Technical Appendix 7.1: Heritage Assets within the Inner Study Area (Figure 7.1, Volume 2)

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
1	The Wolf Stone, Lothbeg	294130	910010	MHG10030	HER; NRHE	The HER records that the Wolf Stone marks the place where the last wolf in Sutherland was shot. The monument was erected in 1924. Not visited during field survey as the location lies well away from any proposed development area.	Low
2	Creag Riabhach	294220	911100	MHG10039	HER; Historic Maps; Aerial Photography	The HER records a small field system adjacent to a depopulated settlement. Field survey by the Ordnance Survey (1976) recorded an area of cleared ground defined mostly by stone heaps, with some connected by lynchets, and at least two low field walls with one or two cultivation plots 20m by 15m in extent. No elements of the field system are depicted on the 1st or 2nd edition Ordnance Survey maps (Sutherland 1879, sheet XCVIII; Sutherland 1909, sheet XCVIII) and nothing is depicted on current Ordnance Survey maps. Aerial imagery from 2010 (Google Earth, 2010) shows an irregular field system with up to three mounds. Not visited during field survey as the location lies well away from any proposed development area.	Medium
3	Chambered Cairn - Lonmore	293545	910396	MHG10044 / MHG41551	HER; NRHE	The HER records a chambered cairn with characteristics of the Orkney-Cromarty type. Field Survey by the Ordnance Survey (1976; 1981) recorded a sub-circular mound of stones, measuring 20m x 18m, and 0.5m high, that was mostly retained a kerb of boulders up to 0.5m in height. The remains of a passage were visible with adjacent slabs protruding through turf. Further into mound, at right angles to the passage, was an upright slab 0.1m high. Overlying the north side of entrance is a probable displaced lintel stone and two upright stones in the south east are probably portal stones though no gap remains. Within the mound towards north west quarter is an oval stone structure, 6.5m by 5m internally. The structure may be a hut circle but is probably more likely to be a sheep shelter. Not visited during field survey as the location lies well away from any proposed development area.	Medium
4	Hut circle, Sletdale Burn	292550	912519	MHG10049	HER; NRHE	The HER records a stone-walled hut circle on an old river terrace. Field survey by the Ordnance Survey (1976) recorded a hut-circle that measured around 10.5m in diameter, 0.7m high and spread to 3m. Not visited during field survey as the location lies well away from any proposed development area.	Medium
5	Township, Braeval	292000	908300	MHG10478	HER; NRHE; Historic Maps; Aerial Photography	The HER records that there are four rectangular buildings in varying ruinous states, each with an enclosure abutting it to the north. Running west east in front of the houses is a track, and immediately to the south is a large enclosure (Harden, 1991). The HER notes that the site was visited during a walkover survey in 1999. The settlement comprises a row of four or five small crofts marked by short parallel strips of land with associated buildings. There are three principal long rectangular stone structures and a number of smaller structures. Immediately adjacent to the mapped structures the survey noted a number of small cairns up to 3m in diameter and a small rectangular structure measuring 7m by 4m. There is a single house with enclosures 150m to the east. Maps in the Sutherland Estate Papers show that Braeval was constructed in about 1820, during the improvement of Kintradwell Farm, to replace houses demolished in the newly enclosed fields to the south. It was still occupied at the time of the Ordnance Survey 1st edition survey of 1872 (Carter, 1999). A number of structures are depicted to the north of Kintradwell (*Clyntradwell*) on Roy's military map (1747-55) and may relate to earlier settlement.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						The 1st edition Ordnance Survey 6-inch map (Sutherland 1879, sheet XCVIII) depicts four main buildings, with three clustered to the west and a single outlier to the east. This building has three enclosures associated with it; the one to the south is divided in two compartments. The buildings to the west each have small square or rectangular gardens to the north the eastern most of which is divided into two, while a larger enclosure to the south, separated from the buildings by a track, is divided into four plots, with a further two smaller enclosures to the west. There are four small square roofed structures and an unroofed structure, depicted at the northern edge of these enclosures. The settlement is shown as abandoned on the 2nd edition Ordnance Survey map (Sutherland, 1909, Sheet XCVIII). All four of the buildings and associated enclosures are shown on the current Ordnance Survey map (2019) while the remains can also be seen on current aerial photographs (Google Earth, 2019). Field survey confirmed the remains were as described. The walls of the buildings were ruinous, surviving to a height of 0.5m to 0.75m, but some survived up to a height of 1m.	
6	Loth Burn	293100	912599	MHG19357	HER; NRHE; Historic Maps	The HER records a farmstead that was depicted as unoccupied on the Ordnance Survey first edition map (Sutherland 1879, Sheet IXXXIX). Four buildings and a ring dyke were recorded on the 1963 edition of the Ordnance Survey 1:10,560 map, although very little remains of the farmstead (RCAHMS, 1995; K and J Bowker, 2011). Not visited during field survey as the location lies well away from any proposed development area.	Medium
7	Farmstead, Creagan Mor	291621	908205	MHG11554	HER; Historic Maps; Aerial Photography; Field Survey	The HER records the footings of two rectangular buildings measuring 18m x 5m x 0.3m and 11.5m x 5m x 0.3m in extent. Both had internal divisions creating two separate spaces within their interiors, no entrances were discernible. The eastern building abutted a low, grass covered, enclosure wall, 1.5m in width and 0.4m in height, which defined an area to the south and east of these structures. Within the eastern half of the enclosure was another rectangular structure, measuring 11m x 5.5m x 0.2m. The west side of this structure was abutted by a grass-covered corn-drying kiln of 1m internal diameter. Across the hill slope above the farmstead are a few small cairns, generally about 3m in diameter and 0.3m in height (Harden, 1991). The HER also notes that field survey in 1999 revealed only a few small cairns no more than 40m from the north side of the enclosure. Records show that the farmstead was built between 1772 and 1820 and probably shortly before 1820, during the improvement of Kintradwell farm. It was abandoned before the Ordnance Survey 1st edition survey of 1872 (Carter, 1999). No structures are depicted on the 1st or 2nd edition Ordnance survey maps (Sutherland 1879, sheet XCVIII; Sutherland 1909, sheet XCVIII) though a rectangular enclosure, which is associated with the Kintradwell field systems, is depicted. This enclosure is shown on current Ordnance Survey map (2019) while a polygonal enclosure is also depicted to the north, both of which can be seen on the current aerial photographs (Google Earth, 2019). Field survey confirmed the remains of a number of clearance cairns (7A-D) two structures (7E and F) and a field wall (7G). Much of the area was covered in dense gorse, particularly the areas of archaeological remains, which concealed their form. An argo track runs through the area, which has caused disturbance to the archaeological features.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						The structures (7E and 7F) were almost completely obscured by gorse. Structure 7E was circular, with the northern wall visible, comprising a stone and earthen bank that stood 0.3m high. It was around 5m exterior diameter and appeared to be a hut circle or a sheiling. Structure 7F was almost entirely covered in dense gorse. It was difficult to characterise the remains. Note that the surveyed area for 7F indicates the spread of gorse rather than the limit of the building, as the building itself was inaccessible. The field bank (7G) was in fair/poor condition and appeared to be of earth and stone construction. It stood to a height of 0.1m and was 1m wide. It had been damaged by a vehicle track. The clearance cairns (7A-D) were grass covered: 7A: 6m x 3m, 0.3m high. 7B: 3m x 2m, 0.7m high. 7C (possible clearance spread): 2m x 2m, 0.1-0.2m high. 7D (possible clearance cairn): 3m x 3m, 0.5m high.	
8	Braeval	291855	908241	N/A	Field Survey	Field survey identified several clearance cairns(8C-H), a possible field wall (8A) and a small oval hut circle (8B). The area was covered in dense gorse to the north-west, deep heather to the north-east, and dense bracken to the south. More archaeology may exist in the surveyed area, obscured by dense vegetation. The general area was formerly tree-covered, with tree stumps noted throughout, this was probably the woodland depicted on the Ordnance Survey first edition map in 1872 (Sutherland 1893, sheet XCVIII). By the second edition map (1904) the trees had been removed (Sutherland 1906, sheet XCVIII). The field bank (8A) was grass and reed covered. It stood around 0.1m high and around 0.4m wide. The bank sat to the west of a dense bracken-covered area and may have been part of a wider enclosure. The oval hut circle (8B) comprised a stony bank 6m by 4.5m and around 0.1m high, with a central indented area. Six clearance cairns (8C-H) were distributed in a linear arrangement along a break of slope. They were similar stony mounds, grass and moss-covered, and ranged in size: 8C: 4m x 3m, c. 1m high. 8D: 7m x 4m, 0.2-0.3m high. 8E: 7m x 3.5m, 0.2m high. 8F: 5m x 5m, 0.5m high. 8G: 6m x 2.5m, 0.2m high. 8H: 4m x 3.5m, 0.2m high.	Medium
9	St. Trolla's Chapel	292210	907420	MHG11563 / MHG31515	HER; NHRE; Historic Maps	The HER records that this is the possible site of St Trolla's chapel. Marked *as Supposed Site of St Trolla's Chapel* on both the 1st and 2nd edition Ordnance Survey maps (Sutherland 1879, sheet XCVIII; Sutherland 1909, sheet XCVIII). Another entry in the HER (MHG31515) notes that excavation in 2001 recorded the remains of 16 burials in the area. All of the burials lay extended and in a supine position and were buried east north-east to west south-west, with the heads to the west. At least two had stone settings around the heads and upper bodies. Radiocarbon dating established that the burials may date back to the 10th century (Lelong, 2001). Not visited during field survey as the location lies well away from any proposed development area.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
10	Badenahauglish 2	290474	909921	MHG13157	HER; NHRE; Historic Maps; Aerial Photography; Field Survey	The HER records that there is a settlement at this location comprising unroofed buildings, enclosures, and field walls. The site is not recorded on any historical maps, but a number of possible structures are located in the area on Roy's 'Military Survey of Scotland' map (1747-55) which may relate to the settlement. The enclosure and structures are depicted on the current Ordnance Survey map (2019) and visible on aerial photographs (Google Earth, 2019). The site comprises of a five-compartment unroofed structure (290583, 910050) aligned north west to south east approximately 40m in length it is located to the north east of a large polygonal field system, approximately 415m by 276m in extent. Three further small enclosures are located close to the rectangular structure while an inner rectangular field system is divided into four compartments. Field survey identified the remains of a terrace of buildings with 4 compartments (10B), a small isolated square structure (10A), another building (10C), and two enclosures (10D and E). The buildings (10A-C) were in fair condition, with walls surviving to 0.5m – 0.7m high. The enclosures were dry stone stock enclosures, 10D was of better construction and survived to a height of 0.4m, and 10E was bracken and moss-covered, 0.2m in height. Worthy of note was the enclosure itself, which was a substantial ditch and bank construction, 430m west-east and 280m north-south. The stony bank stood approximately 1m high and was created from the upcast of the ditch. The bank was 1-2m wide and the ditch was 2m wide. An entrance to the site via a stone construction overlying the ditch was located at 290604, 910046. A similar stone construction was used to cross a waterfall running through the site at 290442, 909887. Due to the high elevation of the site, it is possible that the site was occupied in the medieval period during more favourable climatic conditions.	Medium
11	Badenahauglish 1	291181	909794	MHG13158 / MHG19127	HER; NHRE; Historic Maps; Aerial Photography; Field Survey	The HER records that there is a settlement at this location comprising unroofed buildings, enclosures, and field walls. Another entry in the HER (MHG19127) records that a farmstead comprising two unroofed buildings; a field-system and an enclosure are depicted on the 1st edition of the Ordnance Survey 6-inch map (Sutherland 1879, sheet XCVIII). Three unroofed buildings, a field-system and an enclosure are shown on the 1964 Ordnance Survey map (RCAHMS, 1995). A number of possible structures are located in the area on Roy's 'Military Survey of Scotland' map (1747-55) which may relate to the settlement. The 2nd edition Ordnance Survey map (Sutherland 1909, sheet XCVIII) depicts comprising three unroofed buildings and five irregular shaped enclosures and a field wall. Field survey identified a four-compartment building (11B), a possible corn-drying kiln (11A), a possible mill lade (11C), the remains of other structures (11D), an enclosure (11E), and field bank (11F). The long building (11B) was sub-divided into four compartments. Preservation was fair, with the walls surviving to between 0.5m and 1.8m high and around 0.5m thick.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						The remains of a circular structure joined to a rectangular structure (11A). At the southern area of the group of buildings had been partly disturbed on the north-west side by the levelling of ground at the entrance to the bothy. Despite this, the structure survived in a good state of preservation, around 4m by 3m across and to a height of 1.1m. The stone walls were 1m thick. The remains of two well-built walls (11C) ran from the buildings, meeting the burn to the south-west. The western wall stood to almost 1.7m high and was 1.1m thick close to the burn, but both walls were generally 0.5 to 0.7m high. The eastern wall formed a revetment to raised ground. The walls seem likely to form part of a mill lade, water was still present at the end of the channel where it met the burn. A later track and fording point have been constructed over the probable upstream entrance to the lade. Revetment of the burn on the western edge was also visible. The remains of a well-built stone wall (11D) at the eastern edge of the group of buildings appears to be the remains of a substantial building, destroyed during the construction of the track. Further building walls are also visible in the area. Between the buildings 11D and 11A there is a dump of rubble which appears to be part of the levelling associated with the track. An enclosure (11E) marked on the Ordnance Survey first edition map abuts the Badenahauglish Burn and appears to be an animal enclosure. The enclosure survives to a height of 0.7m and the walls were around 0.4m thick. The dry-stone structure was moss-covered with dense bracken in the interior. Abutting enclosure 11E was a curvilinear field bank of stone and earth construction (11F). The bank was 1m wide and 0.2m high in a fair condition and petered out to the south-west. Field survey suggests that this may be the site of a mill, with mill lade and corn-drying kiln barn.	
12	Kintradwell	291500	907900	MHG13159	HER; NHRE; Historic Maps; Aerial Photography	The HER records a settlement in this location but provides no information as to its nature or extent. Four buildings are depicted on Roy's 'Military Survey of Scotland' map (1747 – 55) associated with an enclosure, but it is not clear if these represent this settlement or another settlement within the wider vicinity. The remains of the settlement are depicted on the current Ordnance Survey map (2019) comprising two or three unroofed structures and a trapezoidal enclosure, enclosed within a field system. A second field system lies to the south east enclosing two small structures. A rectangular structure with a square enclosure can be seen on aerial imagery (Google Earth 2010) sitting within an oval field system. Not visited during field survey as the location lies well away from any proposed development area.	Medium
13	Lonmore	293240	910362	MHG13170 / MHG19122	HER; NHRE; Historic Maps; Aerial Photography	The HER records that a township comprising five unroofed buildings, an enclosure, a boundary wall and a field is depicted on the 1st edition of the Ordnance Survey 6-inch map (Sutherland 1879, sheet XCVIII). Six unroofed buildings, four enclosures, a boundary wall and a field are shown on the 1963 Ordnance Survey 1:10,560 map (RCAHMS, 1995). The 2nd edition Ordnance Survey map (Sutherland 1909, sheet XCVIII) records the same layout as described above.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						A group of four buildings is depicted on Roy's 'Military Survey of Scotland' map (1747-55) enclosed by cultivated fields. Four structures are depicted on the current Ordnance Survey map (2019) with up to five small enclosures a head dyke and field systems. Four structures and the partially obscured head dyke can be seen on current aerial photography (Google Earth, 2019). Not visited during field survey as the location lies well away from any proposed development area.	
14	Allt Choll, Lothbeg	293300	909100	MHG19082	HER; NHRE; Historic Maps; Aerial Photography	The HER records that a farmstead comprising two unroofed buildings, three enclosures and a short length of wall are depicted on the 1st edition of the Ordnance Survey 6-inch map (Sutherland 1879, sheet xcviii). Two unroofed buildings, five enclosures and a short length of wall are shown on the 1964 edition of the Ordnance Survey map (RCAHMS 1995). The 2nd edition Ordnance Survey map (Sutherland 1909, sheet XCVIII) records the same layout as described above. The current Ordnance Survey map (2019) does not record anything at this location but the two unroofed buildings and enclosures can be clearly seen on current aerial photographs (Google Earth, 2019). This site forms part of the Lothbeg Township MHG19081. Not visited during field survey as the location lies well away from any proposed development area.	Medium
15	Sletdale Burn	291283	913083	MHG30022	HER; NHRE; Historic Maps; Aerial Photography	The HER records this as a single house. An unroofed rectangular building is depicted on the 1st and 2nd edition Ordnance Survey maps (Sutherland 1879, sheet LXXXIX; Sutherland 1907, sheet LXXXIX). On the current edition Ordnance Survey map (2019), it is recorded as a three-compartment structure with two radial walls extending to the north-east from the north-east side of the structure. The structure is visible on current aerial images (Google Earth, 2019). Not visited during field survey as the location lies well away from any proposed development area.	Low
16	Aircraft Crash Site, Carn Garbh	288700	914000	MHG30819	HER; NHRE; Historic Maps; Aerial Photography; Field Survey	The HER records that a Wellington aircraft (Serial No. R1093. Sqd. 20 O.T.U.) crashed at this location on July 30th, 1941 (Clark 2002). Images on the HER record the well-preserved remains of the aircraft wreckage, including spent ordnance (Aitken, 2004). Field survey located the crash site 190m away from that recorded in the HER, and spread across two main areas over a distance of 120m. Snow-fall had covered the site, but debris from the aircraft was visible, and scattered debris was also noted away from the main surveyed areas (CFA Field Survey December 2019).	High
17	Aircraft Crash Site, Creag Riabhach	293700	911900	MHG30834	HER; NHRE; Historic Maps; Aerial Photography	The HER records that a Sunderland aircraft (Serial No. DP197. Sqd. 4O.T.U.) crashed at Creag Riabhach (south west of Helmsdale), on August 15th, 1944. Mainly aluminium wreckage strewn between the two locations (NC 93623 11721 & NC 93689 11665), on either side of a low heathery knoll, on the south-west side of Creag Riabhach. Spent ammunition can be seen scattered around the wreckage. A small cairn at NC 93809 11566, which has three metal cylindrical rods (100mm diameter) incorporated into its construction may be associated with the crash site (Clark, 2002).	High

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						Not visited during field survey as the location lies well away from any proposed development area.	
18	Aircraft Crash Site, Creag Riabhach	292600	911600	MHG33851	HER	The HER records that a Barracuda plane is alleged to have crashed on the south side of Creag Riabhach. No further information about the circumstances surrounding the crash has been uncovered (Lindsay 2004). Not visited during field survey as the location lies well away from any proposed development area. (It is probable that this record is a duplicate for another HER entry (MHG30842) for a Barracuda crash on Col Bheinn, where there is visible wreckage).	High (possible)
19	Carn Garbh	290784	913465	MHG38882	HER; NHRE	The HER records that this as a cave or rock shelter. The last wolf in Sutherland is reputed to have lived in a cave on the east side of Carn Garbh. The lair or cairn is located on a rocky slope with a number of other caves and rock shelters (Aitken, 2004). Not visited during field survey as the location lies well away from any proposed development area.	Low
20	Coire Riabhach	289216	912463	MHG38883	HER; Field Survey	The HER records a shallow trench made in the peat for feeding grouse nutritional minerals or grit (Aitken 2004). Field survey found no trace of this feature.	Negligible
21	Col-bheinn	290064	910988	MHG38884	HER; Field Survey	The HER records the possible remains of a shieling at this location (Aitken, 2004). Field survey identified a number of stone clusters within the general area, but nothing which appeared to be the footings of a structure. The overall area appears to have eroded since the site was photographed in 2004.	Low
22	Lothbeg	293769	909703	MHG9776	HER; NHRE; Historic Maps	The HER records a depopulated township on both sides of the modern road comprised of several small groups of rectangular building ruins with adjoining enclosures and connecting field banks (Ordnance Survey, 1962). A township comprising three roofed, one partially roofed and fourteen unroofed buildings, some enclosures and field walls and part of a head-dyke are depicted on the 1st edition of the Ordnance Survey 6-inch map (Sutherland 1879, sheet xcviii). The 2nd edition Ordnance Survey map (Sutherland 1909, sheet XCVIII) records seventeen unroofed buildings and associated enclosures and field boundaries. Thirty-two unroofed buildings, with some enclosures and field walls and part of a head-dyke are shown on the 1964 edition of the Ordnance Survey map (RCAHMS, 1995). A settlement marked Loth Beg is recorded on Blaeu's 'Atlas of Scotland' (1654) and on Roy's 'Military Survey of Scotland' map (1747-55) a number of buildings are depicted in the general vicinity of this area. The named settlements of Little Loth, Balieraggan and Badcraggan may represent some of the structures depicted around Lothbeg and recorded on the 1st and 2nd edition maps. Not visited during field survey as the location lies well away from any proposed development area.	Medium
23	Kintradwell	291940	907570	MHG9778	HER; NHRE; Historic Maps	The HER records that a broch, excavated in the 1870s, occupies a narrow area of uncultivated ground between the steep gorge of the Kintradwell Burn in north east and the wall of pasture field to south west. There is no trace of the structure in the pasture field which is 1.0m lower than the uncultivated land. According to the HER it is not clear if this site is a broch but the remains and finds indicate some form of	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						domestic site of uncertain date. However, it does have a strong resemblance to the secondary domestic structures found in association with brochs in the area in its plan form and method of construction, i.e. the combination of dry-stone walling and large upright slabs (Ordnance Survey, 1962). Recorded on the 1st edition Ordnance Survey map as a three compartment sub-rectangular structure and annotated *Pictish Tower (Ruins of)* (Sutherland 1879, sheet xcviii) and as a *Brough* on the 2nd edition Ordnance Survey map (Sutherland 1909, sheet XCVIII). Not visited during field survey as the location lies well away from any proposed development area.	
24	Earth House & Runic Inscript, Cos Ceumach	291860	907650	MHG9779	HER; NHRE; Historic Maps	The HER records that an "earth house" or souterrain was explored in 1864 (Simpson, 1865). It was cut into the steep bank of the burn and comprised of a dry-stone-walled entrance passage and two chambers. The inner chamber had a flight of seven stairs leading upwards. A stone with "runic letters" was removed and is now lost. By 1975 the souterrain was mainly inaccessible. The footings of a possibly contemporary sub rectangular structure 8m by 6m were observed above the souterrain (Ordnance Survey, 1975). Marked on the 1st and 2nd edition Ordnance Survey maps with a curving dashed line forming a sub-rectangular feature and annotated *Cos Ceumach (*Sutherland 1879, sheet xcviii; Sutherland 1909, sheet XCVIII). Not visited during field survey as the location lies away from any proposed development area.	Medium
25	Hut circle, Allt Choll	293390	909220	MHG9781	HER; NHRE; Historic Maps	The HER records a stone-walled hut measuring about 10.0m internal diameter. The hut is situated on a dry knoll and is heather covered. A gap in the north arc could be an entrance. There are some clearance heaps to the west (Ordnance Survey, 1968). Not visited during field survey as the location lies well away from any proposed development area.	Medium
26	Cairn etc, Lonmore	293530	909860	MHG9782	HER; NHRE; Historic Maps	The HER records a round cairn, defined by a kerb of stones set on edge, 7.3m in diameter and 0.3m high. It sits on a prominent false crest. The cairn material is displaced in the centre, possibly from excavation (Ordnance Survey, 1968). Not visited during field survey as the location lies well away from any proposed development area.	Medium
27	Lonmore	293510	909800	MHG9783	HER; NHRE; Historic Maps	The HER records that a field system occupies the south east facing slope of open moorland, nine hectares in extent. It comprises a number of field plots, 20.0m by 20.0m in average size, delineated by stone clearance heaps and lynchets and is particularly well preserved in the vicinity of the cairn (26). No hut circles are apparent (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
28	Creagan Mor	292700	908700	MHG9788	HER; NHRE; Historic Maps	The HER records an extensive field system occupying about 16 hectares of open moorland, with later cultivation encroaching on its lower south side. It is well preserved throughout its whole area. Many field plots are evident delineated by stone clearance heaps and lynchets, the former being somewhat larger than the type commonly associated with hut circles. No huts can be seen (Ordnance Survey, 1976). No features are depicted on historical maps and nothing can be seen on current map or aerial imagery. Not visited during field survey as the location lies well away from any proposed development area.	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
29	Possible Broch, Lothbeg	294000	910000	MHG9937	HER	The HER records that a mound that stood on the banks of the River Loth was cleared, revealing a "subterranean dwelling surrounded on the outside by large flat stones" (Ordnance Survey, 1973). Not visited during field survey as the location lies well away from any proposed development area.	Medium
30	Lonmore	293762	910220	MHG9938	HER	The HER records a settlement of four stone walled hut circles situated within a contemporary field system on lower and middle slopes of a hillside. Hut 'A' is 5.5m in diameter defined by a wall 1.4m thick, with and entrance in the south-east. Hut 'B' is 6.0m in diameter within a wall spread to 2.0m. There was probably an entrance in the south-east. Hut 'C' is 6.5m in diameter within a wall spread to 1.5m; a depression in the south-west may indicate an entrance. Hut 'D', is 9.0m in diameter defined by a wall 1.6m in width. There is an entrance in the south south-east. The field system is distinguished by numerous stone clearance heaps, lynchet and wasted field banks and some cultivation plots can be seen, covering an area approximately 300m x 400m in extent (Ordnance Survey, 1976).	Medium
31	Lothbeg Bridge	294420	910530	MHG10031	HER	The HER records a post-medieval bridge. The bridge was built around 1811 and is a single segmental arch construction (Calder, 1974). Not visited during field survey as the location lies well away from any proposed development area.	Low
32	Hut circle, Creag Riabhach	294580	911430	MHG10034	HER	The HER records a small hut circle on an east-facing slope. The hut circle measuring 7m diameter, with an outer face of slabs enclosing a rubble bank around 1m wide. The hut circle sits within a small field system, which comprised cleared ground with dumps of clearance along the edges (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
33	Homestead, Carradh Nan Clach	293960	912560	MHG10035	HER	The HER records a Wag-type homestead in a hollow behind an old river terrace. The structure is slightly oblong in plan and measuring 12m by 4m, with a semi-circular chamber 3m internal diameter on the south-west corner. The walls stand to a maximum of 2m high and are around 2m thick (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
34	Hut circle (possible) Carradh Nan Clach	293960	912480	MHG10038	HER	The HER records a hut circle. Only one or two stones remain around the rim of a circular platform. The platform measured 14.5m in diameter (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
35	Hut circle, Creag Riabhach	294523	911249	MHG10040	HER	The HER records a small hut circle on a narrow shelf on a south-east facing slope. The hut circle is oval in shape, measuring 6.5m by 5m, and stone-walled with a possible entrance to the south-east. There is an adjacent field system with cleared ground (Ordnance Survey, 1976).	Medium

Asset No	Asset Name	Easting	Northing	HER No	Source	Description	Sensitivity
						Not visited during field survey as the location lies well away from any proposed development area.	
36	Cairn, Carradh Nan Clach	293980	912480	MHG10041	HER	The HER records a heavily robbed cairn. The cairn survives as a grassy platform 8.5m in diameter and 0.3m high. Two slabs of retaining kerb remain on the western edge and a depression near the centre may be from an excavation (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
37	Carradh Nan Clach	293850	912560	MHG10042	HER	The HER records two hut circles and a field system. The stone-walled hut circles were described as 'simple' in form: Hut 'A' being in a better state of preservation, with an interior measurement of 7.5m diameter; Hut 'B' is around 7m by 6.5m internally with rubble spread extending to a width of 2m. Level ground between and beyond the houses was cleared for cultivation (Ordnance Survey, 1976). Not visited during field survey as the location lies well away from any proposed development area.	Medium
38	Lothbeg	294244	910652	MHG13171	HER	The HER records a settlement. The settlement comprises an unroofed building, enclosures and field walls (Ordnance Survey, 1963). Not visited during field survey as the location lies well away from any proposed development area.	Medium
39	Lothbeg	294410	910930	MHG9935	HER	The HER records a hut circle situated within the vicinity of a post-medieval settlement. The structure is stone-walled and oval on plan, measuring 11m by 10m. Not visited during field survey as the location lies well away from any proposed development area.	Medium
40	Loth Burn	293582	912642	MHG30025	HER	The HER records the remains of a wooden bridge across the burn (Lindsay, 1999; Highland Council, 2001). Not visited during field survey as the location lies well away from any proposed development area.	Negligible

Technical Appendix 7.2: Heritage Assets within Outer Study Area and within 5km of the Proposed Development (Figure 7.2, Volume 2)

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[1]	No of hubs visible[2]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
SM1775	Carradh nan Clach, two standing stones	Standing Stones	Scheduled Monument	Two standing stones are located on the top of a bank at the confluence of the Loth and Sletdale burns, and west of the road through a hill pass. The standing stones have a localised setting with views north and south along Glen Loth.	4-7	4-7	2.7	High	Low. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.3
SM1778	Clach Mhic Mhios,standing stone,Glen Loth 4000m N of Lothbeg Bridge	Standing Stone	Scheduled Monument	A standing stone set on a slight knoll within an open moorland setting with remnants of prehistoric settlement nearby. The standing stone has a prominent location with views along Glen Loth and is visible from hill slopes to the east and west.	1-3	0	4.3	High	Negligible. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.4
LB583	Clynemilton East	Mid 18th Century House	Category B Listed	Mid 18th century 2-storey, 3-bay farmhouse on a south facing slope adjacent to Clynemilton burn. Localised rural farmland setting north of the village of Brora.	1-3	0	4.9	Medium	Negligible. (Only 1-3 tips (no hubs) visible. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB7148	Farmsteading, Crackaig	Mid 19th century farm steading.	Category C Listed	19th century farmsteading fronting a square farm courtyard on a south-facing slope overlooking the Moray Firth. Localised rural farmland setting. Localised farmyard setting.	1-3	0	4.6	Low	Negligible. (Only 1-3 tips (no hubs) visible. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB12371	Farmhouse, Crackaig	Late 18th century house	Category C Listed	late 18th early 19th century farmhouse fronting a square farm courtyard on a south-facing slope overlooking the Moray Firth. Localised rural farmland setting.	1-3	0	4.7	Low	Negligible. (Only 1-3 tips (no hubs) visible. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	

[1] Based on bare-earth blade tip height ZTV
[2] Based on bare-earth blade hub height ZTV

Technical Appendix 7.3: Heritage Assets within Outer Study Area and within 5km-10km of the Proposed Development (Figure 7.2, Volume 2)

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[3]	No of hubs visible[4]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
SM1769	Balnacoil Hill, cairn 530m NE of Balnacoil Lodge, Strath Brora	Cairn	Scheduled Monument	Prehistoric cairn 12m in diameter and 1.5m high located on the southwest slope of Balnacoil Hill. The cairn sits at the edge of woodland which obscures the principle views over the river valley to the east and south.	8-11	4-7	7.8	High	Low. (Turbines visible in distant views on and beyond skyline alongside Operational Gordonbush wind farm).	Minor	
SM1793	Kilbraur, hut circle & clearance cairns 270m SW of	Hut Circle and Clearance Cairns	Scheduled Monument	A hut circle, with a few mounds probably relating to clearance, are located adjacent to Kilbraur broch, overlooking the Strath Brora valley. Principle views are towards the loch and along river valley.	4-7	4-7	6.9	High	Negligible. (Turbine tips visible in distant views screened by topography).	Minor	
SM1803	Learable Hill, stone rows, circles, cross-marked stone & settlements	Stone rows, stone circles, cross-marked stone and settlements	Scheduled Monument	The monument consists of an extensive scheduled area including four groups of stone rows, an elliptical stone circle, a cross-marked stone, the deserted township of Learable, prehistoric hut circles, clearance cairns and field systems, in an expansive area of moorland on the sides gently sloping Learable Hill.	8-11	4-7	9.4	High	Negligible. (Turbines visible only from prehistoric settlement remains in the northern part of the scheduled area. Localised setting unaffected). For heritage assets where setting is a consideration, in the southern area, there is no predicted visibility).	Minor	
SM1826	Achinnearin, souterrain and enclosure S of Suisgill Lodge	Souterrain and enclosure	Scheduled Monument	A souterrain and overlying enclosure are situated on a sloping hillside above the River Helmsdale. Localised prehistoric settlement settling.	8-11	4-7	9.4	High	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Minor	
SM1846	Carrol, broch 600m SSW of, Loch Brora	Broch	Scheduled Monument	Iron Age broch occupying a plateau on the ascending west side of the Strath Brora valley. Open aspects to the east with views over Loch Brora and Strath Brora. Further Iron Age settlement in the vicinity. Principal views are towards the loch and river valley.	8-11	4-7	6.6	High	Negligible. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.5
SM1854	Duchary Rock, fort	Fort	Scheduled Monument	Probable Iron Age fort occupying a prominent location on a steep-sided ridge. Open aspects to north and east towards the sea along the Brora river valley. Further Iron Age settlement to the north and northeast.	12-15	12-15	7.7	High	Low. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.7
SM1887	Uppat, homestead 800m SSE of	Homestead	Scheduled Monument	The monument consists of a WAG[5]-type walled structure, probably	8-11	4-7	9.9	High	Negligible.	Minor	

[3] Based on bare-earth blade tip height ZTV
[4] Based on bare-earth blade hub height ZTV
[5] or 'Aisled Building': A sub rectangular dry-stone building with upright pillar stones set vertically around its inner wall-face, forming an 'aisle'. The pillar stones are single monoliths and are often capped by a lintel which rests on the wall-head.

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[3]	No of hubs visible[4]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
				prehistoric but may be post medieval. The homestead is situated within woodland. Localised prehistoric settlement setting.					(Turbines visible in distant views. Mostly screened by woodland within Dunrobin Castle GDL).		
SM2843	Kildonan Burn, hut circles & field system	Hut circles & field system	Scheduled Monument	A series of prehistoric hut circles and field systems are situated on a gently sloping hillside overlooking the Kildonan Burn to the south.	4-7	1-3	8.2	High	Negligible. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.8
SM13617	Carrol, fish farm 430m SE, 410m SSE, 660m and 890m SSW of	Late 19th Century Fish Farm	Scheduled Monument	Late 19th century fish farm comprising artificial pools, a fish ladder and collector lades, along the Allt Coire Aghaisgeig Burn on the hillside on the west side of Strath Brora. Localised setting.	8-11	4-7	6.3	High	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected.).	Minor	
SM13646	Kilbraur, broch 135m SSW of	Broch	Scheduled Monument	A largely destroyed Iron Age broch visible as a grass-covered mound with a sheepfold on top. The broch occupies a flattened knoll overlooking the Strath Brora valley. Principle views are towards the loch and along river valley.	4-7	4-7	6.7	High	Negligible. Discussed in detail in Chapter 7: Cultural Heritage and Archaeology, Operational Effects.	Minor	Figure 7.6
LB568	Female School, Rosslyn Street, Brora	School	Category B Listed	Mid-19th century former girl's school, now a residential dwelling. Located on the bank of the river Brora within the town of Brora. Localised village setting.	12-15	4-7	7.8	Medium	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB574	1-10 Railway Terrace, Victoria Road, Brora	Terraced Houses	Category B Listed	Late-19th century red brick 2-storey terraced houses, on the main street of the village of Brora. Localised village setting.	12-15	4-7	7.6	Medium	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB578	Distillery, Clynelish Road, Brora	Distillery	Category B Listed	Distillery built in 1819 and remodelled in 1896 from which time most of the visible structures date. Part of a complex of buildings in low-lying foothills adjacent to Clyne Burn. Localised rural farmland setting.	1-3	0	6.2	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB579	Walled Garden, Clynelish House, Brora	Walled Garden	Category B Listed	Walled garden associated with Clynelish House. Part of a complex of buildings in low-lying foothills. Localised rural farmland setting.	1-3	0	6.4	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural	Negligible	

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[3]	No of hubs visible[4]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
									significance. Localised setting unaffected).		
LB579	Clynelish House and Laundry, Brora	House and Laundry	Category B Listed	Mid-19th century 2-story gabled House and Laundry. Part of a complex of buildings in low-lying foothills. Localised rural farmland setting.	1-3	0	6.4	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB580	Steading, Clynelish House, Brora	Steading	Category B Listed	L-shaped plan steading rebuilt in 1866 and part of Clynelish House farm. Part of a complex of buildings in low-lying foothills. Localised rural farmland setting.	1-3	0	6.3	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB580	Dairy, Clynelish House, Brora	Dairy	Category B Listed	19th-century dairy associated with Clynelish House and Farm. Part of a complex of buildings in low-lying foothills. Localised rural farmland setting.	1-3	0	6.4	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB581	1-3 Clynelish Farm Cottages	Cottages	Category B Listed	Row of mid-19th century cottages associated with Clynelish House and Farm. Part of a complex of buildings in low-lying foothills. Localised rural farmland setting.	1-3	0	6.4	Medium	Negligible. (Mostly screened by topography. Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB592	Duncraggie, Golf Road, Brora	Hotel	Category B Listed	Early 20th century hotel situated on a road within the town of Brora and adjacent to the River Brora. Localised village setting.	12-15	8-11	7.7	Medium	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB593	Jubilee Fountain, Fountain Square, Brora	Fountain	Category B Listed	Late-18th century fountain commemorating Queen Victoria's Jubilee in 1897 standing within a miniature enclosed garden. Localised village setting.	12-15	8-11	7.8	Medium	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB5102	Inverbrora	19th century house	Category B Listed	Early-19th century house situated within a small woodland and part of	8-11	4-7	8.3	Medium	Low.	Minor	

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[3]	No of hubs visible[4]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
				Inverbrora farm. Part of a complex of farm buildings south of the village of Brora. Localised rural farmland setting.					(Turbines visible in distant views screened by farm buildings and woodland).		
LB7024	Uppat House	Mid 18th century house	Category B Listed	Mid-18th century house part of the Sutherland Estates. The house sits in a woodland setting at the edge of the Dunrobin Castle GDL (GDL00160).	8-11	4-7	9.2	Medium	Negligible. (Distant visibility but surrounding woodland has obscured visibility).	Negligible	
LB7026	James Loch Memorial, Uppat House	Memorial	Category B Listed	Memorial to James Loch, former Commissioner of Sutherland and Stafford Estates. Woodland plantation has obscured panoramic views to the Moray Firth. Localised woodland setting.	8-11	4-7	10.0	Medium	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB567	Grove Cottage, Rosslyn Street, Brora	Cottages	Category C Listed	Mid-19th century house with farm buildings extending to the rear. Localised setting within the village of Brora	12-15	8-11	7.9	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB569	8-18 Rosslyn Street, Brora	Terraced Houses	Category C Listed	Late-19th century 2-storey terraced house. Localised setting within the village of Brora.	12-15	8-11	7.8	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB571	Station and Footbridge, Brora Station	Station and Footbridge	Category C Listed	Late-19th century station building and footbridge located within the village of Brora. Localised setting within the village of Brora.	12-15	4-7	7.6	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB572	Ardassie, Shore Street, Brora	Residential House	Category C Listed	Early-19th century 2-storey house within Brora village. Localised setting within the village of Brora.	12-15	8-11	7.9	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB573	Icehouse, Harbour Road, Brora	Icehouse	Category C Listed	Early-19th century single vaulted icehouse built into the banks of the River Brora. Localised setting at the mouth of the River Brora.	12-15	4-7	7.8	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB582	4 Clynelish Farm Cottages	Cottages	Category C Listed	Row of mid-19th century cottages associated with Clynelish House and Farm. Part of a complex of buildings in	1-3	0	6.3	Low	Negligible. (Mostly screened by topography. Views out from	Negligible	

Asset No	Asset Name	Asset Type	Status	Setting	No of tips visible[3]	No of hubs visible[4]	Distance to nearest turbine (km)	Sensitivity of Asset	Magnitude of Impact	Significance of Effect	VP Figure (where applicable)
				low-lying foothills. Localised rural farmland setting.					asset not an important contributor to cultural significance. Localised setting unaffected).		
LB7023	Strathsteven Cottages	Cottages	Category C Listed	Three single storey late-18th century cottages overlooking the Moray Firth. Originally part of the Dunrobin Estate and situated at the edge of the Dunrobin Castle GDL (GDL00160). Localised setting.	8-11	4-7	9.9	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB7190	Kildonan Bridge	Bridge	Category C Listed	Early-19th century hump-backed single span hump-backed bridge crossing the River Helmsdale. Localised river setting.	1-3	0	7.9	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
LB49184	Clyne Parish School, Clyneish Road, Brora	School	Category C Listed	Mid-19th century L-plan school. The school is unoccupied and was added to the buildings at risk register in 2003. Localised setting within the village of Brora.	4-7	1-3	6.4	Low	Negligible. (Views out from asset not an important contributor to cultural significance. Localised setting unaffected).	Negligible	
GDL00160	Dunrobin Castle	Designed Landscape	Garden and Designed Landscape	Garden and Designed Landscape comprising parterre beds within formal gardens, kitchen garden and woodland, surrounding Dunrobin Castle, all in a coastal setting. Extensive views south-west out over open sea to the Moray Firth and to the Morayshire coastline form an important part of the setting. Views to and from the castle and designed landscape are limited by enclosed woodland surrounding the castle to the north and north-east. GDL has an important contribution to local coastal scenic character.	12-15	8-11	9.1	High	Negligible. (Distant visibility of turbines from the north part of the GDL, which is mostly woodland providing considerable screening).	Minor	