

# River Poddle Flood Alleviation Scheme Update

Presentation to DCC South East Area Committee Meeting  
November 1<sup>st</sup> 2023



## River Poddle – Brief History

- Rises near Fettercairn House and flows to Wellington Quay through Tymon Park, KCR, Harold's Cross and Dublin Castle
- Route Length 6km
- Flowed into the 'Black Pool' that is associated with the naming of Dublin
- Main Water Supply for Dublin up to 13<sup>th</sup> Century
- Played a major role in the social and economic growth of Dublin where it served up to 52 Mills and Commercial Enterprises along its route
- 15 other Watercourses associated with its network
- Progressively urbanised and culverted watercourse

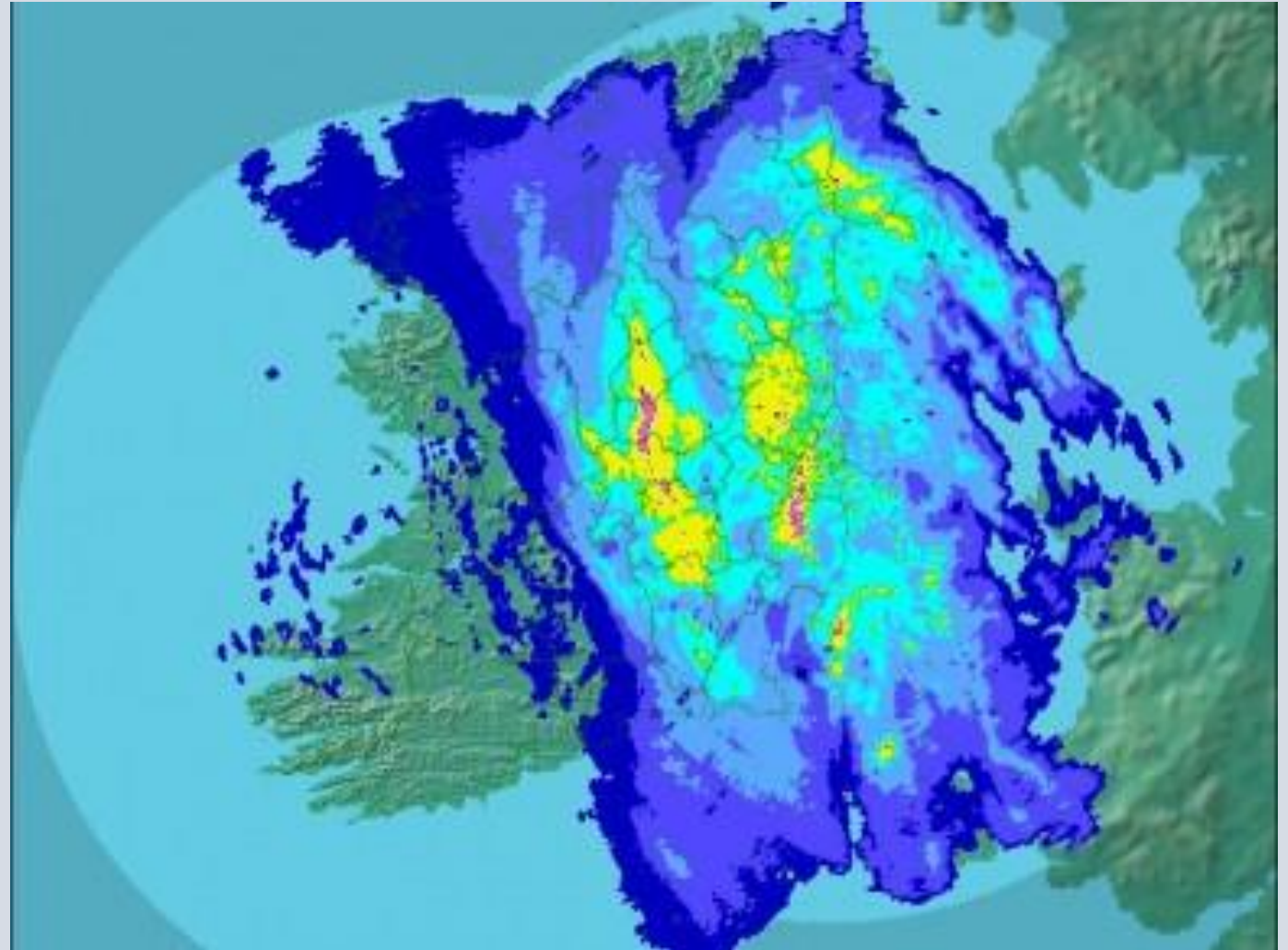


# River Poddle Layout



## Recent Flood Events

- 24/10/2011 – 90mm of rainfall in 6 hour period – Major flooding in Rathcoole, Tallaght, Kimmage, Harold's Cross and Mount Jerome.
- 05/09/2008 – 58mm of rainfall over 11 hour period in Kimmage area
- 06/11/2000 – 103mm of rainfall in 48hr period. Banks broken in Kimmage area
- 25/08/1986 – Hurricane Charlie



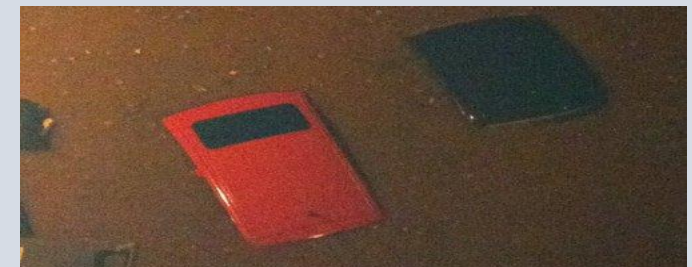
Met Eireann Rainfall Radar 5pm 24<sup>th</sup> October 2011

# Impact from 2011 Event



- Mostly affected the Eastern Region of Ireland
- 80mm of rainfall in 6-hour period over Dublin
- 2 Fatalities
- Major Emergency Plan effected by SDCC and DCC
- 1,000 Properties flooded
- 318 'Significant' Road Floods affecting Transport
- Estimated Claims of €127 million
- Loss of Electricity

<https://www.rte.ie/news/player/one-news-web/2011/1025/#page=217>



# River Poddle FAS



- Devised from Eastern CFRAM Study (Final Report 2011) following introduction of National Flood Policy in 2004
- 2014 Poddle Options Report
  1. Hard Defences and Sealing Manholes
  2. Option 1 and Upstream Storage
  3. Option 1 and diversion to the Dodder
- Funded by OPW – SDCC Lead Authority
- Tri-Agency Input – OPW, DCC and SDCC
- Consultant Appointed in March 2018 – Nicholas O’Dwyer Ltd

## **Poddle Options Report Option 2: Proposed Scope of Scheme**

- Main intervention area from Tymon Park to Harold’s Cross
- Combination of raised 460m of Earth Embankments and 3420m of Hard Defences
- Non Return Flap Valves
- Assessment of Drainage Networks
  - Manhole Sealing
  - Culvert Cleaning
- Replacement and Review of Weirs and Culvert Screens
- Maintenance Plan

# **River Poddle FAS – Main Scope of Works**



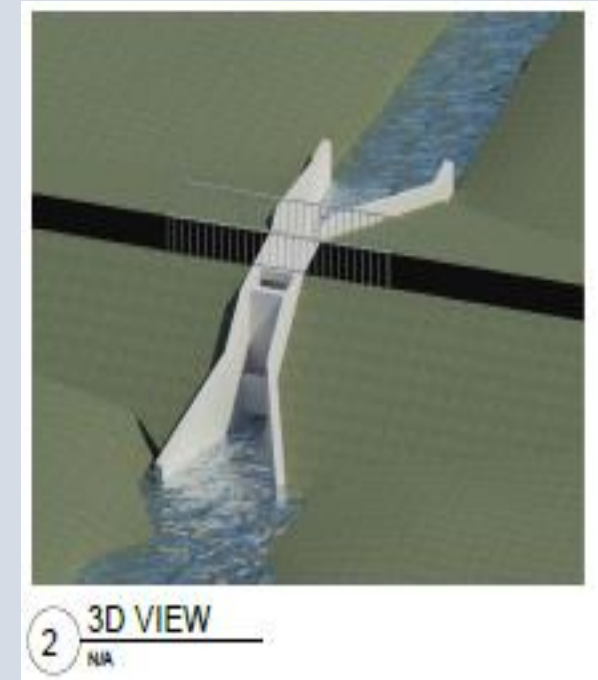
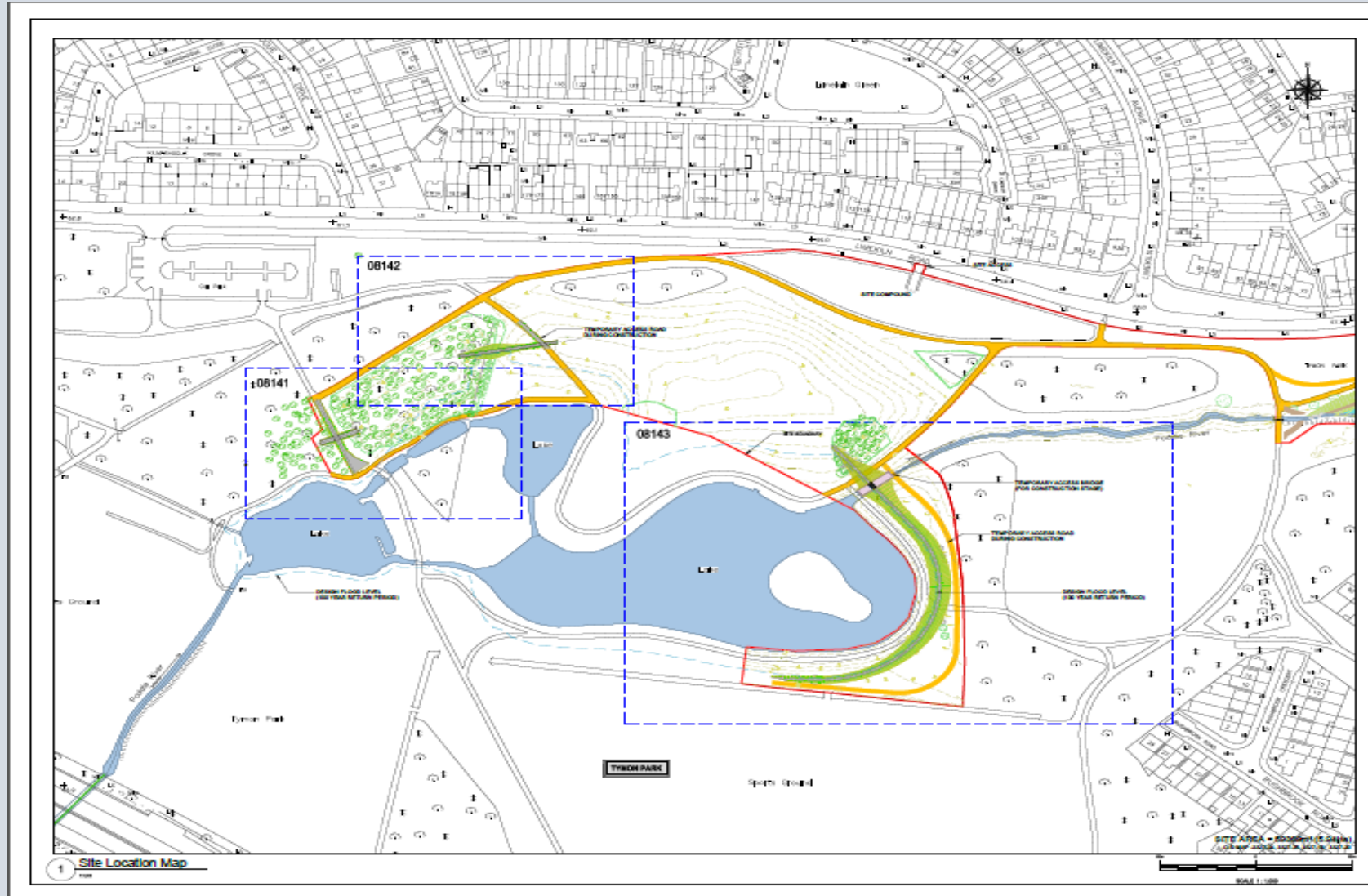
## **Design**

- Designed for 1 in 100yr event
- Main Flood Storage at Tymon Park, Other areas of potential storage to be considered to reduce defences required
- Combination of Raised Earth Embankments, Hard Defences and Sealed Manholes
- Assessment of Trash Screens
- Assessment of existing Boundary Walls as indirect flood defences
- ABP Part 10 Planning (Works > 2km long) so EIAR required.
- Focus on Biodiversity and access to River

## **Proposed**

- 220m long 3m high Earthen Embankment – Tymon Lake with new flow control structure (1 in 2 year return period)
- Realignment of the river channel at Whitehall Park (Wainsfort) to create storage
- Reconfiguration of Ravensdale Park to create storage
- 600m of Earthen Embankments
- 700m of Reinforced Concrete Hard Defences
- Tree Removal/Replacement
- Nature Based Solutions/Pollinator Areas
- Integrated Constructed Wetland at Tymon Park

# Proposed Scheme Layouts – Tymon Park Lakes



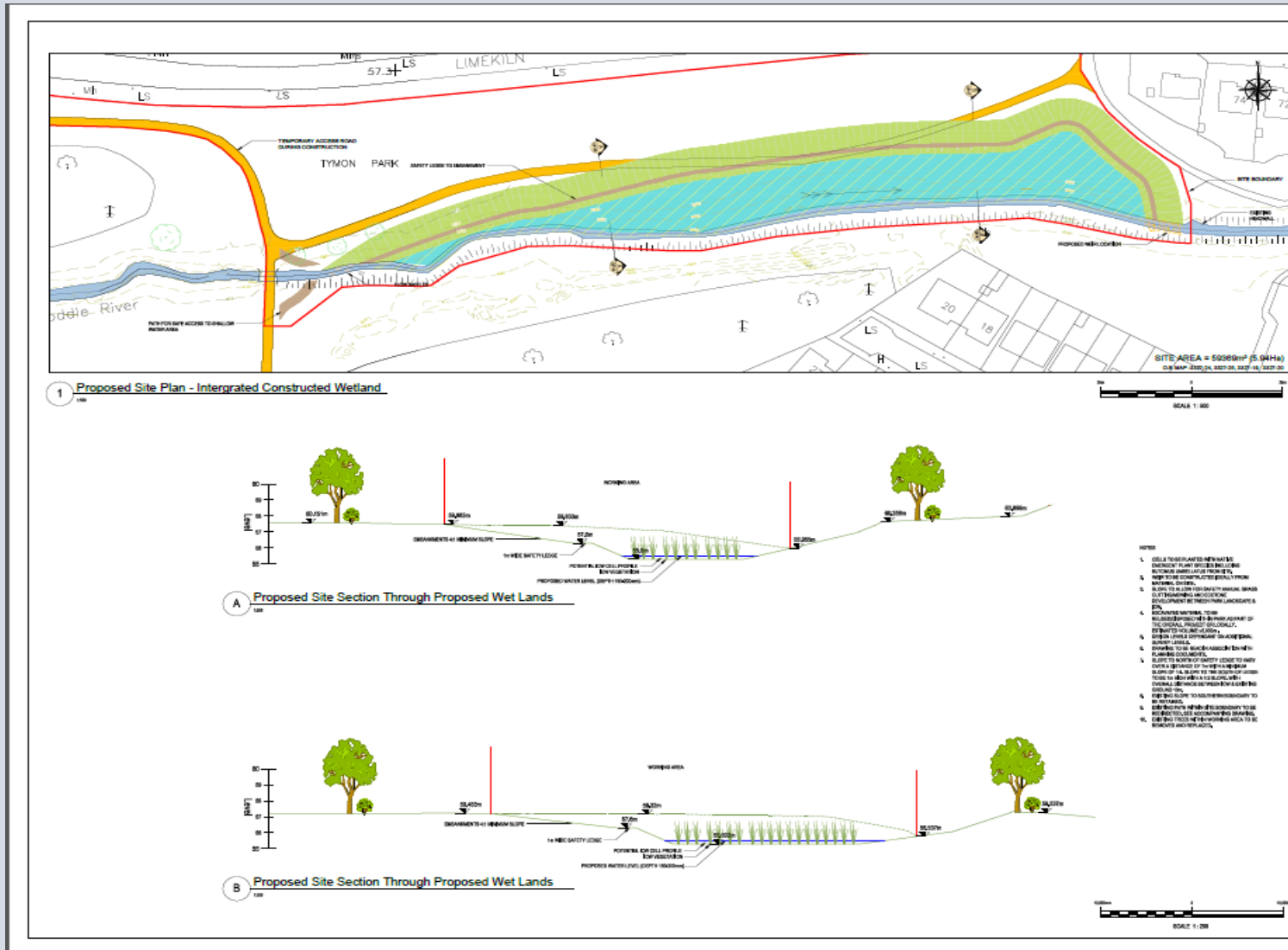


# Proposed Scheme Layouts – ICW Tymon Park

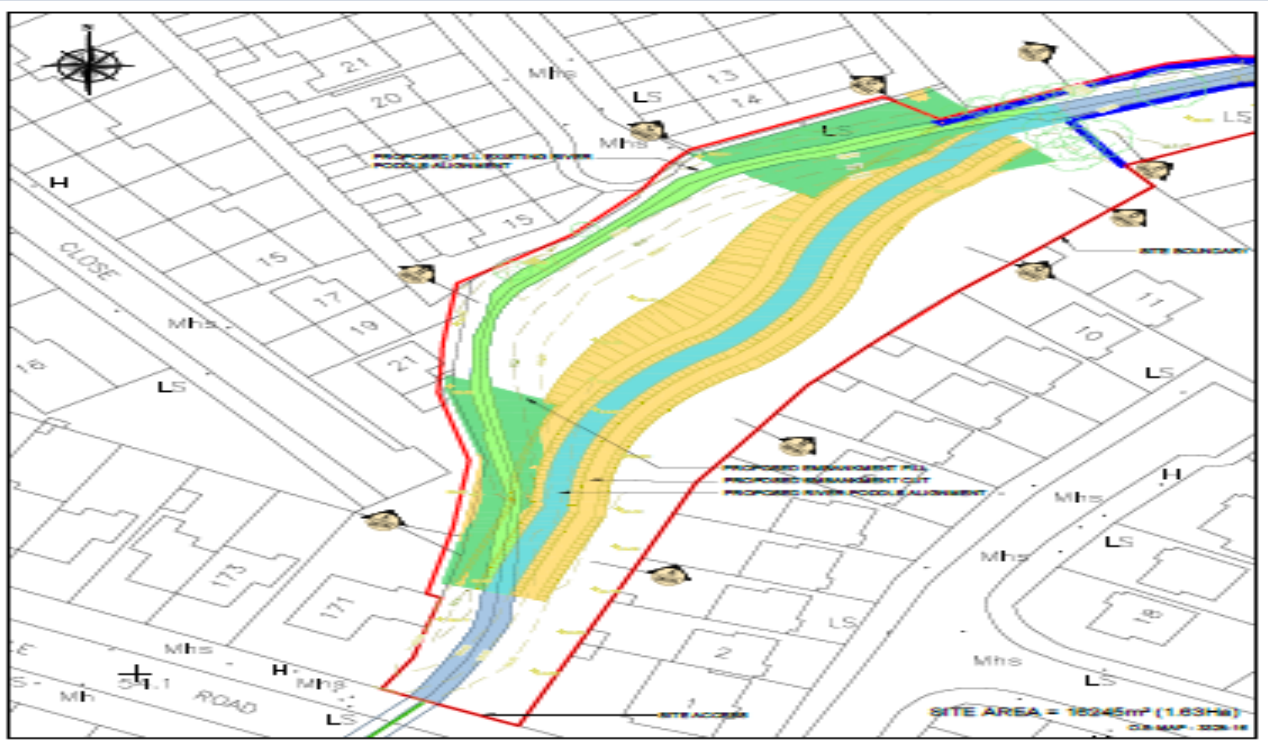


## Benefits:

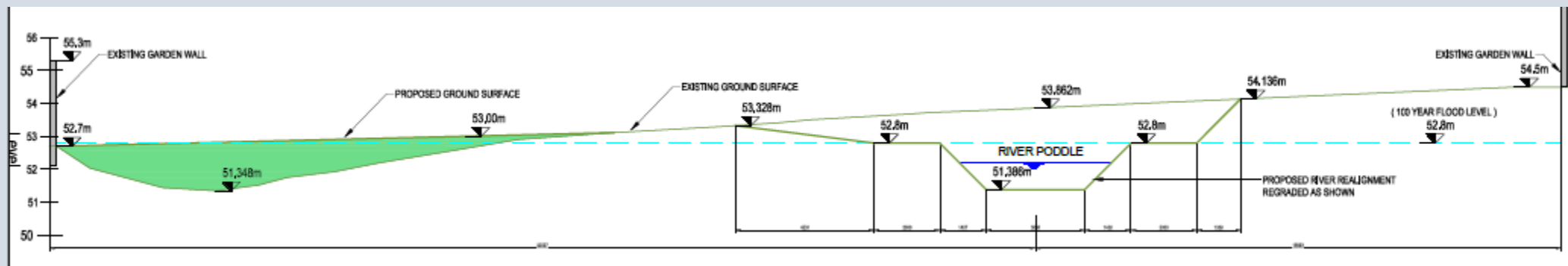
- Cells will be planted in native species
- Improvement in Water Quality in line with the WFD
- Increase in Aquatic life
- Protection and enhancement of Biodiversity
- Proposed access platform to allow integration with the wetland
- Largely self sustaining so limited follow on maintenance costs



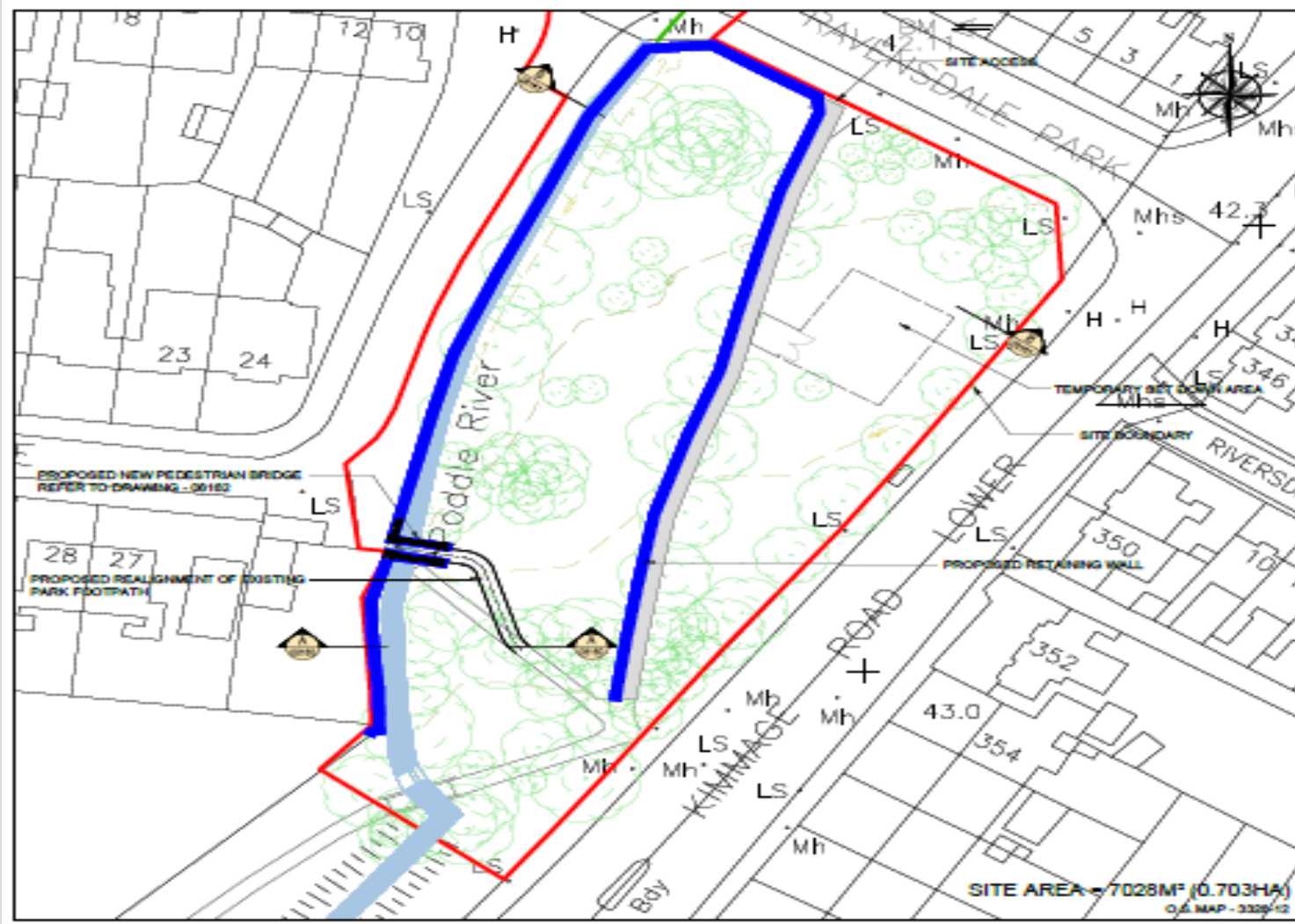
# Proposed Scheme Layouts – River Realignment at Rear of Grosvenor Court



- Located just upstream of the Wainsfort (Lakelands) Culvert
- Provide extra Flood Storage to alleviate flooding in Whitehall Rd, Kimmage Manor Area
- Realignment of river channel from inside of boundary wall to centre of open space
- Form embankments either side of channel
- Install footpath on Eastern side to provide accessibility to the river from Templeville Road
- Install Pollinator areas on Western side of the channel



# Proposed Scheme Layouts – Poddle Park



- Construction of 1.5m high wall along Eastern side of Park
- Construction of 1.5m – 0.2m wall through the centre of the Park with sloped footpath.
- Proposed seated wall effect on internal wall
- Proposed new pedestrian bridge at KCR Builders Providers
- Feature entrance to the Park
- Significant reduction in tree removal compared to option in Poddle Options Report 2014

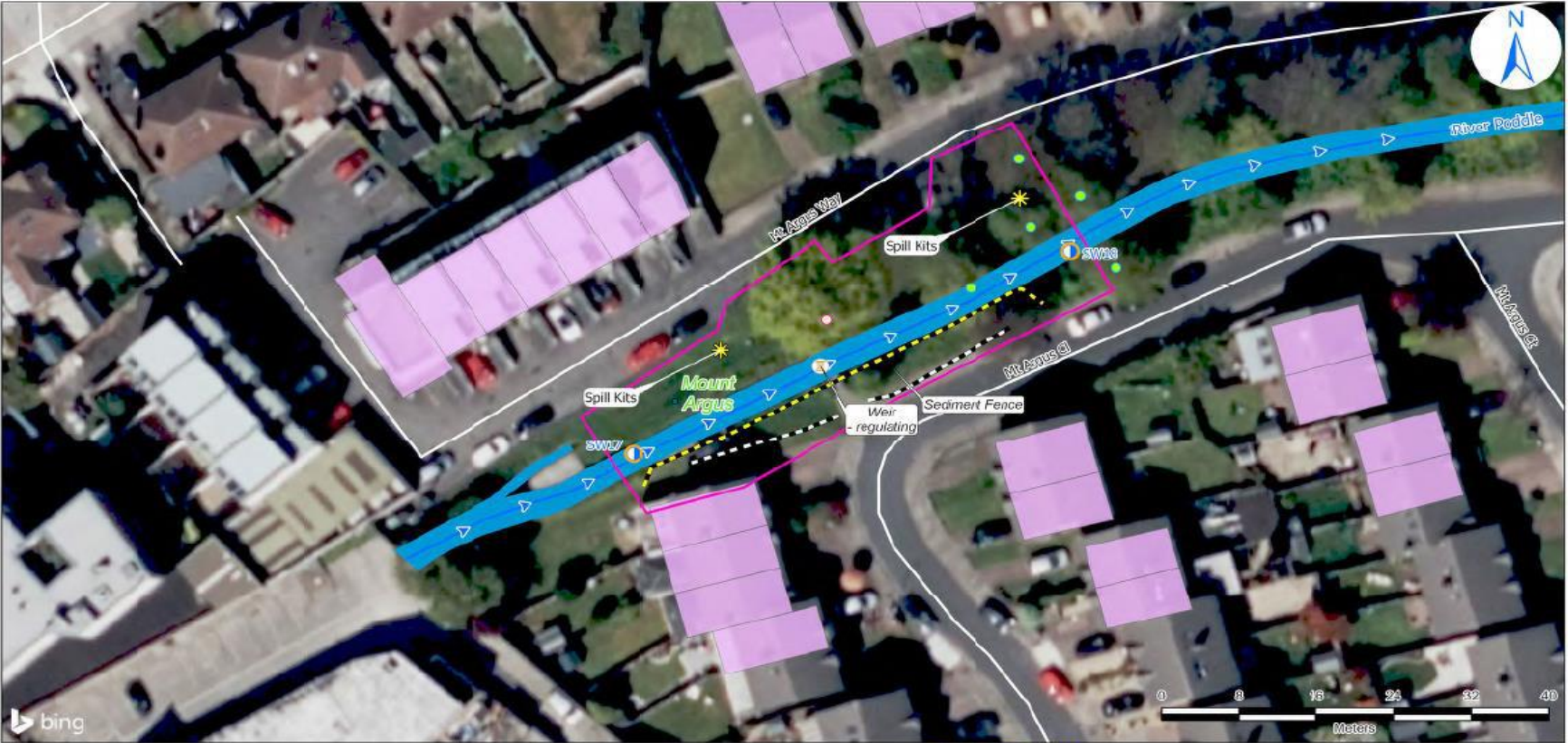
# Existing and Proposed Scheme Layouts – Poddle Park



# Existing and Proposed Layouts – St Martins Drive



# Mount Argus, 1.1m Flood Wall 25m long.



Legend			
	Water Quality Monitoring (TBC)		Streets and Roads
	Sediment Control Fence		Flow Direction
	Retaining Wall		Watercourse
	Approximate FAS Extent		Noise Sensitive Location
	Spill Kits		Sites and Monuments Records
	Proposed Tree Removals (Indicative)		Trees to be Retained (Protection Required)



Client: Office of Public Works (OPW)	
Project: River Poddle Flood Alleviation Scheme	
Environmental Control Map No. 9: Mount Argus	
Spatial Reference	
Name: IREN95 Irish Transverse Mercator	
PCS: IREN95 Irish Transverse Mercator	
Figure Number: 9	Page Size: A3
Date Exortect: 08/09/2023	Scale: 1:400
RevisionNumber: 1	Prepared By: DP
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# River Poddle FAS – Challenges



- **BLEND IN WITH EXISTING PUBLIC REALM**
  - Constant contact with SDCC and DCC Public Realm over proposed works
  - Panel Engineer required for Tymon Park Embankment – Category A Structure
- **LOCAL REPRESENTATIVES IN SDCC and DCC**
  - Presentations to Co Co Meetings, Area Committees and SPC's
- **STAKEHOLDERS – OVER 20 STATUTORY AGENCIES**
- **BIG LOCAL PUBLIC INTEREST DUE TO PREVIOUS FLOOD EVENTS**
  - Public Information Days in December 2018; Over 80 attendees
- **ACCESS FOR PROPOSED WORKS – Public and Private**
  - Local consultation to commence
- **PART X PLANNING**
  - First FAS to go to Part X; Timescale 3 years and 3 months.

## *River Poddle FAS - Benefits*

- Over 800 Properties to be protected and lower risk to human life
- Increase in Water Quality
- Increase in Aquatic life – River Poddle currently not Salmonid
- Water Framework Directive
- Enhance Biodiversity – ICW, Bee Hotels and Pollinators
- Dual Maintenance and Emergency Response Plan with SDCC and DCC
- Feeds into the Dublin Climate Change Action Plan 2019



## *River Poddle FAS - WHERE ARE WE NOW*

- All Environmental survey elements completed and updated
- Hydraulic and Hydrological Modelling completed
- Topographic and Threshold Surveys completed
- Draft EIAR and Draft Planning Drawings issued in June 2019 and feedback received
- Part X Planning Submission Q3 2019. Approved June 2023.
- Public Consultation to commence in Sept/Oct 2019
- Ground Investigation Contract completed.
- Detailed Design to run in parallel with Planning Submission
- Estimated construction start Q1 2024, completion Q4 2026.
- 24-36 month Programme
- Estimated Cost €10 million

# Proposed Section 85 Agreement with South Dublin County Council

- OPW have asked for Section 85 agreement between DCC and SDCC which in effect would mean that SDCC would control the construction of the works in the DCC area up to the maintenance period when the works would be handed back to DCC.
- This is a reserved function so would have to be passed at a meeting of Dublin City Council.
- DCC would still have personnel on the Project Steering group to give advice on works in DCC area.
- What are views of SEA on this?

**THANK YOU  
ANY QUESTIONS?**

[www.poddlefas.ie](http://www.poddlefas.ie)