







Tionscadal Éireann Project Ireland 2040

# River Dodder Flood Alleviation Scheme Phase 3

Presentation to Dundrum Area Committee, Dublin 22 April 2024



# Contents

Background

Public Participation and Consultation

**Current Status** 

**Initial Screening** 

**Emerging Option** 

**Overall Scheme** 

Current Design

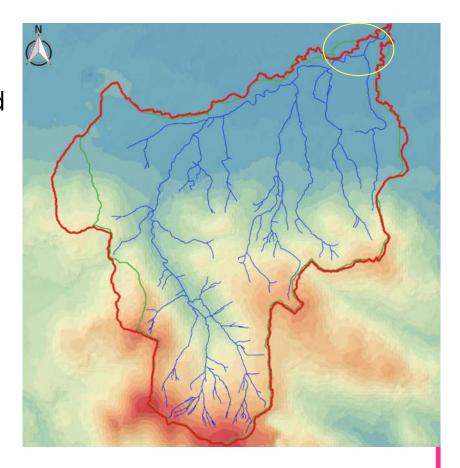
Programme





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- Significant flood risk along Dodder Valley
- Flashy Catchment due to Topography and Urbanisation
- Steering Group
  - Dublin City Council Lead Authority
  - Dun Laoghaire-Rathdown County Council and OPW
- Phase 3 Orwell Road (Waldron's) Bridge to Clonskeagh Road Bridge







1. Public Consultation Day	14 <sup>th</sup> January 2020
2. Presentation to Councillors	12 <sup>th</sup> June 2023
3. Public Participation Event	22 <sup>nd</sup> June 2023
4. Final Public Consultation Day	May 2024
5. Planning Stage (Part X)	October 2024

Final Public Consultation Day for Stage 1 to be held in May/June 2024 at a venue to be confirmed





- Topographical Surveys
- Culvert and Manhole Survey
- Hydrology Assessment
- Hydraulic Modelling and Baseline Flood Mapping
- Invasive Species Treatment Contract (2020-2023)
- Hydrogeomorphology Study
- Initial Screening of Options
- Options Development

- Environmental Surveys & Reports
  - Biodiversity (Bats, Aquatic Ecology, Mammals, Birds)
  - Noise and Vibration
  - Air & Climate
  - Landscape & Visual
  - Cultural Heritage
  - EIA Screening & Scoping
  - AA Screening

## **Current Status – Works Ongoing**



- 1. Site Investigation Contract Awarded ongoing
- 2. Invasive Species Treatment Contract (2024)
- 3. Top-up Ecology Surveys ongoing (Birds, Bats)
- 4. Arboreal Impact Assessment Trees
- 5. Landscape Design
- 6. Photomontages
- 7. Finalising Preferred Option
- 8. Assessment of Scheme Benefits
- 9. Estimates for Scheme Cost and Benefit/Cost Ratio
- 10. Preparation of Environment Impact Assessment Report
- 11. Preparation of Natura Impact Statement

## Flood Defence Measures Screened Out



- Structural Measures
  - Individual Property Protection
  - Property Relocation
  - Property / Infrastructure
     Reconstruction
  - Upstream Flood Storage
  - Diversion of entire river
  - Flood flow bypass channel

- Do Nothing
- Do Minimum
- Non-Structural Measures
  - Sustainable Urban Drainage Systems (SuDS)
  - Flood Forecasting/ Flood Warning



## **Preliminary Optioneering of Viable Options**



## Non-Structural Measures

- Planning Control / Land Use Management
- Upstream Catchment Management
- Building Regulations
- Public Awareness

## Flood Containment

- Rehabilitate / Improve Existing Defences
- New Flood Walls and Embankments
- Demountable Flood Defence Barriers / Gates

## **Conveyance Improvements**

- Channel Upgrade
- Removal of Local Constraints
- Channel Maintenance
- Stormwater Drainage

# **Evaluation Criteria**



- Social
- Economic
- Environmental
- Technical

## **Emerging Preferred Option**



- Rehabilitate / Improve Existing Defences.
- New Flood Defence Walls / Embankments.

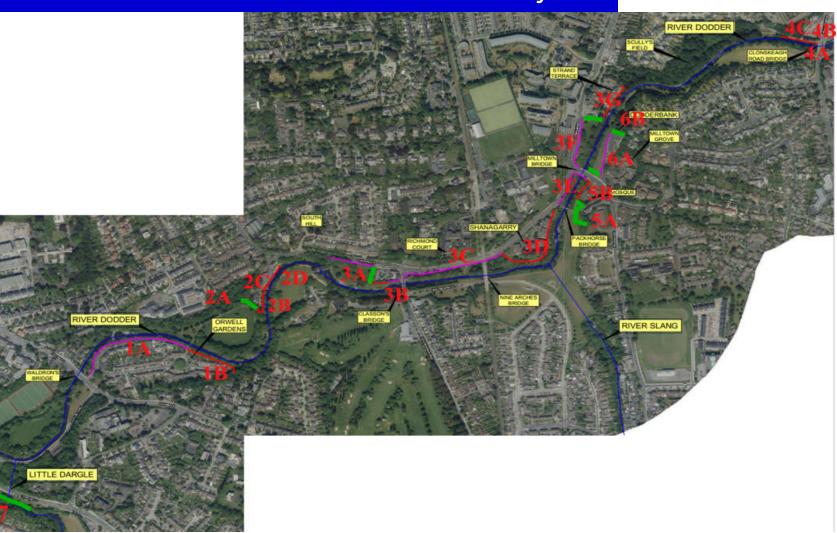


Coordination with Other Projects.

- Dodder Greenway.
- Nine Arches Rain Garden.

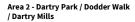
# River Dodder FAS Phase 3 Overall Scheme Layout





## River Dodder FAS Phase 3 Overall Scheme Layout





#### Proposed works:

2A - Steps & Wheelchair ramp over wall. Wall tying into high ground and

2B - 2-2.7m high wall at Dodder Walk from existing ground level with glass panels tying into proposed defence at Dartry Mills.

2C&2D - Replace existing wall at Dartry Mills to 2m above existing ground level. Tying into existing wall in yard and car park. Closure of existing bridge opening with 1.8m high wall.

The defences in Area 2A to 2D was deferred and will be progresses following agreement between DCC Parks, DLRCC Packs, Dodder Greenway and this FAS.

## Braemor Rd. Junction

Replace railings & existing access opening with flood defence wall along Woodside Drive and Braemor Rd to prevent flooding from the Little Dargle.

New Access point and to tie into existing path.

#### Area 3C - Classon's Bridge to Nine Arches

#### Proposed works:

Area 1A & 1B - Orwell Walk / Dodder Vale / Orwell Gardens

1A - Upgrade to existing wall, increasing height up to 1.4m from

pedestrian bridge parapet.

and pedestrian bridge parapet.

existing ground level along Orwell Walk and Dodder Vale. Tying into

1B - New wall, varies 0.5m to 2m high above ground level, running at rear of back gardens, at Orwell Gardens, tying into high ground

Upgrades to existing wall by increase in heights up to 300mm.

New raised concrete pedestrian ramp (1.3m height from existing ground level) at existing footpath access point adjacent to Classon's bridge. Tving into existing pedestrian footpath along riverbank.

New raised pedestrian footpath of height 1.3m from existing ground level (reinforced concrete) adjacent to Nine-Arches bridge. This entrance may be closed off by the DCC Parks Dept.

#### Area 3E & 3F - Milltown Bridge to **Strand Terrace**

#### Proposed works:

3E - 2.3m high new concrete wall and new earthen embankment. New access ramp from carpark to park area. New access footpath from Milltown Rd. toward river side footpath.

3F - 2.5m high wall from existing ground level, tying into high ground along Strand Terrace. Wall to be fitted with glass panels.

#### Area 6 - Dodderbank Apartments

#### Proposed works:

Upgrade existing wall to 2.95m from existing ground level on wet side. Existing wall to be flood proofed.

1.3m high wall above existing ground level. Tying into high ground.

#### Area 4 - Clonskeagh Rd.

#### Proposed works:

Access road to be upgraded from Clonskeagh Rd. with 3.3m high wall above existing ground level, tying into existing ground level along access road running parallel to river.

3.3m earth embankment, tying into high wall and high ground.

Replace existing bridge railing with low wall 600mm high.

### Area 5 - Dundrum Rd. and Bankside Cottages

#### Proposed works:

Replace existing footpath with precast concrete (u-channel) infilled with material and new hand railings at 1.7m above existing ground level. Trying into existing footpath at Dundrum Rd. (bridge parapet) and Bankside Cottages.

1.0m high wall above existing ground level to close existing access point to Packhorse Bridge.

Ground raising with new footpath from Bankside Cottages to tie into existing footpath adjacent to Packhorse Bridge.

## Area 7 - Woodside Drive /

#### Proposed works:

footpath from Braemor Rd.

#### Area 3A & 3B - Milltown Rd. at **Dropping Well Pub**

#### Proposed works:

3A - Upgrade to existing wall along Milltown Rd increasing height by 0.8m. New access point along Milltown Rd. to tie into public carpark.

3B - New wall 2m above existing ground level. Tving into existing property defence wall. Upgrade to existing property defence wall by 0.4m.

## Area 3D - Shanagarry Apartments

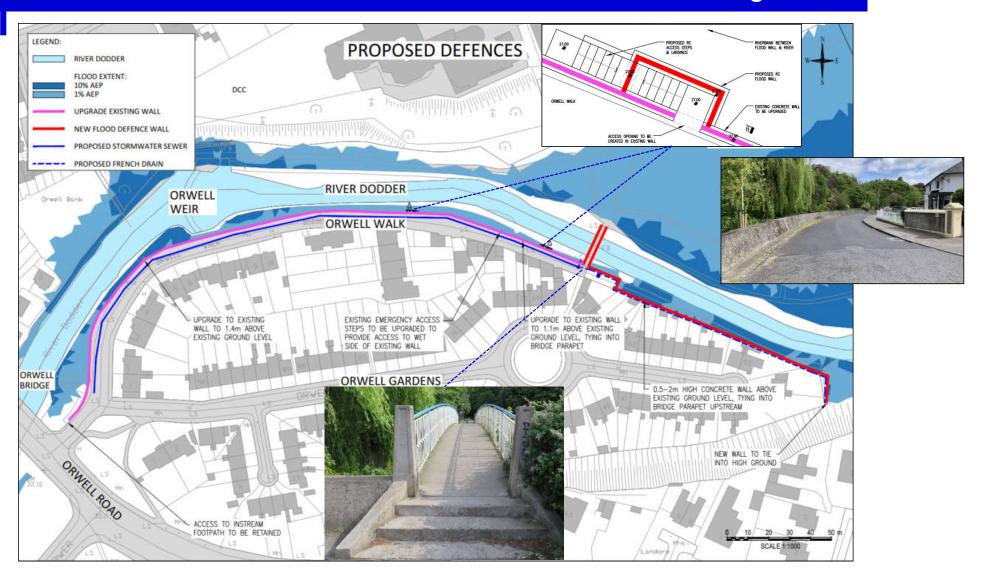
#### Proposed works:

Replace existing wall 1.5m above existing ground level. Tying into existing wall along Milltown Rd.

New pedestrian access ramp (reinforced concrete) to facilitate access to Shanagarry Apartments and adjacent riverbank footpath.

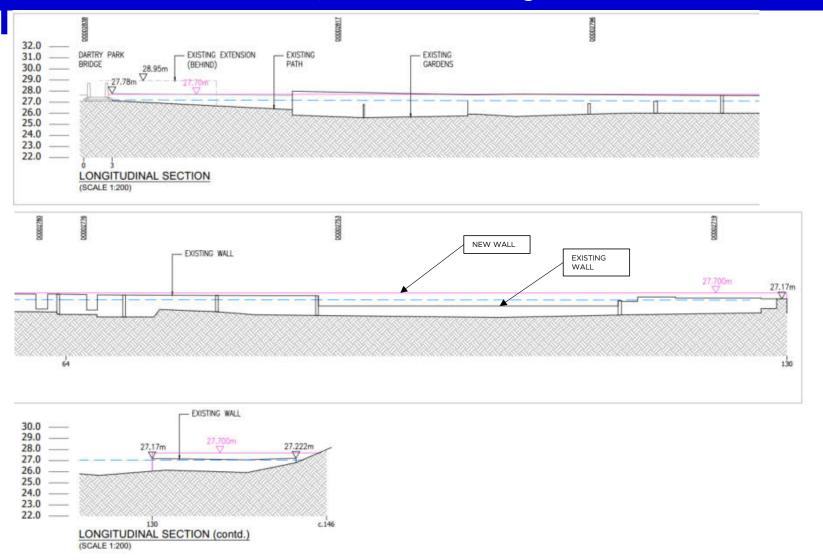
## Area 1A & 1B – Orwell Walk / Dodder Vale / Orwell Gardens – Right Bank





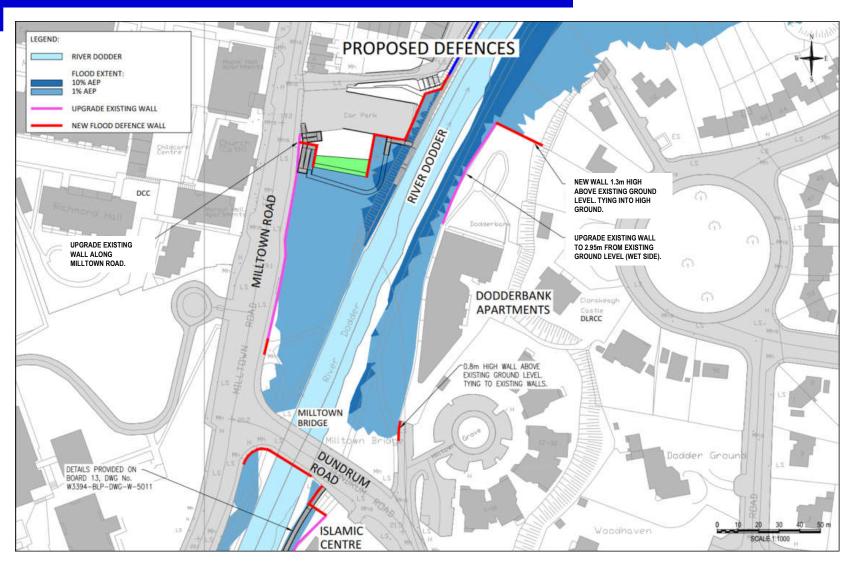


## **Area 1B – Orwell Gardens, Wall Section – Right Bank**



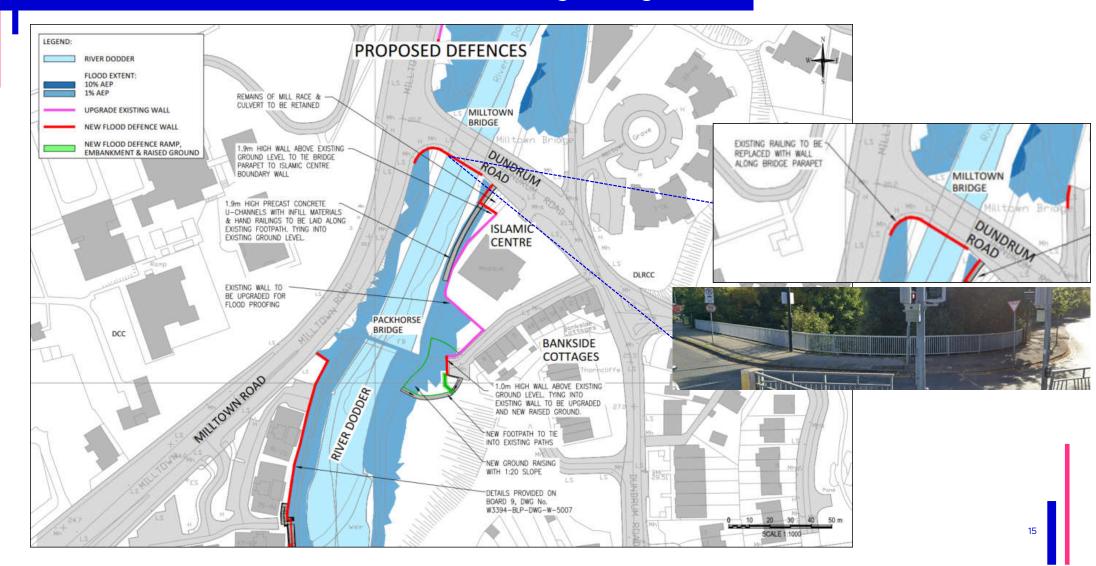
## Area 6 – Dodderbank Apartments - Right Bank





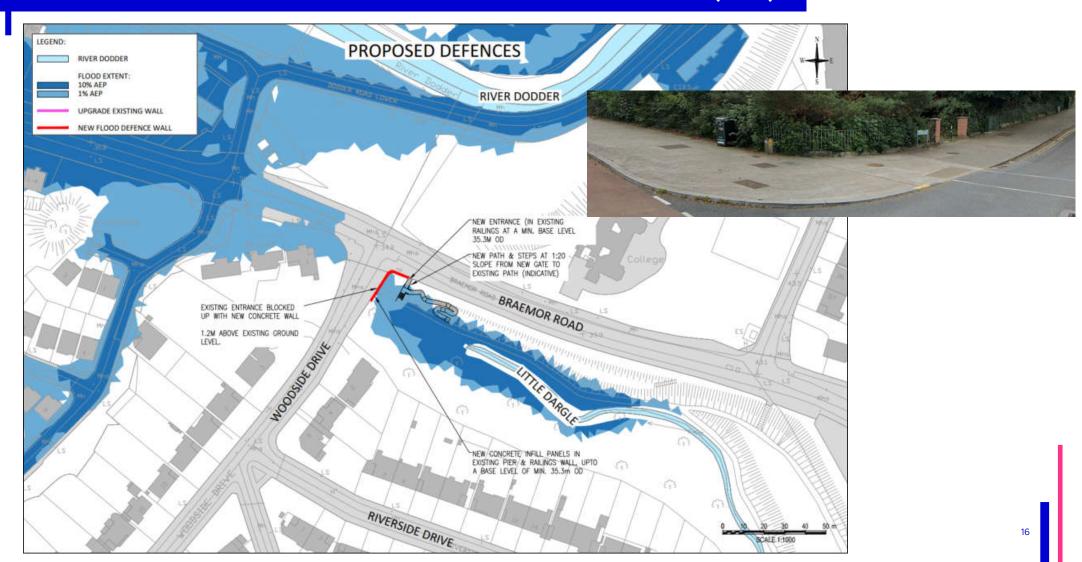
## Area 5 – Dundrum Road and Bankside Cottages - Right Bank





## **Area 7 – Woodside Drive / Braemor Road Junction- South (DLR)**

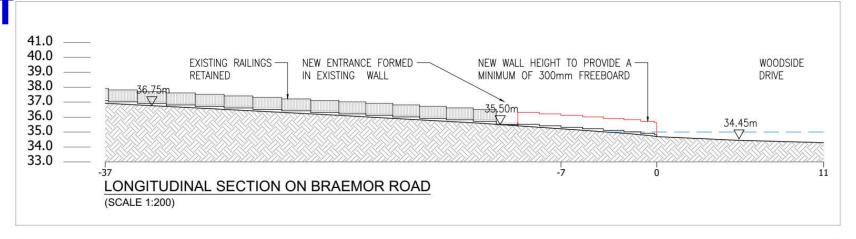


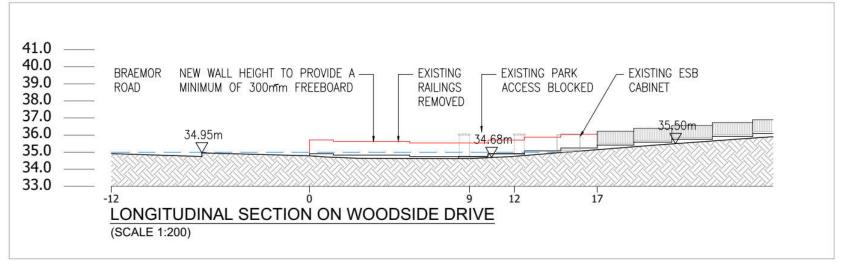




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## **Area 7 – Woodside Drive / Braemor Road Junction- South (DLR)**







# **Programme**

Stage I

- SCHEME DEVELOPMENT & PRELIMINARY DESIGN
- Commenced Q4 2019
- Currently in Q2 2024
- Expected Conclusion October 2024

Stage II

- PLANNING
- Commencement 2024
- Conclusion 2026

Stage III

- DETAIL DESIGN
- Commencement 2026
- Conclusion 2026

Stage IV

- CONSTRUCTION
- Commencement 2026
- Conclusion 2030

Stage V

- HANDOVER
- Commencement 2030
- Conclusion 2030



Thank you!

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