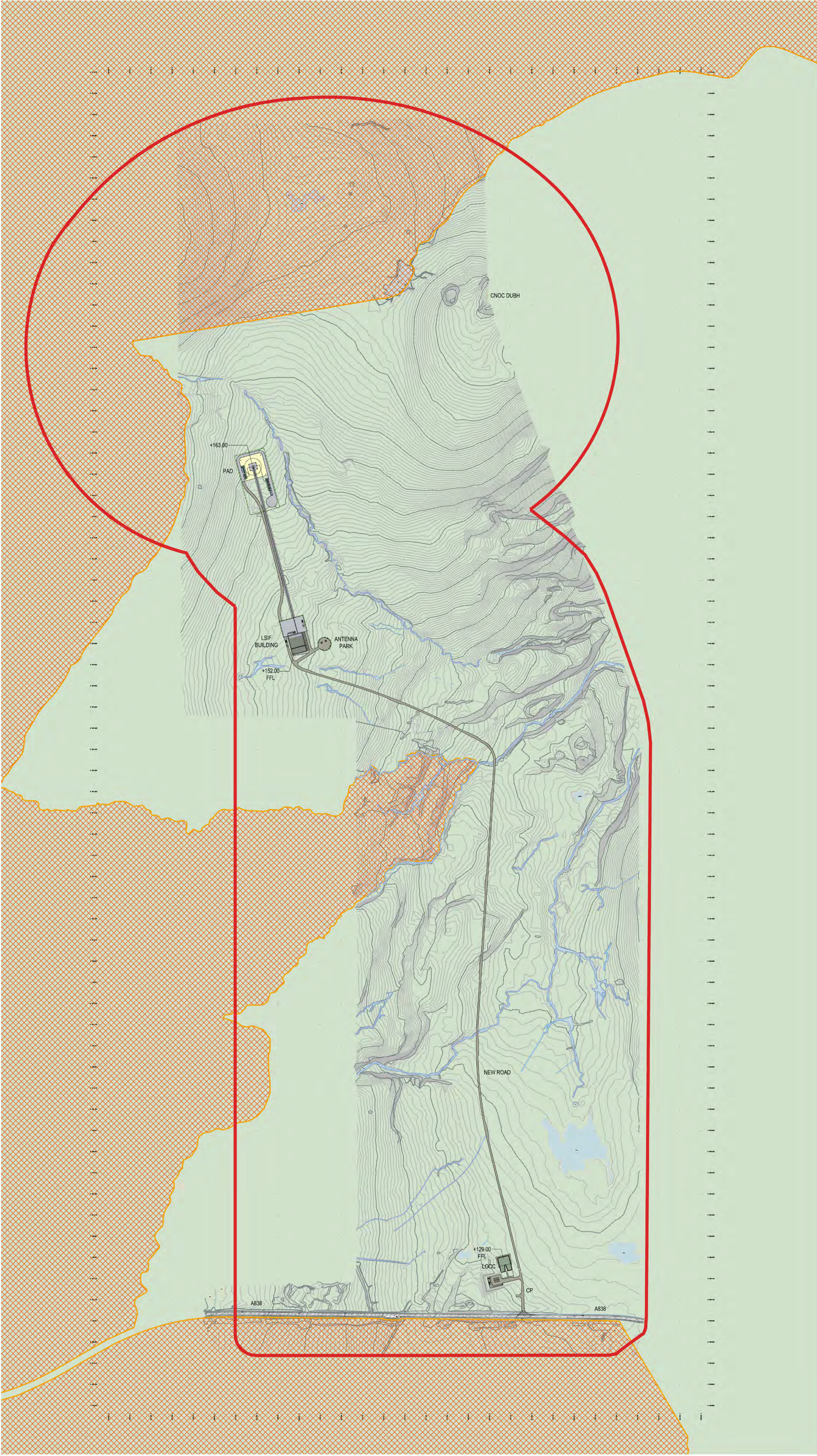
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Drawn	L Beattie	Date	06.01.2020
Checked	C Hunter	Date	06.01.2020
Scale	1:50000 @ A1		
Client	HIGHLANDS & ISLANDS ENTERPRISE AN LOCHRAN, INVERNESS CAMPUS INVERNESS, IV2 5NA		
Project	SPACE HUB SUTHERLAND		
Drawing Title	SITE LOCATION PLAN 1:50000		
Sheet Status	S2 - SUITABLE FOR INFORMATION		
Project No.	IAGG19-0030		
Drawing No.	UKVLS-NOR-ZZ-ZZ-DR-A-90051	Rev.	P03



DATE	REVISION	REV	DRW	CHK
10.01.20	INITIAL ISSUE	P01	LB	CH
15.01.20	PROJECT TITLE UPDATED	P02	CH	CH
20.01.20	LEZ OMITTED	P03	CH	CH
21.01.20	UPDATED IN ACCORDANCE WITH M&E PROPOSALS	P04	LB	CH
22.01.20	PROJECT REVISION UPDATED	P05	LB	CH
05.02.20	CONTOURS UPDATED	P06	CH	CH

LSIF - LAUNCH SITE INTEGRATION FACILITY
LOCC - LAUNCH OPERATIONS CONTROL CENTRE

Point	Easting	Northing	Elevation	Description
A1	254365.285	960059.069	138.103	Nail
A2	254328.718	960059.074	133.205	Nail
A3	254380.737	960057.560	129.959	Nail
A4	254518.985	960064.137	128.559	Nail
A5	253957.769	960060.669	145.257	Nail
A6	253854.981	960070.586	151.090	Nail
A7	253720.298	960072.206	157.814	Nail

NOTE:
1) The grid is OS National Grid based on OSTN15
2) The levels are relative to Ordnance Datum based on OSGM15

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Keyplan

North Arrow

Detail Symbol

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Drawn L Beattie	Date 10.01.2020
Checked C Hunter	Date 10.01.2020
Scale 1:5000 @ A1	
Client HIGHLANDS & ISLAND ENTERPRISE	
Project SPACE HUB SUTHERLAND	
Drawing Title SITE PLAN AS PROPOSED	
Sheet Status S2 - SUITABLE FOR INFORMATION	
Project No. IAGG19-0030	
Drawing No. UKVLS-NOR-ZZ-ZZ-DR-A-90054	Rev. P06

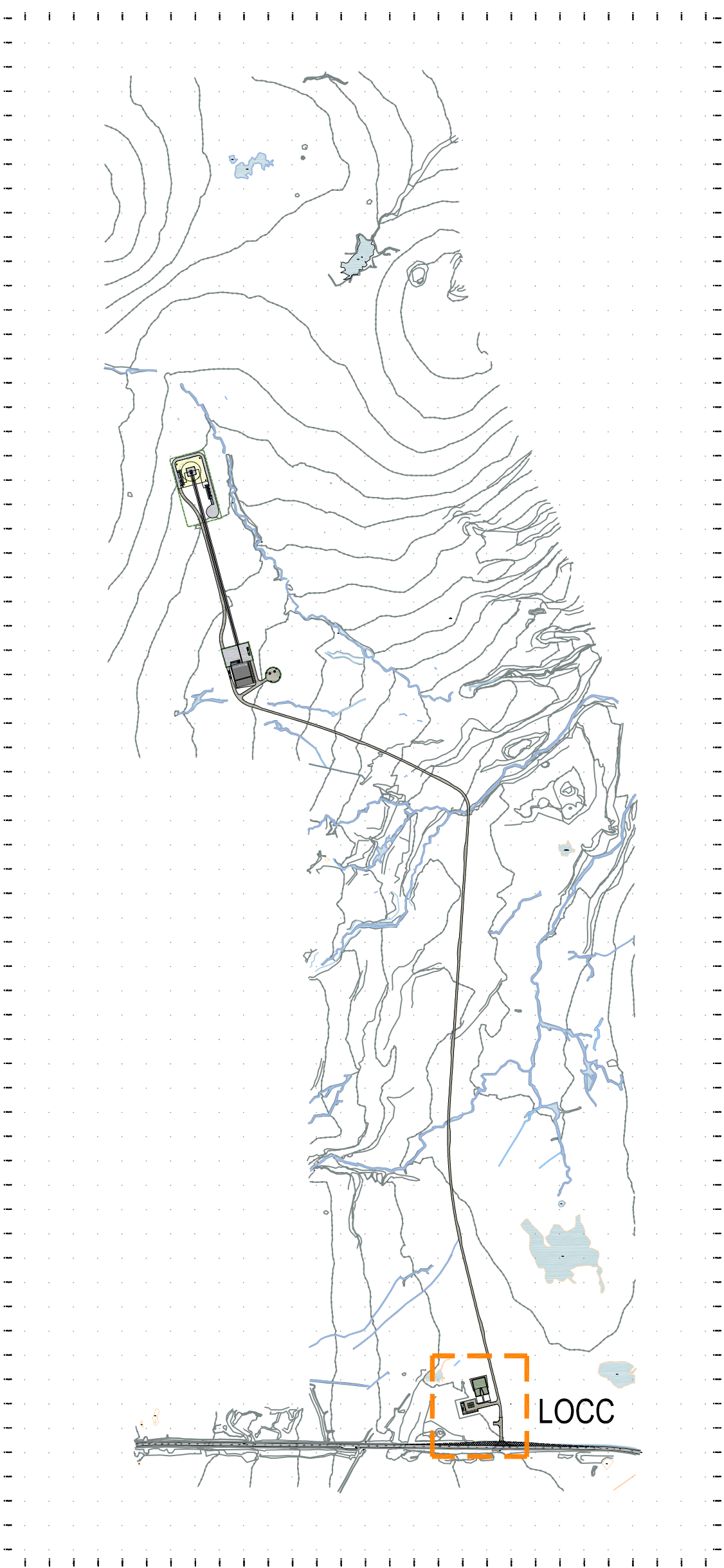
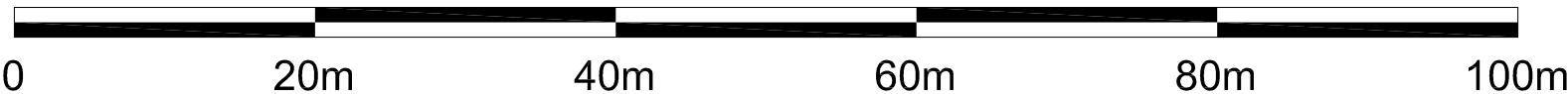
SITE PLAN AS PROPOSED - 1:5000 AT A1





LOCC BUILDING - 1:500 AT A1

1:500



DATE	REVISION	REV	DRW	CHK
10.01.20	INITIAL ISSUE	P01	LB	CH
15.01.20	PROJECT TITLE UPDATED	P02	CH	CH
20.01.20	SCALE NOTE UPDATED	P03	LB	CH
21.01.20	UPDATED IN ACCORDANCE WITH M&E PROPOSALS	P04	LB	CH
22.01.20	PROJECT TITLE UPDATED	P05	LB	CH
05.02.20	CONTOURS UPDATED	P06	CH	CH

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Keyplan

SSSI / SPA / SAC / RAMSAR
ENVIRONMENTAL AND LANDSCAPE
DESIGNATIONS

LOCC - LAUNCH OPERATIONS CONTROL CENTRE

North Arrow

Detail Symbol

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Client
HIGHLANDS & ISLAND ENTERPRISE

Project
SPACE HUB SUTHERLAND

Drawing Title
**SITE PLAN AS PROPOSED
LAUNCH OPERATIONS CONTROL
CENTRE**

Sheet Status
S2 - SUITABLE FOR INFORMATION

Project No.
IAGG19-0030

Drawing No. UKVLS-NOR-ZZ-ZZ-DR-A-90055	Rev. P06
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