

A63 Castle Street, Hull HullBID Network Lunch

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What we will cover today?

- Introduction to Highways England and the Road Investment Strategy
- A63 Scheme History
- Current issues on A63 and why we are promoting this solution
- Scene setting
- Scheme challenges
- Governance and processes we need to follow
- Next steps

Who are we?

- Government owned company, since 2015, formally Highways Agency
- Operate, maintain and improve England's motorways and major A roads.



Department
for Transport

Network totals around **4,300 miles**. While this represents only **2 per cent** of all roads in England by length, these roads carry **a third** of all traffic by mileage and **two thirds** of all heavy goods traffic.



We report to **Department for Transport** and two bodies hold us to account on your behalf:

- **Transport Focus**
- **Office of Road and Rail**



What do we do?

Road investment strategy (RIS 1)

A long-term programme for our motorways and major roads with the stable funding needed to plan ahead.

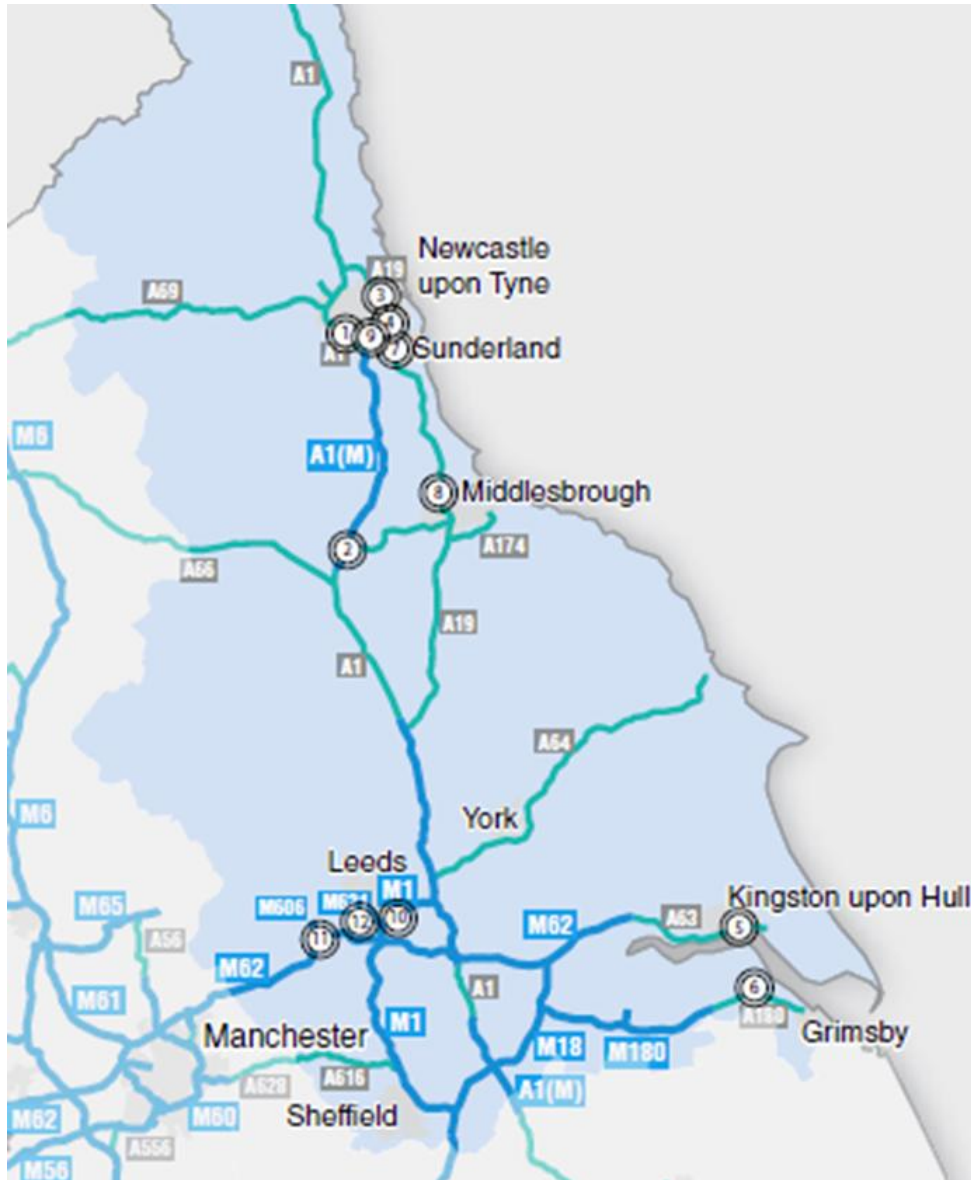
The RIS 1 comprises:

- a long-term vision for England's motorways and major roads, outlining how we will create smooth, smart and sustainable roads
- a multi-year investment plan that will be used to improve the network and create better roads for users
- high-level objectives for the first roads period 2015 to 2020

Over the next 5 years the first RIS will:

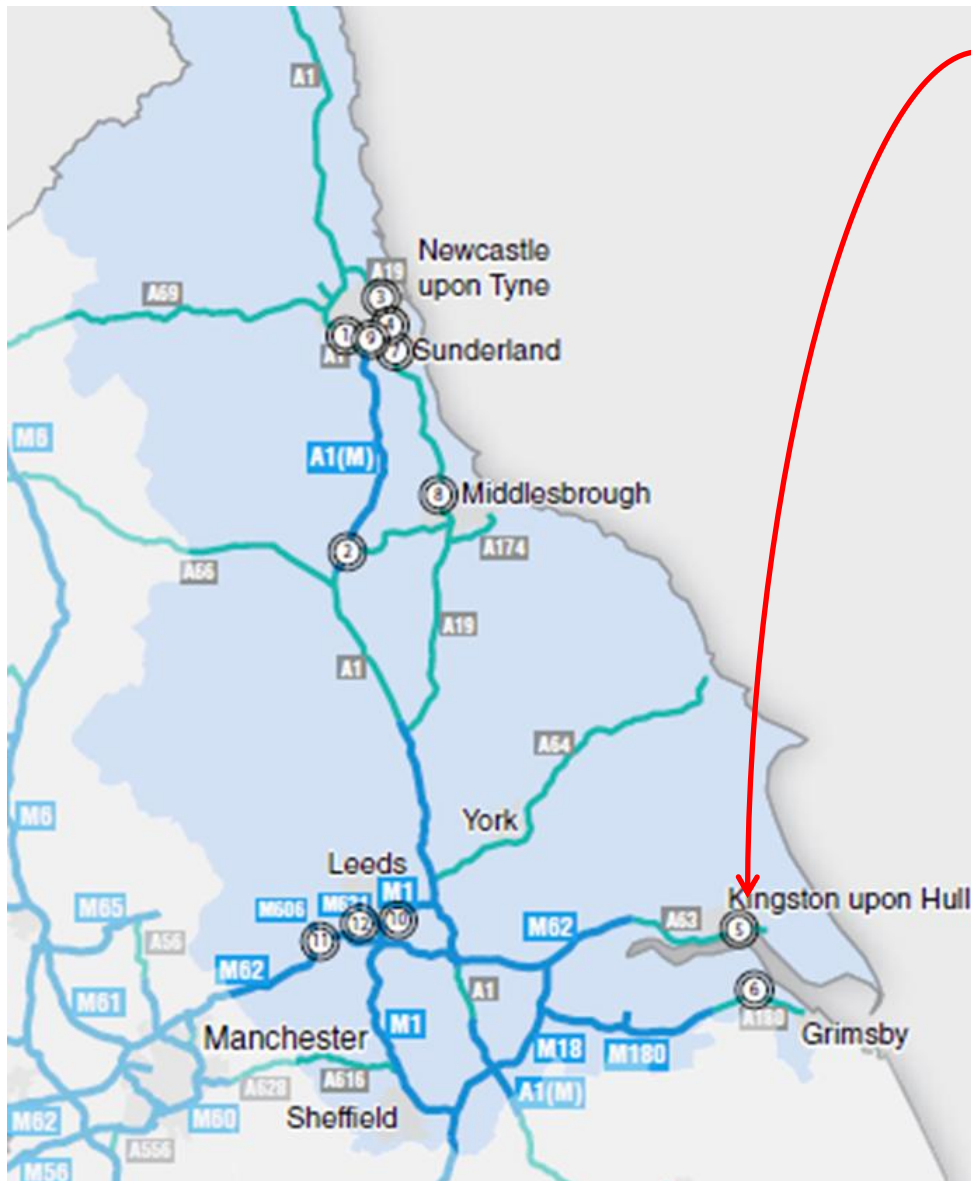
- see **£15.2 billion** invested in over 100 major schemes to enhance, renew and improve the network
- benefit up to 250,000 people by reducing the noise impact of England's motorways and major roads
- help prevent over 2500 deaths or serious injuries on the network
- improve 200 sections of the network for cyclists
- build over 1300 additional lane miles

Schemes completed in RIS 1 in Yorkshire and North East



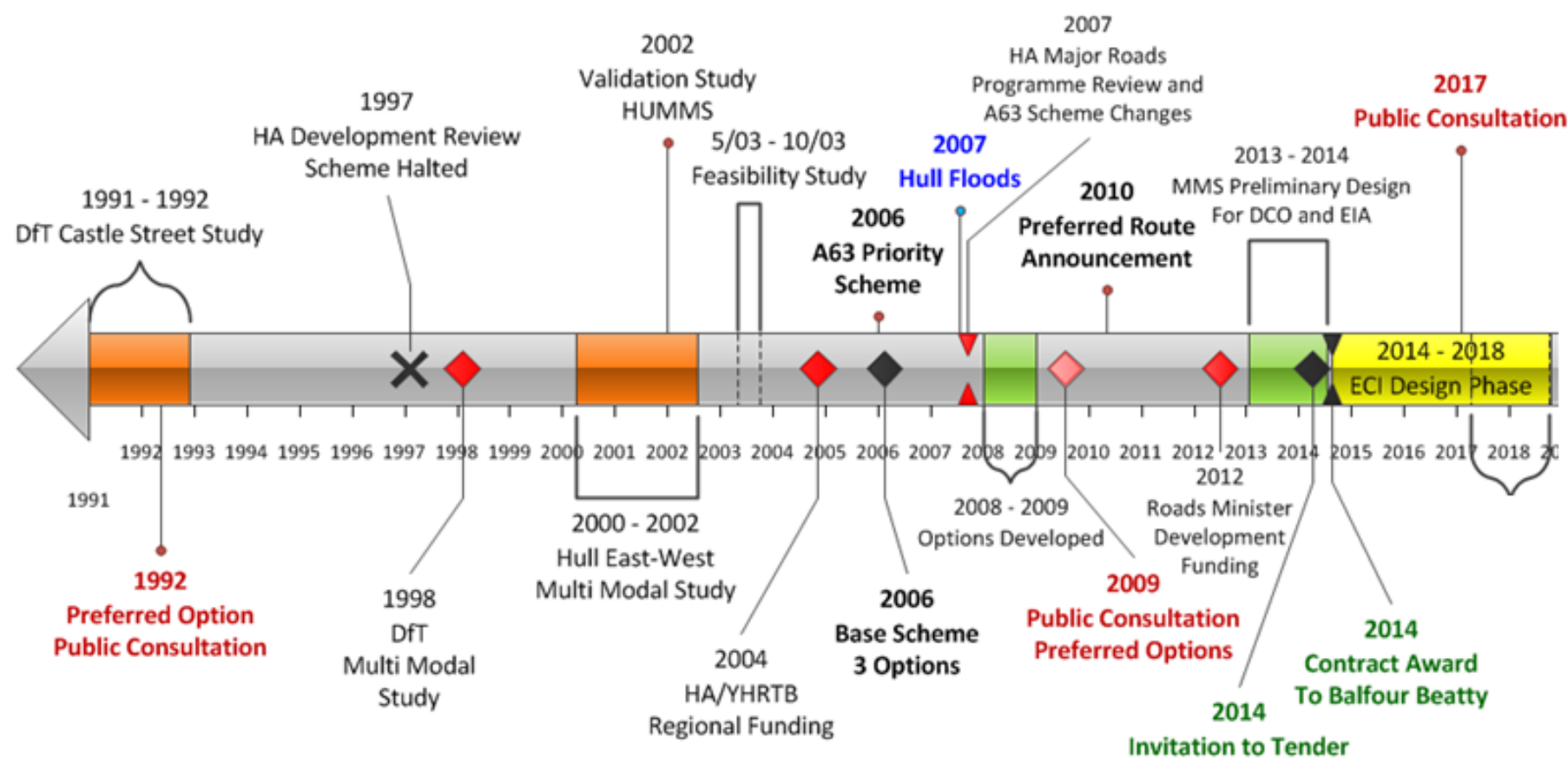
- A160/A180 Port of Immingham (March 2017)
- A1 Coalhouse to Metro Centre (July 2016)
- M1 28-32 Smart Motorway (Feb 2016)
- M1 J39-42 Smart Motorway (Jan 2016)
- A1 Leeming to Barton; OFT Winter 17/18
- A19 Coast Road; OFT March 2019

Schemes in development



- A63 Castle Street
- A19 Testos
- A19 Downhill Lane
- A19 Norton to Wynyard
- M621 J1-7
- M1 J45
- M62 J20-25 Smart Motorway
- A1 Scotswood to North Brunton
- A1 Birtley to Coalhouse
- A1 in Northumberland Programme

Scheme History



A63 Castle Street – Why is there a need for a scheme?

Current Problems:

- A63 Castle Street is approximately 1.5 kilometres long and is a dual carriageway which runs through the centre of Hull
- Vital link between the M62 motorway to the west and the Port of Hull to the east of the city
- Approximately 54,000 vehicles a day travel on Castle Street
- 6 sets of traffic lights between Porter Street and Market Place (so within the scheme limits)
- Not very efficient and frequent cause of congestion
- A63 creates visual and physical severance between the city centre and the Marina

Our Scheme Objectives:

1. To relieve congestion on A63 Castle Street
2. Provide improved accessibility to the Port of Hull
3. Reduce severance between the city centre and waterfront
4. Improve safety

A63 Castle Street – What are our proposals?

- Update the Mytongate junction and improve the 1.5 kilometre section of road to improve journey times for road users through conversion of a major interchange into a split level junction.
- Two-lane dual carriageway carrying east-west traffic below north-south traffic in a new 400 metre underpass. Lowering the level of the road into a cutting by approximately 7 metres at Mytongate Junction.
- Ferensway and Commercial Road would pass over, being raised by approximately 1 metre, creating a split level junction.
- Scheme includes two new pedestrian bridges which will link the south and north of the city for pedestrians, cyclists and disabled users.
- Exhumation of circa 19,000 bodies to allow us to build the scheme.
- Alternate pedestrian / cycle route under A63 at High Street to replace Market Place crossing
- A bespoke pumping station and rising main.

A63 Scheme Extents

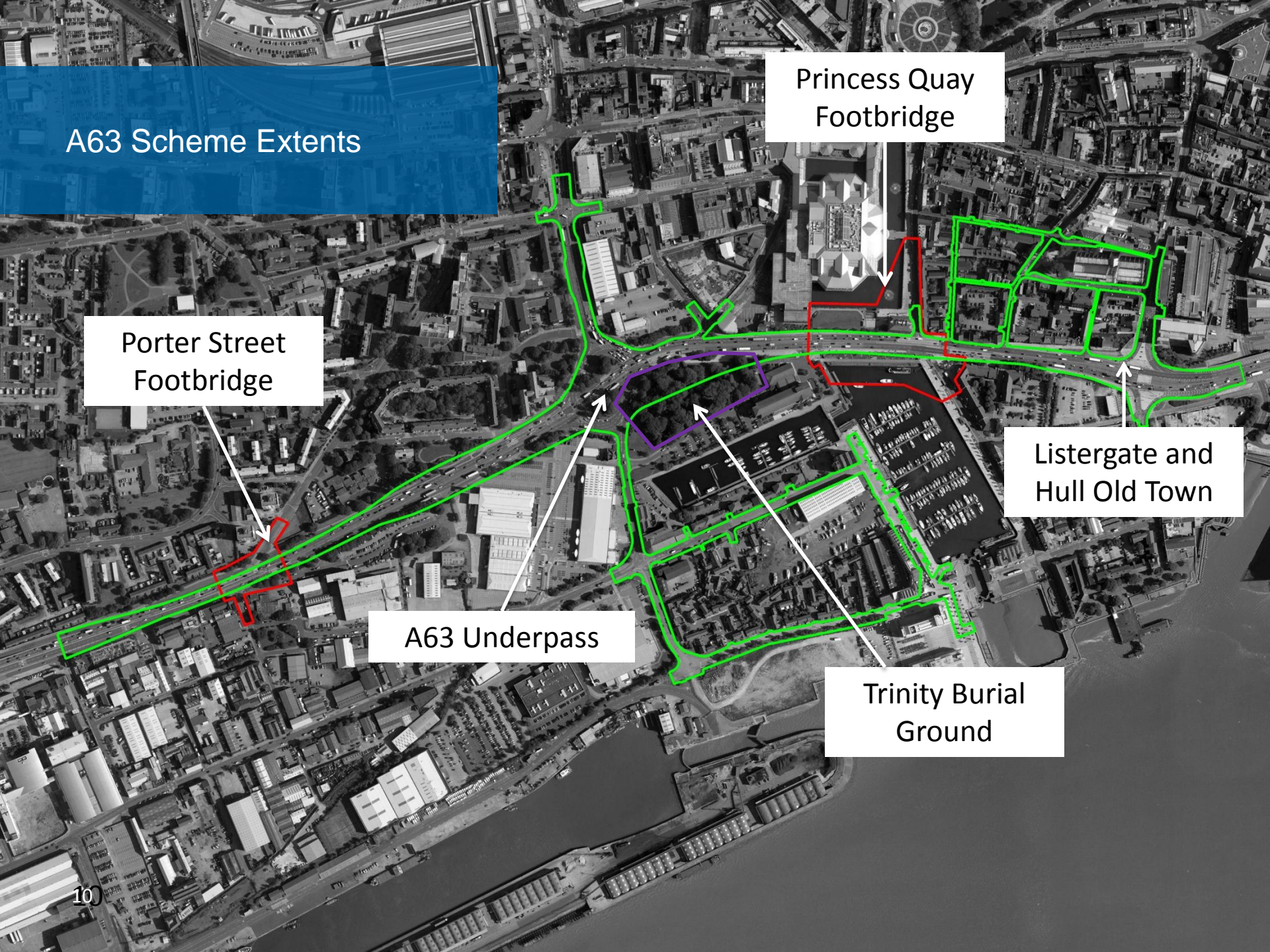
Princess Quay
Footbridge

Porter Street
Footbridge

Listergate and
Hull Old Town

A63 Underpass

Trinity Burial
Ground



Scene Setting – what will it look like?



Scene Setting – what will it look like?



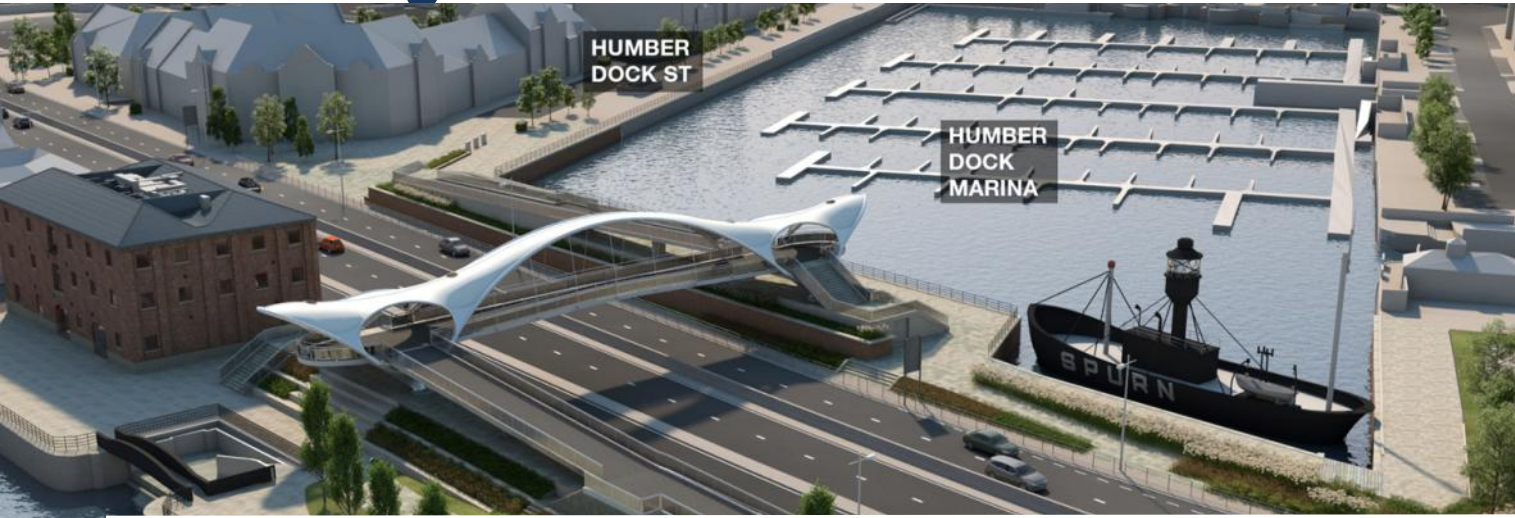
Western Scheme Extent

Scene Setting – what will it look like?



Mytongate Overbridge

Scene Setting – what will it look like?



Princes
Quay
Bridge



A63 Castle Street Model

ARUP

Scheme Challenges

Many challenges to overcome, including:

- Working in a busy urban environment
- Need to keep the networks moving (both HE and HCC)
- Archaeology and constraints
- Pedestrian and vehicle management during works
- The unique engineering solution and ground conditions
- Utilities to divert
- Programme length / Phasing of works / other schemes
- Keeping stakeholders happy and involved throughout

We are working very closely with officers from Hull City Council to resolve these issues

Scheme Challenges – *Urban Area / network capability*

- Different to usual Highways England schemes
- No lane closures on the A63 between 6am and 8pm, Monday to Saturday. Maintain two lanes at all times during these times
- Full or partial road closures on the A63 only overnight or at weekends for certain essential works
- Access to businesses and properties will be maintained wherever possible
- Noise, vibration and disruption to adjacent properties will be kept to a minimum
- Alternative pedestrian footway and crossing facilities will be maintained at all times

Scheme Challenges – *Keeping the network moving*

- Working closely with Hull CC to identify how the network will cope - detailed traffic modelling undertaken and mitigation needed to local road network to increase resilience
- Needs to maintain free flowing traffic on A63 to maximise through flow on route for safety and operation reasons
- Proposal to remove right turns at Mytongate Junction during main works
- Alternative routes to bypass work area likely to be used



Scheme Challenges – *Archaeology*

Facts:

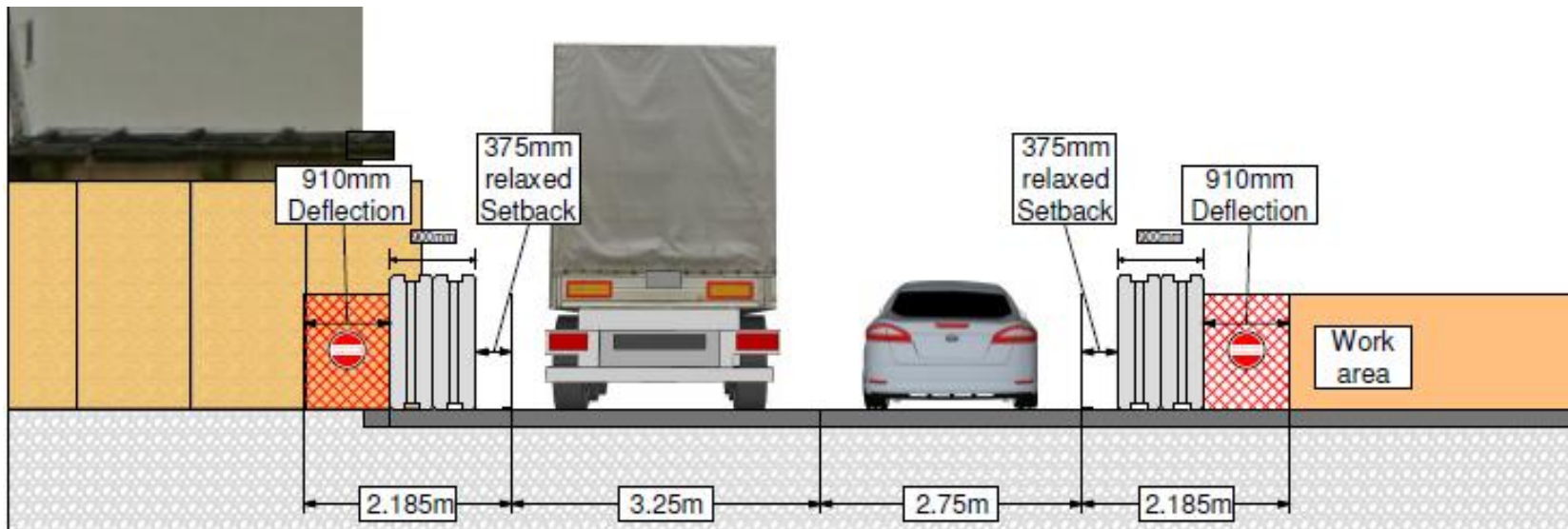
- Trinity Burial Ground
- 19,000 bodies need to be exhumed and relocated
- Working with the Church and Historic England
- Site tented and access restricted
- Rebury all exhumed bodies back within the grounds
- The **largest exhumation project outside of London**
- Huge nationwide archaeological interest
- Estimated 130 archaeologists engaged in the Trinity Burial Ground works for up to a year!
- Planned removal of 95 skeletons per day



Scheme Challenges – Constraints

Facts:

- Two listed buildings in the way of road including:
 - Earl de Grey – Grade II
 - Castle Buildings– Grade II
- Detailed discussions how to deal with these already had with Historic England / Hull CC and will go into planning process



Scheme Challenges – *Pedestrian and Vehicle Management*

Pedestrian Management Facts:

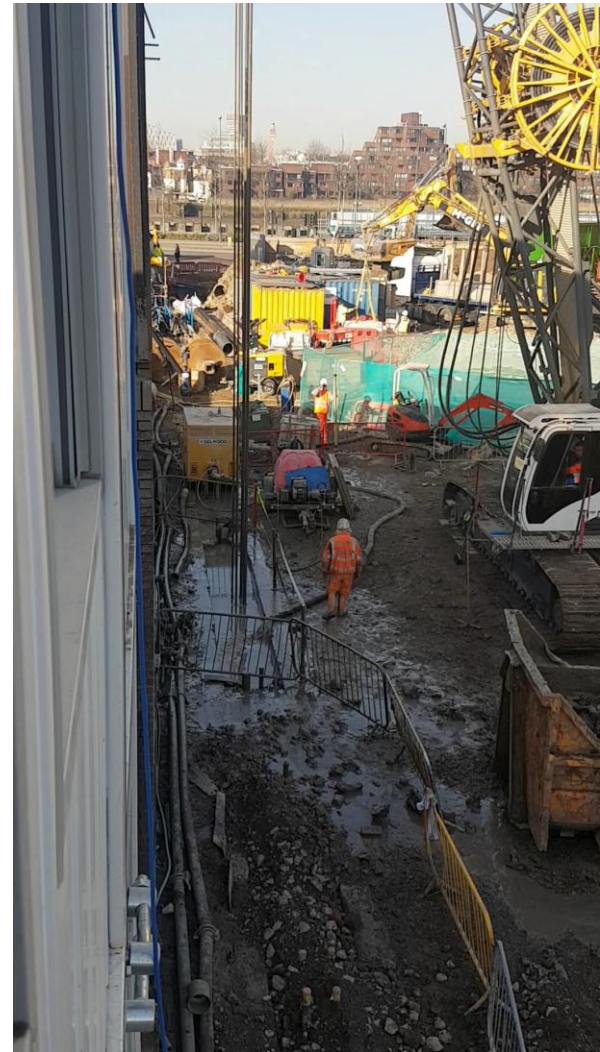
- Insufficient room to provide 2 lanes of traffic each way and East/West pedestrian routes and build the scheme
- Pedestrian access restricted through the works
- Porter Street and Princes Quay pedestrian bridges constructed alongside the scheme and we are looking at when they can be built
- Temporary considerations - free shuttle bus / temporary pedestrian bridge
- A safe passage for pedestrians and vulnerable road users will be maintained at all times via diversions or alternative routes

Vehicle Recovery Facts:

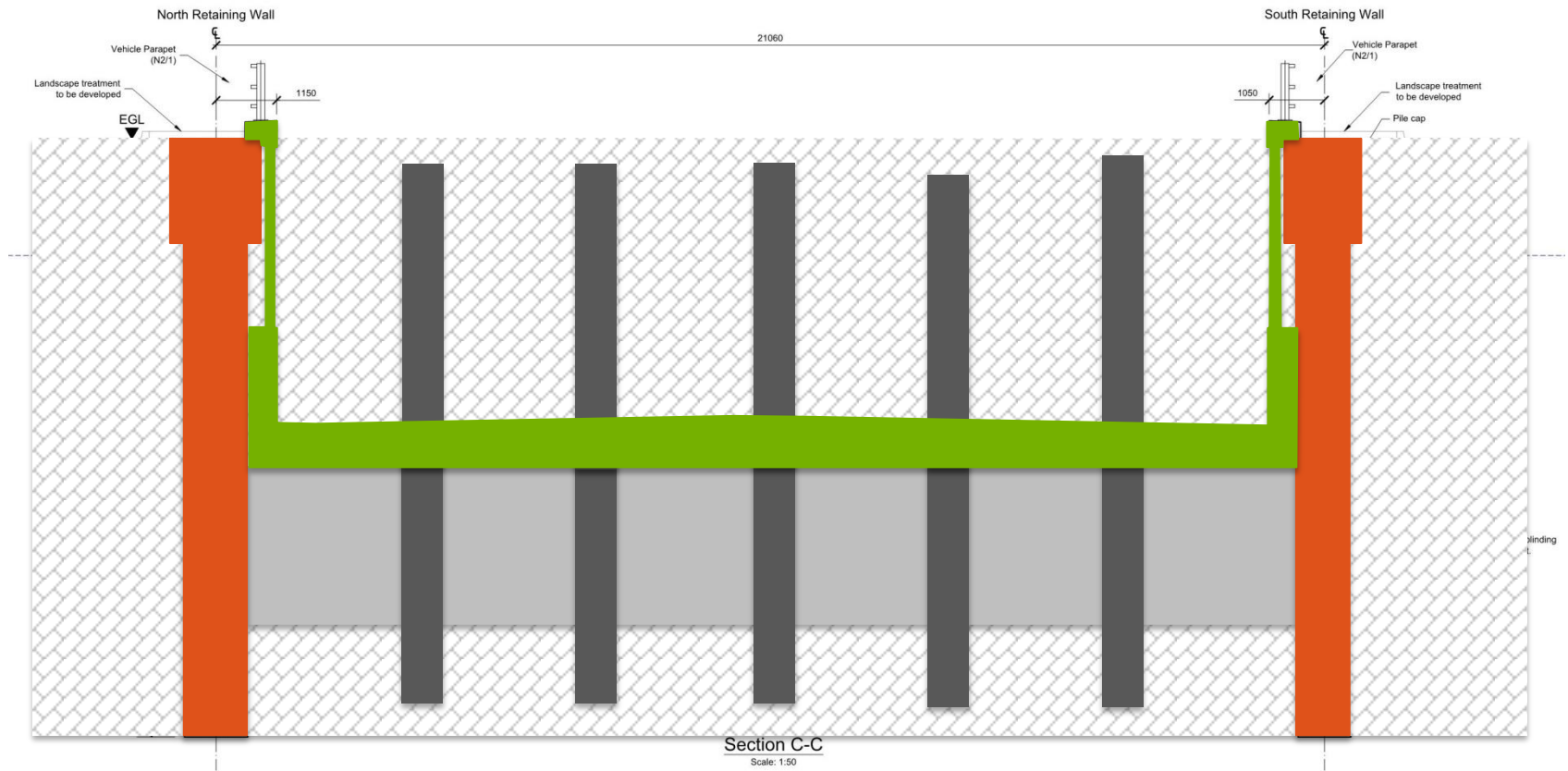
- Eastbound and westbound coverage
- Full extent of coverage from start to end of traffic management
- 2.9 miles eastbound, 1.3 miles westbound
- City centre coverage with 24/365 free recovery
- HGV, car and van recovery
- Safe and secure drop off points for recovered drivers

Scheme Challenges – Engineering solution

- Installation of a Bentonite farm, plant and equipment
- Construction of concrete reinforced guide walls
- Excavation of diaphragm wall panels
- Installation of steelwork and reinforcement
- Pouring of concrete to displace the Bentonite
- Estimated 4 panels per week from a total of around 300 panels

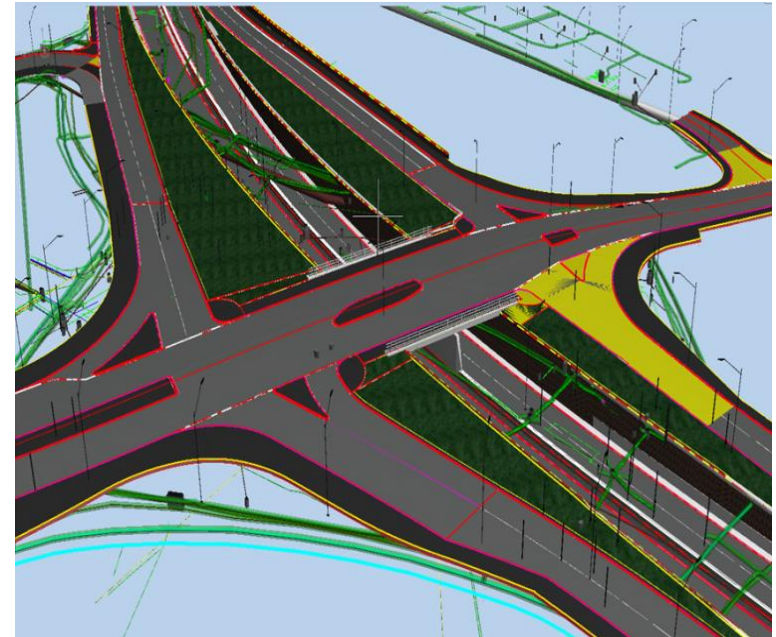
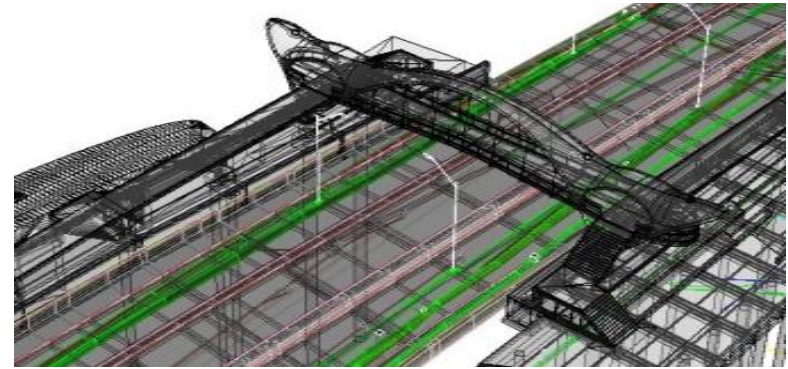


Scheme Challenges – Engineering solution

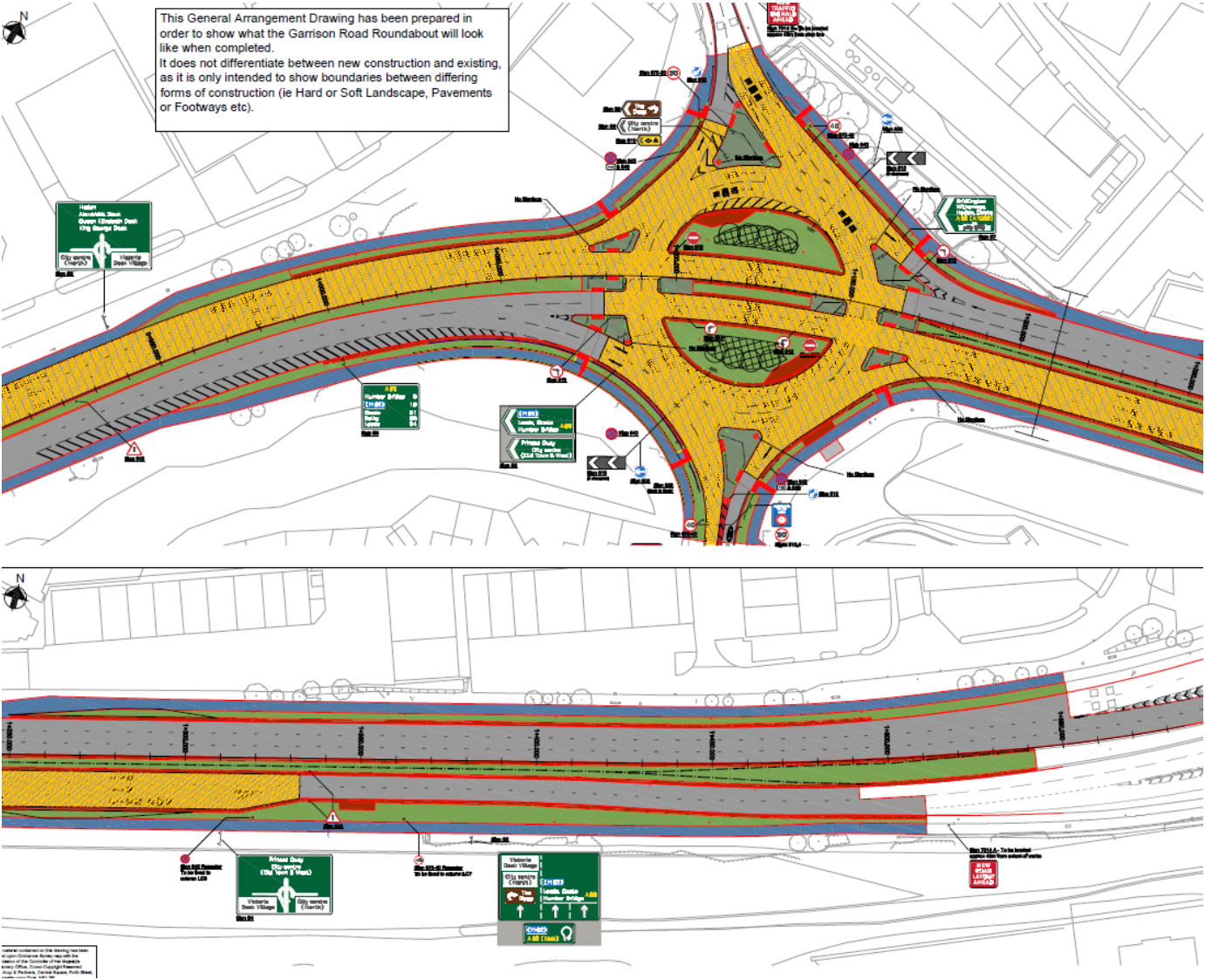


Scheme Challenges – Utilities to divert

- Lots of utilities in the way
- Working with all SU suppliers to develop diversion solutions
- Significant YW sewer diversion, current proposal is to complete the work using tunnelling techniques to minimise disruption to business and network
- Surveys detected around 900 additional utilities to what is recorded on SU records - this equates to around 14km of extra pipes and cables



Scheme Challenges – Coordination



Scheme Challenges – *Programme Length / Phasing*

Total – 5 years

- **1.5 years ‘enabling’ works**
 - Trinity Burial Ground works
 - Statutory undertaker diversions
 - Listed Building works
 - Mobilisation and compound set up
- **3.5 years construction Period for main scheme**
 - Princes Quay Bridge
 - Porter Street Bridge
 - Underpass construction
 - New Mytongate bridge and junction
 - Old Town Works
 - Accommodation works

Scheme Challenges – *Phasing of works (draft at this stage!)*

Phase 0 – Enabling works – Duration 18 months



Construction:

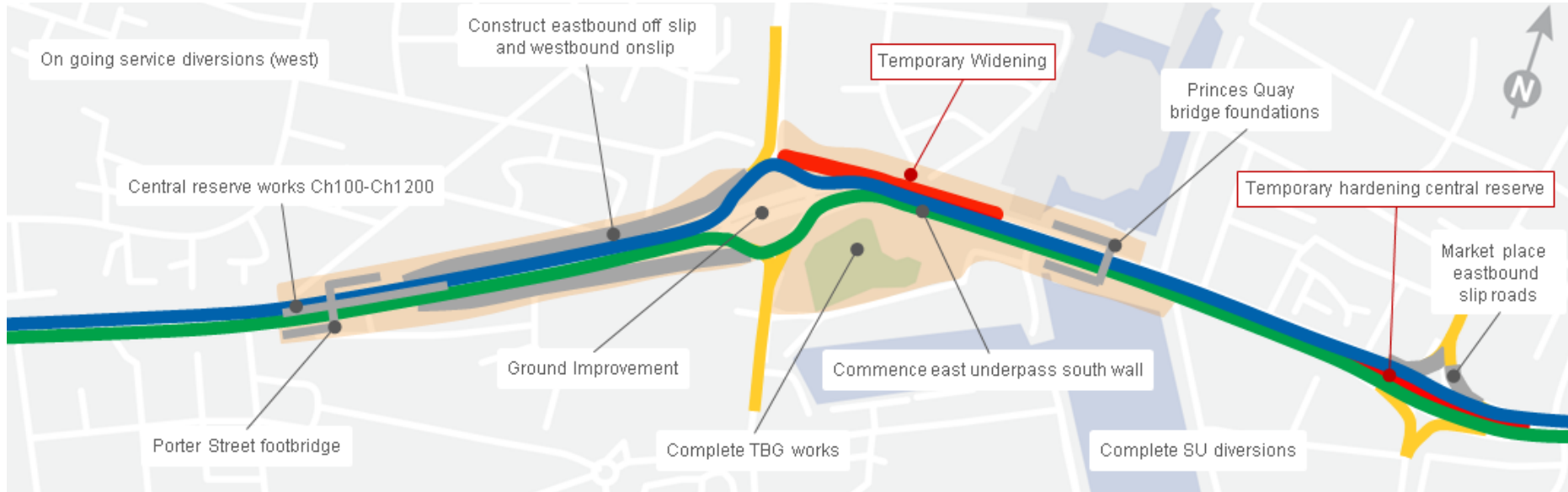
- Enabling works
- Commence accommodation works High Street, Princes Dock Street and Market Place
- Commence Trinity Burial Ground archaeology and exhumation programme.
- Service diversions to East and West of Mytongate junction.

Traffic Management:

- Mainly offline Traffic Management, local to A63 side roads, retail car parks, pavement and pedestrian route diversions.
- A63 closures to enable crossings to be installed.
- Mytongate will remain in operation



Phase 1 – Construction works – Duration 5 months



Construction:

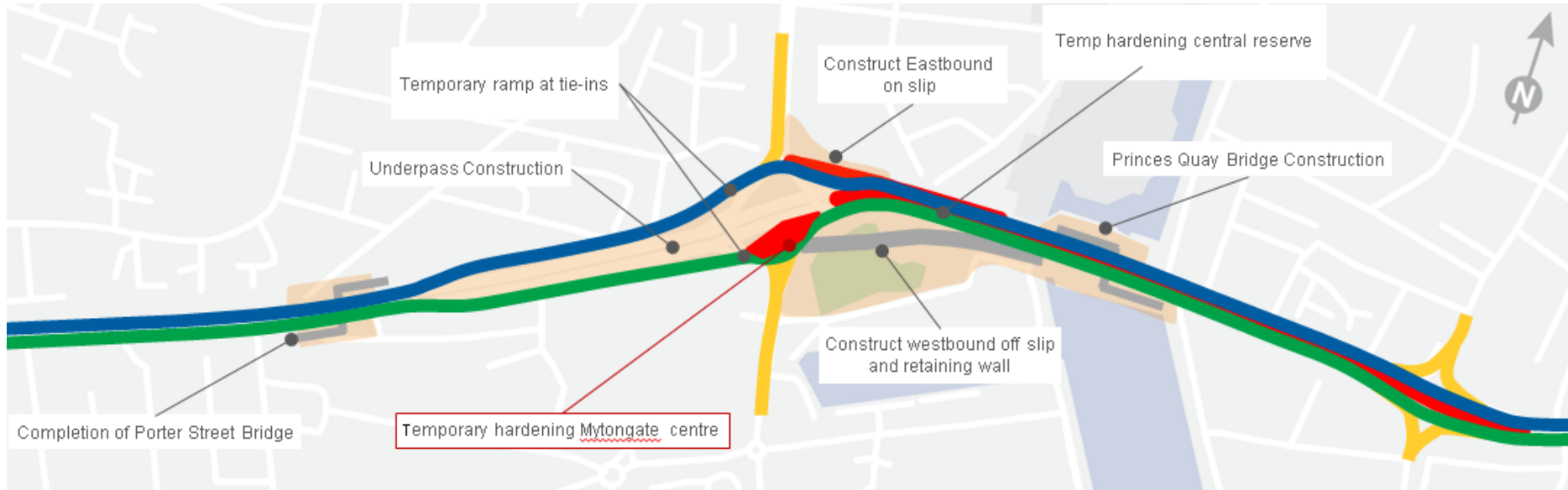
- Completion of Service diversions (East)
- Commence new slip roads
- Completion of Trinity Burial Ground archaeology. Commence earthworks for slip road and underpass
- Commence Princes Quay and Porter Street Bridges
- Commence ground improvement to underpass
- Complete temporary hardening and widening for traffic
- Start Market Place junction East Bound

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street



Phase 2 – Construction works – Duration 3 months



Construction:

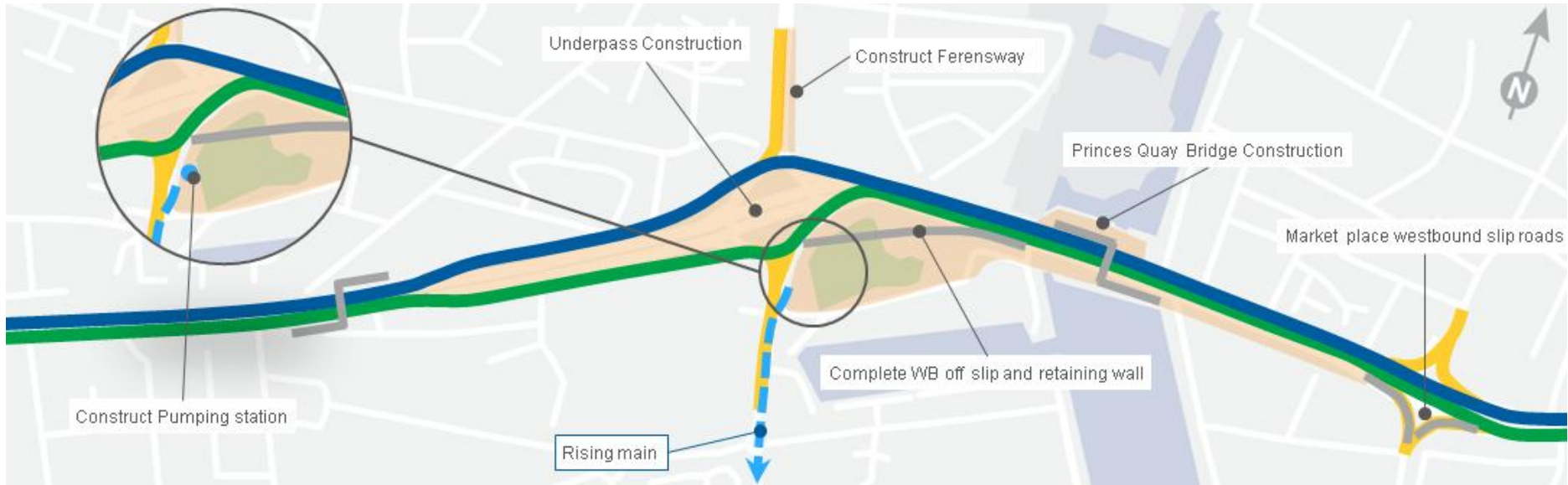
- Completion of Porter street bridge
- Construction of underpass and wall commences
- Temporary road construction to Mytongate roundabout and temporary ramps to slip roads
- Jet Grouting commences
- Sheet piling commences
- Construct eastbound on slip
- Princes Quay construction continues

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street



Phase 3 – Construction works – Duration 6 months



Construction:

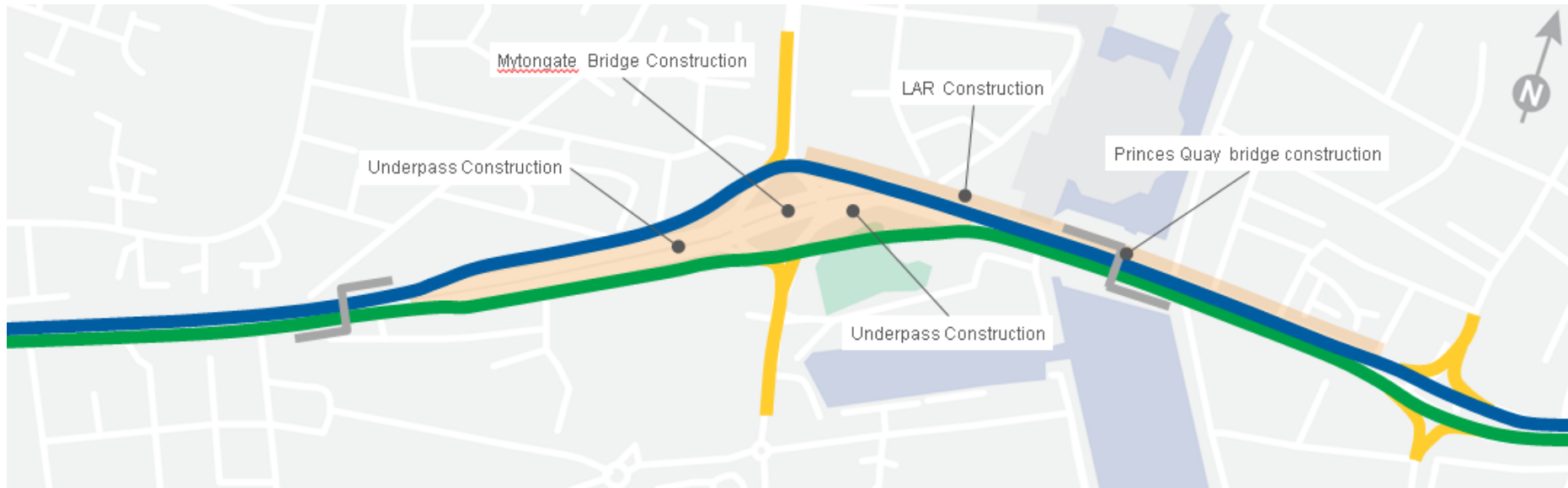
- Continue west underpass wall construction
- Commence pumping station
- Completion of westbound off slip wall construction
- Construction of Ferensway southbound
- Installation of rising main to outfall
- Commence Princes Quay bridge superstructure
- Start slip road construction at Market Place westbound

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street



Phase 4 – Construction works – Duration 3 months



Construction:

- Continuation of underpass works
- Commence Mytongate bridge construction
- Construction of eastbound on slip and local road
- Finalisation of Princes Quay superstructure and landscaping

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street



Phase 5 – Construction works – Duration 12 months



Construction:

- Continue underpass construction
- Continue Mytongate bridge construction
- Continue underpass wall construction
- Construct new central reserve
- Prince Quay bridge opens

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street

EB traffic to ports Temp. Construction Local access roads NMU routes
WB traffic from port Works area Construction

Phase 6 – Construction works – Duration 5 months



Construction:

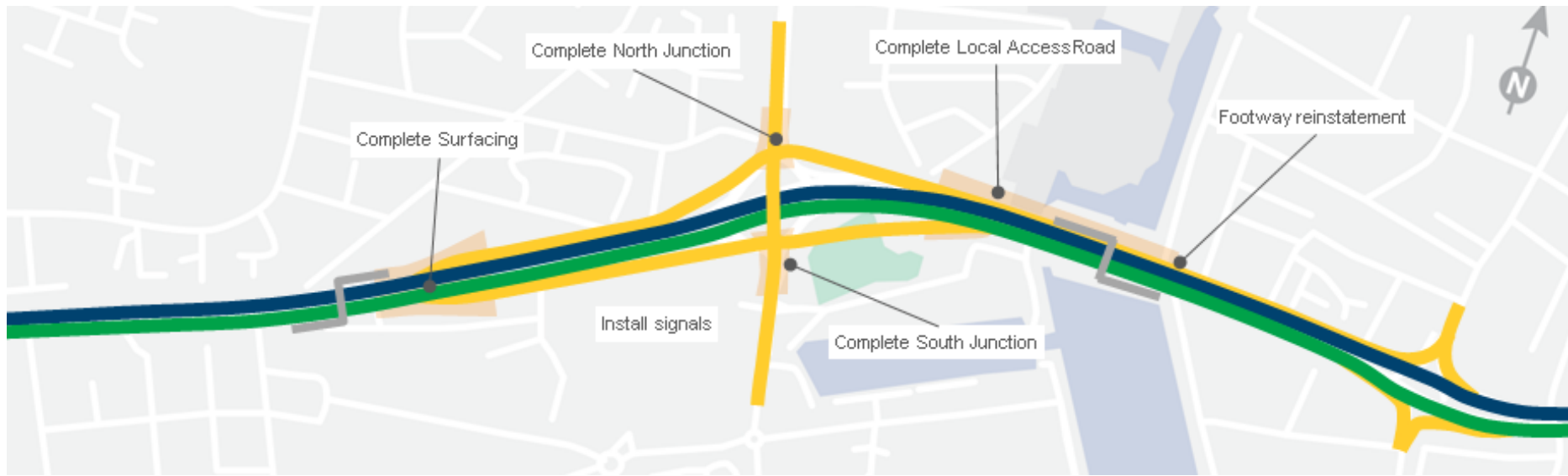
- Complete underpass construction
- Complete Mytongate bridge construction
- Continue underpass wall to eastern extent of scheme
- Reconstruct central reserve for local access road

Traffic Management:

- Narrow Lanes A63 east and westbound
- 30mph temporary speed limit in place
- Free vehicle recovery
- Right turn restrictions with diversions for Mytongate
- Ferensway south closed from Osborne Street



Phase 7 – Finalisation Works – Duration 4 months



Construction:

- Complete surfacing at western end of the scheme
- Construct north and south bound junctions at Mytongate bridge
- Completion of local access roads and hard landscaping
- Install and commission traffic signal equipment

Traffic Management:

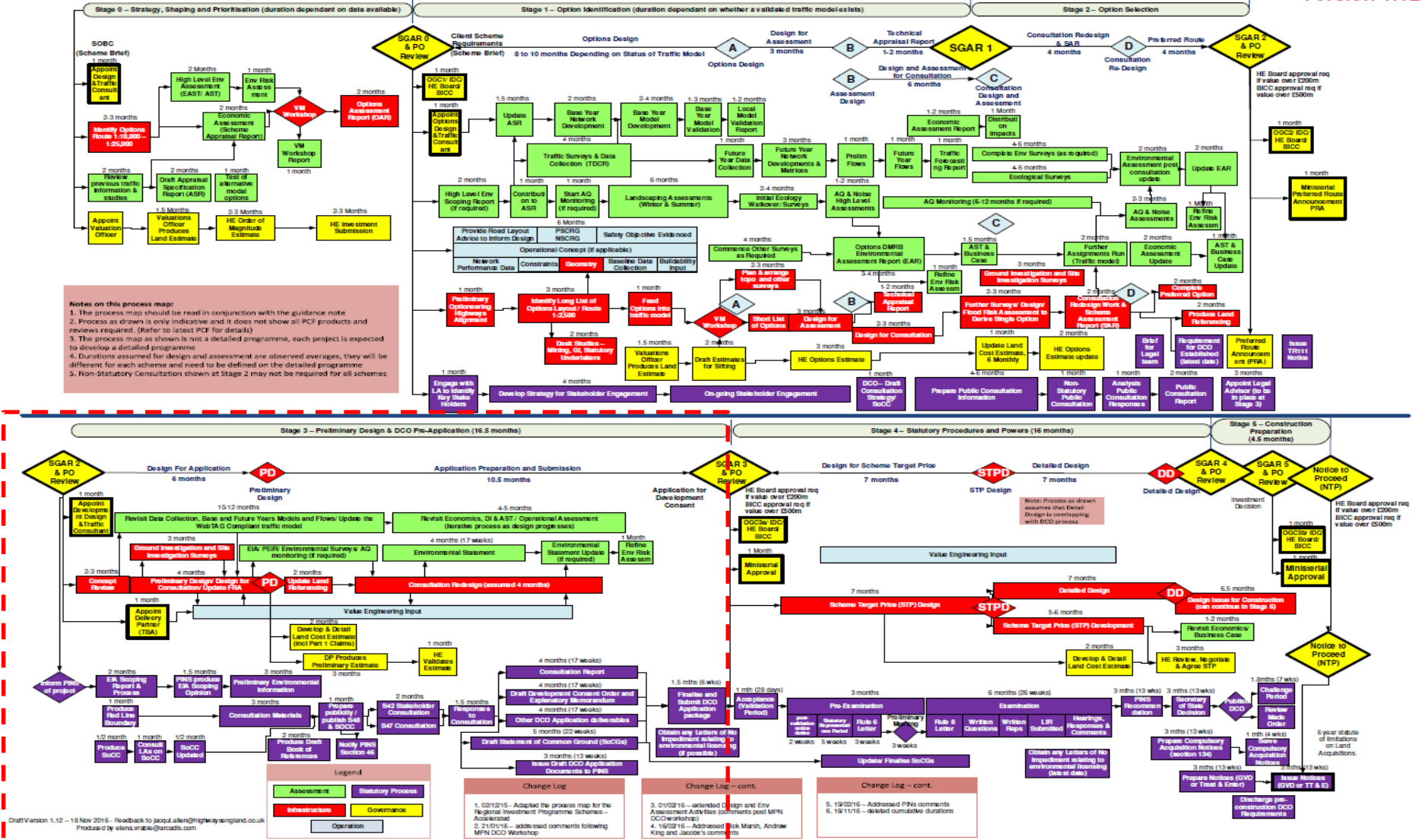
- Lane and slip road closures
- 30mph temporary speed limit in place
- Free recovery service provided

EB traffic to ports Temp. Construction Local access roads NMU routes
WB traffic from port Works area Construction

Our Governance

Schemes (Requiring DCO) – Options and Development Phase Process Map – Planning Act 2008

Version 1.12



We are here!

Next Steps...

- **Ensure scheme remains Value for Money**
- **Collaboration with Hull CC and affected stakeholders to resolve as many issues as possible before DCO submission**
- **Finalise the phasing of the works (PQ Bridge for example)**
- **Communicate scheme timescales / programme when confirmed**
- **Further information events and additional targeted consultation events will be required**
- **Coordination of schemes on Network for next 7 years to ensure diversion routes are clear and work is carried out in most efficient manner, would assess:**
 - Hull CC local capital programme
 - Garrison Road works
 - HE general maintenance improvements

Latest Draft Programme

Activity	Start	Finish
Options Phase Stages 1 and 2	Complete	Complete
Stage 3 Prelim Design	Ongoing	July 2018
DCO Application Submitted	July 2018	
Stage 4 Statutory Procedures and Powers	July 2018	Nov 2019
Stage 5 Construction preparation	Nov 2019	March 2020
Start of works	March 2020	
Open For Traffic	March 2025	

**Thank You
Any Questions?**