Submission Ref: S3-116

Annette Ryan

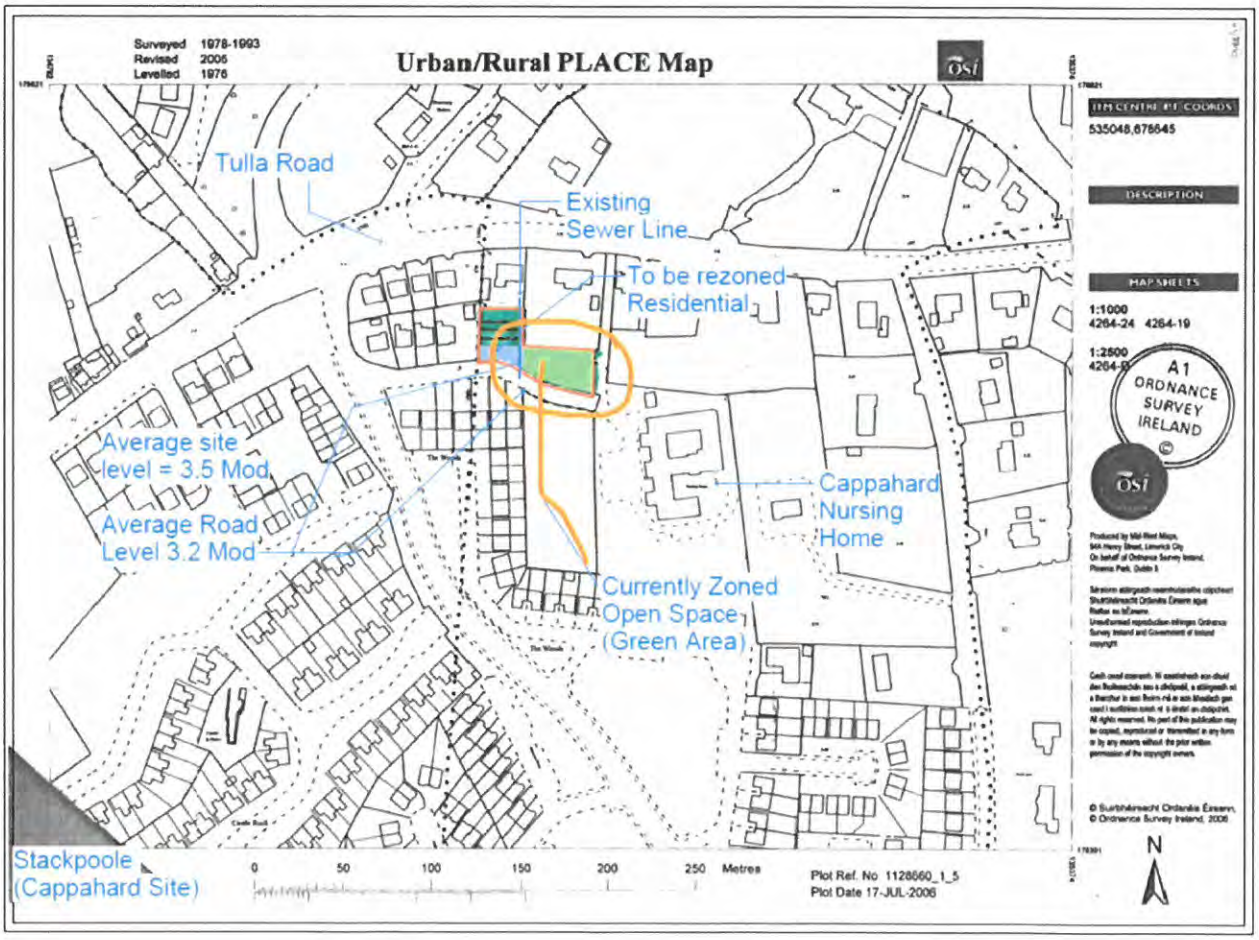
From: John Duggan [redacted]
Sent: Tuesday 3 January 2023 14:22
To: Development Plan
Subject: Frank Stackpoole "Proposed Amendments to the Draft Clare Draft Development Plan 2023-2029"
Attachments: stackpoole submission 2.pdf

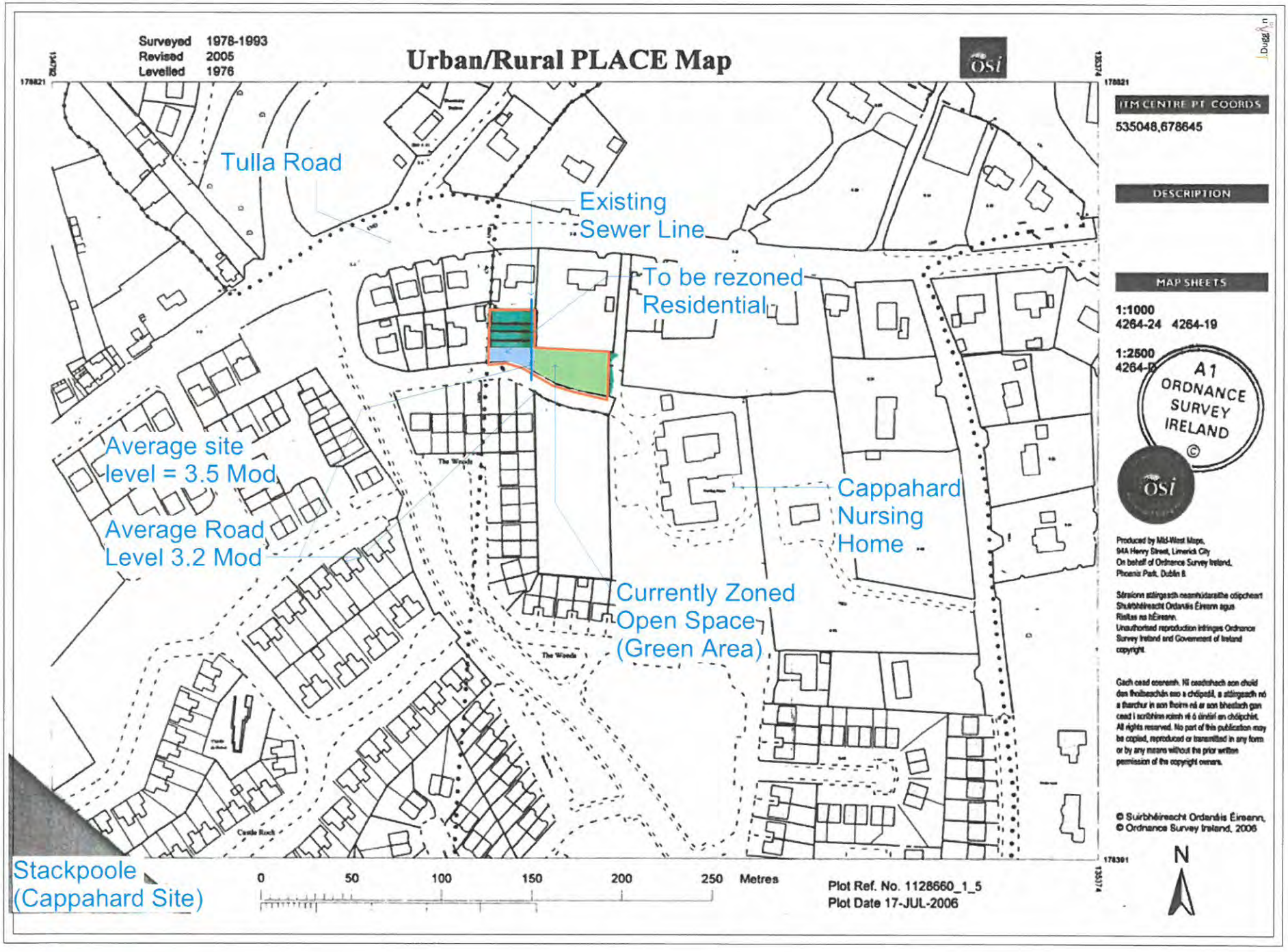
Hi,

Please fond attached submission for **"Proposed Amendments to the Draft Clare Draft Development Plan 2023-2029"**

"Proposed Amendments to the Draft Clare Draft Development Plan 2023-2029"

Dear Sir/Madam, I (Frank Stackpoole) own a site of (0.082 acres) @ Cappahard, Tulla Road Ennis which I would like the council to consider its zoning status which is currently 'Open Space'. The site has excellent development potential as it is an infill type site, ideally located to meet the Ennis and Environs development goals i.e. to concentrate developments within built-up footprint of the town and in line with its '10 minute commute' to town centre policy. The site is also located beside a nursing home and therefore could possibly provide ancillary facilities for same in some fashion. It is a well serviced site with onsite sewer network as I gave the council permission to run a mains sewer line through the property in 2007. Please give due consideration to revising its current green area zoning. A change to Residential use would be preferred but development of the site for community use i.e., civic, health services, public or educational uses including the provision of schools, community halls, healthcare facilities etc. or other possibly 'mixed use' which would complement the adjacent nursing home. Thank You, Franke Stackpoole




Surveyed 1978-1993
Revised 2005
Levelled 1976
Urban/Rural PLACE Map
Tulla Road
Existing
Sewer Line
To be rezoned
Residential
Average site
level = 3.5 Mod
Average Road
Level 3.2 Mod
Cappahard
Nursing
Home
Currently Zoned
Open Space
(Green Area)
Stackpoole
(Cappahard Site)
0 50 100 150 200 250 Metres
ITM CENTRE PT COORDS
535048,678645
DESCRIPTION
MAP SHEETS
1:1000
4264-24 4264-19
1:2500
A1
ORDNANCE
SURVEY
IRELAND
Produced by Mid-West Maps,
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Plot Ref. No. 1128660_1_5
Plot Date 17-JUL-2006
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Flood Risk Assessment for Infill Site at Cappahard Tulla Road Ennis Co Clare for Mr. Frank Stackpoole

Contents

Flood risk assessment data reference for this report:

Clare Co. Council development plan (predictive flooding maps)

Shannon Cframs Study

OPW National Flood Hazard Map.

Ennis Flood Risk Review 2011

Flood study of a tidally affected Town by C. Cummane and A. M. Cawley

This flood risk assessment study has been undertaken in consideration of the following guidance document:
'The Planning System and Flood Risk Management – Guidelines for Planning Authorities' DOEHLG 2009.

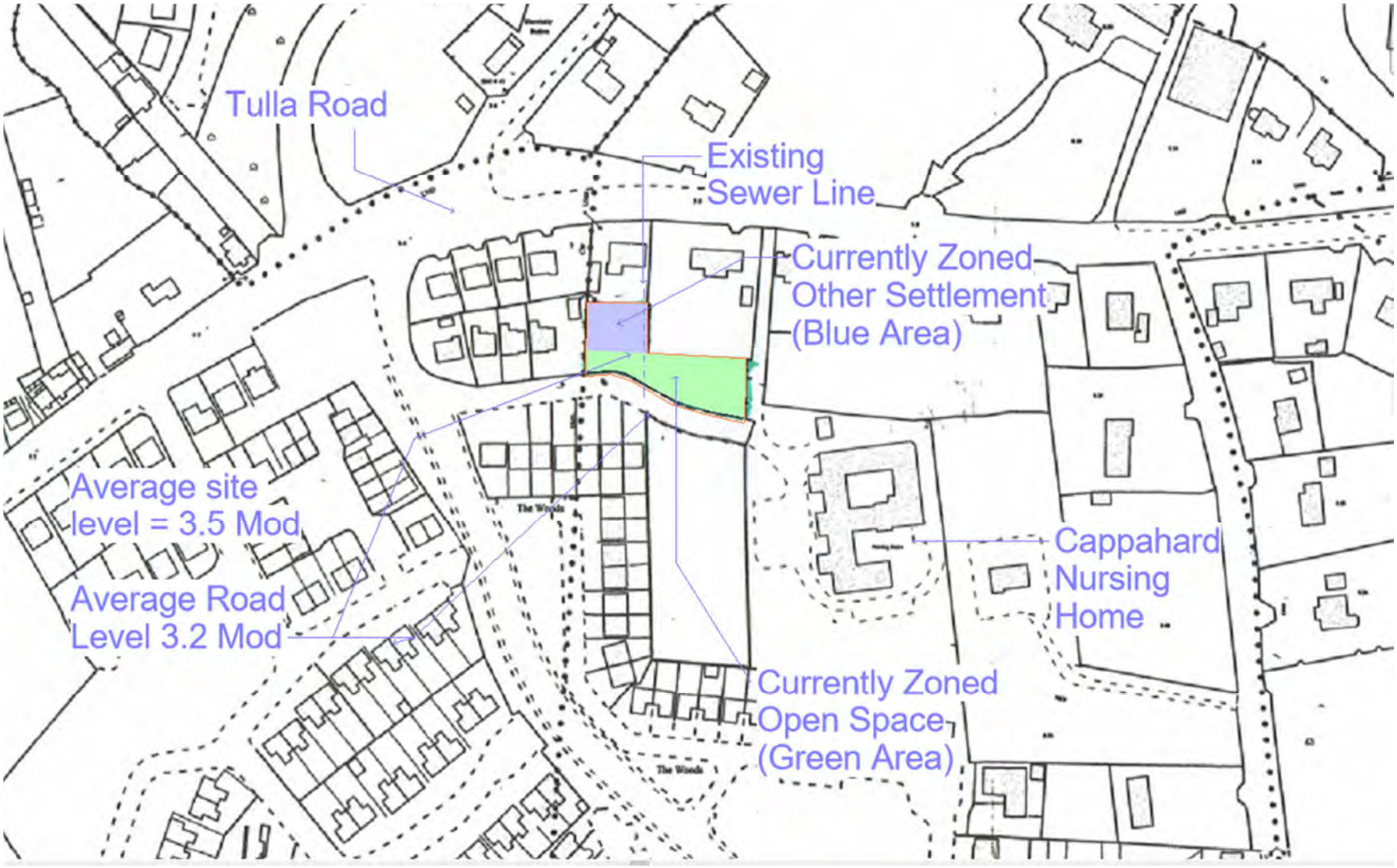
Site Location – Site is located just across the road from Cappahard Nursing Home on the Tulla Road about 400m from the Minor Fergus River. It lies within and is surrounded by existing residential housing developments.

Existing topography & services

Existing site area is 0.25 acres

Existing average site level is 3.5m (Malin head ordnance datum)

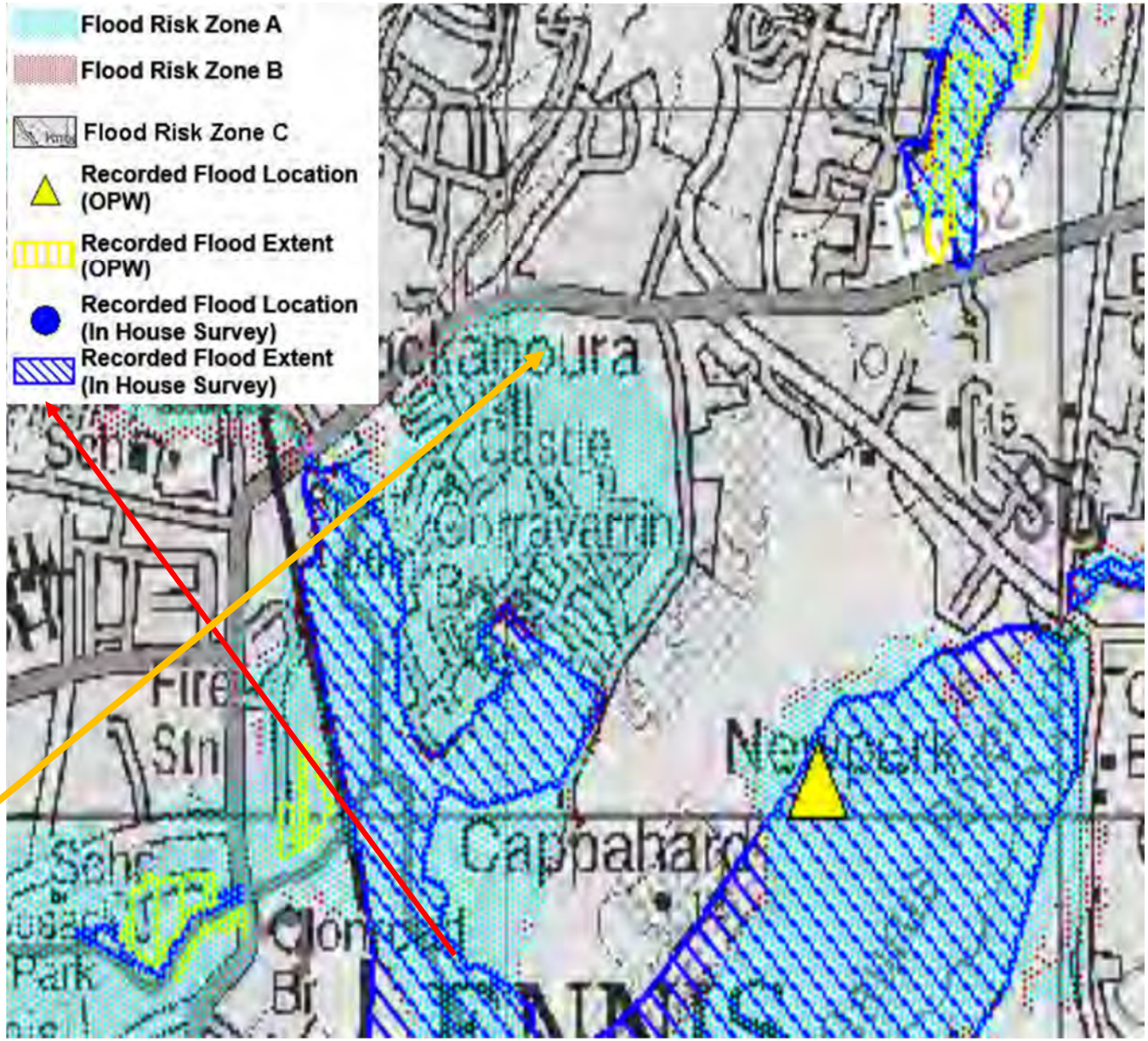
Existing average road level is 3.2m (Malin head ordnance datum)


Tulla Road
Existing
Sewer Line
Currently Zoned
Other Settlement
(Blue Area)
Average site
level = 3.5 Mod
Average Road
Level 3.2 Mod
Cappahard
Nursing
Home
Currently Zoned
Open Space
(Green Area)

Flood Zone Map (Clare Co Council Development Plan 2017-2023)

The Draft County Development Plan 2017-2023 Flood Zone Map i7 (see extract here) identifies the site as being generally in flood zone A.

The Maps provide only an indication of areas that may be prone to flooding. They are not necessarily locally accurate, and should not be used as the sole basis for defining the Flood Zones



Historic Flood Risk Occurrence

The 1999 Ennis Flooding Report noted that in the Cappahard Area, water levels reached 2.48 m OD in coming quite close to Cappahard Nursing Home This flooding was caused by overtopping of the embankment along the Fergus during tidal cycles. Ennis and environs flooded in November 2009 due to 2 weeks of excessive rainfall, flooding also occurred the following November in 2010 however no flooding was reported in the vicinity of subject site most likely due to the fact that the Ennis certified drainage scheme was substantially completed. This scheme was fully completed in 2014 and provided flood defenses designed on an AEP of 1% flood the lower Fergus including the lands from the subject site on the Tulla Road.

The Ennis flood risk review carried out by the OPW AND PUBLISHED IN June 2011 does not show the subject site to be at risk of flooding (see attached map showing historic flood events

Flood event records

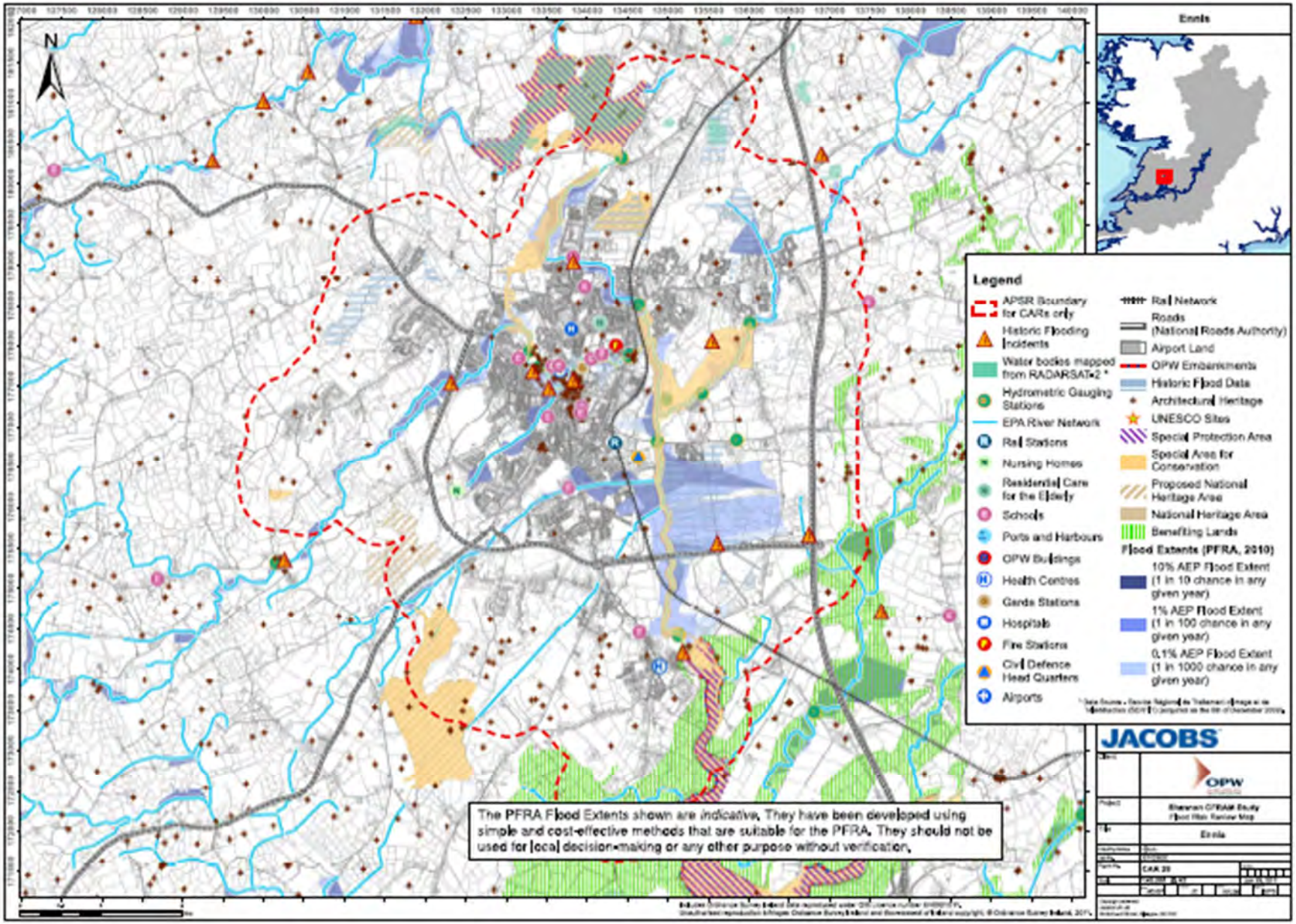
There is a long history of flood events with 13 thirteen flood records listed: 2 recurring, 8 singular events and 3 flood areas. Reports are dated from 1947-2009, including "detailed report of Ennis floods" which includes receptors affected and photos for the most recent flood event in 2009.

In Ennis town the combination of prolonged intense rainfall over a period of several days, the tidal peak itself and the exacerbation of the tidal peak by south westerly winds at critical times resulted in the highest ever recorded water levels on the River Fergus in the town centre in 2009.

Flooding occurrences are as a result of a mixture of fluvial, tidal, pluvial and groundwater influences.

''Extract from Ennis flood risk review 2011''

Ennis Flood Risk Review Map 2011



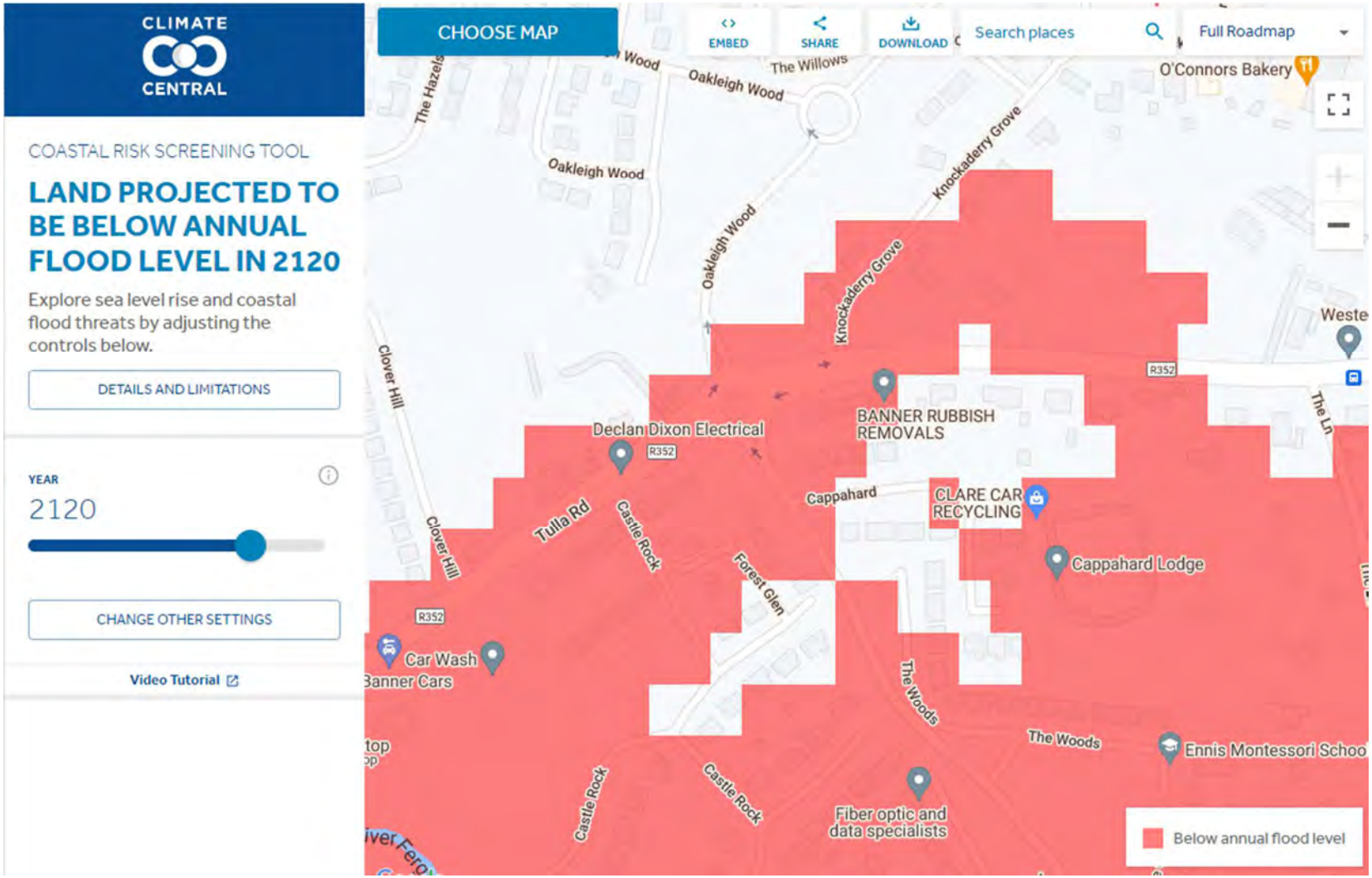
Ennis River System Map: The Fergus is one of the tributaries of the Shannon, It has a catchment area of approx. 400 sq. miles and 37 miles long. The Fergus and Claureen rivers merge on the eastern side of the town and the Fergus Minor is a secondary link river connecting the Fergus upper with the Fergus middle and lower. The Gaurus River flows from the east of the town (a very small river) and joins the Fergus lower south of the town. Ground water interactions include Lough Girroga (ground fed) and the swallow hole on the stream flowing into St Flannans College. The town of Ennis is protected from direct tidal flooding by a 1950's barrage with self-operated hinged sluice gates at Clarecastle, which prevents tidal inflow to the lower Fergus while at the same time prevents outflow of the River Fergus to the Estuary during periods of high spring tides

The Ennis Lower Flood Relief Scheme was completed in 2021 providing sheet piling along the Fergus River Bank further substantially mitigating flood risks, however the town is liable to flooding by the River Fergus/River Claureen and Gaurus Rivers i.e. storage of water upstream of the barrage during tidal peaks causes backwater effects in the Town. However in recent years river bank sheet pile and embankments reinforcing have been very effective at mitigating flood risk in the Ennis area.

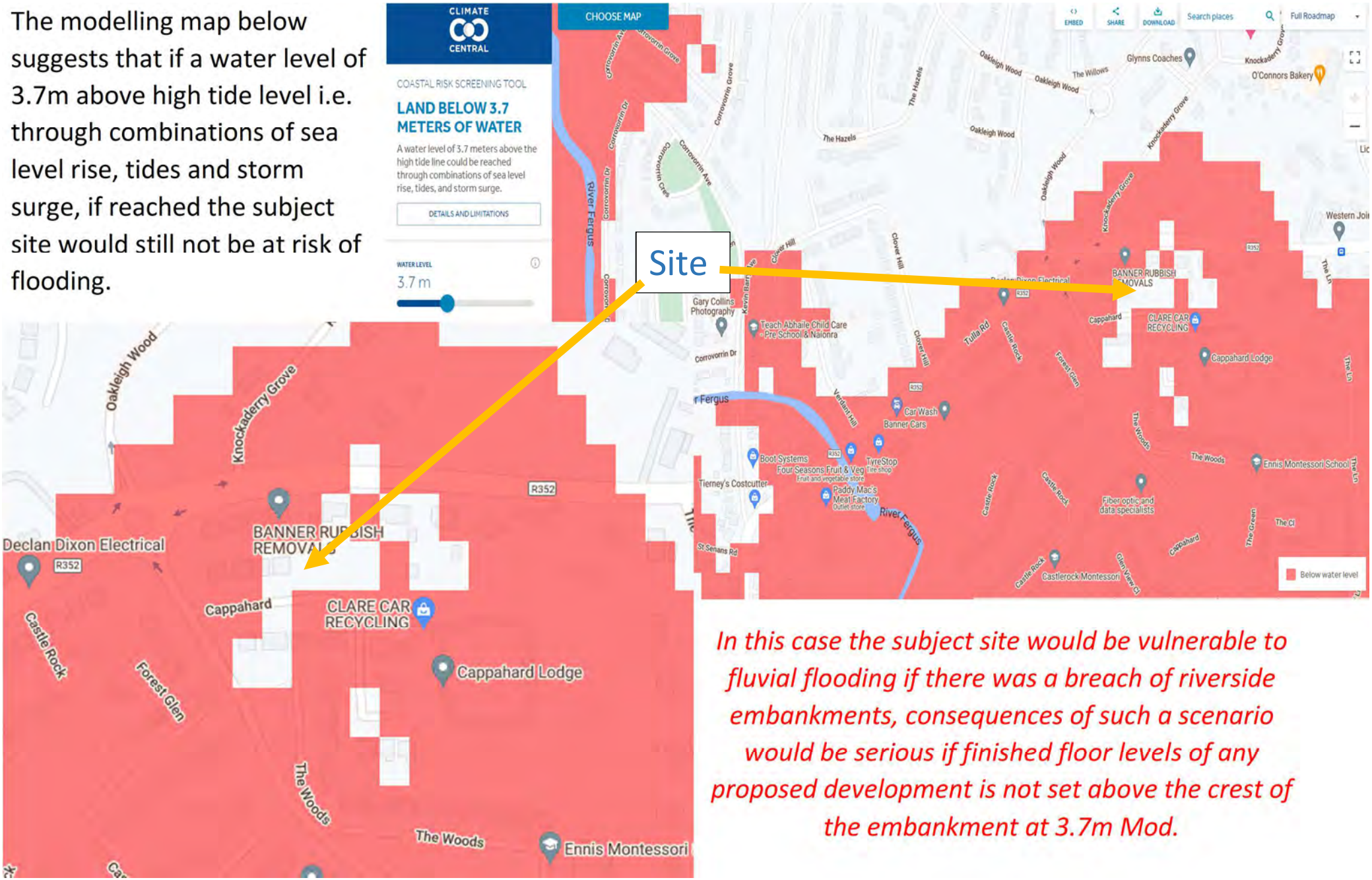
Prediction mapping by CLIMATE CENTRAL

Climate Central IS A (non-profit organisation) that communicates climate change science, effects, and solutions to the public and decision-makers. Climate Central is an independent group of scientists and communicators who research and report the facts about our changing climate and how it affects people's lives.

CLIMATE CENTRAL Flood prediction modelling maps suggest that the subject site is well elevated compared to the surrounding lands and indicates that the site would not be below annual flood level perhaps until 100 years from now.



The modelling map below suggests that if a water level of 3.7m above high tide level i.e. through combinations of sea level rise, tides and storm surge, if reached the subject site would still not be at risk of flooding.



In this case the subject site would be vulnerable to fluvial flooding if there was a breach of riverside embankments, consequences of such a scenario would be serious if finished floor levels of any proposed development is not set above the crest of the embankment at 3.7m Mod.

Justification Test / Sequential Approach

The flood risk management guidelines for planning authorities allow for the consideration of development in flood zone areas via the application of the sequential approach in conjunction with the justification test. Exemptions to the restriction of development due to possible flood risk are provided through the application of the Justification test i.e. where the planning need and the management of flood risk to an acceptable level must be demonstrated.

Conclusion on site vulnerability to flooding:

Coastal / Tidal flooding (not applicable) *i.e. mitigated against by the barrage @ clarecastle, which prevents tidal inflow to the lower Fergus PREVENTING FLOODING FURTHER UPSTREAM during periods of high tide.*

Fluvial Flooding (produced by the action of a river or stream)

In this case the risk of fluvial flooding arises from a possible breach of the river embankments (not considered likely in 1 in 100 year flood event) consequences of this are not of a concern as the finished floor level of any proposed new development will be set above the 3.7m OD Fergus embankment reinforcement defense level.

The main pathway for subject site flooding would be an overtopping of the existing Fergus river defenses, however the site has no direct source to receptor pathway from the subject site to the river, due to the presence of existing development surrounding the site effectively isolating the site from the river. The Ennis main drainage / flood study preliminary report 2001 recommended that river embankment protection level be set at 3.2m OD during a 100 (cubic meter per second) river flow, we believe these levels have been raised further to 3.7m OD by recent and ongoing OPW river embankment reinforcement improvement works.

Pluvial flooding (results from rainfall generated overland)

Groundwater: *There have been no significant springs or groundwater discharges recorded in the vicinity of the subject site*

Surcharge of storm sewers: *The subject site is serviced with separate foul and surface water sewers, in fact, the site owner Frank Stackpoole kindly facilitated Clare co council by allowing them to install a foul sewer through the subject site a number of years ago.*

John Duggan BSc. FFcabe

Registered Building Surveyor / Chartered Building Engineer
Design / Inspection / Certification