

**A Measured and Photographic Survey of
Archaeological Features to be affected by the
Proposed Hydro-Electric Scheme at Loch Poll,
Assynt, Sutherland.**

**HIGHLAND COUNCIL
ARCHAEOLOGY SERVICE**

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A Measured and Photographic Survey of Archaeological Features to be affected by the Proposed Hydro-Electric Scheme at Loch Poll, Assynt, Sutherland

Background

In December 1998, the author was asked by Turnbull Jeffrey Partnership to carry out a rapid walk-over survey of the area likely to be affected by the proposed hydro-electric scheme at Loch Poll, Assynt, Sutherland. The purpose of the survey was to identify sites of archaeological interest, to define areas which should be protected from the construction of access routes or the digging of borrow pits, and to assess the impact of the increase in water levels on the archaeological record. As a result of this survey, and in consultation with Highland Council Archaeology Service, it was agreed that one of the conditions of the granting of planning permission for the scheme should be a detailed measured and photographic survey of those archaeological features which would be submerged or otherwise affected by the construction work and the increased water levels

Method

The survey was carried out on March 10th and 11th 1999. For each site a ground plan and written description was produced, and photographs taken of both general views of the features and specific details. In the case of the larger sites, the survey was limited to only those parts of each site or feature which are to be submerged or damaged, and note was taken of significant points on the features which would not be submerged and thus could be keyed in to any future survey work.

Historical and Archaeological Background

The archaeological features identified in the initial walk-over survey were all considered to date to the period immediately preceding the clearances, which were documented as having taken place in the first two decades of the 19th century, and to the post-clearance period when the land was reorganised into large-scale sheep farms. There are three probably pre-clearance settlements on the shores of Loch na Loinne, namely Loinn Mheadhonach and Loinn Mhor on the north shore of the loch and Dubharlainn on the south shore. The surrounding land is divided by dykes, generally constructed of turf and stone, which run often for long distances and terminate at the natural boundaries of lochs and rivers. The function of the short stretches of rivers as boundaries has been improved by the construction of dykes to run along the river banks and the reinforcing with stonework of the banks. It cannot be said that these dykes and banks are contemporary with the three settlements as at no point do they interconnect; it is possible therefore that they date to the time of the establishment of the sheep farms.

No monuments of obvious national importance were identified in the initial walk-over survey, but the 18th and 19th century features were considered to be of regional and local significance. They date to a time of great social change in the Assynt area and represent the various phases of land use and settlement which form the social history of the peoples of Assynt. It was therefore considered desirable to preserve the archaeological record where practically possible and record it in detail where damage or loss was considered necessary.

SITE No. 1. (Site no. 7 in original walk-over survey)

LOCATION at NC 1275 3032, on the short stretch of burn linking Loch Torr na h- Eigin and Loch Torr nan Uidhean

THE SURVEY

It is intended that the present water level of Loch Torr nan Uidhean will rise by 2m. The lower stretches of the dyke and all of the retaining wall along the loch shore will be completely submerged, while higher stretches of the dyke will be partially submerged and will begin to deteriorate as the turf washes out of the dyke.

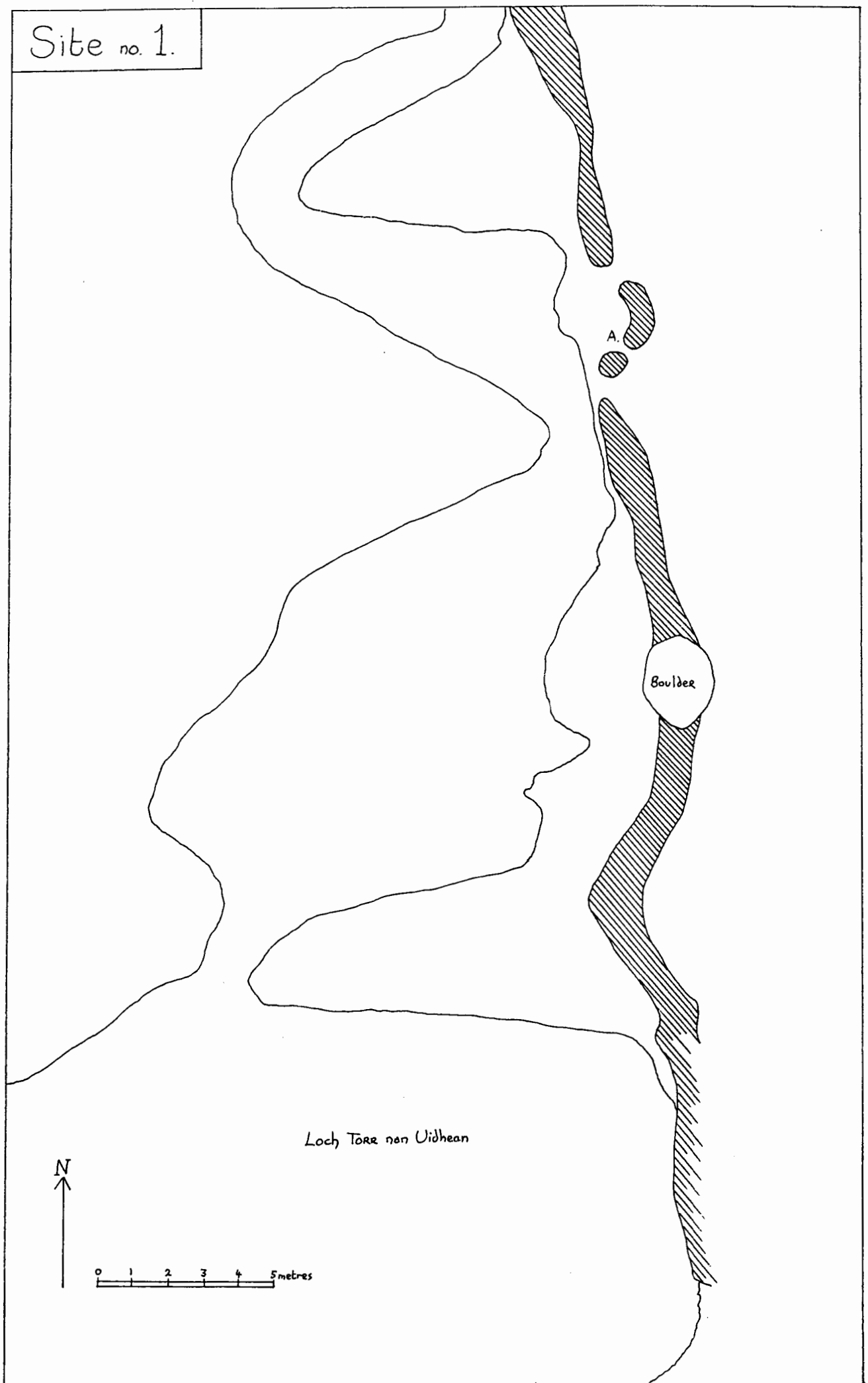
The dyke was surveyed along the length at which its base is 2m. or less above the present water level of Loch Torr nan Uidhean, reaching a point upstream at which the burn narrows considerably into the first of a series of small rocky falls.

DESCRIPTION

A turf and stone dyke following the entire length of the east bank of the burn and extending 6m. as a retaining wall along the east shore of Loch Torr nan Uidhean. The dyke stands 1m. high in its best preserved stretches, reducing to low clumps of heathery turf at its worst. it is overgrown along its entire length with a thick growth of heather except at its northernmost point as it meets the shore of Loch Torr na-h-Eigin where the turf is bare and eroded. The retaining wall is of stone and does not rise above the natural height of the bank above the shore.

It is assumed that the function of the dyke was livestock management, to prevent beasts from crossing the burn where otherwise the lochans themselves provide a natural land division.

Site no. 1.



Loch Torr nan Uidhean



0 1 2 3 4 5 metres

SITE NO. 1 Photograph No. 1

View North from the shore of Loch Torr nan Uidhean



SITE NO. 1 Photograph No. 2

View North East from the shore of Loch Torr nan Uidhean



SITE NO. 1 Photograph No. 3

View South East from waterfall



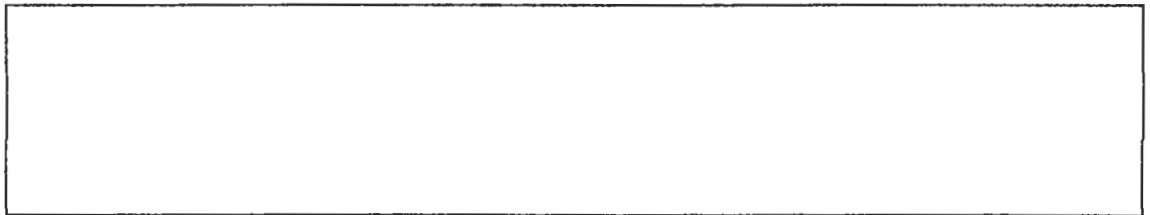
SITE NO. 1 Photograph No. 4

Detail of dyke, marked A on ground plan, view to North East.



SITE NO. 1 Photograph No. 5

Retaining wall along shore of Loch Torr nan Uidhean, view to East.





Site No 2.

SITE No. 2. (Site no.8 in original walk over survey)

LOCATION At NC 1287 2985 at the outflow of Loch Torr nan Uidhean.

THE SURVEY

It is intended that the water level of Loch Torr nan Uidhean will rise by 2m. which will completely submerge this feature. A dam is to be constructed approximately 20m. downstream, making as much use as possible of rubble from the burn and surface boulders from the surrounding area to reduce the need for the digging of borrow pits. It was agreed that as the feature, on being submerged, was effectively lost from the archaeological record and would deteriorate underwater, it was acceptable to destroy it after it had been recorded, to use the stones in the construction of the dam. Therefore it was partially demolished on 10.3.99 in a controlled manner to gain as much information as possible about its construction and function.

DESCRIPTION

As the burn leaves the loch it is broad and shallow in a steep sided valley before narrowing and dropping steeply towards Loch na Loinne. This broad and shallow stretch has been effectively dammed by rubble fill and walling, making use of a natural rocky island midstream. Running west of this island to the shore is a low rough wall of originally three courses of large stones with rubble fill. The base of the wall, now standing in silt, is a double row of carefully placed large stones. Most of the top, single row of stones has now been lost. As this wall reaches the shore it attaches to a low stone and turf dyke which turns south and continues along the bank of the burn.

To the east of the island, below water level can be seen piled rubble extending into the loch for up to 1m. beyond which the loch bottom is considerably deeper. Only a few stones break the surface here to provide irregular stepping stones. As this dam approaches the eastern bank there is a section of stones set upright to provide a more substantial barrier. There are some traces of this eastern bank of the burn being strengthened or steepened by walling, with a clear section approximately 20m. downstream.

Site no. 2

Loch Torr nan Uidhean

Underwater
Rubble

0 1 2 3 4 5 metres



SITE NO. 2 Photograph No. 1

View North West of the wall section



SITE NO. 2. Photograph no. 2

View West of the wall section



SITE NO. 2 Photograph No. 3

View South West



SITE NO. 2. Photograph no. 4

Detail of the North East section of the feature, from South West.



SITE NO. 2 Photograph No. 5

Detail of the North East section of the feature, from South East



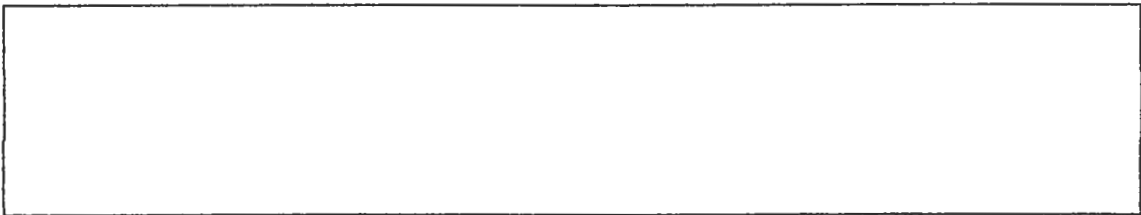
SITE NO. 2. Photograph no. 6

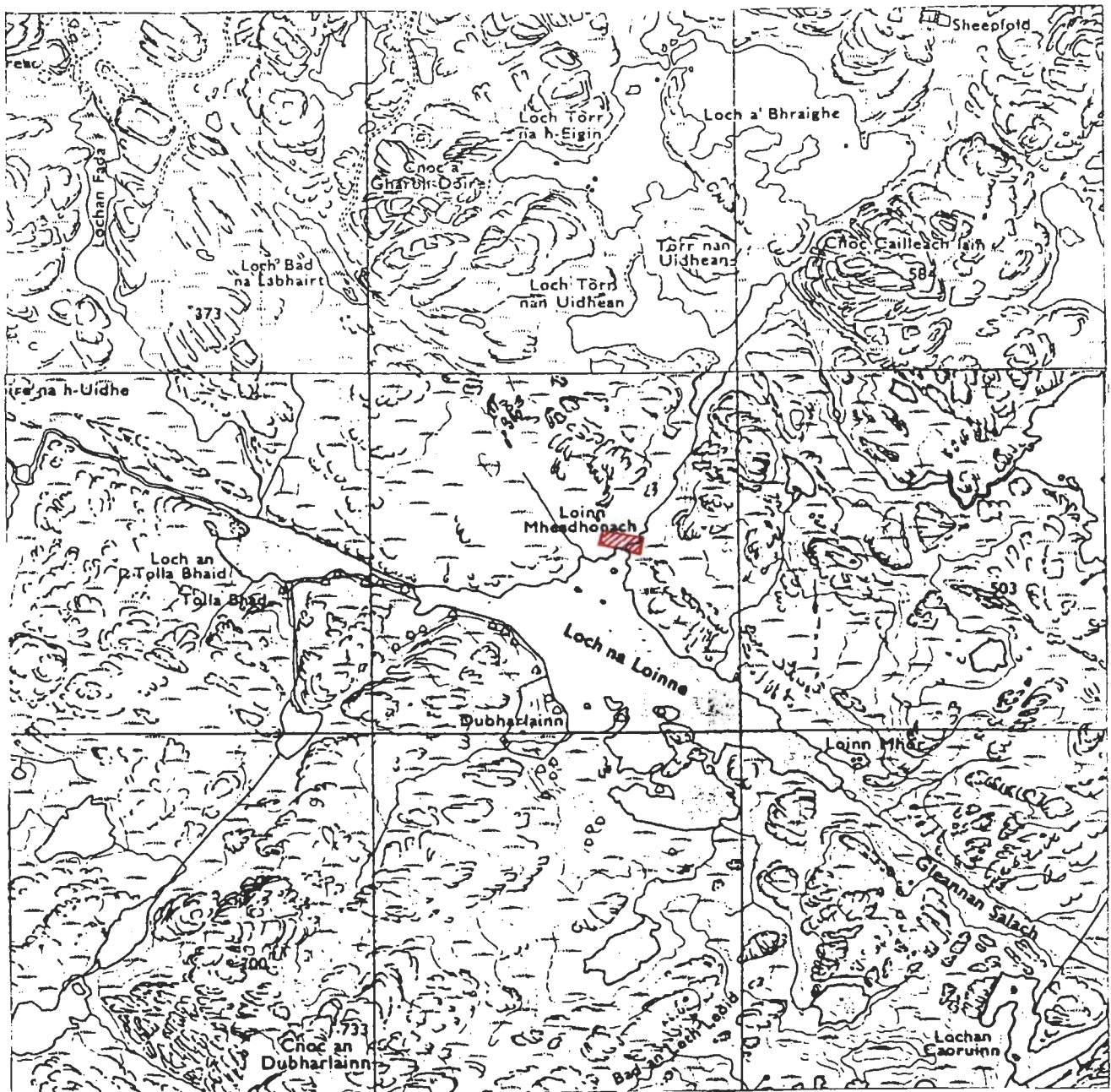
Wall demolished to show double row of stones at base



SITE NO. 2 Photograph No. 7

Retaining wall on the East bank of the burn approximately 20m. South of the main feature. Canes indicate the proposed location of the dam





Site No 3.

SITE No. 3. (Site no. 9 in original walk-over survey)

LOCATION At NC 127 296. On the lower west banks of the burn flowing from Torr nan Uidhean to Loch na Loinne is Loinn Mheadhonach, a settlement enclosed entirely by a stone and turf dyke, within which the ground cover is notably grass and bracken contrasting with the heather and bog outside the settlement. Visible features within the settlement include three buildings, one enclosure and several small stone storage structures, these are all well above the proposed rise in water levels.

THE SURVEY

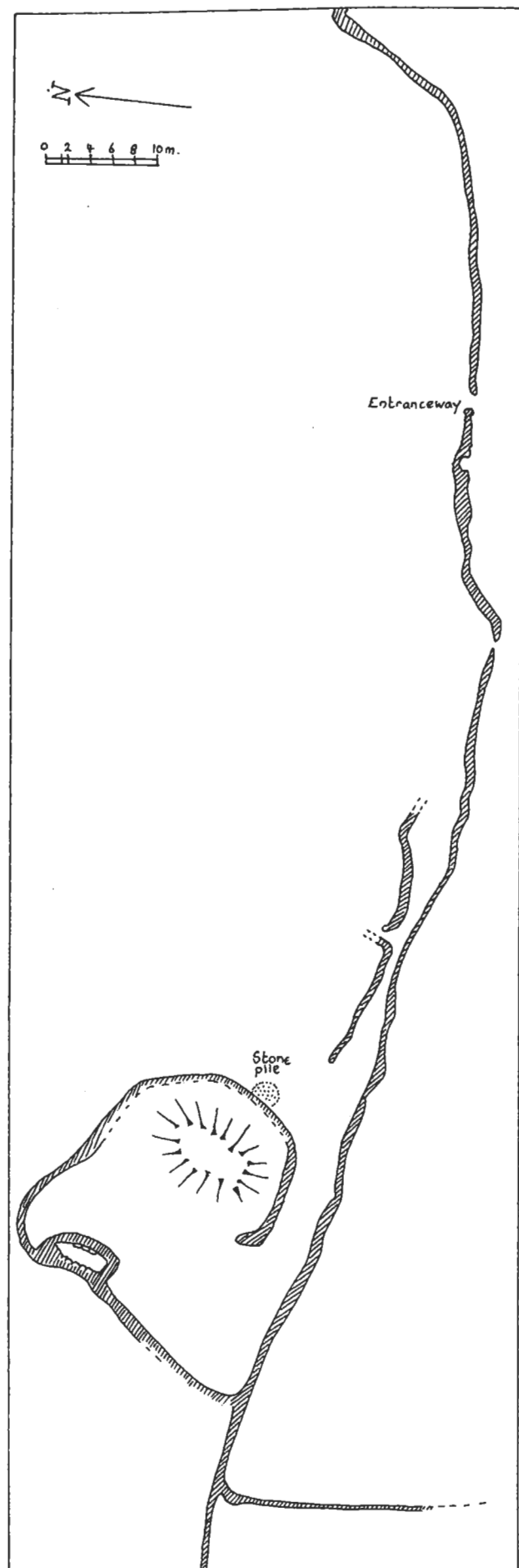
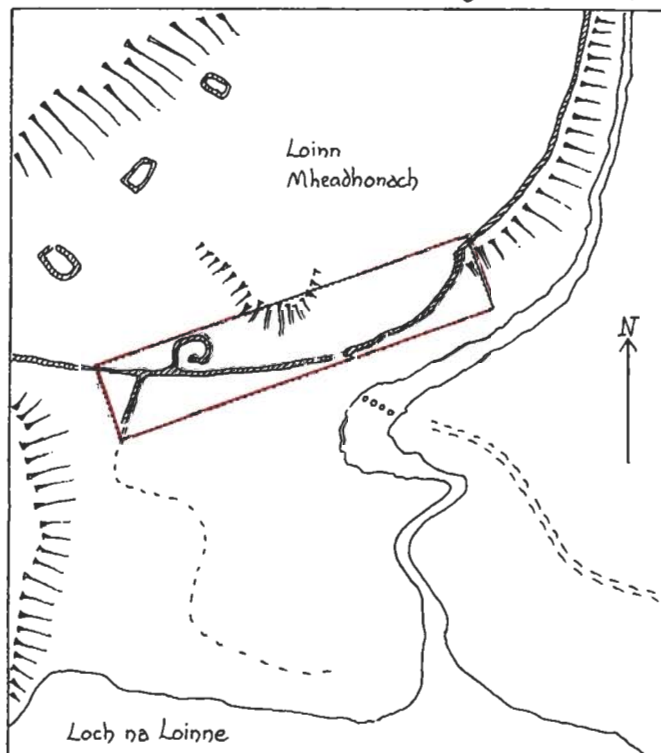
It is proposed to raise the water levels of Loch na Loinne by 2m. and this will flood the lower ground lying outwith the main enclosing dyke and is likely to submerge, if only partially, some of the lowest stretch of the dyke. A section of this dyke was surveyed between two distinctive features which, it is assumed, will not be flooded: to the west the junction between the main dyke and another low dyke running southwards, and to the east a sharp corner in the dyke as it rises to the top of the steep bank above the burn.

DESCRIPTION

The dyke is effectively a retaining wall, with a difference in ground height of up to 0.8m., the higher ground within the dyke being smooth, well-drained turf, the lower ground outside the dyke is boggy and eroded with a cover of heather and rushes. In this low boggy area there is a ditch running eastwards alongside the outside of the dyke. One break in the dyke appears to be an entranceway, with stepping stones across the burn just outside it. On the other side of the burn, erosion on the bank suggests a trackway leading SE towards Loinne Mhor. To the west of the entranceway the dyke deteriorates into broken turfy mounds but improves as the ground rises into a substantial turf and stone dyke standing up to 1m. high. Above the dyke in this western area are low banks, no more than 0.2m. high, suggesting enclosures, and the footings of one small stone building. Below the dyke at this point a further dyke and ditch run down into the low lying ground but cannot be traced with any certainty as far as the shore.

Site no. 3

Sketch Plan of Loinn Mheadhonnach showing area of survey



SITE NO. 3 Photograph No. 1

Eastern corner of dyke marking easternmost point of ground plan.
View from South-East



SITE NO. 3. Photograph no. 2.

View to South West from just below Eastern corner



SITE NO. 3 Photograph No. 3

Assumed entranceway through dyke, view from South East



SITE NO. 3. Photograph no. 4

View to North East, showing entranceway



SITE NO. 3 Photograph No. 5

Detail of eroded section of dyke, view from South



SITE NO. 3. Photograph no. 6

Small building within enclosure, view from North East, main dyke in background.



SITE NO. 3 Photograph No. 7

Detail of small building, view from South East



SITE NO. 3. Photograph no. 8

Western edge of ground plan, marked by the junction of main dyke and low dyke heading South. View from North East.



SITE NO. 3 Photograph No. 9

Junction of main dyke and low dyke heading South, View from East



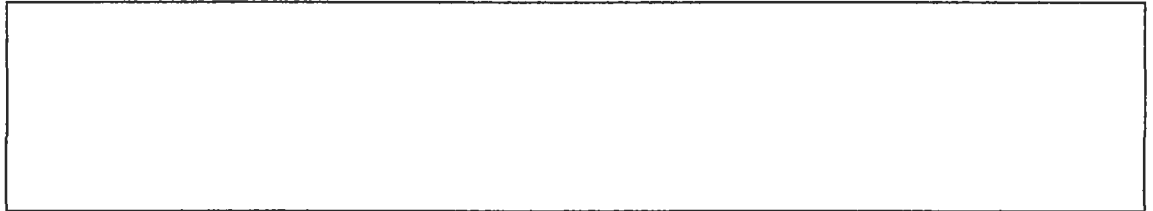
SITE NO. 3. Photograph no. 10

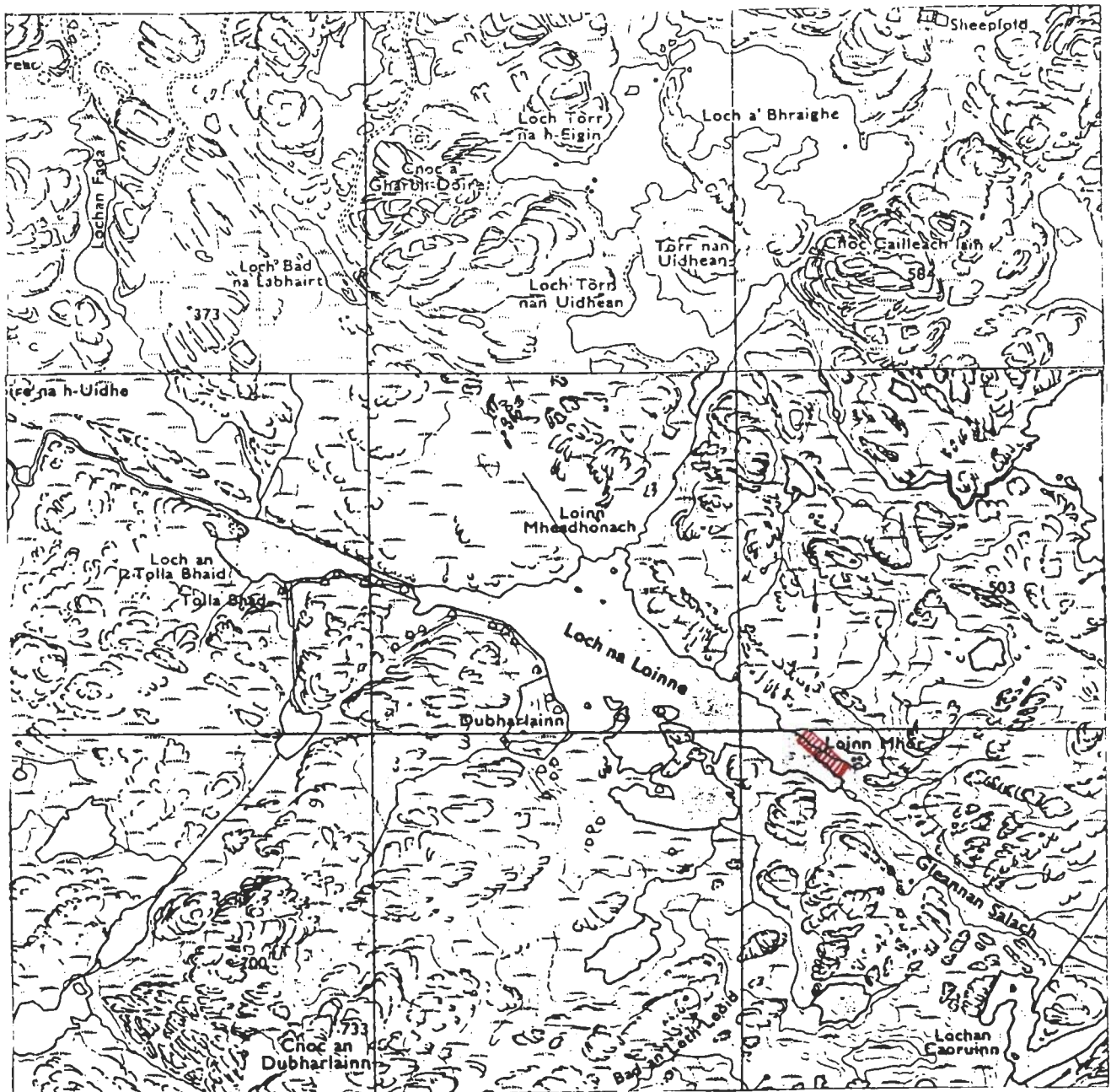
Western edge of ground plan, marked by the junction of main dyke and low dyke heading South. View from West.



SITE NO. 3 Photograph No. 11

Stepping stones across the burn to the South East of the entranceway through main dyke, view from South East.





Site No 4.

SITE No. 4. (Site no. 16 in original walk-over survey)

LOCATION centred on **NC 133 289**. On the NE shore of Loch na Loinne, close to the outflow from Gleann Salach, on gently rising ground, is the enclosed settlement of Loinn Mhor. The standing structures of this settlement are on a small rocky ridge running E-W well above any rise in water level.

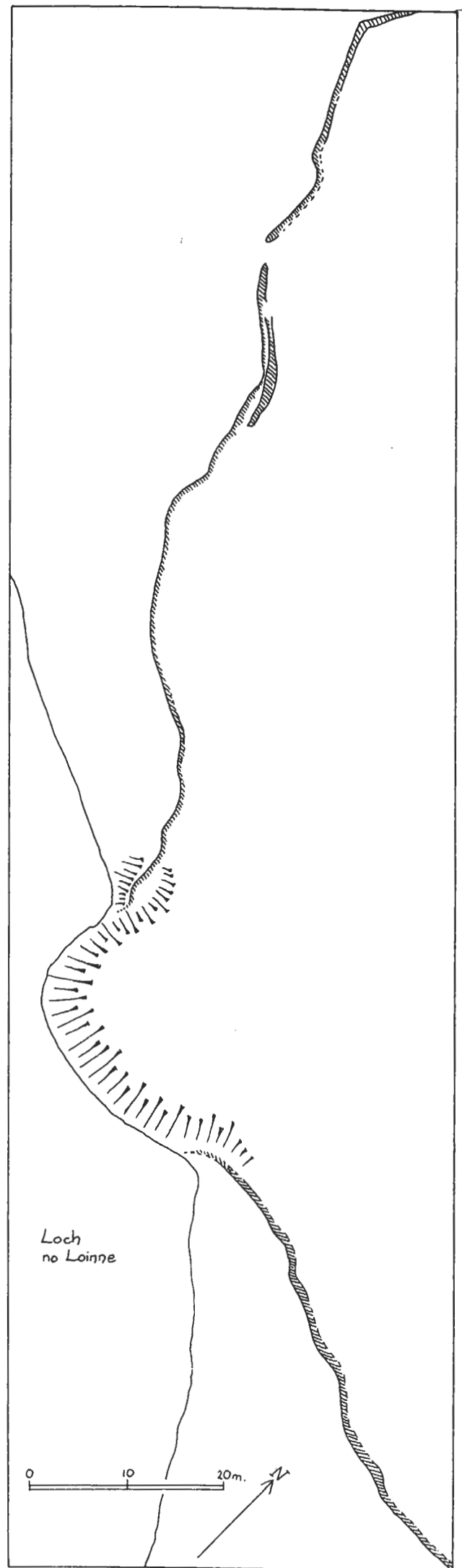
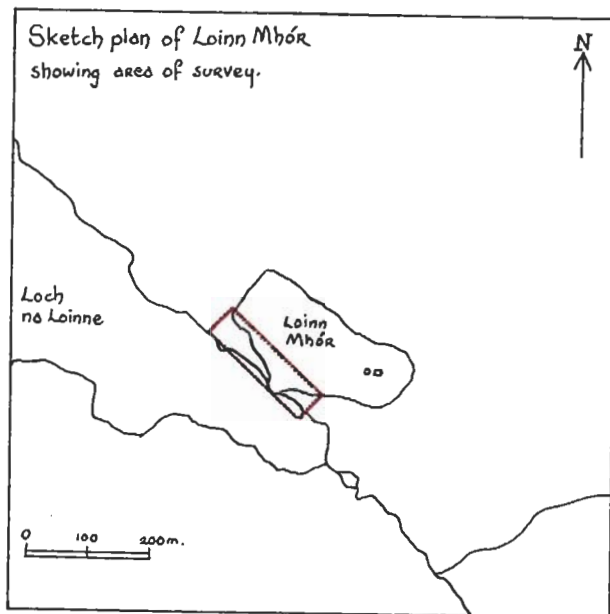
THE SURVEY

It is proposed to raise the water level of Loch na Loinne by 2m. and this will submerge or partially submerge the lower stretches of the enclosing dyke of the settlement. The dyke is of stone and turf construction, and will be considerably damaged by submersion as the turf erodes out. The dyke was surveyed along the length which, it was estimated, would be fully or partially submerged, running from a point to the west of the settlement where the dyke turns a sharp corner to run uphill at a right angle to the shoreline.

DESCRIPTION

The dyke is of turf and stone construction and is eroded in many stretches, visible at worst as only a retaining bank rising 0.5m. Along the higher stretches to the west the wall stands up to 0.8m. above the ground level outwith the dyke. There is no appreciable improvement in the land or vegetation within the settlement. From both east and west burns or ditches run down along the outside of the dyke but are separated at the shoreline by a rocky knoll which has been utilised as a natural barrier. The dyke runs into this knoll at shore level from both directions, at this point it is eroded to a rubble of small stones.

Site no. 4



SITE NO. 4 Photograph No. 1

View of the section of dyke to the East of the rocky knoll, from the West



SITE NO. 4. Photograph No. 2

Section of dyke to the East of the rocky knoll, view from South West.



SITE NO. 4 Photograph No. 3

Detail of eroded section of eastern stretch of dyke as it abuts onto rocky knoll



SITE No.5 (Site no.15 on original walk over survey)

LOCATION At NC 1252 2900 On the south shore of Loch na Loinne is the settlement of Dubharlainn. Cultivated areas connected with the pre-clearance settlement spread along the gently sloping ground to the east but to the west the ground falls steeply and rockily to the shore. The post-clearance features include a well-built drystone dyke which encloses the settlement on three sides and runs down into the loch at sites no. 5 and 6.

THE SURVEY

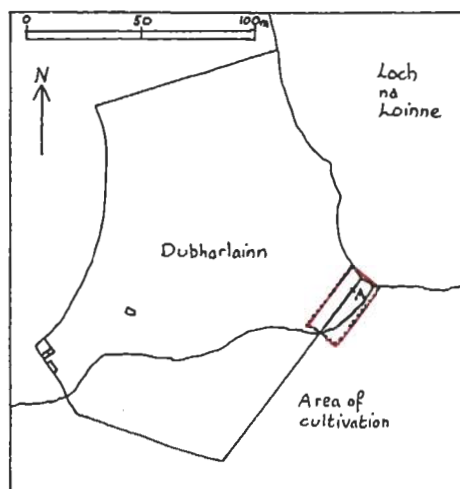
The last 30m. of this dyke will be submerged or partially submerged by the proposed 2m. rise in water level of loch na Loinne. The drystone construction of the dyke means that it should not be destroyed by submersion, and the dyke runs in a straight line down to the shore, so a ground plan was not produced, but the dyke was examined for information about its construction and function.

DESCRIPTION

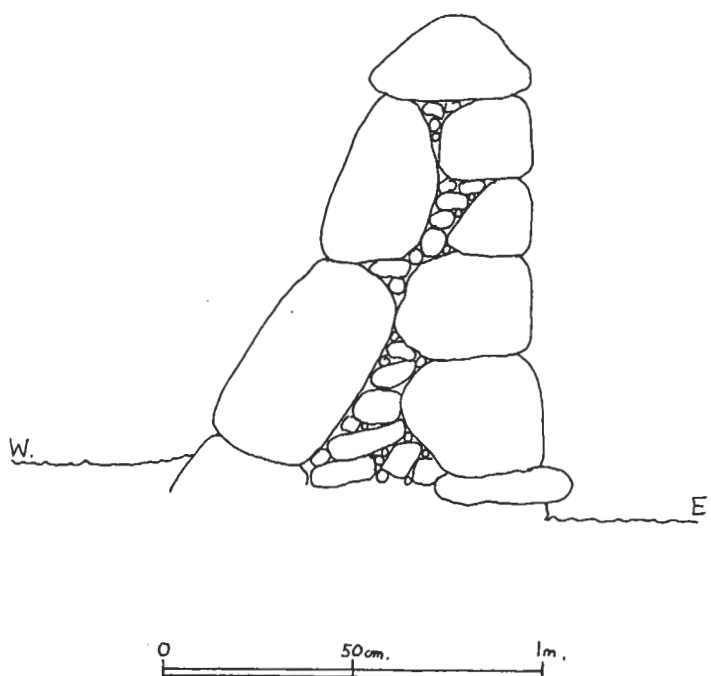
The dyke stands on average 1.3m. high, with the ground level slightly higher by up to 0.1m. on the inside. The outer face of the wall is very nearly vertical but there is a pronounced batter on the inner face, the stones of the inner skin being placed at an angle to conform to the slope of the face. The wall runs out into the loch for a distance of 2m., terminating untidily with fallen stones underwater.

Site no. 5

1. Sketch plan of Dubharlainn showing low-lying section of dyke.



2. Cross-section of dyke at A.



SITE NO. 5 Photograph No. 1

View of dyke from South



SITE NO. 5 Photograph No. 2

View of dyke from West



SITE NO. 5 Photograph No. 3

View of dyke from South East



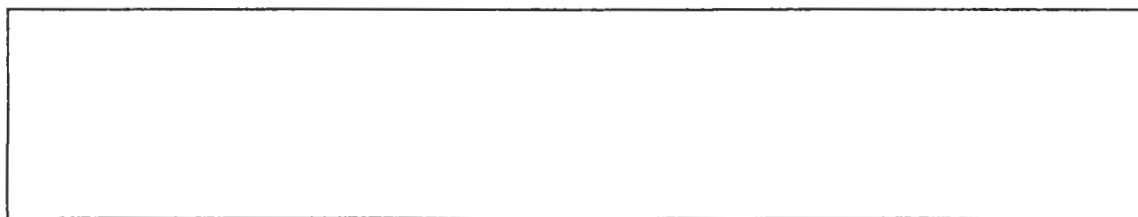
SITE NO. 5 Photograph No. 4

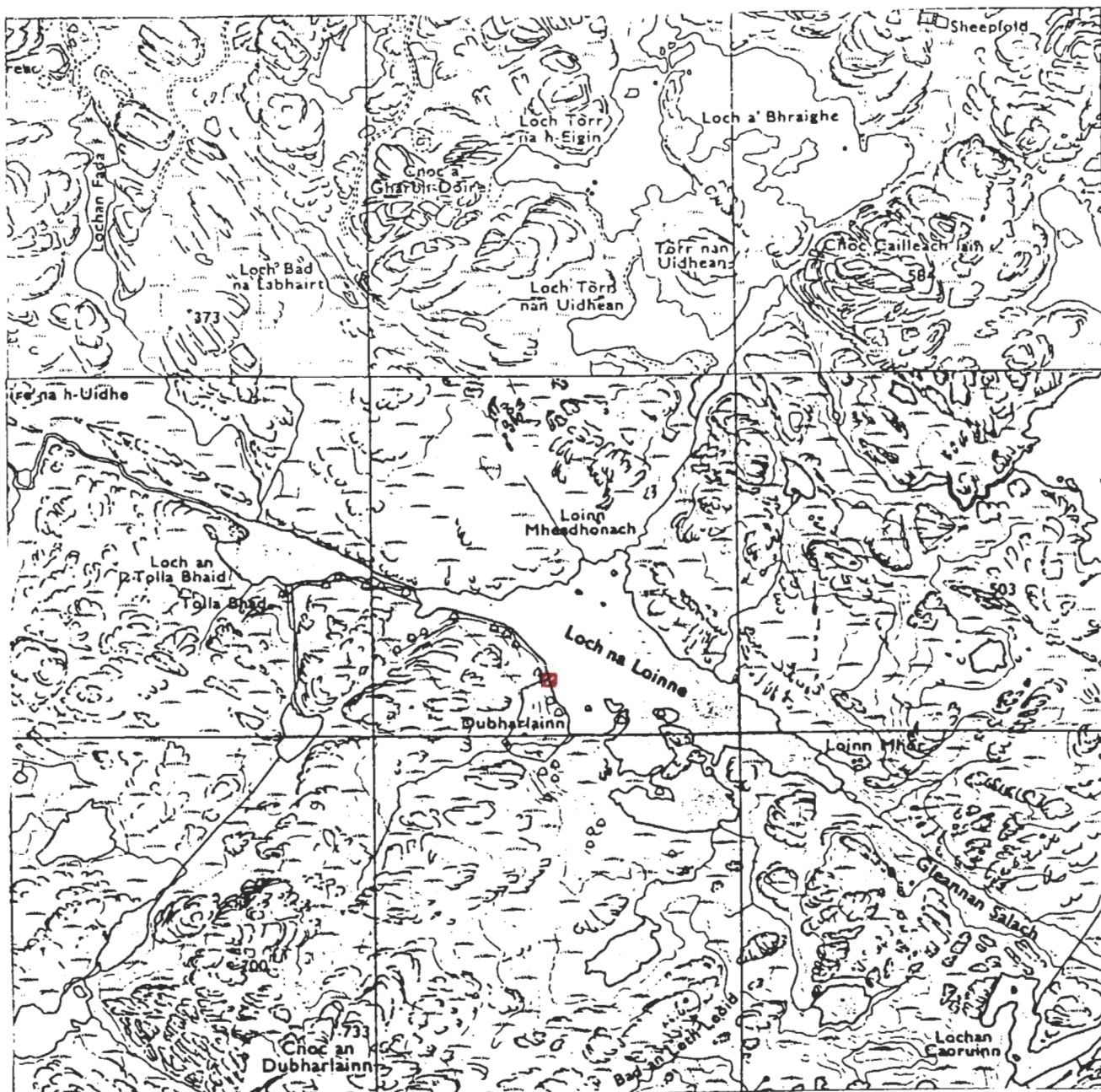
Section of dyke, view from South West



SITE NO. 5 Photograph No. 5

Section of dyke extending into Loch na Loinne, view from South East





Site No 6.

SITE No. 6 (Site no 15 on original walk over survey)

LOCATION At NC 1249 2915 The north-western terminal of the post-clearance dyke of the settlement of Dubharlainn

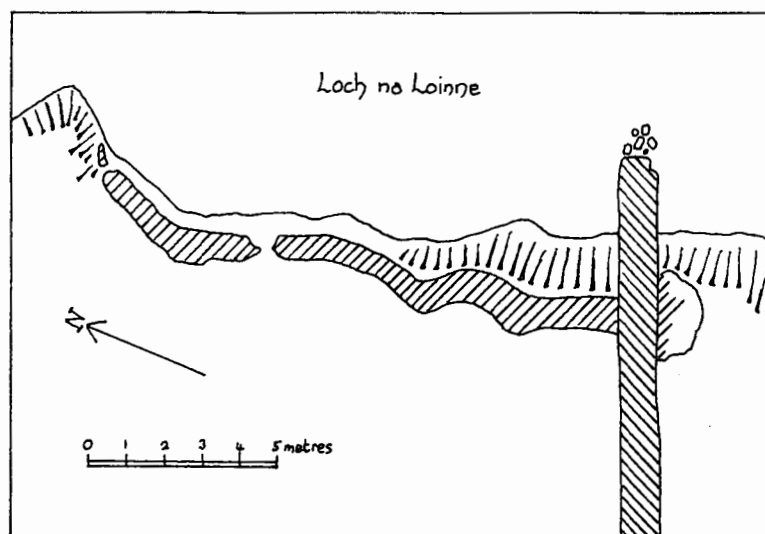
THE SURVEY

The ground falls steeply to the loch at this point and only about 6m. of the dyke will be submerged by the proposed 2m. rise in water level of Loch na Loinne. Close examination revealed the remains of an older dyke running along the shore and crossed over by the more recent dyke. This is of stone and turf construction and will be completely submerged. It was surveyed along its entire visible length.

DESCRIPTION

The post-clearance drystone dyke is of the same dimensions and general construction as at site no. 5, but is less uniformly built as it drops steeply to the shore. The 2m. of wall extending into the loch is poorly constructed and tumbled. The older dyke running along the shoreline is low, at most 0.3m. high and broken into turfy mounds and runs only from the drystone dyke to a sharp rocky outcrop to the NW. Apart from a rubble pile abutting on to the drystone dyke, there is no visible trace of this dyke to the SE. The drystone dyke clearly passes over the top of the older dyke.

Site no 6



SITE NO. 6 Photograph No. 1

View of dyke from North



SITE NO. 6 Photograph No. 2

Section of dyke extending into Loch na Loinne, view from South.



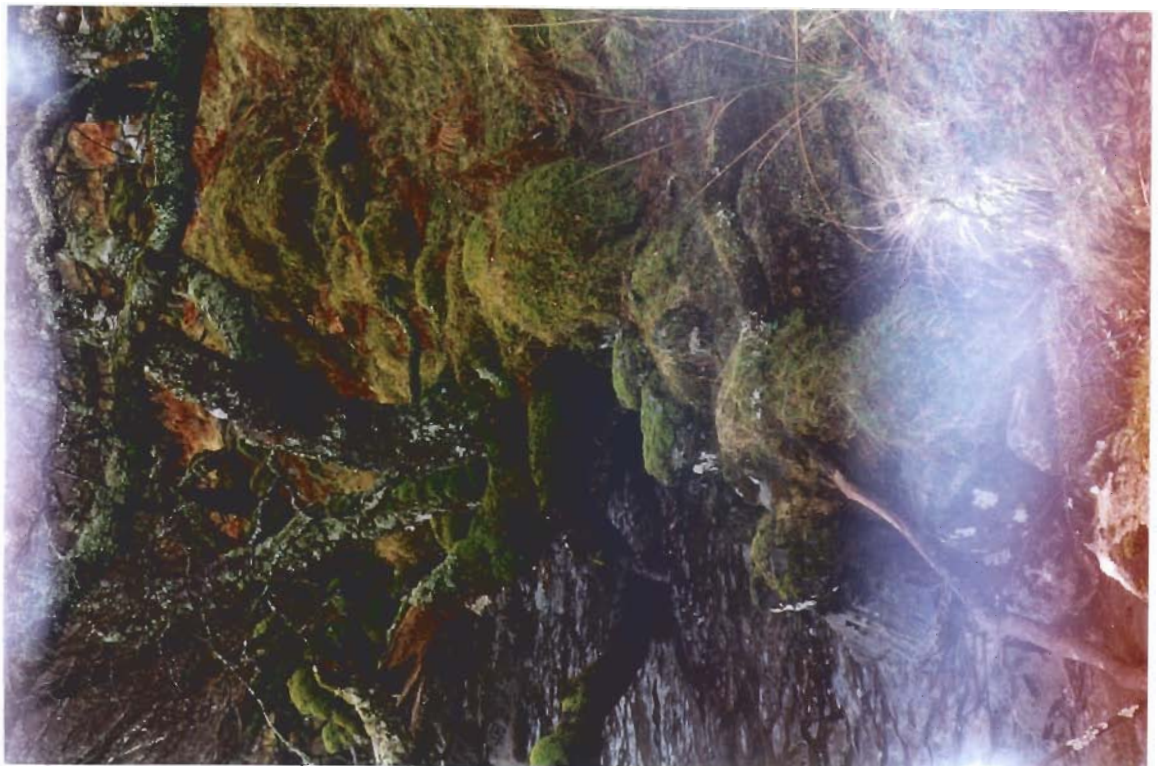
SITE NO. 6 Photograph No. 3

Section of dyke extending into loch na Loinne, view from North West.



SITE NO. 6 Photograph No. 4

Earlier dyke following the shoreline, view from the North



SITE No.7 (Site no. 13 on the original walk-over survey)

LOCATION At NC 1212 2940 On the south bank of the short stretch of river flowing out of Loch na Loinne

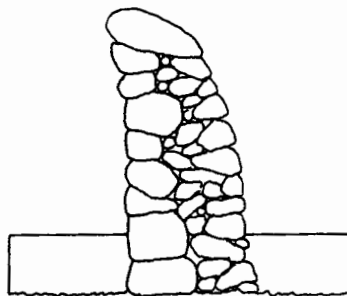
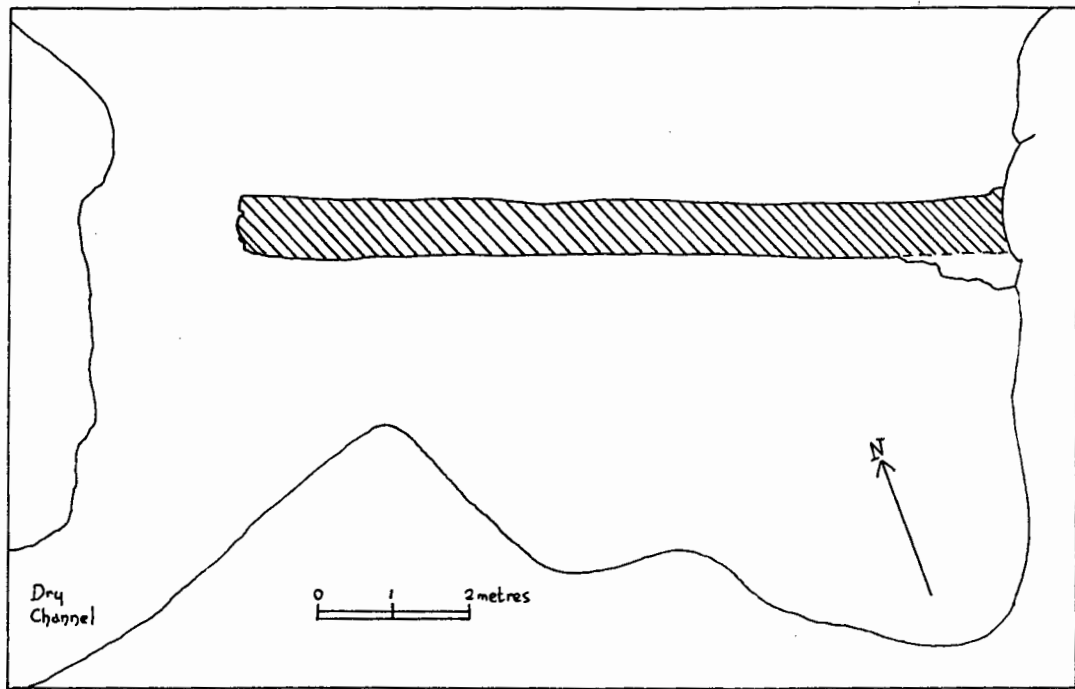
THE SURVEY

The dam is to be constructed a few metres west of this feature, which will be completely submerged by the proposed 2m. rise in water level. It was agreed that as it had been accepted that this feature would be lost to the archaeological record on being submerged, and as this would be mitigated by a detailed measured and photographic survey, it was acceptable that material from the feature could be removed and used in the construction of the dam to reduce the necessity for borrow pits. The feature was demolished in a controlled manner on 11.3.99 to gain as much information as possible about its construction and function

DESCRIPTION

Where the river flows out of Loch na Loinne it passes a rocky outcrop on the south bank then appears to have originally divided into two channels to flow around a second knoll. The SW channel is now dry but there is a shallow pool 12m. by 4m. SW of the main flow of water, cut off by a drystone wall measuring 10m. in length. It was originally thought that the wall cut off the pool completely, but the lack of rubble underwater in the 2m. gap suggests that this was not the case and that the wall was intentionally incomplete. Although looking well built, the wall proved fragile and has presumably only survived by not being rubbed against by livestock, but the flow of water along its northern face appears to have caused subsidence. The wall now has a distinct lean to the NE. Only on the NE face were stones regularly placed at the base, this face was presumably more carefully constructed to withstand the flow of water but the SW face is of roughly piled rubble. There are very few tie stones. The wall stands in 0.4m. of water with a height of on average 1.4m. above the present water level. The SW end of the wall abutts onto the vertical rockface of the small knoll.

Site no. 7



0 50cm. 1m.

SITE NO. 7 Photograph No. 1

View of wall from North



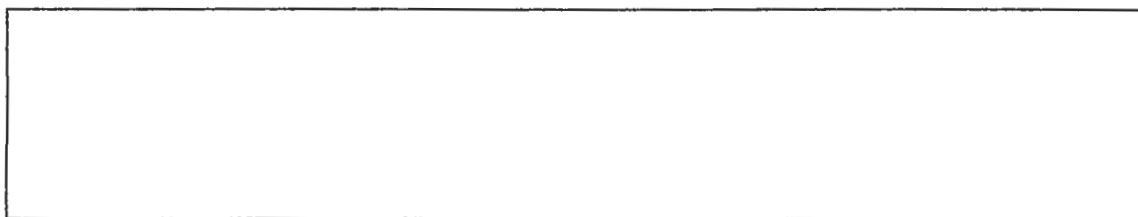
SITE NO. 7 Photograph No. 2

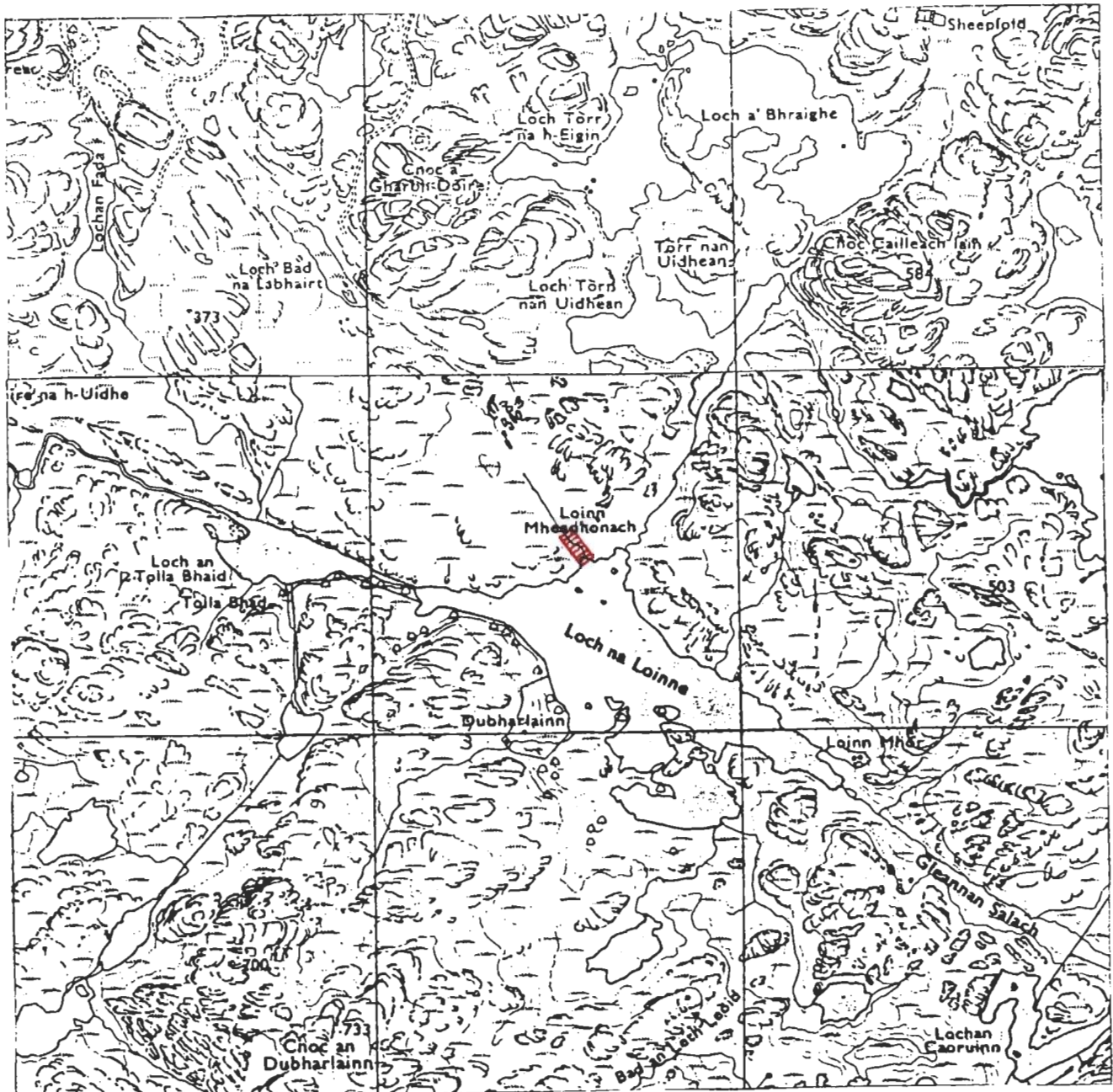
Detail and section of the wall, from the West.



SITE NO. 7 Photograph No. 3

Wall after demolition, showing row of stones laid at base on northern side. View from
North West





Site No 8.

SITE No. 8. (Site no. 10 on original walk-over survey)

LOCATION At NC 1257 2950 To the west of the settlement of Loinn Mheadhonach on the north shore of Loch na Loinne, where a small burn flows SE into the loch. A dyke runs through the same valley as the burn for approximately 500m. Just before it reaches the shore an enclosure has been constructed by running two walls from the dyke up to the rockface at the NE side of the valley.

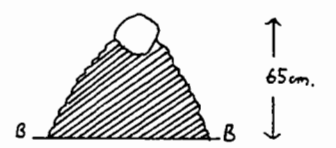
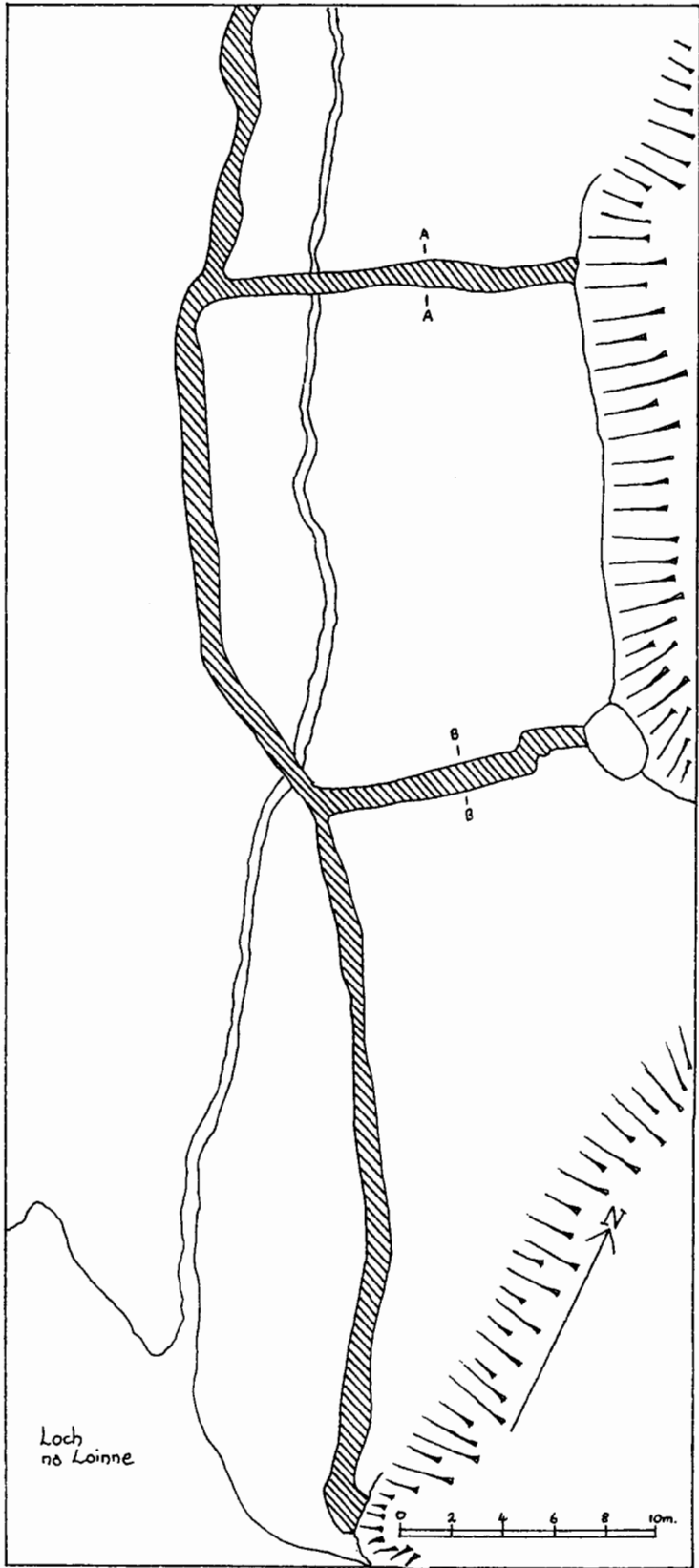
THE SURVEY

The lower lying sections of the main dyke and the two enclosure dykes will be submerged by a 2m. rise in water level of Loch na Loinne, and being of stone and turf construction will deteriorate as the turf erodes out. The area of the survey included the complete enclosure and as far up the dyke as it was estimated would be affected by the rise in water level. The higher edge of the enclosure will not be submerged and the two terminals of the dykes will remain visible as points of reference.

DESCRIPTION

The beginning of the main dyke curves slightly eastwards to abutt onto the vertical rockface at this point of the valley side but generally runs SE-NW, crossing the burn at the enclosure to run up the west side of the valley. It is of stone and turf construction, thickly overgrown with heather, and stands on average 0.8m high. The two enclosure walls are stonier and eroded with no covering of vegetation and stand on average only 0.5m. high. The enclosure is roughly rectangular, with no obvious entranceway. The burn passes through the enclosure and passes under the dykes with no apparent construction of culverts. The enclosure walls rise at an angle of 30 degrees to terminate at the rockface which forms the NE edge of the valley.

Site no. 8



SITE NO. 8 Photograph No. 1

View of dyke and enclosure from South East



SITE NO. 8 Photograph No. 2

View of dyke to North West from within enclosure. Trees mark North West edge of ground plan



SITE NO. 8 Photograph No. 3

View of South East wall of enclosure, from North West.



SITE NO. 8 Photograph No. 4

View of North West wall of enclosure, from South East.



SITE NO. 8 Photograph No. 5

View from the North of dyke running South East to abut onto rockface to the East of
the valley at the shore

