



**An Roinn Iompair**  
Department of Transport



**Cumann Lucht Bainistíochta Contae agus Cathrach**  
County and City Management Association

## **RSTG Conference 2024 15<sup>th</sup> May - Day 1**

### **Welcome**

The Conference Will Begin at 9.30am

- Welcome from Sligo County Council.
  - Ministerial Opening Address

**Session 1- Road Sector Overview, National Development Plan Case Study, High Voltage Interface**

**Chair John Mc Laughlin**

09.50-10.10	Regional and Local Roads Overview	David O'Grady - Principal Adviser - DoT
10.10-10.35	Regional and Local Roads Case Study - R494 Improvement, Shannon Crossing & Killaloe Bypass	Sean Kileen - Clare County Council and Anthony O'Brien – RPS
10.35-11.00	HV Infrastructure in Regional and Local Roads Network + Celtic Interconnector Case Study	Stephen Flynn - RMO Sean Callery - Cork County Council

Join the Q&A session at [Slido.com](https://www.slido.com) and enter 5812867  
Or via the QR Code over



Wi-Fi is open Guest@Radisson\_Blu enter your e-mail 1<sup>st</sup> time only





**An Roinn Iompair**  
Department of Transport



**Cumann Lucht Bainistíochta Contae agus Cathrach**  
County and City Management Association

# **RSTG Conference 2024 15<sup>th</sup> May - Day 1**

## **Welcome**

Sligo County Council Cathaoirleach,

Cllr. Gerard Mullaney





**An Roinn Iompair**  
Department of Transport



**Cumann Lucht Bainistíochta Contae agus Cathrach**  
County and City Management Association

**RSTG Conference 2024 15<sup>th</sup> May - Day 1**

**Opening Address**

**Jack Chambers T.D.**  
**Minister of State DoT**





An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

# ROADS Services Training Group

## LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Day 1-Session 1-Presentation 1

David O'Grady

Sligo Radisson Hotel, Sligo, May 2024





An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

---

# ROADS Services Training Group

## LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Day 1-Session 1-Presentation 2

Sean Killeen & Anthony O'Brien

Sligo Radisson Hotel, Sligo, May 2024



An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

## LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION – 2024

### **Killaloe Bypass, Shannon Bridge Crossing & R494 Improvement Scheme**



COMHAIRLE | CLARE  
CONTAE AN CHLÁIR | COUNTY COUNCIL

Seán Killeen  
Senior Executive Engineer  
Clare County Council



Anthony O'Brien  
Technical Director  
RPS



## Contents

- Scheme Introduction
- Project Need
- Project Benefits
- Roadmap
- Design
- Advanced Works Contracts
- Main Works Contract Procurement
- Construction



## Scheme Introduction

The proposed scheme can be broken down into three sections;







## Project Need

- Existing Bridge





## Project Need

- Killaloe





## Project Need

- R494





## Project Benefits - What Will it Deliver

- Safety benefits arising from a new bridge crossing and realignment of R494.
- 40% reduction in town traffic.
- 50% reduction on the scheme end-to-end journey times is envisaged.
- Facilitate public realm improvements to the towns of Killaloe & Ballina.
- Over 6km of pedestrian and cycle facilities.
- Health Benefits arising from pedestrian and cycling infrastructure.
- Improved permeability to Clarisford Park and public amenities there.
- Improved infrastructure links to public transport facilities.
- Significant reduction in CO2 emissions forecasted.
- Economic & Tourism Benefits arising from the connection to existing and proposed Greenways which have the potential to create over 360km of linked Greenway facilities along the River Shannon.



## Scheme Roadmap

1996 - Feasibility Report  
Existing Bridge

2003 - Traffic Mgt. Strategy

2006 – Route  
Selection SBC

2000 - EIA Existing Bridge

2005 - Constraints Study SBC



**Shannon Bridge Crossing  
Route Selection Report  
Volume A - Text**

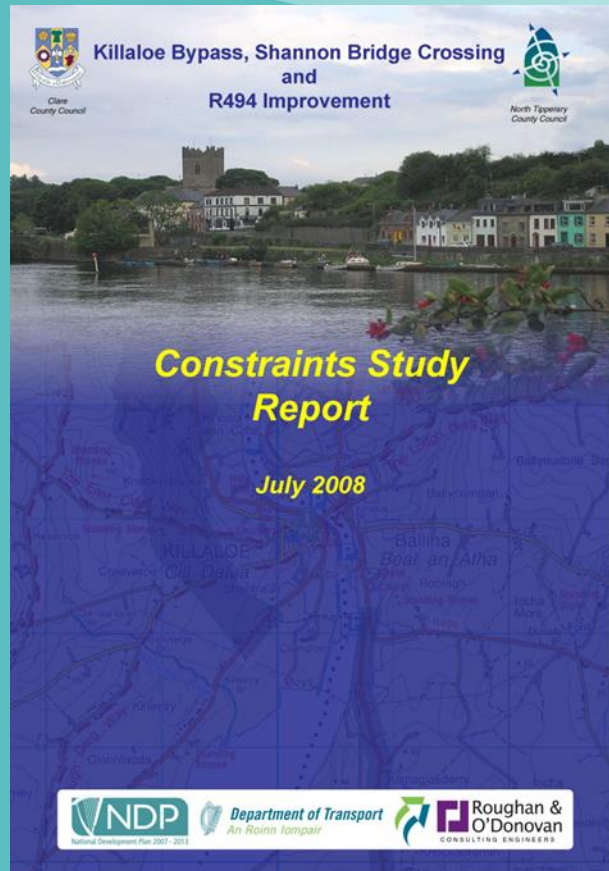
Jan. '06

Rev. F01





## Roadmap Timeline



2000 - EIA Existing Bridge

2005 - Constraints Study SBC

2008 - Constraints Study Full Scheme



# Roadmap Timeline

1996 - Feasibility Report  
Existing Bridge

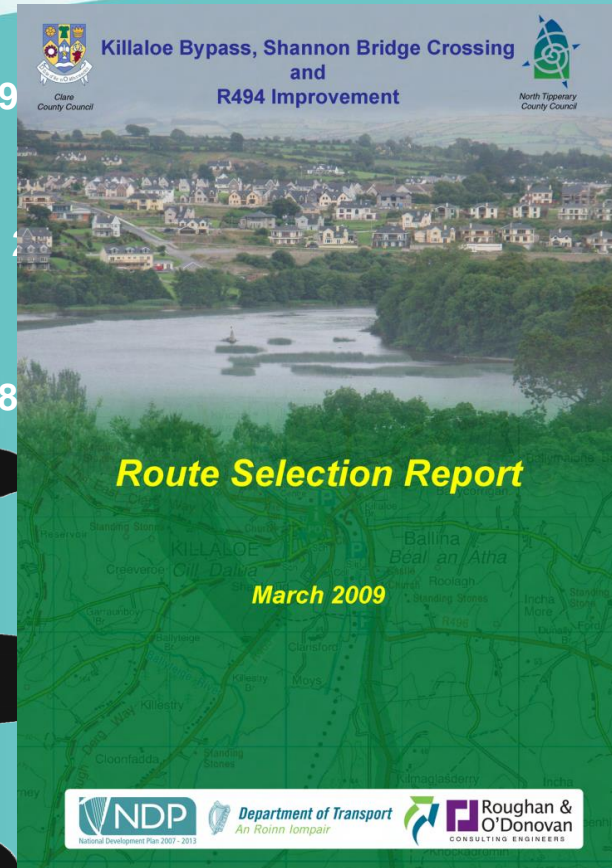
2003 - Traffic Mgt. Strategy

2006 – Route  
Selection SBC

2009 - Route Selection Full  
Scheme

199

2008





# Roadmap Timeline



**KILLALOE BYPASS, SHANNON BRIDGE CROSSING AND R494 IMPROVEMENT ENVIRONMENTAL IMPACT STATEMENT VOLUME 1 - NON TECHNICAL SUMMARY**

2



**KILLALOE BYPASS, SHANNON BRIDGE CROSSING AND R494 IMPROVEMENT NATURA IMPACT STATEMENT**

**CLARE County Council**  
Comhairle Contae an Chláir



**Comhairle Contae Thiobraid Árann Thuaidh**  
North Tipperary County Council



**COMPULSORY ACQUISITION OF LAND**  
**CLARE COUNTY COUNCIL**  
**(KILLALOE BYPASS, SHANNON BRIDGE CROSSING AND R494 IMPROVEMENT SCHEME)**  
**COMPULSORY PURCHASE [Roads No. 1] ORDER 2012**

**NOTICE OF THE MAKING OF A COMPULSORY PURCHASE ORDER UNDER SECTION 76 OF AND THE THIRD SCHEDULE TO THE HOUSING ACT, 1966, AS EXTENDED BY SECTION 10 OF THE LOCAL GOVERNMENT (NO. 2) ACT, 1960 AND AMENDED BY THE PLANNING AND DEVELOPMENT ACTS, 2000 - 2011 INCLUDING SECTION 213 OF THE PLANNING AND DEVELOPMENT ACT, 2000; LOCAL GOVERNMENT ACTS, 1925 - 2010 INCLUDING LOCAL GOVERNMENT (NO. 2) ACT, 1960; ROADS ACTS, 1993 - 2007 AND ALL OTHER ACTS THEREBY ENABLING TO BE PUBLISHED IN ACCORDANCE WITH ARTICLE 4(a) OF THE THIRD SCHEDULE TO HOUSING ACT, 1966 (AS AMENDED)**

Clare County Council (hereinafter referred to as "the local authority") on its own behalf and on behalf of North Tipperary County Council, in exercise of the powers conferred upon them by section 76 of the Housing Act, 1966, and the Third Schedule thereto, as extended by Section 10 of the Local Government (No. 2) Act, 1960 (as substituted by Section 86 of the Housing Act, 1966) and amended by the Planning and Development Acts, 2000 to 2011, have made an order entitled as above which is about to be submitted to An Bord Pleanála (hereafter "the Board") for confirmation.

If confirmed, the order will authorise the local authority to acquire compulsorily the land described in the Schedule thereto for the purposes of providing a road development comprising a bypass of Killaloe, a bridge crossing of the River Shannon and an upgrade of the R494 in Ballinac, in the townlands of Ballyvalby, Knockyclovaun, Creeveroe, Shantraud, Killestry and Moy in the County of Clare; and Roolagh, Kilmaglaserry, Garrynathine, Lackanavea (Egremont), Knockadromin Cooladromin and Gortysigane in the County of Tipperary together with link roads, side roads and all ancillary and consequential works associated therewith. Owners, lessees and occupiers of the land described in the Schedule will receive individual written notice.

Any objections to the compulsory acquisition of the land described in the Schedule Part I and II should be made in writing to An Bord Pleanála, 64 Marlborough Street, Dublin 1 no later than **Friday 30th March 2012**.

The order will also authorise the local authority to extinguish the public rights of way described in the Schedule Part II thereto, by order made by them after they have acquired the land, where the said public rights of way are over the land so

acquired or any part thereof, or over land adjacent to or associated with the land so acquired or any part thereof. Any objections to the extinguishing of the said public rights of way should be made in writing to An Bord Pleanála, 64 Marlborough Street, Dublin 1 no later than **5.30pm on Friday 30th March 2012**.

The Board may, at its absolute discretion, decide not to confirm—

- a compulsory purchase order in respect of the land if an objection is made in respect of the acquisition by an owner, lessee or occupier of the land and not withdrawn;
- an order which authorises the extinguishment of a public right of way if there is an objection to the extinguishment, which is not withdrawn, until it has caused to be held an oral hearing into the matter and until it has considered the objection and the report of the person who held the oral hearing.

An Environmental Impact Statement and a Natura Impact Statement, for which separate public notice has been given, have been prepared in respect of the development which it is proposed to carry out on the land to which the order relates. Evidence in relation to:-

- the likely effects on the environment of the proposed road development;
- the likely consequences for proper and sustainable development in the area in which it is proposed to situate the proposed road development;
- the likely significant effects of the proposed road development on European sites;

may also be heard at the oral hearing, if held.

A copy of the order and of the maps referred to in it may be seen at the offices of:

- Clare County Council, Aras an Contae, New Road, Ennis between the hours of 9.00 am and 5 p.m. on working days from 13th February 2012 to 30th March 2012 (inclusive of both dates)
- South East Clare Area Office, Westbury Centre, Knockballynameeth, Co Clare between the hours of 10 a.m. and 12.30 p.m. and from 1.30 p.m. and 4.00 p.m. days from 13th February 2012 to 30th March 2012 (inclusive of both dates)
- Scariff Area Office, Mountshannon Road, Scariff between the hours of 9.30 a.m. and 5 p.m. on working days from 13th February 2012 to 30th March 2012 (inclusive of both dates)
- North Tipperary County Council, Civic Offices, Limerick Road, Nenagh between the hours of 9.00 a.m. and 5 p.m. on working days from 13th February 2012 to 30th March 2012 (inclusive of both dates)
- Newport Area Office, Main Street, Newport between the hours of 9.30 a.m. and 4.30 p.m. on working days from 13th February 2012 to 30th March 2012 (inclusive of both dates)

Dated this 6th day of February 2012  
Tom Coughlan  
County Manager





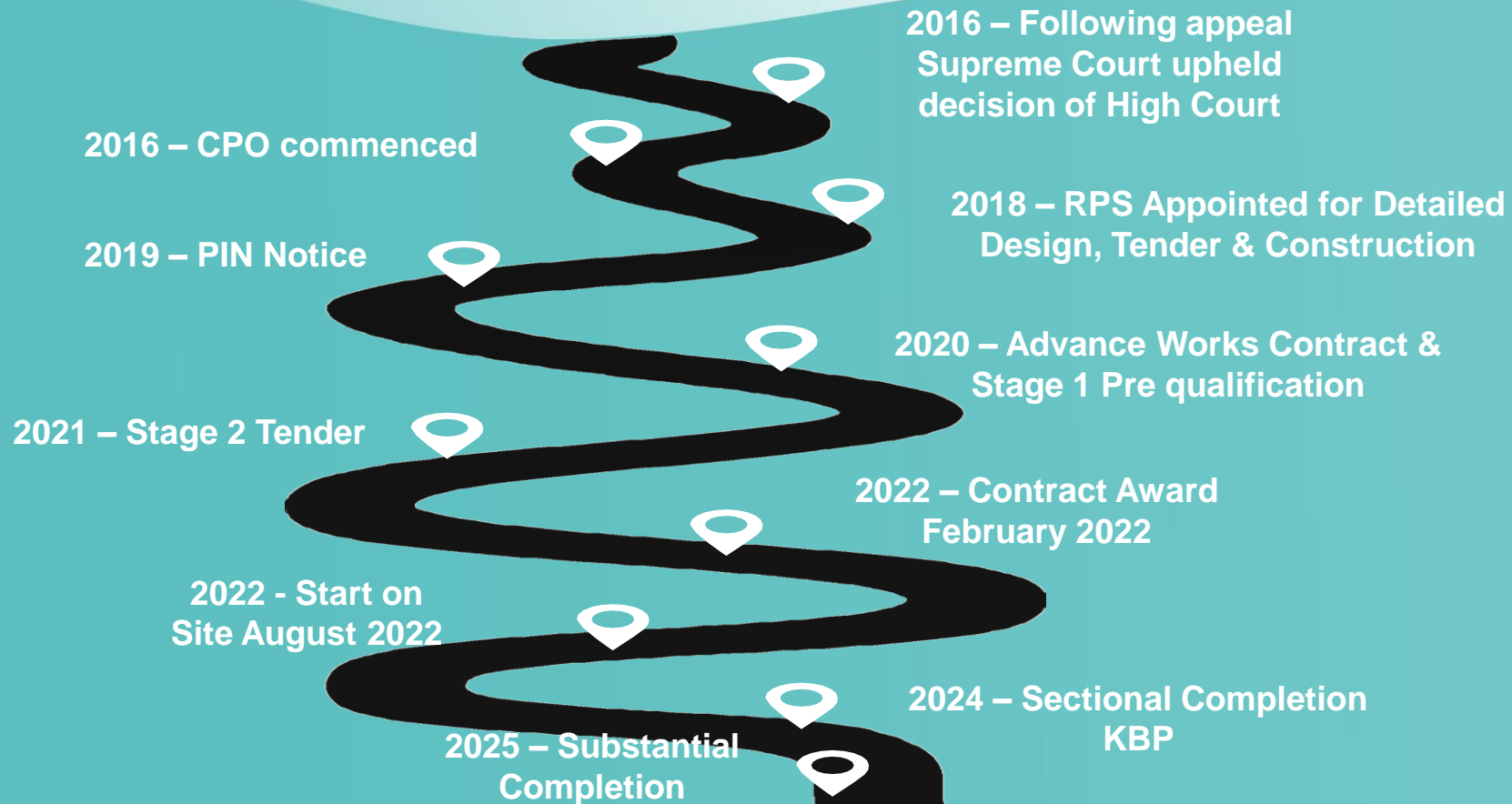


## Roadmap Timeline





## Roadmap Timeline





## Long & Winding Road





## Scheme Design

- 3.0km of new Type 3 single carriageway
- 3.2km of widened/realigned Type 3 single carriageway
- Pedestrian & Cyclist Facilities over the full extent
- 3 new roundabouts
- 2 new staggered priority junctions
- 22 principal structures, including the Shannon Bridge Crossing, Kilmastulla river bridge, Nenagh to Limerick railway bridge, 1 x farm underpass, 14 x culverts and 10 x retaining walls, 3 x attenuation tanks (31 in total)
- Significant earthworks including 13m deep cutting on KBP
- 10 x road drainage attenuation ponds
- Accommodation works for over 100 affected landowners
- Utility diversions, including water, gas, telecoms & power
- Landscaping works, environmental mitigation



## Road Design Challenges

- **Killaloe Bypass**
- 13m deep cutting
- Cycling Facilities (Passage of time, changes in standards)
- Lack of Access, Heavy Vegetation and Forested Areas
- Accommodation Works
- **R494 Improvement**
- Mainly Online Improvement
- Traffic Management
- Online Railway Bridge Replacement
- Utilities
- Drainage
- Stream Culverts
- Septic Tanks
- Property Accesses
- Accommodation Works



## The Shannon Bridge

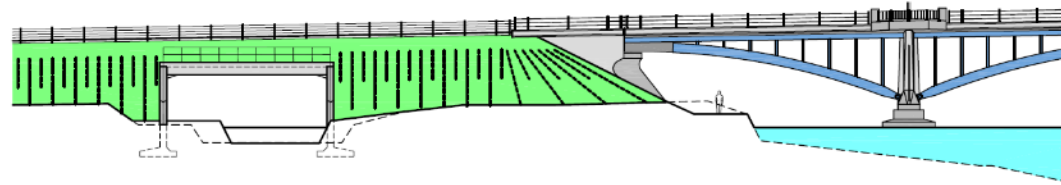


- 207m long with 6 spans
- Steel arched trusses supporting a steel-concrete composite ladder deck
- Reinforced concrete piers, pilecaps and piled foundations



## The Shannon Bridge – Design Challenges

- Planning Conditions – additional span, increase in width



CANAL BRIDGE  
SOUTHERN ELEVATION  
(Scale 1:250)

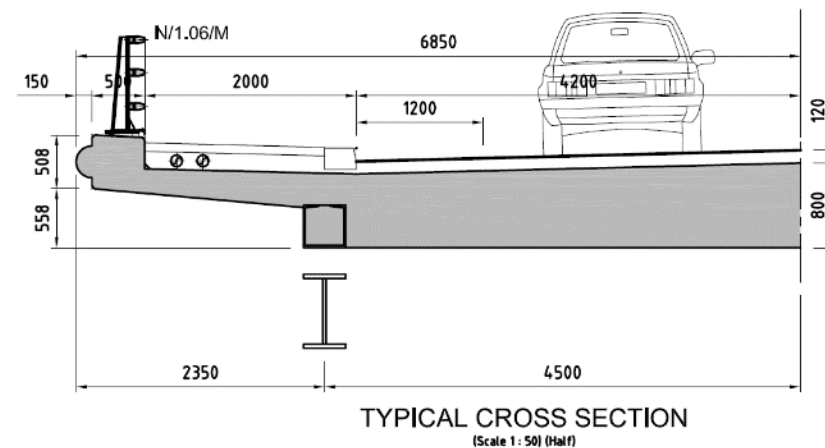
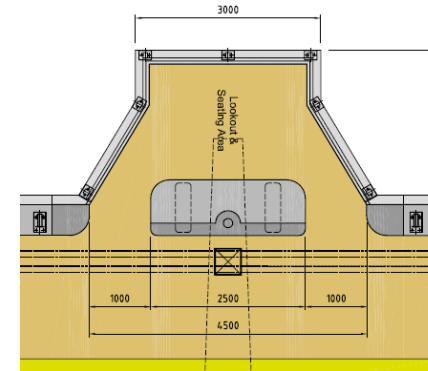
- Aesthetics – retain the architectural vision





## The Shannon Bridge – Design Challenges

- Passage of time since prelim design / planning
- Changes in Design Standards (e.g. parapets)
- Developments in bridge design best practice
- E.g. preliminary design had:
  - - bearings at each pier
  - - 800mm deep in-situ deck spanning transversely
  - - Post-tensioning

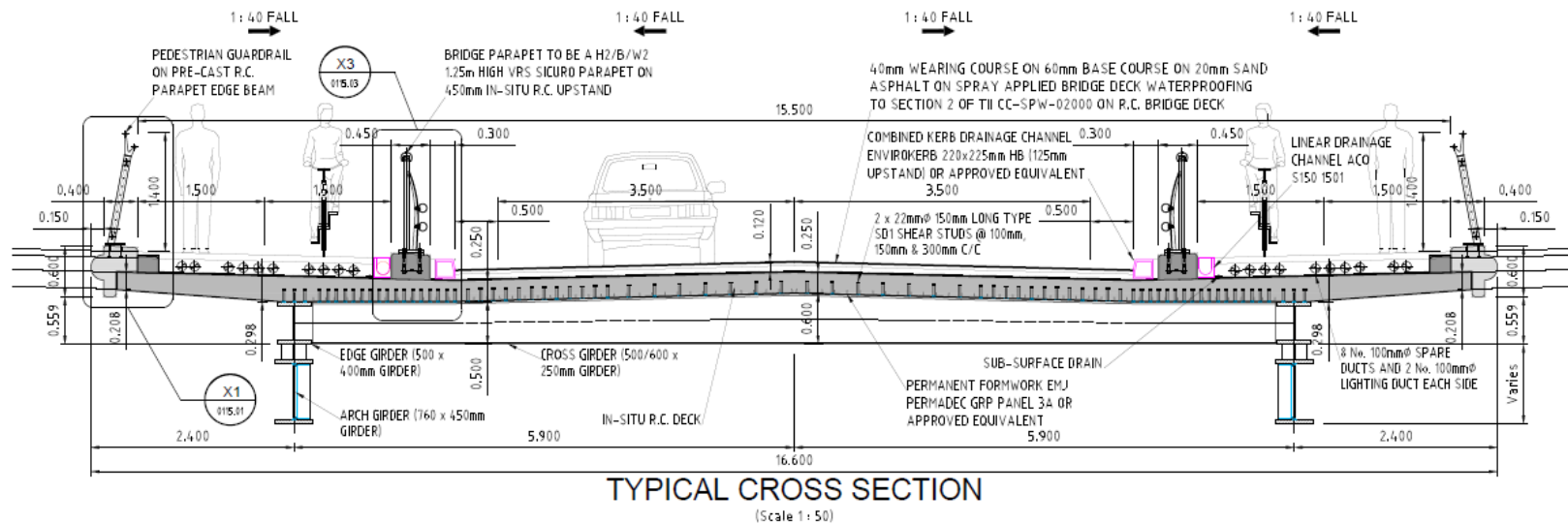






## The Shannon Bridge – Design Solutions

- Overarching desire to retain the aesthetic of prelim design (same Architect)
- Internal vehicular parapets, external stainless steel pedestrian railing

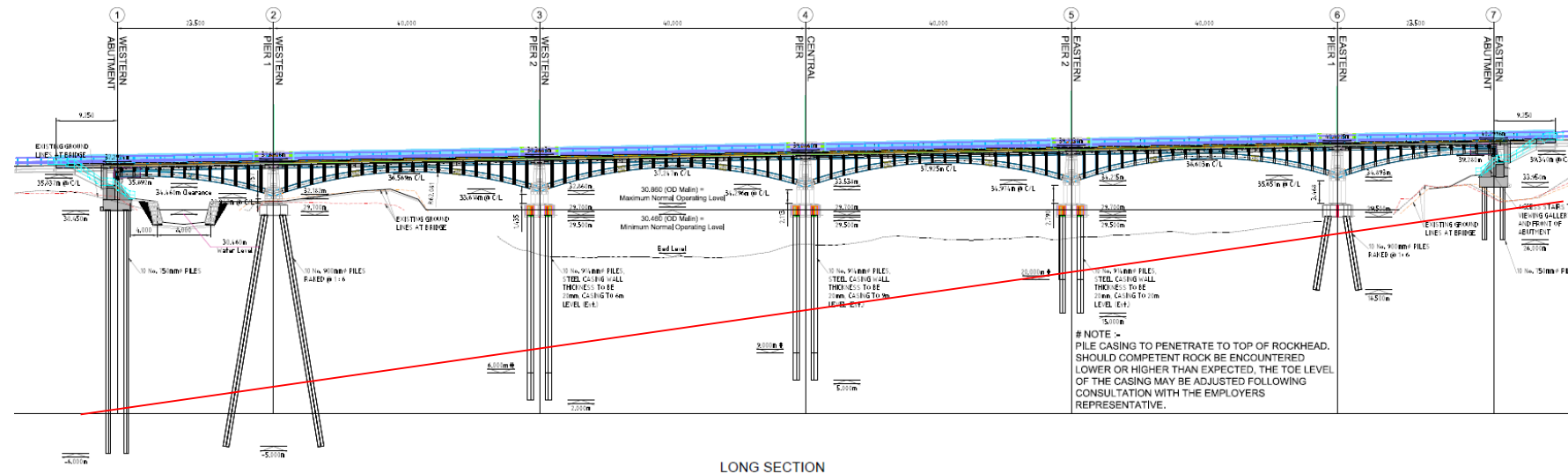


- Change the deck to steel composite ladder deck with steel plate girders spanning transversely and composite deck slab (200mm thick)
- Permanent soffit formwork



## The Shannon Bridge – Design Solutions

- Remove bearings at all intermediate piers
- - fully integral construction at piers (statically indeterminate)
- - structural fixity in arches & spandrels
- - only retain bearings & expansion joints at the abutments
- Varying Foundation Stiffnesses
- Precast Pilecap Shells (bath tubs)



LONG SECTION

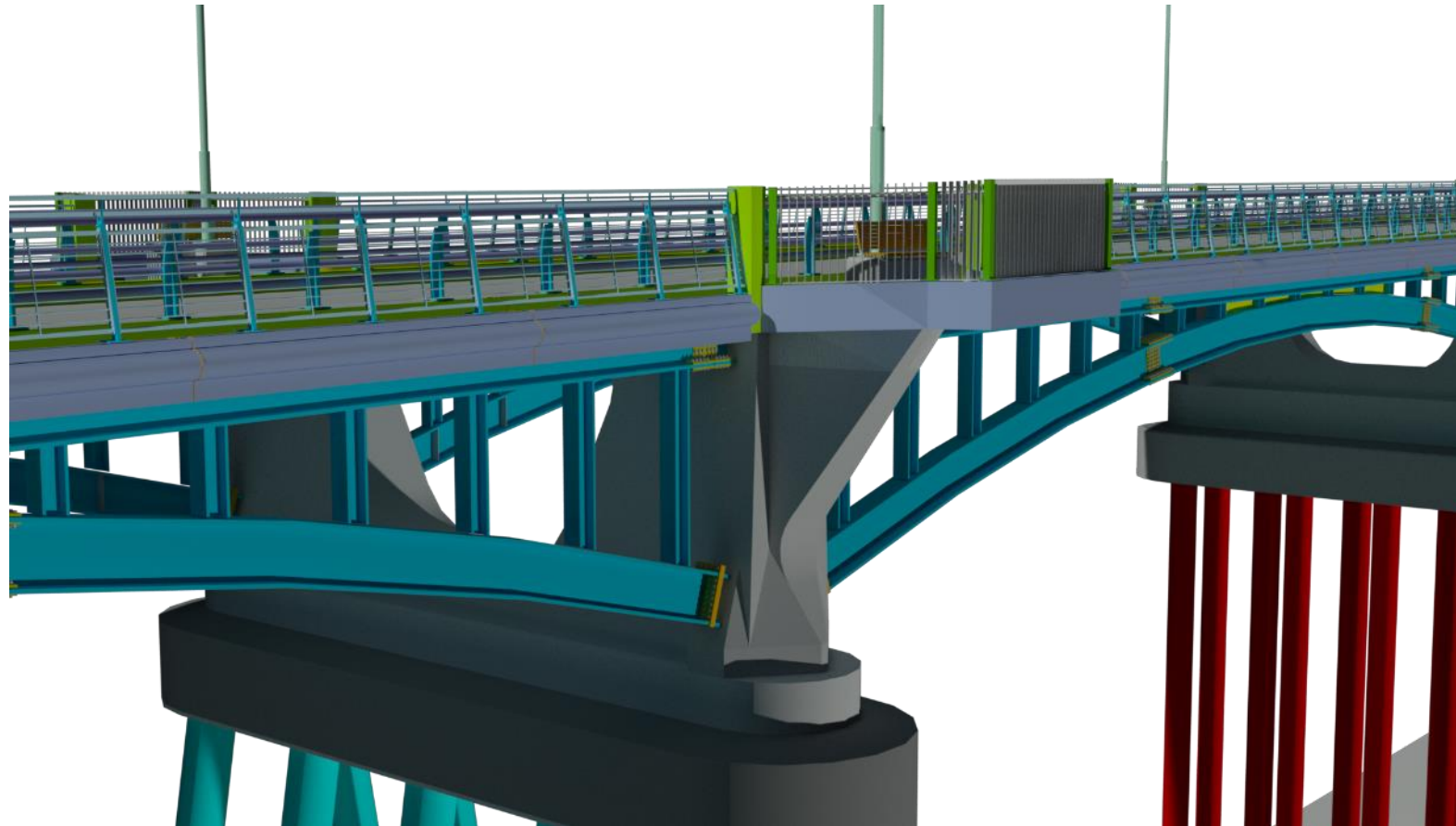


## Design Delivery through Level 2 BIM



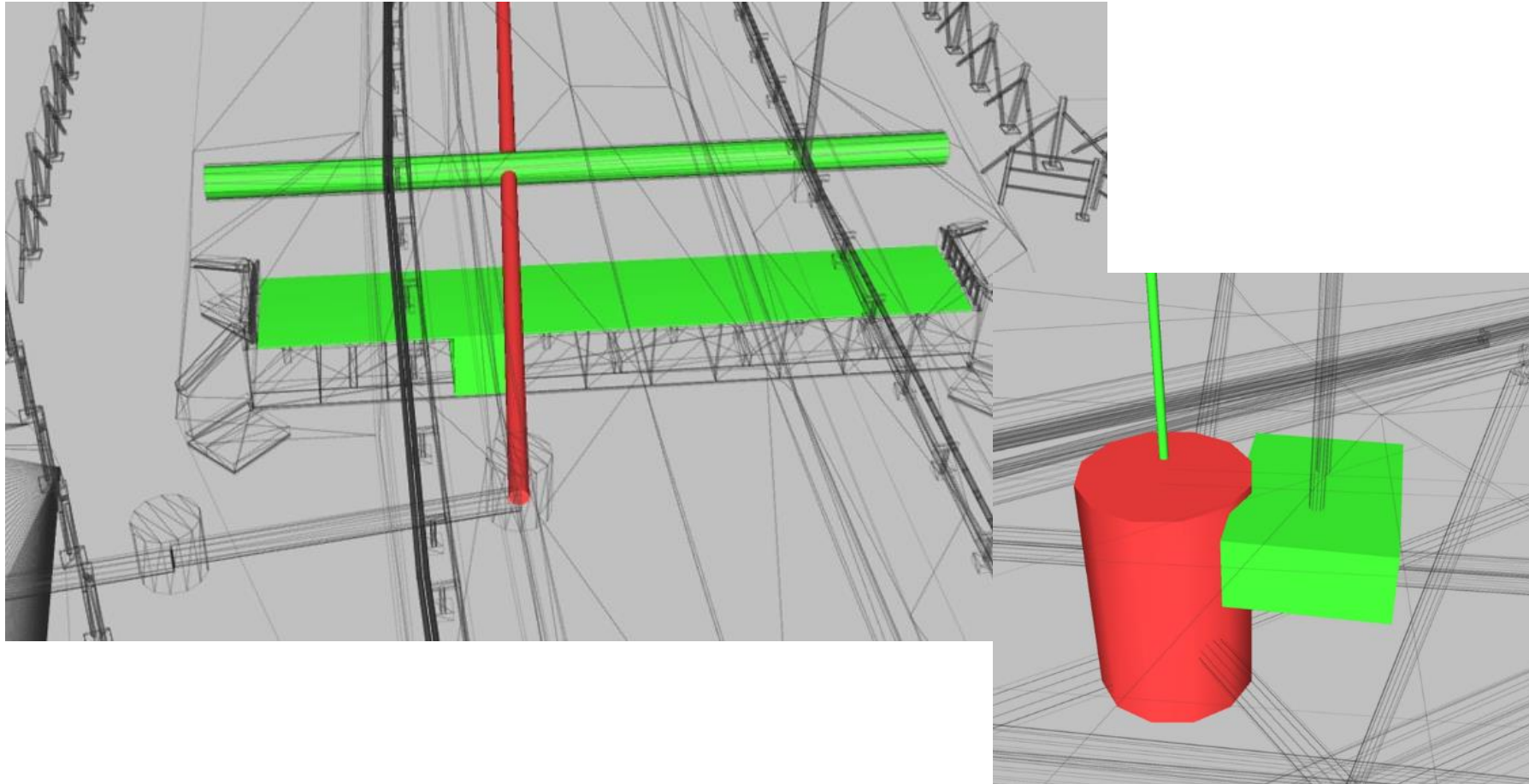


## Design Delivery through Level 2 BIM





## Level 2 BIM – Clash Detection





## Advanced Works Contracts

- **Design Phase:**

- Topographical Surveys
- Ground Investigations
- Utility Investigations
- Invasive Species Surveys
- Ecology Surveys
- Bat Mitigation Measures

- **Enabling Works Contract**

- Site Clearance
- Access Tracks
- Utility (ESB O/H) Diversions
- Fencing
- Foul Sewer Main to Ballina WWTP

- **Archaeological Investigation Contract**

- Stages (i) – (iv) Archaeological Resolution



## Main Works Contract Procurement

- **Two Stage Restricted Procedure:**
- Stage 1 Suitability Assessment Questionnaire (July 2020)
- Pass/Fail & Qualitative Criteria (previous experience)
- 12 responses received, 6 candidates pre-qualified
  
- Stage 2 Invitation to Tender (August 2021)
- 80% Price and 20% Quality split.
- Quality Criteria (Works Proposals) focussed on proposed methodology, seasonal constraints, environmental & risk management procedures
- 4 tenders received
  
- Public Works Contract for Civil Engineering Works Designed by the Employer
- Awarded to John Sisk & Son (Holdings) Ltd in February 2022



## Construction – Killaloe Bypass (2023)







## Construction – Killaloe Bypass (Apr 2024)





## Construction – R494 Improvement (2023)





## Construction – R494 Improvement (Apr 2024)





## Construction – R494 Improvement (Apr 2024)



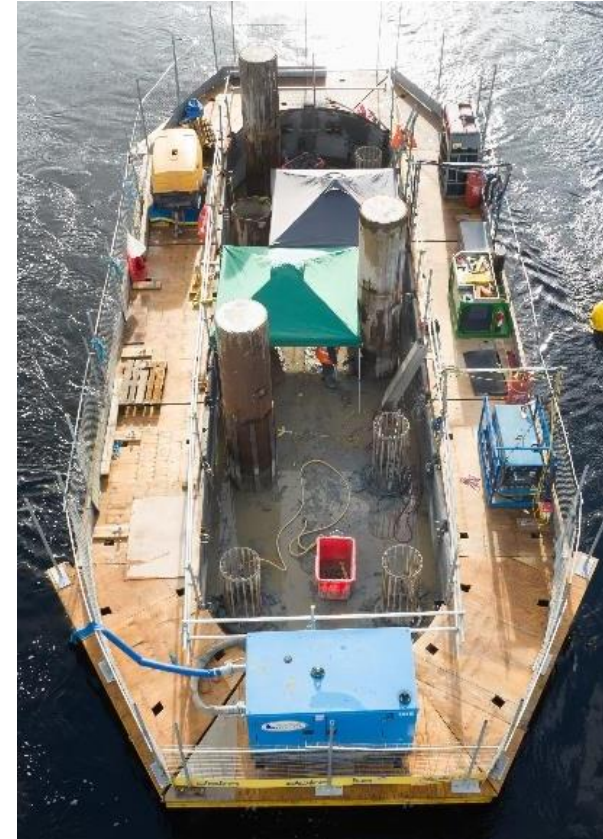


## Construction – Shannon Bridge (2023)





## Construction – Shannon Bridge (2023)



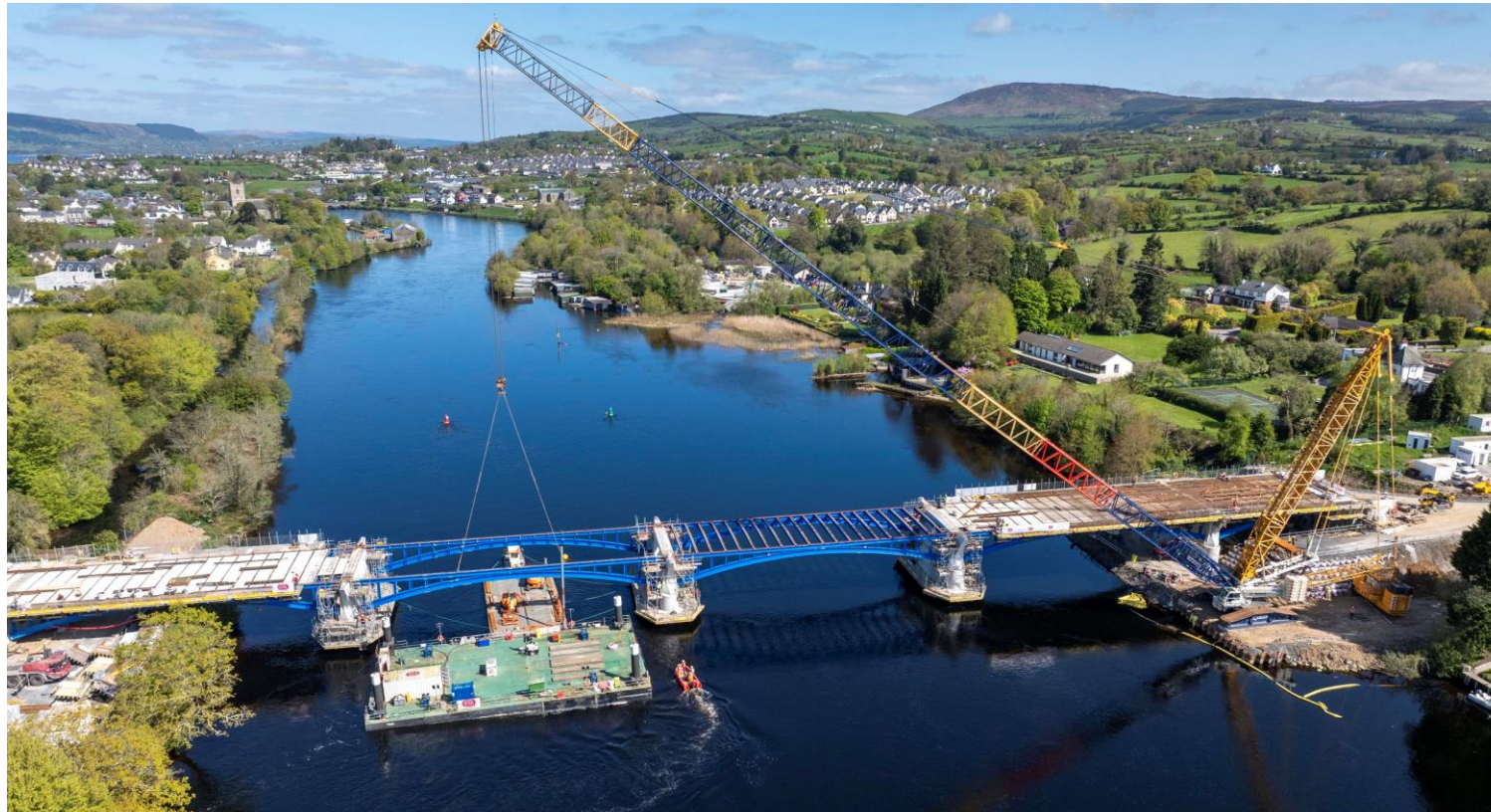


## Construction – Shannon Bridge (2023)





## Construction – Shannon Bridge (Apr 2024)







## Construction – Shannon Bridge (Apr 2024)





An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

---

## Construction – Shannon Bridge (Apr 2024)



---

## Thank You

Questions to be entered through SLIDO when entering your question please direct it to **Anthony O'Brien or Sean Killeen** and they will be addressed at the end of the session:

Slido.com and enter 5812867  
Or via the QR Code





An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

---

# ROADS Services Training Group

## LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION - 2024

Day 1-Session 1-Presentation 3

Stephen Flynn & Sean Callery

Sligo Radisson Hotel, Sligo, May 2024



An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

---

## LOCAL AUTHORITY ROADS CONFERENCE and EXHIBITION – 2024

### **Accommodating Electrical Transmission Infrastructure in the Public Roads Network**

Sean Callery  
Senior Engineer Cork County Council National Roads Office

Stephen Flynn  
Senior Engineer RMO

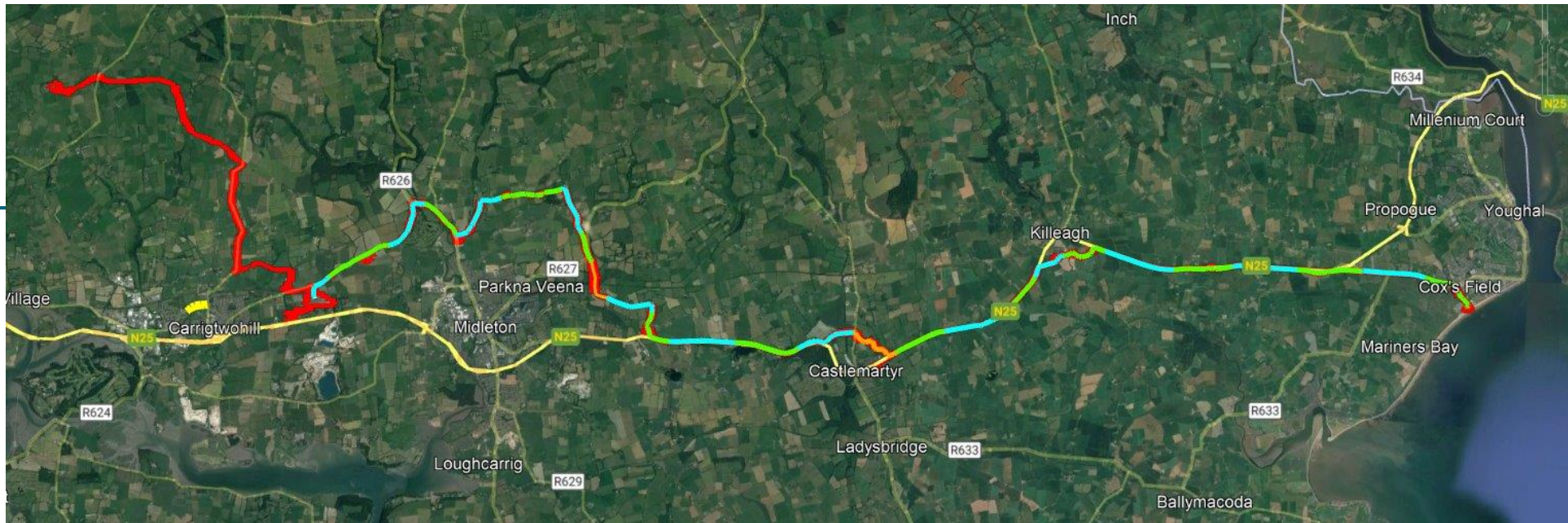


# Celtic Interconnector

## Introduction:

The Celtic Interconnector cable will enable the exchange of 700MW of electricity between Ireland and France. Moving this electricity across a distance of 575km, from Knockraha substation in Co. Cork traversing some 42km of roads and privately owned lands to the coast at Youghal. Then 500km under sea until landfall near La Martyre, France and a further 33km of cable route in France.





## Celtic Interconnector: Irish Route

- Statistics :
  - Overall Length = 42km.
  - On the N25 = 13km.
  - On regional & local roads & Private Lands = 29km.
  - Jointing bays = 60 no.
  - Jointing bays on the N25 = 10 no.
  - The 400 KV route is highlighted in red above, the remainder of the route is 320KV.

# Celtic Interconnector

## Celtic Interconnector: Partnership



**Developer:** Eirgrid Group, for the Irish section of the route. RTE, or Le Reseau de Transport D'Electricite for the French section. The partnership is called Celtic Interconnector.



**Cable & Civils Contractor:** Nexans. They design and supply the cables. They are also contracted to complete the civil works and act as PSCS/PSDP for these elements.



**Sorensen** : Civils contractor working for Nexans.



**Jointing bay designer:** OCSC are the jointing bay & cable route designer, employed by Nexan. They are completing the Technical Acceptance Report (TAR) for the jointing bay design.



**Converter station (in Ballyadam)** :Siemens are the PSCS/PSDP for these works.



# Celtic Interconnector – Role of Cork Co. Co. NRO

---

- Coordinate between various stakeholders, area engineers, planners, CCC developments such as greenways and developments in the Carrigtwohill area, TII structures etc.
- Coordinate between Celtic and future road network upgrades such as Castlemartyr and Killeagh bypasses.
- Assess and agree the design of the jointing bays and cable routes within the national/regional and local roads.
- Advise Cork County Council Planning department on the discharge of planning conditions relating to design elements.
- Road opening licences & Traffic management.
- Precondition surveys.
- Supervision of the works on the regional/local & national routes.

# Celtic Interconnector – Programme & Progress

Projected commissioning date – Spring 2027

400KV route – Projected completion date – Spring 2025

320KV route – Projected completion date – Winter 2026

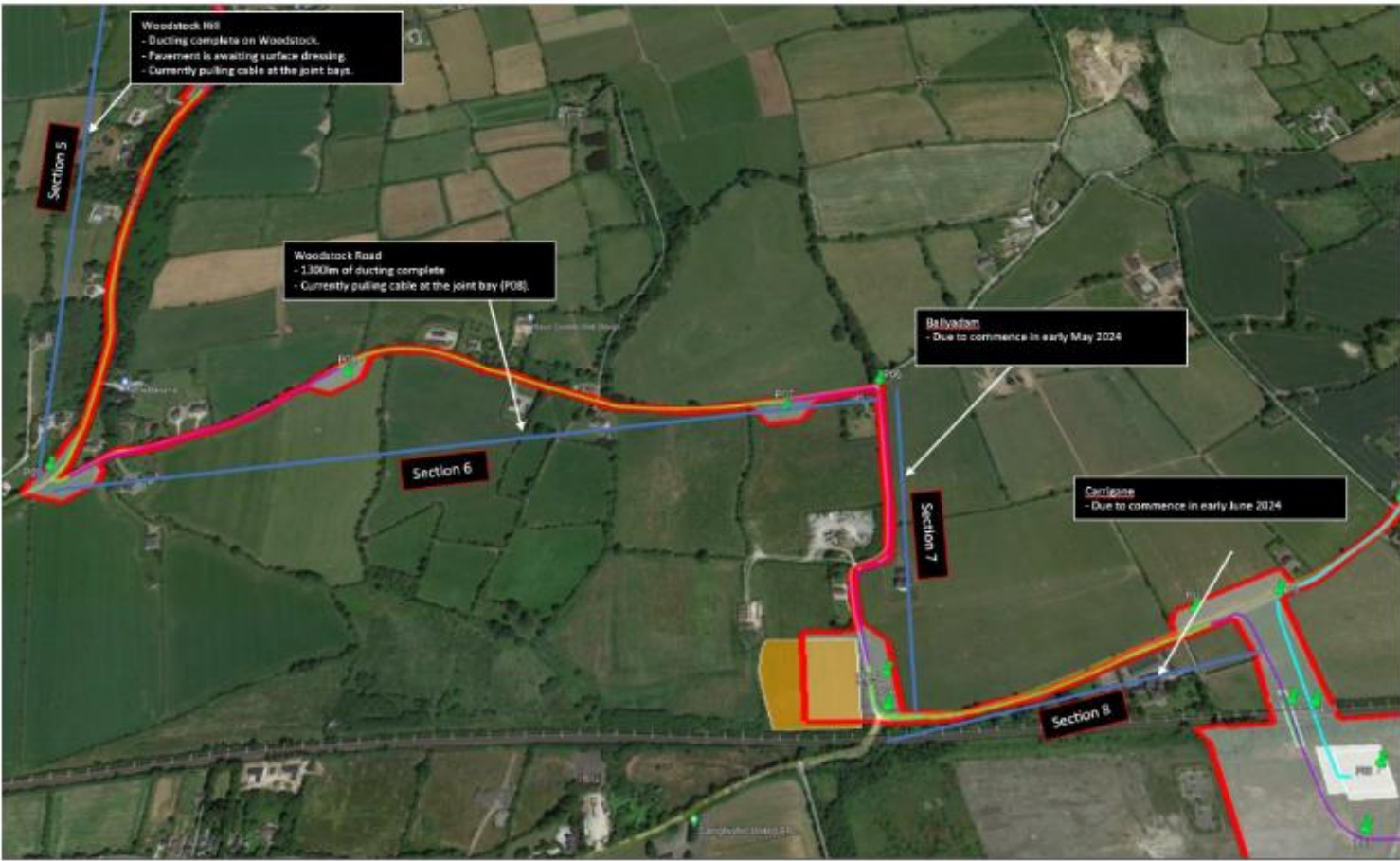
<b>Date W/E:</b>	26th April 2024	
<b>Ducting 400KV route</b>	<b>Total Complete 74%</b>	<b>7400m of 10,200</b>
<b>Joint Bays 400KV route</b>	<b>Total Complete 62%</b>	<b>8/13 installed</b>
<b>Ducting 320KV route</b>	<b>Total Complete 0.7%</b>	<b>220m of 32,100</b>
<b>Joint Bays 320KV route</b>	<b>0%</b>	
<b>Passing bays</b>	<b>14/14 complete on the 400KV route 7/8 complete on the 320KV</b>	
<b>Permanent Reinstatement</b>	<b>5,200 m completed on the regional and local roads, of 7620m</b>	



# Celtic Interconnector – Programme & Progress



# Celtic Interconnector – Programme & Progress



# Celtic Interconnector – Ducting & Road Reinstatement Local Roads

---



# Celtic Interconnector – Ducting & Road Reinstatement Local Roads

---



# Celtic Interconnector – Jointing Bays

---



# Celtic Interconnector – Jointing Bays

---





# Celtic Interconnector – Jointing Bays

---



# Celtic Interconnector – Key Concerns

---

## Stakeholders:

- Disruption of service to road users and key stakeholders during construction.
- Queuing traffic, on the N25 specifically, Castlemartyr & Killeagh.
- Prolonged disruption on the national route.

## Resilience of existing road network

- With temporary diversions in mind & rat running
- Heavy load deliveries.



# Celtic Interconnector – Key Concerns

---

## Design

- Route selection and the location of the cable within the road cross section.
- Restrictions on future maintenance or pavement upgrade works due to separation distances, operations and maintenance manual.
- Road pavement and rideability issues caused by settlement post construction.
- Impact on existing structures, drainage, VRS and other utilities.



# Celtic Interconnector – Key Concerns

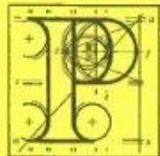
---

## Planning

- Compliance with planning conditions.
- Archaeology & Ecology.

## Safety

- Possible cable strike & scope and extent of remedial works.
- Will road closures be required to repair etc?
- Operations & Maintenance



An  
Bord  
Pleanála

**Board Direction**  
BD-010706-22  
ABP-310798-21

# Celtic Interconnector – Lessons Learned to Date

---

## Planning:

- Detailed route design to be agreed at planning stage.
- Detailed design of jointing bays to be submitted at planning stage.
- Road reinstatement measures to be conditioned at planning stage.
- Operations and maintenance manual detailing separation distances to other services to be submitted and agreed as part of the planning submission.
- Planning condition close out to be addressed at the earliest possible opportunity, and well in advance of construction activities.
- Planning contributions must cover site supervision teams.

## Consultation:

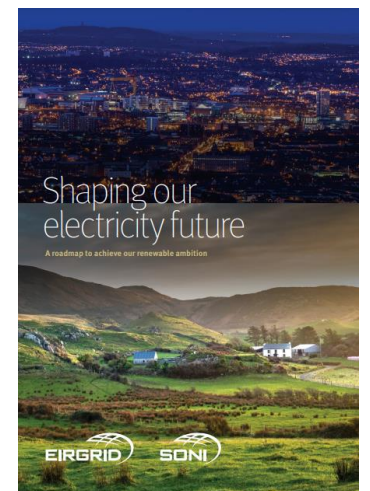
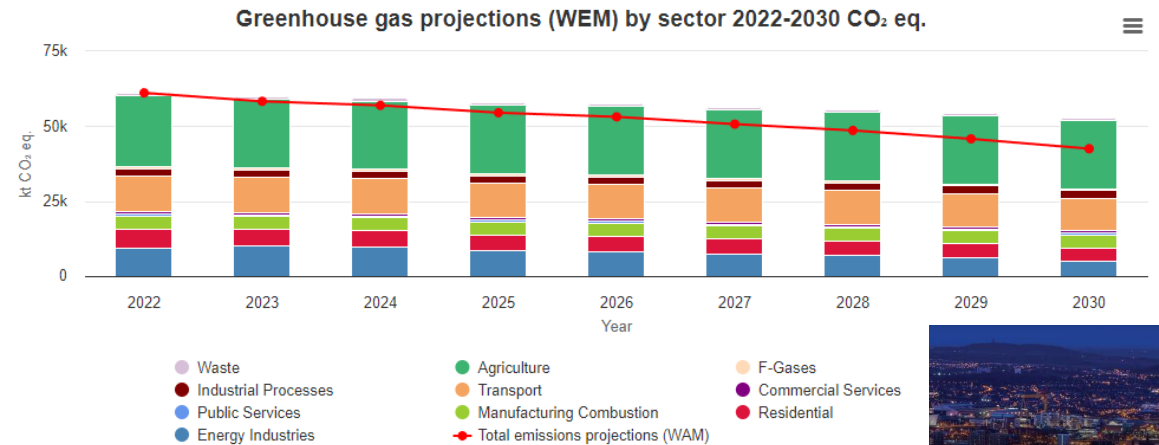
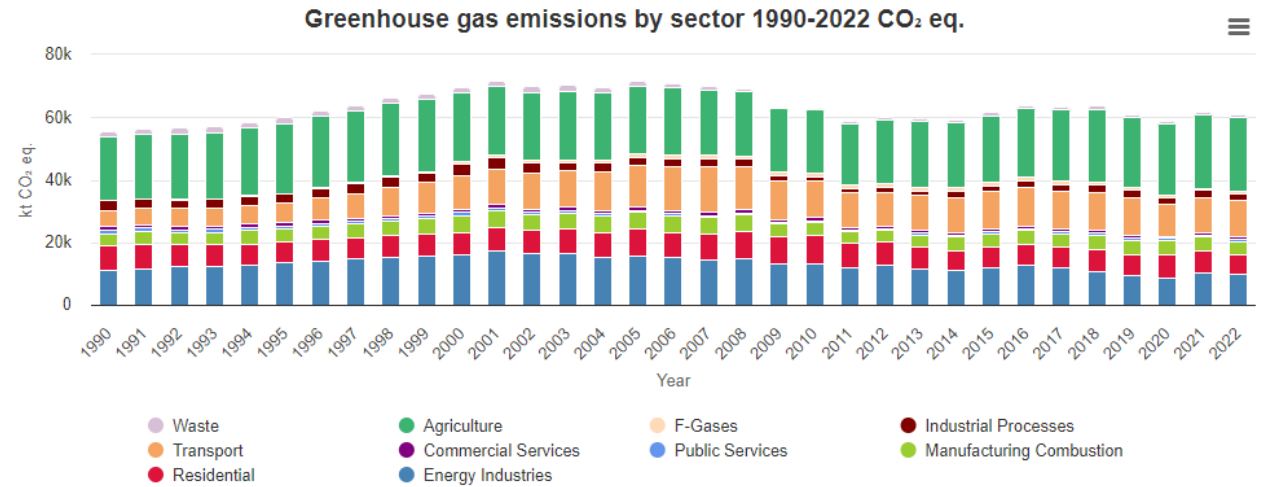
- Interfaces with future schemes to be discussed and developed at the earliest possible opportunity, for example the Cork to Midleton Greenway and the Carrigtwohill Urban Realm Scheme.
- Engagement with landowners. For example, early engagement with landowners would allow opportunity to construct cattle underpasses etc in advance of the cable route construction.

## Coordination of the Works:

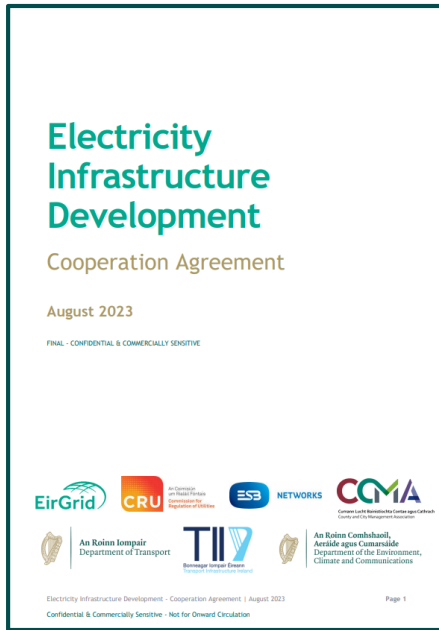
- Mobilise a site supervision team at the earliest opportunity.
- Steering group/Supervisory board could be established.

# Why? - Policy Context

- “Enable the use of the public road and potentially the rail networks for routing of new public and private electricity circuits” CAP 2023
- ***“All relevant public bodies will carry out their functions in a manner which supports the achievement of the renewable electricity targets, including, but not limited to, the use of road and rail infrastructure to provide a route for grid infrastructure where this is the optimal solution”*** CAP 2024
- Social acceptability of underground vs overground solutions in public space?



# HV Forum

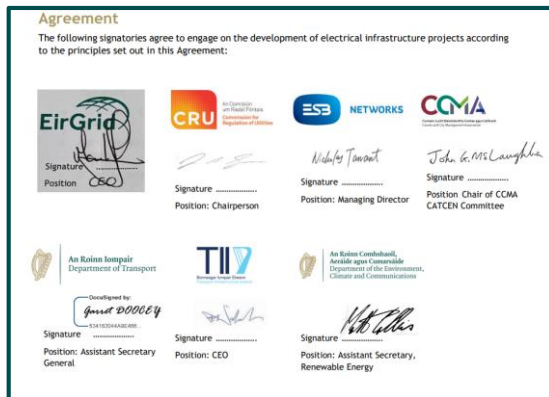


Created in 2023

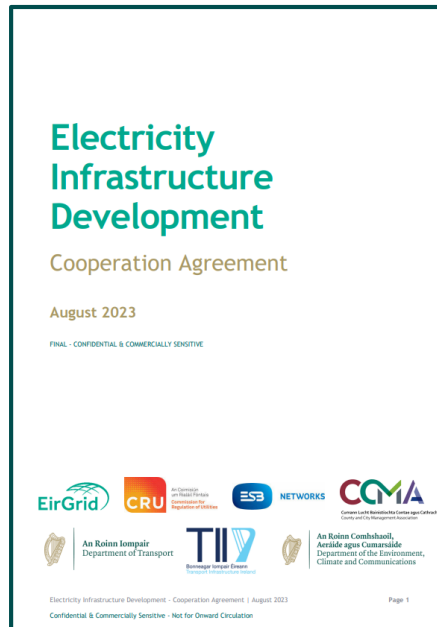
## Key Principles

The following principles form the basis of ongoing collaboration and agreement for the development and operation of electricity transmission infrastructure projects:

1. All parties acknowledge that underground **routing along public roads infrastructure, where practical, is a key enabler** of the EirGrid's Shaping Our Electricity Future.
2. All stakeholders are committed to **working constructively towards accommodating the electricity transmission infrastructure, provided that significant roads impacts are objectively identified and addressed.**
3. **Early engagement** has been identified as a key requirement whereby roads issues and impacts are identified and addressed from the outset of each project.
4. EirGrid will **fully assess route options, including alternatives to public road** where appropriate, in order to optimise the schemes. Under the Forum, a joint working framework will define protocols for engagement between electricity and roads sectors through the project lifecycle.



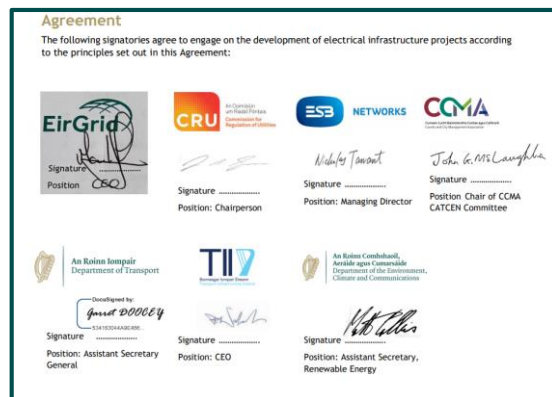
# HV Forum



## Key Principles

The following principles form the basis of ongoing collaboration and agreement for the development and operation of electricity transmission infrastructure projects:

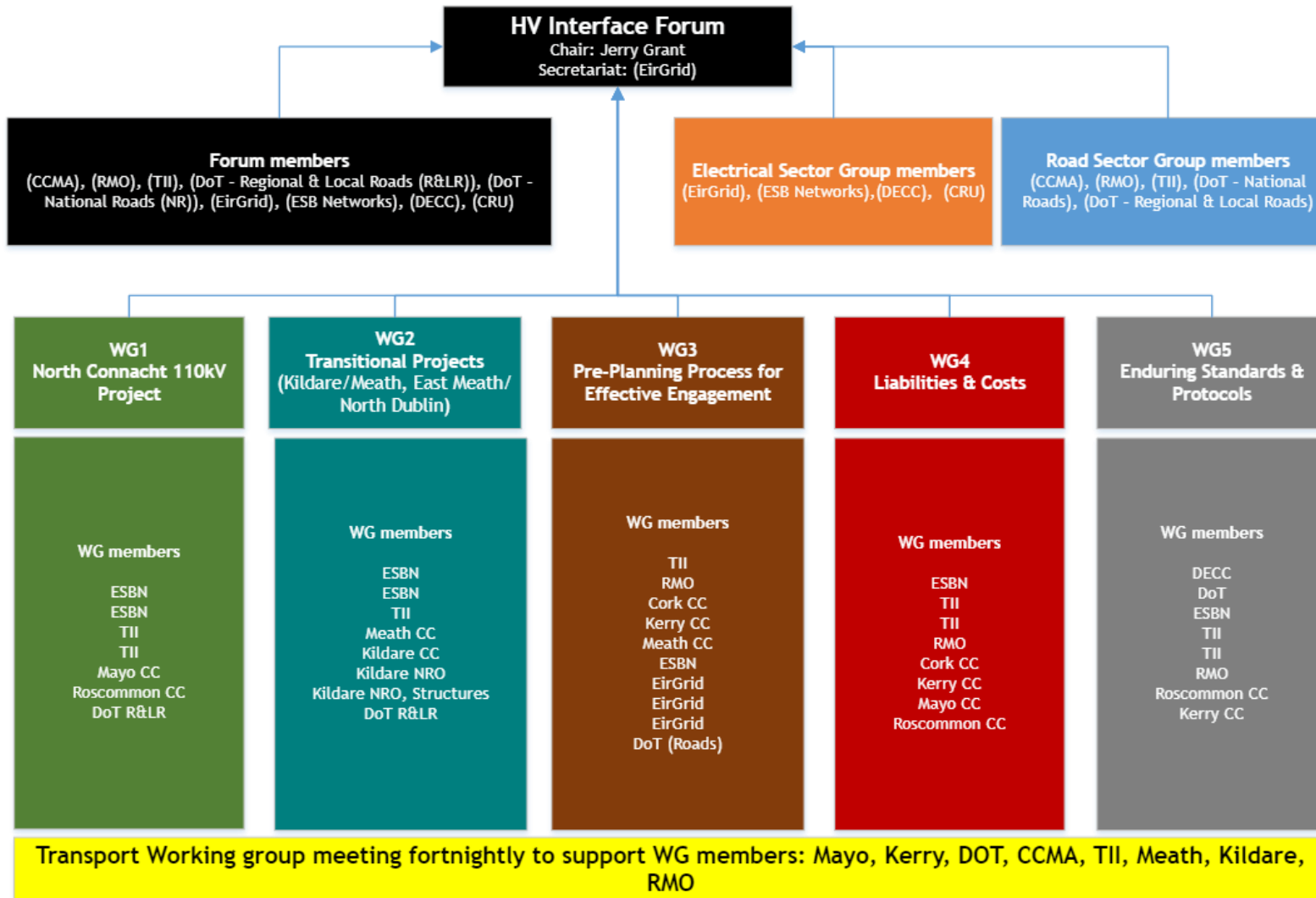
5. Protocols will be developed in line with **best practise so that electrical and road infrastructure can be effectively operated, maintained** and repaired to deliver the separate mandates of electricity and roads authorities.
6. The Forum acknowledges the **need for cost of participation by roads authorities in project delivery to be covered** in project budgets.
7. Electricity transmission infrastructure systems in public roads create the potential for **future cost liabilities**.
8. The Forum will seek to address protocols for addressing liabilities arising from operation of transmission Infrastructure.





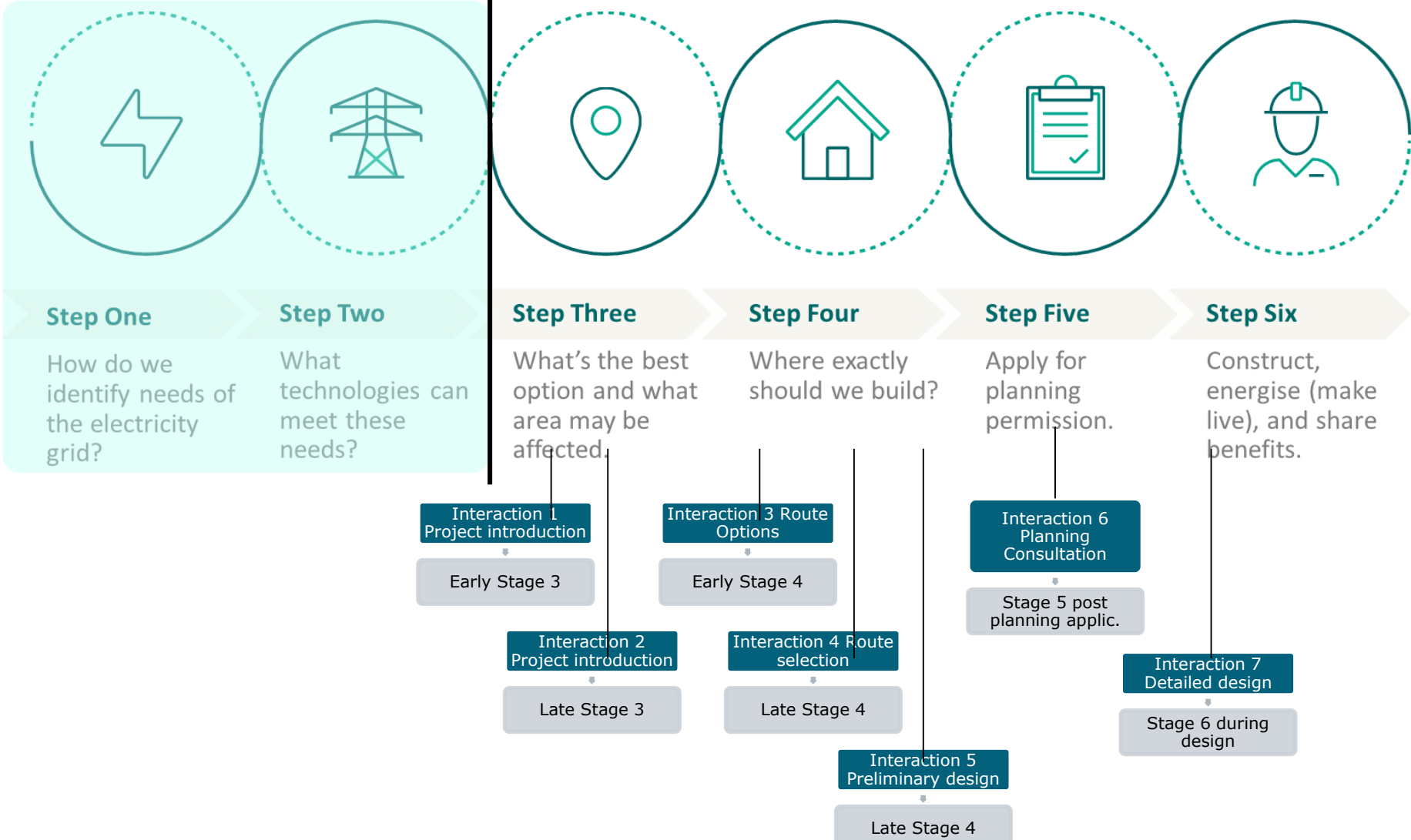
# HV Forum

Date: 07/03/2024



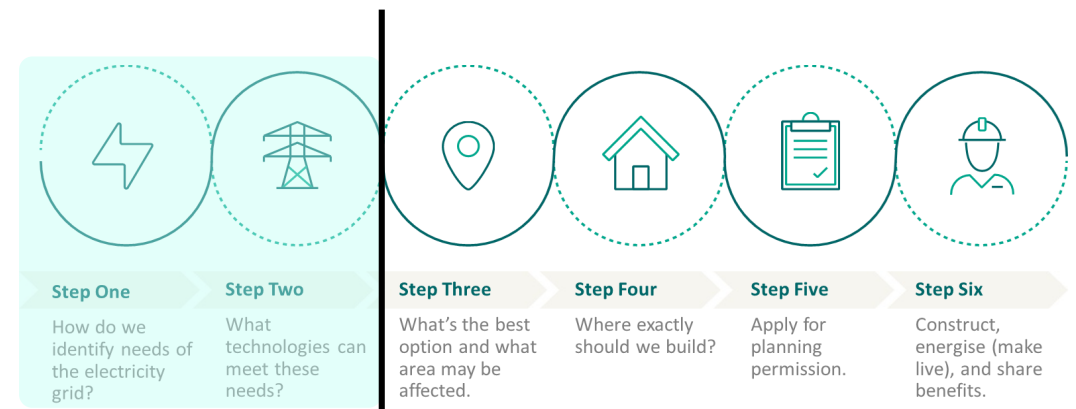
Progress during 2023 & Q1 2024 has been slow on some areas.

# Eirgrid's evolving approach



# Working Group 3 - Pre-Planning Process for Effective Engagement

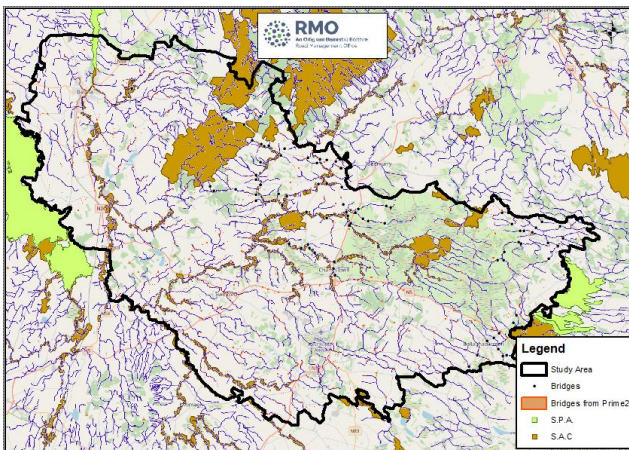
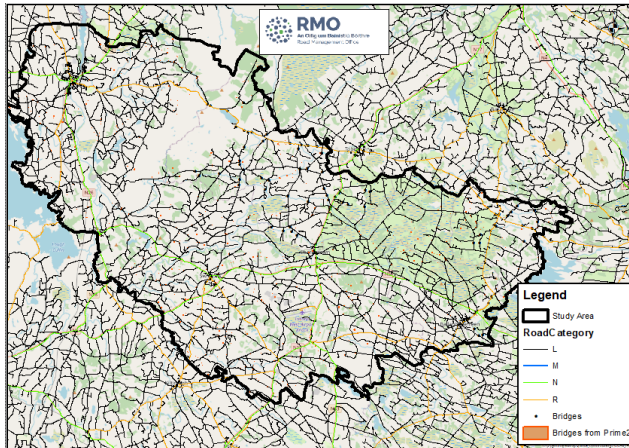
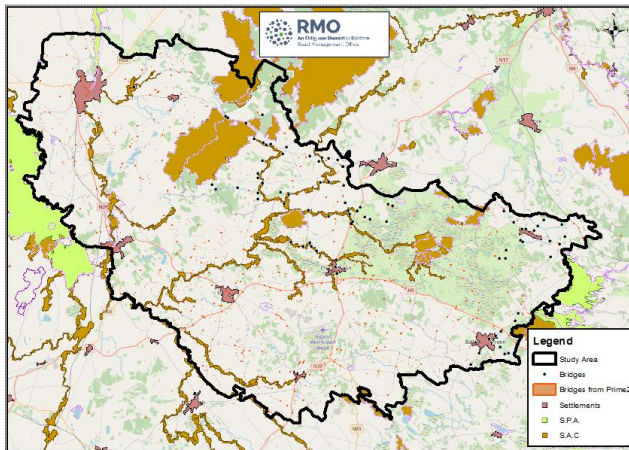
- Opportunities (e.g. other projects) that are available should be considered at Step 1
- Consider all reasonable options at Step 2. Will always need consider overground and underground; off road and on road – or possible combinations.
- How does a planned approach get incorporated?
- All statutory powers should be considered in MCA
- Minimising risk for ESNB “ No Surprises Please”
- How to measure future risks?



# EIRGRID How to get from A to B?

Multi criteria analysis, MCA

SAC, SPA, NHA, Settlements, Rivers etc

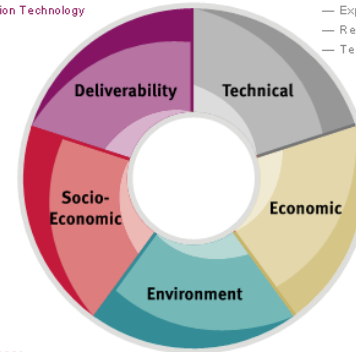


### Deliverability Sub-Criteria

- Implementation Timelines
- Project Plan Flexibility
- Dependence on other Projects
- Risk of Untried Construction Technology
- Supply Chain Constraints
- Permits & Wayleaves

### Technical Sub-Criteria

- Safely Standard Compliance
- TSSPS Compliance
- Reliability Performance
- Headroom
- Expansion / Extendibility
- Repeatability
- Tech. Operational Risk



### Socio-Economic Sub-Criteria

- Settlements & Communities
- Recreation & Tourism
- Landscape & Visual
- Cultural Heritage
- Telecommunications, Aviation & Defense

### Economic Sub-Criteria

- Implementation Cost
- Life-Cycle Cost
- Benefits
- Cost to SEM
- Contingency Provision
- Pre-Engineering Cost

### Environment Sub-Criteria

- Biodiversity, Flora & Fauna
- Water, Geology, Hydrogeology & Hydrology
- Soil
- Air & Climate
- Material Assets
- Noise
- Transport and Traffic

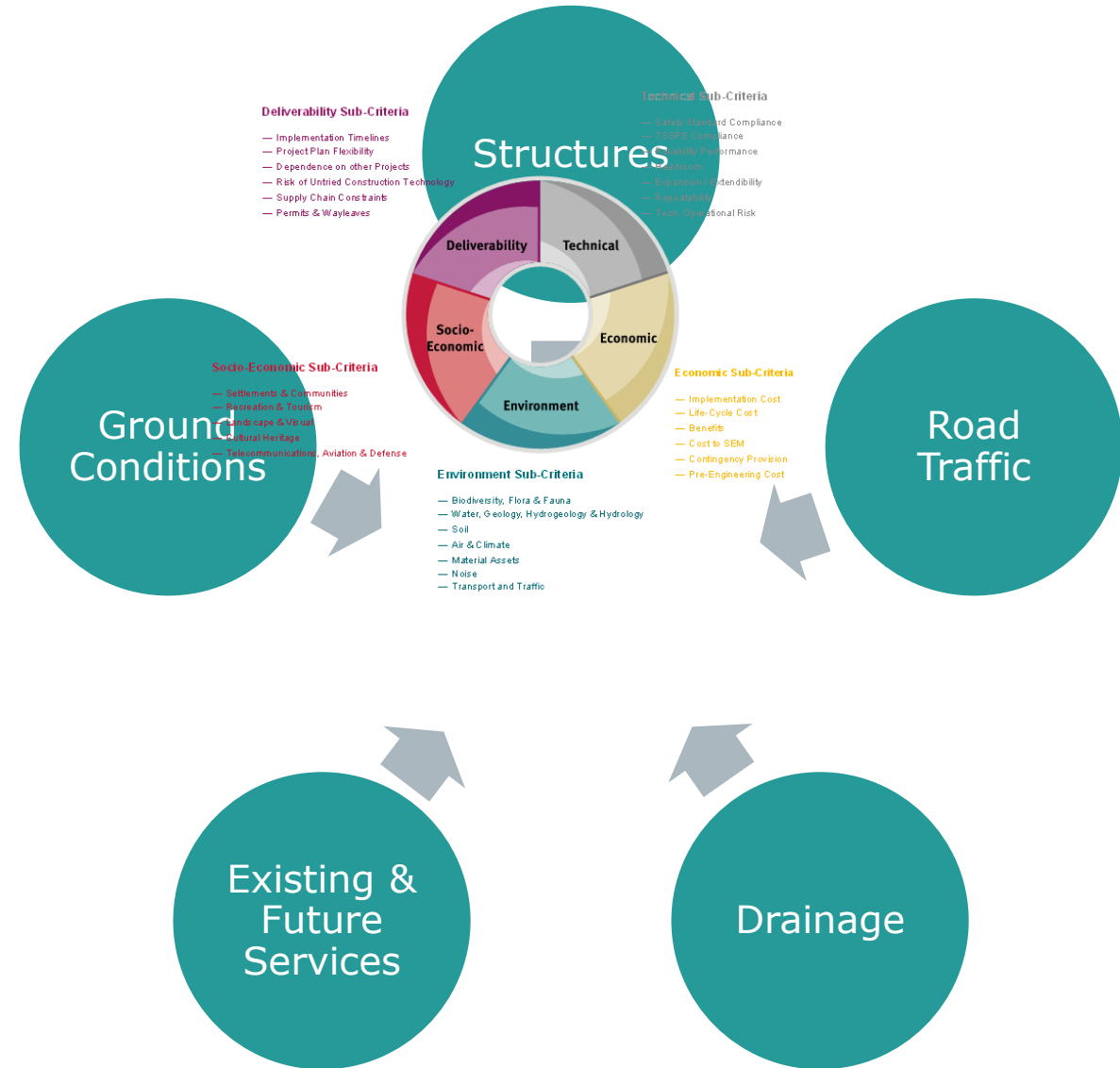
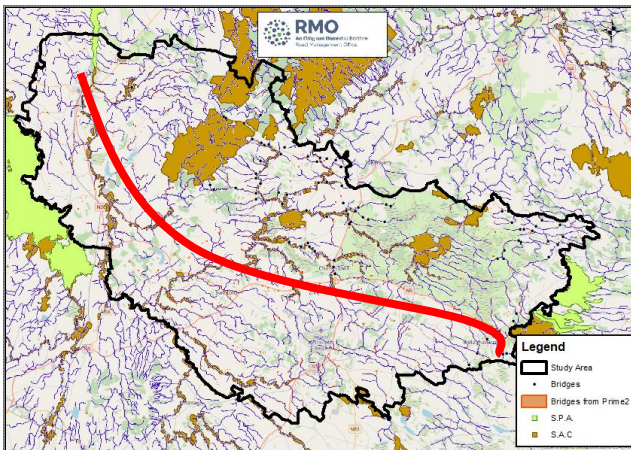
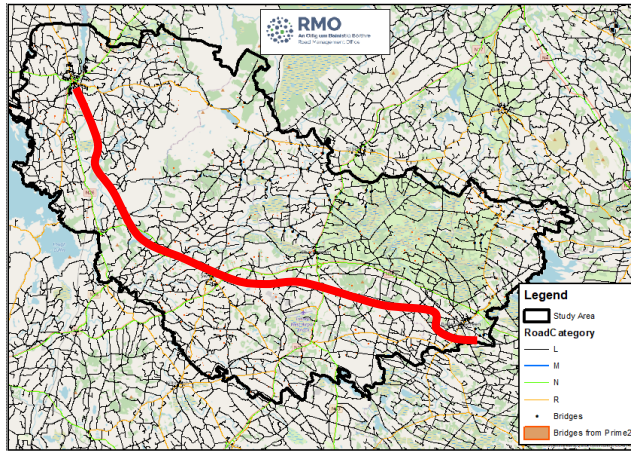
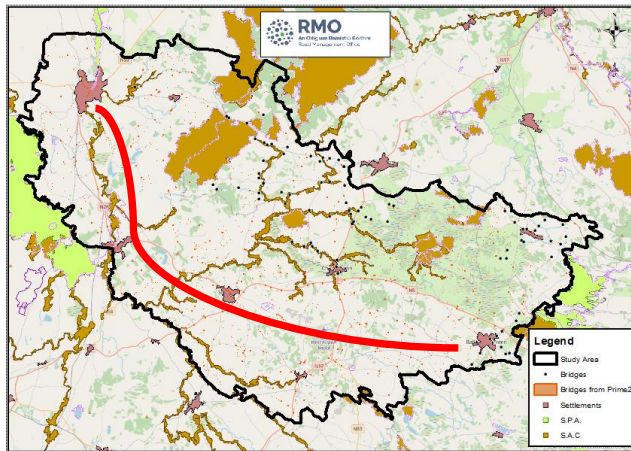
Assessment Criteria	Option 1	Option 2	Option 3
Economic	Dark Blue	Blue	Light Yellow
Technical	Dark Blue	Green	Light Green
Environment	Light Green	Green	Light Green
Socio-Economic	Light Green	Green	Dark Blue
Deliverability	Dark Blue	Green	Dark Blue

More significant/difficult/risk

Less Significant/difficult/risk



# Roads: What are the constraints? How do we get from A to B?



# Working Group 3 - Pre-Planning Process for Effective Engagement

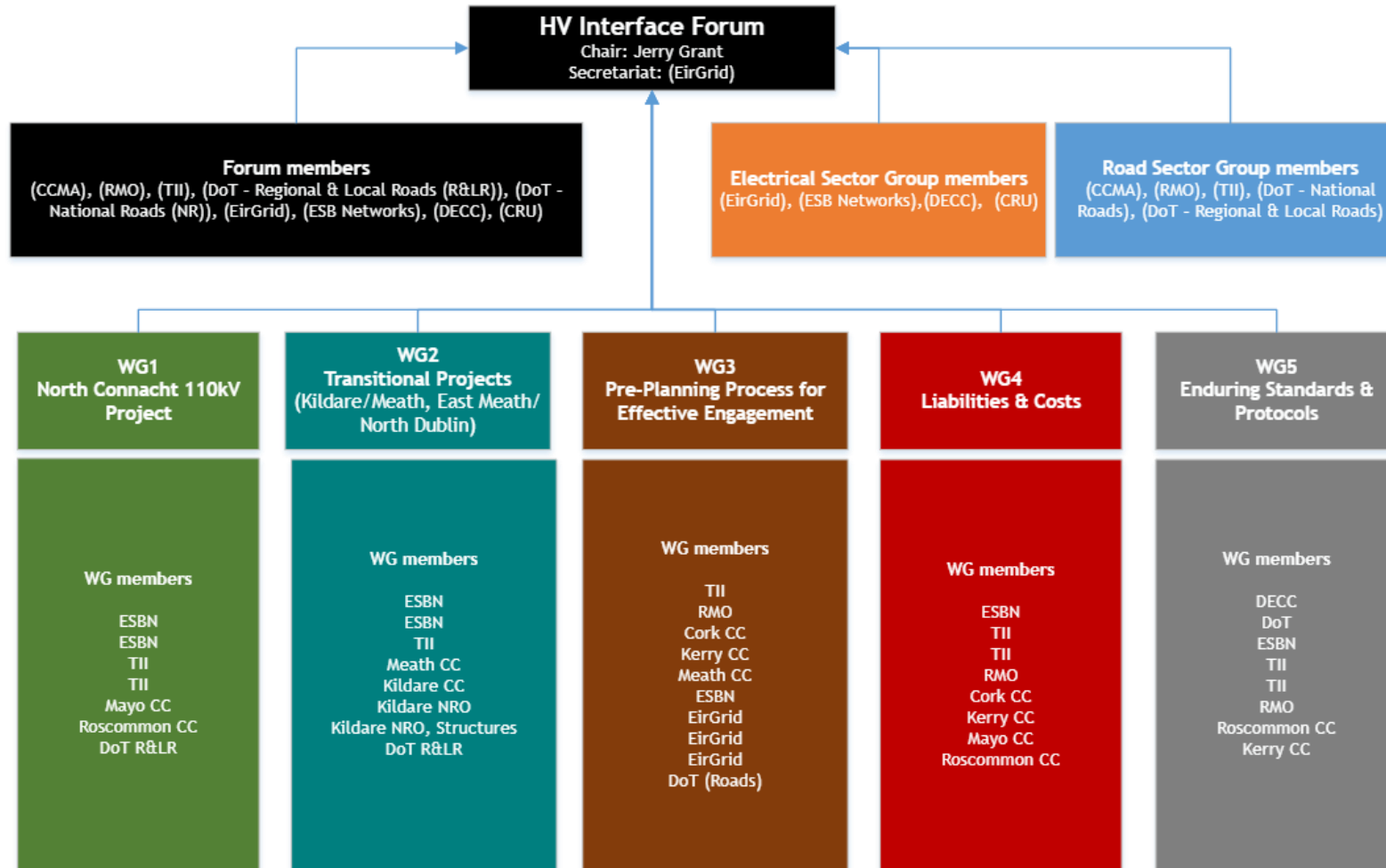
---

## Objectives for Transport Group

- Transparent and robust decision making
- Road Input into the Multi Criteria Analysis, MCA for Long and Short Listing of Routes
- Reasonable “redline” boundaries for route to ensure appropriate flexibility
- Consideration of statutory powers to secure route and easement
- Use of T1 process at an early stage when emerging preferred route is known - reducing risk
- Ensuring requirements for road opening licence process are incorporated in ABP submissions
- Appropriate reinstatement (TII standard) and accommodation for future climate drainage

# HV Forum

Date: 07/03/2024



Transport Working group meeting fortnightly to support WG members: Mayo, Kerry, DOT, CCMA, TII, Meath, Kildare, RMO

## WG 4 & WG 5 – to be finalised

---

The purpose of Working Group 4 (WG4) is to identify and agree a position with respect to:

- ❑ Cost of participation by roads authorities through all project phases throughout development, design, delivery, and operation.
- ❑ Future cost liabilities post construction
  - Maintenance
  - Improvements
  - Drainage
  - Others
- ❑ Develop a protocol for addressing costs and liabilities.
- ❑ Submit protocol to HV Forum for approval.
- ❑ If agreement is not reached in certain areas, the WG should record and present these findings to the HV Forum.



## WG 4 & WG 5 to be finalised

---

- ❑ The purpose of Working Group 5 (WG5) Enduring Standards and Protocols is to build upon the work of the HV Forum Working Groups (WG's 1-4) by forming a Standards Group that will support the longer term development of high voltage electricity transmission infrastructure in public roads where this is the preferred option.
- ❑ The development of enduring standards and protocols will provide certainty to the sectors that certain minimum standards will be defined and agreed for both public and private projects.

# Other items

---

- ❑ Application to private cables
- ❑ Management of scarce underground road space
- ❑ Ongoing oversight
- ❑ Input your experience into group



---

## Thank You

Questions to be entered through SLIDO when entering your question please direct it to **Sean Callery or Stephen Flynn** and they will be addressed at the end of the session:

Slido.com and enter 5812867  
Or via the QR Code





An Roinn Iompair  
Department of Transport



Cumann Lucht Bainistíochta Contae agus Cathrach  
County and City Management Association

## RSTG Conference 2024 15<sup>th</sup> May - Day 1 Networking \ Exhibition & Coffee Break

We will resume at 11.45 am

### Session 2-Asset Management

#### Chair Pat Dowling

11.45-12.00	Bridge Rehabilitation	Gary Salter
12.00-12.25	Capturing & Managing Pedestrian and Cycling Infrastructure (ATI) on MapRoad AMS	Aidan McClafferty - RMO
12.25-12.45	LA 16 Collision Capture and Reporting Procedure on MapRoad AMS (incl Bridges Module)	Brian Burke - RMO

Join the Q&A session at [Slido.com](https://www.slido.com) and enter 5812867  
Or via the QR Code

