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Working with water

11.45 Rossaveal Port

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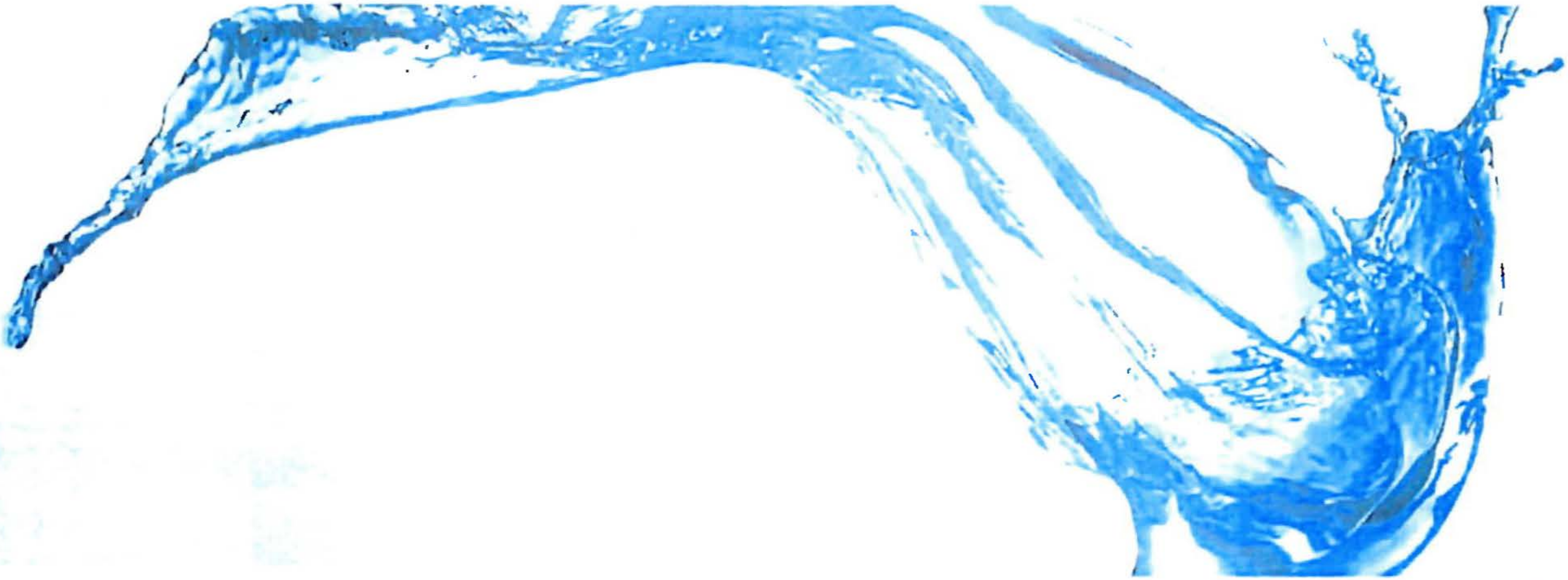

Galway Harbour Extension Oral Hearing

Submission on alternatives

22 January 2015

Vincent Crockett

My name is Vincent Crockett and I am a technical director in the Ships Group of HR Wallingford in the United Kingdom. I am a chartered civil engineer with a first degree in civil engineering and a master's degree in international transport specialising in ports and shipping. I have been with HR Wallingford since 2008 having previously worked with Mott MacDonald since 1989.

I have over 35 years of post graduate experience primarily in the field of port planning and related development, with a particular focus on the navigation or waterside aspects of the port planning process.

Arising from my work with Mott MacDonald I have particular knowledge of the Rossaveel project having been involved with it since the early 2000s and responsible for the development of a phased master plan for the port including the relocation of Aran Island ferry operations to the current purpose built location.

Several real time navigation studies were carried out by HR Wallingford in support of the proposed master plan.

Since joining HR Wallingford I have been providing ad hoc assistance to CoisteTacaíochtaCalaphortRos a' Mhil as required.

The attached presentation is intended to demonstrate to the Inspector that there is a significant omission in the Galway Harbour Extension proposal documentation in that no mention is made of the long standing and well developed proposals for Rossaveel.

Rossaveel is unlikely to be able to accommodate all of the features of the proposed Galway harbour extension but it does offer a significant opportunity to ensure that only appropriate development takes place at each location. In particular, Galway should have a world class waterfront and appropriate development at Rossaveel would assist in meeting this objective.

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Observations on proposal (1)

Overall concept

As vessel and cargo handling technologies have changed traditional city centre ports have migrated downstream or to other locations

The proposal does not follow this model – if it did a starting point for the concept would be a location off Mutton Island?

Natural depths of 10m CD and more off Mutton Island?

Concept is confusing – is it cruise or commercial business led? Lost opportunity for a waterfront city

Port and cruise terminal buildings sterilise future cargo handling areas

No opportunity appears to be taken to develop the existing locked basin?

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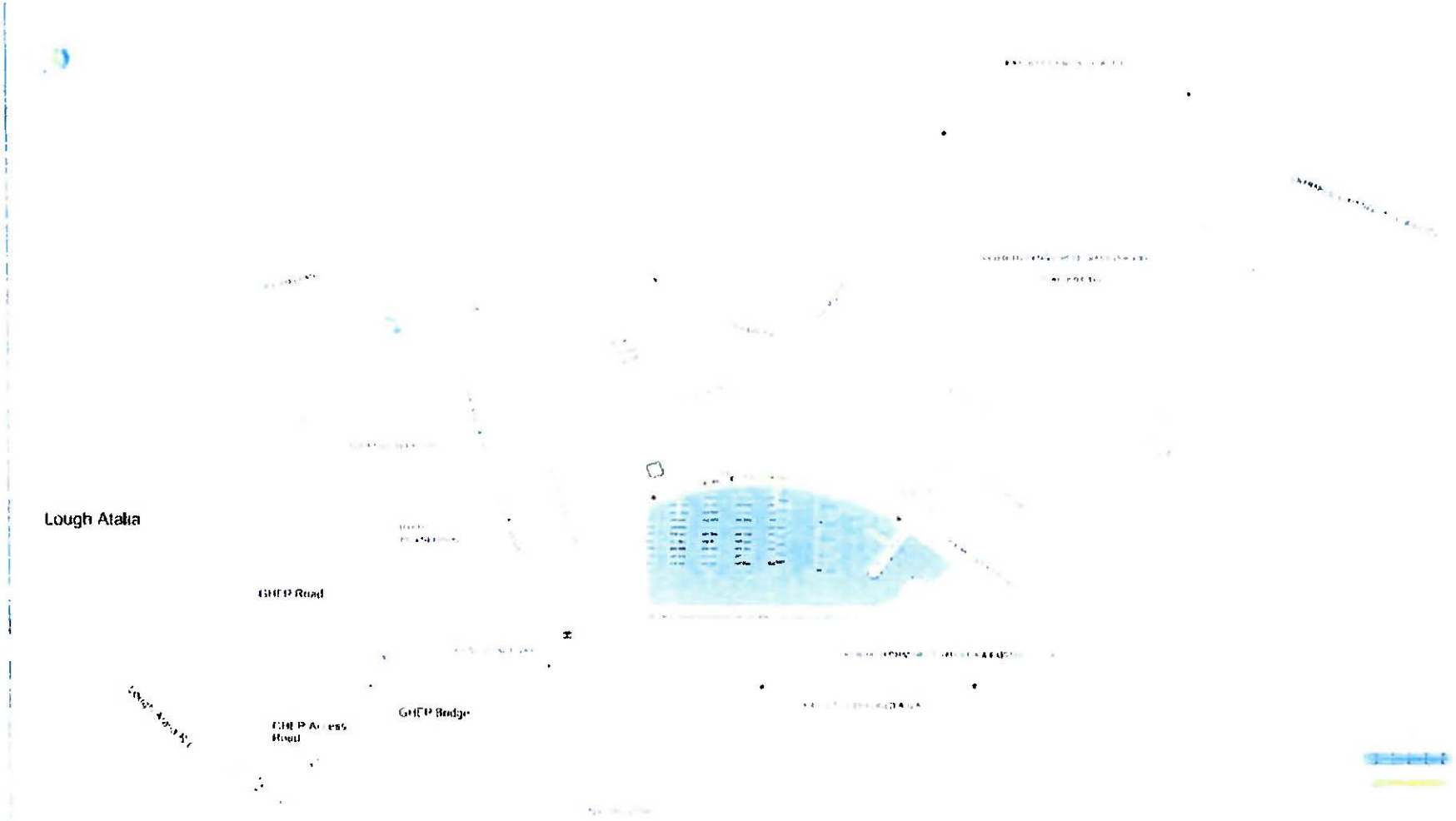
Observations on Proposal (2)



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Observations on proposal (3)

Cruise (1)

Home port or way port?

Unrestricted tidal access? Larger cruise ships have draughts in excess of 8m to 9m or more and operators often require 2m under the keel.

Depth of 10m to 11m CD or more is required for full tidal access? Cruise ship operators prefer not to be constrained by tidal windows

Natural depths of 10m and more off Mutton Island

Limiting wind conditions in manoeuvring area?

Remote berths: passengers will need to transfer to city centre by shuttle coach

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Observations on proposal (4)

Cruise (2)

Significant space for coach parking may be required and is not shown.

Small cruise ship with 1,000 passengers coming ashore may require 20 coaches

400m diameter turning circle is about 1.1 times length of Oasis Class ships – is there enough space? Navigation simulation?

City economics – revenue streams are widely dispersed in the economy

ISPS zoning requirements

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Observations on proposal (5)

Commercial port considerations

Design vessel for commercial operations

How will berth(s) be shared between cruise and commercial operations ?

There is a 4m depth difference between the manoeuvring area and the berth pockets.

This represents a significant tidal constraint if the full potential of the 12m alongside depth is to be realised

Interaction between products tankers and other operations.

Single point mooring or island berth for products?

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Other alternatives omitted include Rossaveel

Rossaveel: Selected positive features

- Relatively low risk project with significantly reduced capital dredging
- No requirement for breakwater – natural shelter
- Quay development space up to 700m on a single alignment
- Good natural depths of -10mCD in approach
- No complex hydraulic considerations
- Concept is supported by navigation simulation studies
- Planning permission in place for deep water quay

Rossaveel can contribute to port capacity in Galway Bay but:

- 200m turning circle could be larger but is adequate for ships of 20,000 DWT
- It will not be able to accept large cruise ships – typically ships such as "Hanseatic" or "Bremen" (not what the development is primarily for)
- Road links would need to be improved/developed (no rail)

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Rossaveel potential 700m long quay development

Rossaveel potential full development scenario

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Rossaveel initial 200m long quay development