

1993 LOCH SURVEY LOCHABER

NM 889800
NM66

Code NM 8837 Name LOCH SHIEL WEST OF EILEAN PHIANAIN (NM 753683) Grid Ref. NM76

Date 15/7/93 Surveyors JH/OLL/JT/JS Estate FORESTRY COMMISSION

Area 1260 ha Altitude 10 m Catchment 2426.8 ha Geology A

Water colour / Clarity / Boat used / Secchi disc depth / m

Loch type 3 Edge type(s) S10/2, S4/3, S19/2

Status SSSI Access FORESTRY TRACK 2a Road/houses present (underline)

Land use % Open water 8.5 Semi-natural 8.5 Forestry 3.8 Agriculture 92

Substrate types (underline main type, tick others present)

- Bedrock
- Boulders (>30cm max. diam.)
- Stones (5-30cm diam.)
- Gravel (4-50mm diam.)
- Sand (0.1-4mm diam.)
- Silt (<0.1mm diam.)
- Organic mud
- Peat
- Artificial embankment

Use	USES AND DAMAGE Area affected	Damage
Water abstraction	.....	.....
Sewage inflow	.....	.....
Agricultural pollution	..... <u>FISH CAGES</u> .....	.....
Edge trampling	.....	.....
Adjacent forestry	..... <u>CONIFEROUS PLANTATIONS IN CATCHMENT</u> .....	.....
Fishing (Edge/boat)	..... <u>BOAT</u> .....	..... <u>NONE OBSERVED</u>
Shooting	.....	.....

FAUNA				
Birds	Mammals	Reptiles Amphibians	Dragonflies & other inverts	Fish
<u>RED BREASTED Merganser</u>				

Species diversity	Water Chemistry
Edge..... <u>11</u>	Alkalinity..... <u>/</u>
Open water..... <u>10</u>	Conductivity..... <u>/</u>
Total..... <u>21</u>	p.H..... <u>/</u>

RARE SPECIES
Rare in RPB area Phragmites australis

National

OLL 6/93

5 large kebs boat:
29 µS cm⁻¹
2.10 mg l⁻¹ = 0.44
56

1993 LOCHABER LOCH SURVEY: AQUATIC PLANT SPECIES LIST

EMERGENT & EDGE SPECIES Site name LOCH SHIEL - WESTERN Grid ref. NN 66, 76 Code NA 887
 END

MC	S	Species	DAFOR	DOMIN	MC	S	Species	DAFOR	DOMIN
Ags		<u>Agrostis stolonifera</u>	.R.	.....	Oc		Oenanthe crocata	.....	.....
Apn	#	Apium nodiflorum	.....	.....	Of	@	Oenanthe fistulosa	.....	.....
Ber	#@	Berula erecta	.....	.....	Ol		Oenanthe lachenalii	.....	.....
Bm		Bolboschoenus maritimus	.....	.....	Pan		Persicaria amphibia	.....	.....
Cap		<u>Caltha palustris</u>	.R.	.....	Pha		<u>Phalaris arundinacea</u>	.R.	.....
Cxat	#@	Carex acuta	.....	.....	Phr	#@	<u>Phragmites australis</u>	.A.	.....
Cxaf	#@	Carex acutiformis	.....	.....	Pop		Potentilla palustris	.....	.....
Cxa	++	Carex aquatilis	.....	.....	Rfl		<u>Ranunculus flammula</u>	.F.	.....
Cxl		Carex lasiocarpa	.....	.....			ssp. flammula		
Cxli		Carex limosa	.....	.....			ssp. minimus		
Cxn		<u>Carex nigra</u>	.A.	.....			ssp. scoticus		
Cxpc	#	Carex pseudocyperus	.....	.....	Rh		Ranunculus hederaceus	.....	.....
Cxri	#@	Carex riparia	.....	.....	Rs	#	Ranunculus sceleratus	.....	.....
Cxro		<u>Carex rostrata</u>	.F.	.....	Rl	#@	Ranunculus lingua	.....	.....
Cxv		Carex vesicaria	.....	.....	Rna		Rorippa nasturtium-aquaticum	.....	.....
Ca	#	Catabrosa aquatica	.....	.....	Rxaq	#+	Rumex aquaticus	.....	.....
Cd	#@	Ceratophyllum demersum	.....	.....	Rxb	#@	Rumex hydrolapathum	.....	.....
Civ	+	Cicuta virosa	.....	.....	Sv	#	Samolus valerandi	.....	.....
Clm	#@	Cladium mariscus	.....	.....	Sp	++	Scheuchzeria palustris	.....	.....
Des		Deschampsia setacea	.....	.....	Sl		Schoenoplectus lacustris	.....	.....
Ela	++	Eleocharis acicularis	.....	.....	St	#@	Schoenoplectus tabernaemontani	.....	.....
Elm		Eleocharis multicaulis	.....	.....	Sd	@	Solanum dulcamara	.....	.....
Elp		<u>Eleocharis palustris</u>	.A.	.....	Sper		Sparganium erectum(4ssp)	.....	.....
Elq		Eleocharis quinqueflora	.....	.....	Spem		Sparganium emersum	.....	.....
Elu		Eleocharis uniglumis	.....	.....	Stp	@	Stellaria palustris	.....	.....
Euf		<u>Equisetum fluviatile</u>	.A.	.....	Ta	@	Typha angustifolia	.....	.....
Evp		Equisetum palustre	.....	.....	Tl	#	Typha latifolia	.....	.....
Era		Eriophorum angustifolium	.....	.....	Vaa	#	Veronica anagallis-aquatica	.....	.....
Gld		Glyceria declinata	.....	.....	Va		Veronica beccabunga	.....	.....
Glf		<u>Glyceria fluitans</u>	.R.	.....	Vc	@	Veronica catenata	.....	.....
Glp	#@	Glyceria notata	.....	.....	Vs		Veronica scutellata	.....	.....
Hlp		Hippuris vulgaris	.....	.....			
Hyd		<u>Hydrocotyle vulgaris</u>	.R.	.....				
He	#	Hypericum elodes	.....	.....			
Ip		Iris pseudacorus	.....	.....			
Jac		Juncus acutiflorus	.....	.....			
Jaa	++	Juncus alpinoarticulatus	.....	.....			
Ja		Juncus articulatus	.....	.....			
Jb		Juncus bulbosus	.....	.....			
Jc		Juncus conglomeratus	.....	.....			
Je		Juncus effusus	.....	.....			
Lit		Littorella uniflora	.....	.....			
Lyc		Lycopodiella inundata	.....	.....			
Lyt	+	Lysimachia thyrsoiflora	.....	.....			
Lyp	#	Lythrum portula	.....	.....			
Lys		Lythrum salicaria	.....	.....			
Ma		Mentha aquatica	.....	.....			
Nt		Nemophanes trifoliata	.....	.....			
Nm		Nimulus moschatus	.....	.....			
Ng		Nimulus guttatus	.....	.....			
Nl		Nimulus luteus	.....	.....			
Ni		Nimulus sp.	.....	.....			
Non		Montia fontana (4ssp)	.....	.....			
Nyl		Nyosotis laxa	.....	.....			
Nsec		Nyosotis secunda	.....	.....			
Nsc		Nyosotis scorpioides	.....	.....			
Nst	+	<u>Nyosotis stolonifera</u>	.....	.....			

Other edge species

Cxd		<u>Carex viridula ssp oedocarpa (C.demissa)</u>	○
Cxe		Carex echinata	
Cxp		Carex panicea	
Cpa		Carex paniculata	
Gp		<u>Galium palustre</u>	○
Gr		Geum rivale	
Sa		Senecio aquaticus	
Tp		Triglochin palustre (T.palustris)	
Vp		Viola palustris	

1993 LOCHABER LOCH SURVEY: AQUATIC PLANT SPECIES LIST

SUBMERGED & FLOATING SPECIES Site name LOCH SHILLY, WESTERN Grid ref. NA.66.76... Code. NA.837
 END

MC	S	Species	DAFOR	DOMIN	MC	S	Species	DAFOR	DOMIN
All	#	Alisma lanceolatum	.....	.....	Ppra	#+	Potamogeton praelongus	.....	.....
Apa	#	Alisma plantago-aquatica	.....	.....	Ppu	#	Potamogeton pusillus	.....	.....
Api	#	Apium inundatum	.....	.....	Pr	#+	Potamogeton rutilus	.....	.....
Bar	#	Baldellia ranunculoides	.....	.....	Pt	+	Potamogeton trichoides	.....	.....
Cah		Callitriche hamulata <u>sp</u>	<u>R.</u>	.....	Pxz		Potamogeton x zizii	.....	.....
Cher	#+	Callitriche hermaphroditica	.....	.....	Rb	#+	Ranunculus baudotii	.....	.....
Cpla		Callitriche platycarpa	.....	.....	Rc	@	Ranunculus circinatus	.....	.....
Cas		Callitriche stagnalis	.....	.....	Rf	#@	Ranunculus fluitans	.....	.....
Cra	*	Crassula aquatica	.....	.....	Rh		Ranunculus hederaceus	.....	.....
Ela	#+	Elatine hexandra	.....	.....	Ro	#	Ranunculus omiophyllus	.....	.....
Elh	+	Elatine hydropiper	.....	.....	Rp	#	Ranunculus peltatus	.....	.....
Ec		Elodea canadensis	.....	.....	Rpp	?	R. penicillatus	.....	.....
Ef		Eleogiton fluitans	.....	.....			ssp. penicillatus		
Ese	#+	Eriocaulon aquaticum	.....	.....			ssp. pseudofluitans		
Fon		Fontinalis antipyretica	<u>R.</u>	.....	Rtr	#@	Ranunculus trichophyllus	.....	.....
Gd	#@	Groenlandia densa	.....	.....	Rma	#@	Ruppia maritima	.....	.....
Hip		Hippuris vulgaris	.....	.....	Rsp	#+	Ruppia cirrhosa	.....	.....
Hp	#	Hottonia palustris	.....	.....	Spa	@	Sparganium angustifolium	.....	.....
Hyd		Hydrocotyle vulgaris	.....	.....	Spem		Sparganium emersum	.....	.....
Isb		Isoetes bronchonii	.....	.....	Spn		Sparganium natans <u>sp</u>	<u>R.</u>	.....
Isl		Isoetes lacustris	.....	.....	Sp	@	Spirodela polyrhiza	.....	.....
Iss	#+	Isoetes setacea (echinospora)	.....	.....	Sub	#+	Subularia aquatica	.....	.....
Jb		Juncus bulbosus (var fluitans)	<u>R.</u>	.....	Uti	@	Utricularia intermedia	.....	.....
Lm	#	Lemna minor	.....	.....	Utm		Utricularia minor	.....	.....
Lt	@	Lemna trisulca	.....	.....	Ua		Utricularia australis	.....	.....
Lit		Littorella uniflora	<u>A.</u>	.....	Uo		Utricularia ochroleuca	.....	.....
Lob		Lobelia dortmanna	<u>A.</u>	.....	Us		Utricularia stygia	.....	.....
Mal		Myriophyllum alterniflorum	<u>R.</u>	.....	Uva	@	Utricularia vulgaris/australis	<u>R.</u>	.....
Msp		Myriophyllum spicatum	.....	.....	Uts		Utricularia spp.	.....	.....
Nf	#+	Najas flexilis	.....	.....	Zan	#@	Zannichellia palustris	.....	.....
Nul	#	Nuphar lutea	.....	.....	Zoa	#+	Zostera angustifolia	.....	.....
Nup	#+	Nuphar pumila	.....	.....	Zom	#+	Zostera marina	.....	.....
Na		Nymphaea alba	.....	.....	Zon	#+	Zostera noltii	.....	.....
		ssp. alba			Cha		Chara sp.	.....	.....
		ssp. occidentalis			Nit		Nitella sp.	.....	.....
Pil	#+	Pilularia globulifera	.....	.....			<u>Sparganium sp</u>	<u>R.</u>	.....
Pam		Persicaria amphibia	.....	.....			.....	.....	.....
Ph		Persicaria hydropiper	.....	.....			.....	.....	.....
Pal		Potamogeton alpinus	.....	.....			.....	.....	.....
Pbe		Potamogeton bertholdii	.....	.....			.....	.....	.....
Pcr	#	Potamogeton crispus	.....	.....			.....	.....	.....
Pcol	#+	Potamogeton coloratus	.....	.....			.....	.....	.....
Pfil	#+	Potamogeton filiformis	.....	.....			.....	.....	.....
Pfr	#+	Potamogeton friesii	.....	.....			.....	.....	.....
Pgr		Potamogeton gramineus	.....	.....			.....	.....	.....
Plu	#@	Potamogeton lucens	.....	.....			.....	.....	.....
Pn		Potamogeton natans	<u>R.</u>	.....			.....	.....	.....
Pxn		Potamogeton x nitens	.....	.....			.....	.....	.....
Pob	#	Potamogeton obtusifolius	.....	.....			.....	.....	.....
Ppec	#	Potamogeton pectinatus	.....	.....			.....	.....	.....
Pper		Potamogeton perfoliatus	.....	.....			.....	.....	.....
Ppol		Potamogeton polygonifolius	<u>R.</u>	.....			.....	.....	.....

Key:
 * = plants in HRPB area occurring in 100 or fewer 10x10km squares in Great Britain requiring special protection (List A, Palmer & Newbold 1983)
 + = plants in CRPB area occurring in 100 or fewer 10x10km squares in Great Britain requiring special protection (List A, Palmer & Newbold 1983)
 # = plants in HRPB area occurring in >100 10x10km squares in Great Britain but which still need special protection (List B, Palmer & Newbold 1983)
 @ = plants in CRPB area occurring in >100 10x10km squares in Great Britain but which still need special protection (List B, Palmer & Newbold 1983)

1993 LOCH SURVEY LOCHABER

Code..... Name. LOCH SHIKEL ^{EAST OF EILEAN FHIAMHAIN (NM 753683)} Grid Ref. NM 77 NM 88
 Date 21, 22, 23.9.93 Surveyors. TH/JJ/OLL Estate. FORESTRY COMMISSION

Area 1960.ha Altitude 10.m Catchment 23000.ha Geology... A.....

Water colour CONTOURLESS. Clarity CLEAR. Boat used... ✓.... Secchi disc depth. /.m

Loch type... S.... Edge type(s)... SLO, SA.....

Status... SSSI..... Access... 2a..... Road/houses present (underline)

Land use % Open water. 0.5. Semi-natural. 7.5. Forestry. 20. Agriculture. 4.5

Substrate types (underline main type, tick others present)

- Bedrock ✓
- Boulders (>30cm max. diam.) ✓
- Stones (5-30cm diam.) ✓
- Gravel (4-50mm diam.) ✓
- Sand (0.1-4mm diam.) ✓
- Silt (<0.1mm diam.) ✓
- Organic mud
- Peat
- Artificial embankment

Use	USES AND DAMAGE	
	Area affected	Damage
Water abstraction
Sewage inflow
Agricultural pollution
Edge trampling
Adjacent forestry
Fishing (Edge/boat)	<u>2 FISHERMAN IN BOAT + FISH FARMS</u>
Shooting
<u>LITTER</u>	<u>DRINKS BOTTLE CIGARETTE PACKET</u>

FAUNA				
Birds	Mammals	Reptiles Amphibians	Dragonflies & other inverts	Fish
				<u>3-SPINED STICKLEBACK</u>

Species diversity	Water Chemistry
Edge..... <u>10</u>	Alkalinity... <u>0.038</u>
Open water... <u>8.9</u>	Conductivity... <u>79.0</u>
Total... <u>16.17</u>	p.H..... <u>5.33</u>

RARE SPECIES
Rare in RPB area

National Phragmites australis

OLL 6/93

1993 LOCHABER LOCH SURVEY: AQUATIC PLANT SPECIES LIST

SUBMERGED & FLOATING SPECIES Site name Loch Shiel - Eastern Grid ref. NM 76, 77, 78 Code NM 8837
 END 88, 97, 98

NC	S	Species	DAFOR	DOMIN	NC	S	Species	DAFOR	DOMIN
All	/	Alisma lanceolatum	.....	.....	Ppra	++	Potamogeton praelongus	.....	.....
Apa	/	Alisma plantago-aquatica	.....	.....	Ppu	/	Potamogeton pusillus	.....	.....
Api	/	Apium inundatum	.....	.....	Pr	++	Potamogeton rutilus	.....	.....
Bar	/	Baldellia ranunculoides	.....	.....	Pt	+	Potamogeton trichoides	.....	.....
Cah		Callitriche hamulata	.....	.....	Pxz		Potamogeton x zizii	.....	.....
Cher	++	Callitriche hermaphroditica	.....	.....	Rb	++	Ranunculus baudotii	.....	.....
Cpla		Callitriche platycarpa	.....	.....	Rc	@	Ranunculus circinatus	.....	.....
Cas		Callitriche stagnalis	.....	.....	Rf	/@	Ranunculus fluitans	.....	.....
Cra	*	Crassula aquatica	.....	.....	Rh		Ranunculus hederaceus	.....	.....
Ela	++	Elatine hexandra	.....	.....	Ro	/	Ranunculus omiophyllus	.....	.....
Elh	+	Elatine hydropiper	.....	.....	Rp	/	Ranunculus peltatus	.....	.....
Ec		Elodea canadensis	.....	.....	Rpp	?	R. penicillatus	.....	.....
Rf		Eleogiton fluitans	.....	.....			ssp. penicillatus	.....	.....
Ese	++	Eriocaulon aquaticum	.....	.....			ssp. pseudofluitans	.....	.....
Fon		Fontinalis antipyretica	.f..	.....	Rtr	/@	Ranunculus trichophyllus	.....	.....
Gd	/@	Groenlandia densa	.....	.....	Rma	/@	Ruppia maritima	.....	.....
Hip		Hippuris vulgaris	.....	.....	Rsp	++	Ruppia cirrhosa	.....	.....
Hp	/	Hottonia palustris	.....	.....	Spa	@	Sparganium angustifolium	.....	.....
Hyd		Hydrocotyle vulgaris	.....	.....	Spem		Sparganium emersum	.....	.....
Isb		Isoetes brochonii	.....	.....	Spn		Sparganium natans sp.	.h.f.	.....
Isl		Isoetes lacustris	.A..	.....	Sp	@	Spirodela polyrhiza	.....	.....
Iss	++	Isoetes setacea(echinospora)	.....	.....	Sub	++	Subularia aquatica	.....	.....
Jb		Juncus bulbosus(var fluitans)	.LA	.....	Uti	@	Utricularia intermedia	.....	.....
Ln	/	Lemna minor	.....	.....	Utm		Utricularia minor	.....	.....
It	@	Lemna trisulca	.....	.....	Ua		Utricularia australis	.....	.....
Lit		Littorella uniflora	.A..	.....	Uo		Utricularia ochroleuca	.....	.....
Lob		Lobelia dortmanna	.A..	.....	Us		Utricularia stygia	.....	.....
Mal		Myriophyllum alterniflorum	.A..	.....	Uva	@	Utricularia vulgaris/australis	.....	.....
Msp		Myriophyllum spicatum	.....	.....	Uts		Utricularia spp.	.....	.....
Nf	++	Najas flexilis	.....	.....	Zan	/@	Zannichellia palustris	.....	.....
Nul	/	Nuphar lutea	.....	.....	Zoa	++	Zostera angustifolia	.....	.....
Nup	++	Nuphar pumila	.....	.....	Zom	++	Zostera marina	.....	.....
Na		Nymphaea alba	.....	.....	Zon	++	Zostera noltii	.....	.....
		ssp. alba	.....	.....	Cha		Chara sp.	.....	.....
		ssp. occidentalis	.....	.....	Nit		Nitella sp. flexilis	.L.F.	..... spec. No. 1/93
Pil	++	Pilularia globulifera	.....	.....			
Pam		Persicaria amphibia	.....	.....			
Ph		Persicaria hydropiper	.....	.....			
Pal		Potamogeton alpinus	.....	.....			
Pbe		Potamogeton berchtoldii	.....	.....			
Pcr	/	Potamogeton crispus	.....	.....			
Pcol	++	Potamogeton coloratus	.....	.....			
Pfil	++	Potamogeton filiformis	.....	.....			
Pfr	++	Potamogeton friesii	.....	.....			
Pgr		Potamogeton gramineus	.....	.....			
Plu	#@	Potamogeton lucens	.....	.....			
Pn		Potamogeton natans	.L.F.	.....				
Pxn		Potamogeton x nitens	.....	.....			
Pob	/	Potamogeton obtusifolius	.....	.....			
Ppec	/	Potamogeton pectinatus	.....	.....			
Pper		Potamogeton perfoliatus	.....	.....			
Ppol		Potamogeton polygonifolius	.....	.....			

1993 LOCHABER LOCH SURVEY: AQUATIC PLANT SPECIES LIST

EMERGENT & EDGE SPECIES Site name LOCH SMEL - EASTERN Grid ref. NA 76, 77, 78 Code NA 8837
END 88, 97, 98

MC	S	Species	DAFOR	DOMIN
Ags		Agrostis stolonifera	.....	.....
Apn	#	Apium nodiflorum	.....	.....
Ber	#	Berula erecta	.....	.....
Bm		Bolboschoenus maritimus	.....	.....
Cap		<u>Caltha palustris</u>	<u>.R.</u>	.....
Cxat	#	Carex acuta	.....	.....
Cxaf	#	Carex acutiformis	.....	.....
Cxa	++	Carex aquatilis	.....	.....
Cxl		Carex lasiocarpa	.....	.....
Cxli		Carex limosa	.....	.....
Cxn		<u>Carex nigra</u>	<u>.LA</u>	.....
Cxpc	#	Carex pseudocyperus	.....	.....
Cxri	#	Carex riparia	.....	.....
Cxro		Carex rostrata	.....	.....
Cxv		Carex vesicaria	.....	.....
Ca	#	Catabrosa aquatica	.....	.....
Cd	#	Ceratophyllum demersum	.....	.....
Civ	+	Cicuta virosa	.....	.....
Clm	#	Cladium mariscus	.....	.....
Des		Deschampsia setacea	.....	.....
Ela	++	Eleocharis acicularis	.....	.....
Elm		Eleocharis multicaulis	.....	.....
Elp		Eleocharis palustris	.....	.....
Elq		Eleocharis quinqueflora	.....	.....
Elu		Eleocharis uniglumis	.....	.....
Eaf		<u>Equisetum fluviatile</u>	<u>.D.</u>	.....
Eap		<u>Equisetum palustre</u>	.....	.....
Era		Eriophorum angustifolium	.....	.....
Gld		Glyceria declinata	.....	.....
Glf		<u>Glyceria fluitans</u>	<u>.R.</u>	.....
Glp	#	Glyceria notata	.....	.....
Hlp		Hippuris vulgaris	.....	.....
Hyd		Hydrocotyle vulgaris	.....	.....
He	#	Hypericum elodes	.....	.....
Ip		Iris pseudacorus	.....	.....
Jac		Juncus acutiflorus	.....	.....
Jaa	++	Juncus alpinoarticulatus	.....	.....
Ja		<u>Juncus articulatus</u>	<u>.D.</u>	.....
Jb		<u>Juncus bulbosus</u>	<u>.A.</u>	.....
Jc		Juncus conglomeratus	.....	.....
Je		Juncus effusus	<u>.D.</u>	.....
Lit		<u>Littorella uniflora</u>	<u>.A.</u>	.....
Lyc		Lycopodiella inundata	.....	.....
Lyt	+	Lysimachia thyrsoflora	.....	.....
Lyp	#	Lythrum portula	.....	.....
Lys		Lythrum salicaria	.....	.....
Ma		Mentha aquatica	.....	.....
Nt		Nenyanthes trifoliata	.....	.....
Nm		Nimulus moschatus	.....	.....
Ng		Nimulus guttatus	.....	.....
Nl		Nimulus luteus	.....	.....
Ni		Nimulus sp.	.....	.....
Mon		Montia fontana (4ssp)	.....	.....
Nyl		Nyosotis laxa	.....	.....
Msec		Nyosotis secunda	.....	.....
Msc		Nyosotis scorpioides	.....	.....
Mst	+	Nyosotis stolonifera	.....	.....

MC	S	Species	DAFOR	DOMIN
Oc		Oenanthe crocata	.....	.....
Of	@	Oenanthe fistulosa	.....	.....
Ol		Oenanthe lachenalii	.....	.....
Pan		Persicaria amphibia	.....	.....
Pha		Phalaris arundinacea	.....	.....
Phr	#	<u>Phragmites australis</u>	<u>.R.</u>	.....
Pop		Potentilla palustris	.....	.....
Rfl		<u>Ranunculus flammula</u>	<u>.F.</u>	.....
		ssp. flammula		
		ssp. minimus		
		ssp. scoticus		
Rh		Ranunculus hederaceus	.....	.....
Rs	#	Ranunculus sceleratus	.....	.....
Rl	#	Ranunculus lingua	.....	.....
Rna		Rorippa nasturtium-aquaticum	.....	.....
Rxaq	+	Rumex aquaticus	.....	.....
Rxh	#	Rumex hydrolapathum	.....	.....
Sv	#	Samolus valerandi	.....	.....
Sp	++	Scheuchzeria palustris	.....	.....
Sl		Schoenoplectus lacustris	.....	.....
St	#	Schoenoplectus tabernaemontani	.....	.....
Sd	@	Solanum dulcamara	.....	.....
Sper		Sparganium erectum(4ssp)	.....	.....
Spem		Sparganium emersum	.....	.....
Stp	@	Stellaria palustris	.....	.....
Ta	@	Typha angustifolia	.....	.....
Tl	#	Typha latifolia	.....	.....
Vaa	#	Veronica anagallis-aquatica	.....	.....
Va		Veronica beccabunga	.....	.....
Vc	@	Veronica catenata	.....	.....
Vs		Veronica scutellata	.....	.....

Other edge species

Cxd		Carex viridula ssp oedocarpa (C.denissa)
Cxe		Carex echinata
Cxp		Carex panicea
Cspa		Carex paniculata
Gp		Galium palustre
Gr		Geum rivale
Sa		Senecio aquaticus
Tp		Triglochin palustre (T.palustris)
Vp		Viola palustris

SURROUNDING LANDUSE =

conifer plantation,
 seminatural mixed woodland,
 open moorland, forestry track.

Key:

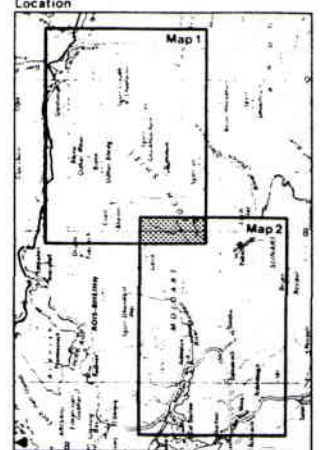
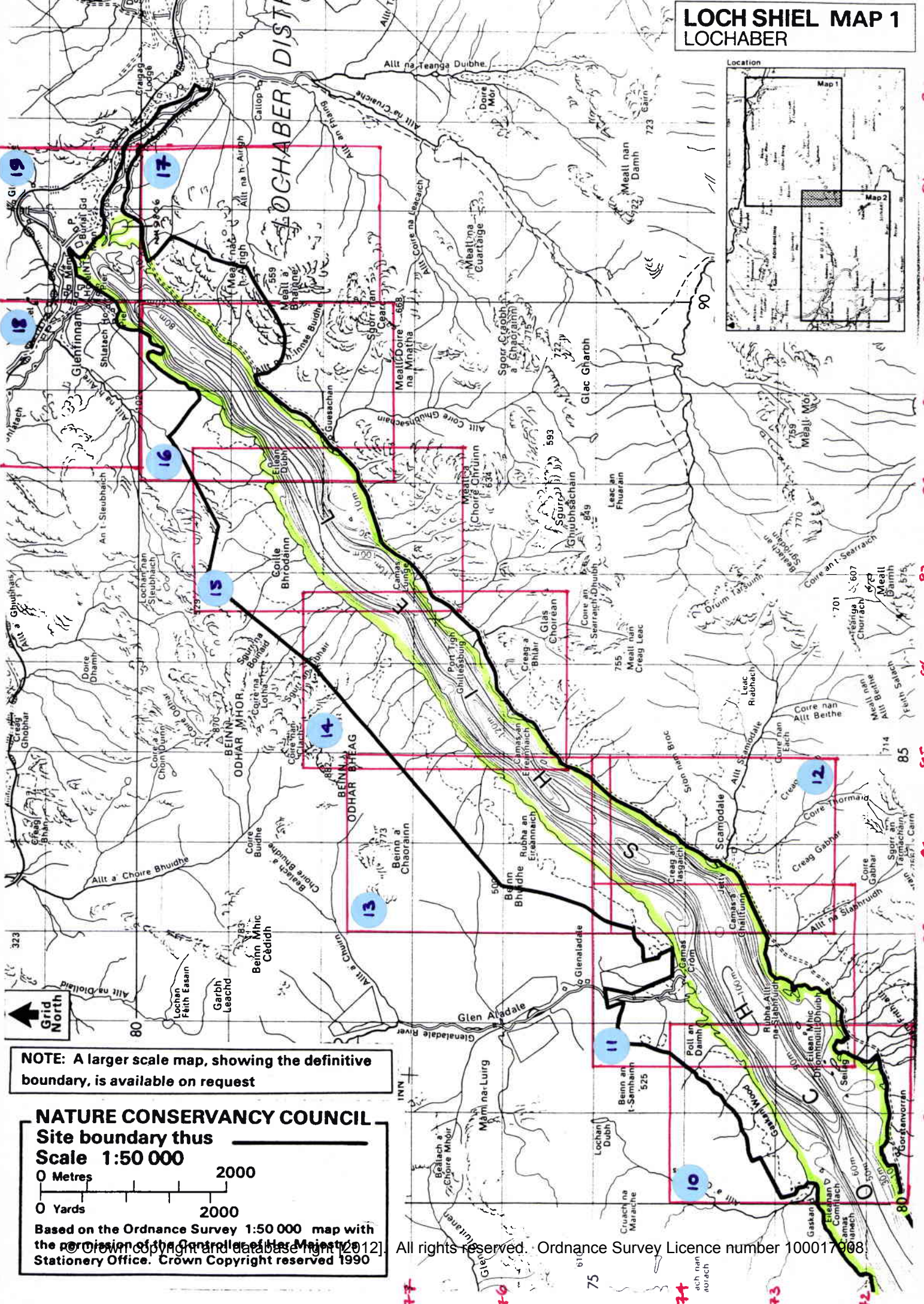
- * = plants in HRPB area occurring in 100 or fewer 10x10km squares in Great Britain requiring special protection (List A, Palmer & Newbold 1983)
- + = plants in CRPB area occurring in 100 or fewer 10x10km squares in Great Britain requiring special protection (List A, Palmer & Newbold 1983)
- # = plants in HRPB area occurring in >100 10x10km squares in Great Britain but which still need special protection (List B, Palmer & Newbold 1983)

The dominant habitat on the east and west shore west of Eilean Fhianain consisting of lit/Lob community. Jb, Mel, Fon. also abundant. 1st more common in deeper water.

Due to a seasonally low water level extensive beds of lit on shore with Rfl, Jb(t), Fon, Jart, Ags, (Cap).

The occasional stands of emergent/floating vegetation are marked on the map - the most common, Pn, found in varying density on both shores. Other emergent stands include Phr + Eqf.

LOCH SHIEL MAP 1 LOCHABER



NOTE: A larger scale map, showing the definitive boundary, is available on request

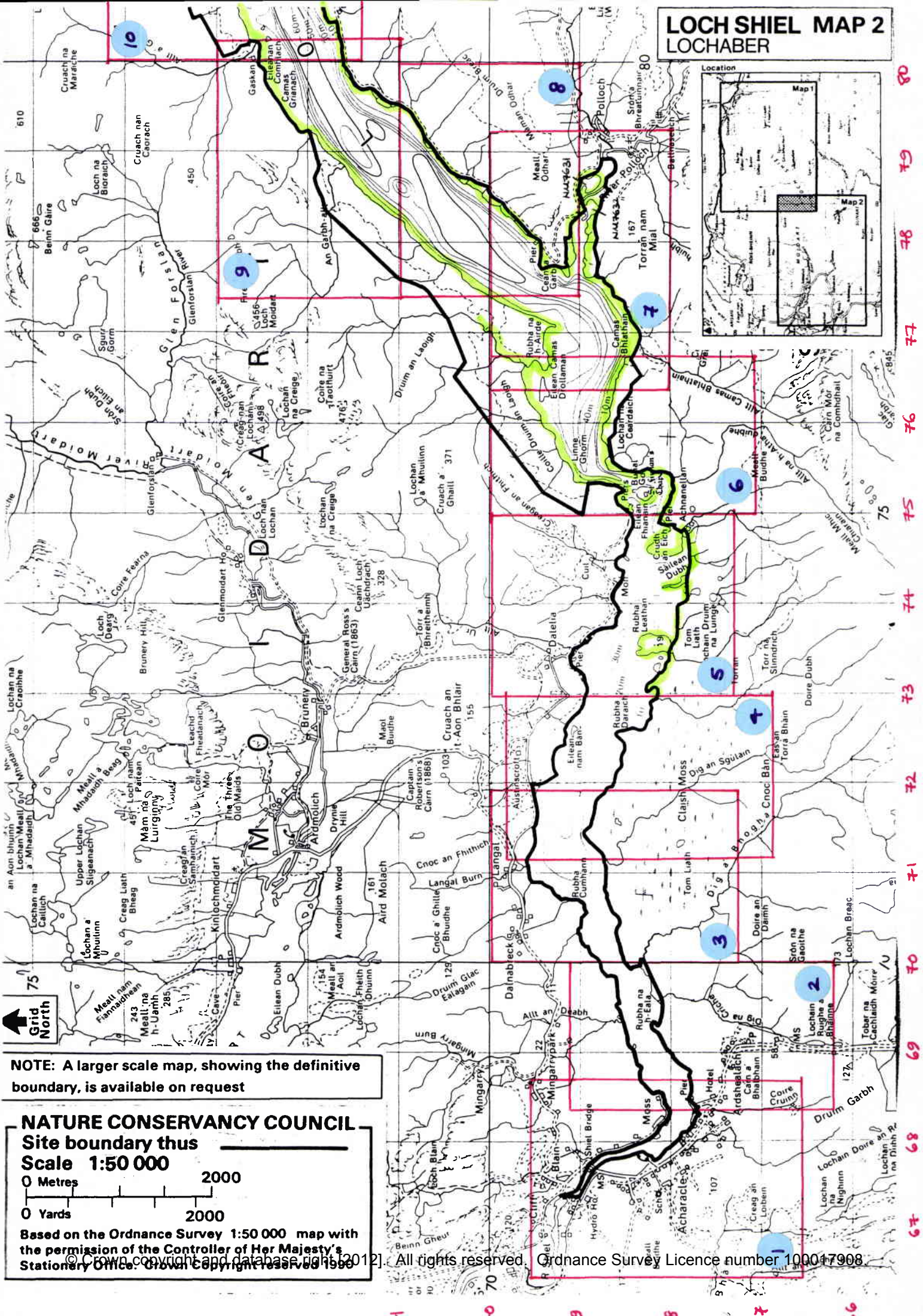
NATURE CONSERVANCY COUNCIL
Site boundary thus

Scale 1:50 000

0 Metres 2000
 0 Yards 2000

Based on the Ordnance Survey 1:50 000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved 1990

LOCH SHIEL MAP 2 LOCHABER

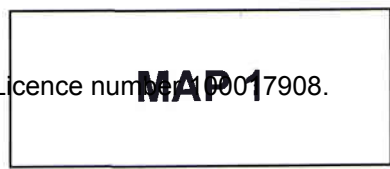


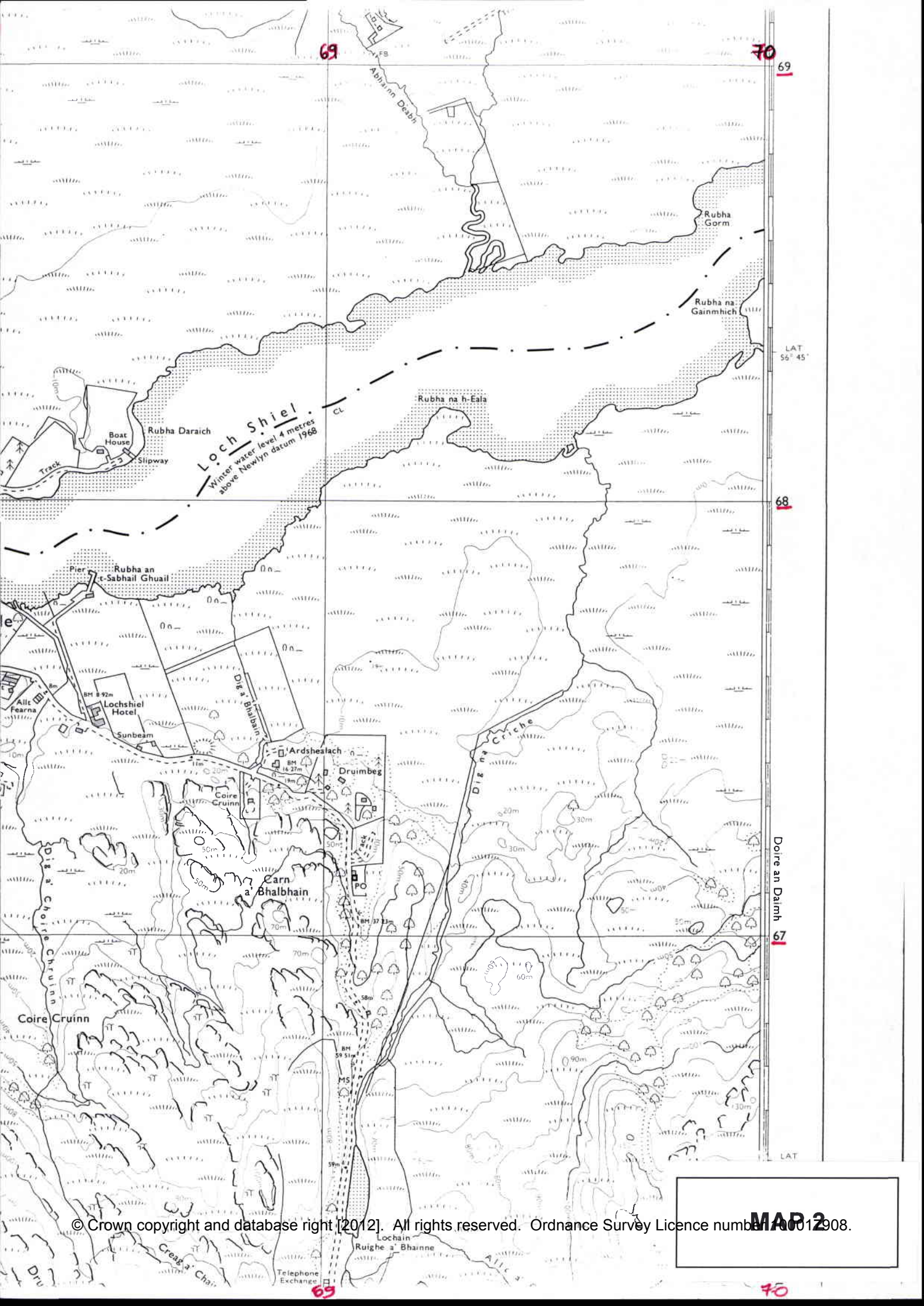
NOTE: A larger scale map, showing the definitive boundary, is available on request

NATURE CONSERVANCY COUNCIL
Site boundary thus
Scale 1:50 000

0 Metres 2000
 0 Yards 2000

Based on the Ordnance Survey 1:50 000 map with the permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved 1956

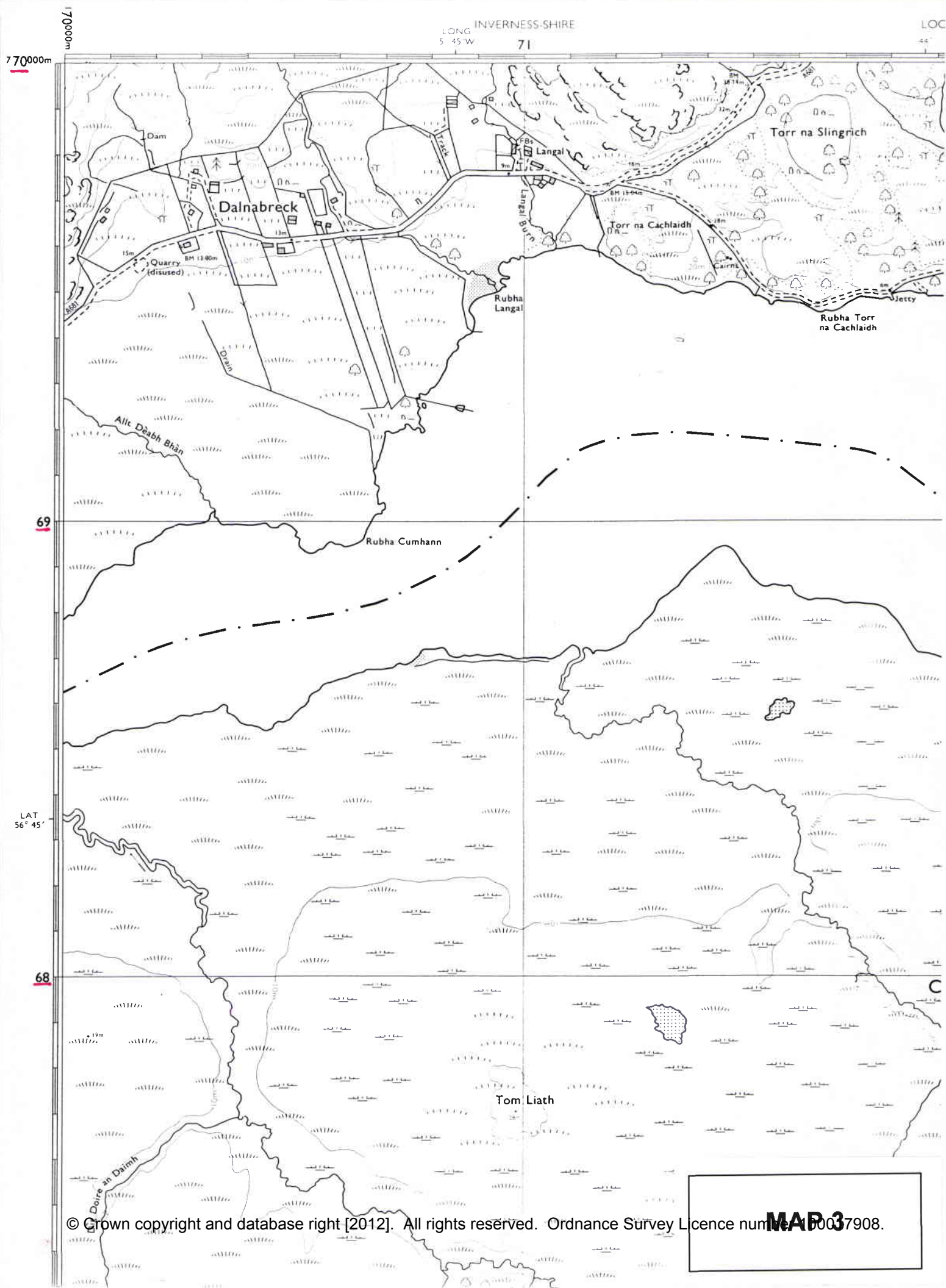




Loch Shiel
Winter water level 4 metres
above Newlyn datum 1968

MAP 2

HEIGHTS IN METRES



INVERNESS-SHIRE
LONG 5 45' W 71

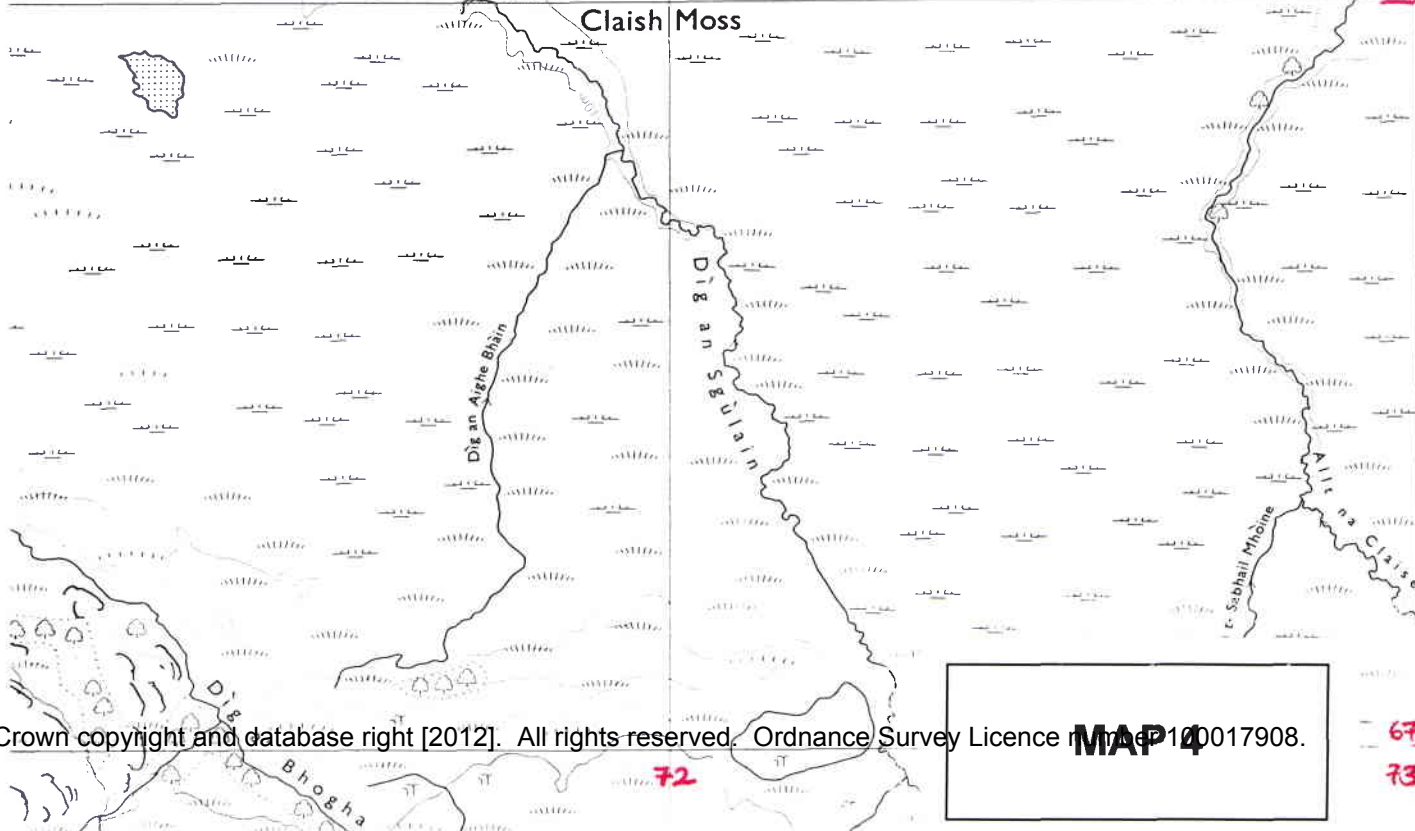
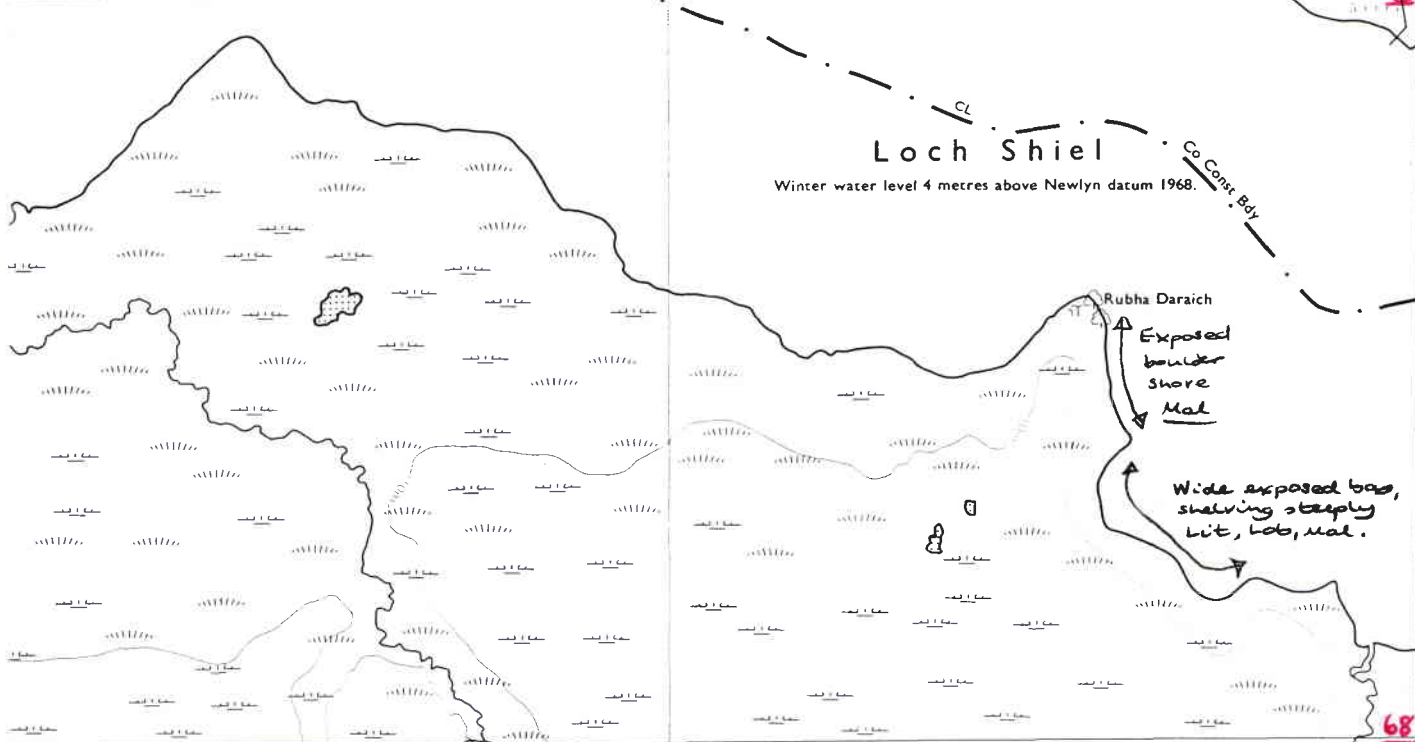
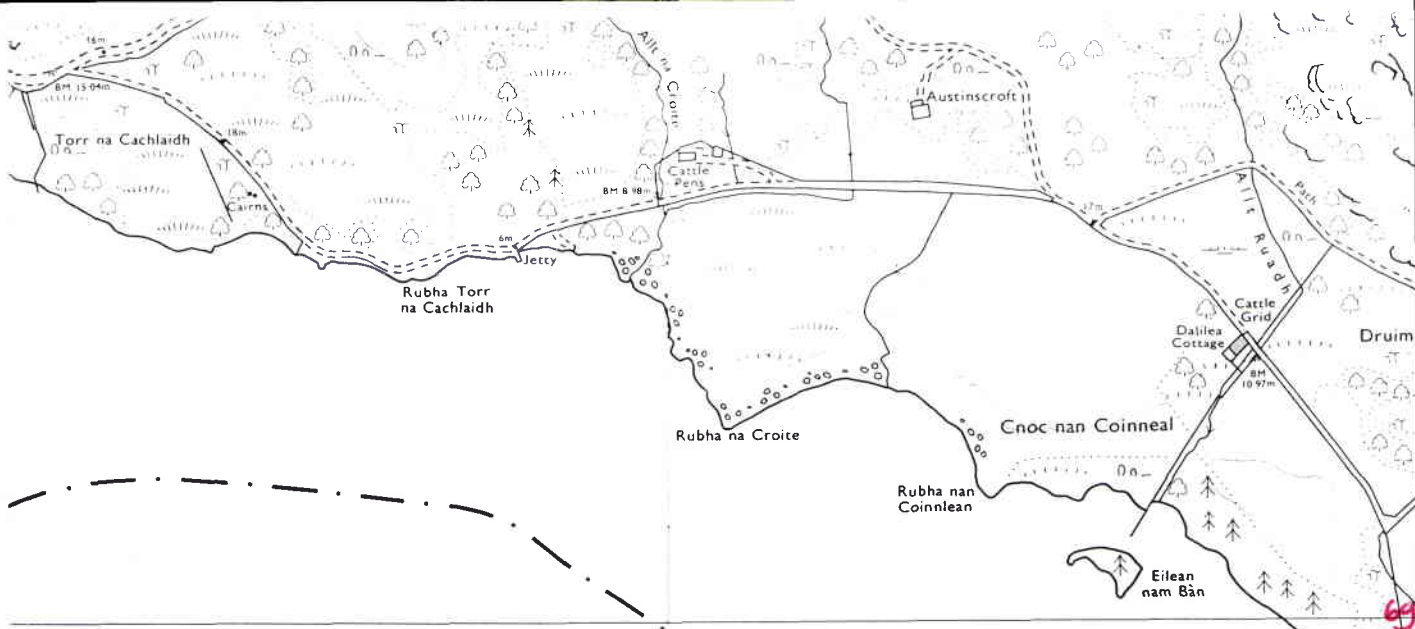
LOC 44

770000m

69

LAT 56° 45'

68



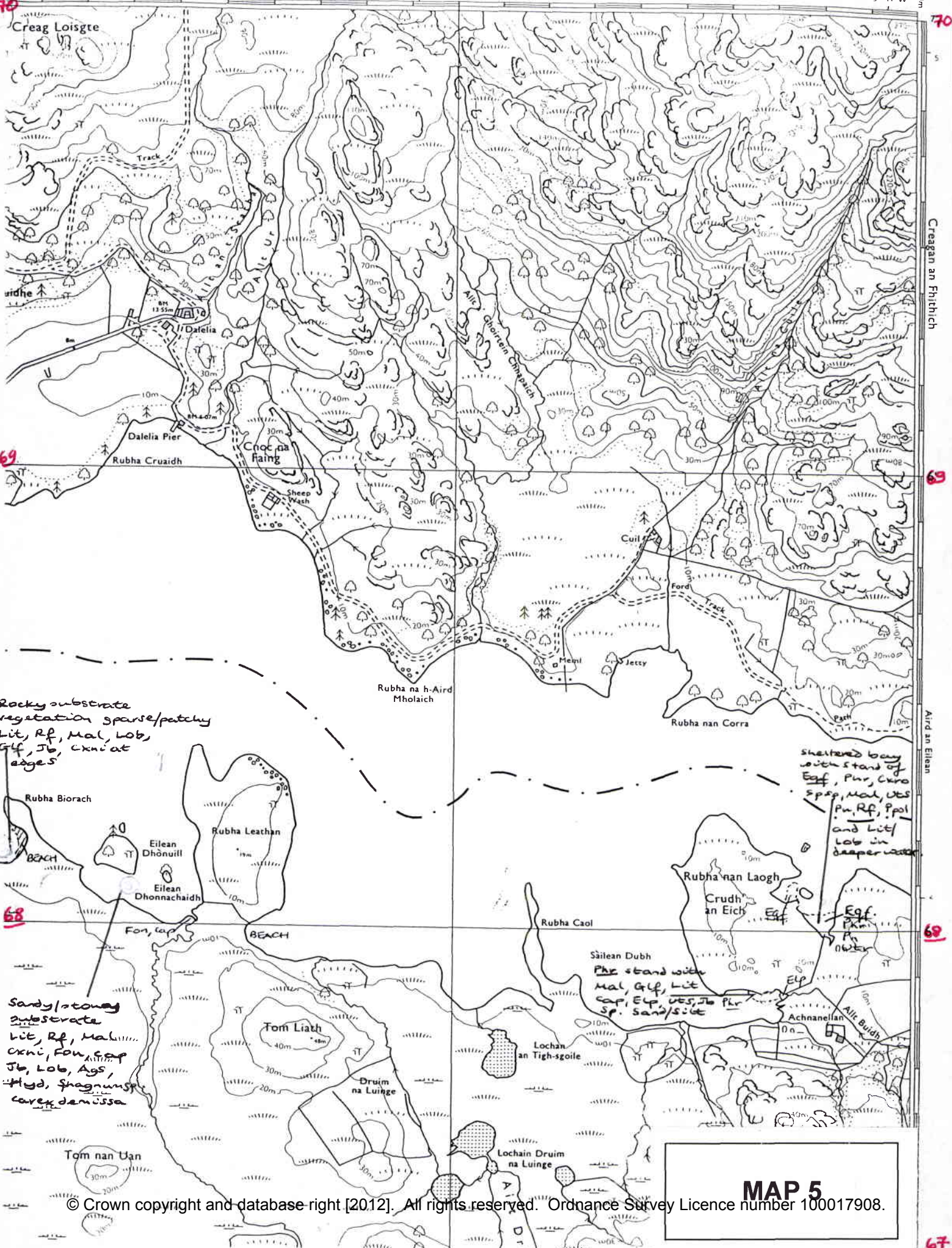
MAP 4

68

67

73

72



Rocky substrate
vegetation sparse/patchy
Lit, Rf, Mal, Lob,
Glf, Jo, Cxni at
edges

Sheltered bay
with stand of
Egf, Plr, Cxro
Sp, Mal, Uts
Pl, Rf, Pool
and Lit/
Lob in
deeper water

Sandy/stony
substrate
Lit, Rf, Mal,
Cxni, Fov, Cap,
Jo, Lob, Ags,
Hgd, Sphagnum sp,
Carex demissa

Sàilean Dubh
Phe stands with
Mal, Glf, Lit
Cap, ELP, Uts, Jo Plr
Sp. Sand/silt

MAP 5

LAT 56° 46'

Pach

standard gauge

deciduous trees

coniferous trees

pond

stonery

clay pit or quarry

quarry

station

appropriate symbol is shown when of boundaries

by with one of the when coincidence sur. in not coincident laries.

CONVERSION SCALE

Metres - Feet

2000 Metres 6500 Feet

6000

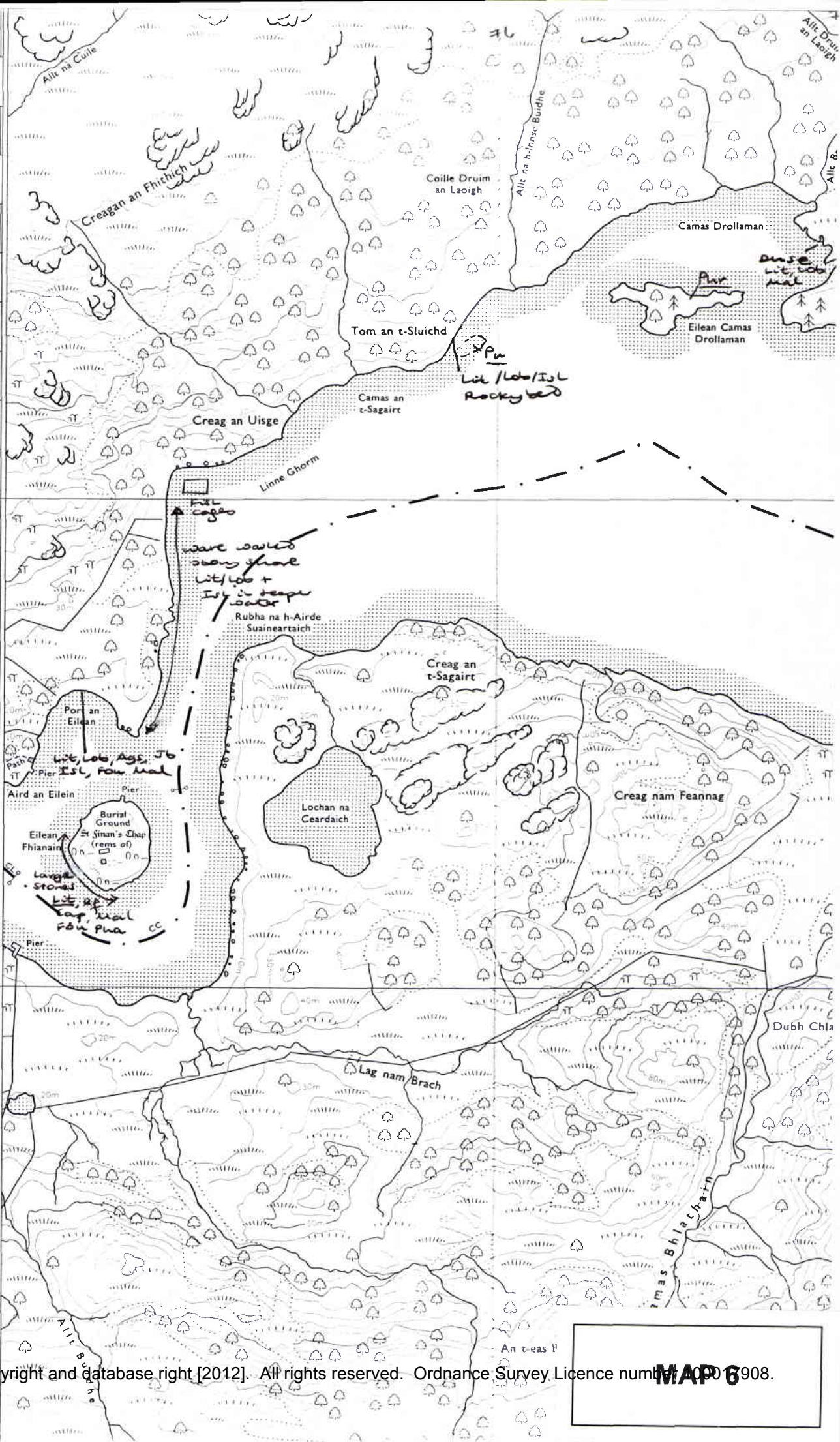
1500 5000

69

45

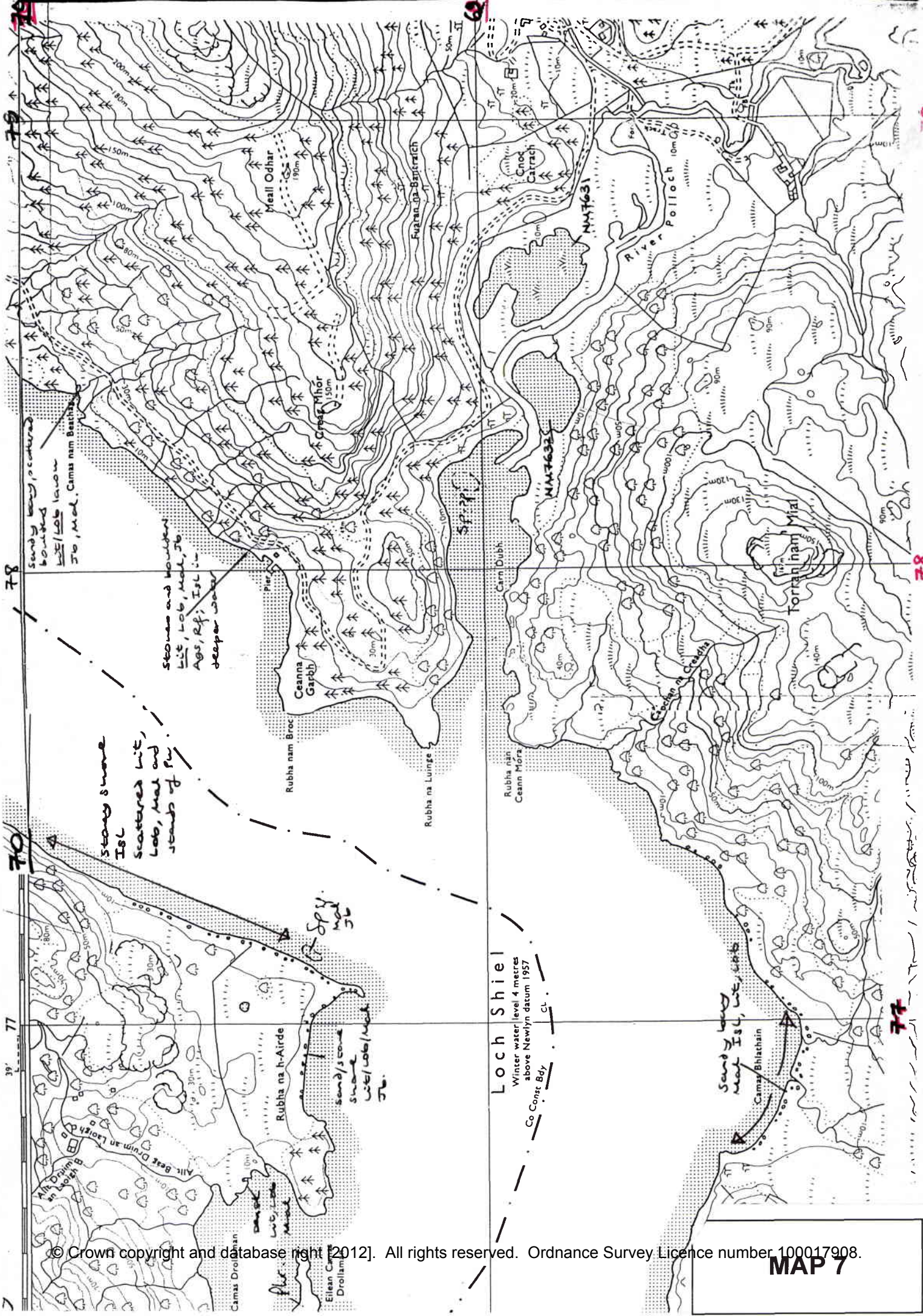
68

Uilleann Tigh Mhoir



9

76



sandy bog, scattered
boulders
W/E/low lawn
50, Mod. Camas nam Beachain

Stony shore
Isl
scattered lit,
lob, Mal and
stands of fir

Stones and boulders
lit, lob, mod, 50
Ags, Rf, Isl
deeper water

Rubha na h-Airde
sandy shore
W/E/lob/Mod
50

Loch Shiel
Winter water level 4 metres
above Newlyn datum 1957
Co Const Bdy

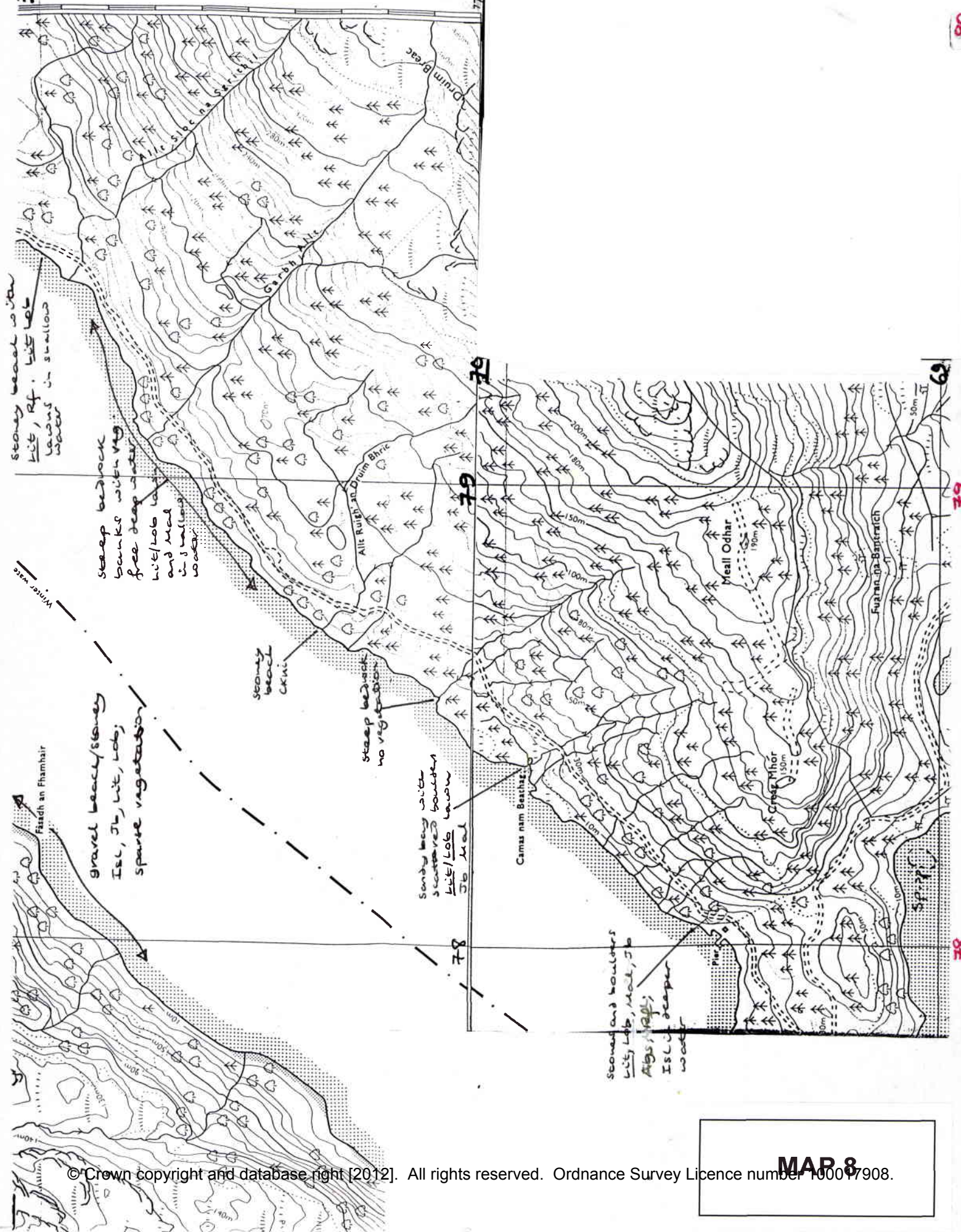
Sandy bog
W/E/lob
Camas Bhiachain

SKILZ 77SE

77 SE

ARDNAMURCHAN CP

770000m



stony beach with
lit, rft, lit, lob
leaves in shallow
water

steep bedrock
banks with veg
free deep water
lit/lob
and mal
in shallow
water

gravel beach/stoney
lit, rft, lit, lob;
sparse vegetation

stony
beach
cwm

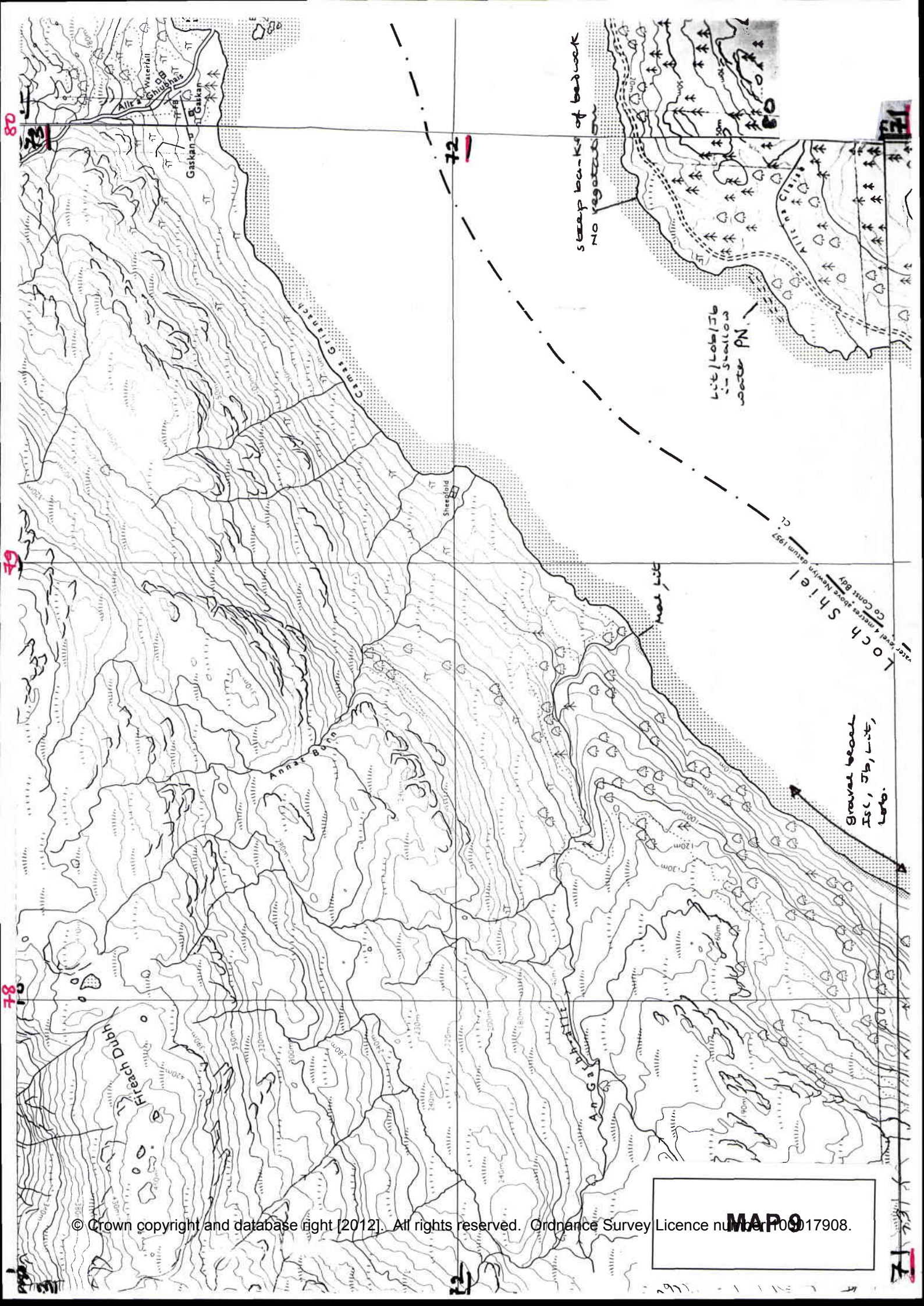
steep bedrock
no vegetation

sandy bay with
scattered boulders
lit/lob
in shallow
water

Camas nam Beathaig

stony and boulders
lit, lob, mal, rft
Aigs, rft;
lit, deeper
water

MAP 8



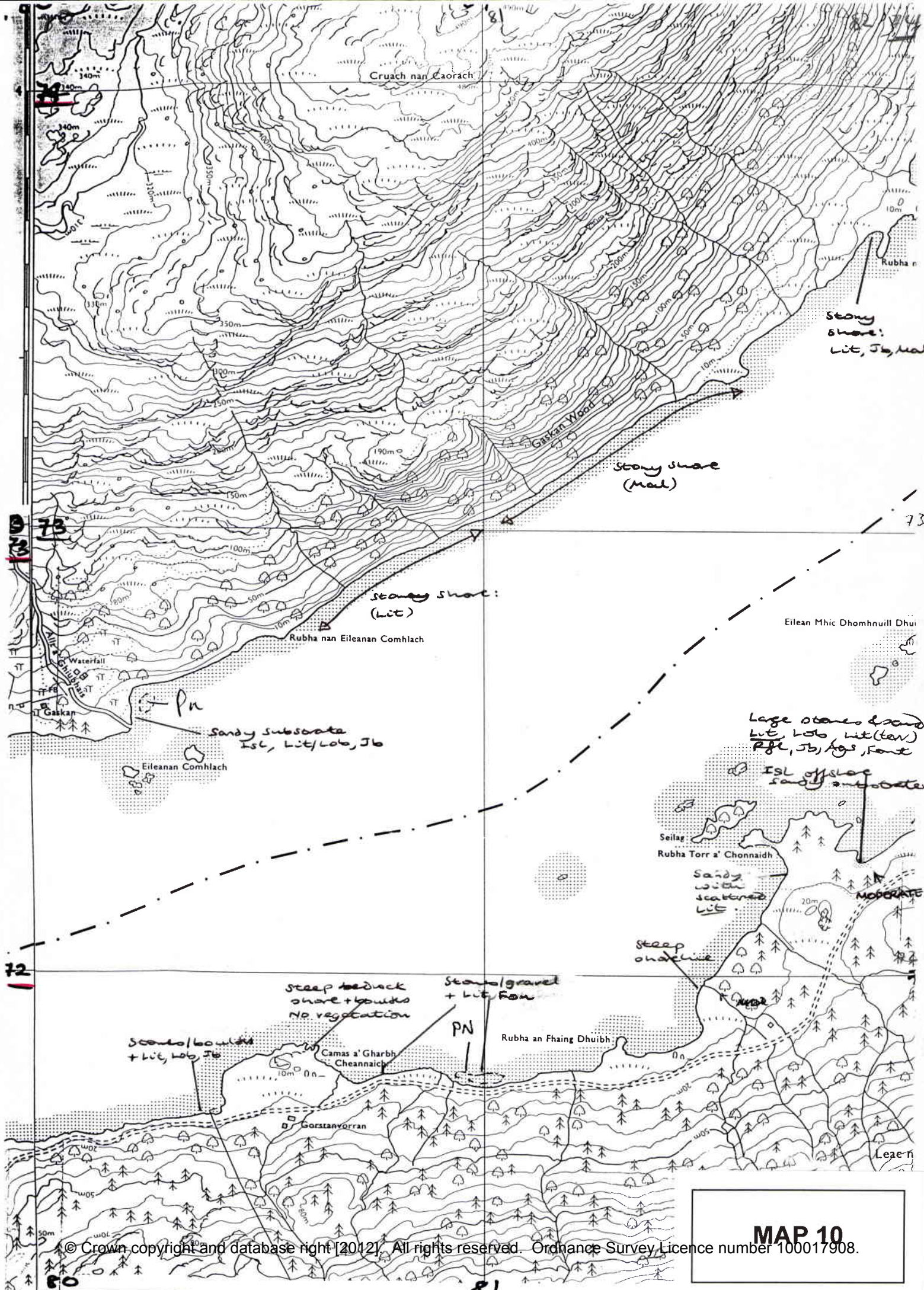
steep banks of bedrock
No vegetation

Lit/Lob/Jb
- shallow
water PN.

Gravel beach
Isc, Jb, Lit,
Lob.

1 inch = 4 miles above Newlyn datum 1957
Co. Const. Bdy
Toch Shiel

MAP 9



Cruach nan Caorach

Rubha n

Stony shore:
Lit, Jb, Mal

Gaskan Wood

Stony shore
(Mal)

Stony shore:
(Lit)

Rubha nan Eileanan Comhlach

Eilean Mhic Dhomhnuill Dhui

Sandy substrate
Isl, Lit/Lob, Jb

Eileanan Comhlach

Large stones & sand
Lit, Lob, Lit (ter)
Pfl, Jb, Ags, Font

Isl off shore
sandy substrate

Seilag
Rubha Torr a' Chonnaidh

Sandy with
scattered
Lit

steep
onachline

steep bedrock
shore + boulders
NO vegetation

Stony/gravel
+ Lit, Font

PN

Rubha an Fhaing Dhuibh

Stony/boulders
+ Lit, Lob, Jb

Camas a' Gharbh
Cheannaich

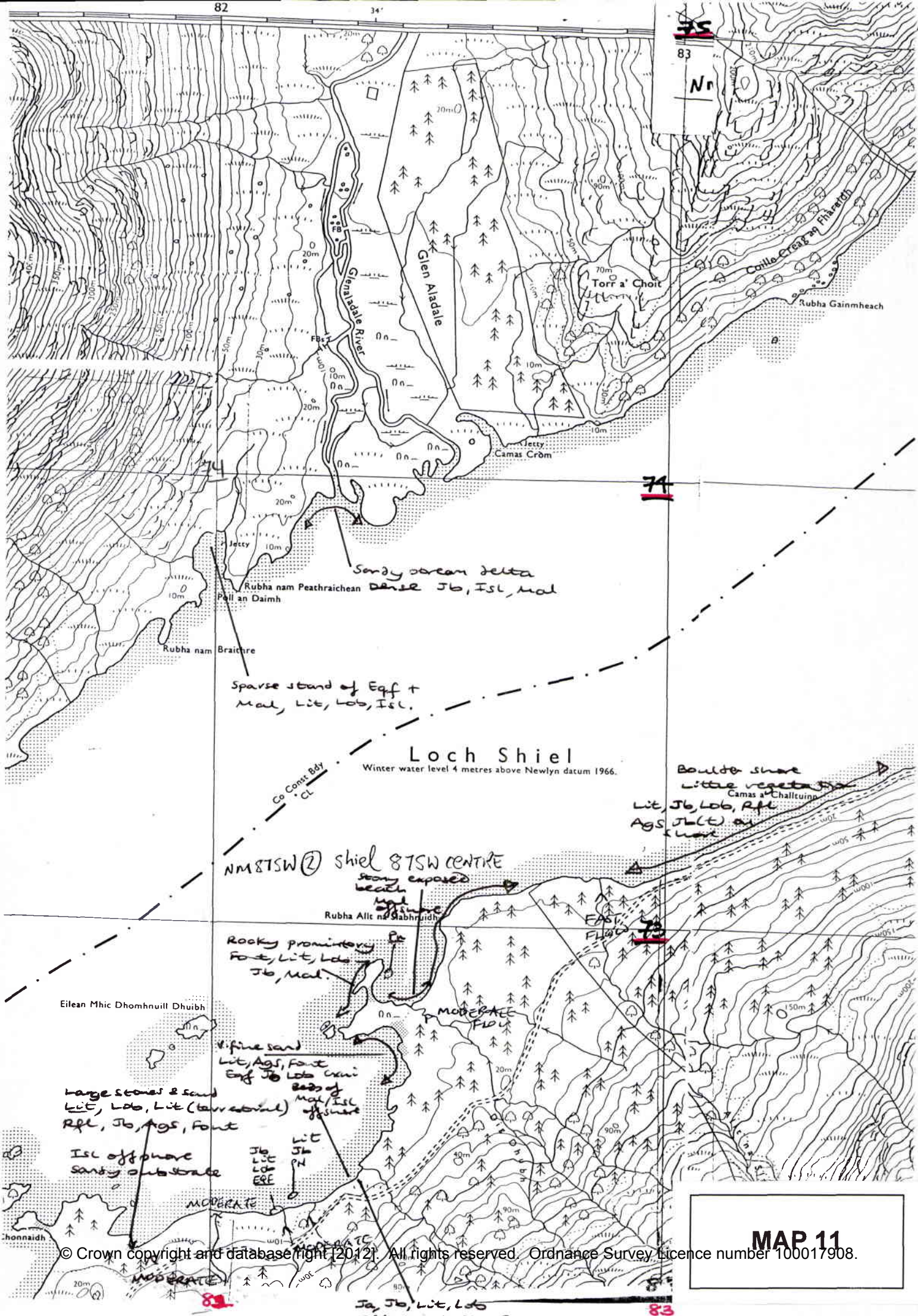
Gorstanayorran

Lea-n

MAP 10
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81

82



Sandy ocean delta
 Rubha nam Peathraichean Dense Jb, Isl, Mal
 Pail an Daimh
 Rubha nam Braithre
 Sparse stand of Egf +
 Mal, Lit, Lob, Isl.

Loch Shiel

Winter water level 4 metres above Newlyn datum 1966.

NM8TSW ② shiel 8TSW centre
 stony exposed beach
 Rubha All na Sabhruidh

Rocky promontory
 Foss, Lit, Lds
 Jb, Mal.

Eilean Mhic Dhomhnuill Dhuibh

fine sand
 Lit, Ags, Foss
 Egf Jb Lobs
 bases of Mal, Isl
 Rfl, Jb, Ags, Foss
 Isl off shore
 sandy substrate

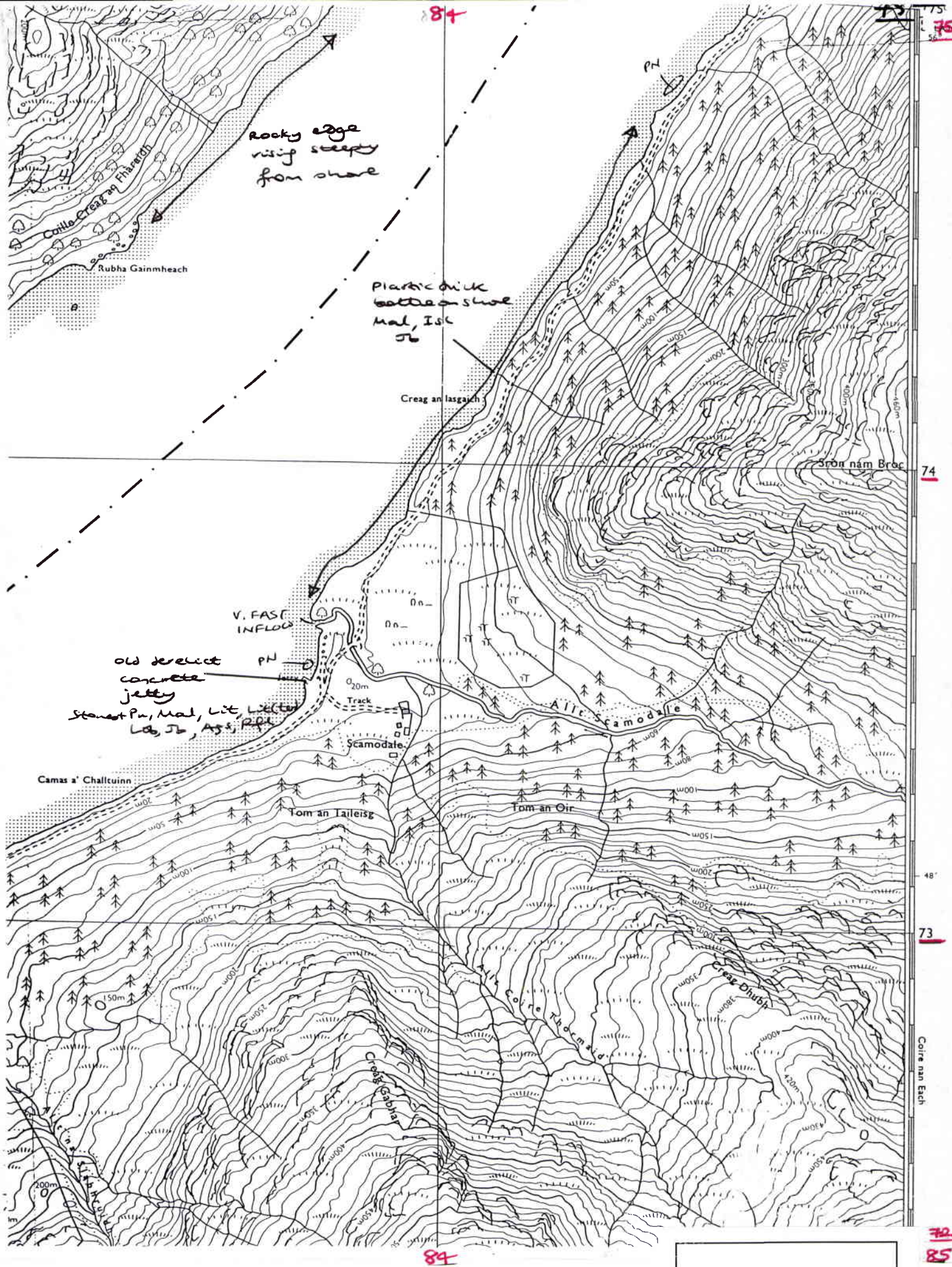
Large stones & sand
 Lit, Lob, Lit (bar abrial)
 Rfl, Jb, Ags, Foss

Lit
 Jb
 Lit
 Lob
 ERE

Boulders shore
 little vegetation
 Camas a' Chaltuinn
 Lit, Jb, Lob, Rfl
 Ags Jb(L) as usual

MAP 11

Jb, Jb, Lit, Lds
 Rfl, Ags as usual



MAP 12

MAP 13

Beinn a' Chaorainn

Plan na h-almiche

Beinn Bhuidhe

Rubha an Eireannaich

Creag an Fhàraidh

Sgèir Dhubh C an Eireannaich

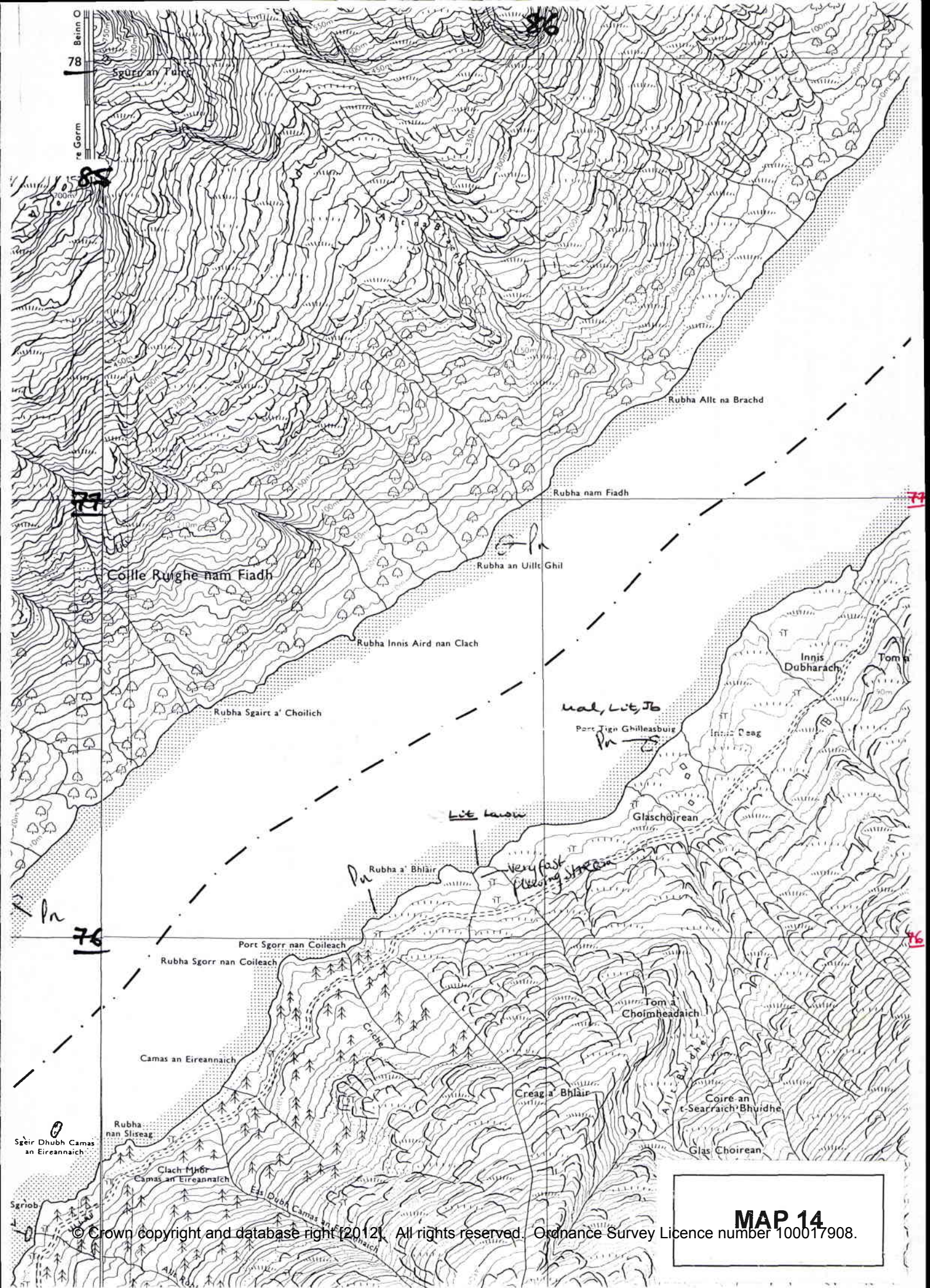
Co. Conair Bòy
Ci. mal Isl, Foinc
(càp)
Rubha nan Sgrìob

Loch Shiel

Winter water level 4 metres above Newlyn datum 1967

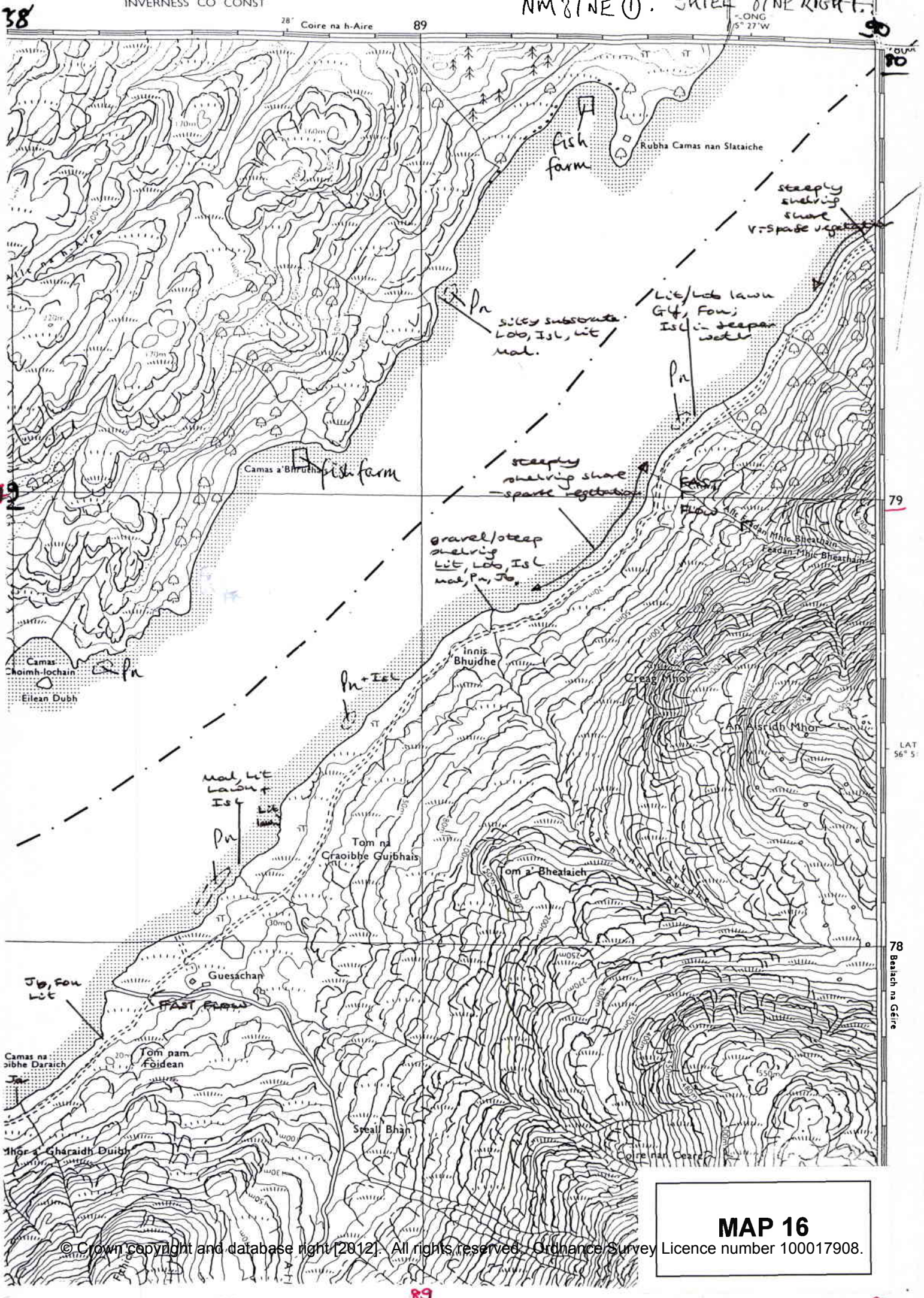
Rocky/stony
shore
offshore: Lds, mal
Isl, lit.
onshore: Lit, Isl (latter)
Rgl

scree:
vegetation:
mal, Isl, Pn

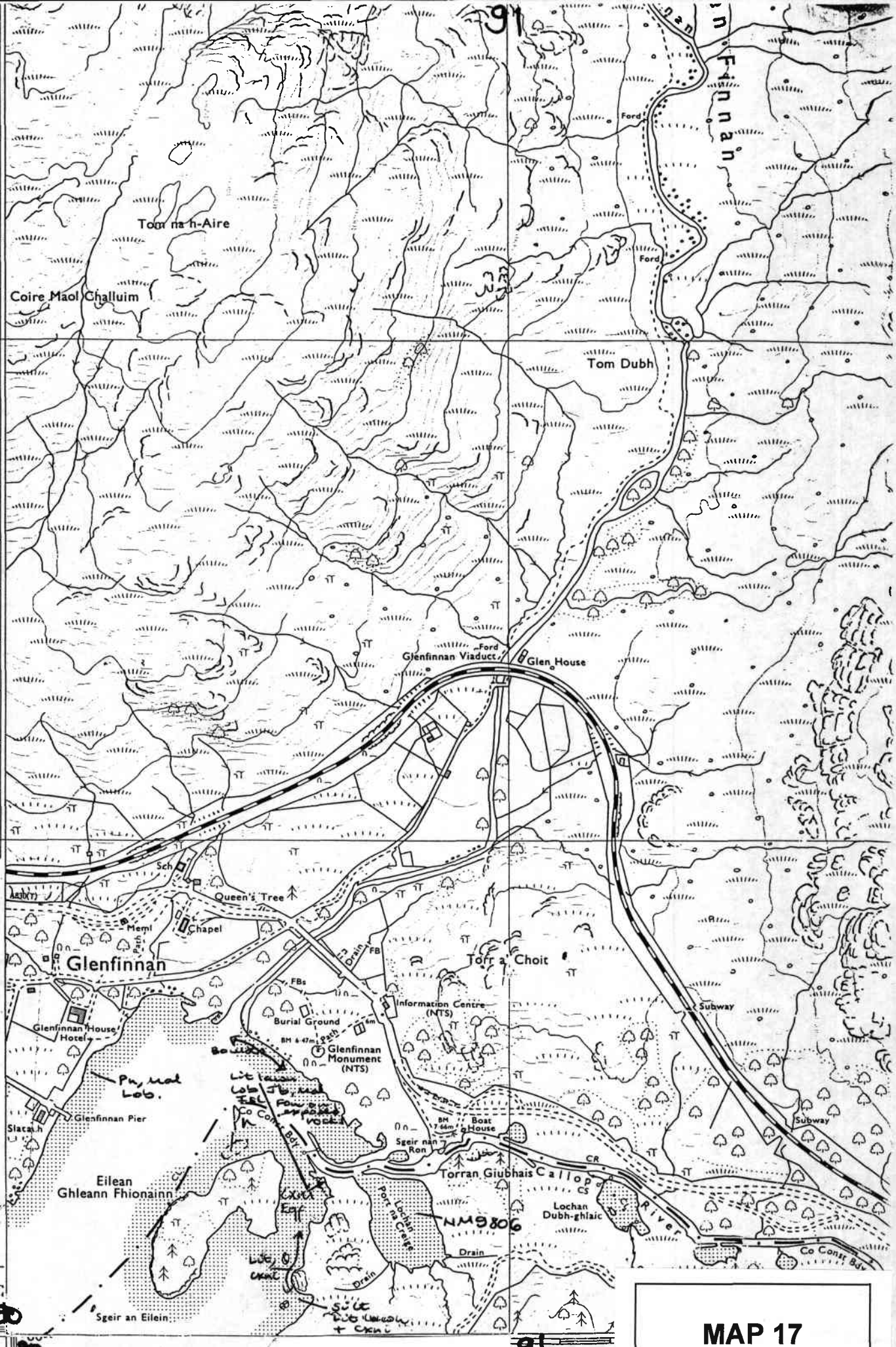


MAP 14

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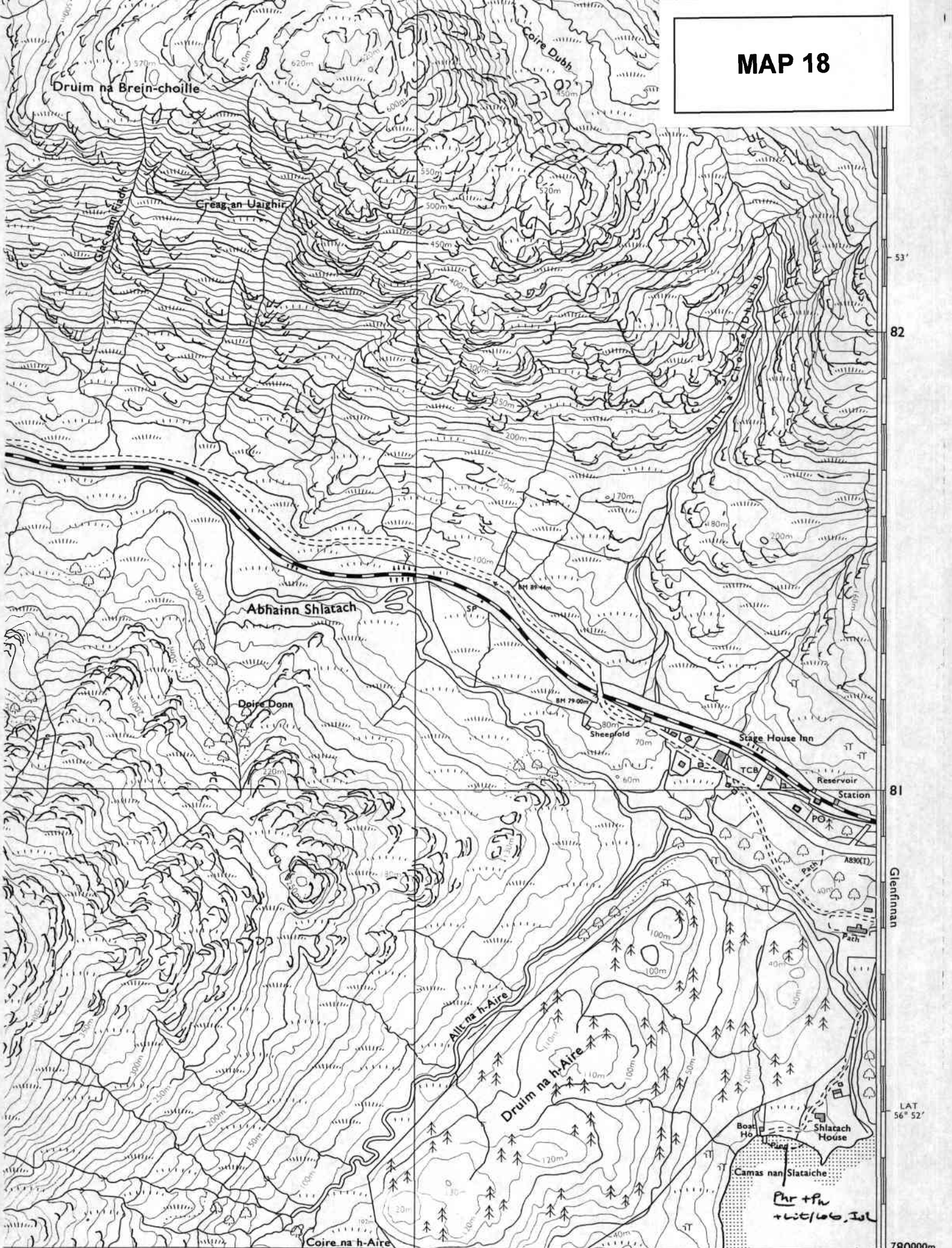


MAP 16



MAP 17

MAP 18



53'
82

81

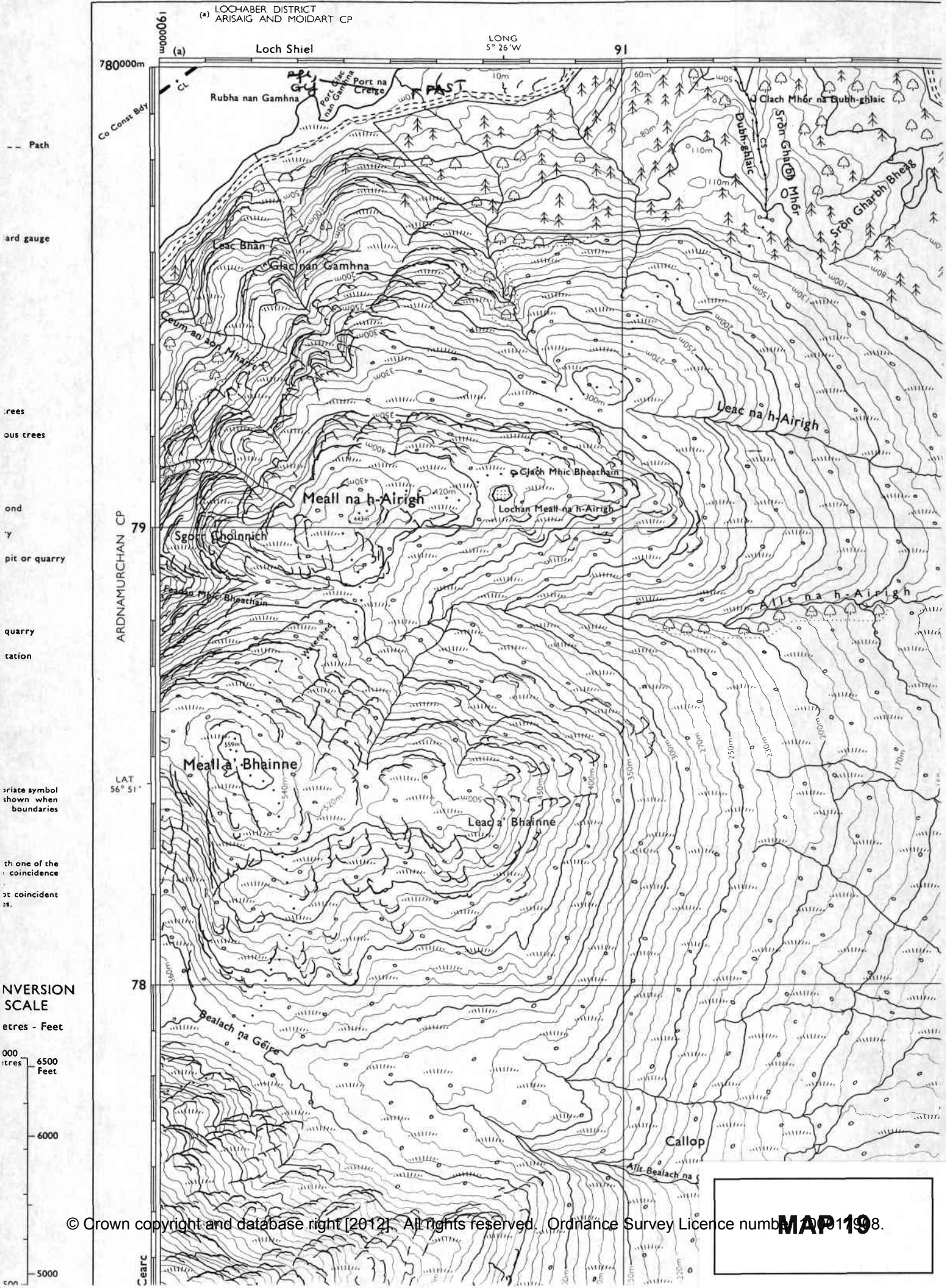
Glenfinnan

LAT
56° 52'

78000m

HEIGHTS IN METRES

(a) LOCHABER DISTRICT
ARISAIG AND MOIDART CP



MAP 198