Mr. John Campbell, Divisional Engineer

Ms Ann McCarthy, AFMD

RE: Aquaculture licence application by PKD Oysters Ltd. for suspended oyster culture at a site in Dundalk Bay.

File ref T1/99

Background

The applicant proposes growing Pacific oysters on trestles and in cages on a large (26 hectare) site on an area of tidal flat adjoining Salterstown townland in the southeast part of Dundalk Bay. The applicant is French based and has oyster farm interests in many parts of Ireland including Dungarvan Bay.

Description of site

I inspected the site on 18/10/13. The site is located on intertidal foreshore 150metres north of a coastal road– the substrate is clean sand, mostly hard to moderately hard. Levels vary across the proposed site – for the most part it slopes offshore (west to east) with a gentle gradient although there are some undulations resulting in shallow depressions and low water channel areas where tidal pools persist after the tide has fallen to low water mark.

View of site from south – note clean substrate, flat gradient and unidirectional ripple marks 18/10/13

The substrate has small sand ripples indicating presence of currents. The site is exposed to the north, to the east and to a lesser extent to the northwest (short fetch 4.5 km at high tide) and south east/ south south east (waves diffracting from deeper water offshore). On the date of inspection there was a strong easterly wind which illustrated that site may be difficult to operate in such easterly weather conditions. In general though the site location is favourable being well sheltered from prevailing southwest direction.

The site is bounded by cobbles and coarse gravels to south.

Access

The site is accessible from a public road nearby. The road itself is a narrow road 3-4m wide with some pull in points to allow meeting traffic to pass – so it would not be ideal for heavy traffic – it does serve local farmers and as a designated scenic route (SR18 in Louth County Development Plan 2009-2015) receives considerable visitor traffic. Note that the access onto the shore from road would not be suitable for laden vehicles due to steepness of roadside bank (see photo below) – unless modification work was done at that location (eg building a shallow sloped ramp from road level to gravel bank below). I have raised this matter by email with applicant on 12/11/13.

Access position from public roadway 18/10/13

Proposed structures

Besides standard sized trestles with wide feet the applicant envisages (in Doc 9 attached to application) that it may be necessary to use pikes or use of trestles with

longer (deeper) feet (an extra 0.6m into ground) to prevent overturning due to wave forces. It is also proposed that trestles will be joined together with tubes. I see no problem with wide feet or tube connectors but the use of embedded feet or pikes needs further clarification and consideration (because of potential for installation and removal impacts on the environment – e.g. could pieces of metal be left embedded in seabed , create safety hazard afterwards, etc. I have put some queries on this aspect by email to the applicant 12/11/13

Site development plan

The applicant has proposed a production of 635 tonnes from year 3 onwards based on use of 10484 trestles and up to 500 cages. The site layout proposed can accommodate up to 27000 trestles by my estimation so site is oversized relative to proposed production and layout. However the layout is a very dense distribution of trestles and it may be prudent to allow the larger area for more flexibility in farm positioning within the site. I have put a query on site size v production plans to the applicant by email 12/11/13.

Other foreshore usages in the area

1) Natura 2000
The site is located in Dundalk Bay SAC (000455) and SPA (004026). Appropriate assessment is required for aquaculture development in such a location. In 2011 an appropriate assessment was carried out for the then proposed and existing aquaculture in Dundalk Bay. Because that assessment study predates this application, it did not include an assessment for this proposed oyster farm development. I have read the 2011 appropriate assessment and conservation objectives documentation. It appears to me from my review of that 2011 "Appropriate Assessment of fisheries and aquaculture on Dundalk Bay SAC and SPA" that there is unlikely to be an impediment to this suspended oyster development proposal arising from the findings of that assessment. However I understand from AFMD that it requires a formal determination on that question by the Marine Institute. I recommend that the Marine Institute appropriate assessment be carried out as soon as possible because this proposed development is an important initiative for aquaculture development in the Bay and I expect the assessment can be done relatively easily based on information which is already largely collected and compiled and still relatively recent.

2) Other beneficial usage
Cockle fishing – at a significant distance further to west of proposed site. Oyster farm proposed should not interfere with fishery. Hand gathering of molluscs would occur in this area of the Bay. Mussel gathering area would be south of site and not on the site.
Brown shrimp / Razor clam fishing – this would occur in deeper water (sub-tidal waters) to east of proposed oyster site. The oyster farm, proposed should not I expect directly interfere with razor clam fishing ground.
Shore angling - small scale at high tide.

Visual impact

The public road to the south of the site is considered a scenic route in the Louth County Development Plan 2015-21 (Refer to Scenic Route SR 18 Castlebellingham – Annagassan-Clogherhead-Termonfeckin in Table 6.4 of that Plan). Also there is a listed View and Prospect from this road on the east side of proposed site (Refer to View and Prospect VP 19 Salterstown – sea views across Dundalk bay towards Cooley and Mourne Mountains in Table 6.5 of that Plan).

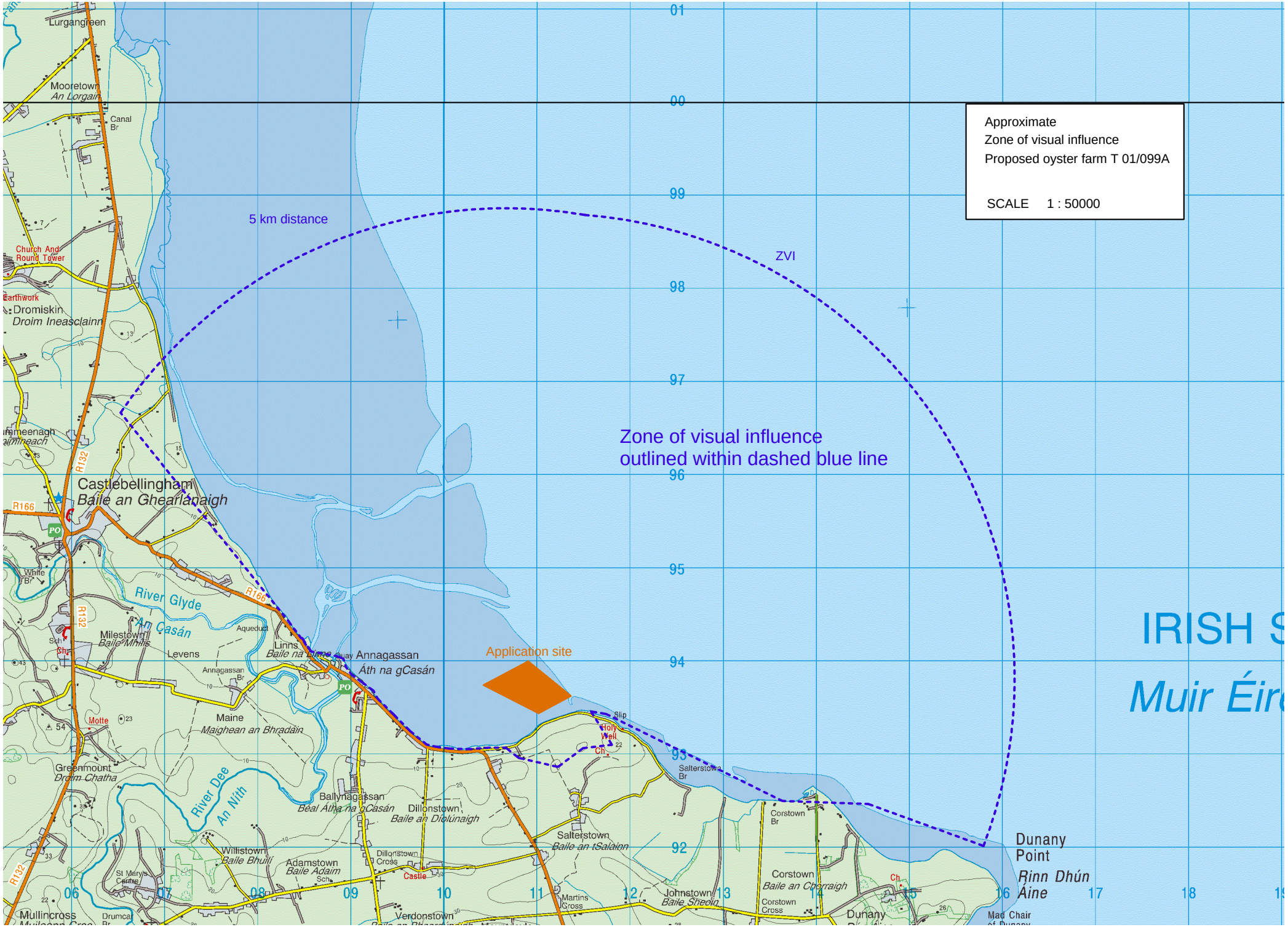
Landscape and visual impact of the proposed development as seen from public views along the road will therefore be of considerable importance in assessing the overall environmental impact of the proposed development.

Attached 1: 50000 scale map titled "Approximate Zone of Visual influence, Proposed oyster farm T 01/099A " shows that visibility of the site from public roads is mainly from a 1 km section of road at Salterstown. This is the road section which is closest to the site (approximately 150 m from SE boundary line of site). Elsewhere visibility of site is mostly limited to views from foreshore area/at sea. Where views of the site exist from the Castlebellingham –Annagassan areas they are from low elevation and long distance so impact significance will I think be negligible in those cases.

From the principal 1km long section of road at Salterstown from which views will occur, views of the site will be either from vehicles or from walkers. In the main public views will be from moving vehicles or from stationary vehicles at a small number of pull in areas (2 or 3 car lengths long) . There are no formal park up areas along the narrow road. For tourist users one can expect viewer sensitivity to be medium to high and impact significance to be of medium magnitude – the oyster farm will occupy much of foreground view but not obscure more distant sections of the Bay or view of mountains in distance because road way is elevated some 8-10 metres above shore level. Assuming medium to high sensitivity of receptor combined with medium impact magnitude, my preliminary conclusion is that for the limited I km road section in question from which the farm will be visible at close quarters, the significance of the visual impact will be mostly moderate to occasionally substantial. On adjoining sections of the scenic route the visual impacts will be slight to nil. On that basis I conclude that the visual impact of the proposed development from the scenic coastal road Annagassan to Salterstown will on aggregate be slight to moderate and I consider it acceptable at this point keeping in mind that the visibility of the development in Dundalk Bay and surrounds is low. This issue can be addressed in more detail if required later bearing in mind also that the site scale may be cut back.

Noise/Disturbance impacts

Because of very large scale of the proposed development there will be a need for careful drafting of operating requirements designed to give protection to other usages of the shore area (minimise noise, disturbance, traffic and visual impacts) and ensure orderly development. If to be licensed I would recommend inclusion of a number of site specific operational requirements along the lines of those adopted in Drumcliff


Approximate
Zone of visual influence
Proposed oyster farm T 01/099A
SCALE 1 : 50000
5 km distance
ZVI
Zone of visual influence
outlined within dashed blue line
Application site
Castlebellingham
Baile an Ghearlanaigh
Annagassan
Áth na gCasán
Dunany Point
Rinn Dhún Áine
IRISH S
Muir Éir
Lurgangreen
Mooretown
An Lorgain
Canal Br
Church And Round Tower
Earthwork
Dromiskin
Droim Ineasclainn
R132
R166
River Glyde
An Casán
Milestown
Baile Mhíle
Levens
Linns
Baile na Linne
Aqueduct
Annagassan Br
Maine
Maighean an Bhradáin
Motte
Greenmount
Droim Chatha
River Dee
An Nith
Ballynagassan
Béal Átha na gCasán
Dillonstown
Baile an Dúlúnaigh
Willistown
Baile Bhuill
Adamstown
Baile Adaim
Dillonstown Cross
Castle
St Mary's Centre
Salterstown
Baile an tSalainn
Salterstown Br
Corstown Br
Corstown
Baile an Chorraigh
Corstown Cross
Johnstown
Baile Sheoin
Martins Cross
Verdonstown
Mullincross
Drumcar
Holy Well
Slip
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Castle
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View of foreshore area visible from public road ; the proposed oyster site is outlined in red 18/10/13

Bay, Co. Sligo for instance – there would be a need to put limits on vehicle numbers, vehicle speed on foreshore etc.

Recommendation

Other than the issue of site being in Natura 2000 area I see no impediment to the development proposal being considered in a positive light for licensing.

With suitable conditions designed to minimise noise and disturbance and impact on other foreshore usages included in a licence , I consider that the proposed development could be accommodated at the proposed site without significant environmental impact resulting.

I recommend that the development proposal go to appropriate assessment as soon as possible as this to me seems to be the main issue that could hold up its being considered further for licensing.

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Paul O'Sullivan
Engineering Division
14/11/13