

Agenda Item	6.2
Report No	PLN/059/19

HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date: 31 July 2019

Report Title: 18/04819/FUL: Scottish Salmon Company
West Strome, Lochcarron

Report By: Acting Head of Development Management – Highland

1. Purpose/Executive Summary

1.1 **Description:** Marine Fish Farm - Installation and operation of an Atlantic salmon fish farm adjacent to the existing Strome farm - consisting of 16 circular pens each 100m circumference and an accompanying feed-barge

Ward: 05 - Wester Ross, Strathpeffer And Lochalsh

Development category: Local

Reason referred to Committee: More than 5 objections

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

2. Recommendation

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

3.0 PROPOSED DEVELOPMENT

- 3.1 The proposal consists of a new fin fish farm with 16 x 100m circumference cages in two groups of eight with a 200 tonne feed-barge and underwater lighting. Each cage would be in a 65m mooring grid.
- 3.2 It is assumed the new farm will be serviced from the jetty and shore-side infrastructure already in place adjacent to the existing farm
- 3.3 Pre Application Consultation: No formal pre-application advice was sought
- 3.4 Supporting Information: An Environmental Impact Assessment Report (EIAR) has been submitted with the application.
- 3.5 Variations: Environmental Management Plan, Sea Lice Review and modified noise assessment submitted

4.0 SITE DESCRIPTION

- 4.1 The application is for a new fish farm that would lie just north east of Strome Castle and the 'narrows' and adjacent to an existing fish farm close to the northern shore of Loch Carron.
- 4.2 This section of the northern shore is heavily wooded and the existing farm is only glimpsed through gaps in the shore-side trees when travelling along the public road that gives access to the site. Long views of the existing farm and this proposed site are available from the A.890 on the southern shore of the loch, particularly at its raised section above Stromeferry where there is a viewpoint.

5.0 PLANNING HISTORY

- 5.1 13 Dec 2010 10/04412/FUL – Marine Fish Farm - Granted
Application for change in size, configuration and number of fish farm cages at Strome, Loch Carron (existing site to north)
- 5.2 6 July 2012 12/00674/FUL - Marine Fish Farm - Atlantic Salmon - New site consisting of 16 cages each 100m circumference and an automated feed barge adjacent to existing site Refused
- 5.3 4 June 2013 13/01278/SCRE EIA Screening - Marine Fish Farm - Atlantic Salmon - new site comprising 16 x 100m circumference circular cages in 2 groups (2 x 4, 2 x 4). in a 65m mooring grid with automated feed barge, adjacent to existing site
- 5.4 4 June 2013 13/01277/SCOP EIA Scoping - Marine Fish Farm - Atlantic Salmon - new site comprising 16 x 100m circumference circular cages in 2

groups (2 x 4, 2 x 4). in a 65m mooring grid with automated feed barge, adjacent to existing site

5.5 30 May 2017 17/02476/SCRE EIA Screening: Marine fish farm - Atlantic Salmon, new site consisting 16X100m circumference cages moored in 2 groups with feedbarge

5.6 26 June 2017 17/02534/SCOP EIA Scoping: Marine fish farm - Atlantic Salmon, new site consisting 16X100m circumference cages moored in 2 groups with feedbarge

6.0 PUBLIC PARTICIPATION

6.1 Advertised: EIA development and Unknown Neighbour

Date Advertised: 26/10/2018 and re-advertised 23/11/2018

Representation deadline: 25/11/2018 and 23/12/2018

Timeous representations: 10

Late representations: 13

6.2 Material considerations raised are summarised as follows:

- The planning authority should apply the Precautionary Principle to this application
- Loch Carron is a poorly flushed location for the proposal
- Tidal flows through the Strome narrows are strong and turbulent making predictions on waste dispersion unreliable
- Site is close to wild salmon migration routes
- Site is close to/crosses the boundary of the Loch Carron Marine Protected Area
- SEPA are aware and have responded to findings of higher than forecast EmBz levels in the environment
- There have been sea-lice control problems at the adjacent site in the recent past - 2016/2017 and 2017/2018
- Warming sea temperatures may exacerbate sea-lice problems in the future
- No evidence submitted of the review of sea-lice prevention requested by Marine Scotland for the neighbouring site in the wake of sea-lice control problems August 2017 – February 2018
- Cumulative impact with existing farm must be taken into account – this is effectively an extension to the existing farm beyond current biomass tonnage limits
- The impact of the proposal on the MPA should be subject to full Habitats Regulations Assessment
- Wild stocks of cleaner fish are being depleted
- SNH response underestimates impact upon priority marine features

- Not clear that a net increase in employment will result – fish farm employment will be offset by job losses due to environmental degradation
- Planning decisions should reflect the conclusions of the parliamentary committee reports
- Unacceptable cumulative visual impact
- Unacceptable impact on Ross Sailing interests associated with the construction of a dwellinghouse under planning permission 17/02391/FUL
- Noise from the feed blowers will be unacceptably high at this consented dwelling
- The proposal will create jobs directly and down the supply chain
- Wild salmon decline – also seen on the east coast - caused by a myriad of factors
- People are used to seeing a fish farm in this location

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

7.0 CONSULTATIONS

- 7.1 Environmental Health – no objection following clarification of feed blower acoustic attenuation
- 7.2 Transport Planning – a Construction Traffic Management Plan should be secured by condition
- 7.3 Scottish Water – no objection
- 7.4 Transport Scotland – no objection
- 7.5 Historic Environment Scotland – no objection in respect of Strome Castle
- 7.6 Northern Lighthouse Board – standard navigational lights required
- 7.7 SEPA – no objection – proposal was granted a CAR licence in 2012. This was reassessed when the emergency MPA was designated. Found incapable of affecting, other than insignificantly, the protected features of the MPA and unlikely to hinder their recovery
- 7.8 SNH – no objection – the proposal is capable of affecting the MPA protected features (flame shell beds and maerl beds) through smothering with fish faeces and food waste, but these effects are insignificant. Further assessment is not required. The proposal will impact areas of Priority Marine Feature (PMF) burrowed mud and tall sea pen but will not result in any significant impacts on their national status. Notes very low levels of waste transported out of the modelled domain.
- 7.9 Marine Scotland Science –
 1st response - satisfied with benthic and water column impacts - note sea lice issues at neighbouring farm between August 2017 and February 2018. Request;
- further information regarding the review required following this incident

- confirmation that SEPA's November 2018 interim position statement will not reduce the level of chemotherapeutants available.
- information on how long bath treatments will take to complete – long treatment periods increase risk of reinfection
- confirmation that cleaner fish will be sourced and stocked in sufficient numbers across the whole FMA
- how this site will be managed in sea lice treatment terms with the existing site

2nd response;

- requested sea lice review submitted – main changes are increased use of mechanical treatments throughout production run, vaccination of fish against pancreatic and gill diseases and better cleaner fish husbandry and resourcing
- applicant has confirmed that the CAR licenced amount of EmBz is in line with SEPA's interim position statement
- bath treatment times for various chemotherapeutants have been submitted. Hydrolicer mechanical method could treat both sites in 6 days.
- applicant states they have several lump fish suppliers with a good record of supply – orders are planned several years in advance. Rely on wild catches for wrasse.
- Two sites will be operated synchronously where possible
- Salmon and sea trout re-stocking programme (partially funded by the applicant) on the River Carron has been a success with historically high rod catches.
- Over 300 sea trout and finnock sampled in 2017 and again in 2018. Sea lice infestation did not appear to be at raised levels.

7.10 Wester Ross Area Salmon Fishery Board (neighbouring area) – objection - sea lice infestation at the existing site has exceeded CoGP treatment thresholds during winter 2013/14, winter 2015/16 and autumn/winter 2017/18 with 4.76 adult female lice per fish recorded in January 2018. Pattern of evidence to show that these incidents resulted in fewer salmon returning to the River Carron system subsequently. Similar pattern for sea trout.

8.0 DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

8.1 Highland Wide Local Development Plan 2012

28 - Sustainable Design
 36 - Development in the Wider Countryside
 49 - Coastal Development
 50 - Aquaculture
 57 - Natural, Built and Cultural Heritage
 59 - Other important Species
 61 - Landscape
 72 – Pollution

8.2 **Wester Ross Local Plan (as continuing in force) April 2012**

No specific policies apply

8.3 **West Highland and Islands Local Development Plan (as submitted to Scottish Ministers) 2019**

No specific policies apply

8.4 **Highland Council Supplementary Planning Policy Guidance**

Highland Historic Environment Strategy (Jan 2013)
Highland's Statutorily Protected Species (March 2013)

9.0 OTHER MATERIAL POLICY CONSIDERATIONS

9.1 **Scottish Government Planning Policy and Guidance**

SPP (2014) paragraph 204 states;

“Planning authorities should apply the precautionary principle where the impacts of a proposed development on nationally or internationally significant landscape or natural heritage resources are uncertain but there is sound evidence indicating that significant irreversible damage could occur. The precautionary principle should not be used to impede development without justification. If there is any likelihood that significant irreversible damage could occur, modifications to the proposal to eliminate the risk of such damage should be considered. If there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.”

SPP (2014) paragraph 250 states;

“The planning system should:

- play a supporting role in the sustainable growth of the finfish and shellfish sectors to ensure that the aquaculture industry is diverse, competitive and economically viable;*
- guide development to coastal locations that best suit industry needs with due regard to the marine environment;*
- maintain a presumption against further marine finfish farm developments on the north and east coasts to safeguard migratory fish species.”*

SPP (2014) paragraph 253 states;

“.....The planning system should not duplicate other control regimes such as controlled activities regulation licences from SEPA or fish health, sea lice and containment regulation by Marine Scotland.”

National Marine Plan

10.0 PLANNING APPRAISAL

10.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

Determining Issues

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

Planning Considerations

- 10.3 The key considerations in this case are:
- a) compliance with the development plan and other planning policy
 - b) planning history
 - c) parliamentary reports and the precautionary principle
 - d) reduced scale of existing farm
 - e) visual and landscape impact
 - f) residential impact
 - g) impact upon the Loch Carron Marine Protected Area (MPA)
 - h) impact upon wild fish populations
 - i) economic impact
 - j) construction traffic

Development plan/other planning policy

- 10.4 Policy 50 (Aquaculture) of the Highland-wide Local Development Plan (HwLDP) - states that the Council will support the sustainable development of finfish and shellfish farming subject to there being no significant adverse effect, directly, indirectly or cumulatively on the natural, built and cultural heritage and existing activity. As discussed in the report below, the proposal will have some negative visual impact, some impact on the MPA qualifying features and other priority marine features and also some negative impact on local wild salmonid populations. However, none of these impacts is considered significant enough to justify a reason for refusal and the ecological effects can be mitigated through the required adaptive management techniques.
- 10.5 Policy 28 (Sustainable Design) of the HwLDP - identifies considerations that must be assessed including;
- impact on individual and community residential amenity
 - impact, including pollution and discharges, on habitats, freshwater systems, species, marine systems, landscape and scenery and particularly within designated areas
 - demonstrate sensitive siting and high quality design in keeping with local character and the historic and natural environment

The policy also states that:

In the relatively rare situation of assessing development proposals where the potential impacts are uncertain, but where there are scientific grounds for believing that severe damage could occur either to the environment or the wellbeing of communities, the Council will apply the precautionary principle.

This must be read in conjunction with SPP (2014) paragraph 204 above which post-dates the HwLDP.

Policy 28 was the identified policy in the three reasons for refusal of the previous application on the site – 12/00674/FUL. For the reasons given below the landscape, ecology and wild fish concerns are no longer considered to constitute reasons for refusal.

- 10.6 Policy 36 (Development in the Wider Countryside) of the HwLDP – reiterates the considerations identified by Policy 28 but adds that regard will also be had to the extent to which the proposal would help, if at all, to support communities in Fragile Areas (Lochcarron falls within this area as defined by Highlands and Islands Enterprise) in maintaining their population and services by helping to re-populate communities and strengthen services.

The submitted documents and third party comments suggest the application could have positive employment impacts.

- 10.7 Policy 49 (Coastal Development) of the HwLDP – requires nearshore water development to comply with the other policies of the development plan in achieving sustainable, well planning coastal development.

- 10.8 Policy 57 (Natural, Built and Cultural Heritage) of the HwLDP – identifies natural, built and cultural features of:

- local/regional importance and states that the authority will allow developments if it can be satisfactorily demonstrated that they will not have an unacceptable impact on the natural environment, amenity and heritage resource
- national importance and states that the authority will allow developments that can be shown not to compromise the natural environment, amenity and heritage resources;

The critical issue here is the Loch Carron MPA. SNH and SEPA have concluded that the chemical and waste outputs from the proposal will not compromise the MPA which is of national importance.

- 10.9 Policy 59 (Other Important Species) of the HwLDP - requires the council to have regard to the presence of, and any adverse effect of development proposals, either individually and/or cumulatively on species including the multi-sea-winter component of the Atlantic salmon population (included in the UK Biodiversity Action Plan Priority Species List and as a Priority Marine Feature). For the reasons below, the proposal is considered acceptable in this regard subject to the securing of adaptive management techniques by planning condition.

- 10.10 Policy 61 (Landscape) of the HwLDP – requires proposals to be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction

materials, as well as the potential cumulative effect of developments where this may be an issue. The siting of the farm in conjunction with the reduced scale of the existing farm is considered to be acceptable in landscape terms.

- 10.11 Policy 72 (Pollution) of the HwLDP – states that proposals that may result in significant pollution will only be approved where a detailed assessment report on the levels, character and transmission and receiving environment of the potential pollution is provided by the applicant to show how the pollution can be appropriately avoided and if necessary mitigated. The submitted environmental statement is considered to meet this requirement.

Planning History

- 10.12 The existing 14 cage farm to the north was granted planning permission in December 2010 (10/04412/FUL) on a site that had been used for fish farming since the early 1980's.
- 10.13 A previous application – 12/00674/FUL – for an almost identical 16 cage farm to the current one under consideration was refused in July 2012. Three reasons for refusal of 12/00674/FUL were given;
1. an unacceptable increase in visual impact resulting in an adverse impact on community residential amenity
 2. a precautionary principle refusal in respect of potential impact on wild salmonids
 3. a precautionary principle refusal in respect of potential impact on Flame Shell habitat
- 10.14 To approve this current application the authority must satisfy itself that these reasons for refusal have now been satisfactorily addressed and overcome and that the proposal does not raise any fresh objection that would warrant a refusal of planning permission.

Parliamentary reports and the precautionary principle

- 10.15 At the current time, no assessment of a fish farm application would be complete without some acknowledgement of the greatly increased public scrutiny of the industry which has accompanied and been reflected by the inquiries held by two Scottish parliamentary committees in 2018 and their subsequent reports.
- 10.16 Many of the third party comments received in respect of this application have referenced these reports and particularly the criticism of the industry that they contained. One theme repeated many times in the objections was a call by the committees for regulators, including planning authorities, to employ the precautionary principle on a more regular basis. This is particularly pertinent to this application given the precautionary principle basis of two of the reasons for refusal applied to the previous planning application 12/00674/FUL.
- 10.17 However, as identified at paragraph 9.1 above, Scottish Planning Policy published in 2014 has provided a definition of the precautionary principle to be used in Scottish planning decisions. As such it is considered compatible with Scotland's

international obligations as the concept has been adopted by both the UN and the EU. It is noted that this post-dates both the 2012 HwLDP Policy 28 and the previously refused planning application of the same year.

- 10.18 The SPP definition sets some important limitations to the application of the precautionary principle. It only relates to interests of national and international importance. There should be sound evidence indicating that significant irreversible damage could occur and if there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.
- 10.19 In this case the only interest of national importance is the MPA – assessed below. Third parties are incorrect in their assertion that it could be legitimately used more widely. Wild salmonid impacts would only be covered by the precautionary principle if they related to a Special Area of Conservation (SAC) – see planning permission 18/00584/FUL for a recent example of this in respect of the Isle of Muck fish farm. Arguably, the status of both salmon and trout as Priority Marine Feature species provides them with ‘national importance’. However, the precautionary principle would only apply in these circumstances when the predicted effect related to the status of the national population as a whole rather than just a small component of it.
- 10.20 So far, the parliamentary reports have not resulted in any fundamental change to national aquaculture planning policy. It continues to be balanced between a generally positive approach on the mainland west coast, Western Isles, Orkney and Shetland and a prohibition on any new aquaculture off the northern and eastern mainland coasts in the interests of protecting wild fish.

Working groups have been set up to specifically examine the issue of wild fish interactions with aquaculture.

The only change in position has been from Marine Scotland who have verbally endorsed the EMP approach to post-consent adaptive management. It is conceivable that this may be reflected in revised future guidance.

Reduced scale of existing farm

- 10.21 One significant aspect of this proposal which differs from the previously refused one is that the applicant intends to remove the six southernmost cages from the existing 14 cage site if this application is approved and implemented. The applicant wishes for this to be a material consideration for the determination of the current application as the change will reduce both the biomass at the existing farm (of significance to benthic, water column and wild salmonid impacts) and its visual impact.
- 10.22 After some discussion a form of words for a legally binding condition that could be applied to any consent issued was agreed. It states that;
- “No positioning of any cages, or any operation of the fish farm, hereby approved shall take place, other than when the number of cages installed in accordance with planning permission 10/04412/FUL, or any previous extant permission, equals 8 or less.”*

It is understood that this would reduce the maximum biomass of the existing farm from 1375 tonnes down to 675 tonnes. The new farm will add 2000 tonnes – a net increase of 1300 tonnes (i.e. double the existing) for the two sites as a whole.

Visual and landscape impact

- 10.23 This reduction in the overall number of cages is significant in respect of the previous reason for refusal which was assessed against a cumulative total of 30 cages. This proposal reduces that total to 24. It also opens up a significant degree of separation – some 700m - between the eight remaining cages of the existing farm and the 16 new cages proposed. The visualisations from viewpoint 3 in the LVIA – the elevated layby above Strome ferry – illustrate this well. The separation reduces the cumulative visual impact to a material degree.
- 10.24 That said, the 16 cages of the proposed farm are a considerable amount of surface development and must be found visually acceptable in their own right for the application to be approved. The viewpoint 3 visualisation indicates that the new farm will feature quite prominently within the foreground of this important view up the length of the loch, past Lochcarron and on to the Monroe peaks above Glen Carron and the river. However, it is considered that this prominence is greatly moderated by the sheer scale of the landscape vista. The eye is not drawn to the fish farm feature but rather more to the middle and far distance.
- 10.25 The previous refusal correctly identified that the site does not fall within a National Scenic Area or any other landscape designation. As a result, the focus of concern was the visual amenity of residential properties close to the shore at Ardnarff and Strome ferry and the reason for refusal used the phrase “community residential amenity” as the material consideration to be protected.
- The LVIA submitted as part of the EIA environmental statement with this current application also focusses on these Strome ferry properties, concluding that the impact on these residential receptors is “*moderate adverse*” – the only significant effect found.
- The visualisation from viewpoint 4 illustrates the identified impact.
- 10.26 However, a clear distinction, that was perhaps lacking in the previous application appraisal, needs to be drawn between an ‘environmental impact’ and a material planning consideration. The impact that is being identified by the LVIA and the previous reason for refusal is in essence these property’s private ‘right to a view’. That is, the impact on the outlook from these dwellings and the private amenity of its occupants. Government guidance makes clear that the planning system is not empowered to protect a right to an individual view. It is ‘public amenity’ which should be protected by the planning system and so very little planning weight should be placed on this consideration.
- 8.27 The LVIA also concludes that the overall visual and landscape impact of the proposal is also limited by the low-lying nature of the development which is back-dropped by the northern shoreline of the loch when seen from the A.890 road. This is considered to be accurate. As is the conclusion that there is very limited access to the northern coastline and that views from close proximity are heavily influenced by forestry screening. In both cases, views of the proposal from the busy major road on the south shore and the more locally used road on the north

shore are generally from a low elevation. Furthermore, the degree of landscape change is moderated by the fact that this part of the loch has been occupied by a 14 cage fish farm for several years. The existing farm assists in identifying the true visual impact of the proposed farm.

These conclusions are important because the vast majority of visual receptors for this development over time will be those travelling by road (and train to the south) along the south and north shores of the loch. Their experience will generally be views of short duration and from a low elevation.

- 10.28 It is considered that all of these factors are valid and suggest that a different conclusion about the visual and landscape impact of this proposal can be drawn from that reached in 2012. Whilst clearly visible, the proposal will be set within a wide open landscape of considerable scale and this will diminish its visual and landscape impact even from its closest receptors. Furthermore, the planning system cannot protect the right to a view regardless of its quality.

Residential impact

- 10.29 Continuing this theme, a third party objection received in May 2019, brought the planning service's attention to planning permission 17/02391/FUL. This is a permission to demolish a former sailing club building and erect a two-storey, four bedroomed house specifically designed to achieve extensive views up and down the loch from its glazed gables. The view from the southern gable would feature most if not all of the proposed fish farm in the foreground. This is an unfortunate situation which was not foreseen and the planning service understands the concerns expressed by the developer. However, again, although this is an extant permission and the amenity of this house is a material consideration, the 'right to a view' cannot be protected and is not a reason for refusal of this application

- 10.30 The owner of this house site has also raised a different issue of amenity, stating that the site continues to be used by sail boats, kayaks and divers in respect of an entity known as Ross Sailing. The owner has an aspiration to develop this activity further but notes that the attractiveness of the site as a launching point would be compromised by the new fish farm which would preclude coastal transits past it.

However, it is noted that the planning permission only allows for the domestic use of the site and so very little weight can be placed upon these non-domestic activities. It is possible that expansion of the Ross Sailing activities would require a further planning permission in respect of change of use of the land.

- 10.31 The letter also raises the issue of noise associated with the feed-blower selector equipment installed on the feed barge given that it is only some 400m from the house site and the equipment is installed in the open on the upper deck.

Although the issue of noise (including the feed blower equipment) was addressed within the ES, it did not appear that the fish farm applicant had taken this specific receptor into account. Furthermore, the submitted noise contour map indicated that the proposed property would be exposed to unacceptably high noise levels.

When this issue was raised with the applicant their response was that the feed blower selector equipment could be placed within an acoustic housing which would greatly attenuate its noise emissions (by 10-16dB) and achieve an acceptable level at the receptor property.

A subsequent discussion with the Council's environmental health service identified that the original noise assessment had taken a 'worst-case' approach and included the noise from boats servicing the site from the shore base. Although this engine noise is intense, it is also short-lived and very intermittent with only a handful of boat movements a day at most. Furthermore, it is a feature of the existing background noise for the current farm. The case officer agrees with the environmental health officer that this noise source can reasonably be omitted from the assessment.

Taking the noise attenuation amendments and revised background noise assessment into account, the environmental health service are satisfied that noise impacts at the 17/02391/FUL property will be acceptable.

- 10.32 It is recommended that two conditions are imposed on any permission granted in this regard. The first is to require full details of the attenuation installation to be submitted and approved before any development takes place. The second is the standard noise condition recommended by environmental health to protect residential amenity during the lifetime of the permission.

Impact upon the Loch Carron Marine Protected Area (MPA) and other Priority Marine Features

- 10.33 This MPA was created as an emergency measure in response to evidence that trawler fishing activity was damaging what is now recognised as the largest flame shell habitat in Europe. The MPA has recently been confirmed and is now permanent.
- 10.34 This matter is of particular relevance to this application because the unknown impact of the previous proposal on the flame shell beds and other priority marine features were cited as a reason for refusal back in 2012.
- 10.35 However, since that time, two factors - the granting of the CAR licence for this development and the creation of the MPA - have removed much of the doubt about this potential impact. The impact centres upon the emissions of chemicals and waste from the farm into the water body and to what extent this could damage the qualifying features of the MPA and other priority marine features such as sea pens.
- 10.36 The issue of a CAR licence for this site in 2012 confirmed that the farm emissions were not considered likely to cause unacceptable harm to priority marine features in the vicinity. In their consultation response SEPA point out that the designation of the emergency MPA meant that they were obliged to review the CAR licence. Their conclusions to this analysis was that the impacts of solids from waste feed and faeces, the fate of sea lice medicine residues and nutrient effects were;
- a) incapable of affecting, other than insignificantly, the protected features of the MPA and
 - b) unlikely to hinder the recovery of the protected features.

The CAR licence therefore remained authorised.

- 10.37 SNH concur with these conclusions stating that the proposal is capable of affecting the protected features of the MPA but that these effects are insignificant. Further assessment is therefore not required. Equally, although there will be an

impact upon the priority marine features of Burrowed Mud and Tall Sea Pens this will not result in any significant impacts on their national status. Like SEPA, SNH note that the hydrodynamic modelling suggests that very little solid waste will be swept away from the immediate vicinity of the site and so the risk of smothering within the MPA is very low.

- 10.38 Given these consultation responses it is considered that the previous reason for refusal relating to flame shell impacts is not longer valid. There is strong evidence to suggest that impacts on the MPA will be very limited.

Impact upon wild fish populations

- 10.39 Wild salmonids i.e. wild salmon and trout, are protected species. Among other designations, Atlantic salmon is listed on Appendix III of the Bern Convention and Appendix II and V of the EC Habitats and Species Directive and are listed on Schedule 3 of the Conservation (Natural Habitats, andc.) Regulations 1994 (as amended) whilst in freshwater. The multi-sea-winter component of the Atlantic salmon population is included in the UK Biodiversity Action Plan Priority Species List. This species is also a Priority Marine Feature (PMF). Trout (*Salmo trutta*) are also a PMF and are on the UK Biodiversity Action Plan Priority Species List and received some protection within the fisheries acts relating to the protection of 'salmon'. The Council also has a Biodiversity Duty under the Conservation of Nature (Scotland) Act 2004 to protect them. Clearly therefore, any impacts on these species must be considered.

Significantly, the overall numbers of wild salmonids in Scottish coastal waters has declined dramatically over the last few decades. Whilst there is no definitive evidence to suggest this has been caused by fish farming, it has created a situation where planning authorities need to satisfy themselves that new fish farm consents will not add to the environmental pressures on an already struggling set of species and make a bad situation even worse.

The MSS consultation response stresses that there is now plenty of evidence from Norway and other producer states showing that sea lice emissions from fish farms can result in increased mortality among wild salmon and sea trout.

- 10.40 Sea lice: The key sea louse species of concern is *Lepeophtheirus salmonis*. These are parasites found in the wild, which can infect farmed salmon. They feed on the fish mucus and flesh. Given the high numbers of fish in fin fish cages, the population of the lice can rapidly increase and affect both the farmed fish and infect/re-infect the wild population. In addition, numerous studies have shown that sea lice in the receiving environment tend to be higher during second years of production of a fish farm and therefore pose a greater risk to wild salmonids at that time. For clarity, marine fish farms tend to operate on roughly two year production cycles, at the end of which all remaining fish are harvested out and the site is left fallow for several weeks or months prior to re-stocking. Once re-stocked, the lice levels are generally low for at least the first few months, then, if there is a sea lice issue in the area, the numbers can build up as the farmed fish grow bigger. The net increase of 1300 tonnes of fish proposed by this application can therefore act as additional hosts for sea lice.

- 10.41 The industry's Code of Good Practice (CoGP) states that average levels of 0.5 adult female lice per fish between February and June and 1.0 adult female lice per fish between July and January should be sought. If these levels are reached or exceeded, they are the suggested criteria for sea lice treatment. Further to this, MSS noted the operator has a target of zero adult female lice in spring as per the CoGP.
- 10.42 Following the Environment, Climate Change and Land Reform Committee report on the environmental impacts of salmon farming (March 2018), it was proposed that site-specific data for all marine fin fish farms would be forthcoming in due course. Individual site data are now published by the SSPO as from May 2018, but these are provided with a 3-4 month time lag.
- 10.43 MSS also state that adherence to the suggested criteria for treatment of sea lice stipulated in the industry CoGP may not necessarily prevent release of substantial numbers of sea lice from aquaculture installations.
- The issue here relates to the huge numbers of fish reared within the pens of a farm relative to the much smaller number of wild salmonids inhabiting and/or transiting the waters in its vicinity. The 500,000 to 750,000 fish in the farm may exceed local wild fish populations by a factor of as much as a 100. Consequently, even when the numbers of sea lice per farmed fish is relatively low, the total number of adult and planktonic sea lice entering the local receiving environment may still be many times greater than the naturally occurring level. This increases the risk of infection for wild fish to a corresponding degree.
- 10.44 The specific circumstances of this proposal in which the farm is positioned within a relatively narrow loch between its even narrower western access to the sea and the loch-head Carron river system to the east, suggests enhanced connectivity between farm sea lice emissions and wild fish.
- 10.45 Indeed, in their consultation responses both MSS and the WRASFB have identified that the existing farm has suffered regular periods in which sea lice numbers on the farmed fish have exceeded CoGP levels by greater or lesser margins. WRASFB have gone on to suggest a correlation between these sea lice episodes and subsequently reduced numbers of wild fish within the wider area.
- 10.46 In their response to consultee and third party comments, the applicants have refuted this claim, pointing out that there was no evidence of a direct causal connection with this particular farm. Furthermore, in the letter received from the Carron River Restoration Project, which has been involved in a re-stocking programme for many years, partially funded by the applicant, contradicting evidence of a steadily growing population of wild fish with little evidence of sea lice damage has been presented.
- 10.47 Nevertheless, MSS state that they were concerned enough following the most recent breach of sea lice guidelines to require a review of sea lice control practice at the site. To a large degree this has been incorporated within the Environmental Management Plan (EMP) submitted with and revised during this application.

10.48 EMPs have been a requirement of several recent planning approvals in the Highland area and in Argyll and Bute including those decided on appeal by the DPEA. Marine Scotland have now indicated that they will be making this form of adaptive management a requirement for all fish farm applications.

10.49 Ideally, an EMP should achieve the following;

- a) a description of the methods, techniques and equipment (chemicals, fresh water treatments, cleaner fish, net design, good husbandry practice etc.) to be used to maintain sea lice infestation numbers at the lowest possible levels throughout each production run
- b) a description of how lice levels will be monitored and reported
- c) a methodology of how rising sea lice levels will be addressed in the form of a positive feedback loop of interventions and monitoring
- d) a commitment to reduce biomass if these interventions prove unable to bring sea lice numbers down to an acceptable level within a short period of time

The above represents normal practice on a fish farm. However, the EMP requires a link to be made with wild fish health and numbers;

- e) a programme of wild fish health and numbers monitoring specific to the site which identifies wild salmonid habitats and populations most likely to be impacted by sea lice emissions from the farm. This may include planktonic sea lice monitoring to inform the wild salmonid populations most at risk.
- f) a commitment at the end of each production run to assess, alongside the planning authority and other statutory bodies, the wild fish monitoring results and, if any causal correlations are identified, agree and implement adjustments to the next production cycle (a feedback to (a) above) to address any harm to wild fish populations being caused by sea lice emissions from the farm.

10.50 The applicant has submitted an EMP with this application and revised it during the course of determination. It is stated to be very similar to one recently approved for sites within the Argyll and Bute planning authority area.

10.51 The applicant has suggested that the EMP approach now has the explicit support of Marine Scotland and the Scottish Salmon Producers Organisation (SSPO) and that this EMP has been developed in that context. Although not perfect, from the authority's point of view, it does seem to represent a step-change in the approach of this company to the adaptive management approach.

10.52 It contains most, if not all, of the elements outlined in paragraph 10.49 above;

- an Integrated Sea Lice Management Plan containing a positive feedback loop in terms of farmed fish monitoring and treatment with a Sea Lice Action Plan and Veterinary Health Plan which are drawn up at the start of each production cycle.
- a commitment to exceed CoGP sea lice standards
- a commitment to reduce biomass if treatments are unsuccessful for a set period of time

- a Wild Fisheries Sea Lice Monitoring Strategy which includes;
 - a baseline data gathering stage for both wild salmonids and planktonic juvenile sea lice
 - further planktonic monitoring triggered by a breach in farm lice levels
 - general on-going wild fish monitoring throughout the operational cycle
- commitment to a bi-annual meeting with local fisheries board, MSS and the planning authority to discuss results
- commitment to treat the EMP as a live and adaptive document over time

10.53 With regard to the submitted plan it is considered that it should make a clearer and more explicit commitment to carrying out the baseline monitoring during each fallow period between production cycles. Furthermore, this should be linked to a commitment to hold one of the regular meetings with the fisheries board, MSS and the planning authority during the fallow period to specifically discuss the adaptive management to be applied to the next production cycle and the monitoring evidence to support it.

It must also contain a specific commitment to include a reduction in biomass as one of the adaptive management options should other measures prove to be inadequate at addressing the negative impacts on the wild fish population as evidenced from the wild fish monitoring strategy approved as part of this application.

10.54 In this regard a condition is recommended requiring the submission of an amended EMP containing the following adjustments;

1. a specific commitment to carry out baseline monitoring of wild fish and planktonic sea lice during each and every fallow period between production cycles.
2. a commitment to hold one of the regular meetings with the fisheries board, MSS and the planning authority during the fallow period to discuss adaptive management changes in respect of the next production cycle. These adaptive management changes are to include a specific commitment to reduce biomass at the site if other measures prove to be inadequate to avoid a detrimental impact on the local wild fish population as evidenced from the results of the approved wild fish/sea lice monitoring strategy.

10.55 The EMP also includes an Escape Management Plan which is considered necessary because escaped farm fish can compete for resources with wild fish and potential introgression between farmed and wild fish would weaken the latter. The Plan is considered acceptable.

10.56 The submission of an acceptable EMP and its role in protecting existing stocks of wild fish is considered to successfully address and overcome the third and last reason for refusal of the previous application.

Economic impact

- 10.57 There is little doubt that the proposed fish farm will have a positive impact on local employment and economic activity both directly and indirectly. This is particularly important for an area falling within the HIE definition of a Fragile Area.
- 10.58 A number of third party comments suggest, however, that the farm could have a negative impact upon tourism and leisure activity related to this part of the loch.
- 10.59 Clearly, as with any economic benefit assessment, it is the 'net' effect which is of interest. The obvious benefits of investment have to be weighed against the 'costs' which come with it, some of which are difficult to quantify. There is insufficient evidence on either side of this argument for the planning authority to come to any definitive answer and so little weight can be placed upon this consideration.

Construction traffic

- 10.60 The transport planning team have asked for a construction traffic management plan (CTMP) to be submitted. The applicant has responded that most construction traffic will arrive by water with very few road movements.
- 10.61 However, a condition calling in a CTMP is recommended as this will allow further dialogue between the developer and the transport planning team. If it is concluded that a CTMP is not required then the condition can still be discharged to that effect.

Other material considerations

- 10.62 There are no other material considerations.

Non-material considerations

- 10.63
- Decision should be deferred until after Scottish Government have made legislative changes following the 2018 Parliamentary Inquiry
 - Contained fish farming – Recirculating Aquaculture Systems (RAS) – should be introduced instead of proposals such as this
 - Planning decision should be deferred until SEPA's new Finfish Aquaculture Plan is in place

Matters to be secured by Section 75 Agreement

- 10.64 a) None

11.0 CONCLUSION

- 11.1 In essence this application seeks to overcome previous reasons for refusal regarding;
1. visual and landscape impact
 2. uncertainty about the impact of the development upon nearby flame shell habitat

3. uncertainty about the impact of the development upon wild salmonids

11.2 In respect of the visual and landscape impact of the proposal, although of high quality, the site does not fall within an area designated for its landscape qualities. In fact the scale of the landscape setting and the low-lying nature of the development minimise its overall impact. The outlook of some individual properties is somewhat compromised but this right to a view cannot be protected by the planning system.

With the confirmation of an MPA to protect the flame shell beds, SEPA and SNH have confirmed that careful assessment of the potential impact of the farm on this designation has been carried out and found that no harmful impact will occur.

The EMP submitted with the application will allow an adaptive management approach to control the impact of the new farm on wild salmonids.

Both this and the reduction in capacity of the existing farm can be secured by condition.

11.3 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

12.0 IMPLICATIONS

12.1 Resource: Not applicable

12.2 Legal: Not applicable

12.3 Community (Equality, Poverty and Rural): Not applicable

12.4 Climate Change/Carbon Clever: Not applicable

12.5 Risk: Not applicable

12.6 Gaelic: Not applicable

13.0 RECOMMENDATION

Action required before decision issued None

Subject to the above, it is recommended that planning permission be **GRANTED**, subject to the following:

Conditions and Reasons

1. No development shall commence until a revised Environmental Management Plan (EMP) has been submitted and approved in writing by the local planning authority. The revised EMP shall include;

- a) a specific commitment to carry out baseline monitoring of wild fish and planktonic sea lice during each and every fallow period between production cycles.

- b) a specific commitment to hold one of the regular meetings with the WRASFB, MSS and the planning authority during each fallow period to discuss adaptive management changes in respect of the next production cycle. These adaptive management changes are to include a specific commitment to reduce biomass at the site if other measures prove to be inadequate to avoid a detrimental impact on the local wild fish population as evidenced from the results of the approved wild fish/sea lice monitoring strategy.

Thereafter the fish farm shall not be operated other than in strict accordance with the provisions and requirements of the approved EMP.

Reason: In the interests of protecting wild salmonids from the effects of sea lice emissions from the farm

2. No positioning of any cages, or any operation of the fish farm hereby approved, shall take place, other than when the number of cages installed in accordance with planning permission 10/04412/FUL, or any previous extant permission, equals 8 or less.”

Reason: To define the permission in accordance with the submitted details and the parameters addressed by the Environmental Statement

3. No development shall take place until full details of the acoustic attenuation housing to be installed around the feed blower selector equipment on the feed barge has been submitted to and approved in writing by the planning authority. Thereafter, the feed blower equipment shall not be operated other than with the approved attenuation housing fully installed.

Reason: In the interests of residential amenity.

4. Activities associated with this development for which noise is audible at the curtilage of any noise sensitive property shall not be carried out other than between 8am and 5pm. All plant, machinery and equipment associated with this development shall be so installed, maintained and operated such that either of the following standards are met;

- any associated operating noise must not exceed NR 20 when measured or calculated within the bedroom of any noise-sensitive premises with windows open for ventilation purposes.

OR

- the operating noise Rating level must not exceed the Background noise level by more than 5dB(A) including any characteristics penalty. Terms and measurements to be in accordance with BS 4142: 2014 Methods for Rating Industrial and Commercial Sound.

Reason: In the interests of residential amenity

5. No development shall commence until a Construction Traffic Management Plan has been submitted to and approved in writing by the local planning authority.

Reason: In the interests of road safety

REASON FOR DECISION

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

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

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

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

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

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

Accordance with Approved Plans and Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development)

must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action.

Scottish Water

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

Local Roads Authority Consent

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

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

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

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

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

Mud and Debris on Road

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

Construction Hours and Noise-Generating Activities: You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

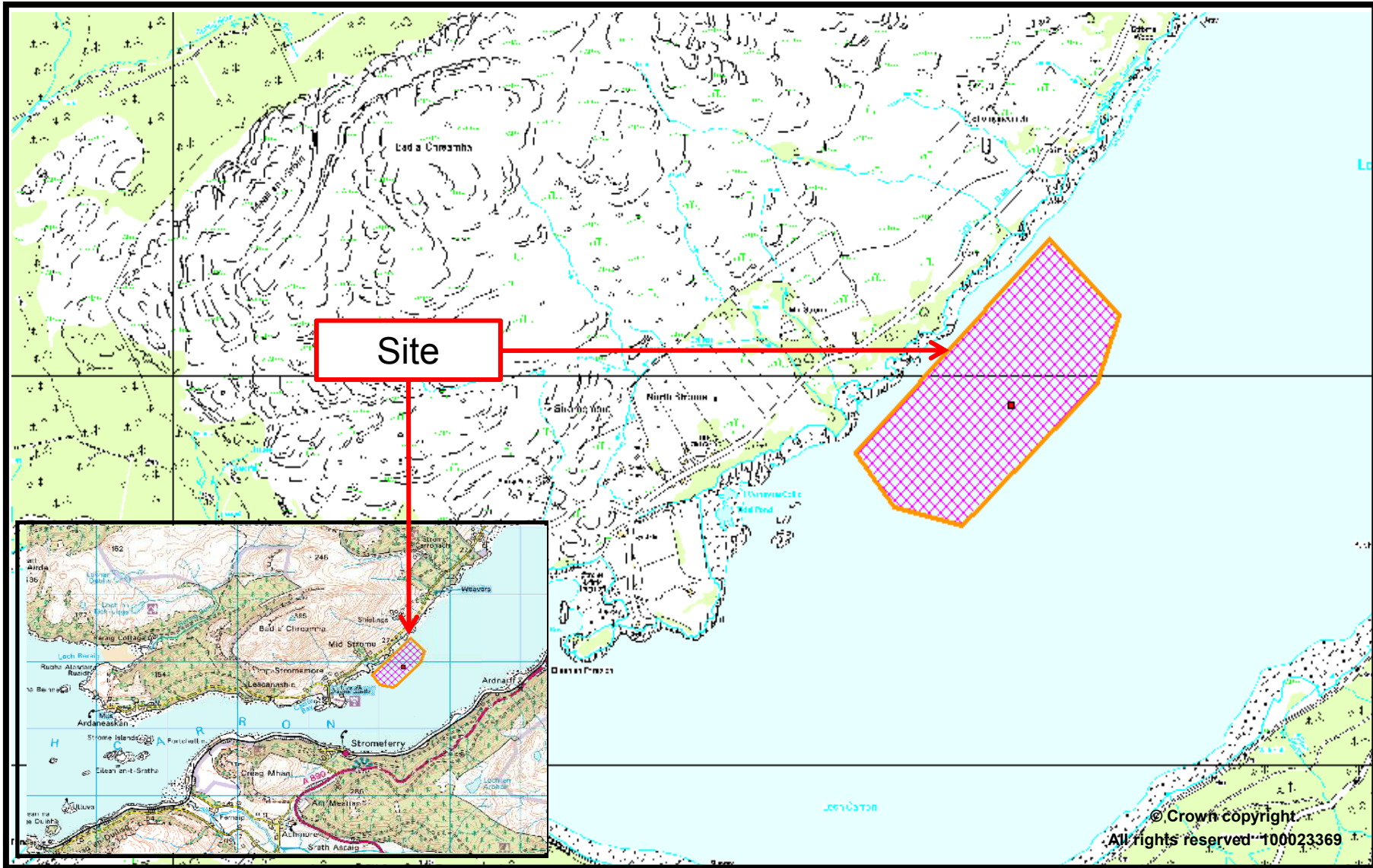
Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to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

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

Protected Species – Halting of Work

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

Designation:	Acting Head of Development Management – Highland
Author:	Mark Harvey
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Plan 1 - 000001 Location Plan as Existing Plan 2 - 000002 Location Plan as Proposed Plan 3 - 000003 Site Layout Plan Plan 4 - 000004 Site Layout Plan Plan 5 - 000005 Site Layout plan with Co-ordinates Plan 6 - KNN-0-0323 Cage Details Plan 7 - T4003D100/40(1) Cage Elevations Plan 8 - GFE_SM_200_76_GA_00001 Feed Barge Elevations Plan 9 - GFE_SM_200_76_GA_00002 Feed Barge Floor Plans Plan 10 - GFE_SM_200_76_GA_00003 Feed Barge Section Plan



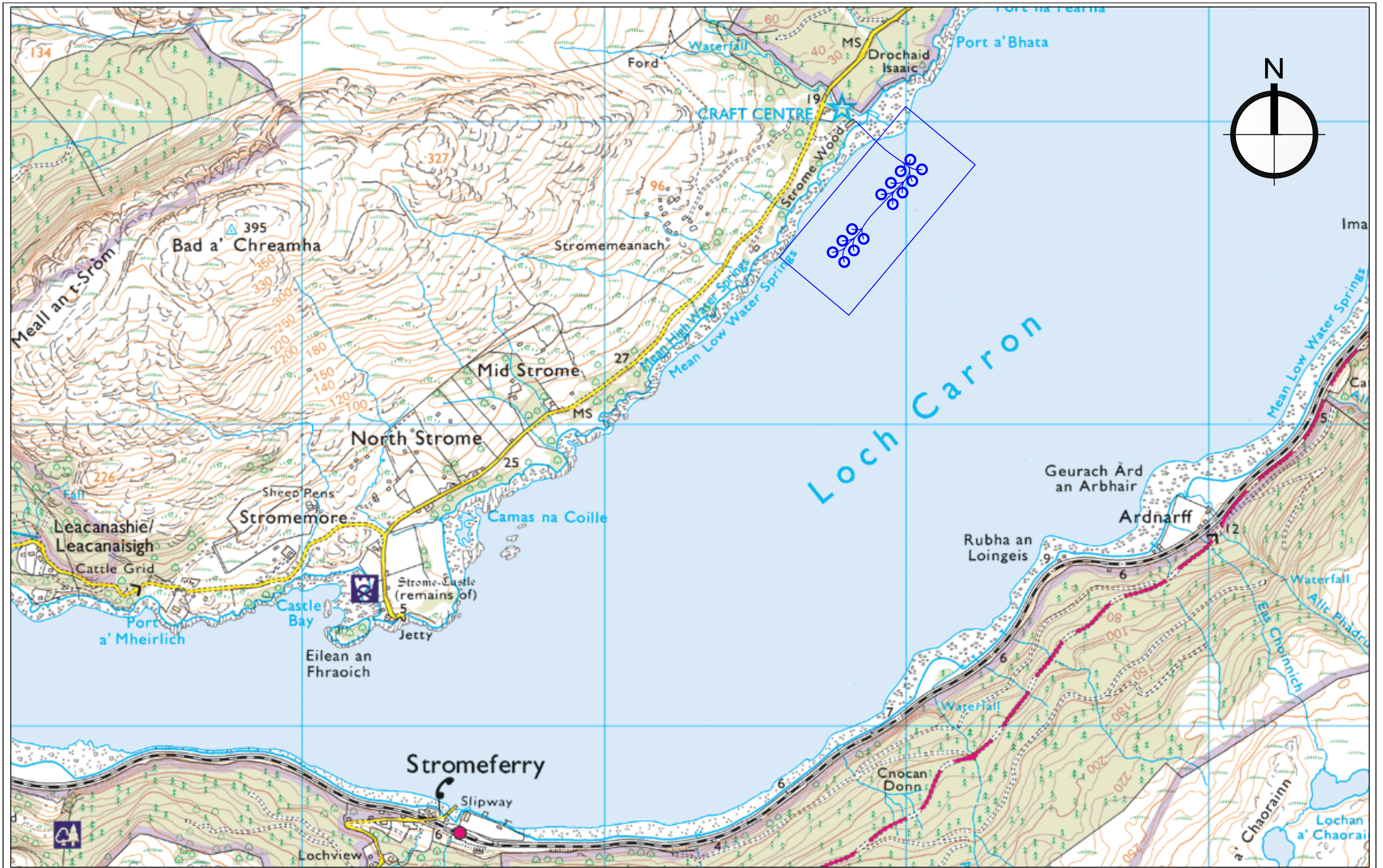
Planning and
Development Service

Location Plan
18/04819/FUL

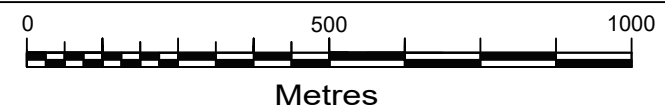
Marine Fish Farm - Installation and operation of an Atlantic salmon fish farm adjacent to the existing Strome farm - consisting of 16 circular pens each 100m circumference and an accompanying feed-barge

June 2019

Scale:



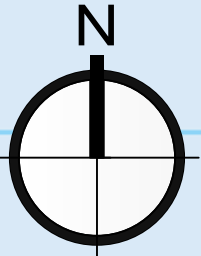
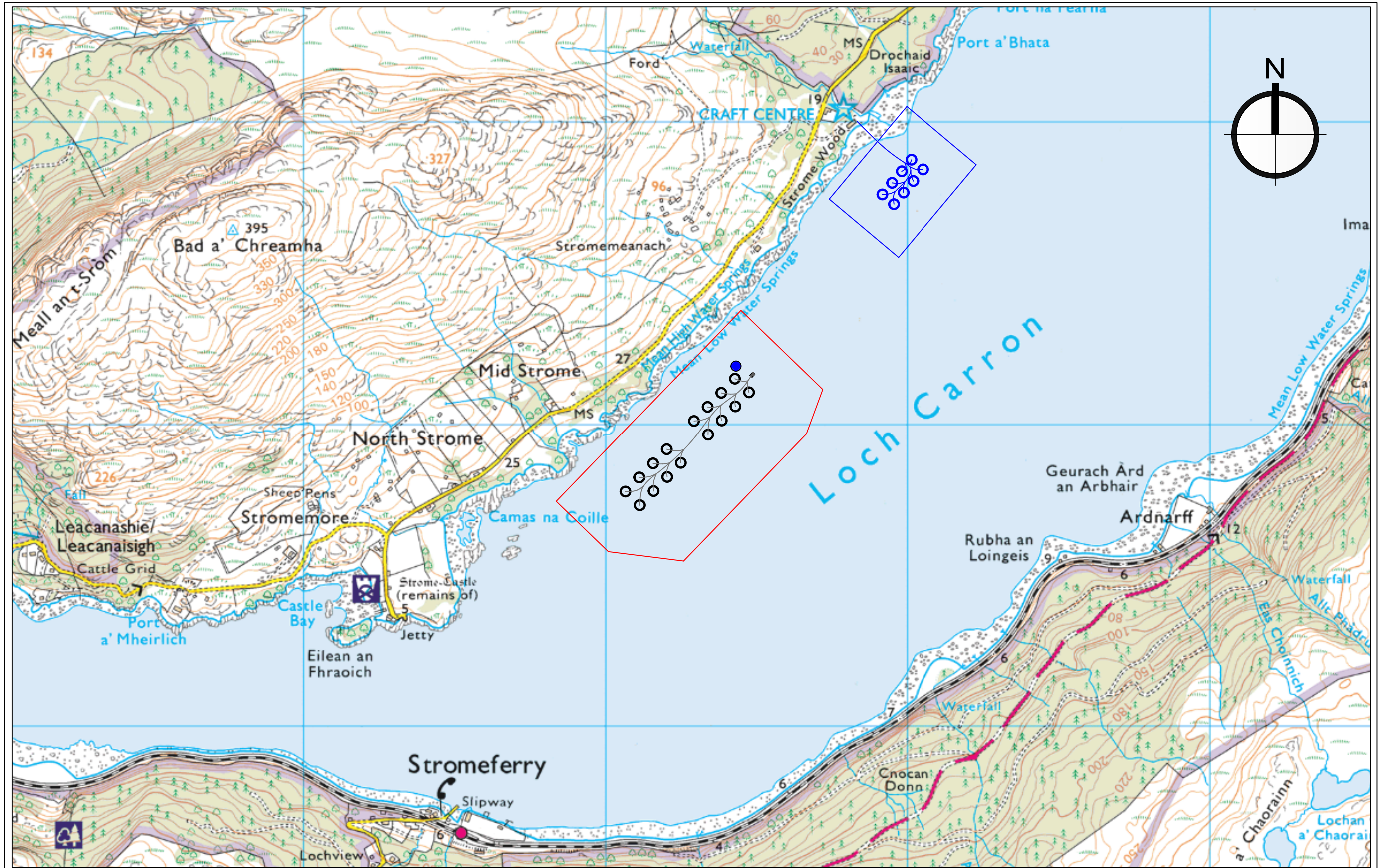
West Strome, Loch Carron, Wester Ross
Location Plan: existing permitted surface equipment, Strome site



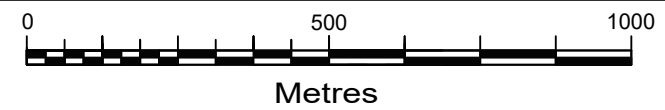
Scale
 1:12500

Key: Existing permitted Strome site

Date
 04/10/2018



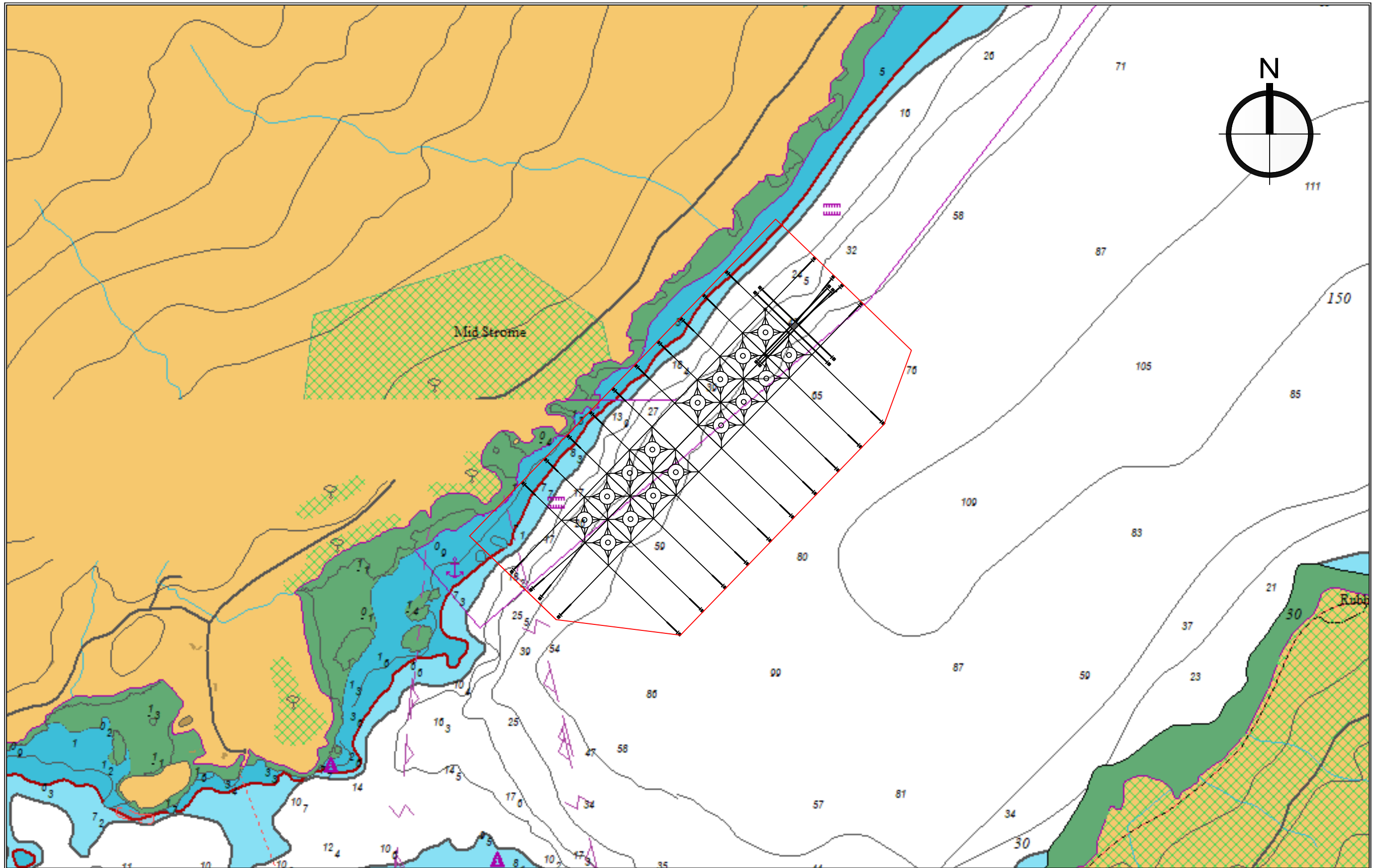
West Strome, Loch Carron, Wester Ross
Location Plan: proposed West Strome site and existing Strome site
 (reduced equipment)



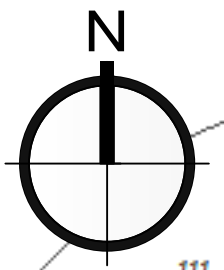
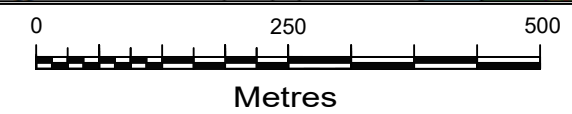
Scale
 1:12500




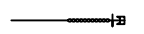
Key:	Proposed Strome site	Proposed cage	Proposed planning/mooring area	Proposed feed barge	NG 87426 36199
------	----------------------	---------------	--------------------------------	---------------------	----------------

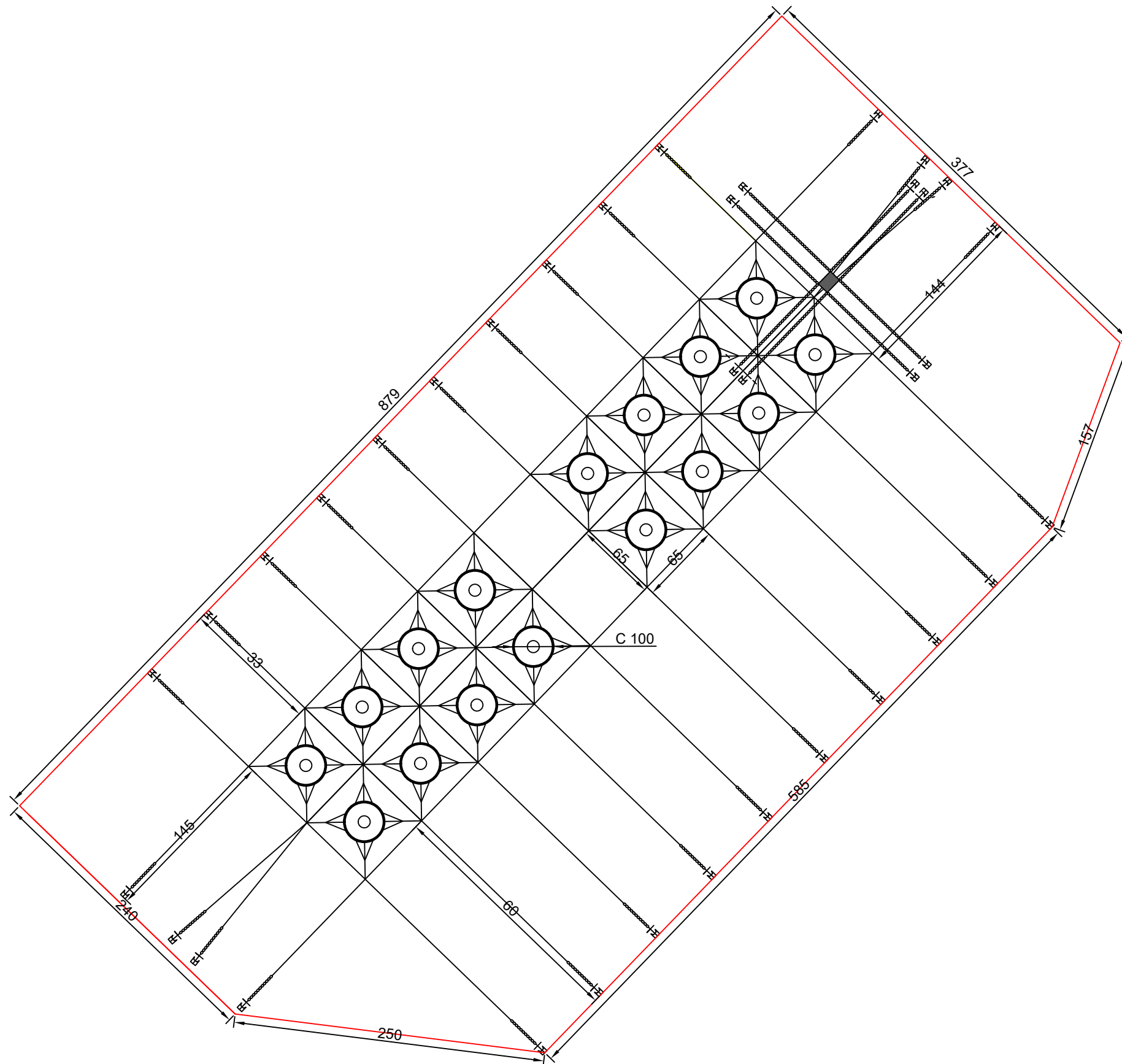
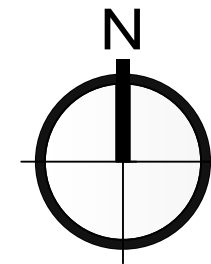
Date
 04/10/2018



West Strome, Loch Carron, Wester Ross
Admiralty chart extract: West Strome site



Key:	 Proposed planning/mooring area	 Proposed grid and cage layout	 Proposed feed barge		Proposed mooring line, chain and anchor	Scale 1:7500 Date 04/10/2018
------	--	---	---	---	---	---



West Strome, Loch Carron, Wester Ross
Schematic diagram: West Strome site layout
All dimensions given in metres

Scale
NTS

Key:



Proposed planning/
mooring area



Proposed grid
and cage layout



Proposed
feed barge

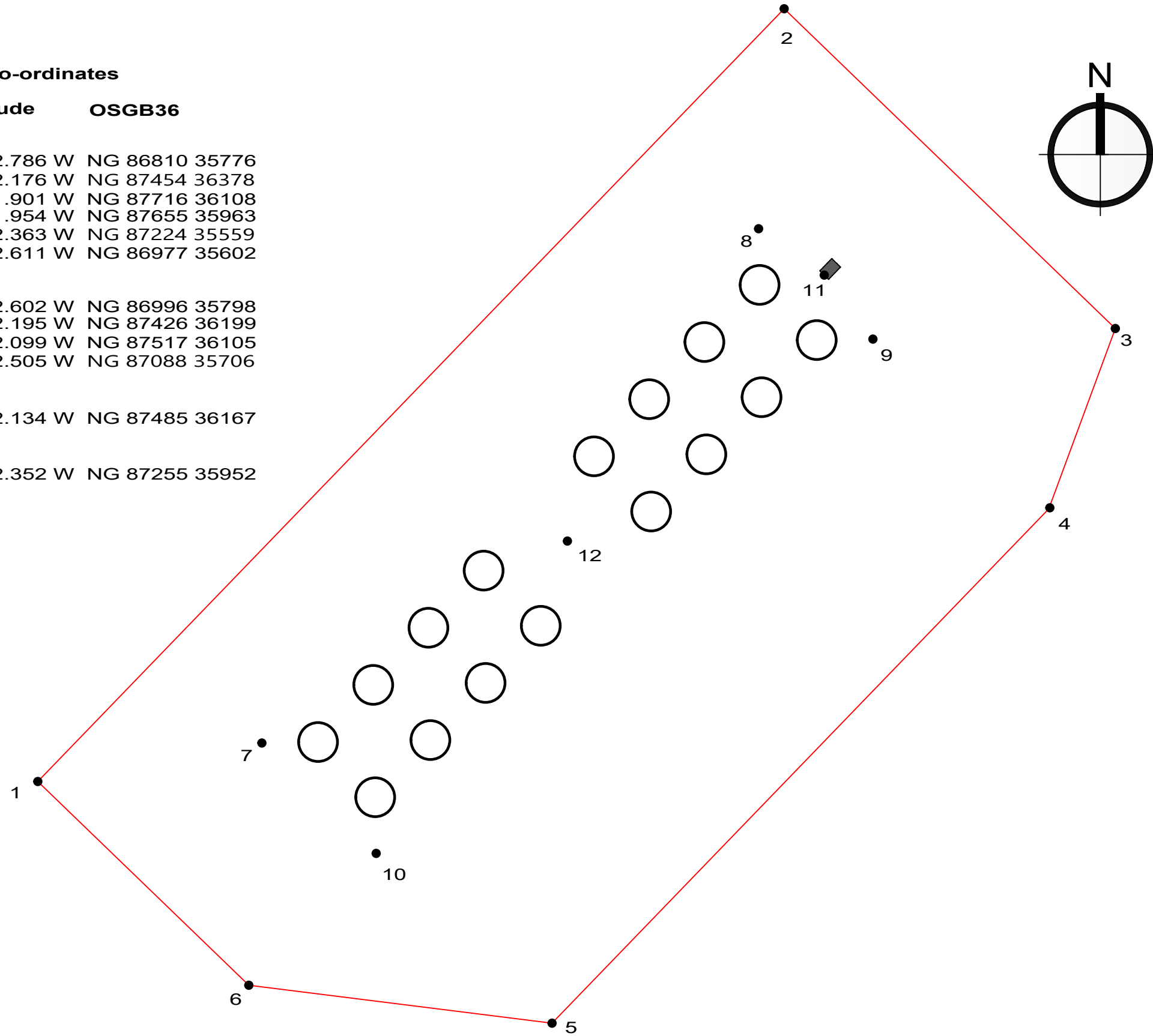


Proposed mooring line, chain
and anchor

Date
04/10/2018

Proposed co-ordinates

Position	Latitude	Longitude	OSGB36
Planning/mooring area:			
1	57° 21.744 N	005° 32.786 W	NG 86810 35776
2	57° 22.086 N	005° 32.176 W	NG 87454 36378
3	57° 21.948 N	005° 31.901 W	NG 87716 36108
4	57° 21.868 N	005° 31.954 W	NG 87655 35963
5	57° 21.639 N	005° 32.363 W	NG 87224 35559
6	57° 21.655 N	005° 32.611 W	NG 86977 35602
Grid/cage area:			
7	57° 21.761 N	005° 32.602 W	NG 86996 35798
8	57° 21.989 N	005° 32.195 W	NG 87426 36199
9	57° 21.941 N	005° 32.099 W	NG 87517 36105
10	57° 21.714 N	005° 32.505 W	NG 87088 35706
Feed barge:			
11	57° 21.973 N	005° 32.134 W	NG 87485 36167
Site centre:			
12	57° 21.851 N	005° 32.352 W <td NG 87255 35952	



West Strome, Loch Carron, Wester Ross
Site co-ordinates

Scale
 NTS

Key:



Proposed planning/
 mooring area

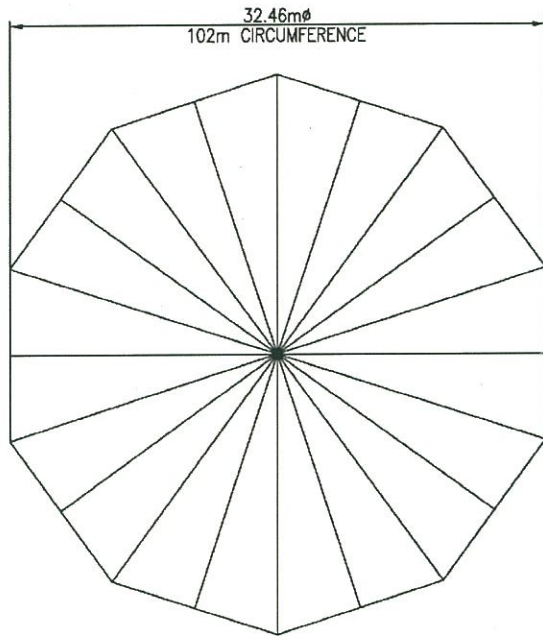


Proposed
 cage layout

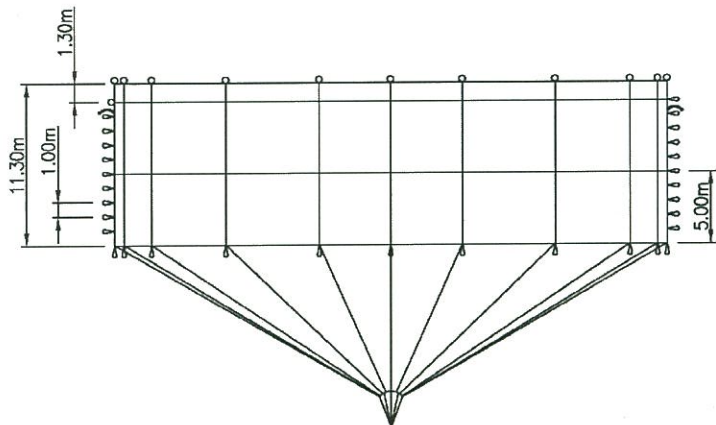


Proposed feed
 barge

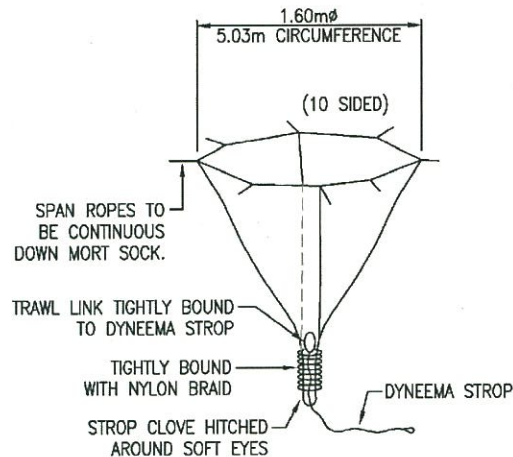
Date
 04/10/2018



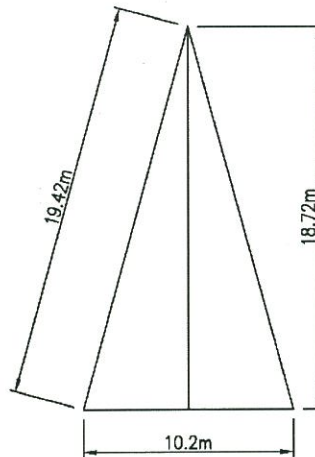
PLAN



ELEVATION

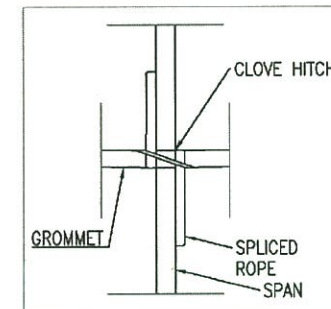


MORTALITY SOCK



FINAL BASE SEGMENT SIZE

NETTING	264 PLY STAR NET WITH 15mm MESH (FERRIC OXIIDE RED)
ROPE	16mm POLYSTEEL
TOP	16mm ROPE c/w NYLON CL RINGS AT VERTICALS
WATERLINE	16mm ROPE c/w NYLON CL RINGS AT VERTICALS
BASE PERIMETER	16mm ROPE + 1.2kg/m LEAD LINE. BOTH TO BE ENCASED IN BRAIDED POLYESTER
VERTICAL ROPE	20 x 16mm POLYSTEEL (MAXIMA) ROPES. VERTICAL ROPES TO HAVE HAND LOOPS FIXED EVERY METER AND A WEIGHT LOOP AT THE BASE
LICE TREATMENT ROPE	16mm POLYSTEEL (MAXIMA) HORIZONTAL ROPE FIXED 7.00m ABOVE BASE PERIMETER
SPANS ROPE	20 x 16mm POLYSTEEL (MAXIMA) ALL CROSSING THE BASE AND SPLICED TO OPPOSITE SIDE. THESE 20 ROPES TO HAVE 0.15kg/m LEADLINE. 10 18mm SPAN ROPES TO THE CENTER WITH A DYNEEMA STROP AND 10 TONNE TRAWL LINK ON THE INSIDE. VERTICALS TO CONTINUE AS SPANS TO THE CENTER OF BASE IN ONE PIECE. REMAINDER TO BE SPLICED AROUND SOCK GROMMET.
TWINE	1.1mm / 1.8mm NYLON BRAID
MORT SOCK	1.60m ϕ x 1.00m DEEP FROM 264 PLY STAR NETTING. MADE FROM 8 SEGMENTS (DOUBLE LAYER)
SEAL BLIND	1.60m ϕ x 1.00m DEEP FROM 18s/6mm KNOTLESS NETTING
SUPPORT LANYARD	0.80m 16mm ϕ LONG SUPPORT LANYARD WITH THIMBLE AND PIPE COVER (1.5inch ϕ BLUE LAYFLAT WATER HOSE PIPE) TO BE SPLICED INTO THE VERTICAL ROPE 0.5m BELOW THE WATERLINE. SIX TUCKS MINIMUM.
OUTER LAYER	1.6m ϕ x 1m DEEP REV SAPPHIRE
BASE CENTRE	4m x 4m PANEL
TRAWL LINKS	10 TONNE LINK c/w DYNEEMA STOP AND SOFT EYE ON OUTSIDE OF NET
LIFTING ROPE	4 x 16mm POLYSTEEL (MAXIMA) CUT TO 15.00m LONG, SUPPLIED SEPARATELY
ROPE GROMMET	GROMMET 0.5m FROM CENTRE. ROPE SPLICED INTO SPAN ABOVE POSITION OF GROMMET, CLOVE HITCHED AROUND GROMMET AND THEN SPLICED INTO SPAN AGAIN BELOW GROMMET. 5 TUCKS MINIMUM



DETAIL 1

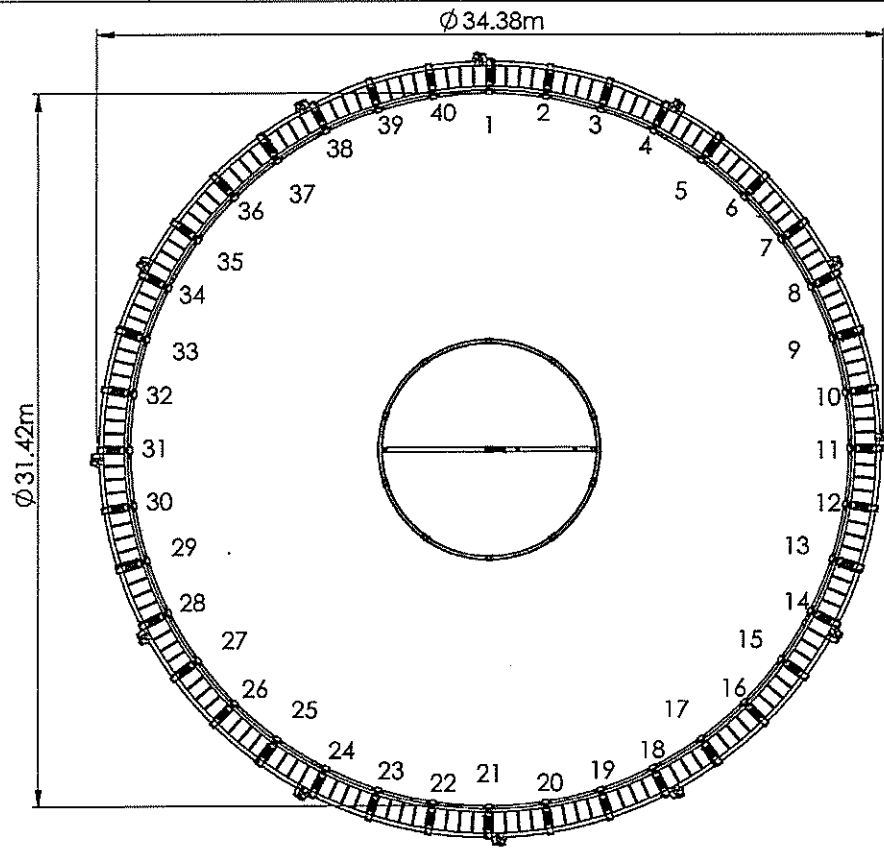
CUSTOMER	THE SCOTTISH SALMON COMPANY
SITE	UNKNOWN
DRAWN BY	FRASER ARMOUR
DATE	MAR '18
SCALE	NTS

TITLE
100m CIRC. x 10 + 1.3m
20 VERTICALS, 10 SEGMENT BASE
15mm STAR NETTING

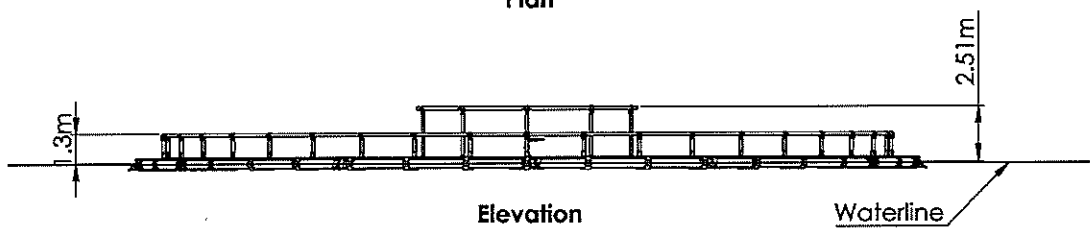
KNOX
W & J KNOX

DRAWING NUMBER KNN-01-0323 REF 1

3rd Angle Projection		If In Doubt Ask ~ Do Not Scale		Dimensions are in mm		Date	Rev	Details of Revision
Job Number	Customer	Date	Base Pipe Type	Uprights per Pen				
			400SDR21	40				



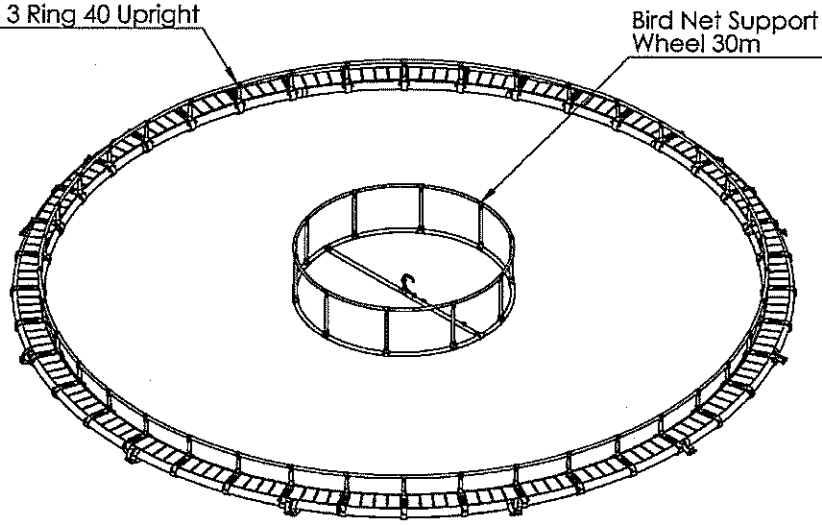
Plan



Elevation

Waterline

Pen 100m Triton400 3 Ring 40 Upright



Isometric View

Description	Qty
Flotation Rings 400mm SDR21 x 100m	3
PS Infill Inner Ring x 100m	1
Base Units 400mm	40
Stanchion Uprights 140mm SDR9 c/w retainer pins	40
Handrail Pipe 140mm SDR9 x 100m	1
Extrusion Weld Base Stops	88
Triton400 Modular Decking System x 100m	1
Mooring Sling Blue 8Ton x 6.8m	12
Pen Serial Plate	1
Bird Net Pole Support Wheel 30m	1
Sinker Tube Kit 250mm SDR11 x 100m	1

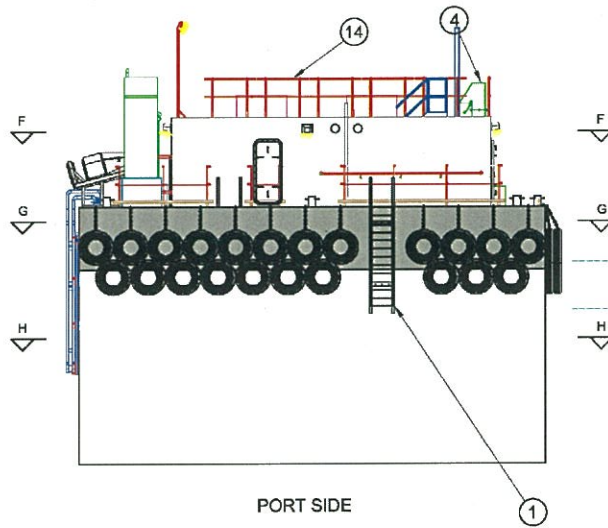
Note: Sinker tube included but not depicted as sub-surface



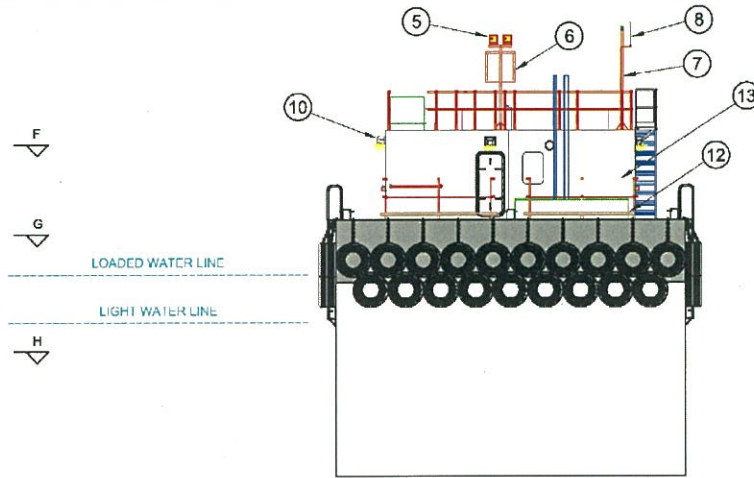
Fusion Marine Limited
 Barcaldine
 By Oban
 Argyll PA37 1SE
 www.fusionmarine.com

Title: Triton400 3 Ring 100m Pen 40 Uprights c/w Bird Net Support Wheel 30m			
Material: PE 100		Finish: Black	
Drawn: R.Edwards	Scale 1:225@ A3	Drawing No.	Rev
Date: 28/08/2018	Reference Drgs		
Checked	T4003D100/40 (1)	T4003D100/40/BNSW30 (1)	
Verified			

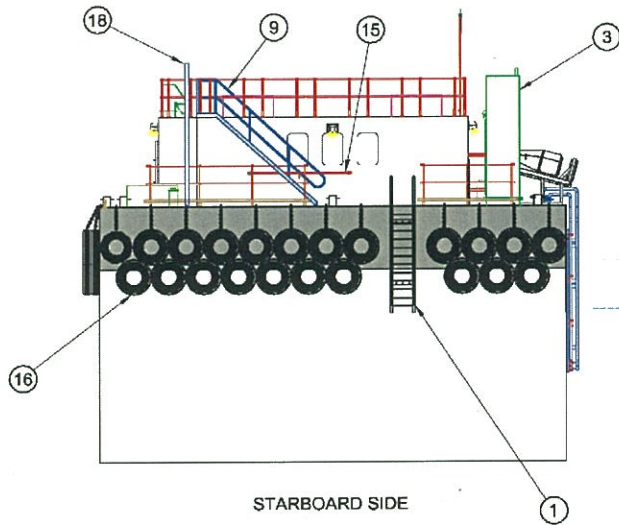
ITEM	QTY	DESCRIPTION
1	2	LADDER
2	1	COOLING TUBES
3	1	TALL VENT
4	1	GENERATOR VENT
5	2	70W DECK LIGHT
6	1	FEED SYSTEM ANTENNA
7	1	ALL ROUND WHITE LIGHT
8	1	RADIO ANTENNA
9	1	STAIRCASE
10	4	DECK LIGHT
11	1	GREY WATER OUTLET
12	8	TOE RAILS
13	5	MAIN DECK HANDRAILS
14	20	TOP DECK HANDRAILS
15	5	GRAB RAILS
16	75	FENDERS
17	1	ENSILER HATCH CONCRETE UPSTAND
18	2	GENERATOR EXHAUSTS



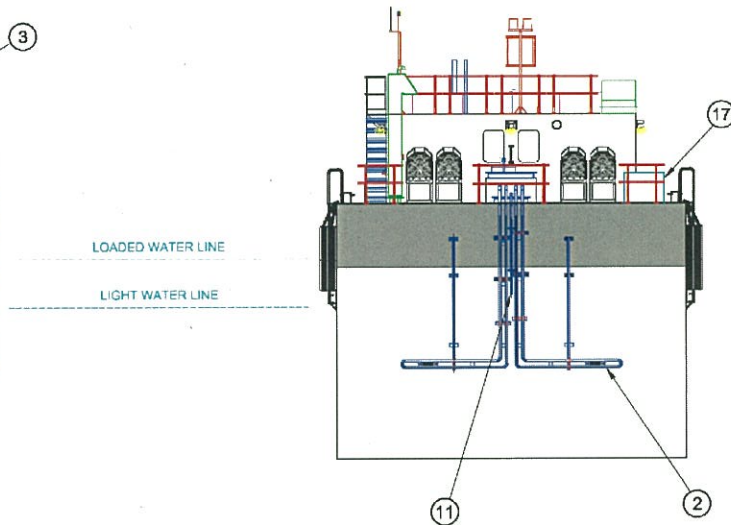
PORT SIDE



STERN



STARBOARD SIDE



FOR LETTER REFERENCE SEE DRAWING NO.
GFE_SM_200_76_GA_00002

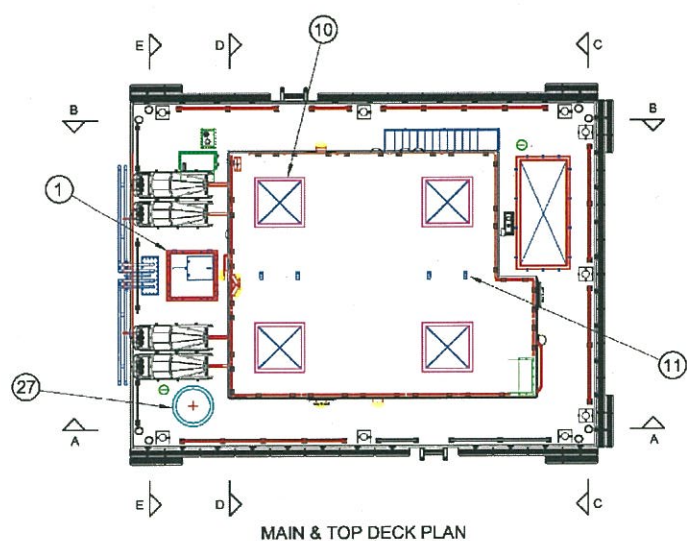
REVISION HISTORY			NAME		DATE	MATERIAL:	SHEET SCALE:	DRG. NO.:		
REV	DATE	COMMENT	DRAWN BY	APPV'D BY	DRAWN	M. JANCSCS	14/04/2016	N/A	1:150	GFE_SM_200_76_GA_00001
B	06/05/2016	UPDATED TO NEW TEMPLATE & NEW LAYOUT	M. JANCSCS	N. MACDONALD	CHK'D	N. MACDONALD	06/05/2016	N/A	A3	GENERAL ARRANGEMENT
					APPV'D	N. MACDONALD	06/05/2016	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS	3rd ANGLE PROJECTION	PROJECT: GFE_SM_200_76
								FINISH:	TOLERANCES (UOS):	SYSTEM: GA
								Ra In µm - ISO 1302 DEBURR & BREAK SHARP EDGES	DIM: $\begin{cases} <4000\text{mm ISO 2768-K-E} \\ \geq 4000\text{mm DIN 7168-T} \end{cases}$	RELEASE NOTE: RELEASED
								THIS DRAWING IS COPYRIGHT AND IS THE PROPERTY OF GAELFORCE ENGINEERING LTD. IT MUST NOT BE COPIED OR DISCLOSED TO A THIRD PARTY WITHOUT THE WRITTEN CONSENT OF GAELFORCE ENGINEERING LTD.	GEO- METR. TOL. $\begin{cases} <3000\text{mm ISO 2768-K-E} \\ \geq 3000\text{mm DIN 7168-T} \end{cases}$	REVISION B SHEET: 1 OF 1
								REFERENCED DOCUMENT (NO. / TITLE)	GEN. TOL. WELDED PARTS: ISO 13920-BF CHAMFERS: ISO 13715 (DIN 8784)	



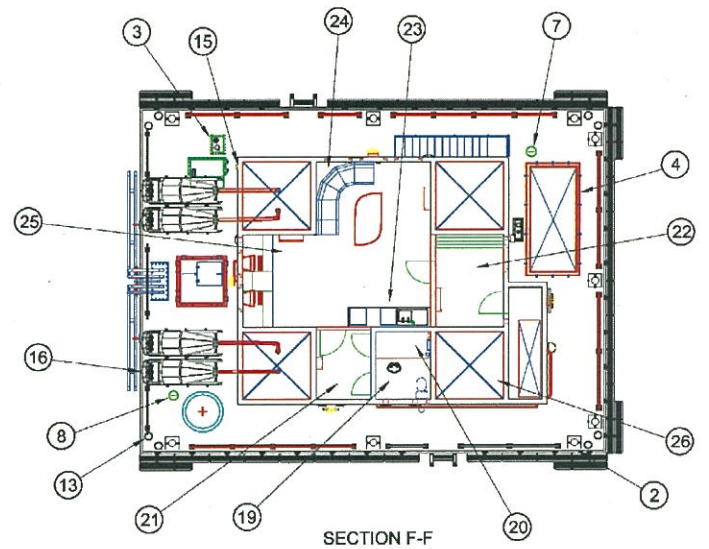
Gael Force Engineering
Gael Force Group
138 Anderson Street, Inverness, IV3 8DH
Tel: +44 (0)1463 716660 Fax: +44 (0)1463 716048
email: gfeengineering@gaelforce.net
website: www.gaelforcegroup.com

ITEM	QTY	DESCRIPTION
1	1	BLOWER / ESCAPE HATCH
2	9	BOLLARDS
3	1	HYDRAULIC BOX
4	1	GENERATOR HATCH
5	1	GENERATOR HATCH COVER
6	1	12 VOLT PANEL
7	1	DIESEL INLET
8	1	FRESH WATER INLET
9	4	AIR PRESSURE SENSORS
10	4	SILO HATCH
11	4	SILO FILLER LID SUPPORT
12	1	FRESH WATER PUMP
13	8	MOORING TUBE
14	4	SELECTOR SUPPLY
15	4	SELECTOR ISOLATOR
16	4	SELECTOR
17	4	BILGE PUMP
18	4	BILGE PUMP ALARM
19	1	BATHROOM
20	1	STORAGE ROOM
21	1	-
22	1	DRYING ROOM
23	1	KITCHEN
24	1	SEATING AREA
25	1	OFFICE
26	4	SILO
27	1	ENSILER HATCH
28	1	ENSILER TANK
29	1	SILAGE TANK
30	1	GENERATOR
31	1	GENERATOR

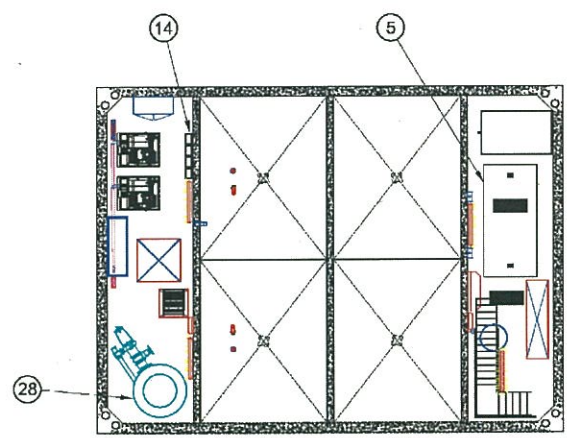
FOR LETTER REFERENCE SEE DRAWING NO.
GFE_SM_200_76_GA_00003



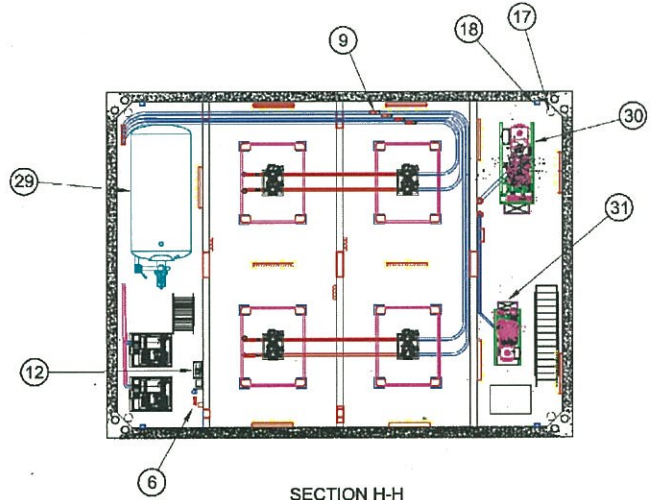
MAIN & TOP DECK PLAN



SECTION F-F



SECTION G-G



SECTION H-H

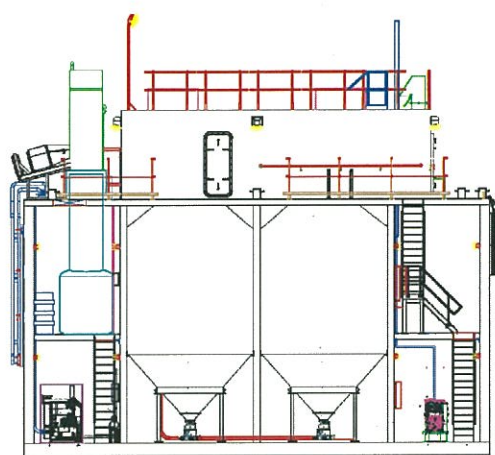
REVISION HISTORY			NAME		DATE	MATERIAL:	SHEET SCALE:	DRG. NO:
REV	DATE	COMMENT	DRAWN BY	APPVD BY		N/A	1:150	GFE_SM_200_76_GA_00002
B	06/05/2016	UPDATED TO NEW TEMPLATE & NEW LAYOUT	M. JANCICS	N. MACDONALD	14/04/2016	WEIGHT: N/A	A3	TITLE: GENERAL ARRANGEMENT
C	12/05/2016	ADDED HANDRAIL TO STARBOARD SIDE	M. JANCICS	N. MACDONALD	06/05/2016	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.	3rd ANGLE PROJECTION	PROJECT: GFE_SM_200_76
						FINISH: Ra 1.6 µm - ISO 1302 DEBURR & BREAK SHARP EDGES	TOLERANCES (UG9): DIM. <math>\begin{matrix} <4000\text{mm ISO 2768-K-E} \\ <2000\text{mm DIN 7168-T} \end{matrix}</math>	SYSTEM: GA
						THIS DRAWING IS COPYRIGHT AND IS THE PROPERTY OF GAELFORCE ENGINEERING LTD. IT MUST NOT BE COPIED OR DISCLOSED TO A THIRD PARTY WITHOUT THE WRITTEN CONSENT OF GAELFORCE ENGINEERING LTD.	GEO-METRL TOL: <math>\begin{matrix} <3000\text{mm ISO 2768-K-E} \\ <2000\text{mm DIN 7168-T} \end{matrix}</math>	RELEASE NOTE: RELEASED
							GEN. TOL. WELDED PARTS: ISO 13820-BF CHAMFERS: ISO 13715 (DIN 6784)	REVISION: C SHEET: 1 OF 1



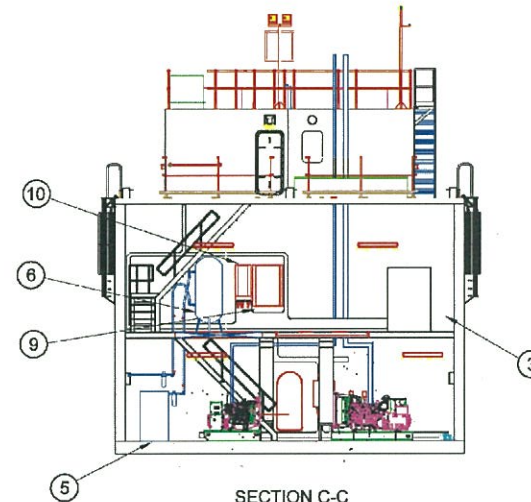
Gael Force Engineering
Gael Force Group
138 Anderson Street, Inverness, IV3 8DH
Tel: +44 (0)1463 716680 Fax: +44 (0)1463 715948
email: gfe@gaelforce.net
website: www.gaelforcegroup.com

ITEM	QTY	DESCRIPTION
1	4	22KW BLOWER
2	1	ESCAPE LADDER
3	1	DIESEL FUEL TANK
4	1	FRESH WATER TANK
5	1	COMPRESSOR
6	1	L900 AIR RECIEVER
7	1	FEED PANEL
8	8	DOSER
9	1	3 PHASE D/B 1
10	1	D/B 2
11	4	SELECTOR SUPPLY PANEL
12	2	EXHAUST
13	2	EXHAUST SILENCER
14	1	SILAGE DISCHARGE PANEL
15	1	ENSILOR PANEL

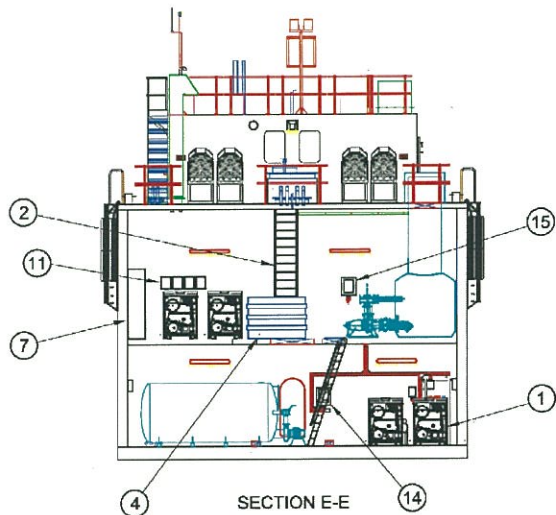
FOR LETTER REFERENCE SEE DRAWING NO.
GFE_SM_200_76_GA_00002



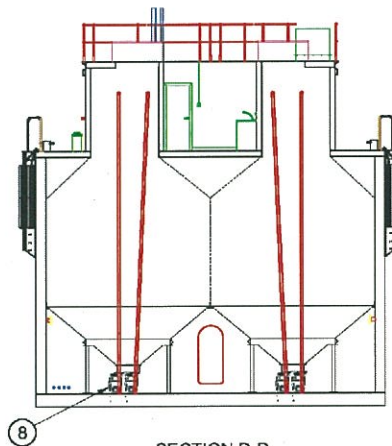
SECTION A-A



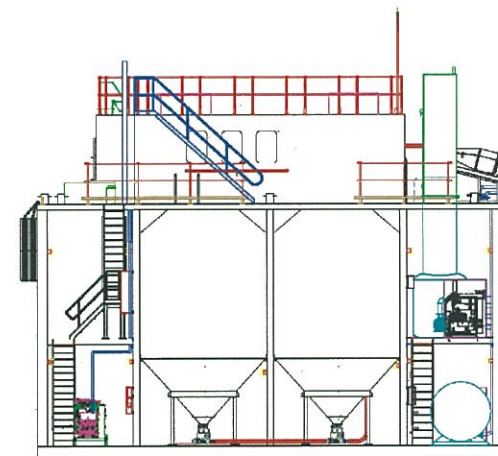
SECTION C-C



SECTION E-E



SECTION D-D



SECTION B-B

REVISION HISTORY			NAME	DATE	MATERIAL:	SHEET SCALE:	DRG. NO:				
REV	DATE	COMMENT	DRAWN BY	APPVD BY	DRAWN	M. JANCICS	14/04/2016	N/A	1:150	GFE_SM_200_76_GA_00003	
B	06/05/2016	UPDATED TO NEW TEMPLATE & NEW LAYOUT	M. JANCICS	N. MACDONALD	CHKD	N. MACDONALD	06/05/2016	N/A	A3	TITLE: GENERAL ARRANGEMENT	
					APPVD	N. MACDONALD	06/05/2016	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS	3rd ANGLE PROJECTION	PROJECT: GFE_SM_200_76	
								FINISH: Ra In µm - ISO 1302 DEBURR & BREAK SHARP EDGES	TOLERANCES (UO3): DIM. < 4000mm ISO 2768-K-E > 4000mm DIN 7168-T	SYSTEM: GA	
								THIS DRAWING IS COPYRIGHT AND IS THE PROPERTY OF GAELFORCE ENGINEERING LTD. IT MUST NOT BE COPIED OR DISCLOSED TO A THIRD PARTY WITHOUT THE WRITTEN CONSENT OF GAELFORCE ENGINEERING LTD.	GEN. TOL. WELDED PARTS: ISO 13920-BF CHAMFERS: ISO 13715 (DIN 8784)	RELEASE NOTE: RELEASED	
										REVISION B	SHEET: 1 OF 1



Gael Force Engineering
Gael Force Group
138 Anderson Drive, Inverness, IV3 8DH
Tel: +44 (0)1463 716680 Fax: +44 (0)1463 715948
email: gfe@gaelforce.net
website: www.gaelforcegroup.com