

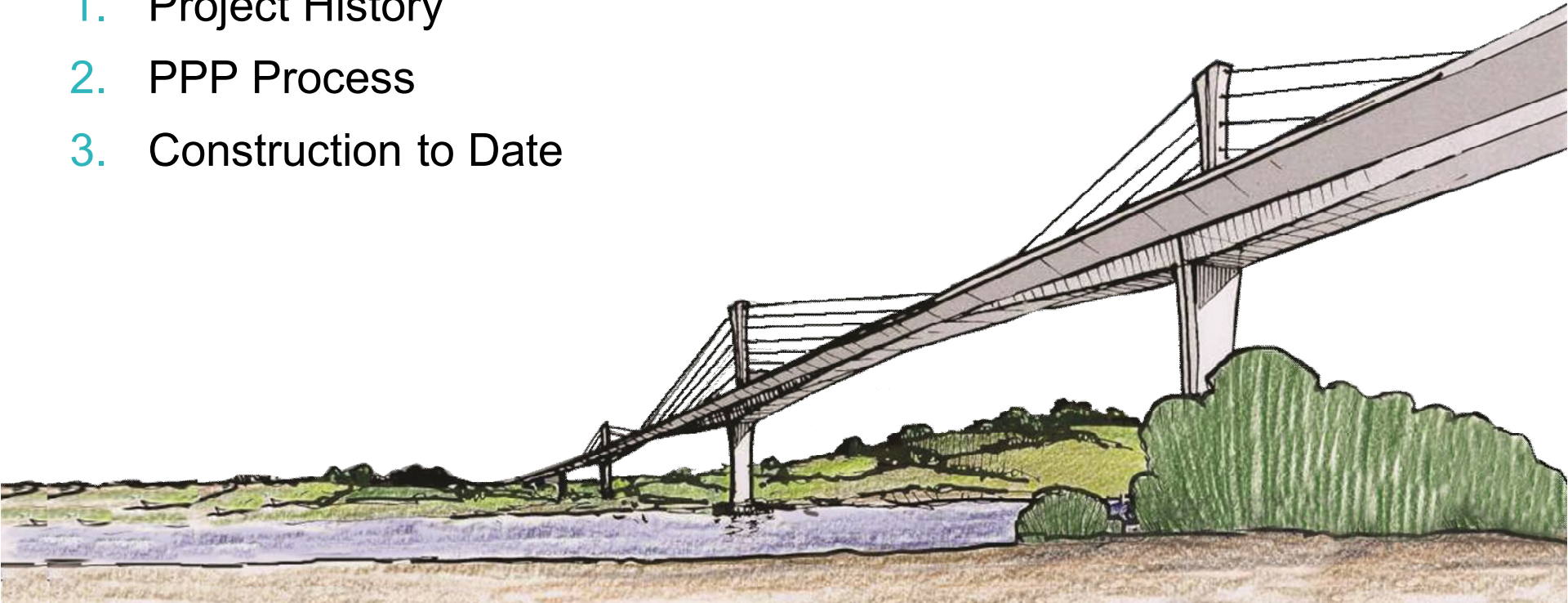
## N25 New Ross Bypass PPP Project History & Construction Progress

Joe Shinkwin & Pierre O'Loughlin



# Presentation Content

1. Project History
2. PPP Process
3. Construction to Date





# Project History

# Need for the Scheme

## Traffic

Significant delays of up to 30 mins

## Safety

125 reported injury collisions (2005-2011)

## Network Resilience

32 km diversions in the event of O'Hanrahan Bridge closure

### Five-mile tailbacks as trailer overturns



ELAINE FURLONG - 12 April 2011

### Road rage in Rosbercon over growing tailbacks

21 December 2006

Road Rage on the Waterford side of O'Hanrahan Bridge spilt over onto the streets of Rosbercon last week.

Traffic was backed up from the bridge as far as the church in Rosbercon at around 6.15p.m. on Tuesday evening last according to local resident John Bennett.

It was also around that time that he saw a vehicle pull out from the queue at the Parish Pump as the frustrated motorist made a break for it down the 'wrong side of the road'.

However, close to the recycling centre at the bottom of the hill the motorist met oncoming traffic, who were understandably not too impressed with the manoeuvre.

### Renewed calls for second bridge after traffic chaos

23 October 2012

RENEWED CALLS have been voiced for the construction of a second bridge in New Ross following the flooding in Rosbercon last week and the severe traffic backlog that ensued.

New Ross Sinn Féin spokesperson Oisín O'Connell has said the town's reputation as a bottleneck and its continuing problems with traffic congestion is impacting on investment coming into New Ross.

'New Ross town has had a big problem with traffic congestion for many years now. It is a situation that has been ignored by successive governments. During the boom years the town witnessed regular tail backs entering the O'Hanrahan Bridge from the Rosbercon side. Intelligent proposals to tackle this problem were made but sadly ignored,' said Oisín.

### Traffic congestion 'threat'



Traffic at the bridge.

11 August 2010

### Long tailbacks on approach to town

10 August 2006

New Ross witnessed huge tailbacks on Friday evening last as the Bank Holiday Weekend got off to a very slow start for hundreds of motorists on the Waterford Road.

For many it took well over an hour to get over O'Hanrahan Bridge and the situation was worsened considerably by a protest in Passage East, which blocked ferry traffic during rush hour and led to a much larger volume of traffic in New Ross than usual.

The traffic lights were turned off at O'Hanrahan Bridge on Friday evening and a member of the Gardaí took up traffic signalling duty, which eased the situation considerably.

However, it was still hard to stomach for motorists and with another protest planned in Passage East this Friday they face 'more of the same'.

### Storm gets the better of roads and trees



Treacherous conditions at Rosebrcon

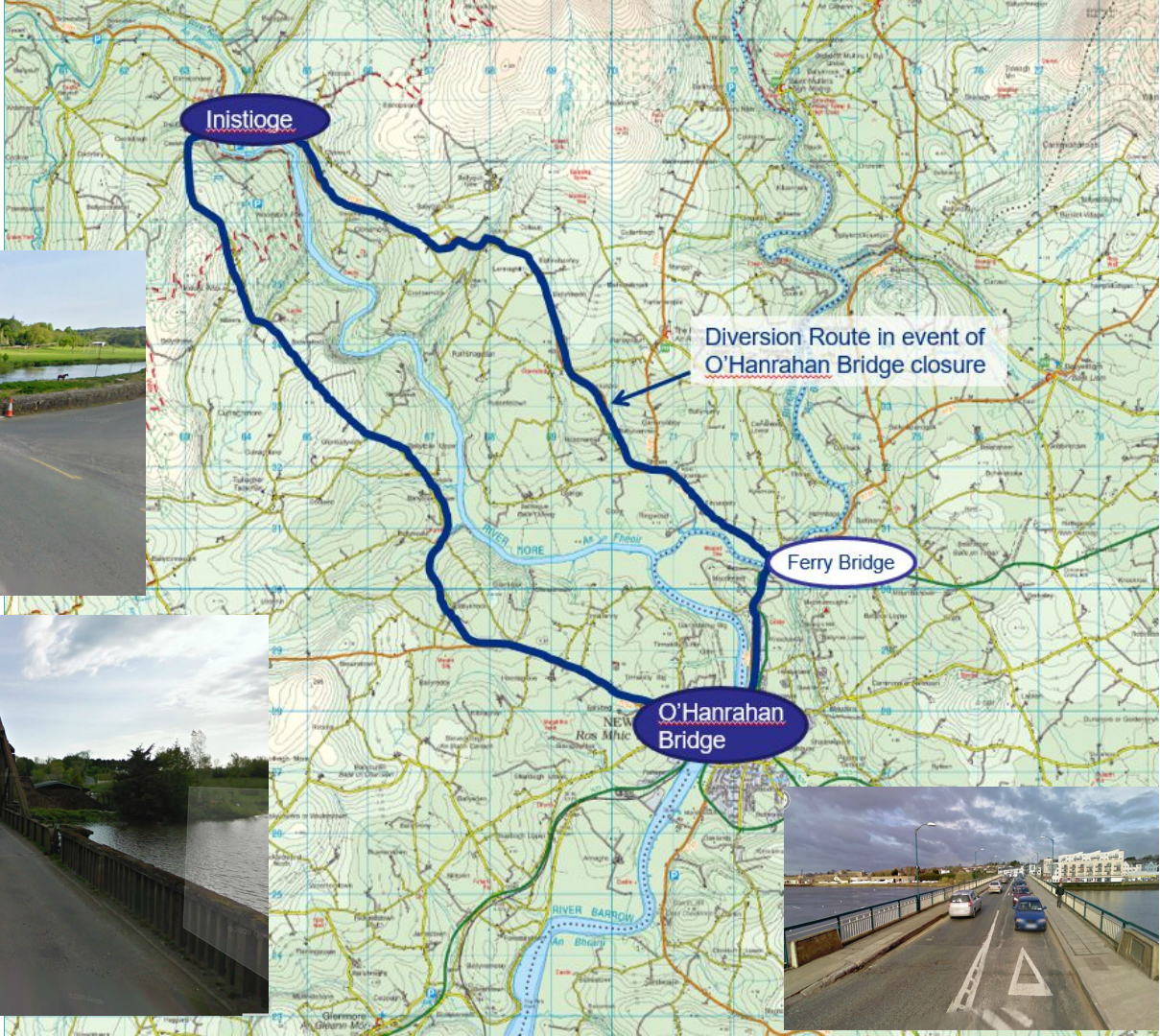
07 January 2014

# Diversion Route (32km)

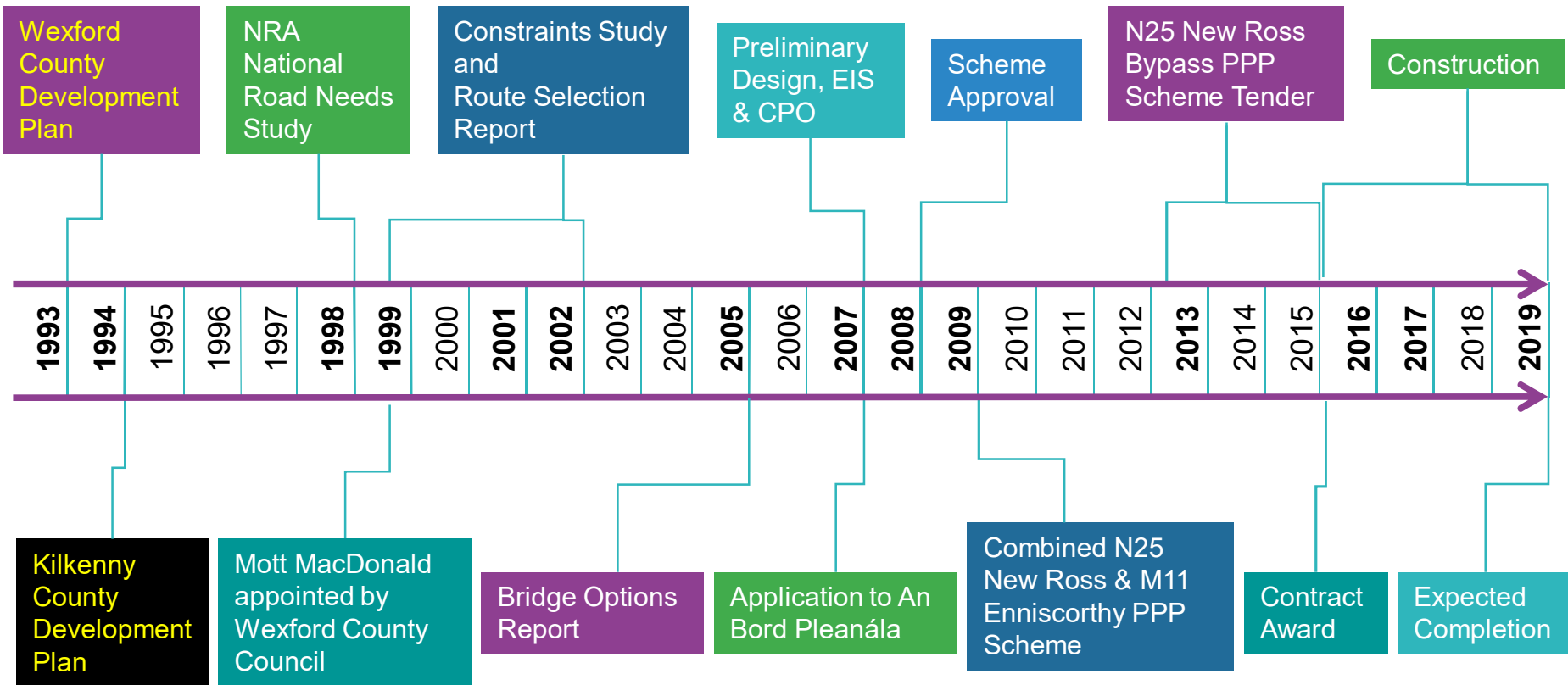
Inistioge Bridge



Ferry Bridge



# Project Timeline



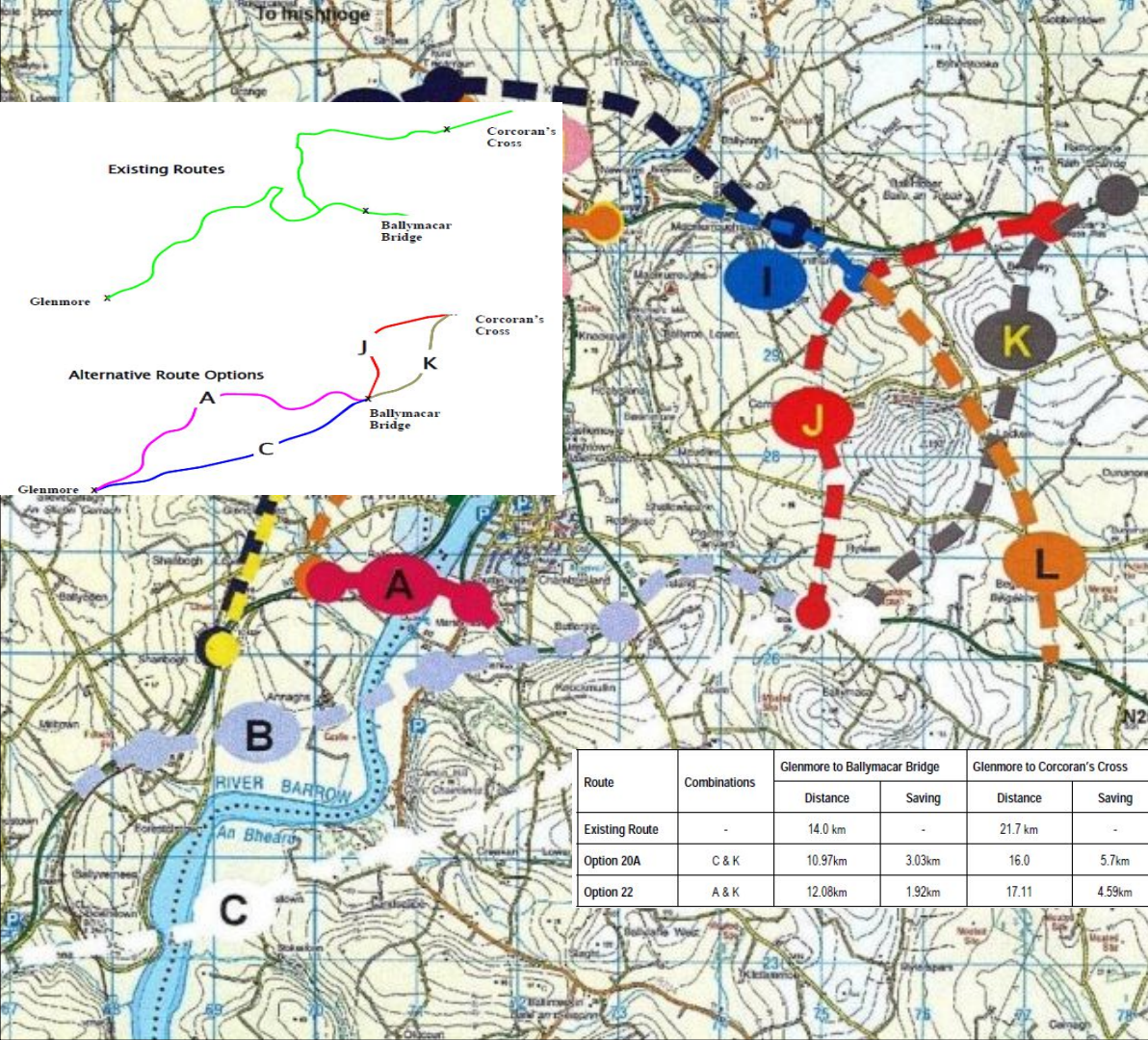
# Route Selection - Challenge

## Constraints Study

- Topography
- Major River Crossing(s)
- Port of New Ross
- Infrastructure/Utilities
- Environmental (cSAC, pNHA)

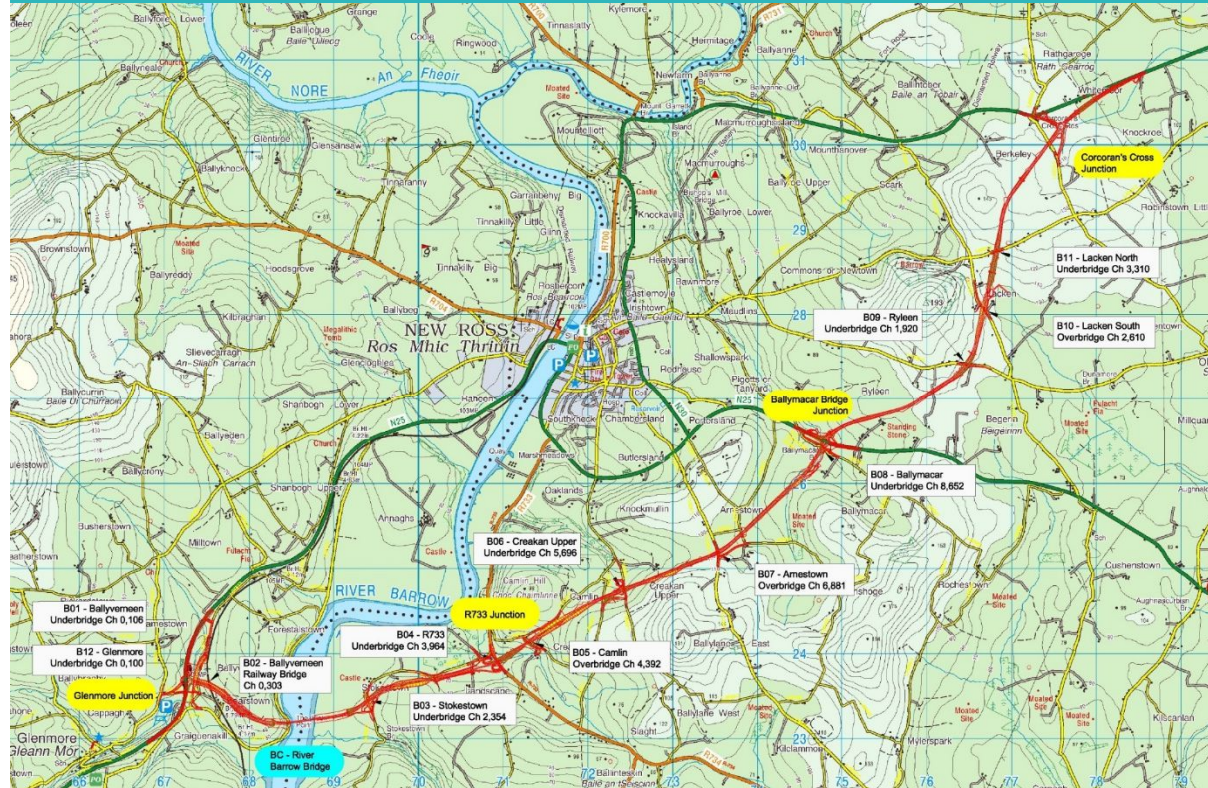
## Route Selection

- 46 Initial Options
- 5 Refined Options
- 2 Detailed Options



## Preferred Solution - Roads

- 13.6km of Dual Carriageway
  - 4km Type 1 Dual
  - 9.6km Type 2 Dual
- 1.2km Single Carriageway
- 3 At-Grade Junctions
  - Glenmore (N25)
  - Ballymacar (N25)
  - Corcoran's Cross (N30)
- 1 Grade Separated Junction
  - Landscape (R733)

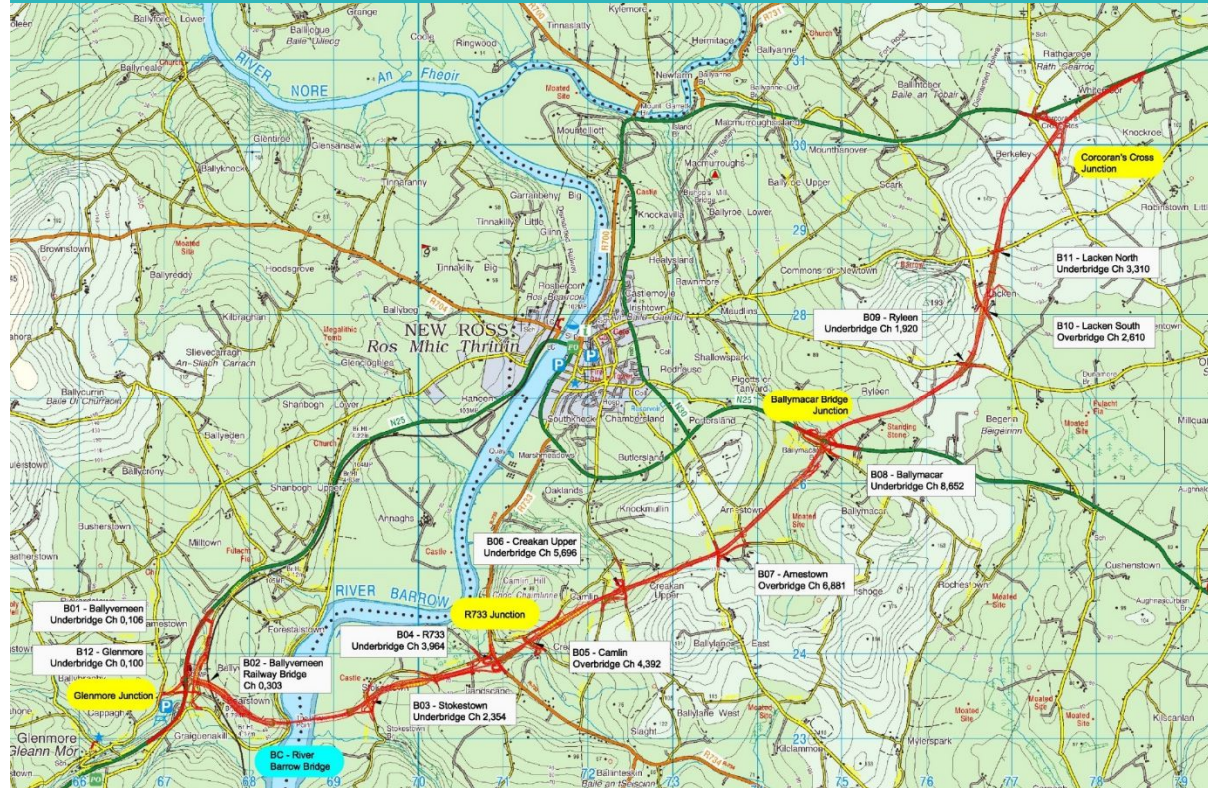






## Preferred Solution – Struct.

- 1 Railway Overbridge
- 8 Underbridges
- 3 Overbridges
- 16 Underpasses
- 6 Culverts
- 3 Retaining Walls
- 5 Environmental Barriers
- 2 Sign Gantries
- 2 VMS
- 900m Extrados River Barrow Crossing



River Barrow



Pink Point



## Challenges

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### River Barrow

Approx. 300m wide

River Barrow and Nore candidate  
Special Area of Conservation  
(cSAC)

Barrow River Estuary proposed  
Natural Heritage Area (pNHA)

Levee and flood plain

### Port of New Ross

36m Shipping Clearance above  
MHWS

### Topography / Ground Conditions

Pink Rock

Alluvial & Glacial Deposits

## Options

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### 4 Bridge Options Studied

Haunched Girder  
Bridge



Three Arch Bridge



Single Arch Bridge



Three Tower Extrados  
Bridge

## Solution

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**Extrados** option  
selected as it offered the  
best balance of overall  
performance

## Extrados Bridge

## Details

**9 Spans** (~900m total)

Main spans – 2 x 230m

Approach Spans

West Side: 45m, 60m, 86m

East Side: 86m, 60m, 60m, 45m

**3 Pylons** (Centred on Bridge Deck)

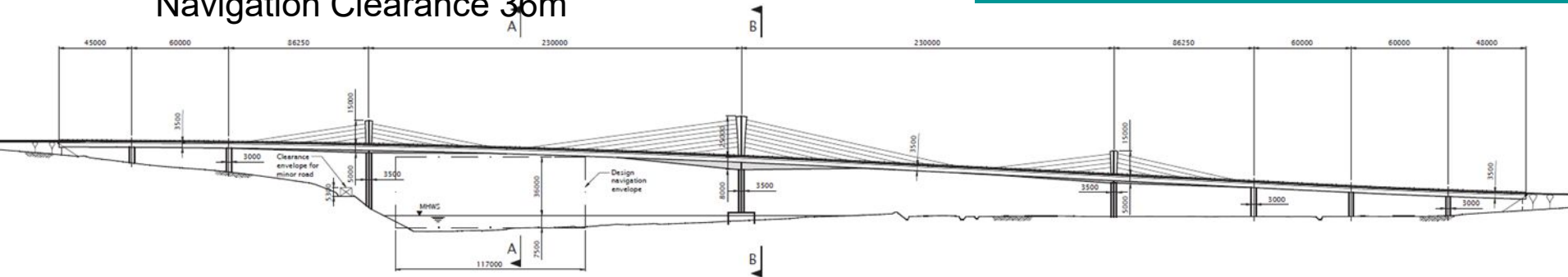
2 x 15m high side pylons

1 x 25m high central pylons

**Bridge Deck**

Width ~22m (with widening on approaches)

Navigation Clearance 36m



# River Barrow Bridge Elevation





# PPP Process

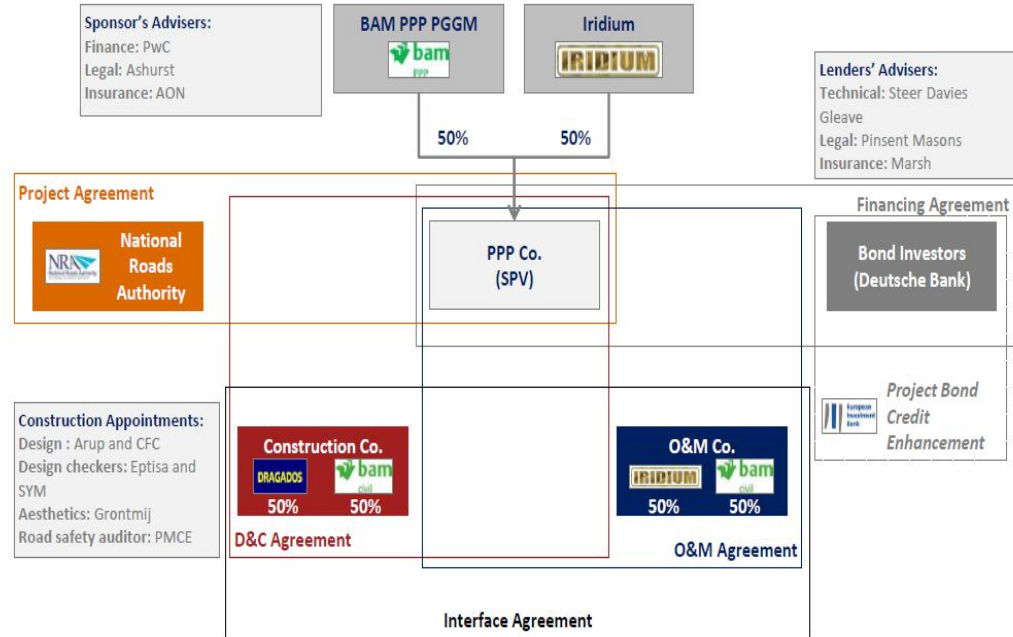
## PPP Tender Period – Key Dates

- 22 Mar 2013 OJEU Advert for PQ
- 19 Jun 2013 Pre-Qual Returns
  - 9 Aug 2013 Four Shortlisted – BANBA, Sli Nua, BAM Iridium, & Direct Route
- 28 Nov 2013 Tender Documents Issued
- 16 Dec 2013 Tender Consultation Meeting 1
- 30 Jan 2014 Tender Consultation Meeting 2
- 08 Apr 2014 Tender Consultation Meeting 3
- 11 Mar 2014 Tender Consultation Meeting 4
- 02 Apr 2014 Tender Consultation Meeting 5
- 30 Sep 2014 Tender Return
- 26 Jan 2016 Contract Award to Bam Iridium



# PPP Co. Structure

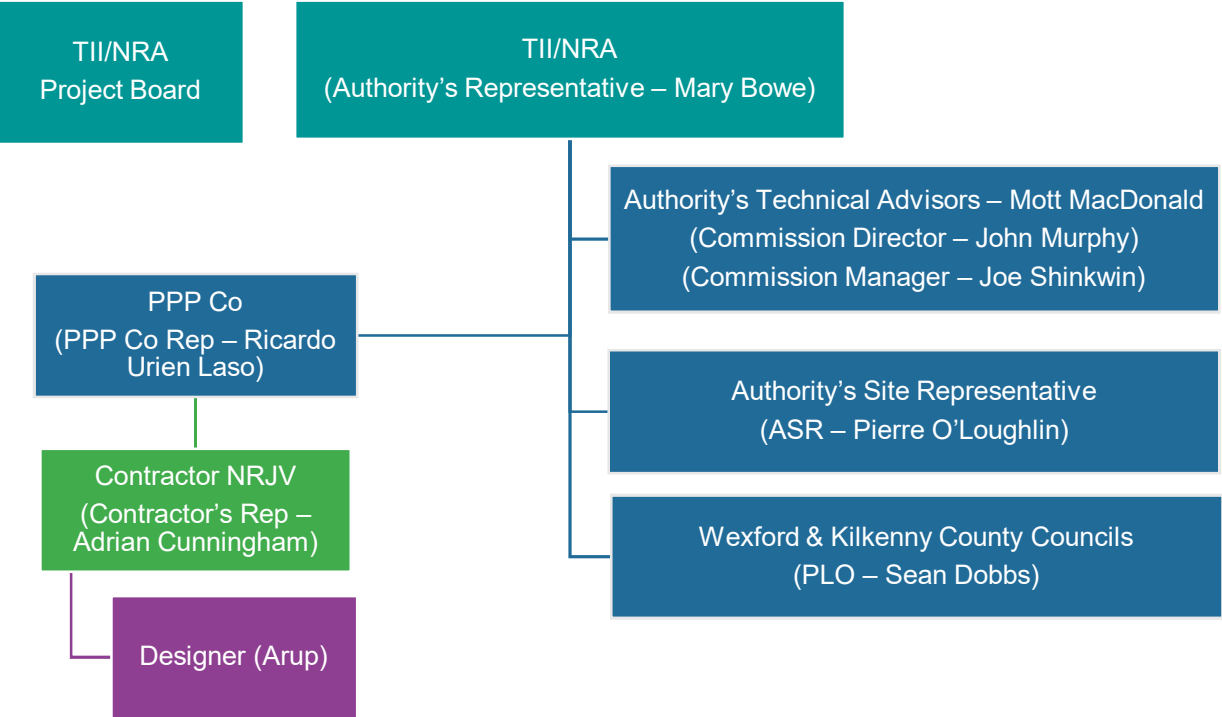
- Contract Awarded to BAM Iridium Consortium
- The Project sponsors are:
  - BAM PPP PGGM Infrastructure Coöperatie U.A. (50%), and
  - Iridium Concesiones de Infraestructuras S.A. (50%).
- PPP Company
  - New Ross N25 By-Pass DAC
- Contractor – BAM Dragados JV
- Designer – Arup & CFC



# PPP Contract Dates

- Commencement Date: 26<sup>th</sup> January 2016
- Permit to Use (PTU): 31<sup>st</sup> January 2019
- Completion Date: 30<sup>th</sup> April 2019

# Overall Scheme Management





# Construction

## Contract Dates

Commencement Date/ Contract Award	Construction Period	Opening Year
26 <sup>th</sup> January 2016	40 Months	2019

- Currently 20 months into a 40 month programme

# Authority's Site Representative

Works Monitoring &  
Administration Team (WMA)

1

Authority's Site  
Representative

3

Senior  
Resident  
Engineers

4

Resident  
Engineers

3

Inspectors

1

Deck and  
Cable  
Specialist

1

Quality &  
Testing  
Manager

Total WMA  
team of

25

4

Administration  
Staff

1

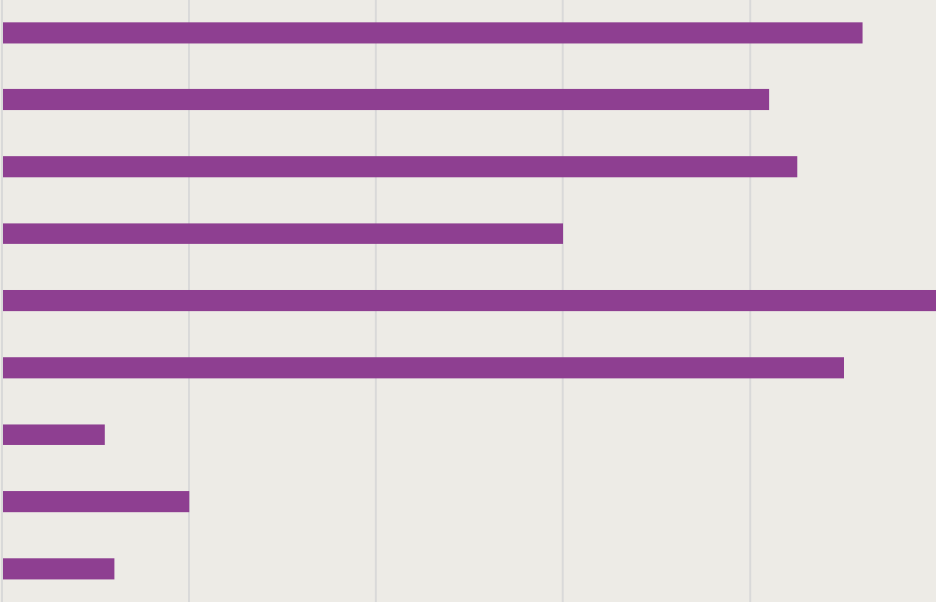
Certification  
Co-Ordinator

# Current Progress

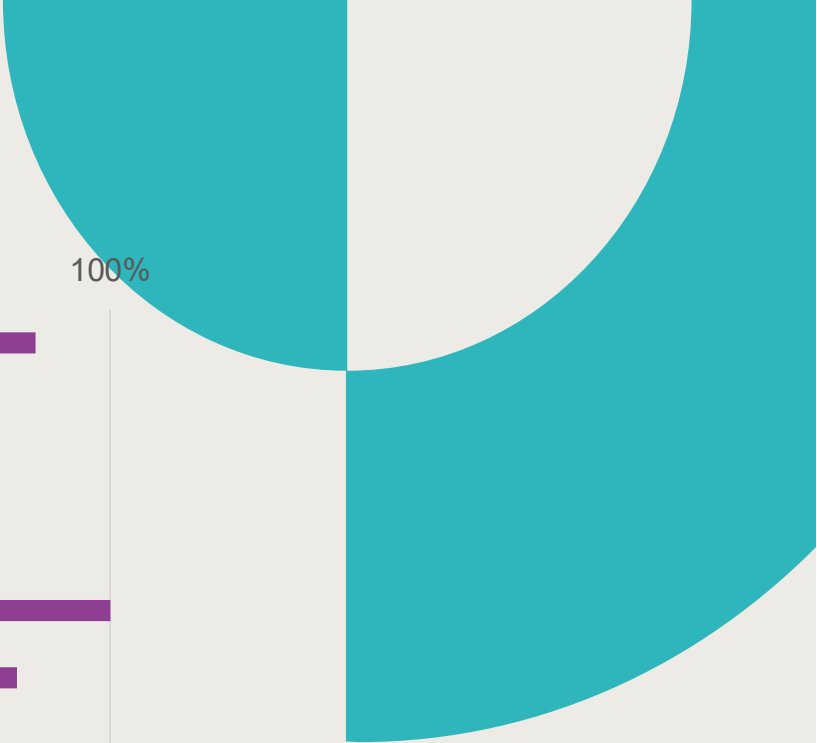
% Complete

0% 20% 40% 60% 80% 100%

- Site Clearance
- Fencing
- Earthworks
- Structures
- RBB Pier Bases
- RBB Piers
- Utilities
- Drainage
- Accom Works

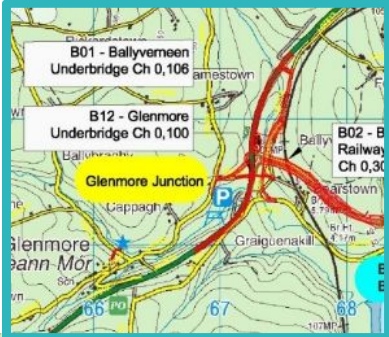


■ Construction Elements



# What's Happening Now

## Glenmore Junction



May 2016



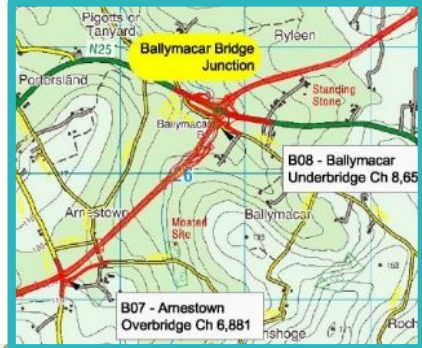






# What's Happening Now

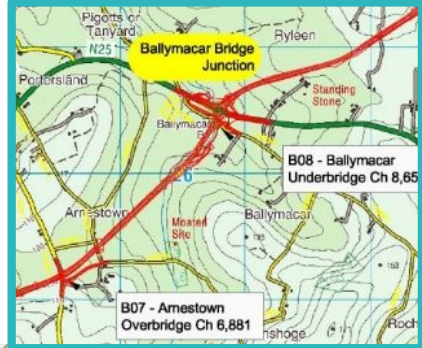
## Ballymacar Bridge Junction



May 2016

# What's Happening Now

## Ballymacar Bridge Junction



August 2017

# What's Happening Now

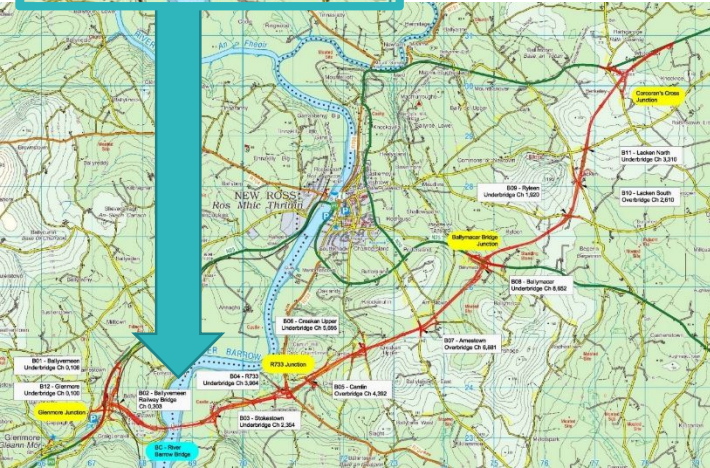
## Corcoran's Cross Junction



August 2017

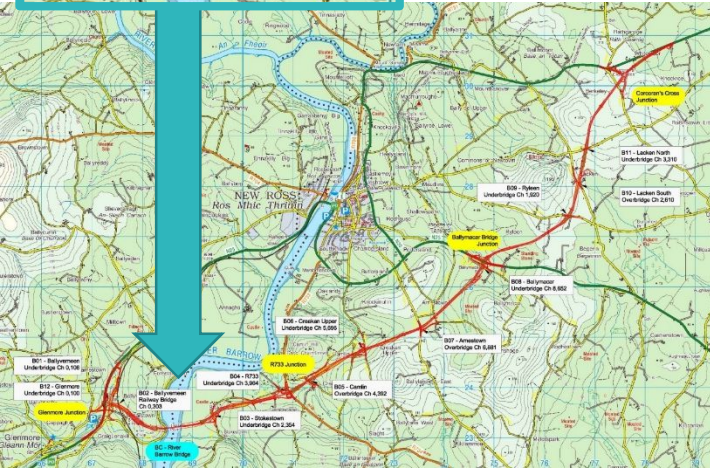
# What's Happening Now

## River Barrow Bridge



# What's Happening Now

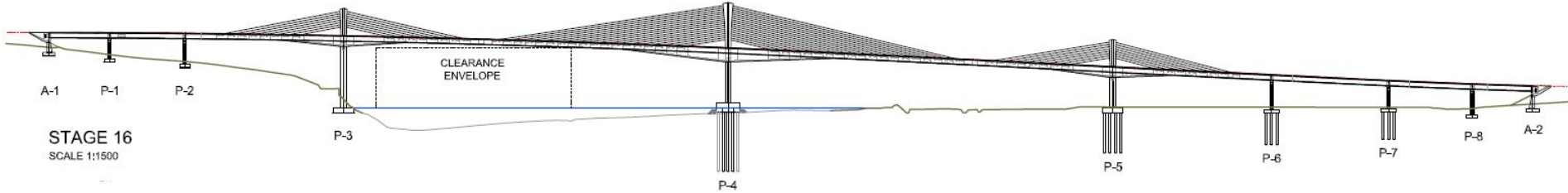
## River Barrow Bridge







# Construction Sequence of River Barrow Bridge



# River Barrow Bridge Elevation



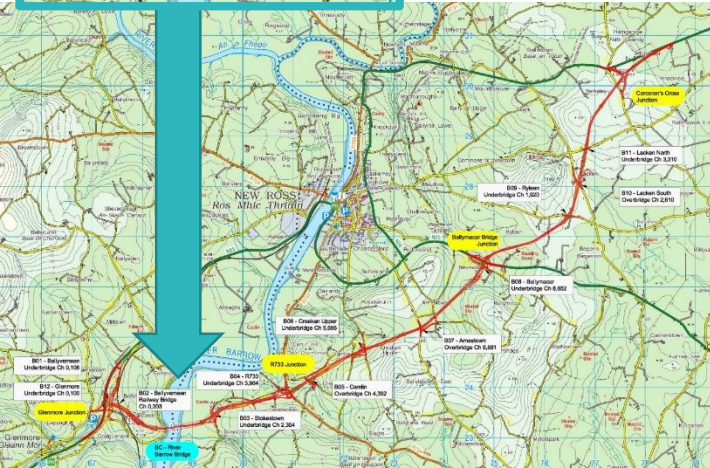
# Barrow Bridge Falsework





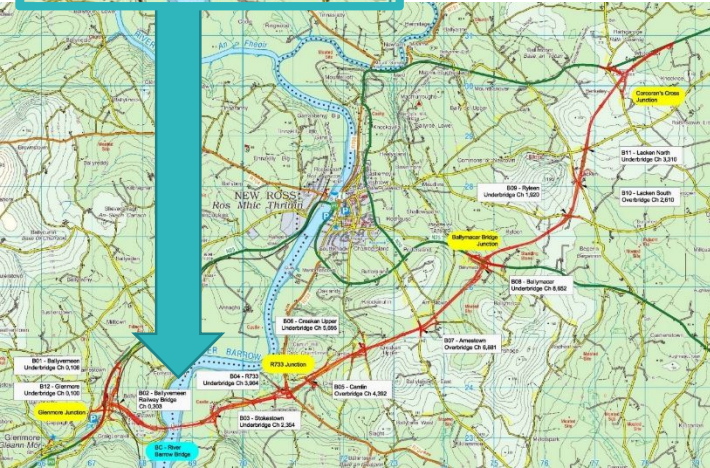
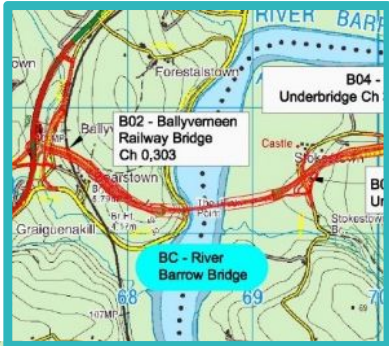
# What's Happening Now

## River Barrow Bridge



# What's Happening Now

## River Barrow Bridge



# Technology & Social Media

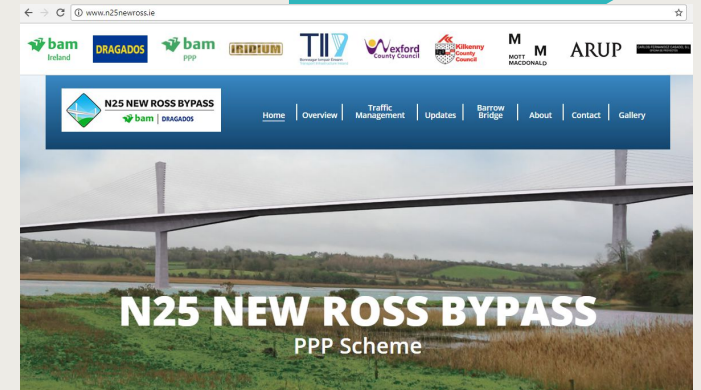
## TII & Wexford County Council

- Video documentary of the scheme
- Time lapse of Barrow Bridge Construction



## PPP Co / NRJV

- Drone Technology for Site Progress Photos
- Website [www.n25newross.ie](http://www.n25newross.ie)



# Thank you

