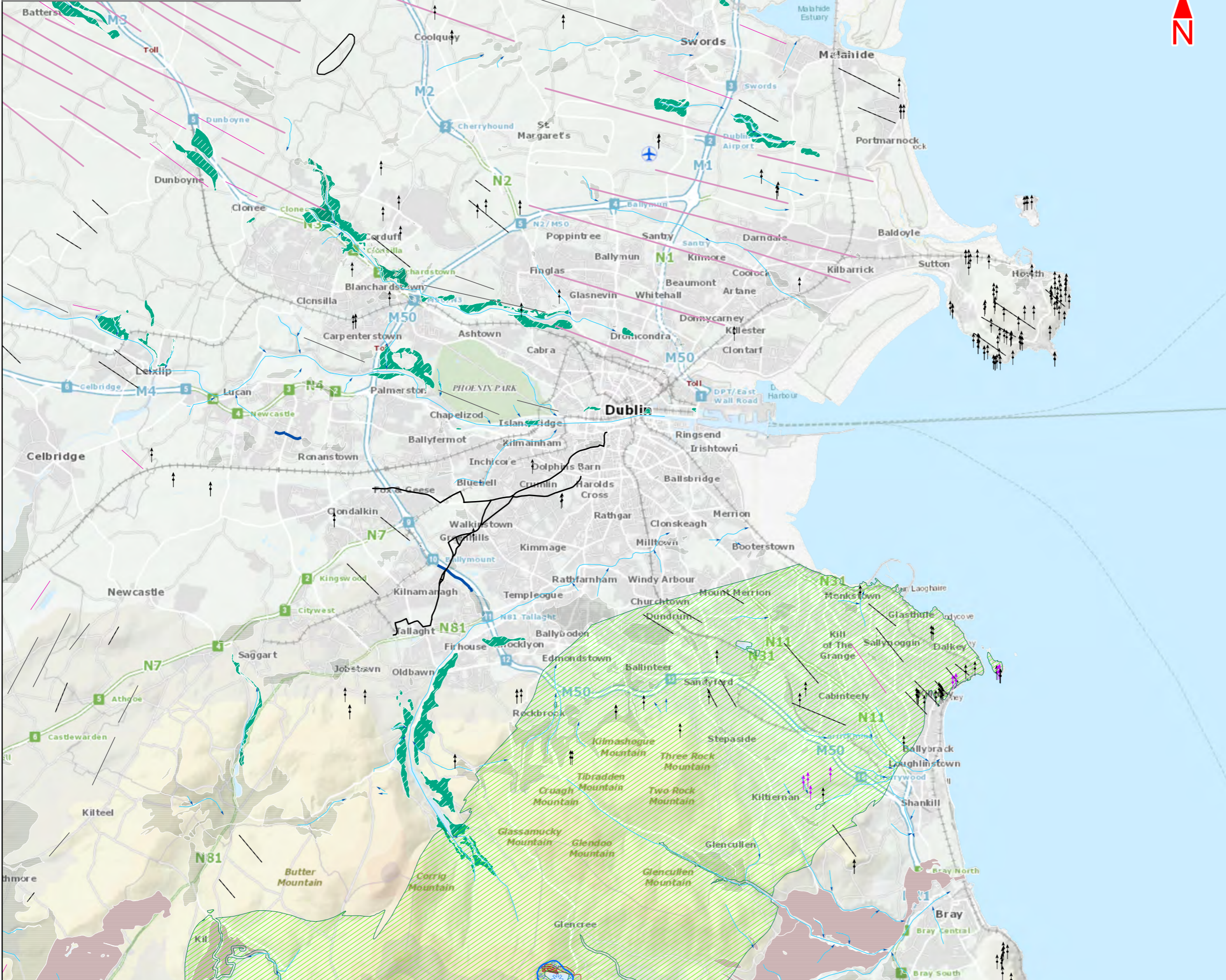




Chapter 14
Land, Soils, Geology &
Hydrogeology



14.1
Regional Geomorphology



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - Landform**
 - ↑ Striae
 - ↑ Roche Moutonnee
 - LANDFORM**
 - Crag-and-Tail
 - Drumlins
 - Mega scale glacial lineation
 - Streamlined Bedrock
 - LANDFORM**
 - Esker ridge
 - Meltwater channel
 - Description**
 - Composite Thrust
 - Block Moraine
 - Landform**
 - Corries
 - Landform**
 - Indicator erratic source area
 - Deglacial Landforms**
 - Delta
 - Glaciofluvial Terrace
 - Hummocky Sand and Gravel
 - Moraine Ridge

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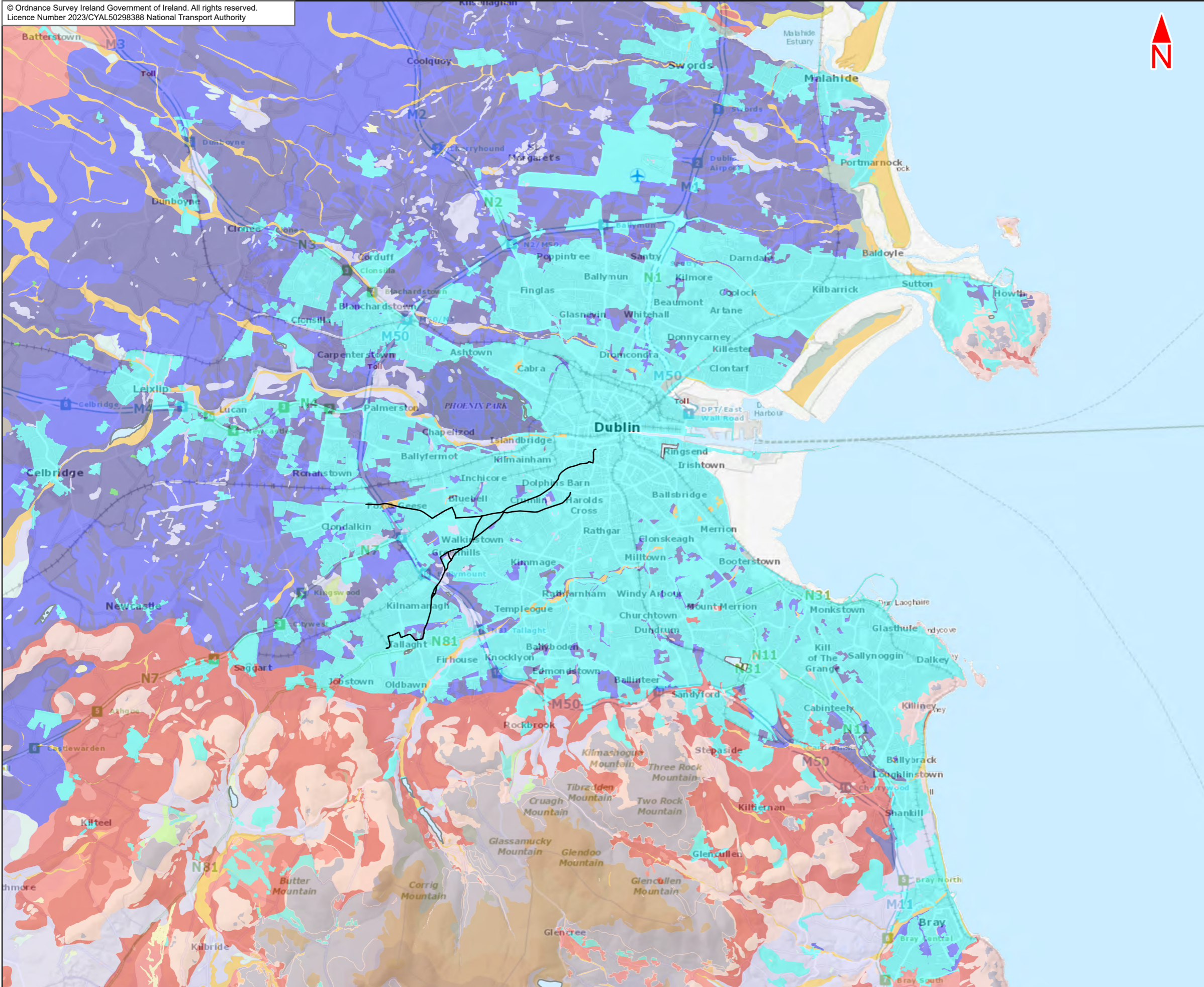
Client
NTA
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National Transport Authority

Consultant
JACOBS
ARUP SYSTRA

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.1 Regional Geomorphology				
Date 22/03/2023	Scale @ A3 1:125 000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0001	Sheet Number 1 of 1	Status A	Rev M01	

14.2 Regional Soils

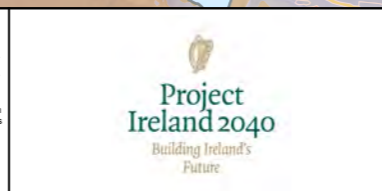




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Consultant: **JACOBS ARUP SYSTRA**

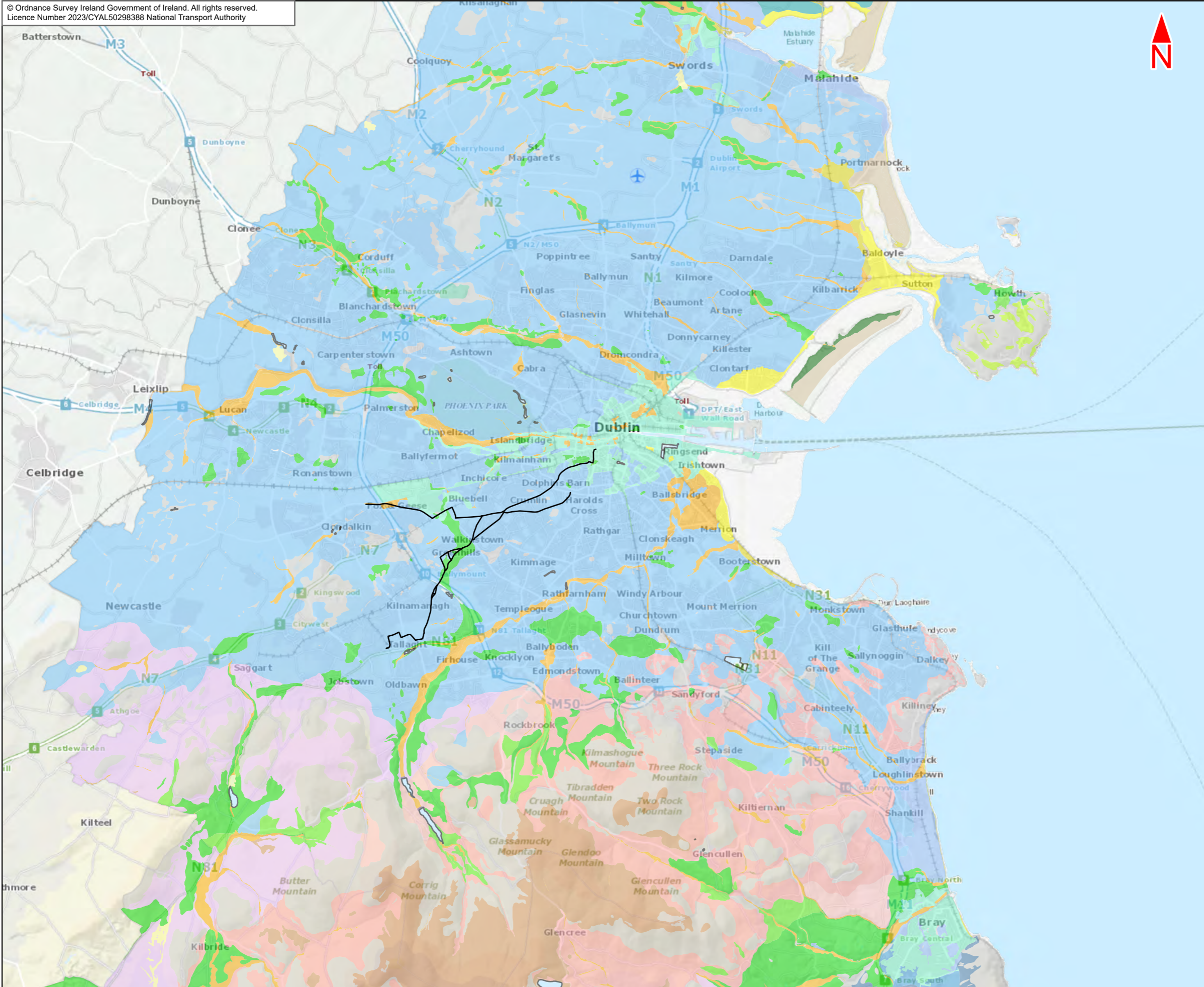
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Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code:

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Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.2 Regional Soils			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0002	Sheet Number: 1 of 1	Status: A	Rev: M01

14.3 Regional Subsoils





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - IrSTCSSs, Irish Sea Till derived from Cambrian sandstones and shales
 - IrSTLPSsS, Irish Sea Till derived from Lower Palaeozoic sandstones and shales
 - IrSTLs, Irish Sea Till derived from Limestones
 - TCSsS, Till derived from Cambrian sandstones and shales
 - TGr, Till derived from granites
 - TLPsS, Till derived from Lower Palaeozoic sandstones and shales
 - TLs, Till derived from shales
 - TMp, Till derived from Metamorphic rocks
 - TQz, Till derived from quartzites
 - Ws, Windblown sands
 - Wsd, Windblown sands and dunes
 - Dam
 - Embankment
 - Landfill
 - Urban
 - Water
 - A, Alluvium
 - Ag, Alluvium (gravelly)
 - As, Alluvium (sandy)
 - Asi, Alluvium (silty)
 - BktPt, Blanket Peat
 - Cut, Cut over raised peat
 - GCh, Gravels derived from chert
 - GLPSsS, Gravels derived from Lower Palaeozoic sandstones and shales
 - GLs, Gravels derived from Limestones
 - Gmp, Gravels derived from Metamorphic rocks
 - GGr, Gravels derived from granite
 - Rck, Bedrock outcrop or subcrop
 - Scree, Scree
 - L, Lacustrine sediments
 - Lsi, Lacustrine silts
 - Mbs, Marine beach sands
 - Mesc, Estuarine silts and clays
 - TdIMr, Tidal Marsh

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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

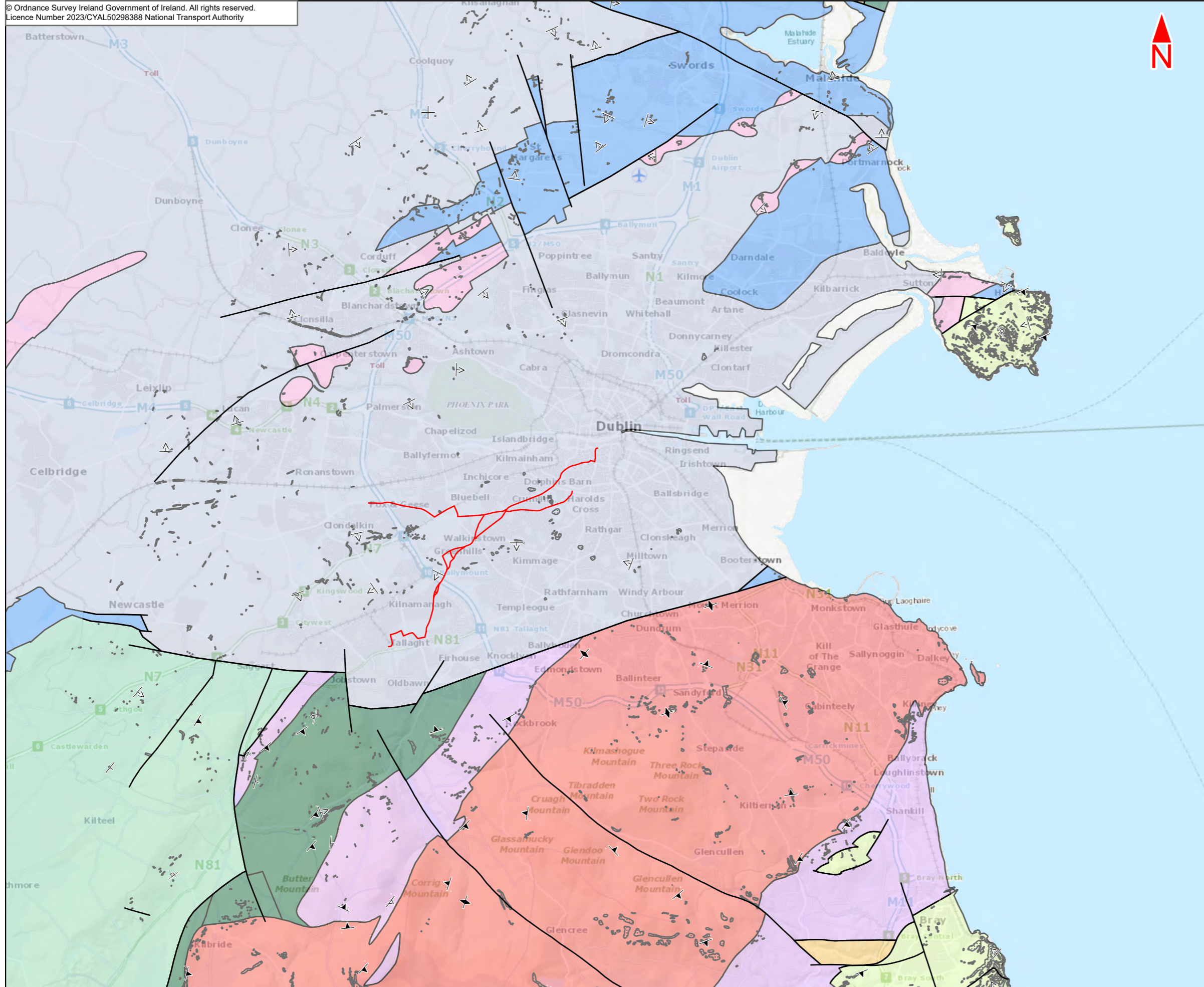
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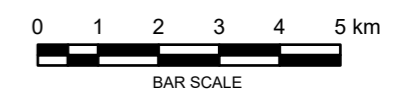
14.4
Regional Bedrock





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - GSI Bedrock Geological Faults - 1:500,000
 - GSI Bedrock Structural Symbols - 1:100,000**
 - First foliation parallel to bedding
 - Horizontal Bedding
 - Strike and dip of bedding, right way up
 - Strike and dip of bedding, way up unknown
 - Strike and dip of first foliation
 - Strike and dip of overturned bedding
 - Strike and dip of second foliation
 - Strike of vertical first foliation
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:500,000**
 - Visean basinal limestone "Calp"
 - Waulsortian mudbank
 - Courcean limestone
 - Up Dev-Lr Carb ORS
 - Caledonian granite
 - Silurian sandstone, g'wacke, shale
 - Mid-Up Ordovician basic volcanics
 - Lr-Mid Ordovician slate
 - Lr-Mid Ordovician acid volcanics
 - Lr-Mid Ordovician basic volcanics
 - Cambrian greywacke, sandst, qtzite

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Project Ireland 2040
 Building Ireland's Future

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 National Transport Authority

Consultant
 Jacobs
 ARUP SYSTRA

Date 22/03/2023 **Scale** @ A3 1:125 000
Project Code BCIDE **Originator Code** JAC

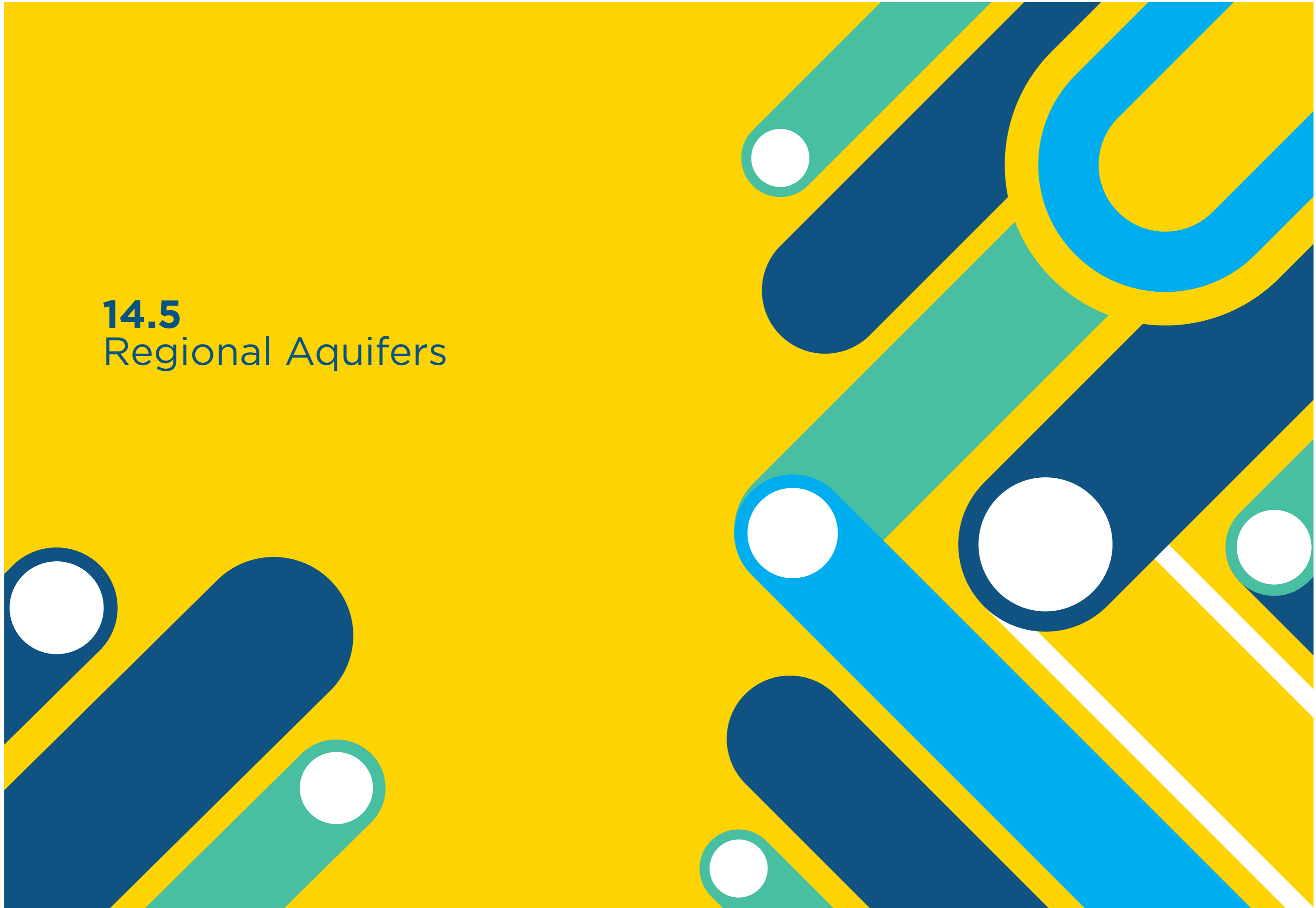
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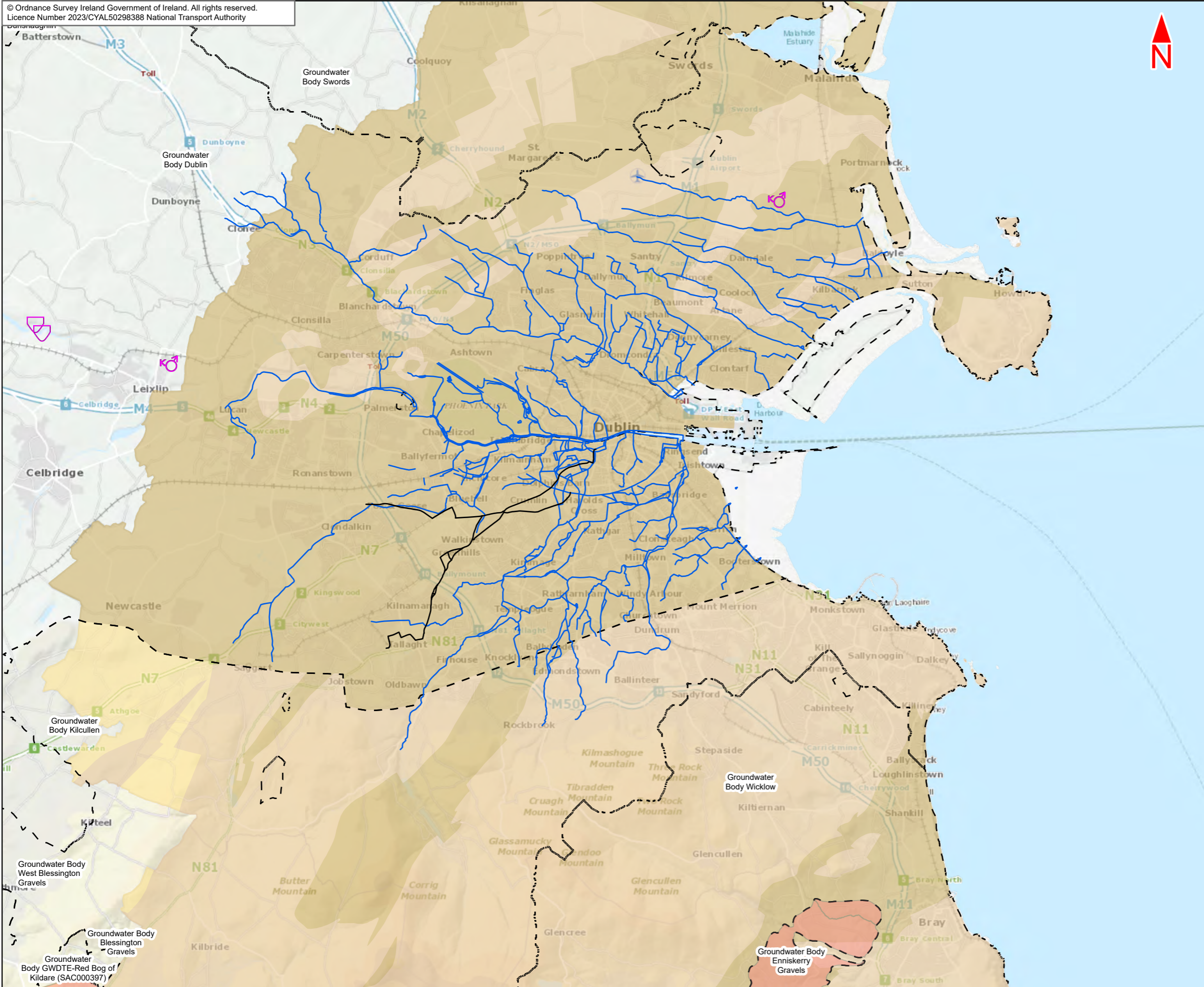
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 BUSCONNECTS DUBLIN
 CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title
 Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 Figure 14.4
 Regional Bedrock

Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0004 **Sheet Number** 1 of 1 **Status** A **Rev** M01

14.5
Regional Aquifers





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - Rivers Of Dublin
 - GSI Sand And Gravel Aquifers
 - Groundwater Bodies - Water Framework Directive
 - GSI Karst**
 - CAVE
 - SPRING
 - GSI Bedrock Aquifer**
 - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)
 - Locally Important Aquifer - Bedrock which is Generally Moderately Productive (Lm)
 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones (PI)
 - Poor Aquifer - Bedrock which is Generally Unproductive (Pu)

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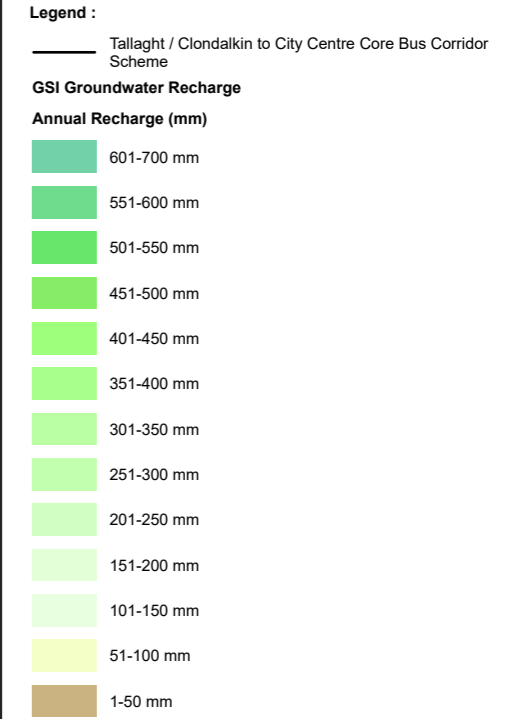
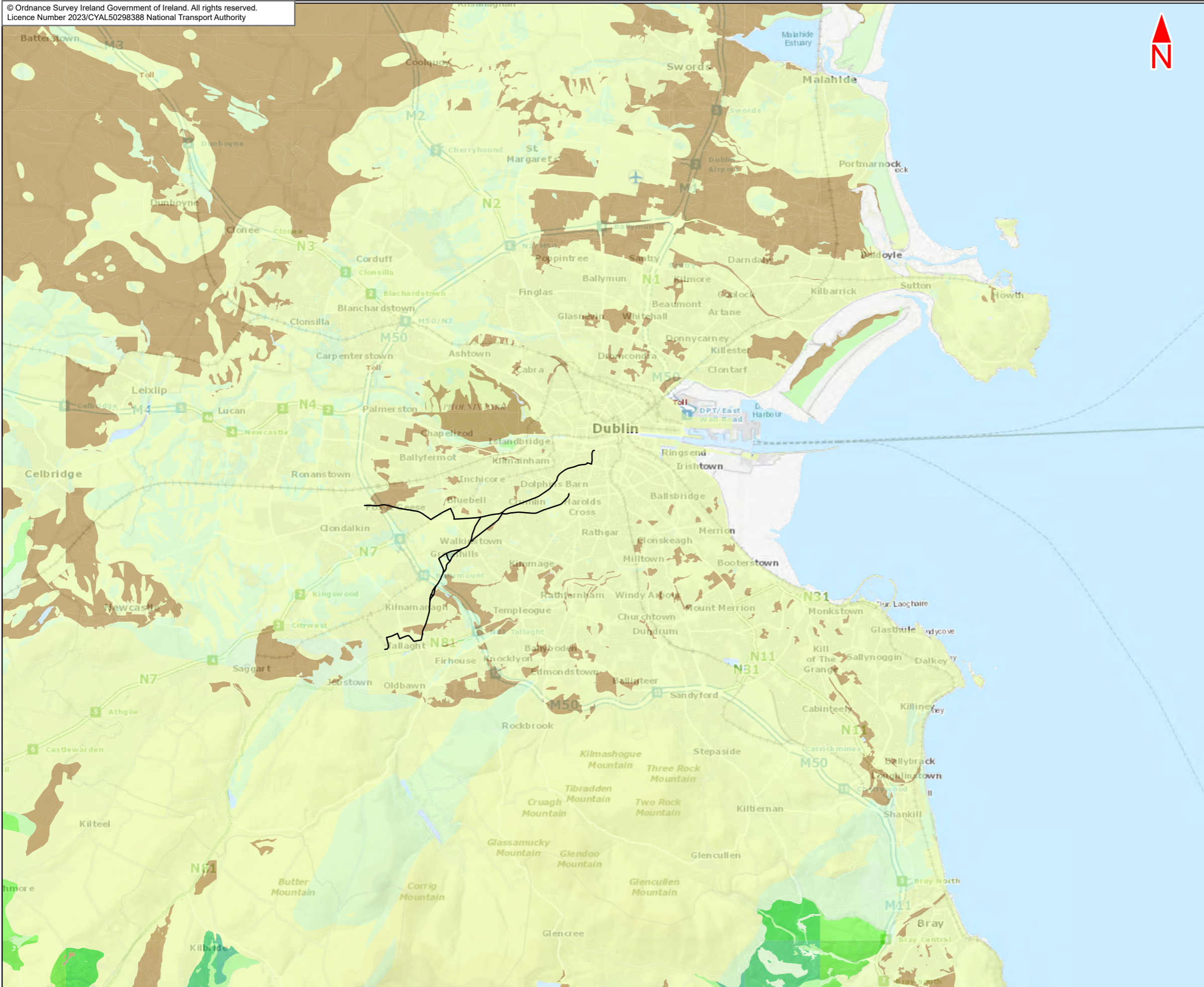
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Date 22/03/2023	Scale @ A3 1:125 000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

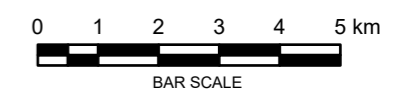
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Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.5 Regional Aquifers				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0005	Sheet Number 1 of 1	Status A	Rev M01	

14.6
Regional Groundwater
Recharge





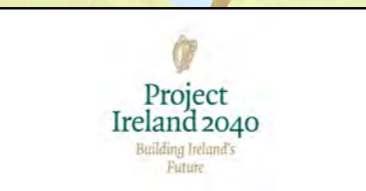
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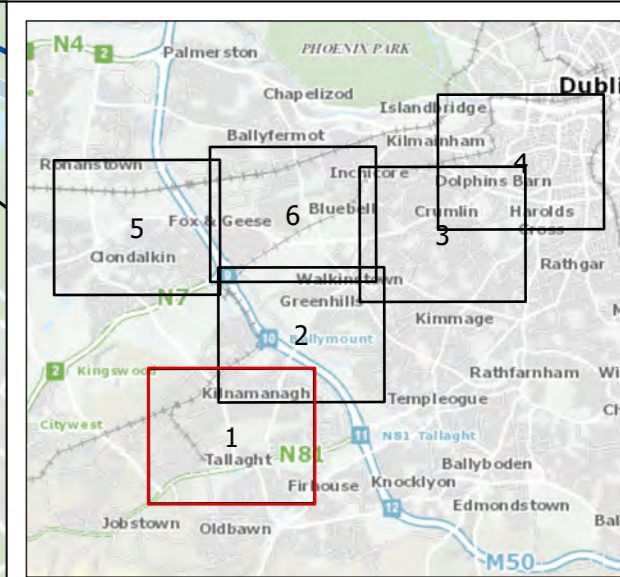
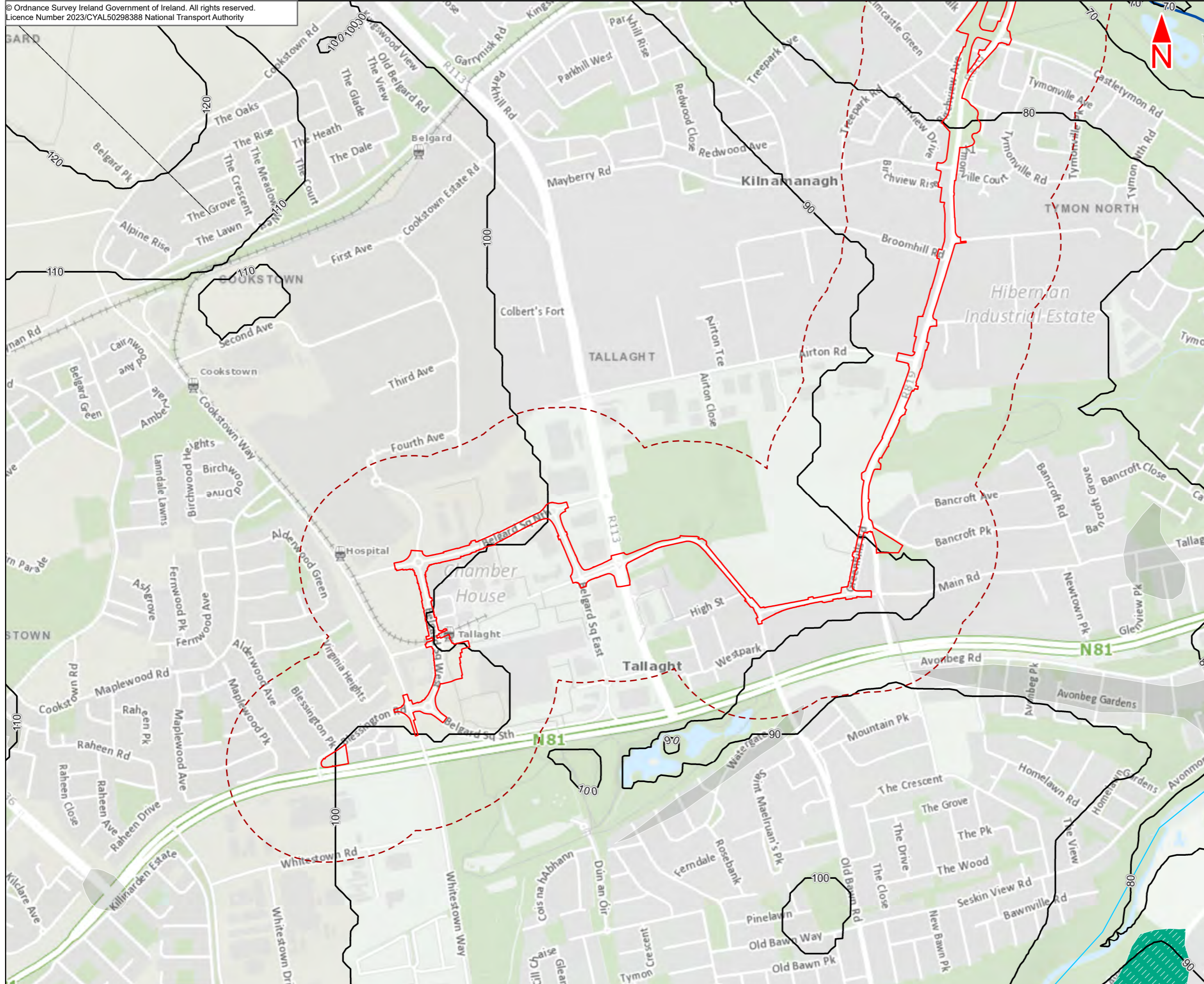
Consultant

Programme Title		BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS		
Drawing Title		Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.6 Regional Groundwater Recharge		
Drawing File Name	Sheet Number	Status	Rev	
BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0006	1 of 1	A	M01	

Date	Scale @ A3	Drawn	Checked	Approved
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Project Code	Originator Code	QMS Code		
BCIDE	JAC			

14.7
Topography and
Geomorphology

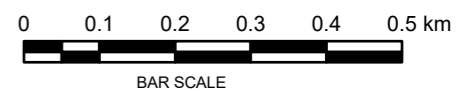




Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- - - 250m Study Area
- EPA Contours
- Subglacial Lineation Landforms**
- LANDFORM**
- Streamlined Bedrock
- Meltwater Landforms**
- LANDFORM**
- Esker ridge
- Meltwater channel
- Deglacial Landforms**
- Landform**
- ▨ Glaciofluvial Terrace
- ▨ Hummocky Sand and Gravel

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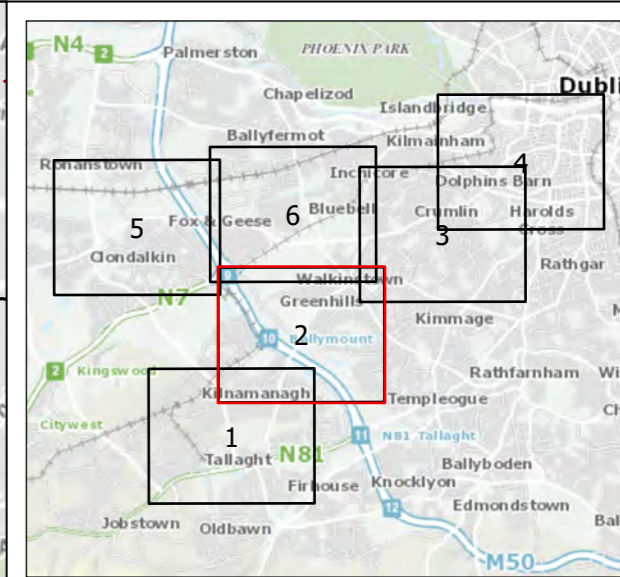
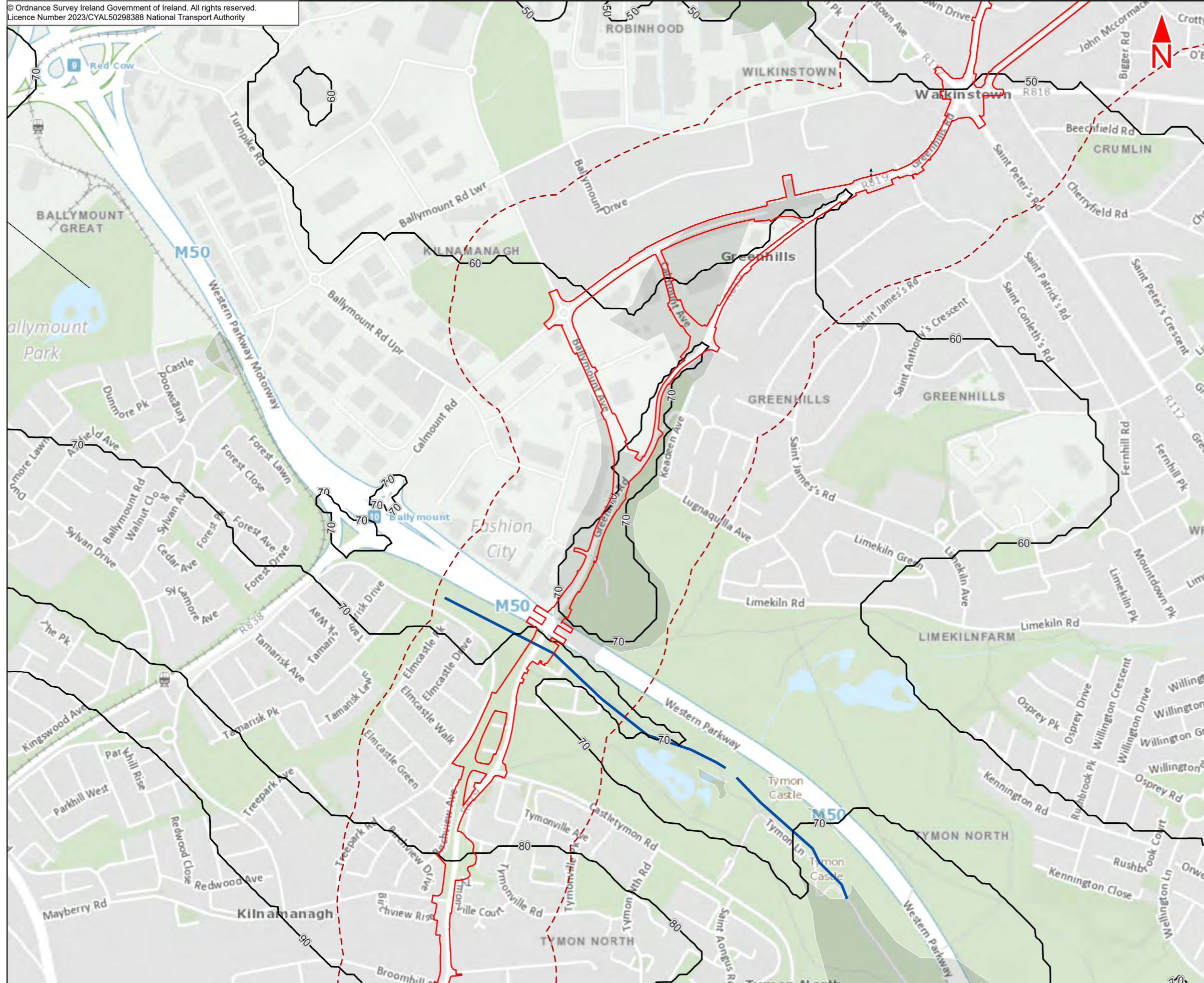
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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

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Project Code: BCIDE | Originator Code: JAC

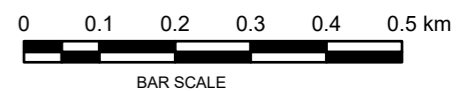
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QMS Code: _____

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Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.7 Topography and Geomorphology			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0101	Sheet Number: 1 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - EPA Contours
 - Subglacial Lineation Striae Landform
 - Streamlined Bedrock Meltwater Landforms Landform
 - Esker ridge Deglacial Landforms Landform
 - Hummocky Sand and Gravel

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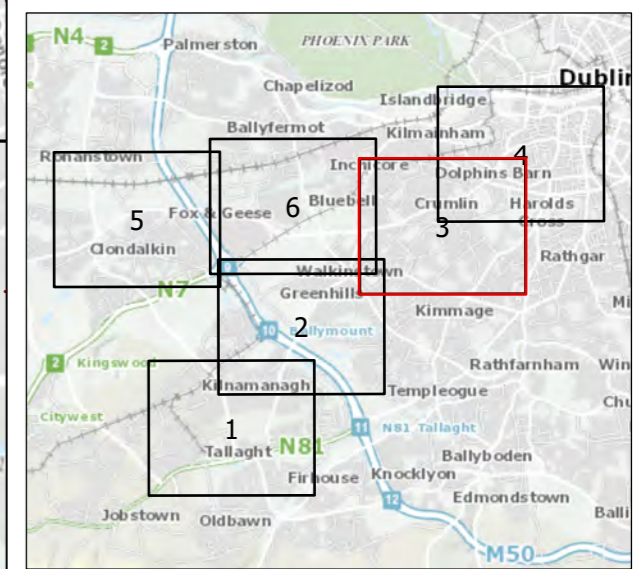
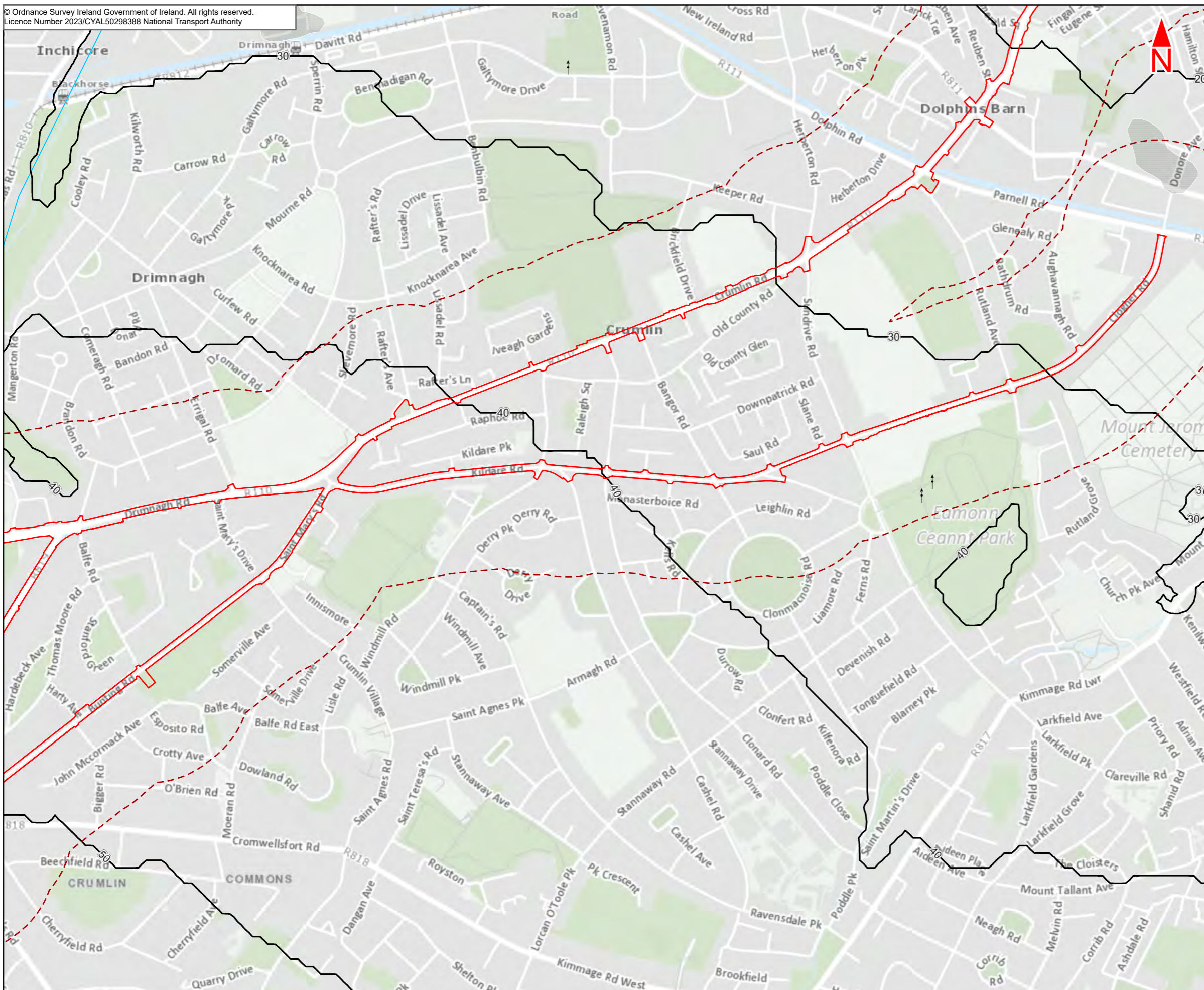
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000
Project Code: BCIDE | Originator Code: JAC

Drawn: FG | Checked: PW | Approved: DK

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.7 Topography and Geomorphology			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0102	Sheet Number: 2 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - EPA Contours
 - Subglacial Lineation Striae
 - Landform
 - Striae
 - Meltwater Landforms
 - LANDFORM
 - Meltwater channel
 - Deglacial Landforms
 - Landform
 - Hummocky Sand and Gravel

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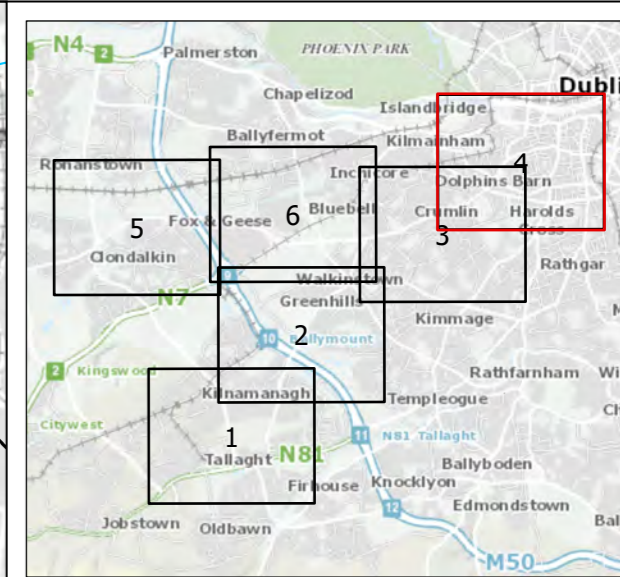
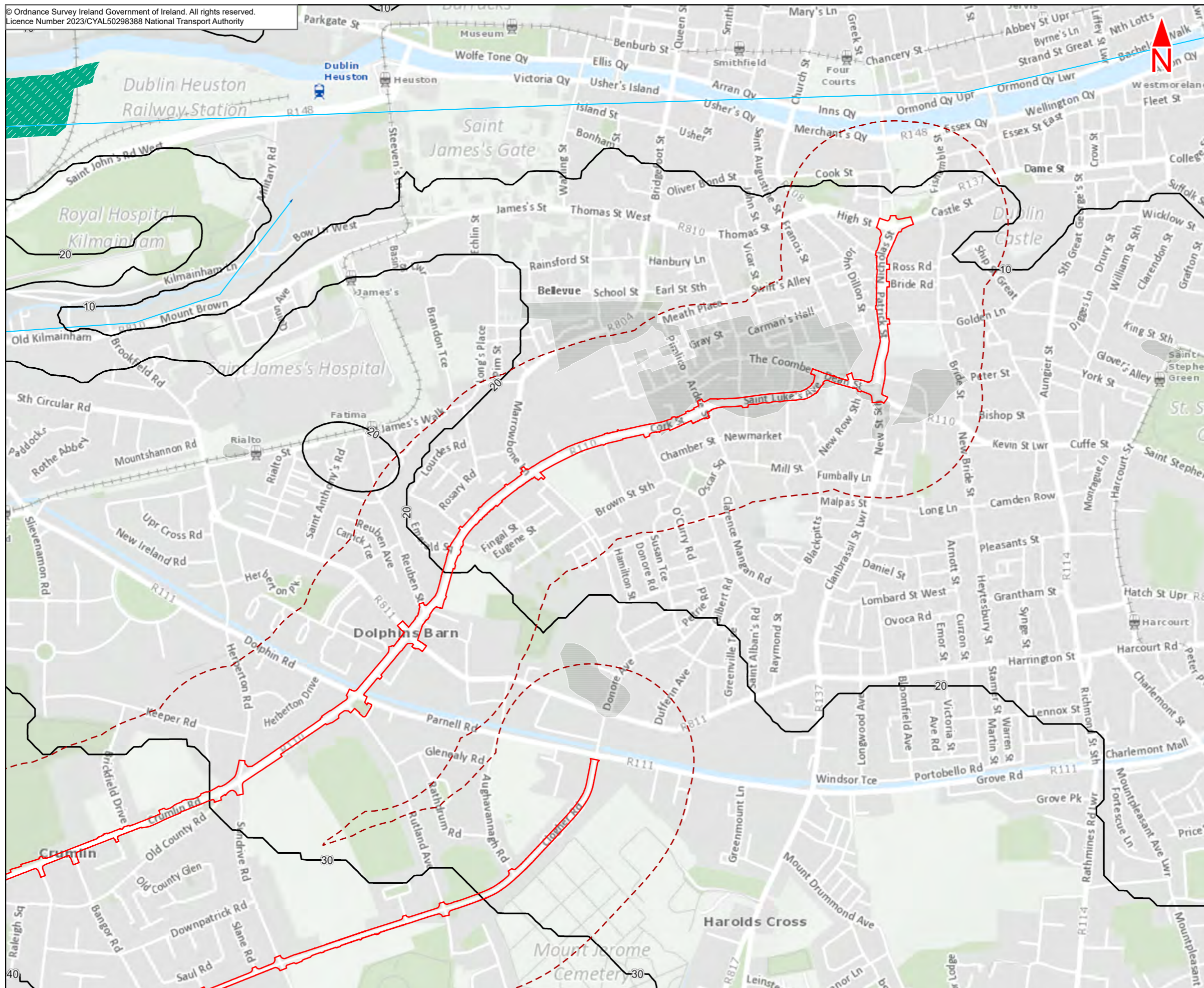
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Client
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 Udarás Náisiúnta Iompair
 National Transport Authority

Consultant
JACOBS
ARUP SYSTRA

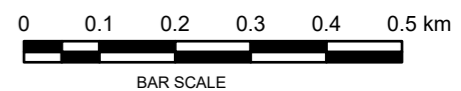
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Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.7 Topography and Geomorphology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0103	Sheet Number 3 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - EPA Contours
 - Subglacial Lineation Striae
 - Landform
 - Striae
 - Meltwater Landforms
 - LANDFORM
 - Meltwater channel
 - Deglacial Landforms
 - Landform
 - Glaciofluvial Terrace
 - Hummocky Sand and Gravel

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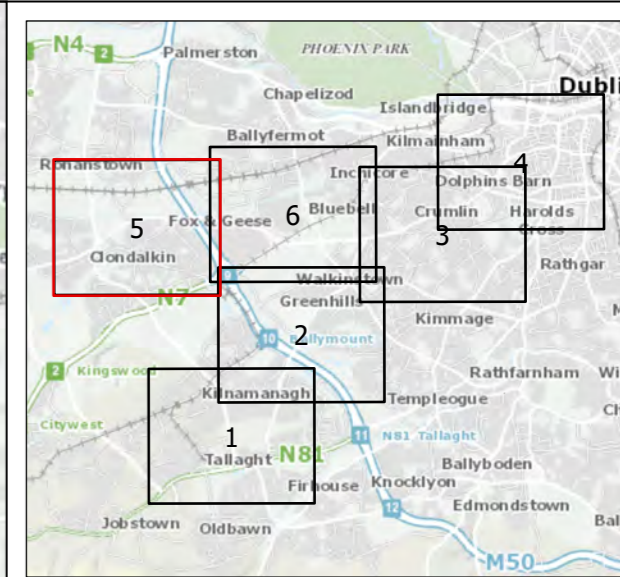
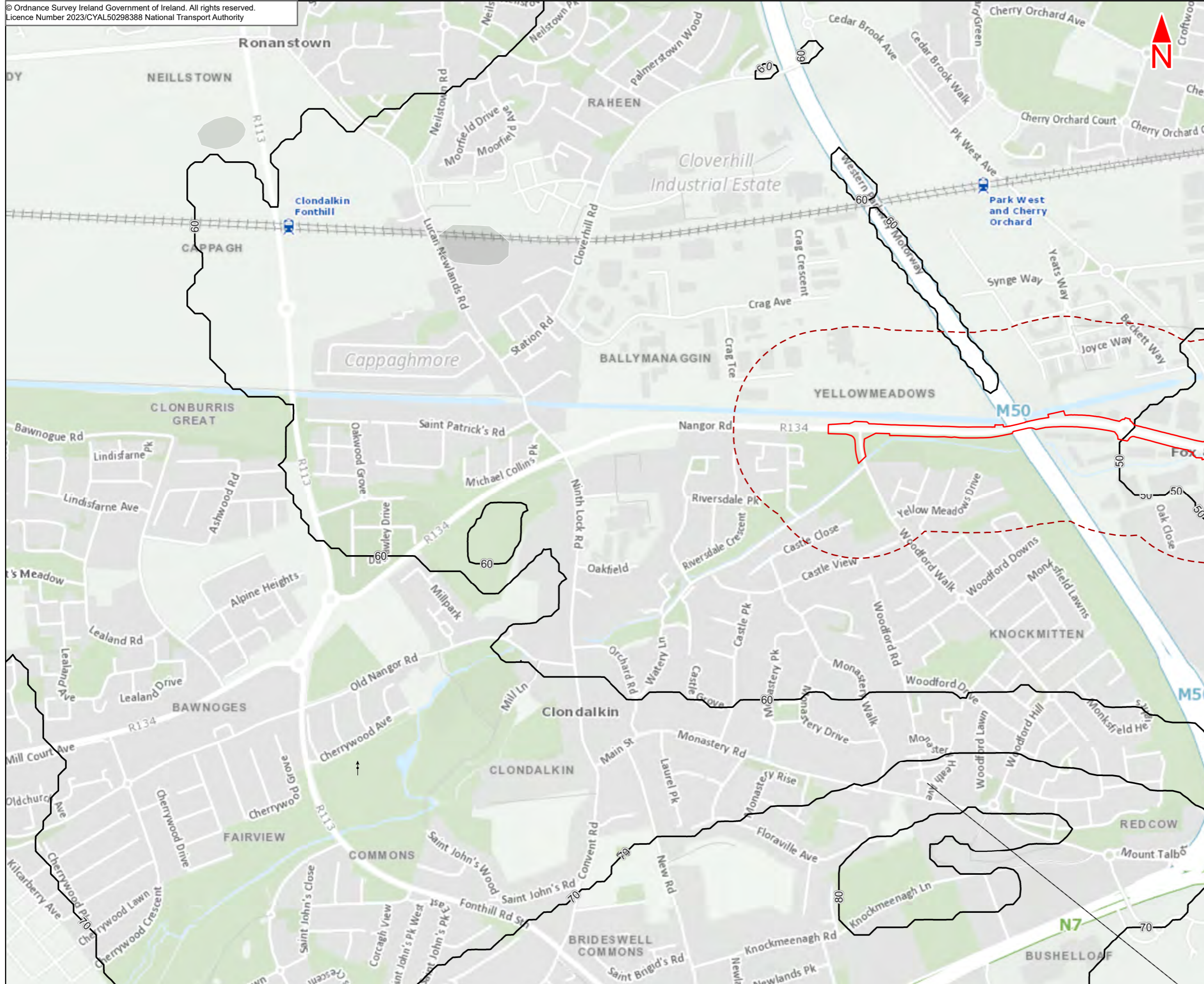
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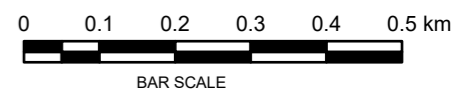
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Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.7 Topography and Geomorphology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0104	Sheet Number 4 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - - - 250m Study Area
 - EPA Contours
 - Subglacial Lineation Striae
 - Landform
 - ↑ Striae
 - Subglacial Lineation Landforms
 - LANDFORM
 - Streamlined Bedrock
 - Deglacial Landforms**
 - Landform
 - Hummocky Sand and Gravel

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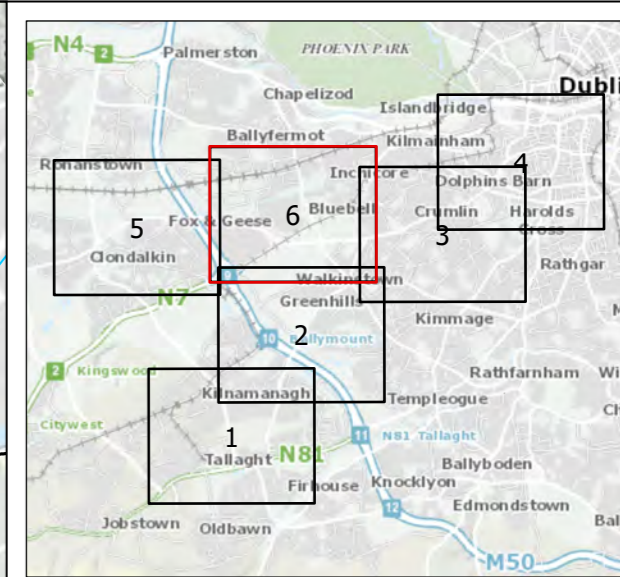
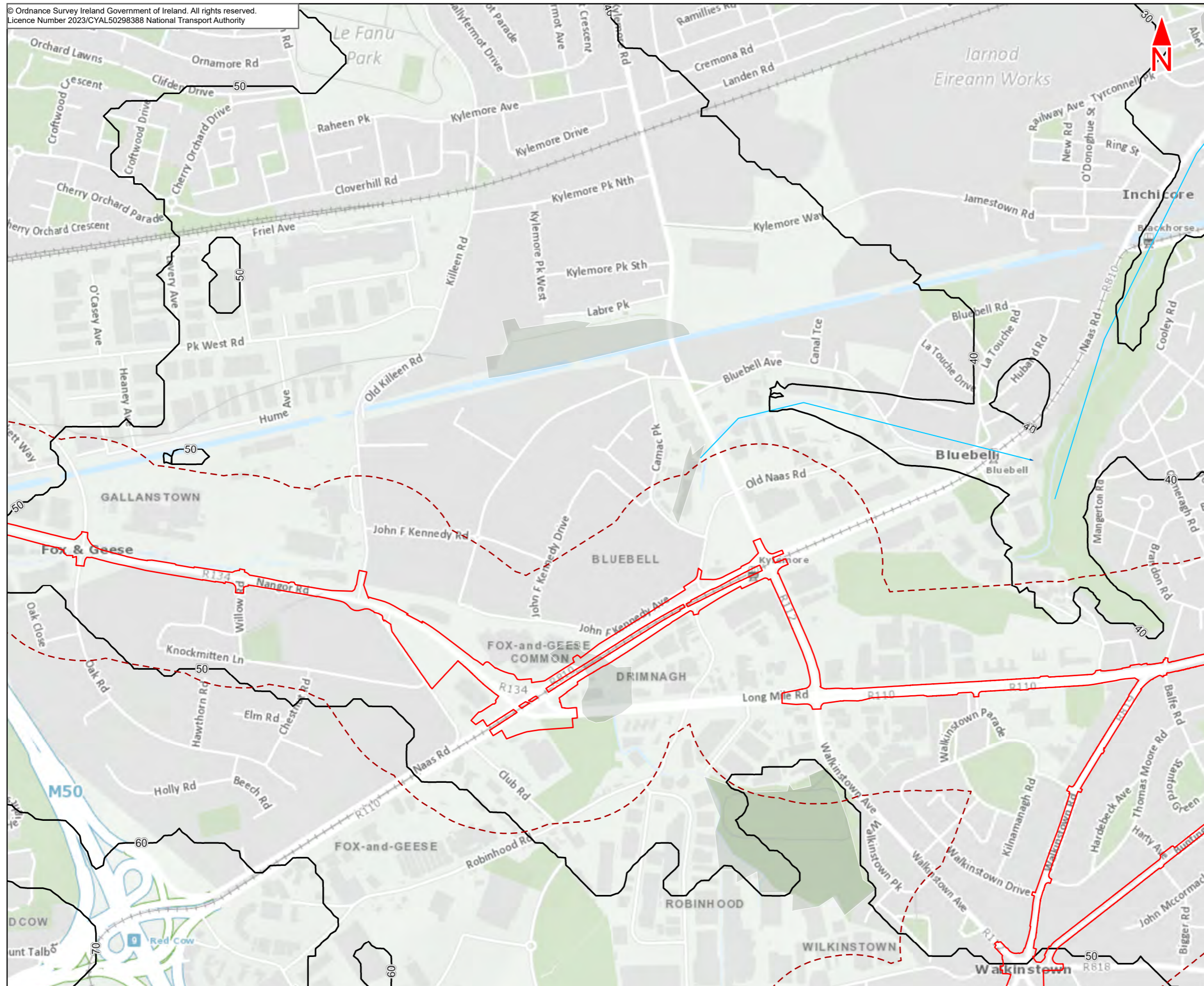
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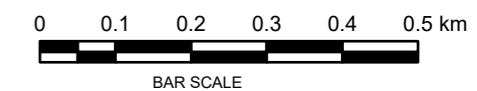
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Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.7 Topography and Geomorphology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0105	Sheet Number 5 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - EPA Contours
 - Meltwater Landforms**
 - LANDFORM
 - Meltwater channel
 - Deglacial Landforms**
 - Landform
 - Hummocky Sand and Gravel

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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

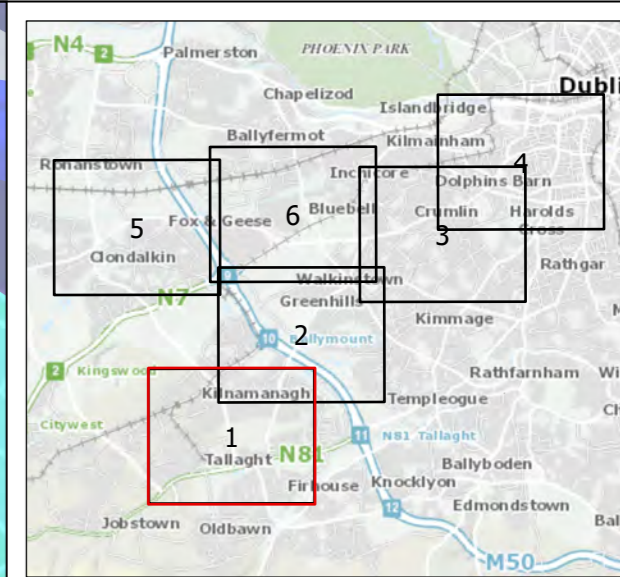
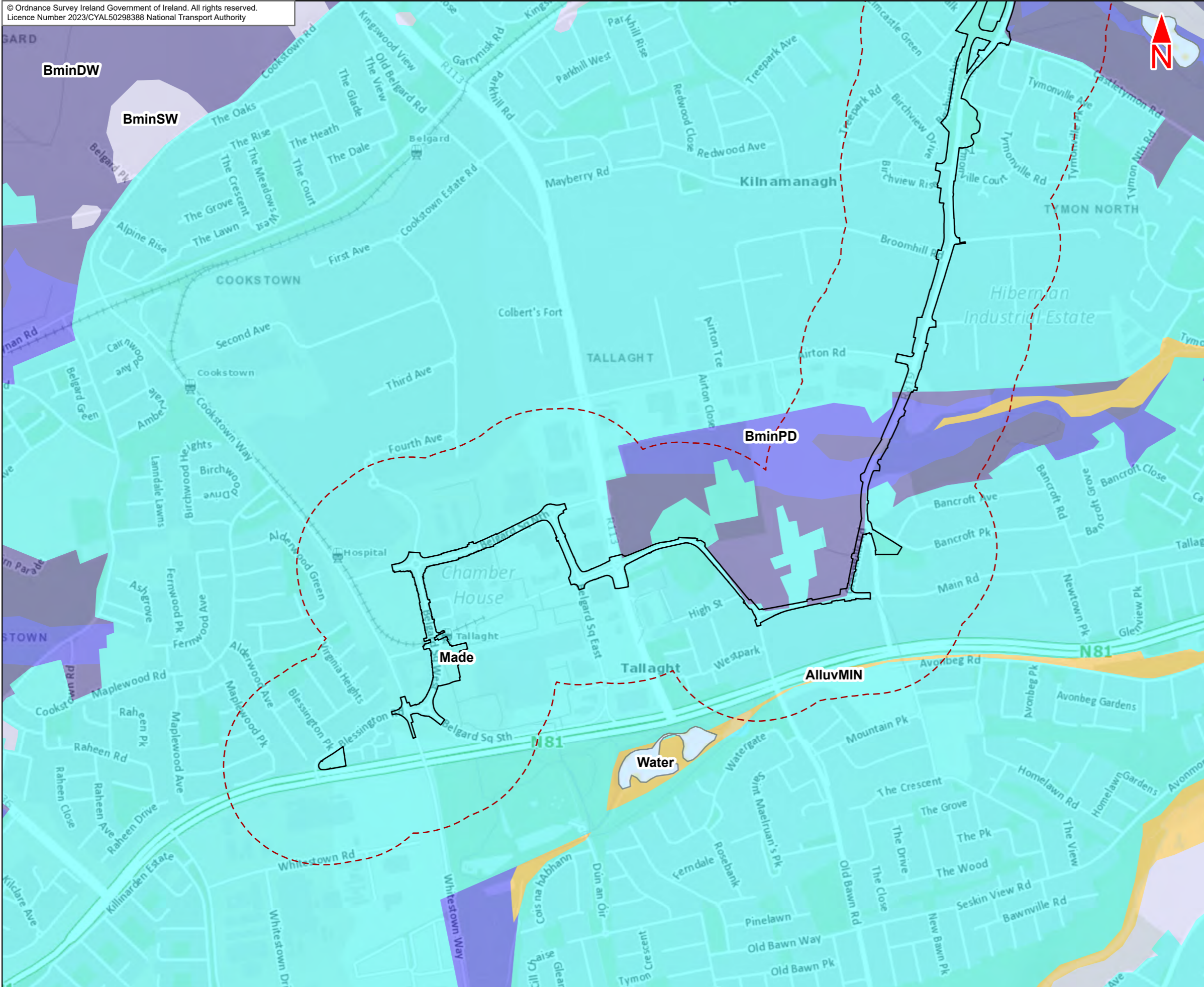
Date: 22/03/2023 | Scale @ A3: 1:10000
Project Code: BCIDE | Originator Code: JAC

Drawn: FG | Checked: PW | Approved: DK

Programme Title: BUSCONNECTS DUBLIN			
CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme			
Figure 14.7			
Topography and Geomorphology			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0106	Sheet Number: 6 of 6	Status: A	Rev: M01

14.8
Soil Deposits





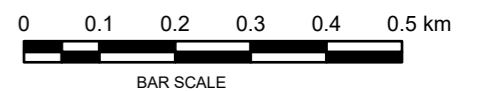
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

Teagasc Soils

- AlluvMIN - Mineral alluvium
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminSW - Renzinas / Lithosols
- Made
- Water

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Client: **NTA**
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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000

Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK

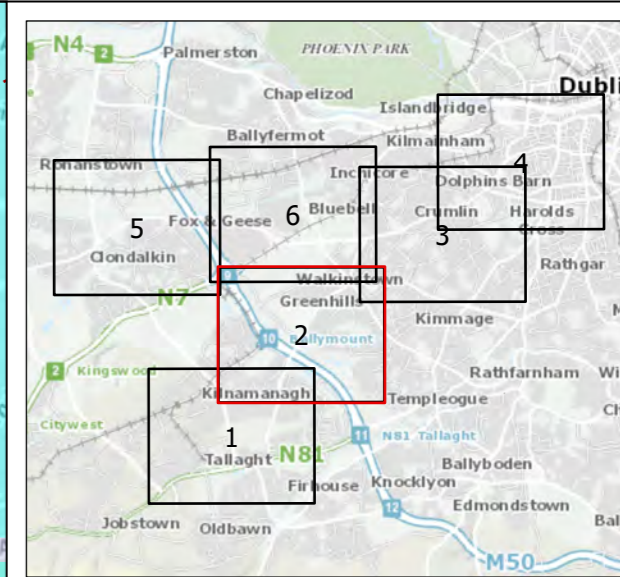
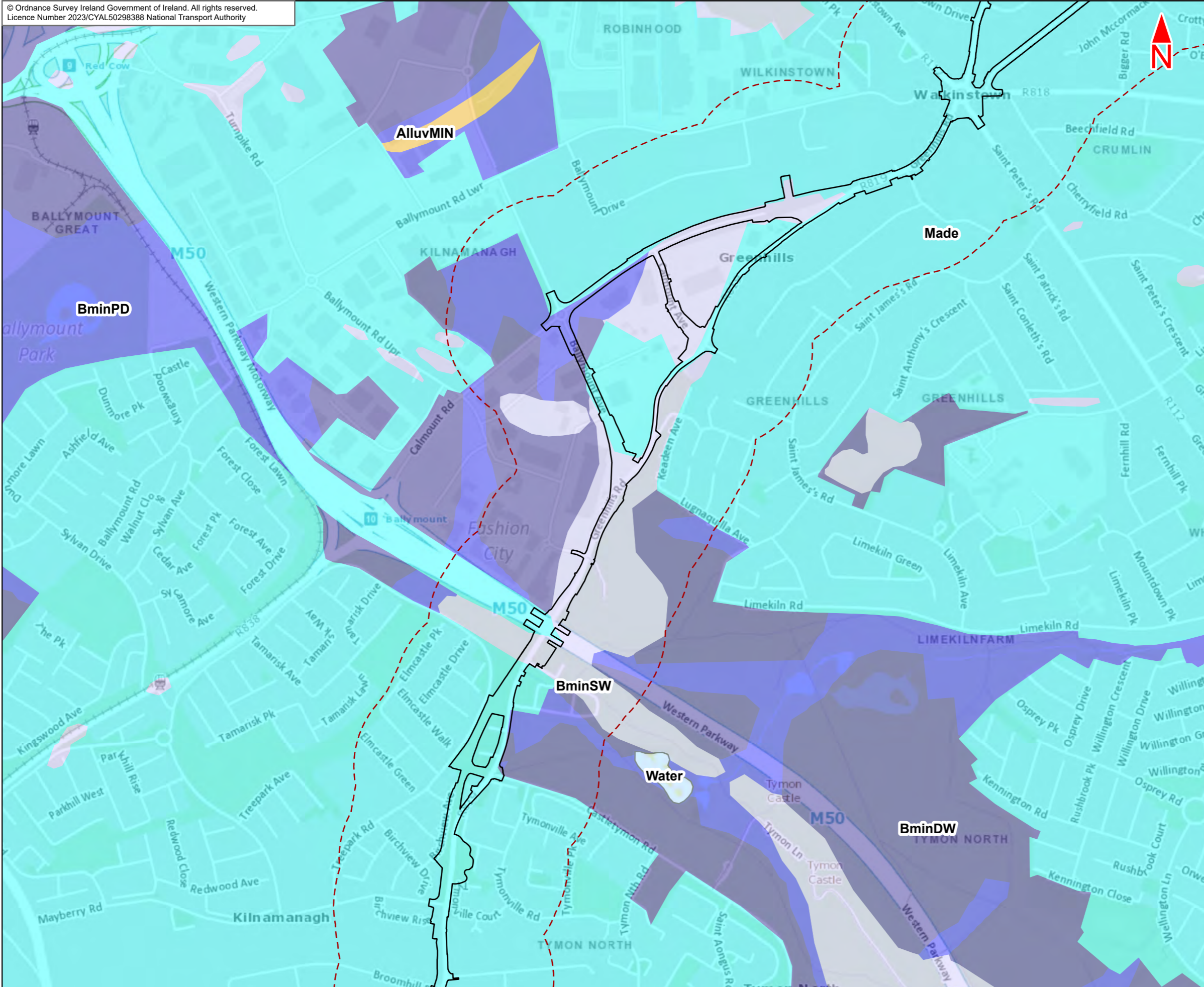
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Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.8 Soil Deposits

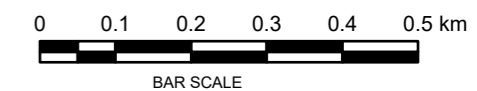
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- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Teagasc Soils**
 - AlluvMIN - Mineral alluvium
 - BminDW - Grey Brown Podzolics / Brown Earths Basic
 - BminPD - Surface water Gleys / Ground water Gleys Basic
 - BminSW - Renzinas / Lithosols
 - Made
 - Water

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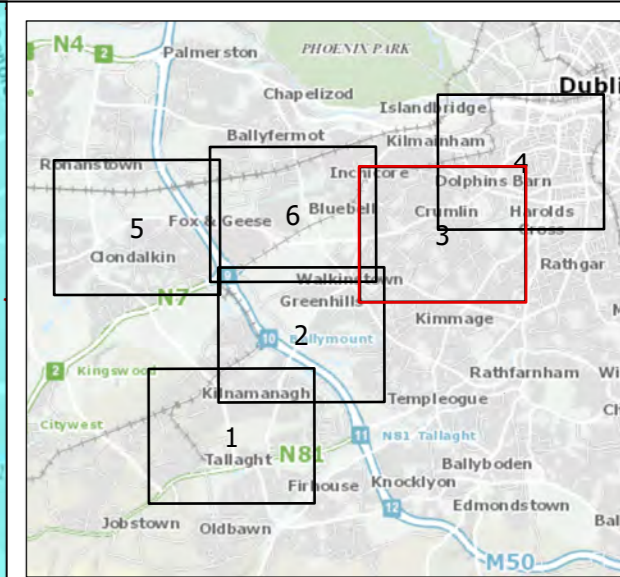
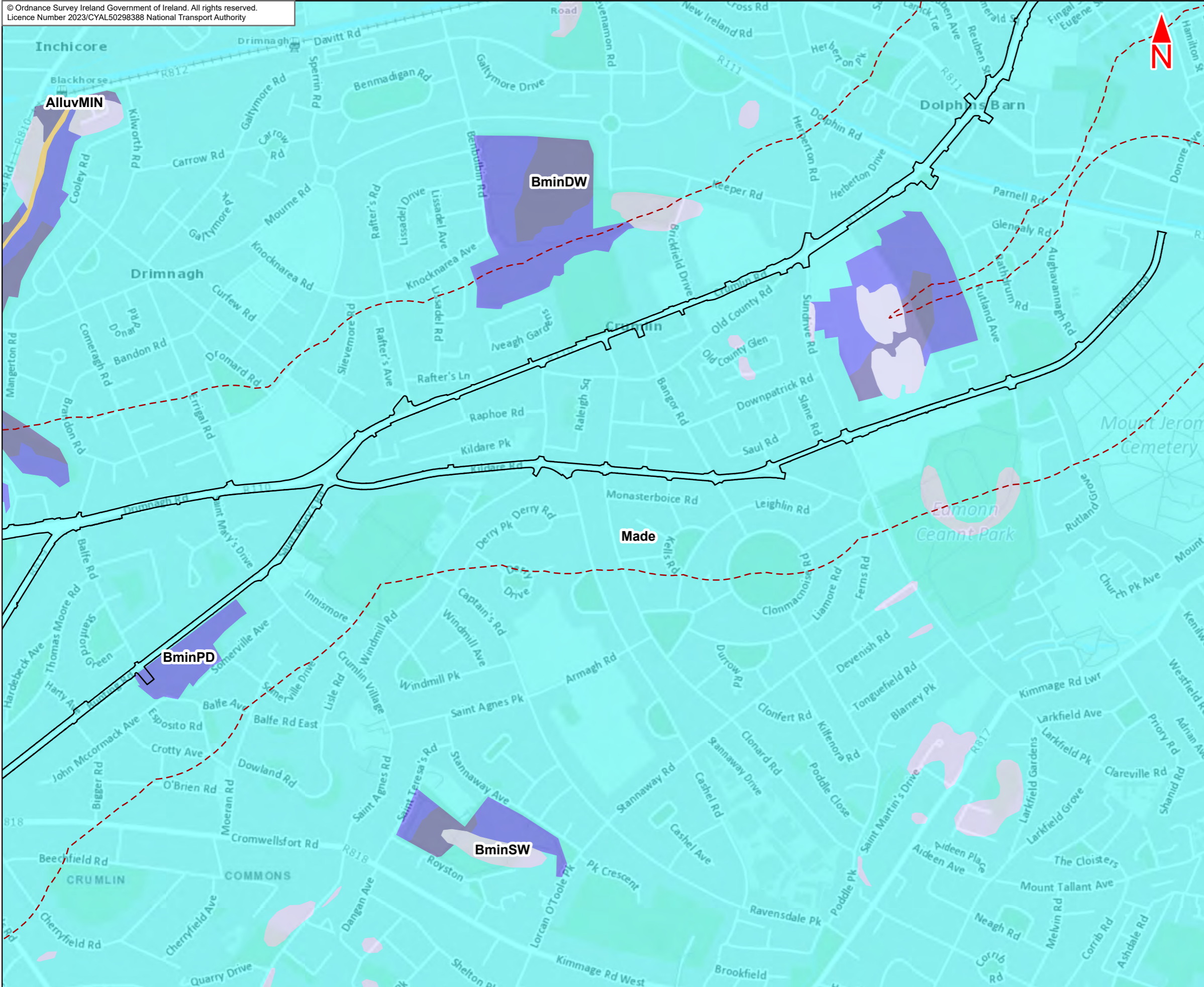
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Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.8 Soil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0202	Sheet Number: 2 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Teagasc Soils**
 - AlluvMIN - Mineral alluvium
 - BminDW - Grey Brown Podzolics / Brown Earths Basic
 - BminPD - Surface water Gleys / Ground water Gleys Basic
 - BminSW - Renzinas / Lithosols
 - Made

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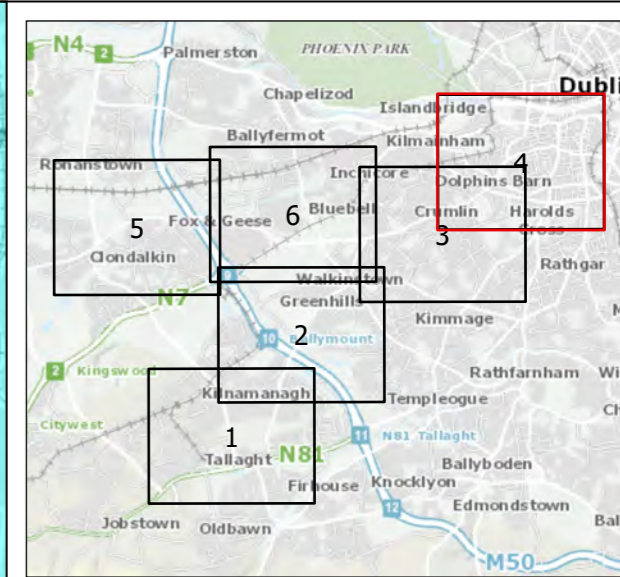
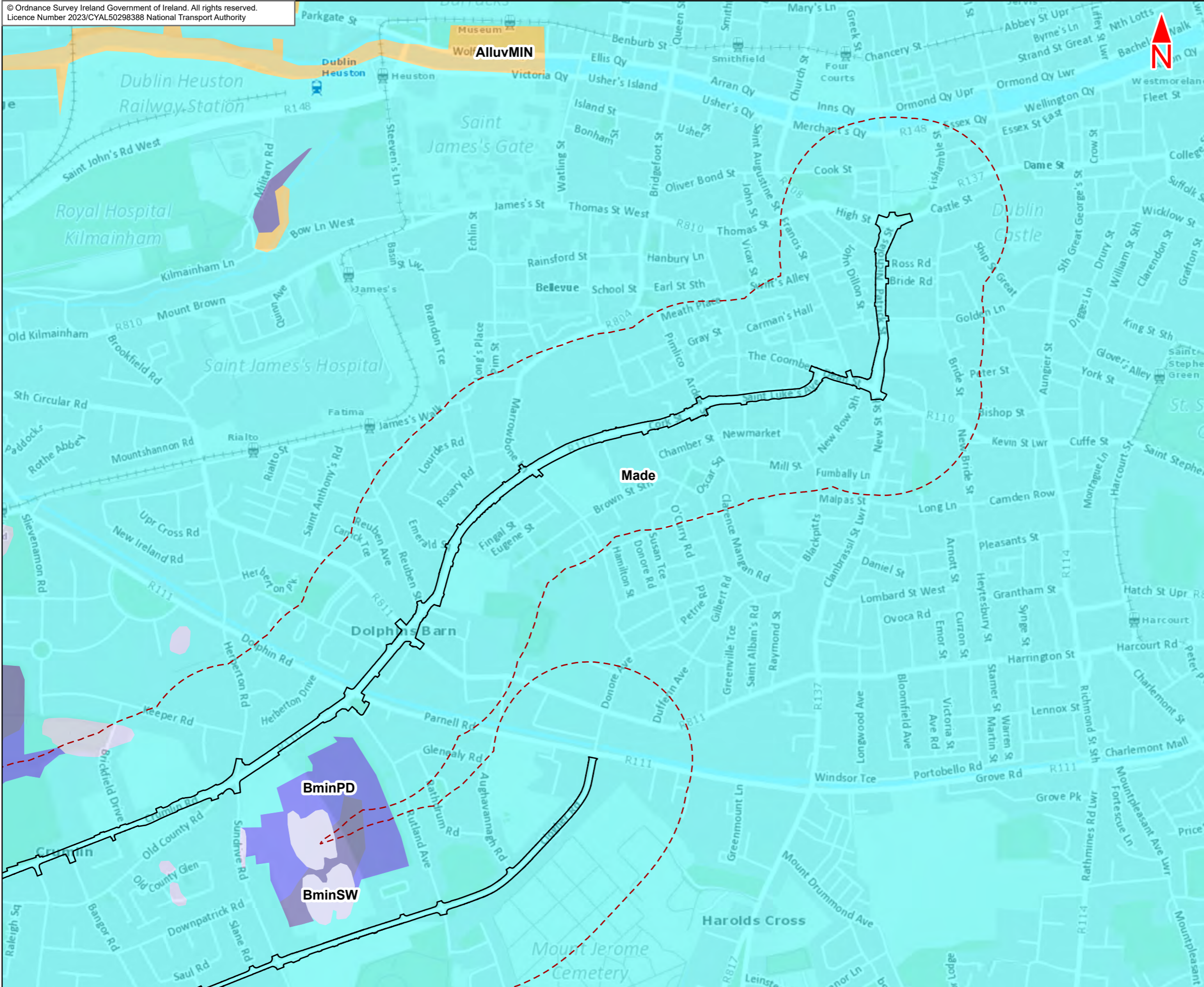
Rev	Date	Drn	Chk'd	App'd	Description
M01	Mar 23	FG	PW	DK	ISSUE FOR PHASE 4 : PLANNING

Client
NTA
Udarás Náisiúnta Iompair
National Transport Authority

Consultant
JACOBS ARUP SYSTRA

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.8 Soil Deposits				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0203	Sheet Number 3 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

Teagasc Soils

- AlluvMIN - Mineral alluvium
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminSW - Renzinas / Lithosols
- Made

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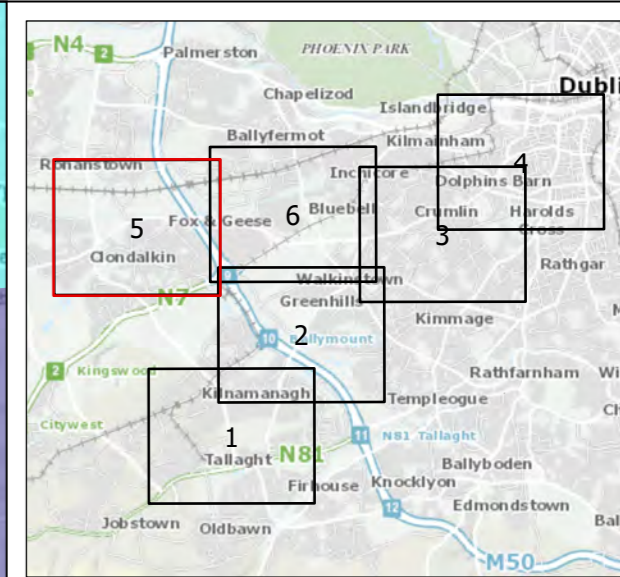
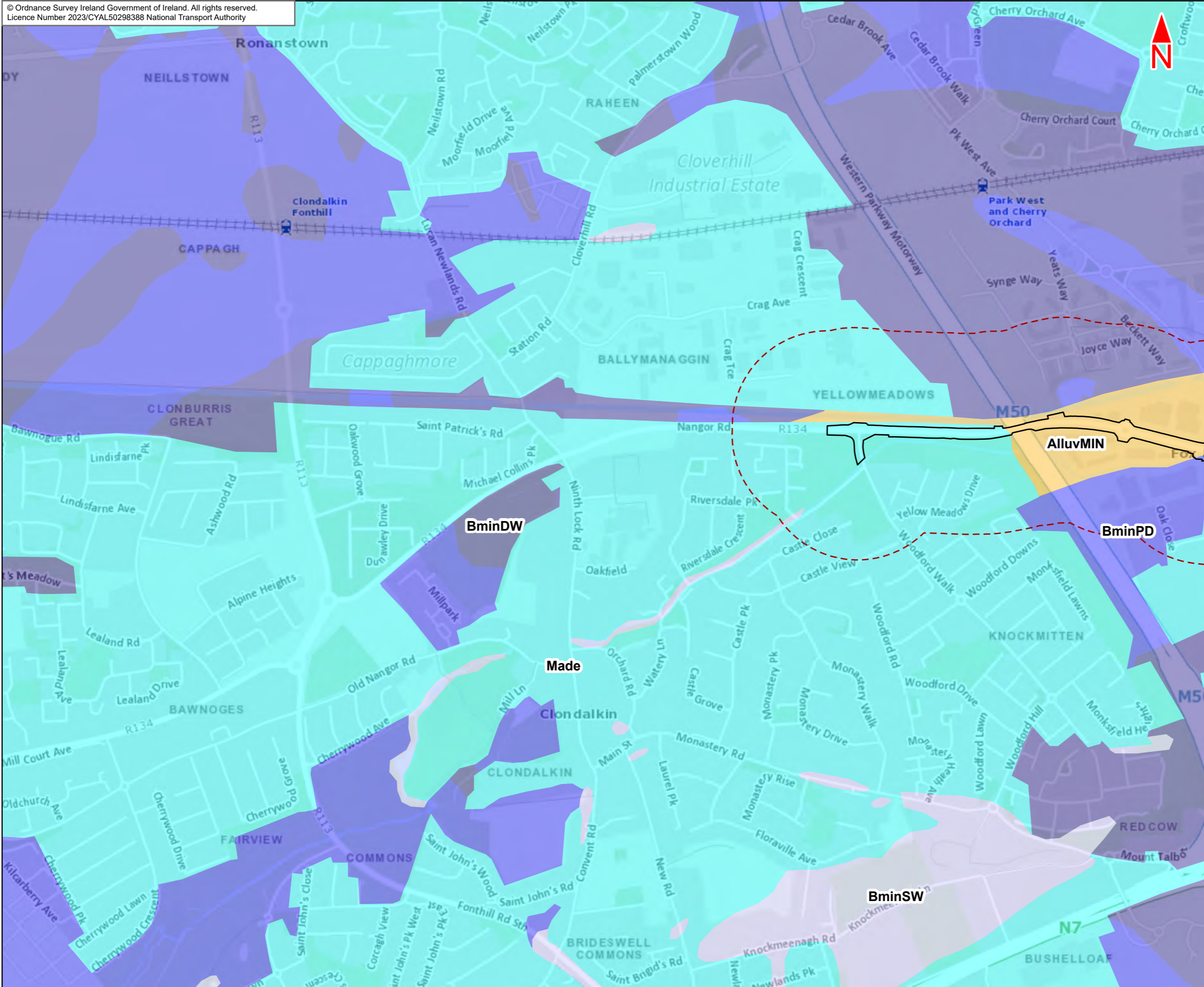
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.8 Soil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0204	Sheet Number: 4 of 6	Status: A	Rev: M01



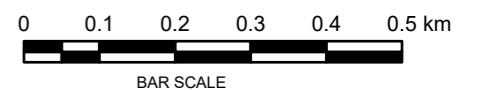
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

Teagasc Soils

- AlluvMIN - Mineral alluvium
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminSW - Renzinas / Lithosols
- Made

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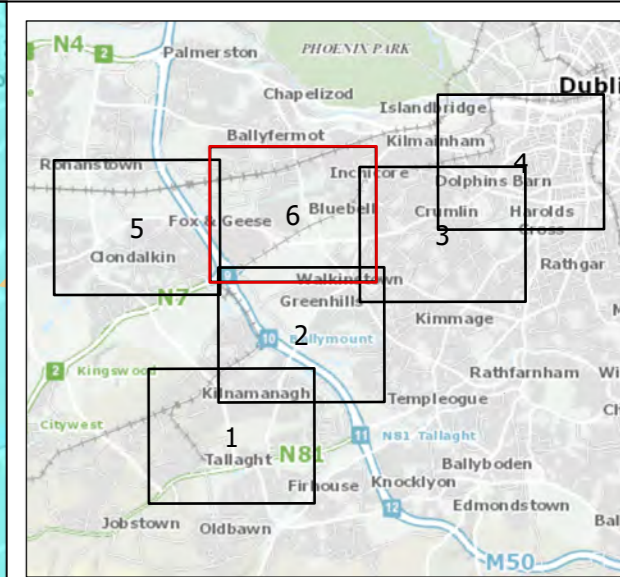
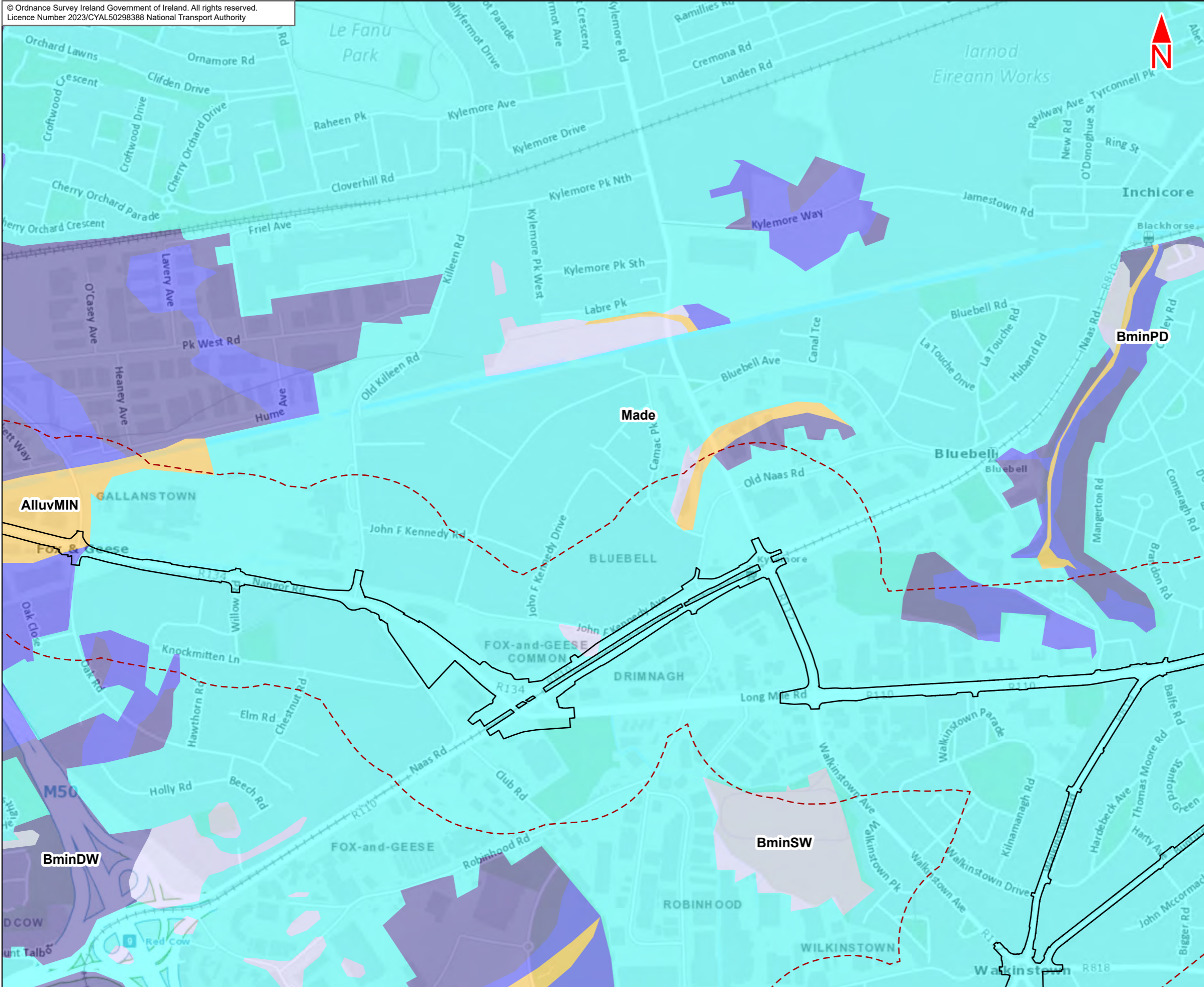
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000
Project Code: BCIDE | Originator Code: JAC

Drawn: FG | Checked: PW | Approved: DK

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.8 Soil Deposits				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0205	Sheet Number: 5 of 6	Status: A	Rev: M01	



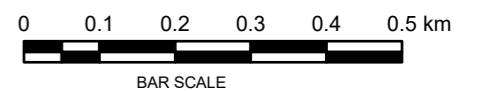
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

Teagasc Soils

- AlluvMIN - Mineral alluvium
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminSW - Renzinas / Lithosols
- Made

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Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS**
ARUP SYSTRA

Date: 22/03/2023 Scale @ A3: 1:10000

Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK

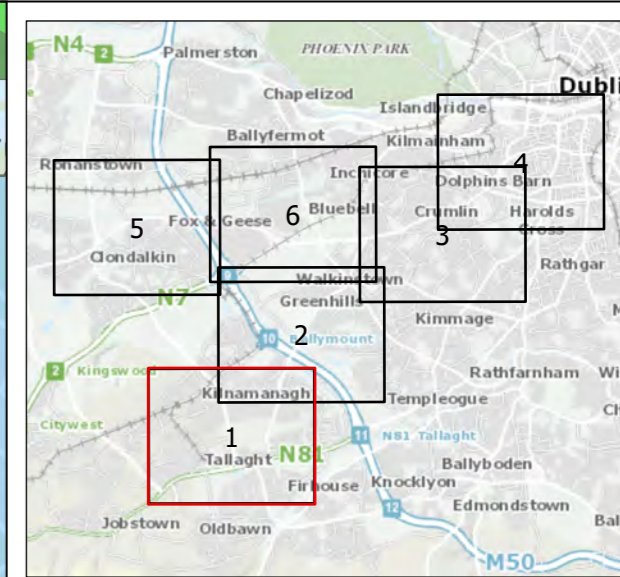
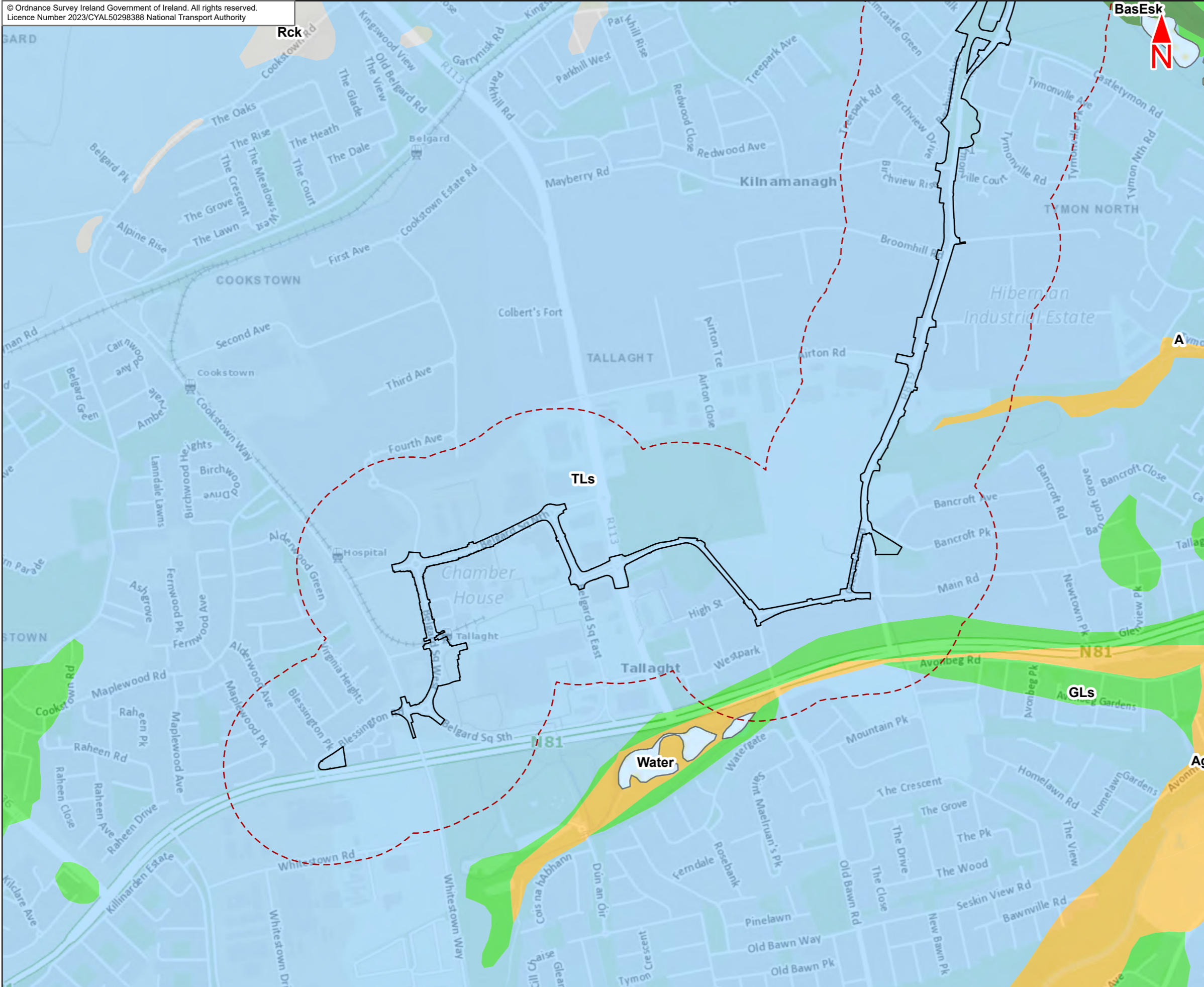
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Programme Title: BUSCONNECTS DUBLIN				
CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme				
Figure 14.8				
Soil Deposits				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0206	Sheet Number: 6 of 6	Status: A	Rev: M01	

14.9

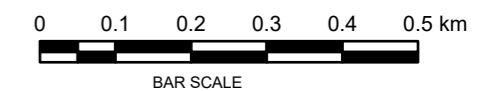
Subsoil Deposits





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Quaternary Sediments - 1:50,000
 - A, Alluvium
 - Ag, Alluvium (gravelly)
 - GLs, Gravels derived from Limestones
 - Rck, Bedrock outcrop or subcrop
 - TLs, Till derived from limestones
 - Water
 - BasEsk, Eskers comprised of gravels of basic reaction

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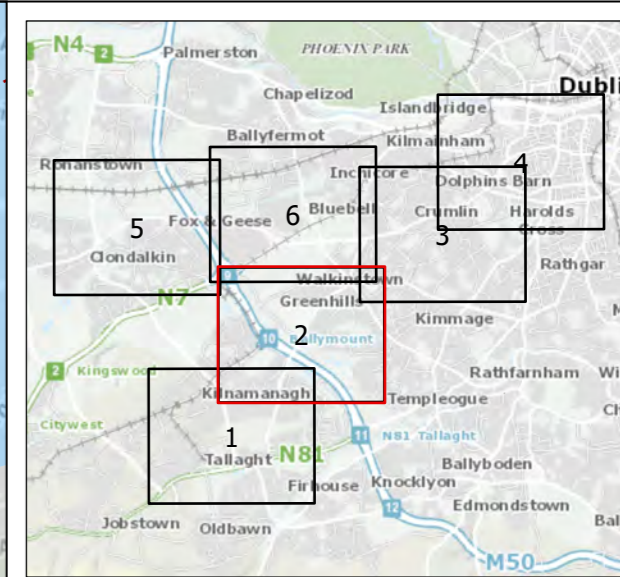
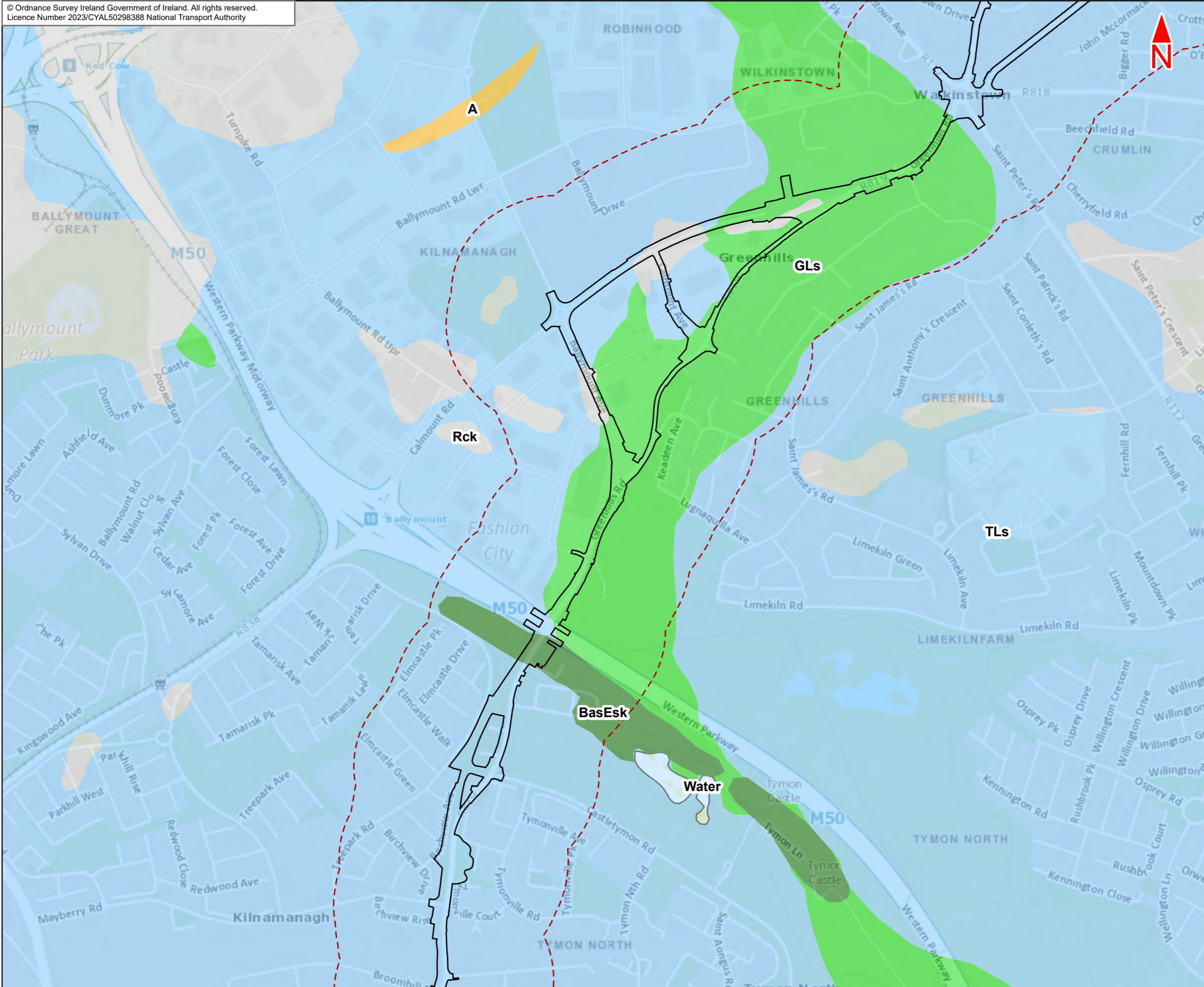
Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3 1:10000

Project Code: BCIDE Originator Code: JAC

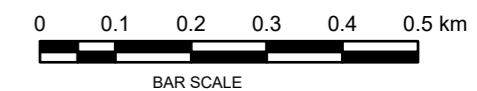
Drawn: FG Checked: PW Approved: DK

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0301	Sheet Number: 1 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Quaternary Sediments - 1:50,000
 - A, Alluvium
 - GLs, Gravels derived from Limestones
 - Rck, Bedrock outcrop or subcrop
 - TLs, Till derived from limestones
 - Water
 - BasEsk, Eskers comprised of gravels of basic reaction

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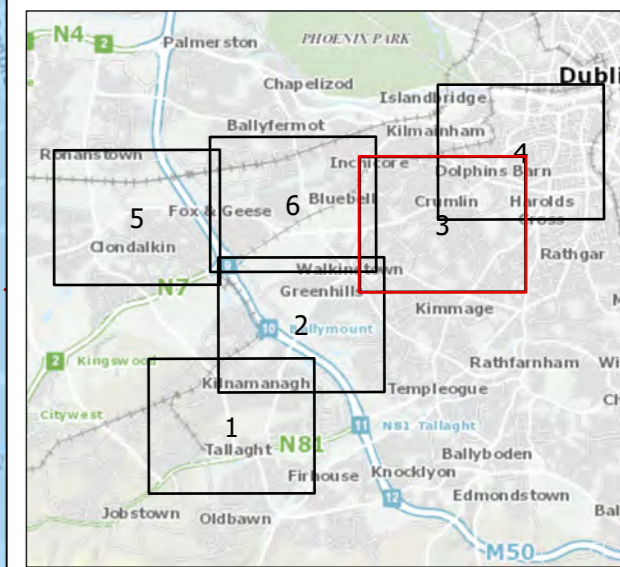
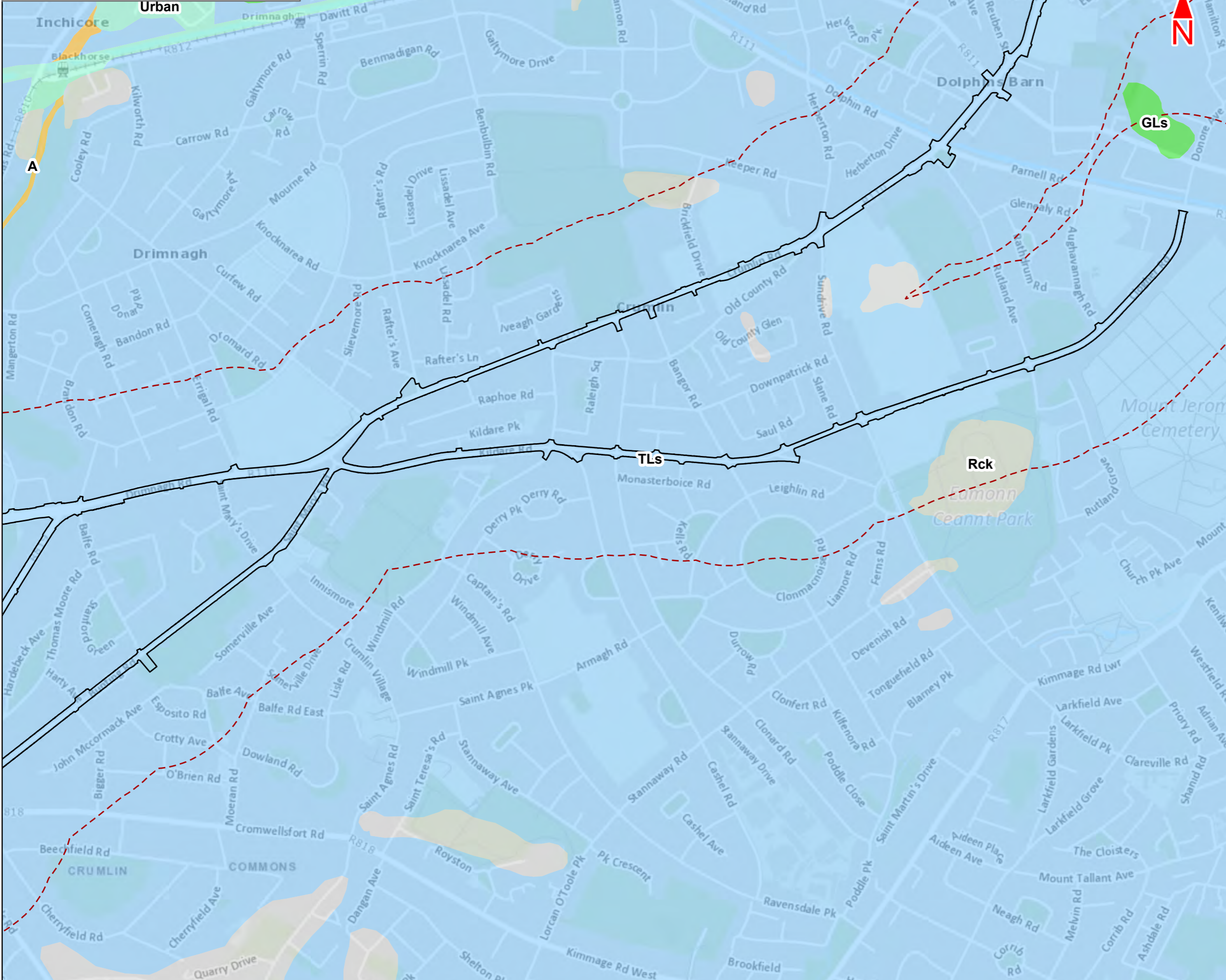
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3 1:10000
Project Code: BCIDE Originator Code: JAC

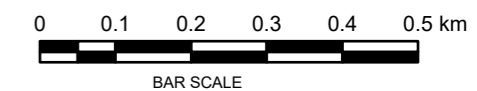
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QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
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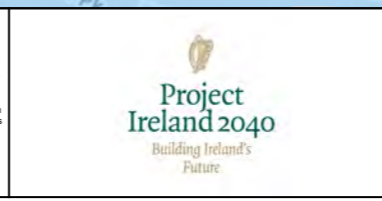


- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - A, Alluvium
 - GLs, Gravels derived from Limestones
 - Rck, Bedrock outcrop or subcrop
 - TLs, Till derived from limestones
 - Urban

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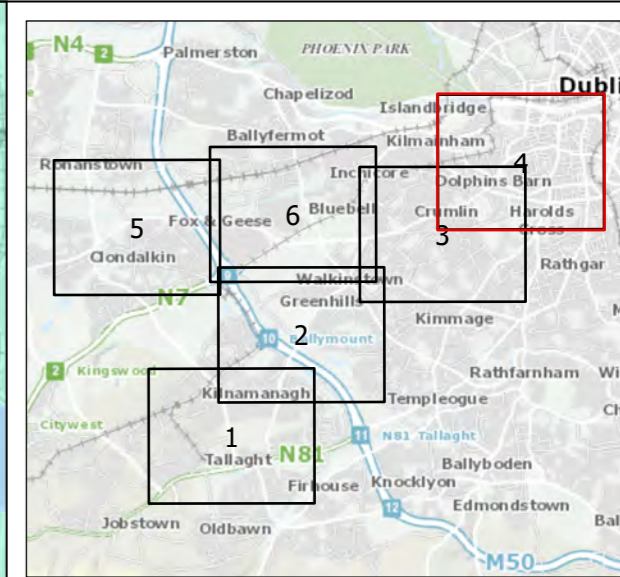
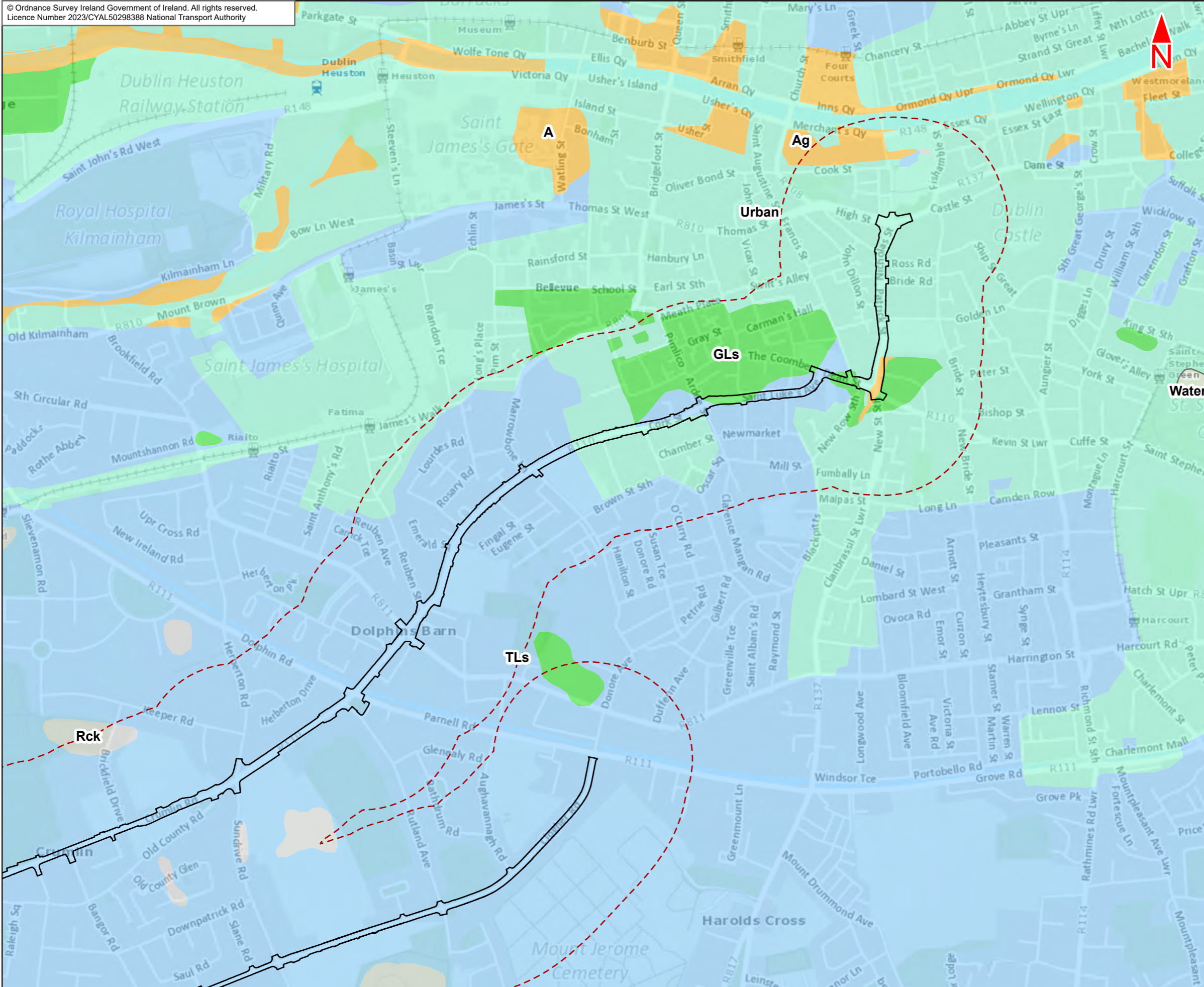
Rev	Date	Drn	Chk'd	App'd	Description
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Client: **NTA**
Udaráis Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

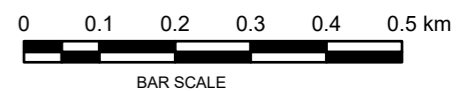
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 Project Code: BCIDE Originator Code: JAC
 Drawn: FG Checked: PW Approved: DK

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0303	Sheet Number: 3 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - A, Alluvium
 - Ag, Alluvium (gravelly)
 - GLs, Gravels derived from Limestones
 - Rck, Bedrock outcrop or subcrop
 - TLs, Till derived from limestones
 - Urban
 - Water

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Rev	Date	Drn	Chk'd	App'd	Description
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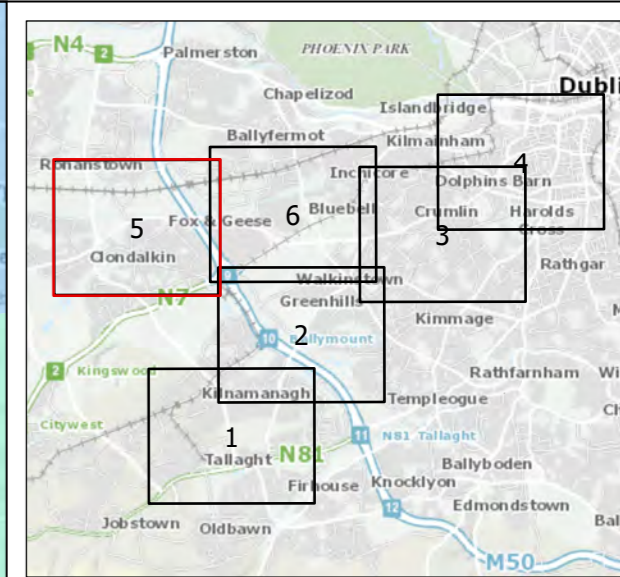
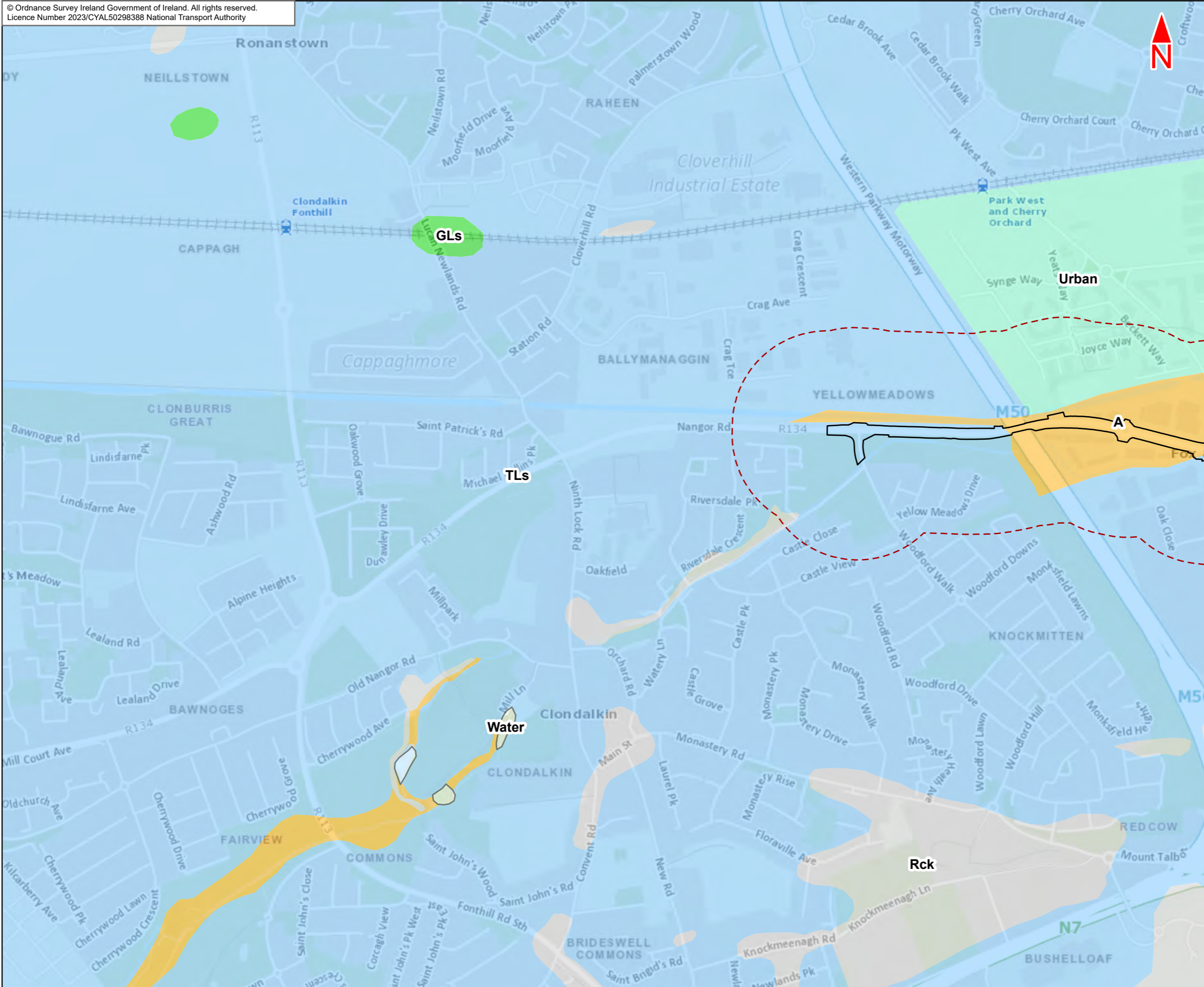
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0304	Sheet Number: 4 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - A, Alluvium
 - GLs, Gravels derived from Limestones
 - TLs, Till derived from limestones
 - Urban
 - Water

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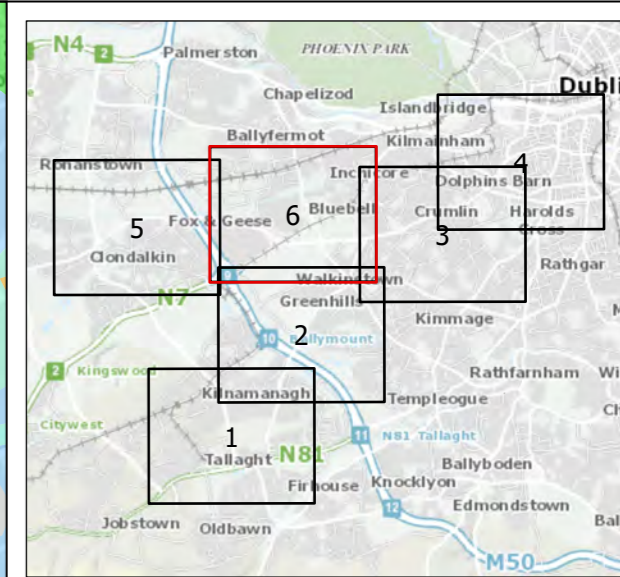
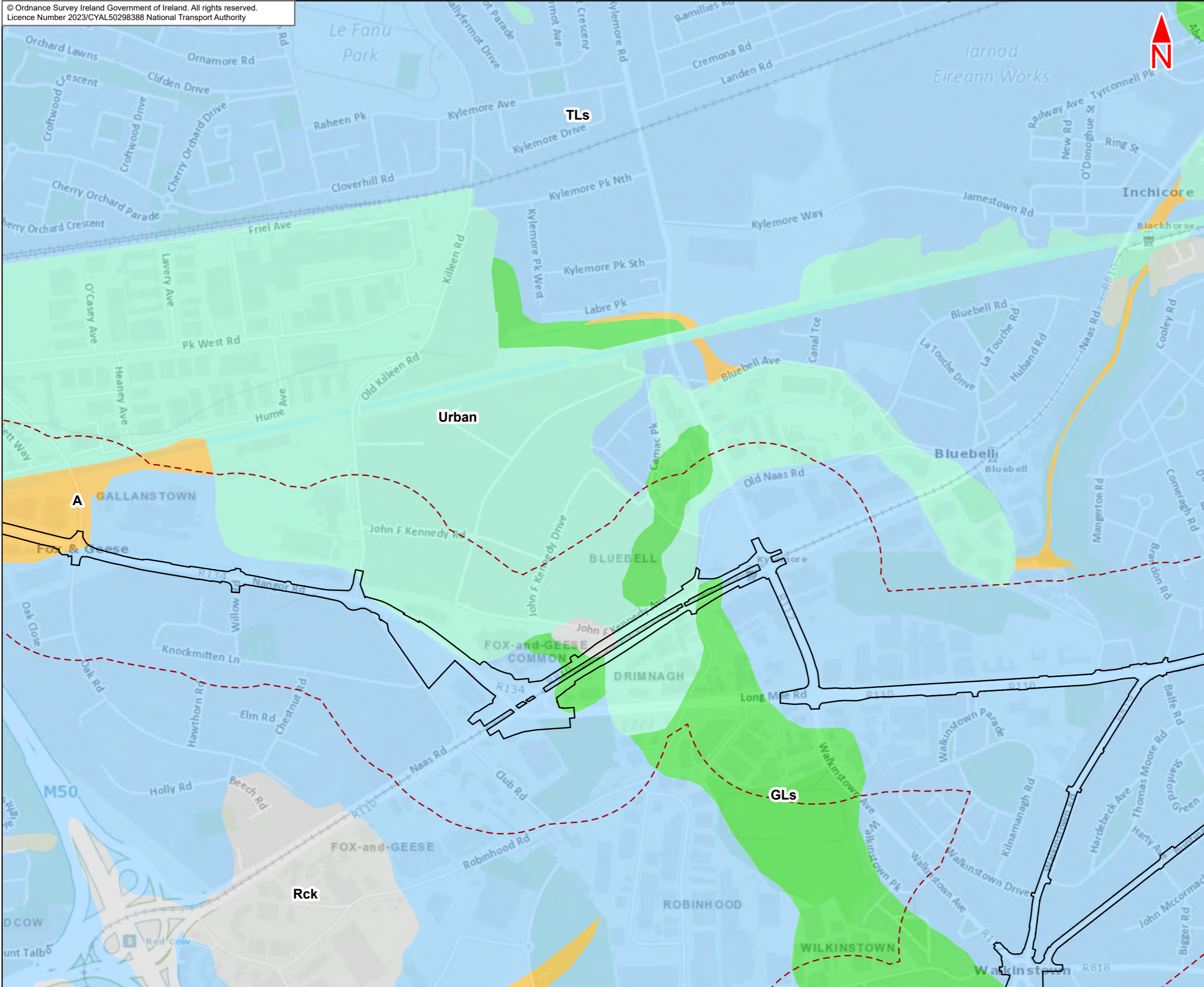
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000
Project Code: BCIDE | Originator Code: JAC

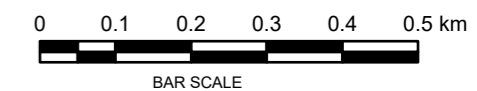
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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0305	Sheet Number: 5 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - A, Alluvium
 - GLs, Gravels derived from Limestones
 - Rck, Bedrock outcrop or subcrop
 - TLs, Till derived from limestones
 - Urban

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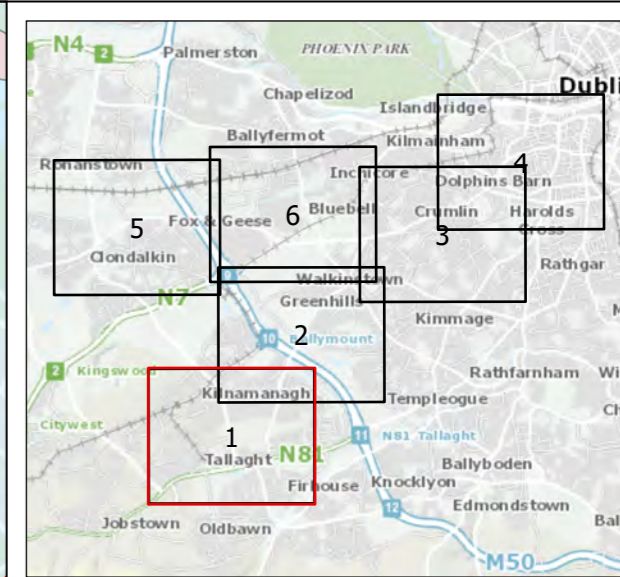
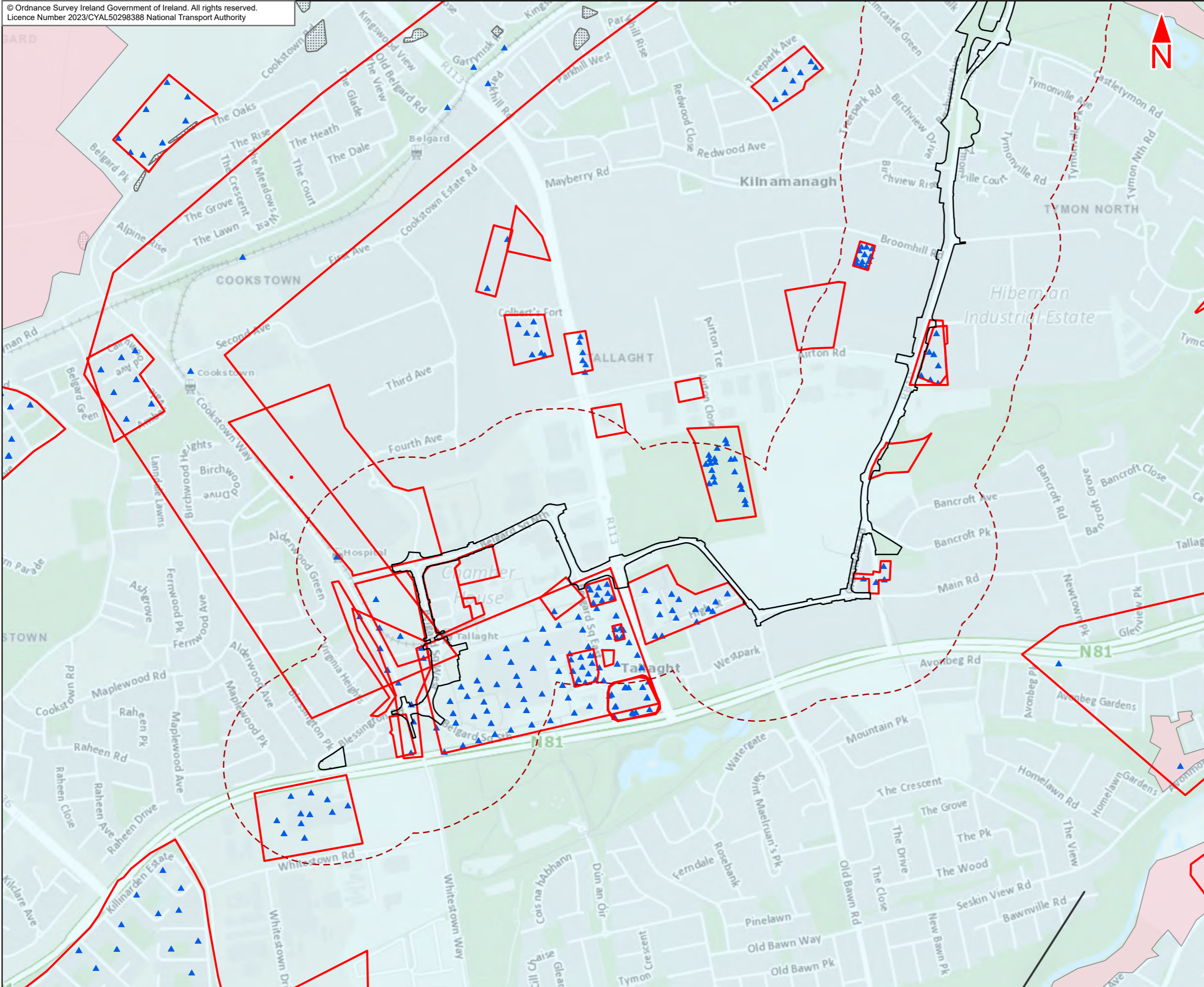
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Date	22/03/2023	Scale @ A3	1:10000	Drawn	FG	Checked	PW	Approved	DK
Project Code	BCIDE	Originator Code	JAC	QMS Code					

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.9 Subsoil Deposits			
Drawing File Name	BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0306	Sheet Number	6 of 6
Status	A	Rev	M01

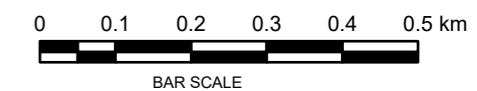
14.10
Bedrock Geology





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - Geological Heritage Site
 - GSI Geotechnical Boreholes
 - Fault
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:100,000**
 - Lucan Formation

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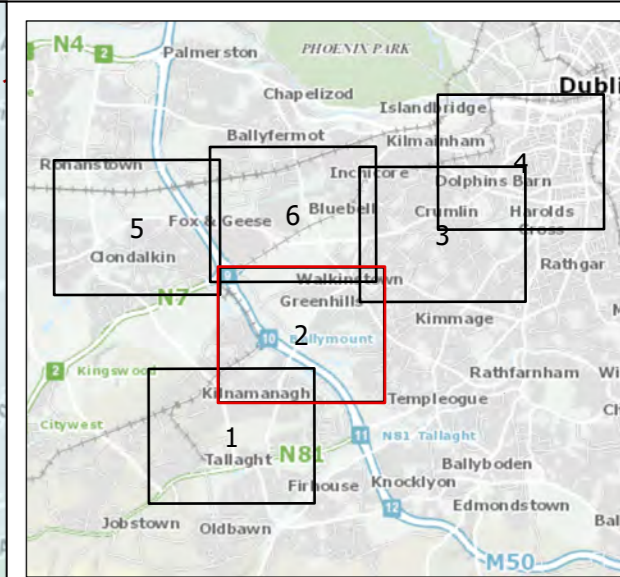
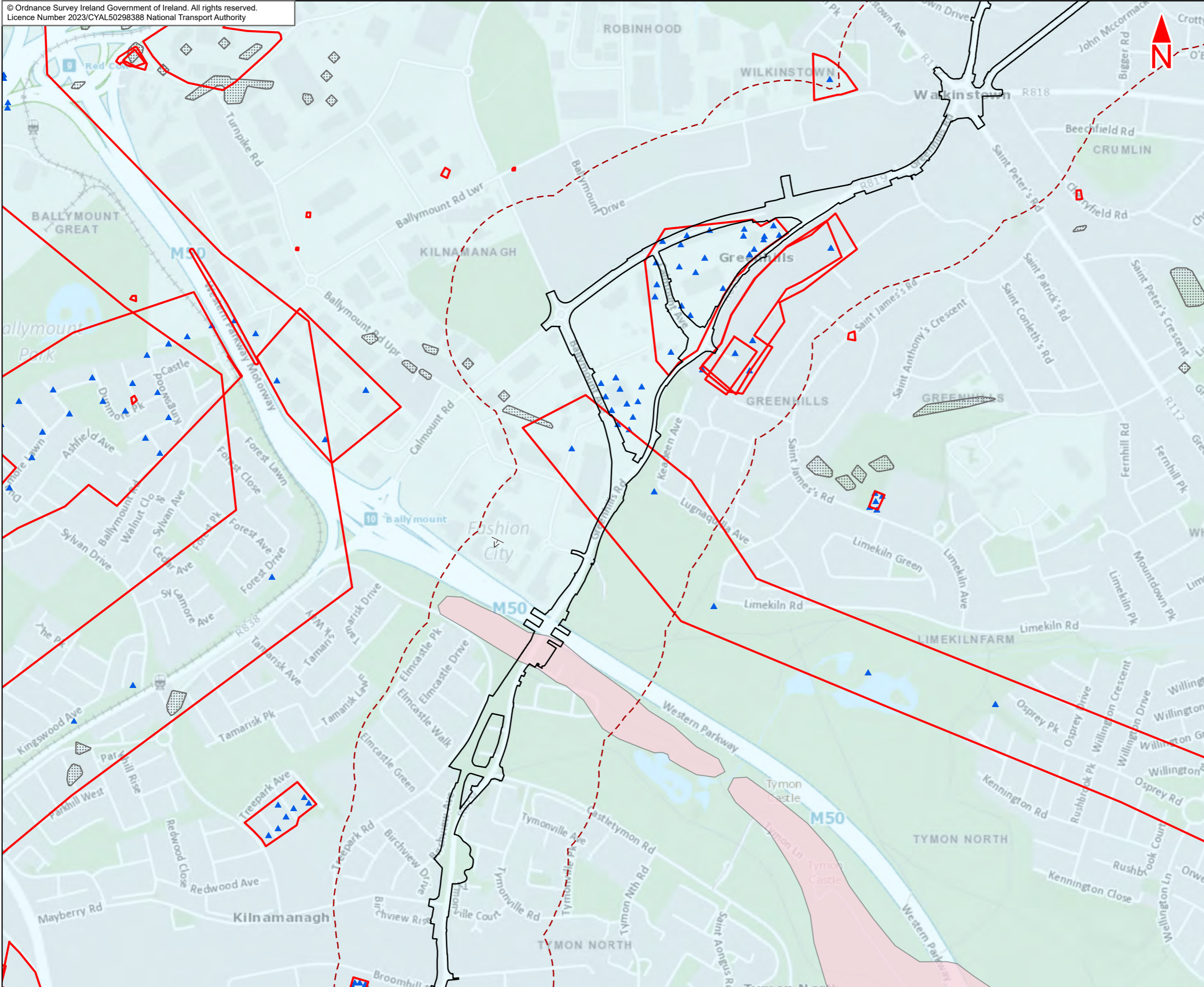


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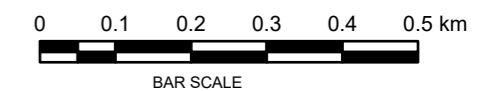
Consultant
JACOBS
ARUP SYSTRA

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology				
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0401	Sheet Number 1 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - Geological Heritage Site
 - GSI Geotechnical Boreholes
- GSI Bedrock Structural Symbols - 1:100,000**
- Strike and dip of bedding, right way up
- GSI Bedrock Outcrop - 1:100,000**
- GSI Bedrock Outcrop - 1:100,000
- GSI Bedrock Geology - 1:100,000**
- Lucan Formation

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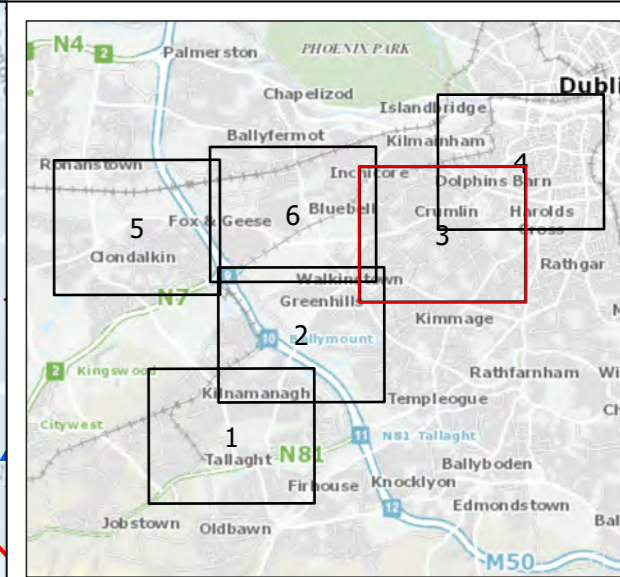
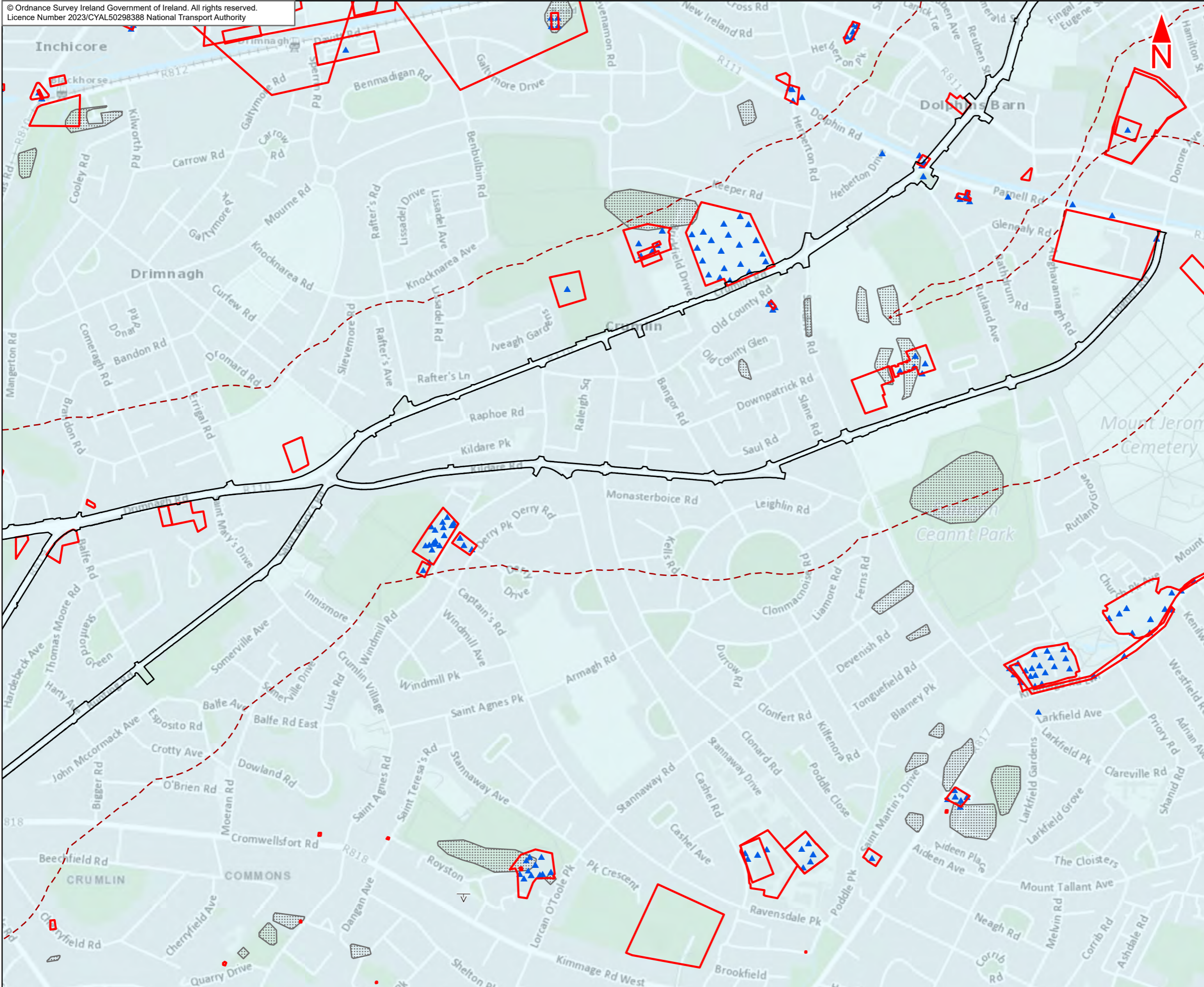
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

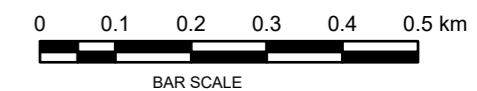
Drawn: FG Checked: PW Approved: DK
QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0402	Sheet Number: 2 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - GSI Geotechnical Boreholes
 - GSI Bedrock Structural Symbols - 1:100,000**
 - Strike and dip of bedding, right way up
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:100,000**
 - Lucan Formation

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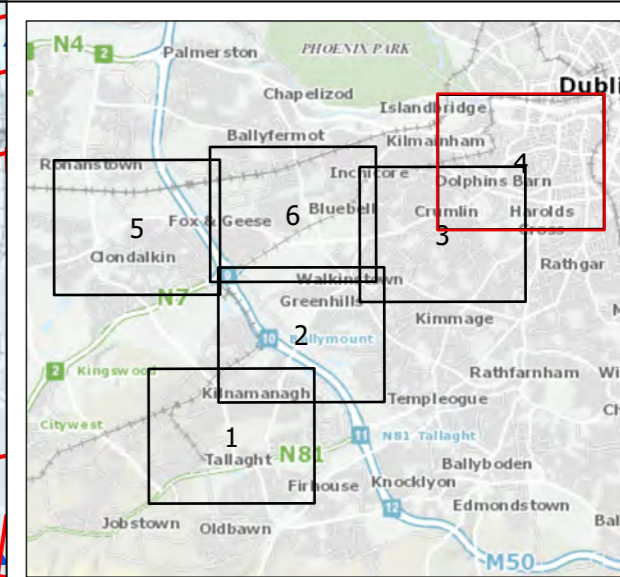
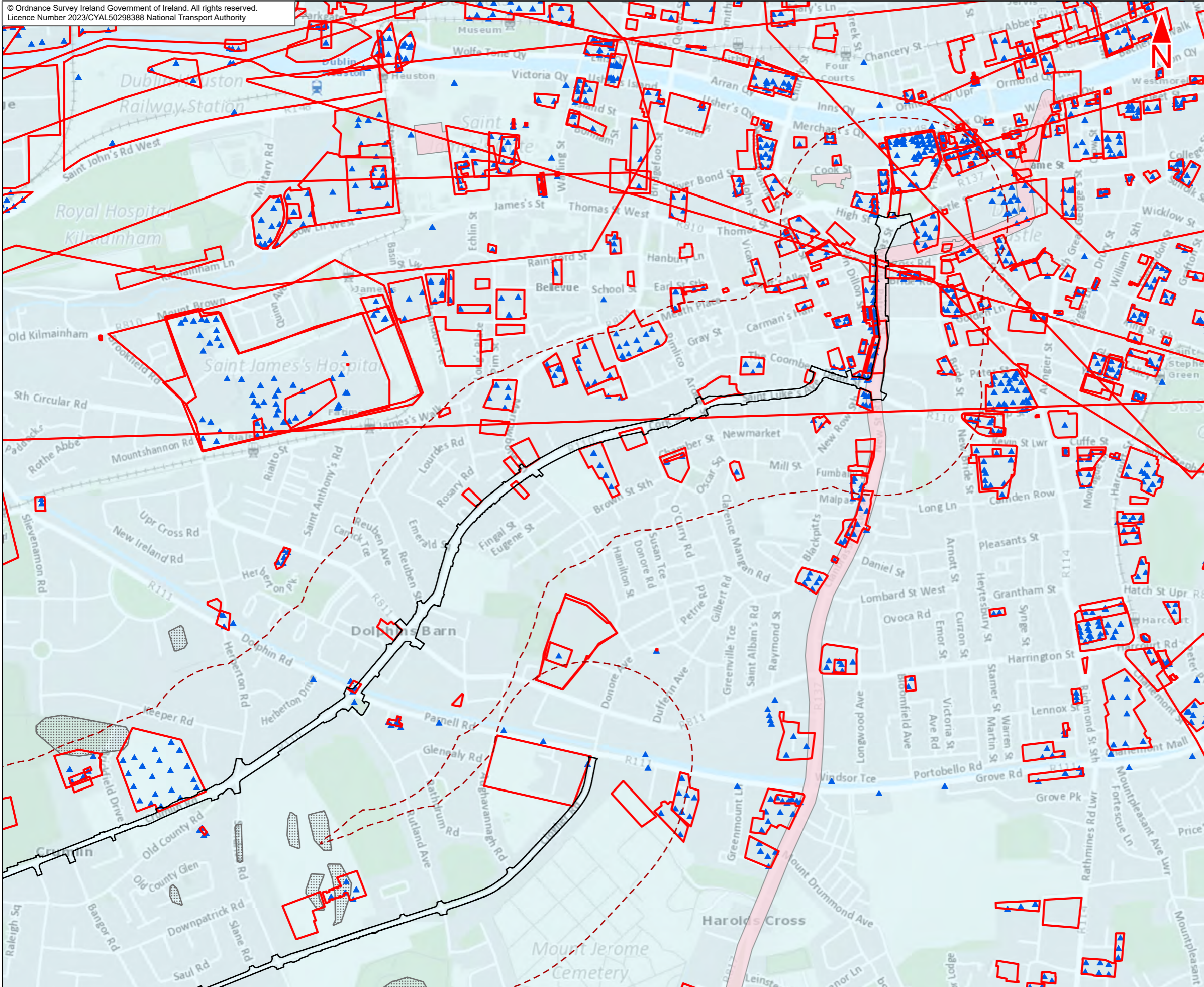
Rev	Date	Drn	Chk'd	App'd	Description
M01	Mar 23	FG	PW	DK	ISSUE FOR PHASE 4 : PLANNING

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Udarás Náisiúnta Iompair
National Transport Authority

Consultant
JACOBS ARUP SYSTRA

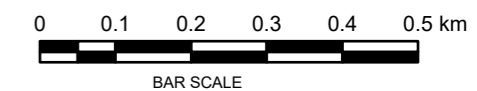
Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0403	Sheet Number 3 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - Geological Heritage Site
 - GSI Geotechnical Boreholes
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:100,000**
 - Lucan Formation

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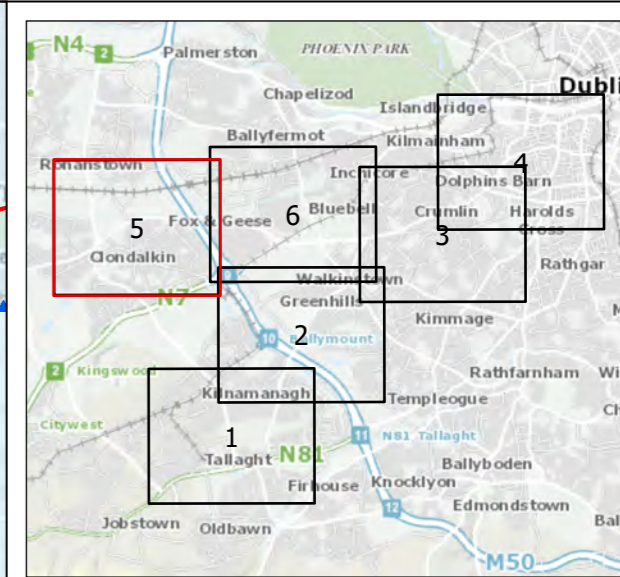
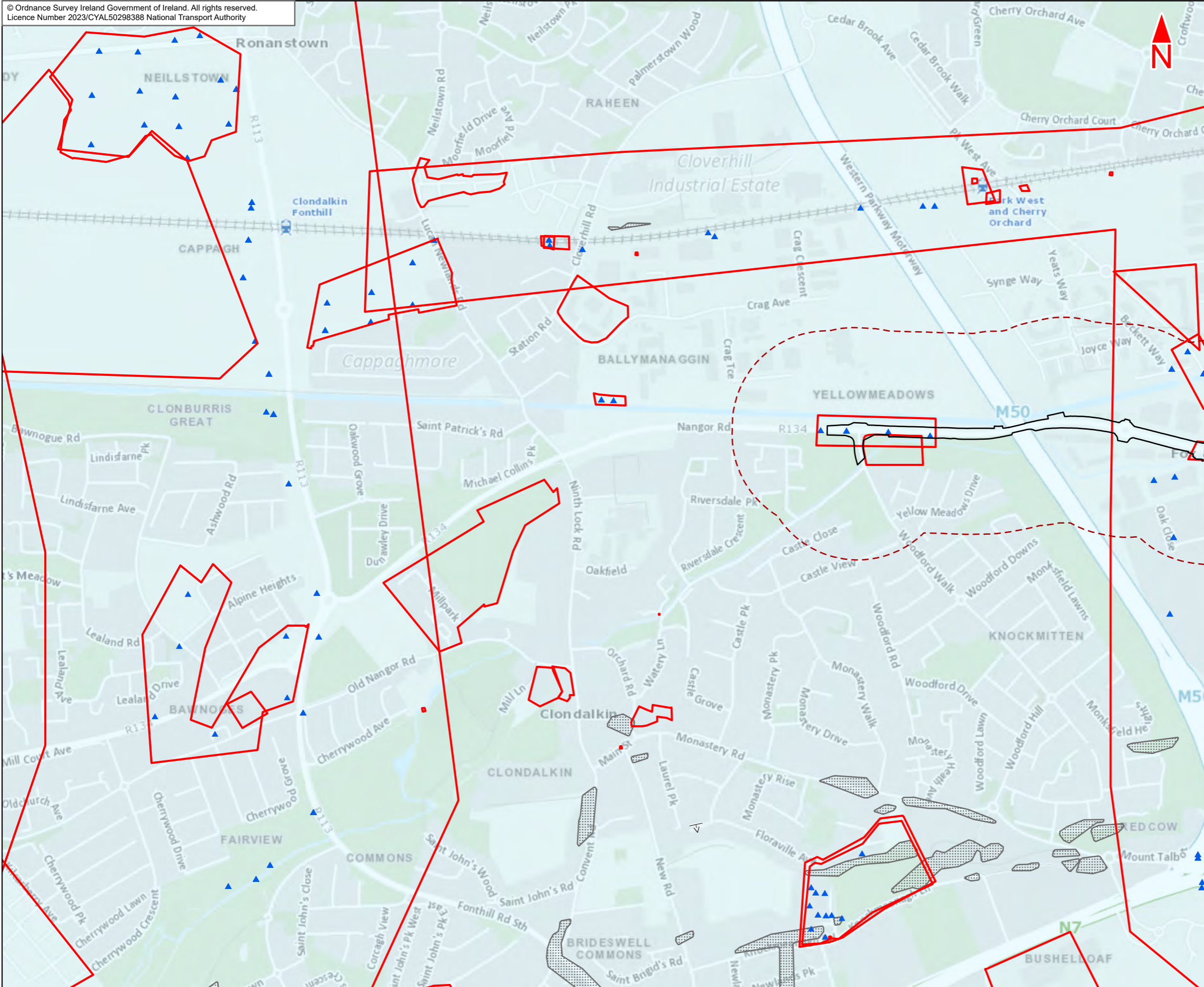
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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

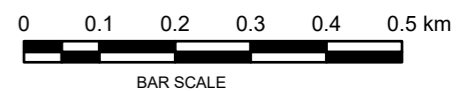
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Drawn: FG Checked: PW Approved: DK
QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0404	Sheet Number: 4 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - GSI Geotechnical Boreholes
 - GSI Bedrock Structural Symbols - 1:100,000**
 - Strike and dip of bedding, right way up
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:100,000**
 - Lucan Formation

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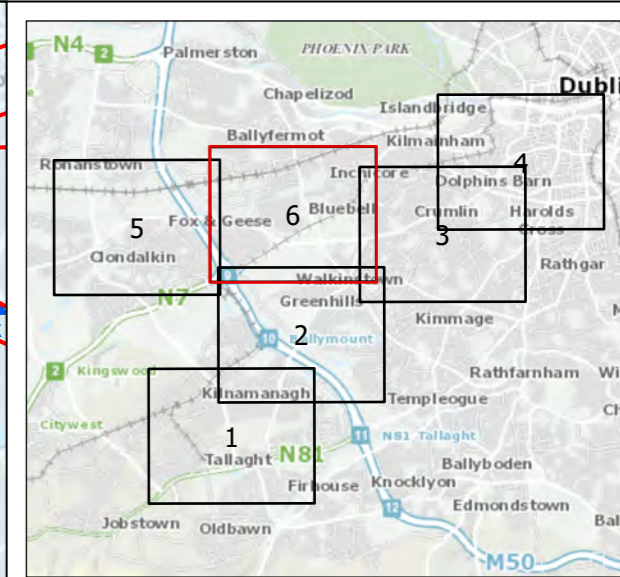
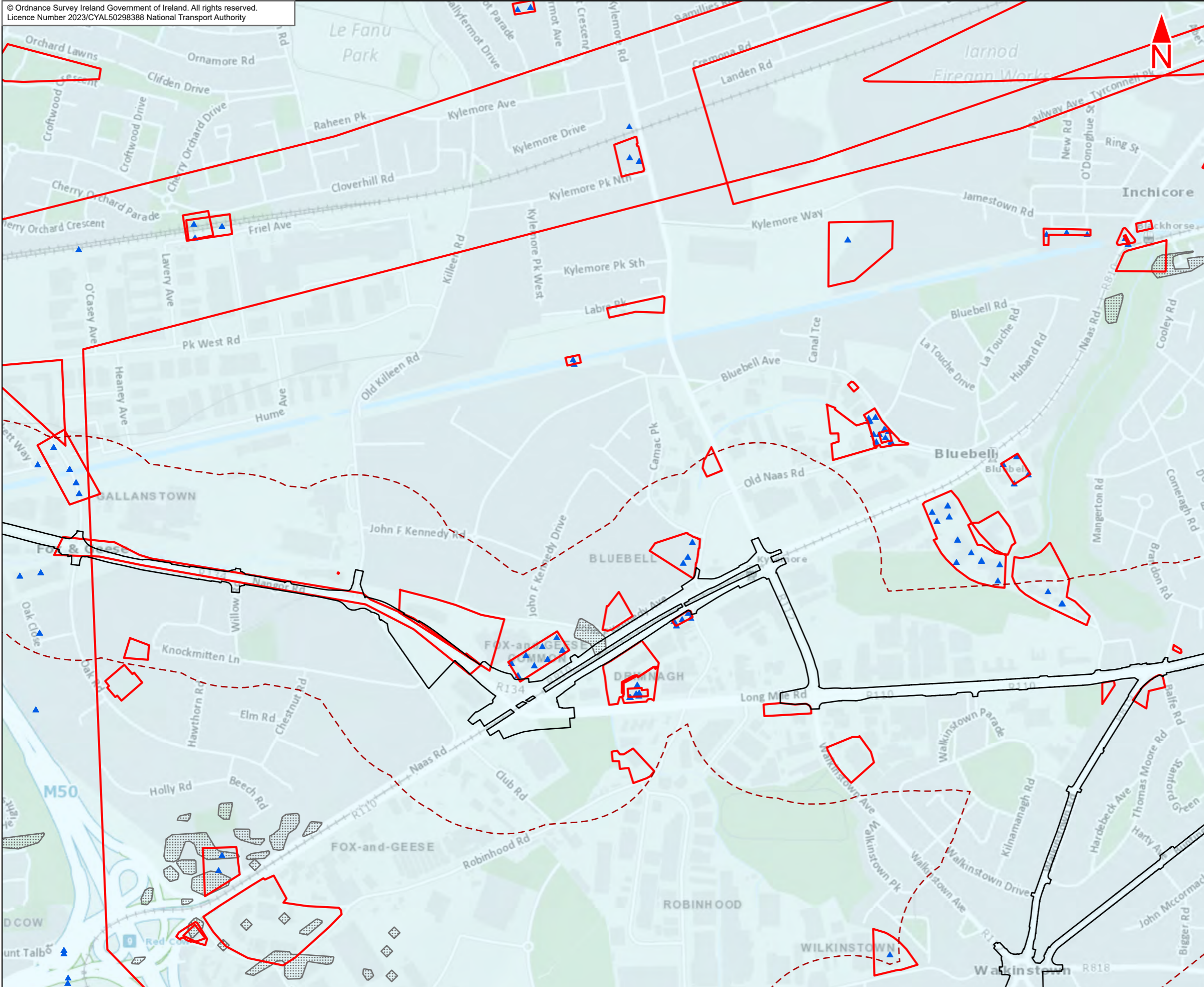
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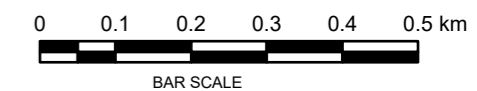
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Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0405	Sheet Number 5 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Geotechnical Sites
 - GSI Geotechnical Boreholes
 - GSI Bedrock Outcrop - 1:100,000**
 - GSI Bedrock Outcrop - 1:100,000
 - GSI Bedrock Geology - 1:100,000**
 - Lucan Formation

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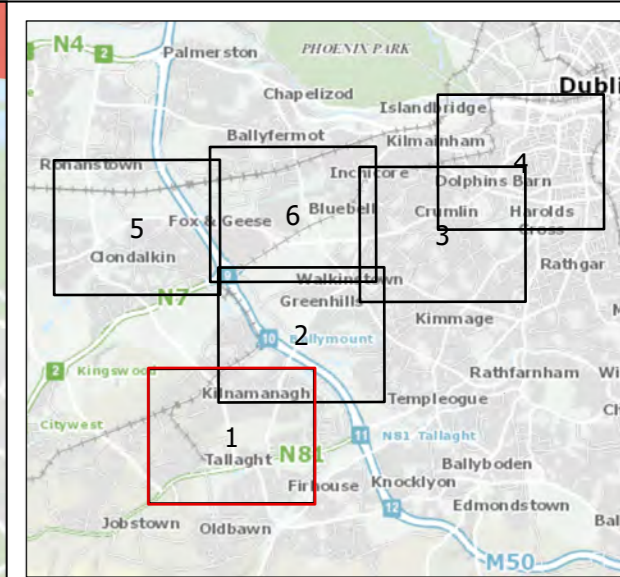
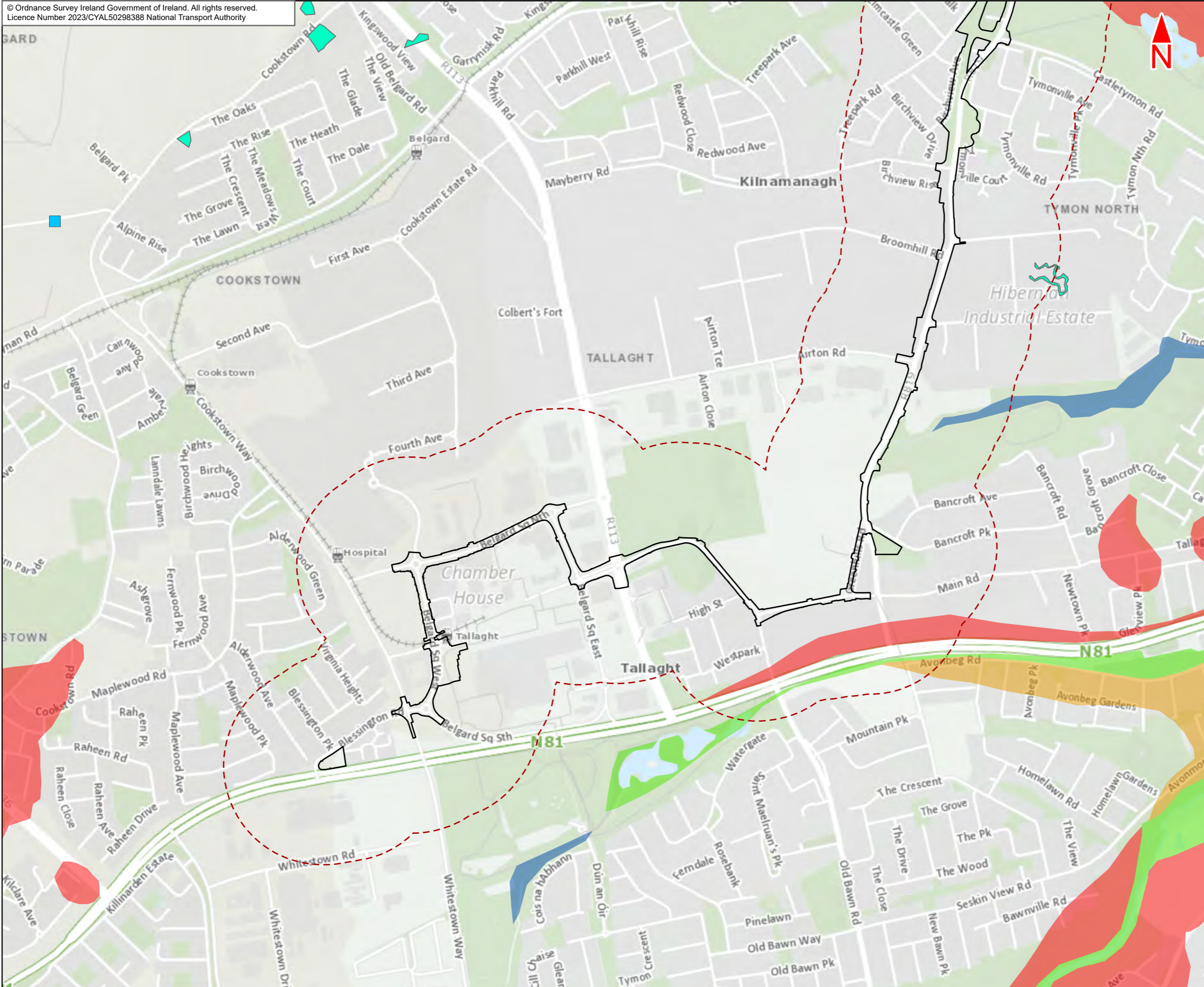
Rev	Date	Drn	Chk'd	App'd	Description
M01	Mar 23	FG	PW	DK	ISSUE FOR PHASE 4 : PLANNING

Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.10 Bedrock Geology				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0406	Sheet Number 6 of 6	Status A	Rev M01	

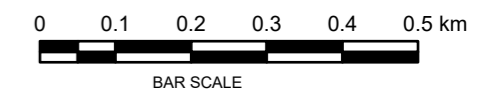


14.11
Granular Aggregate Potential



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Active Quarries**
 - Crushed Rock
 - Pits and Quarries Areas
 - GSI Aggregate Potential Mapping - Granular Aggregate Potential**
 - Very High potential
 - High potential
 - Low potential
 - Very Low potential

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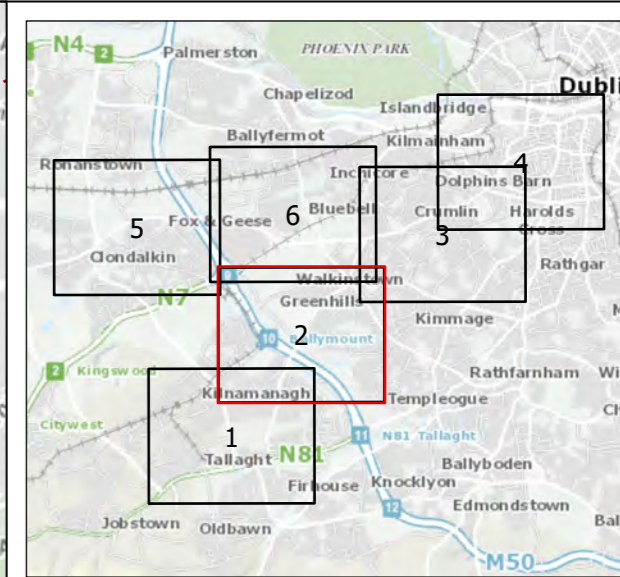
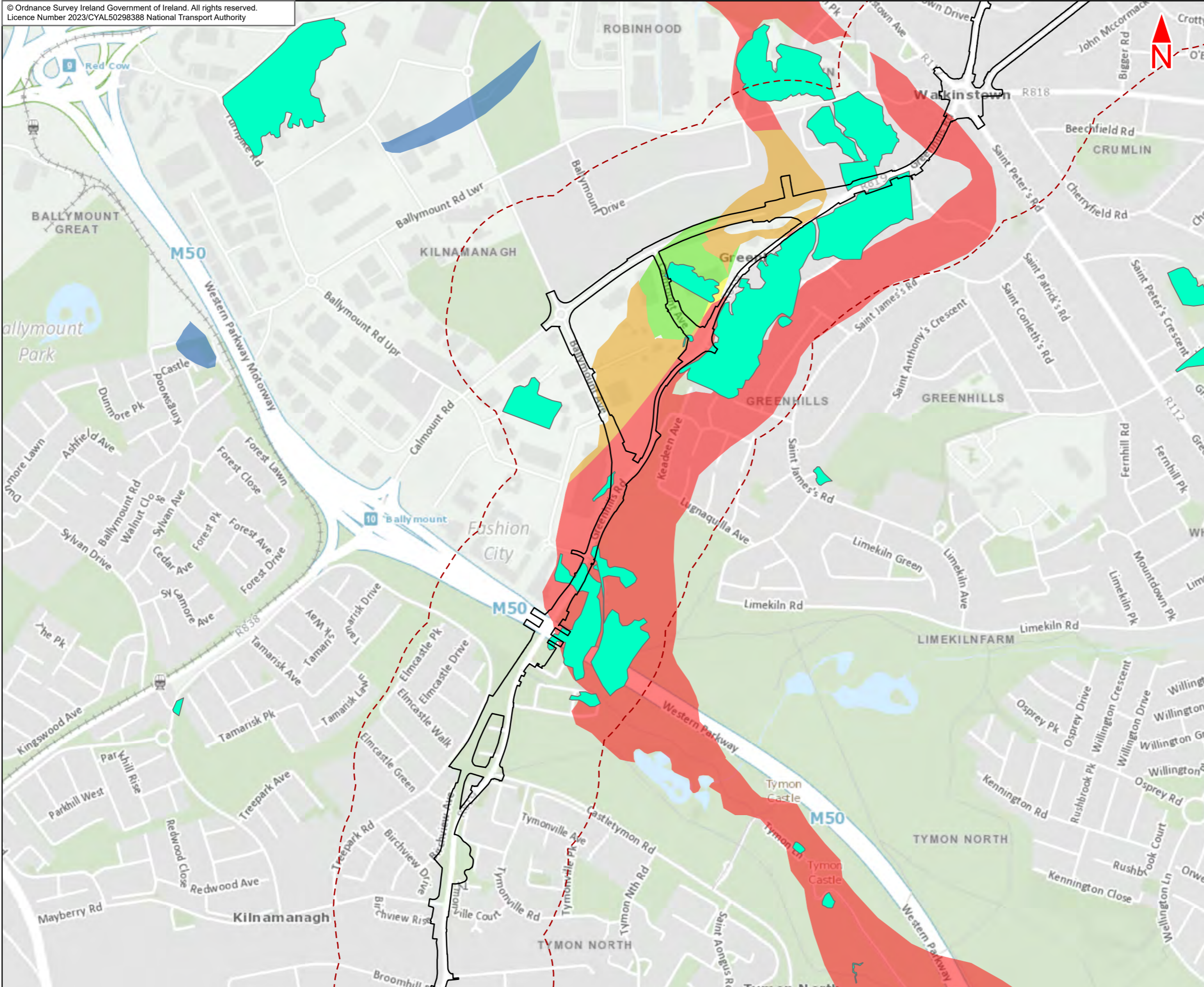
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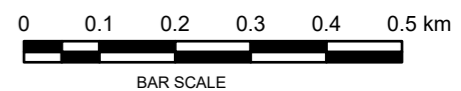
Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0501	Sheet Number 1 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Pits and Quarries Areas
- GSI Aggregate Potential Mapping - Granular Aggregate Potential**
- Very High potential
 - High potential
 - Moderate potential
 - Low potential
 - Very Low potential

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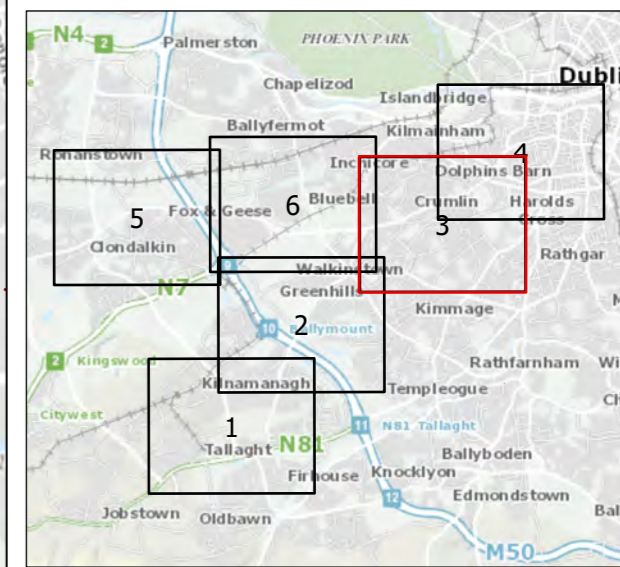
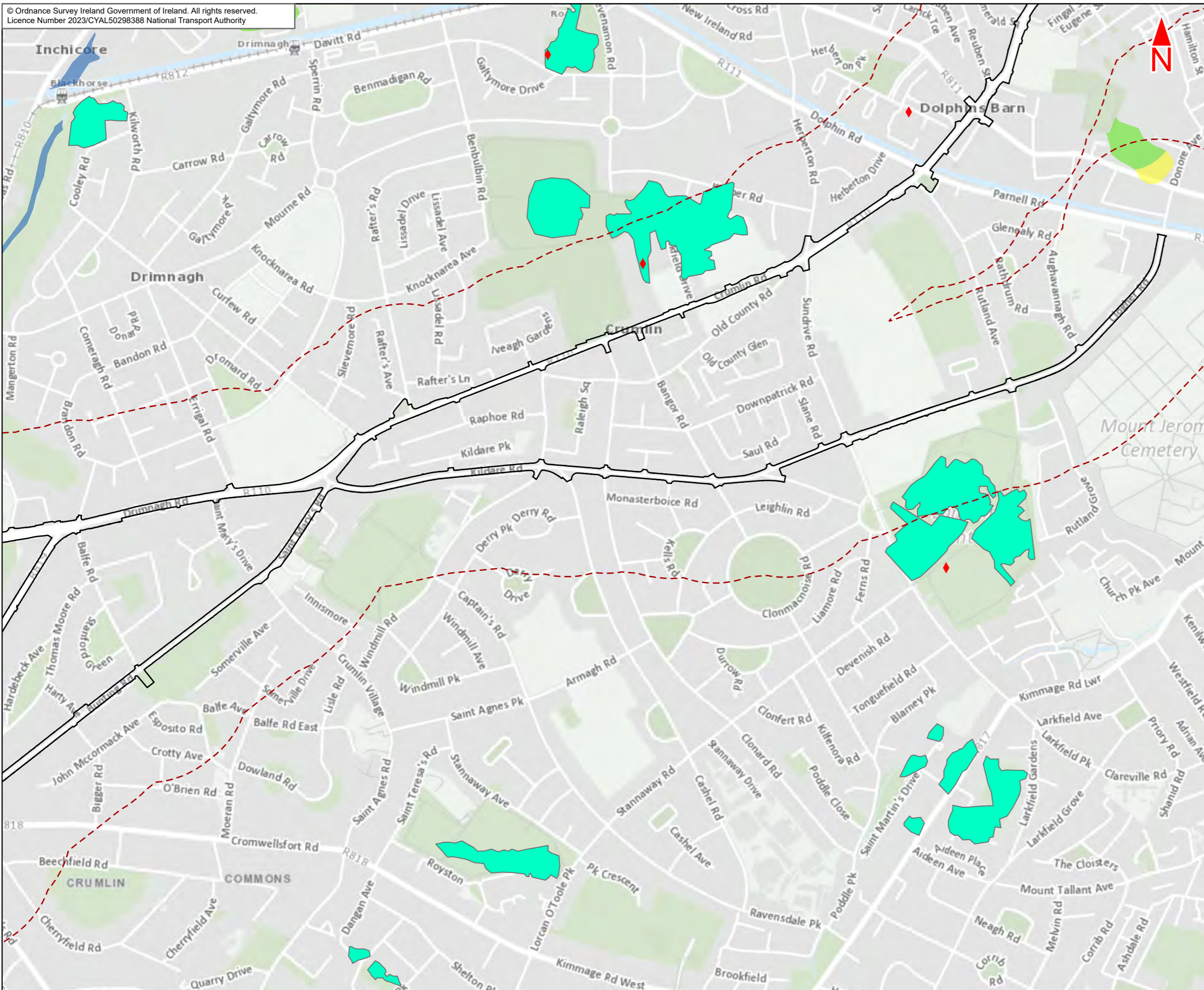
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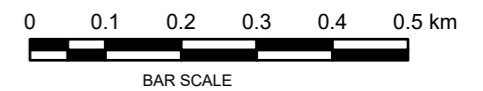
Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0502	Sheet Number 2 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Mineral Locations**
 - Non-metallic
 - Pits and Quarries Areas
 - GSI Aggregate Potential Mapping - Granular Aggregate Potential**
 - Moderate potential
 - Low potential
 - Very Low potential

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Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

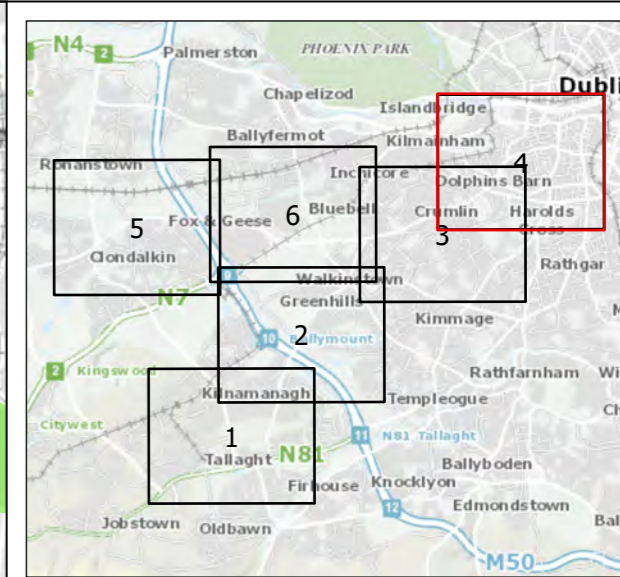
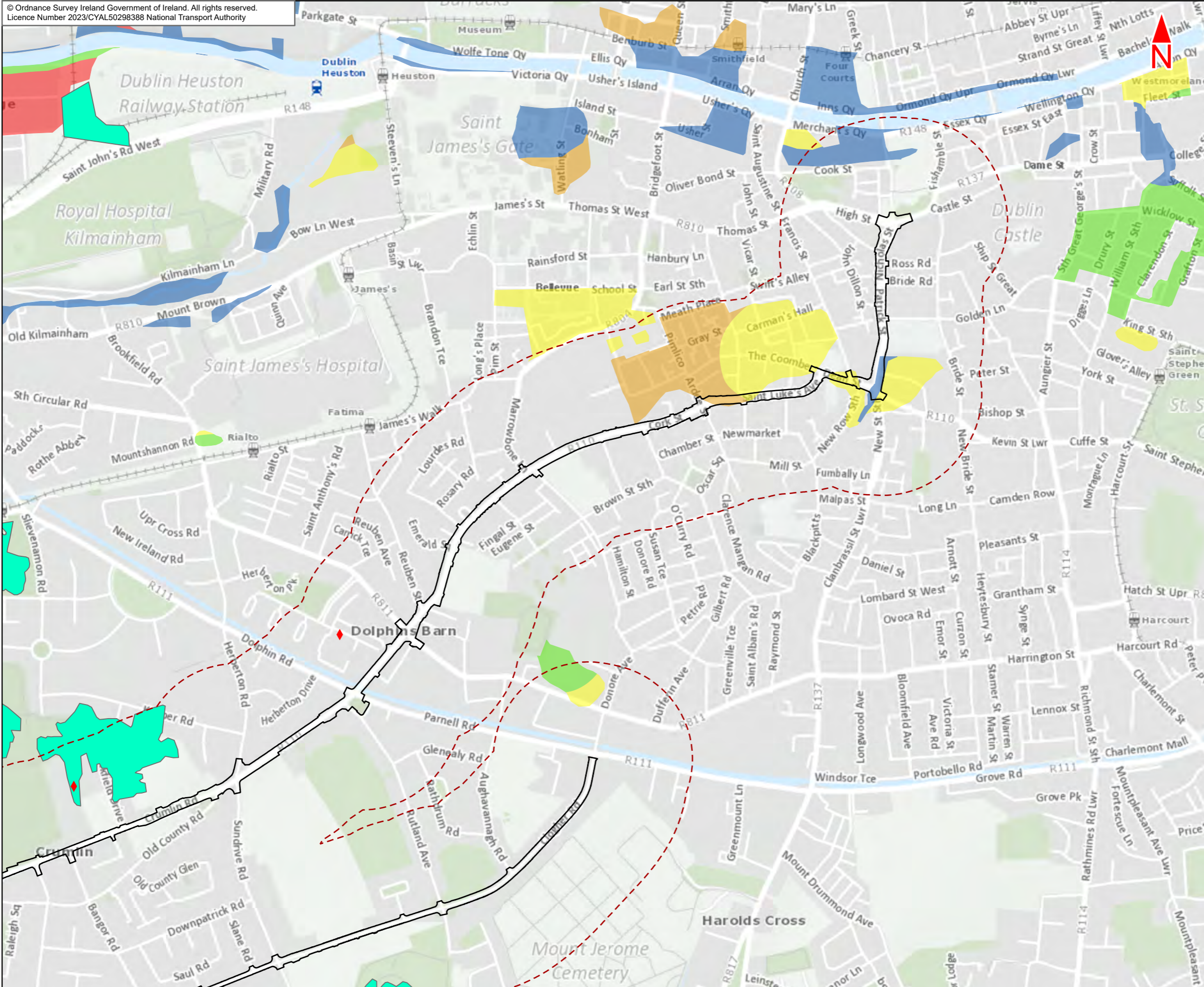
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Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK

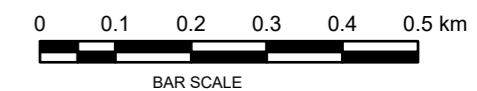
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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0503	Sheet Number: 3 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clonsilla to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Mineral Locations**
 - Non-metallic
 - Pits and Quarries Areas
 - GSI Aggregate Potential Mapping - Granular Aggregate Potential**
 - Very High potential
 - High potential
 - Moderate potential
 - Low potential
 - Very Low potential

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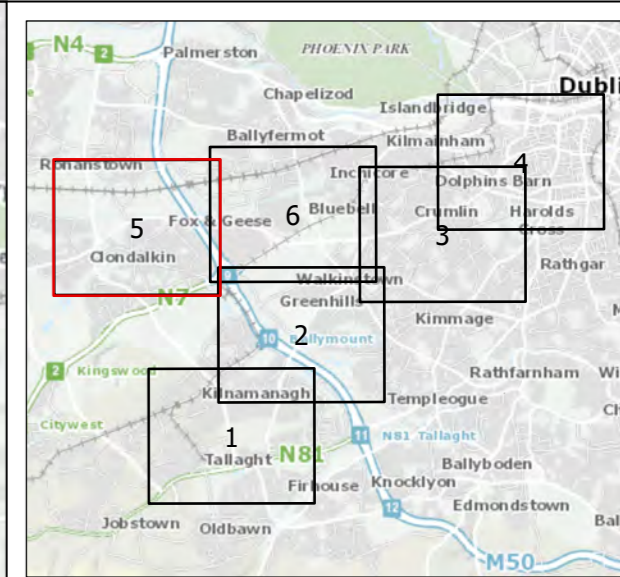
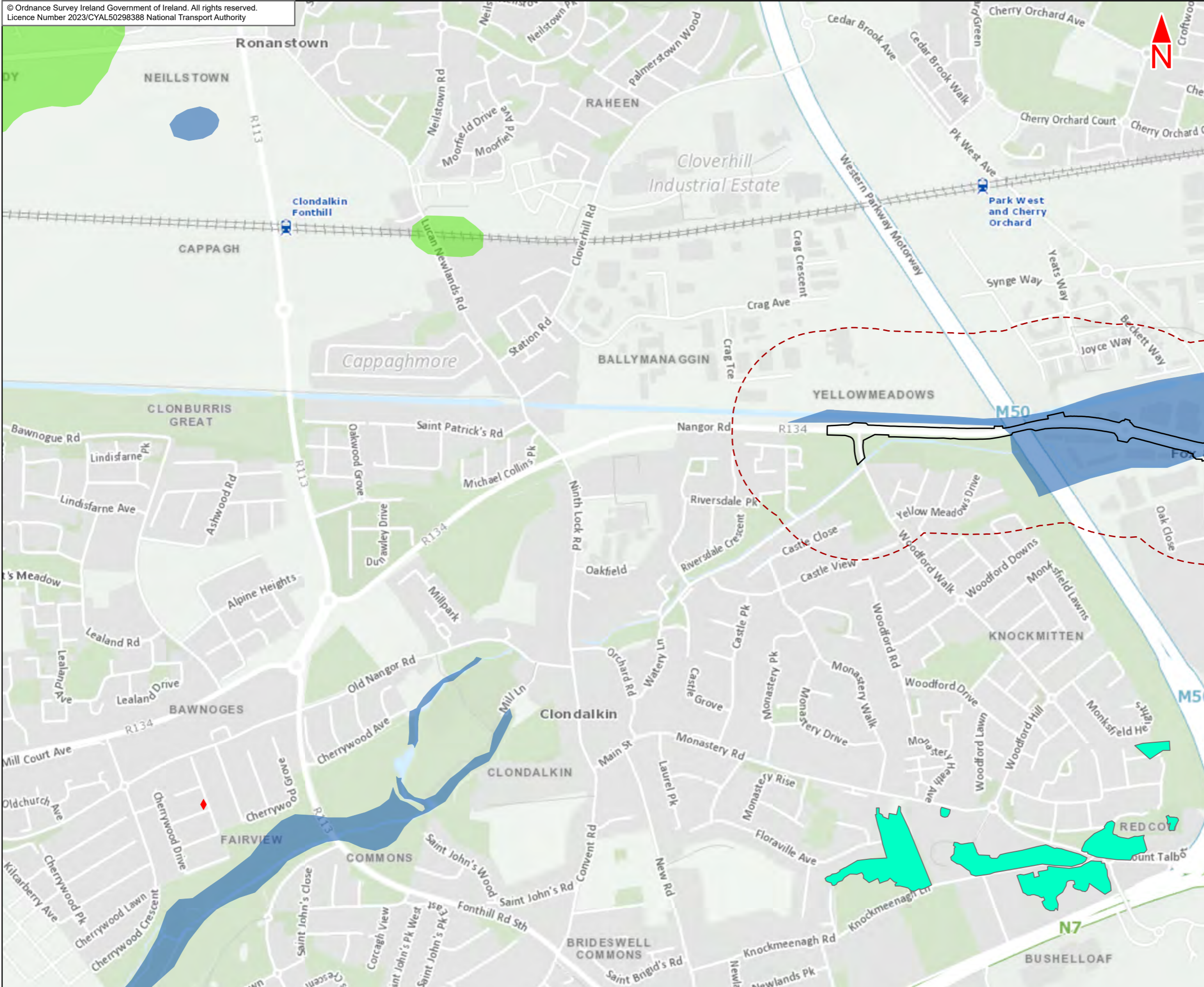
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

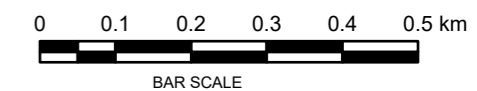
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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clonsilla to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0504	Sheet Number: 4 of 6	Status: A	Rev: M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Mineral Locations**
 - Non-metallic
 - Pits and Quarries Areas
 - GSI Aggregate Potential Mapping - Granular Aggregate Potential**
 - Low potential
 - Very Low potential

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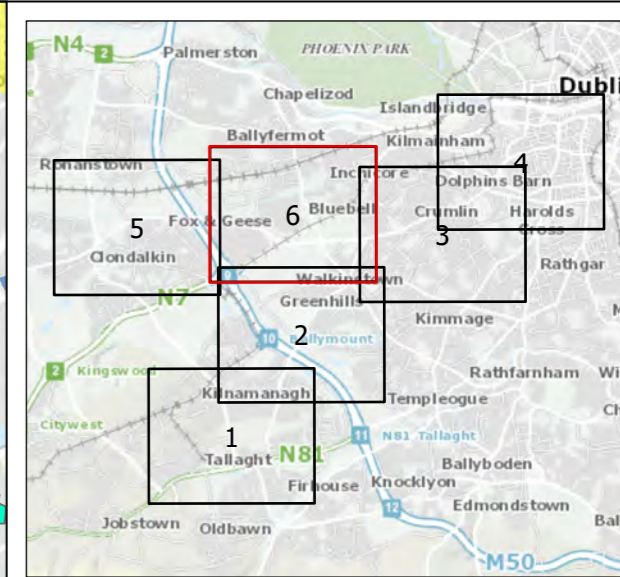
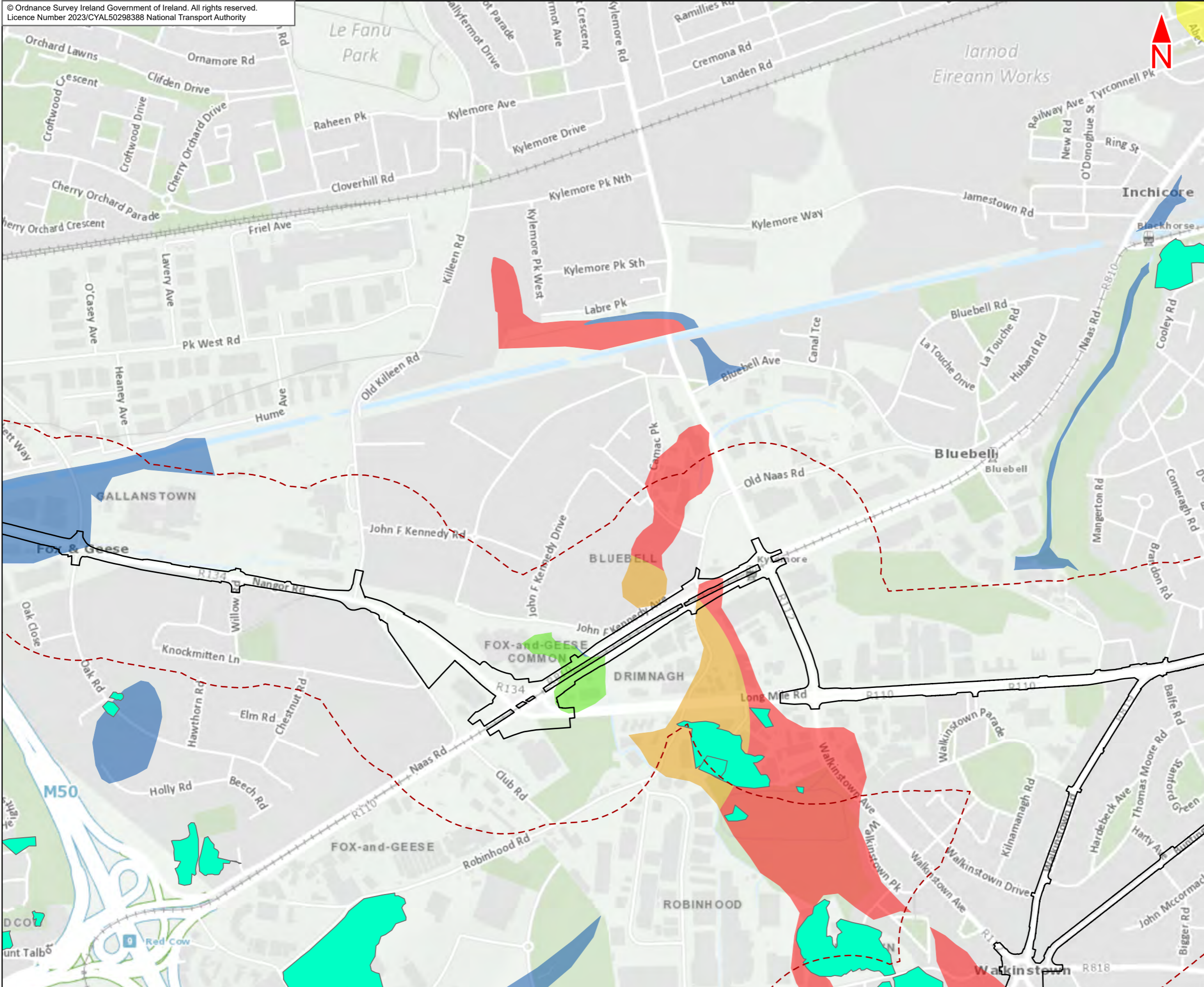
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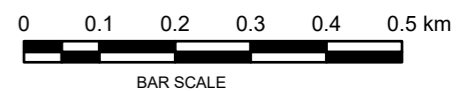
NTA Udarás Náisiúnta Iompair National Transport Authority		JACOBS ARUP SYSTRA		
Date	Scale @ A3	Drawn	Checked	Approved
22/03/2023	1:10000	FG	PW	DK
Project Code	Originator Code	QMS Code		
BCIDE	JAC			

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential				
Drawing File Name	Sheet Number	Status	Rev	
BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0505	5 of 6	A	M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Pits and Quarries Areas
 - GSI Aggregate Potential Mapping - Granular Aggregate Potential**
 - Very High potential
 - High potential
 - Moderate potential
 - Low potential
 - Very Low potential

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Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000

Project Code: BCIDE | Originator Code: JAC

Drawn: FG | Checked: PW | Approved: DK

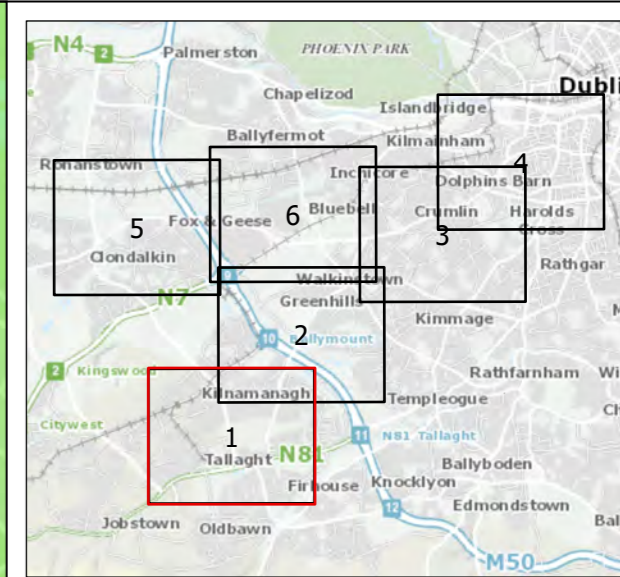
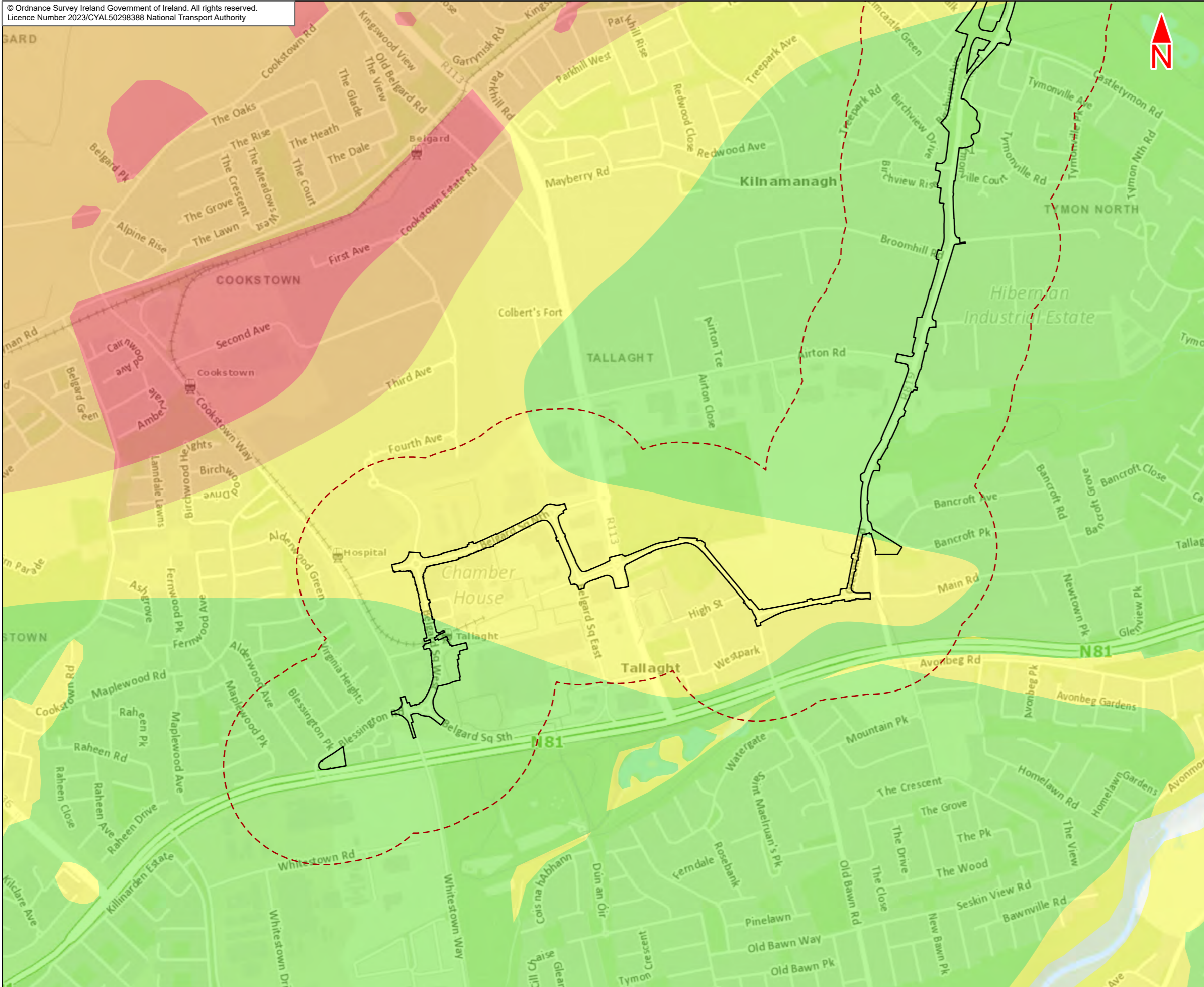
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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.11 Granular Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0506	Sheet Number: 6 of 6	Status: A	Rev: M01



14.12
Crushed Rock Aggregate
Potential





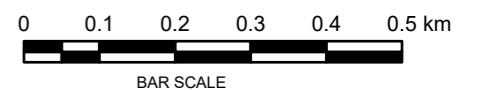
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential

- Very high potential
- High potential
- Moderate potential
- Low potential

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M01	Mar 23	FG	PW	DK	ISSUE FOR PHASE 4 : PLANNING

Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

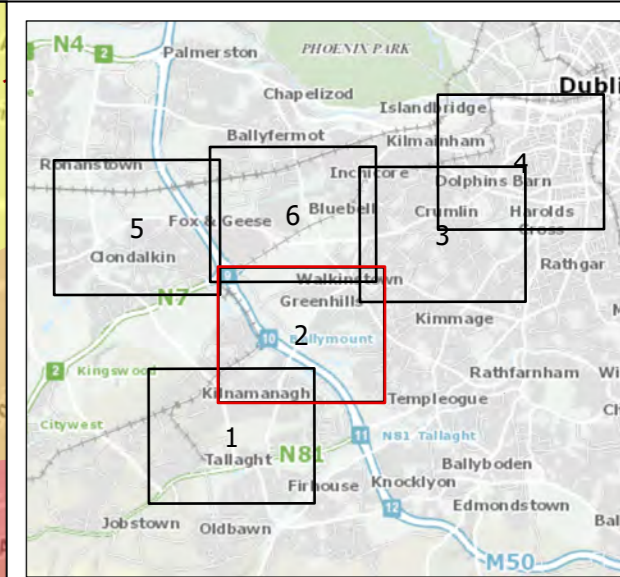
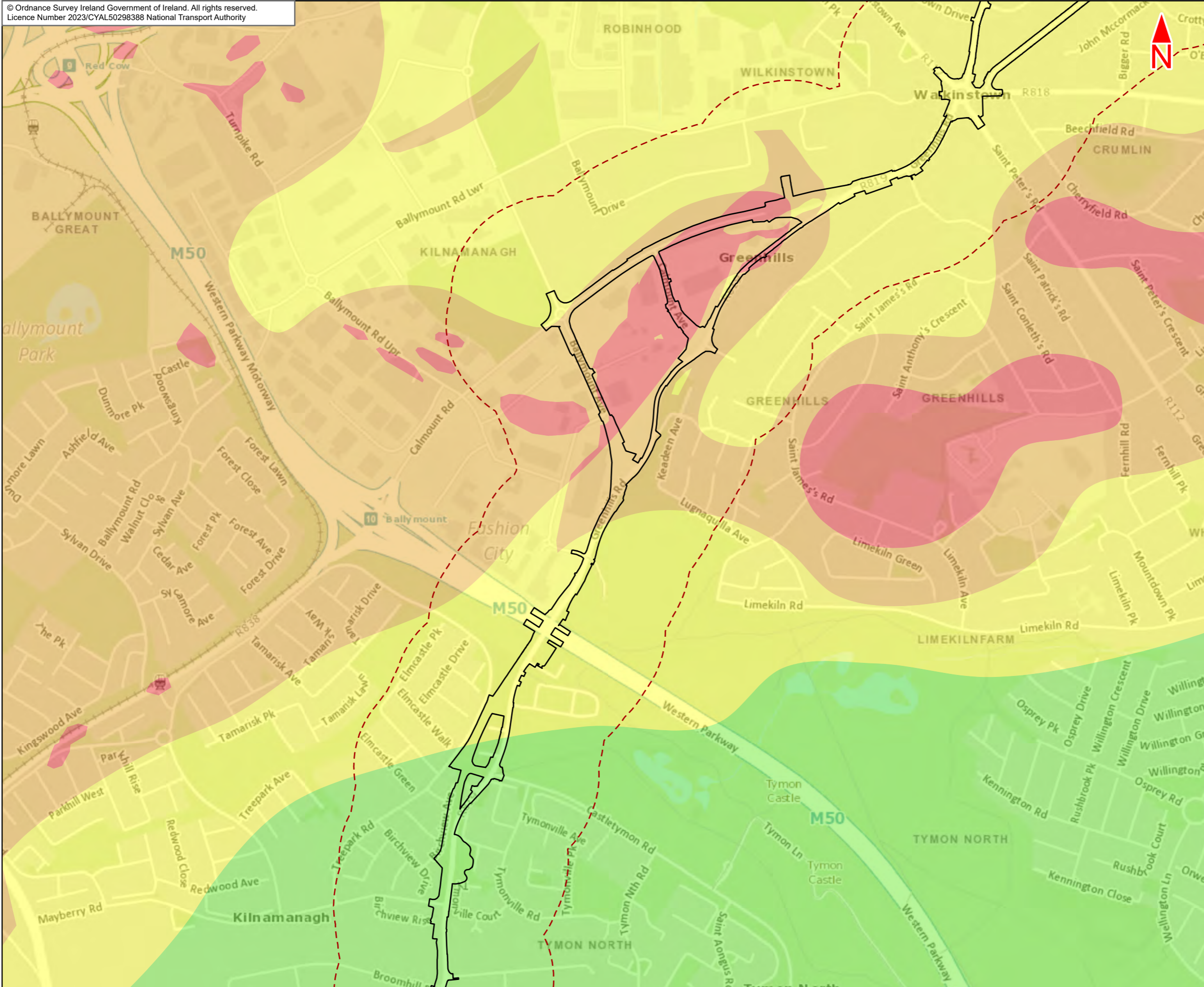
Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code:

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
Figure 14.12
Crushed Rock Aggregate Potential

Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0601 Sheet Number: 1 of 6 Status: A Rev: M01



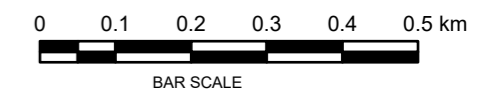
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential

- Very high potential
- High potential
- Moderate potential
- Low potential

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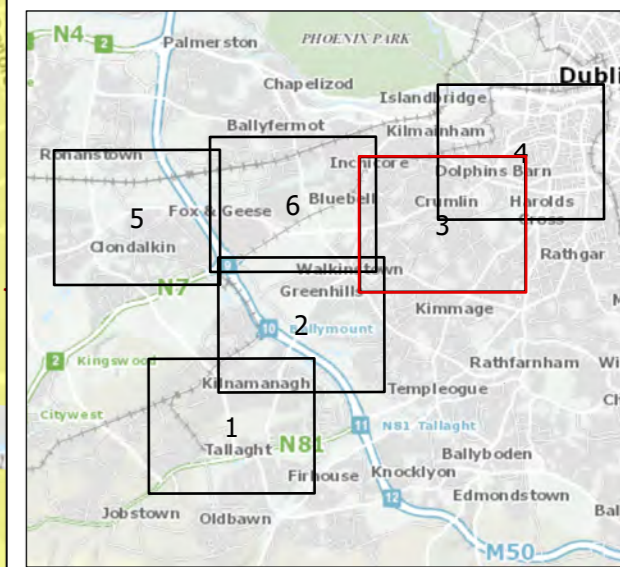
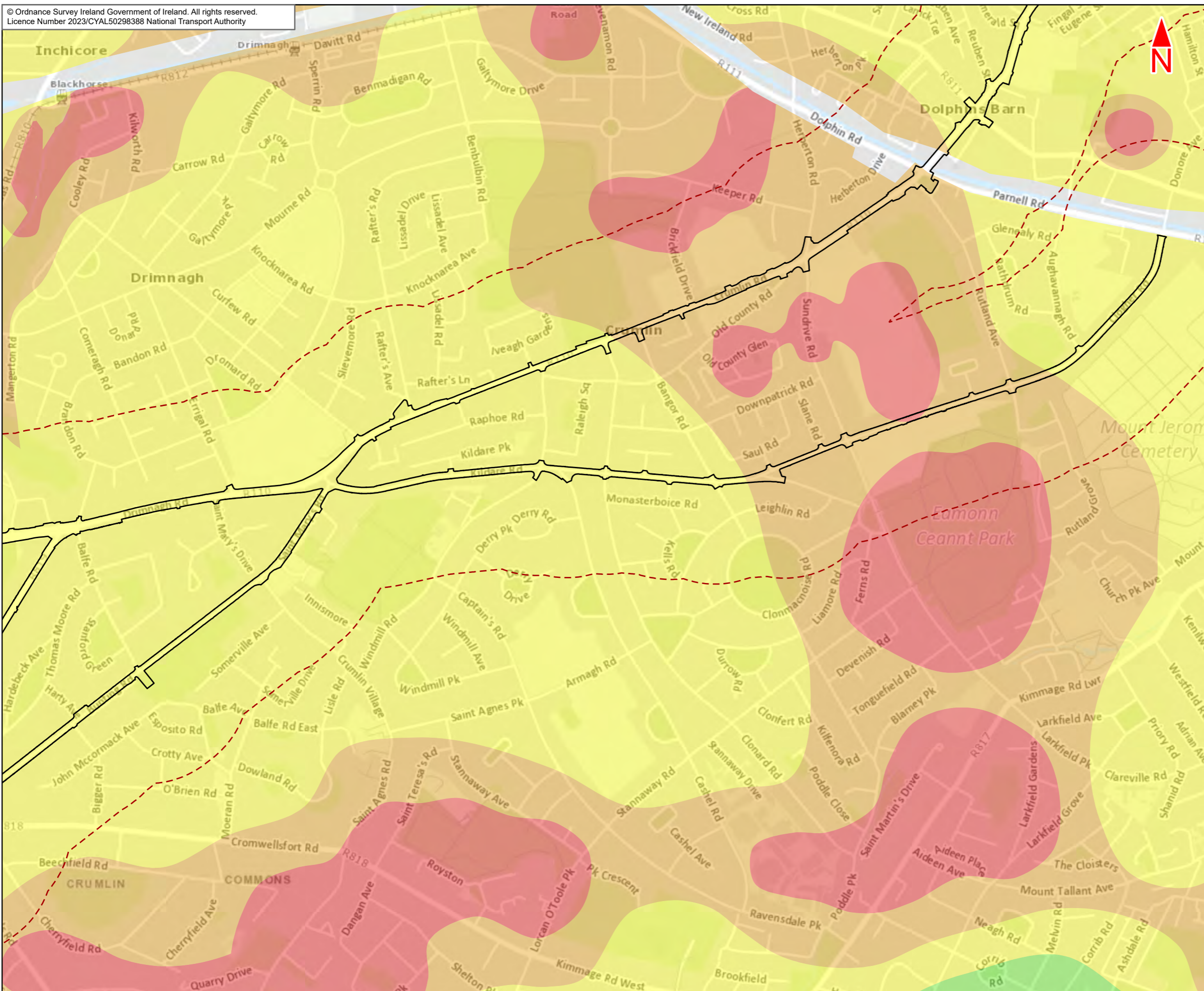
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code: _____

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.12 Crushed Rock Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0602	Sheet Number: 2 of 6	Status: A	Rev: M01



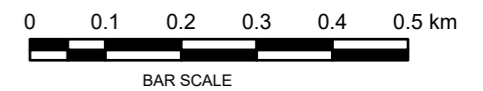
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential

- Very high potential
- High potential
- Moderate potential
- Low potential

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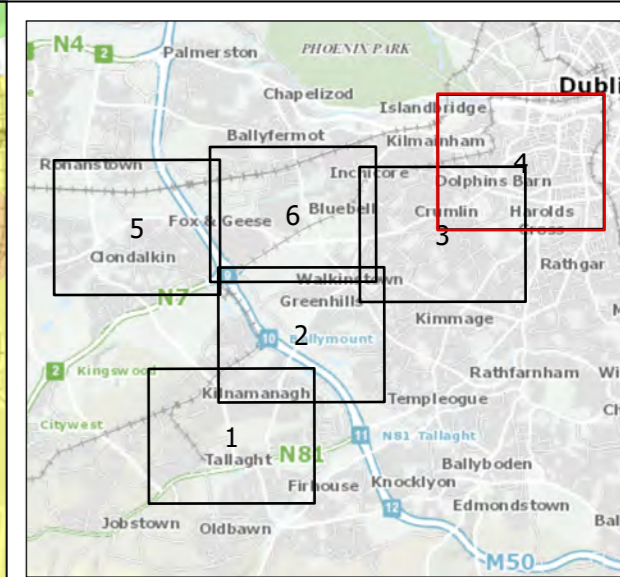
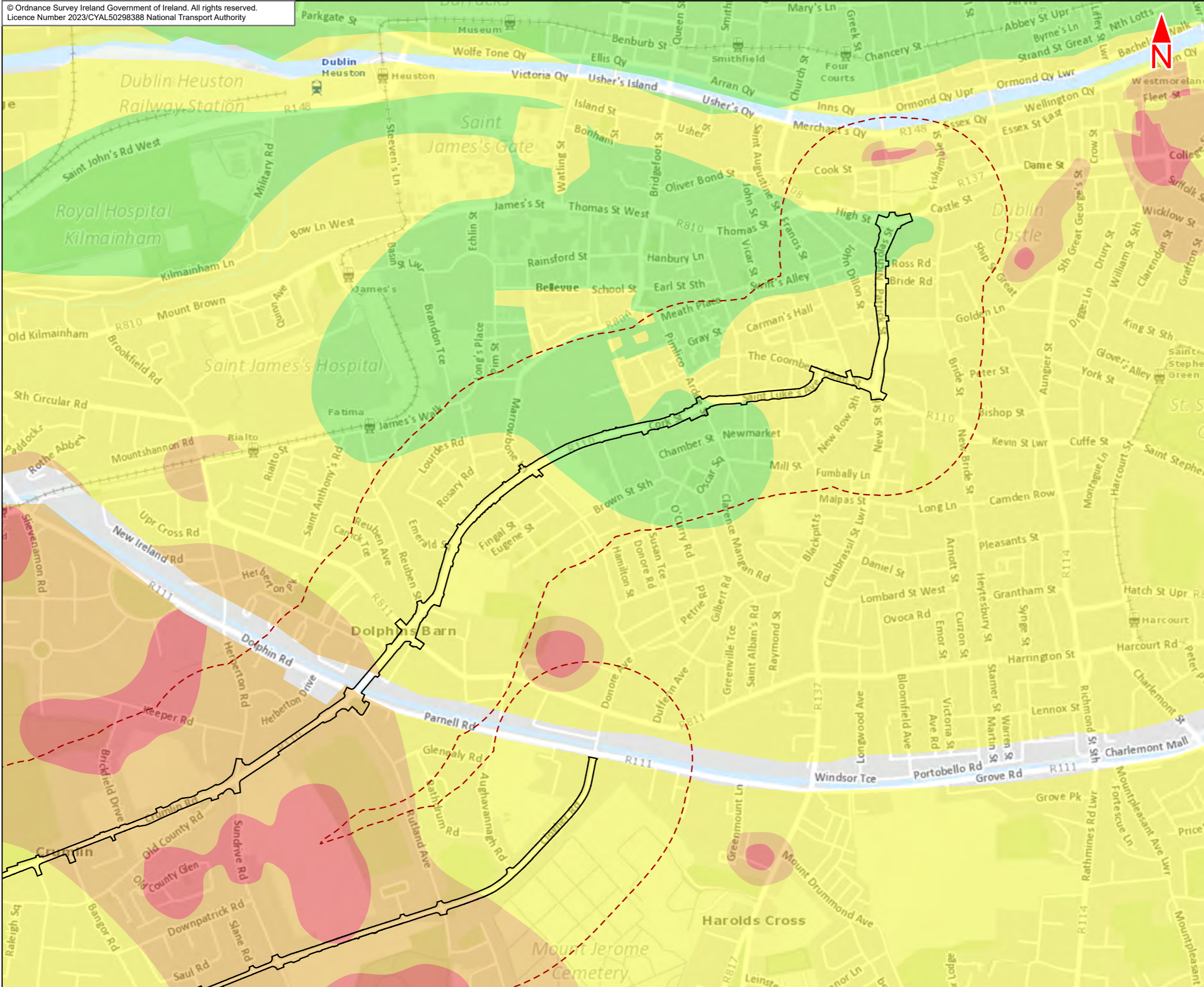
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Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3 1:10000
Project Code: BCIDE Originator Code: JAC
Drawn: FG Checked: PW Approved: DK
QMS Code: _____

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.12 Crushed Rock Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0603	Sheet Number: 3 of 6	Status: A	Rev: M01



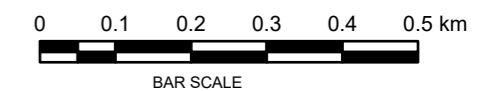
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential

- Very high potential
- High potential
- Moderate potential
- Low potential

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Consultant: **JACOBS ARUP SYSTRA**

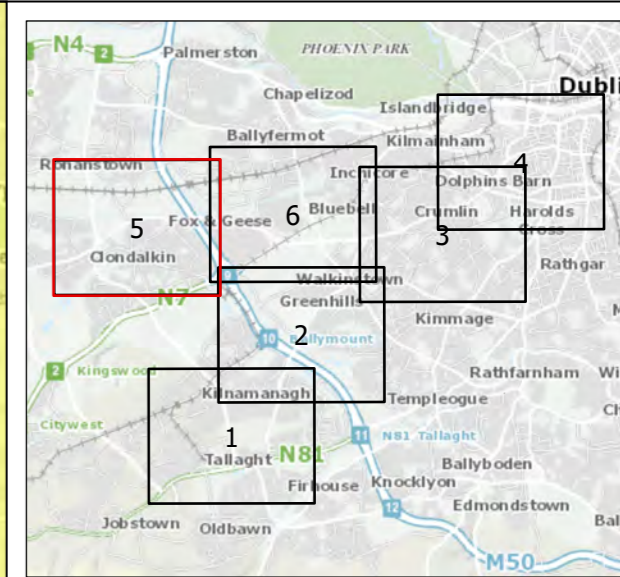
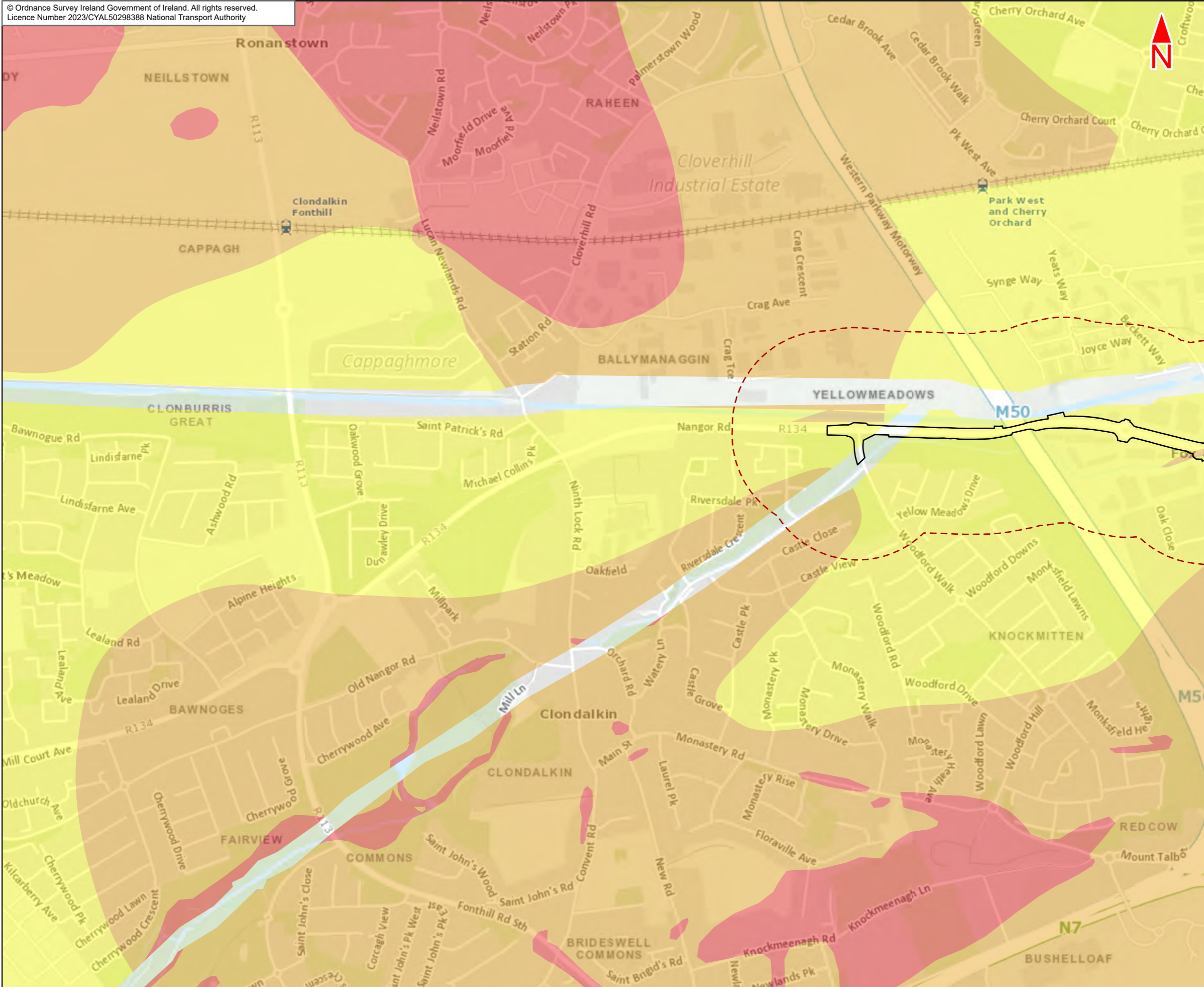
Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code:

Programme Title: **BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
Figure 14.12
Crushed Rock Aggregate Potential

Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0604
Sheet Number: 4 of 6
Status: A
Rev: M01



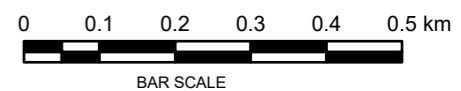
Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area

GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential

- Very high potential
- High potential
- Moderate potential

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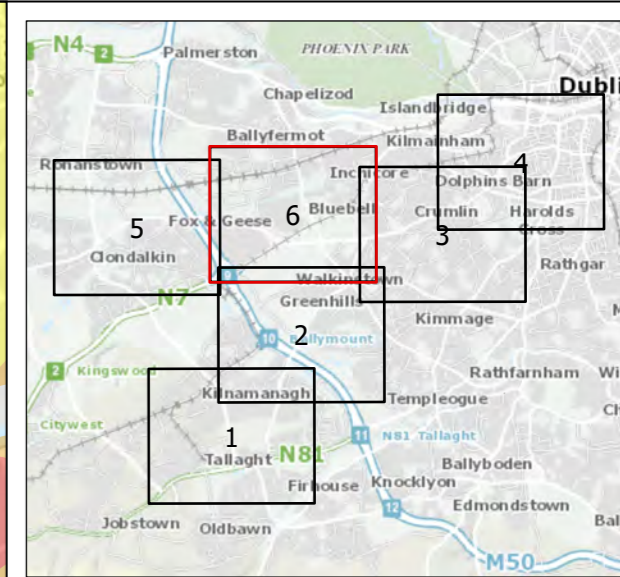
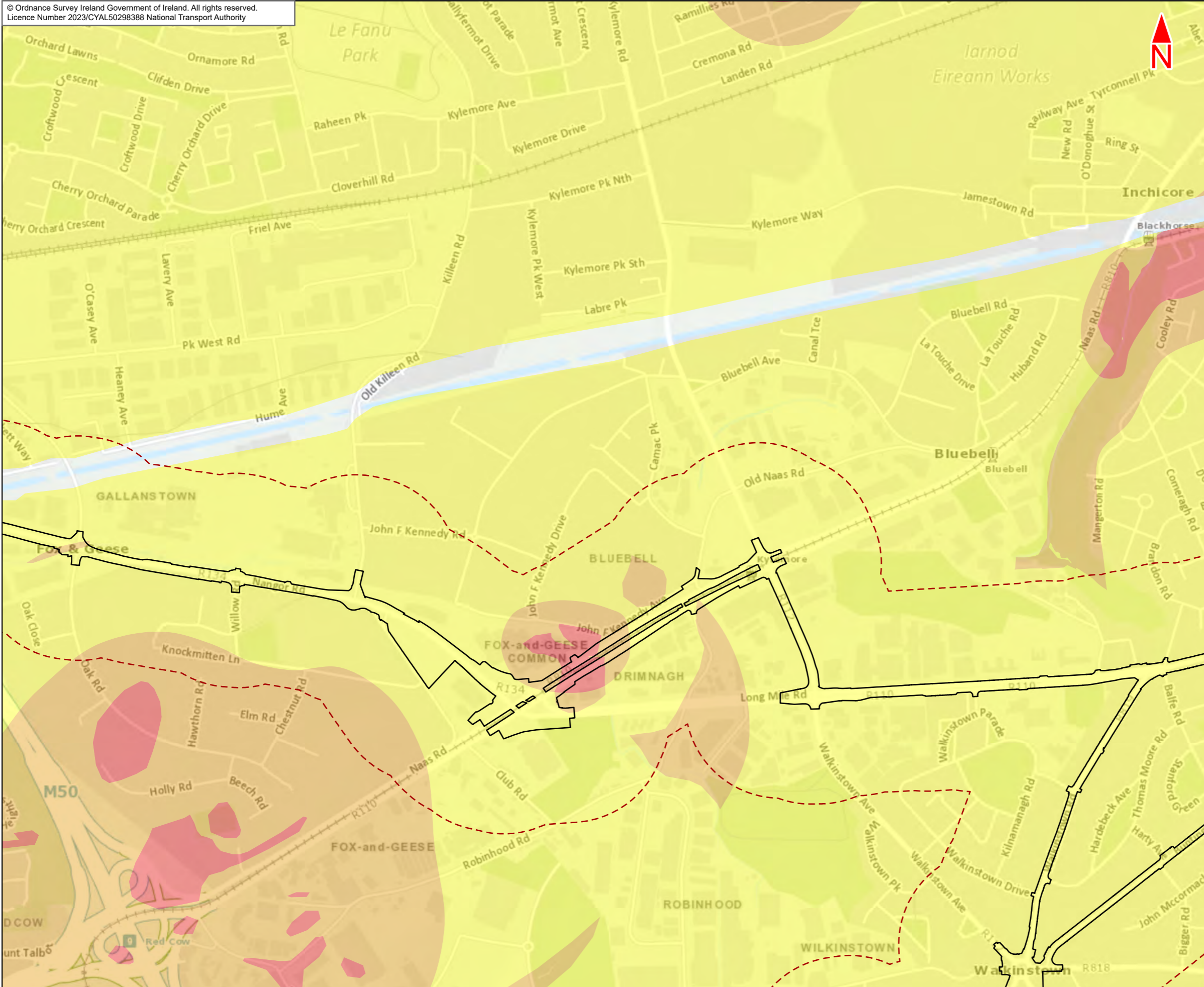
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Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.12 Crushed Rock Aggregate Potential				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0605	Sheet Number 5 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
- GSI Aggregate Potential Mapping - Crushed Rock Aggregate Potential**
- Very high potential
 - High potential
 - Moderate potential

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Client: **NTA**
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National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

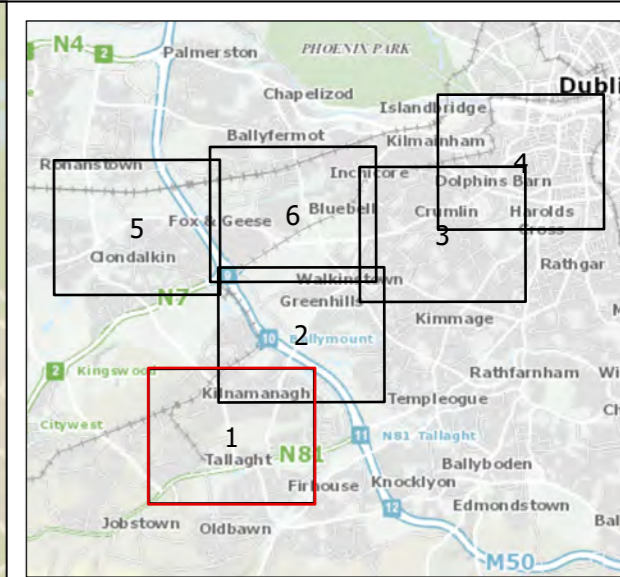
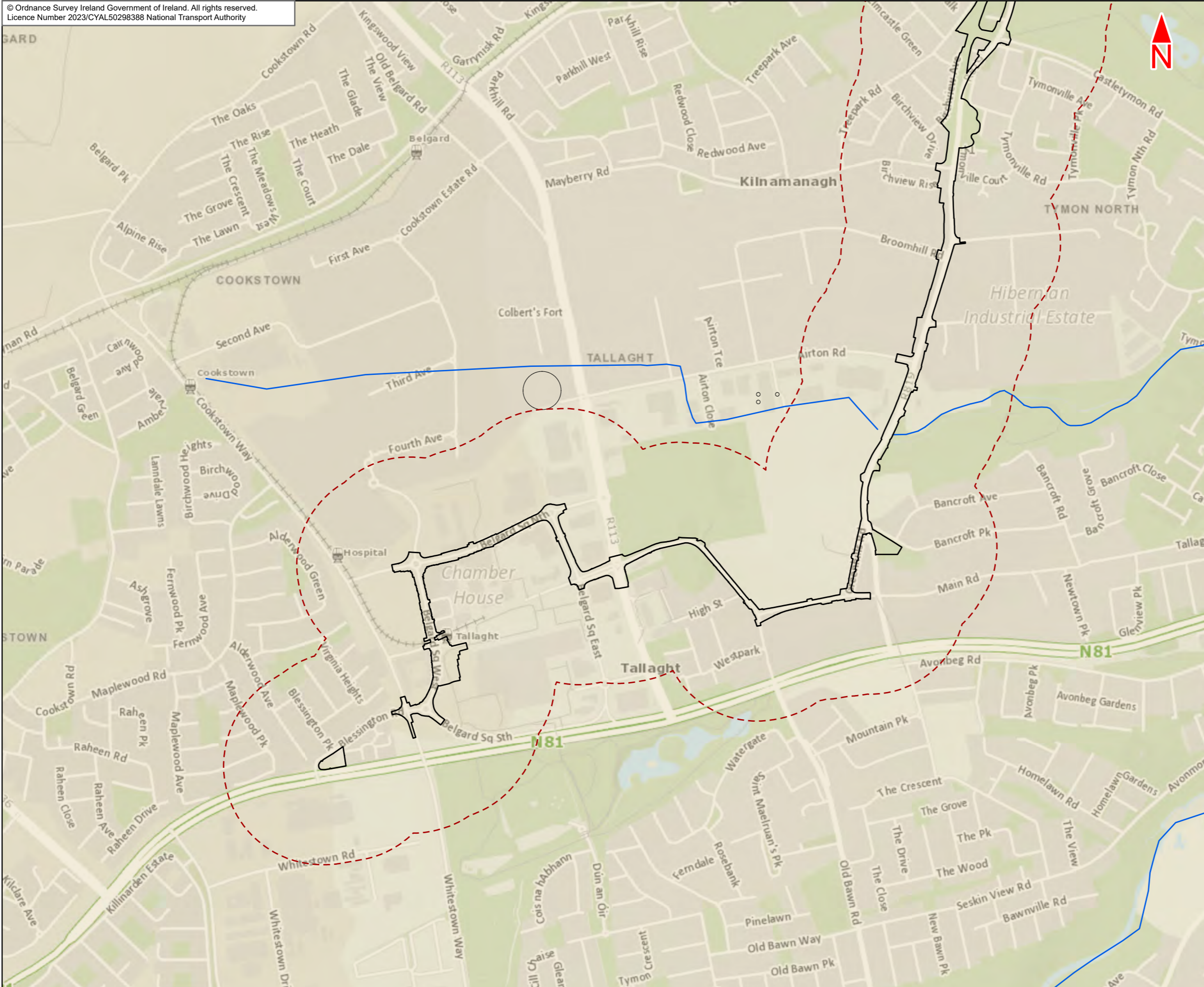
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Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code: _____

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.12 Crushed Rock Aggregate Potential			
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0606	Sheet Number: 6 of 6	Status: A	Rev: M01

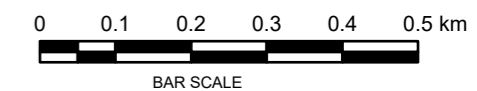
14.13
Aquifers





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
 - GSI Bedrock Aquifer**
 - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)

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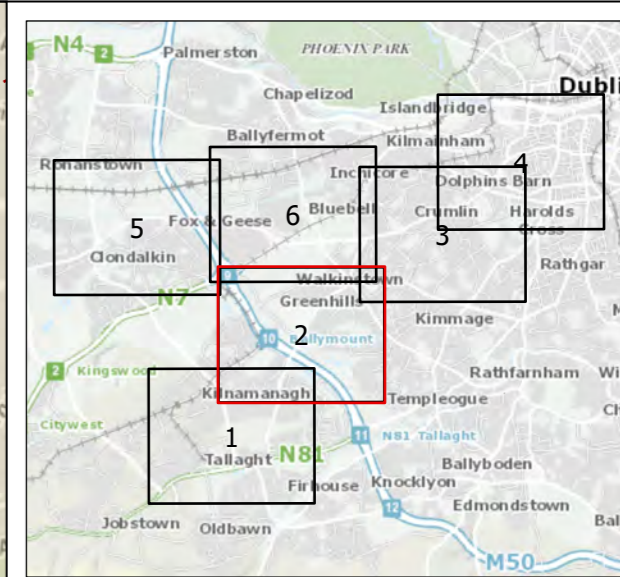
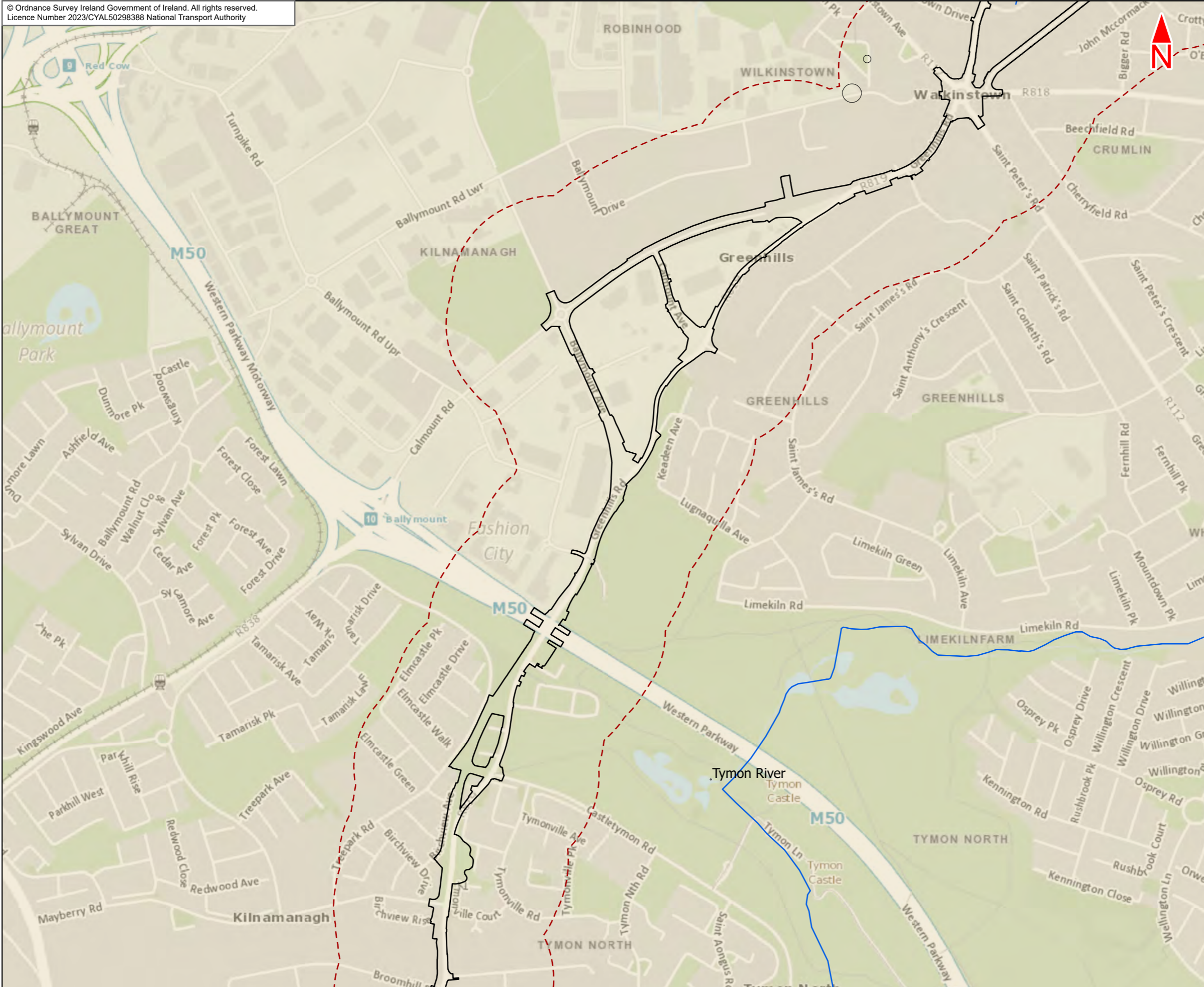
Rev	Date	Drn	Chk'd	App'd	Description
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Consultant
JACOBS ARUP SYSTRA

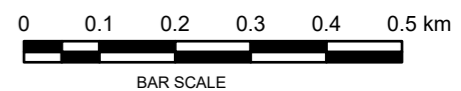
Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0701	Sheet Number 1 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
 - GSI Bedrock Aquifer**
 - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)

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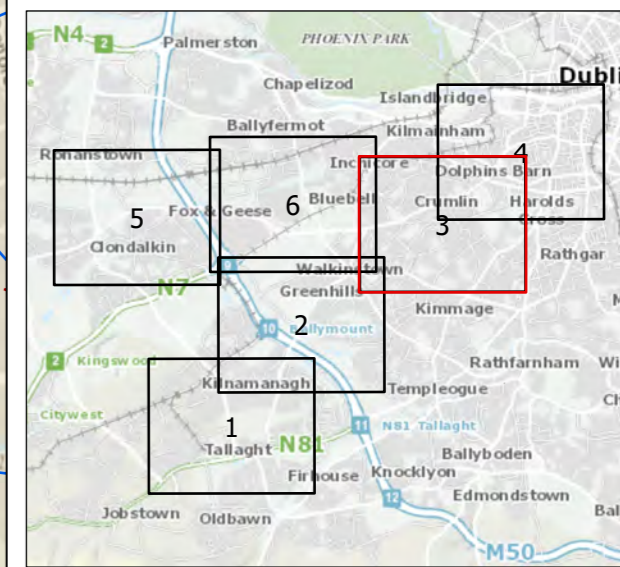
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Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000
Project Code: BCIDE | Originator Code: JAC

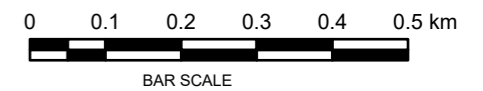
Drawn: FG | Checked: PW | Approved: DK
QMS Code: _____

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0702	Sheet Number: 2 of 6	Status: A	Rev: M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
 - GSI Bedrock Aquifer**
 - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)

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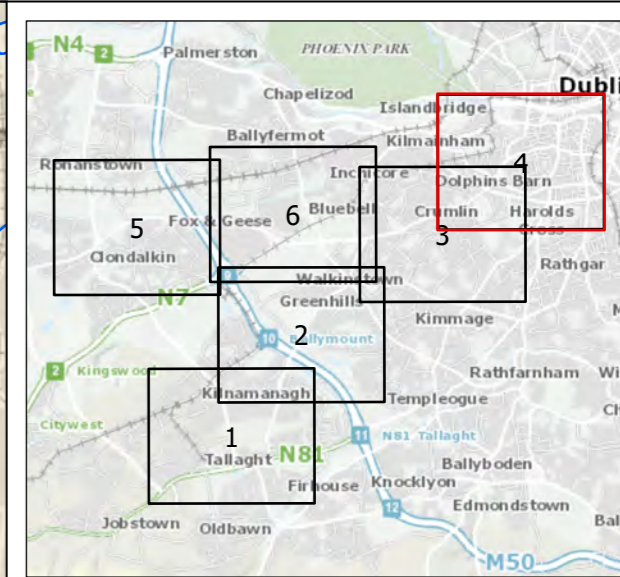
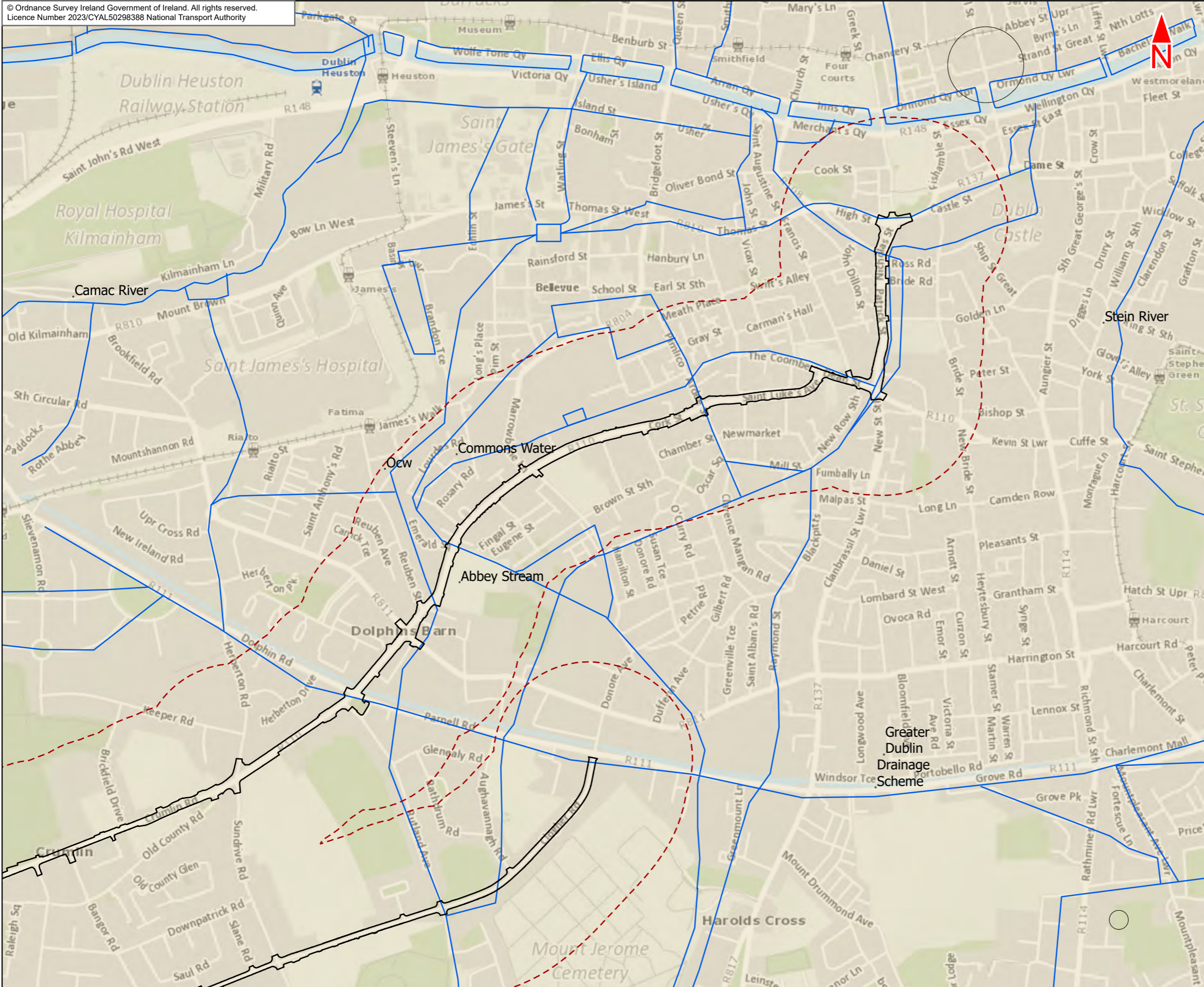
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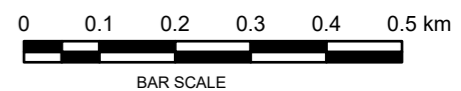
Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0703	Sheet Number 3 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
 - GSI Bedrock Aquifer**
 - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)

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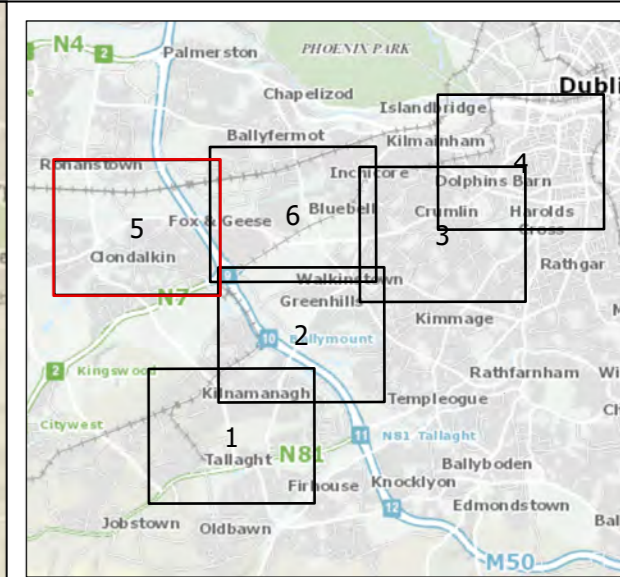
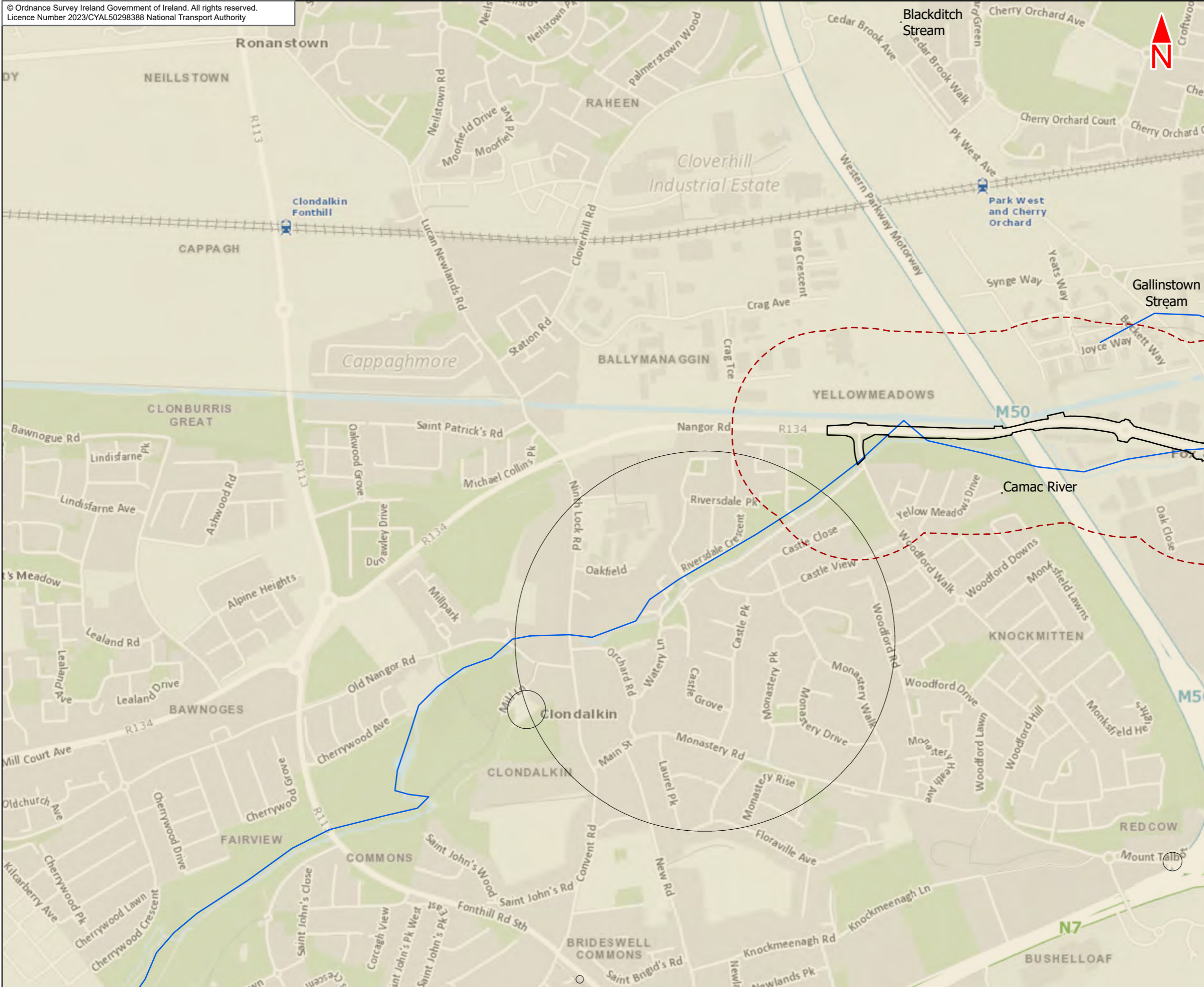


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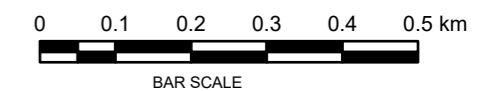
Consultant
JACOBS
ARUP SYSTRA

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0704
Sheet Number 4 of 6	Status A	Rev M01		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
- GSI Bedrock Aquifer**
- Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones (LI)

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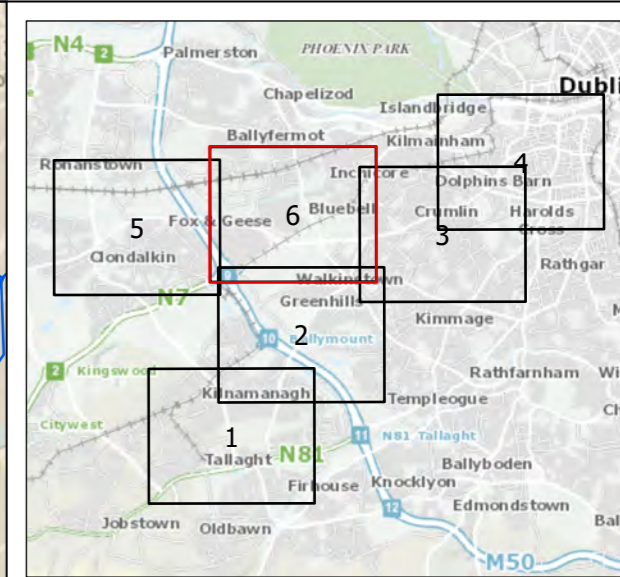
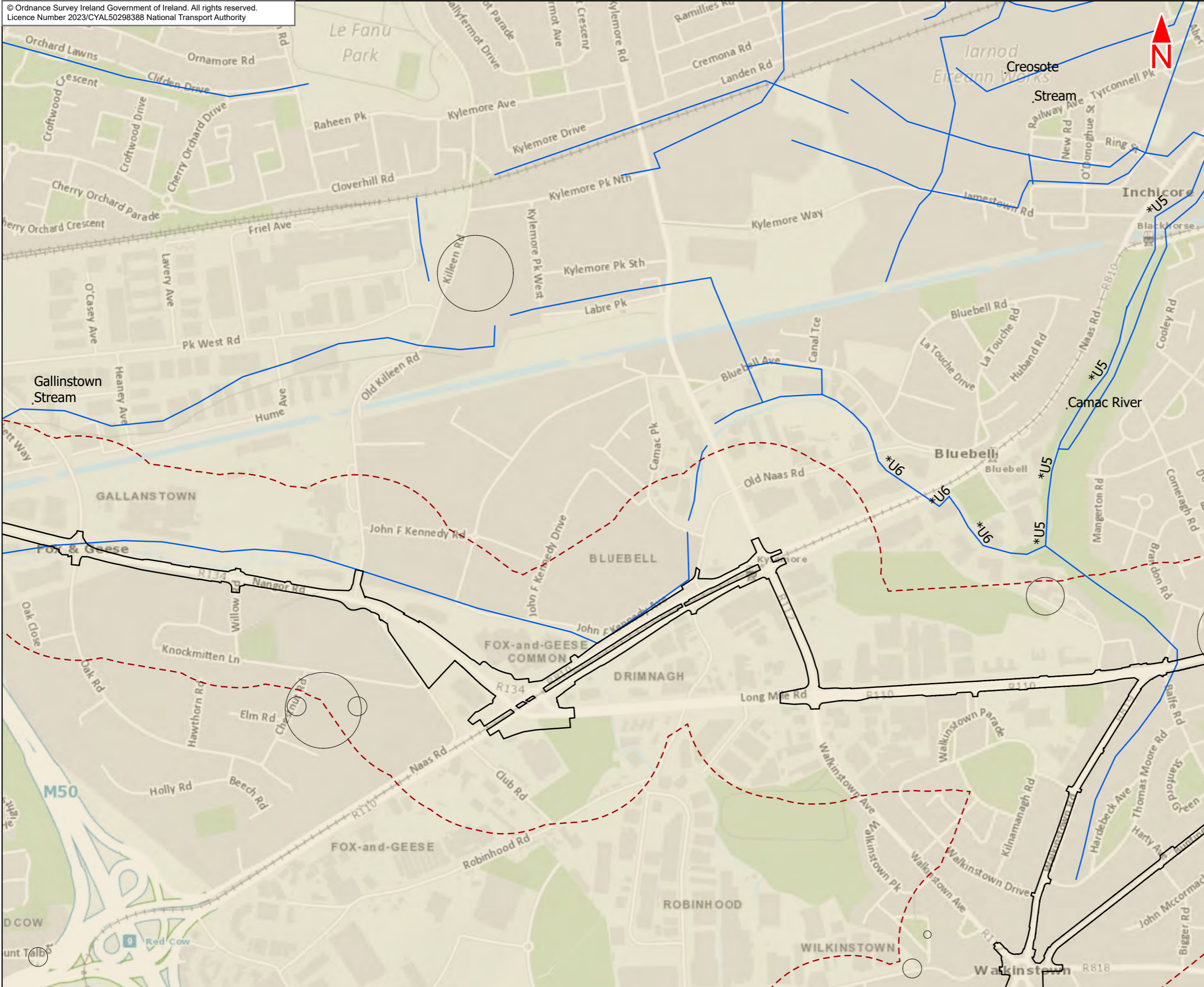
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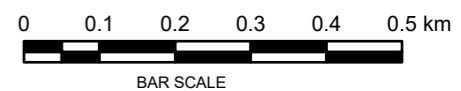
Client NTA Udarás Náisiúnta Iompair National Transport Authority		Consultant JACOBS ARUP SYSTRA		
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0705	Sheet Number 5 of 6	Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - Rivers Of Dublin
 - Groundwater Wells and Springs
 - GSI Bedrock Aquifer**
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National Transport Authority

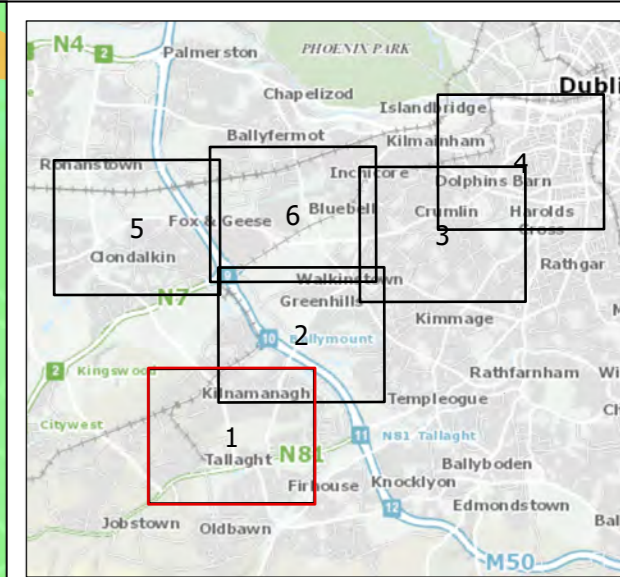
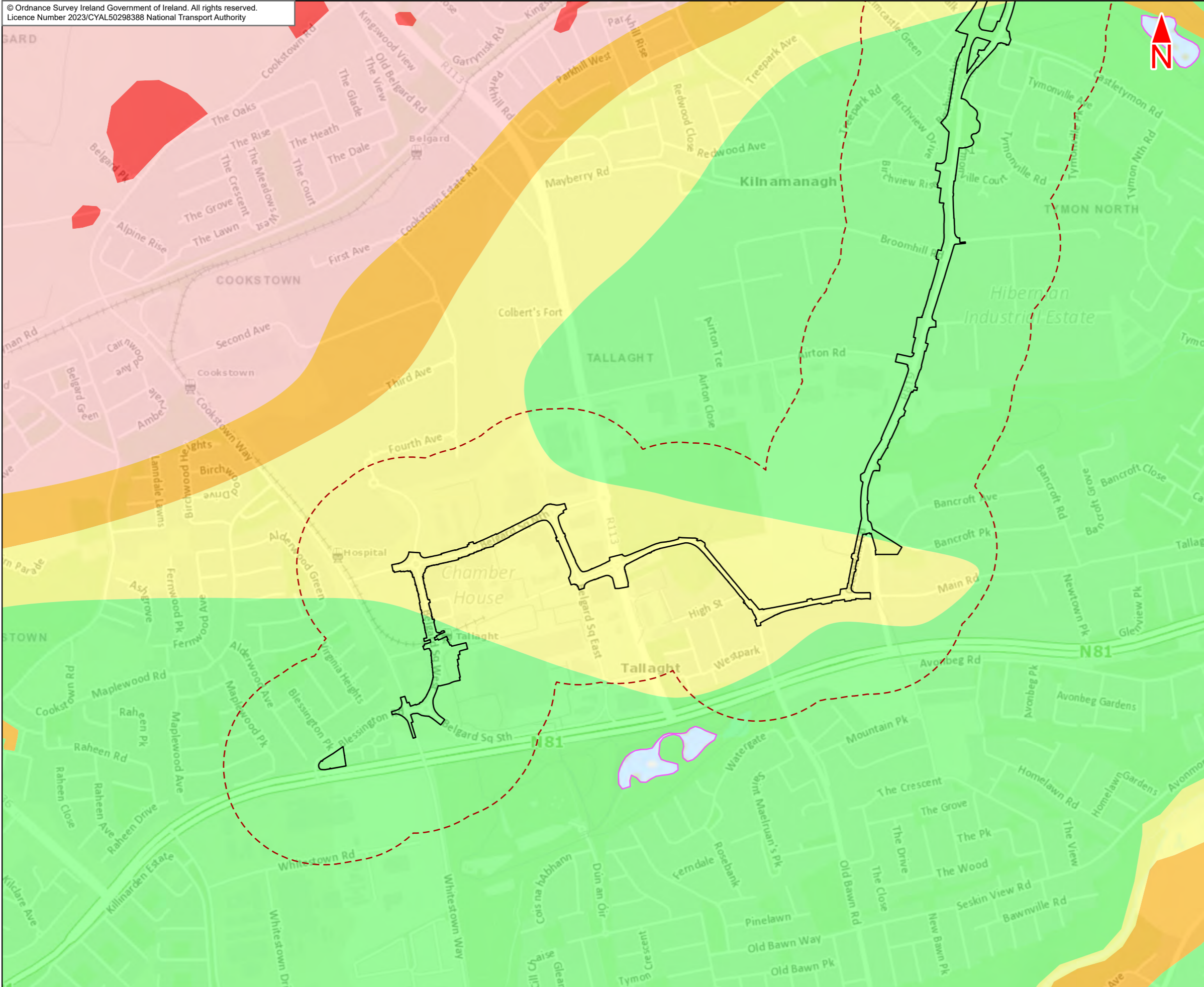
Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 | Scale @ A3: 1:10000
 Drawn: FG | Checked: PW | Approved: DK
 Project Code: BCIDE | Originator Code: JAC | QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.13 Aquifers				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0706	Sheet Number: 6 of 6	Status: A	Rev: M01	

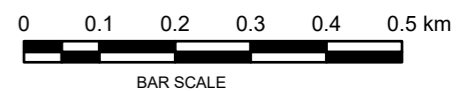
14.14
Groundwater Vulnerability





- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI National Groundwater Vulnerability**
 - Extreme (X) Rock at/close to surface or Karst
 - Extreme
 - High
 - Moderate
 - Low
 - Water

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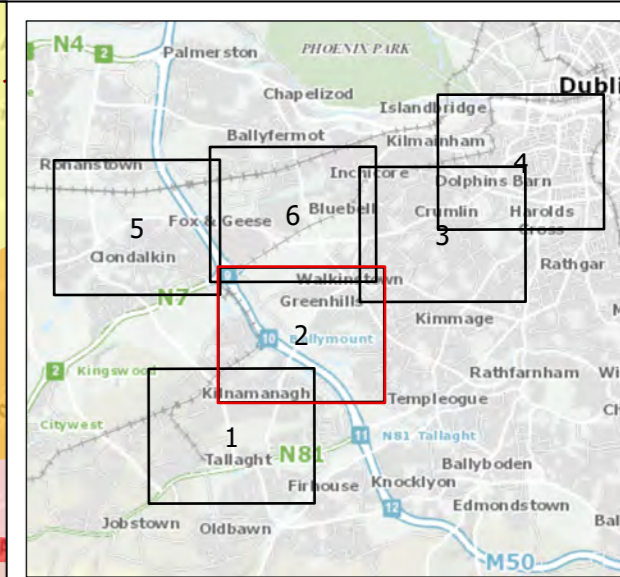
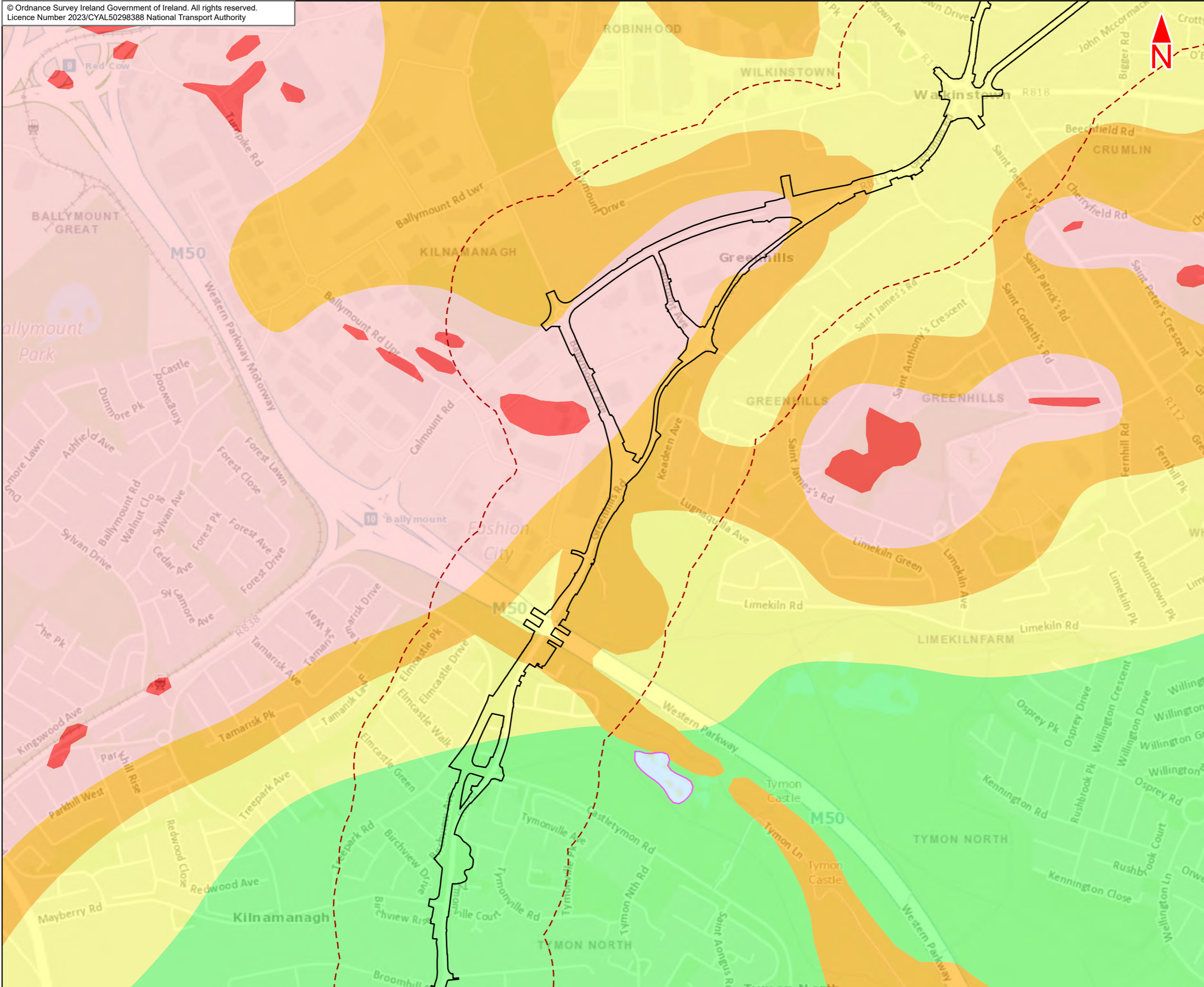
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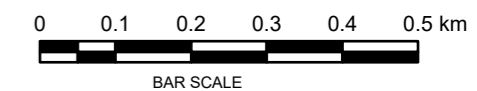
Date	22/03/2023	Scale @ A3	1:10000	Drawn	FG	Checked	PW	Approved	DK
Project Code	BCIDE	Originator Code	JAC	QMS Code					

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability			
Drawing File Name	BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0801	Sheet Number	1 of 6
Status	A	Rev	M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI National Groundwater Vulnerability**
 - Extreme (X) Rock at/close to surface or Karst
 - Extreme
 - High
 - Moderate
 - Low
 - Water

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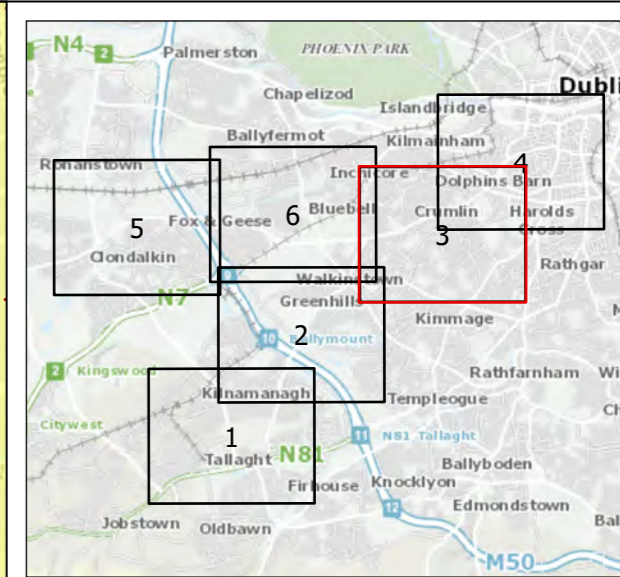
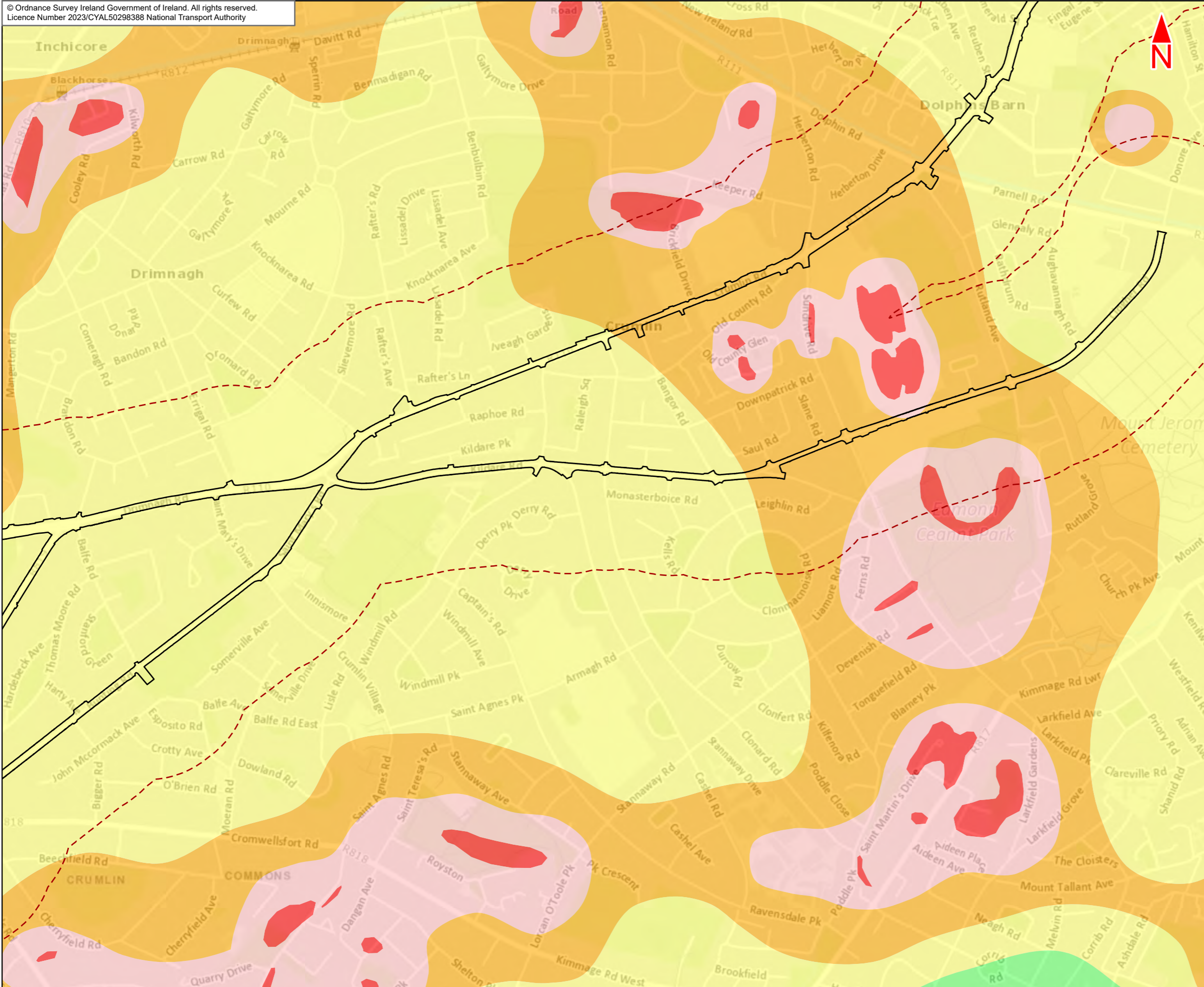
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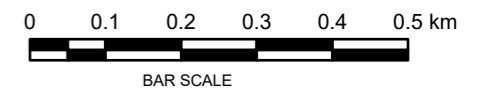
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Date	22/03/2023	Scale @ A3	1:10000	Drawn	FG
Project Code	BCIDE	Originator Code	JAC	Checked	PW
				Approved	DK
				QMS Code	

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability			
Drawing File Name	BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0802	Sheet Number	2 of 6
Status	A	Rev	M01



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI National Groundwater Vulnerability**
 - Extreme (X) Rock at/close to surface or Karst
 - Extreme
 - High
 - Moderate
 - Low

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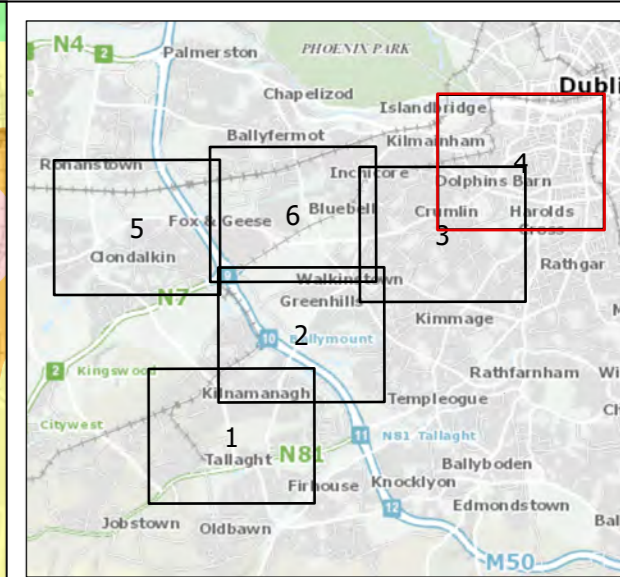
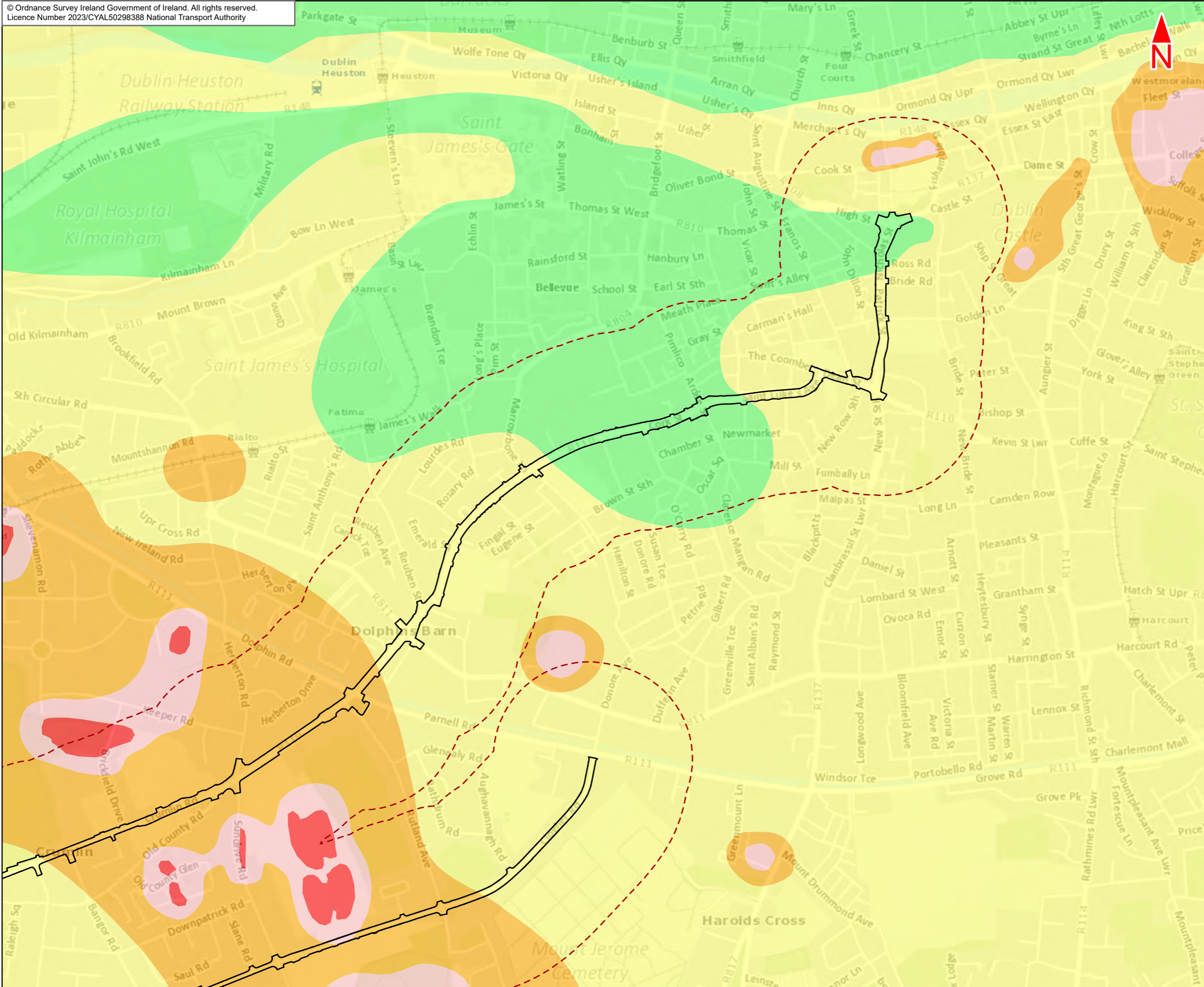
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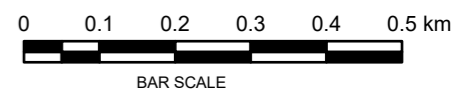
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		Consultant		
Date	Scale @ A3	Drawn	Checked	Approved
22/03/2023	1:10000	FG	PW	DK
Project Code	Originator Code	QMS Code		
BCIDE	JAC			

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability				
Drawing File Name	Sheet Number	Status	Rev	
BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0803	3 of 6	A	M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI National Groundwater Vulnerability**
 - Extreme (X) Rock at/close to surface or Karst
 - Extreme
 - High
 - Moderate
 - Low

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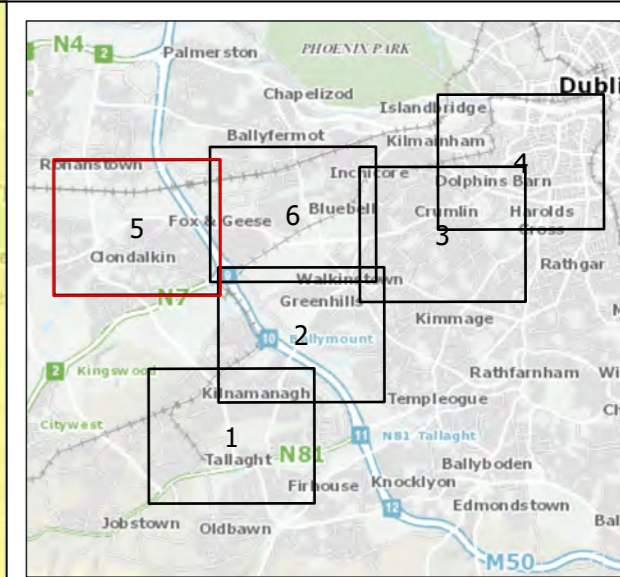
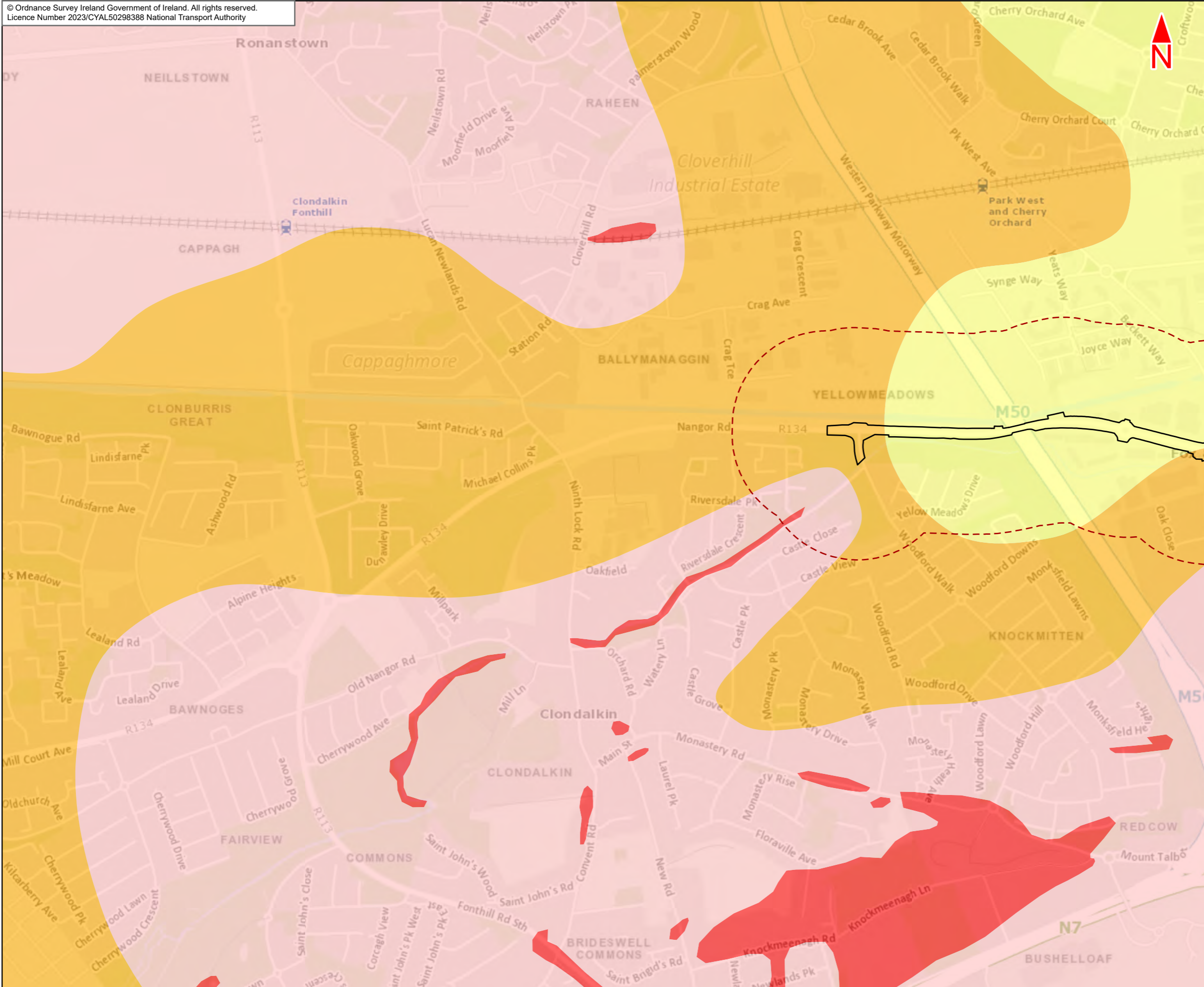


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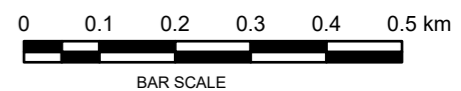
Consultant
JACOBS ARUP SYSTRA

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability				
Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0804
Sheet Number 4 of 6		Status A	Rev M01	



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI National Groundwater Vulnerability**
 - Extreme (X) Rock at/close to surface or Karst
 - Extreme
 - High
 - Moderate

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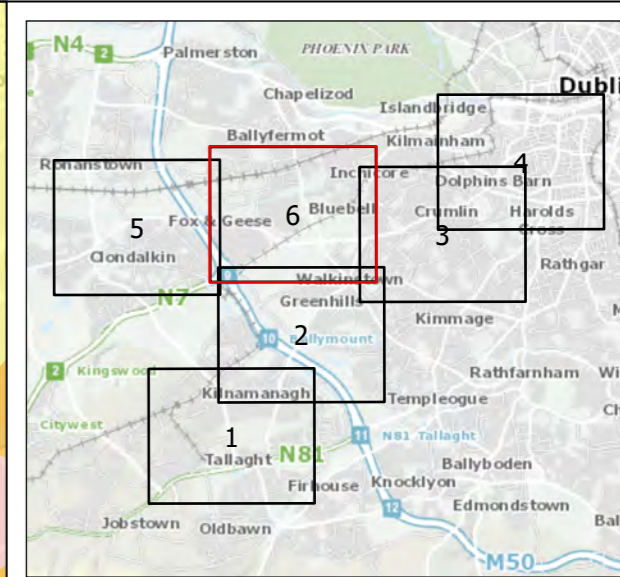
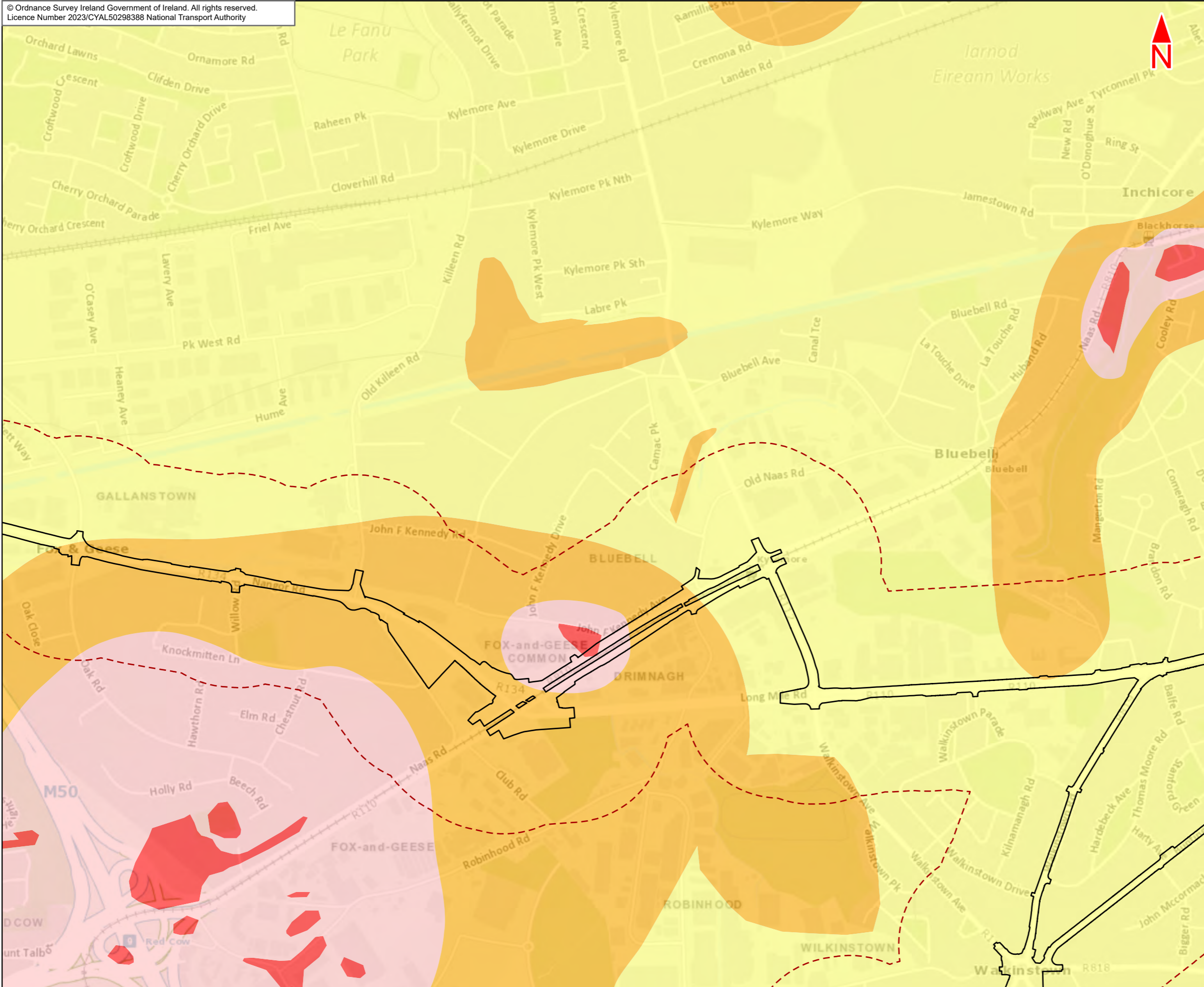
Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
 Drawn: FG Checked: PW Approved: DK
 Project Code: BCIDE Originator Code: JAC QMS Code:

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0805	Sheet Number: 5 of 6	Status: A	Rev: M01	

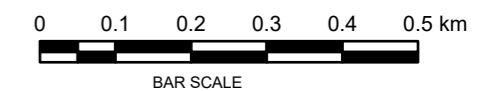




Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area
- GSI National Groundwater Vulnerability**
- Extreme (X) Rock at/close to surface or Karst
- Extreme
- High
- Moderate

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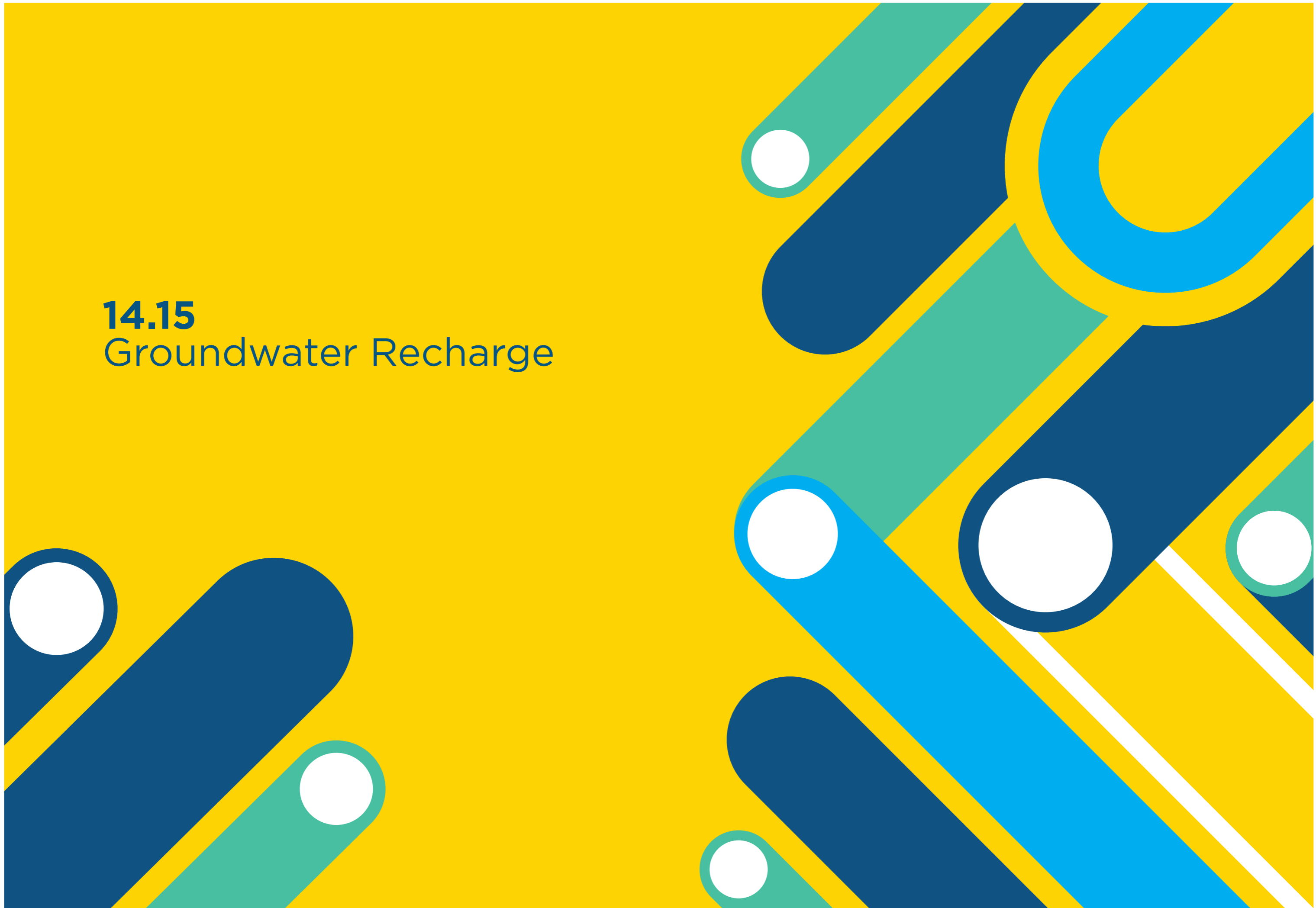
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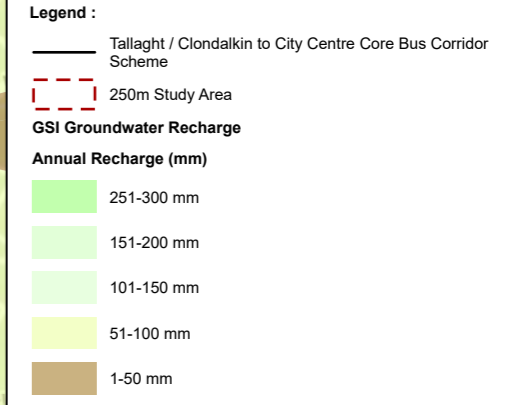
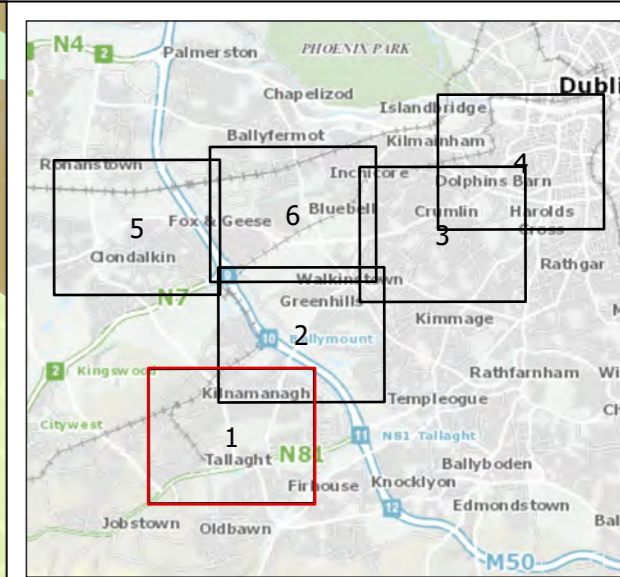
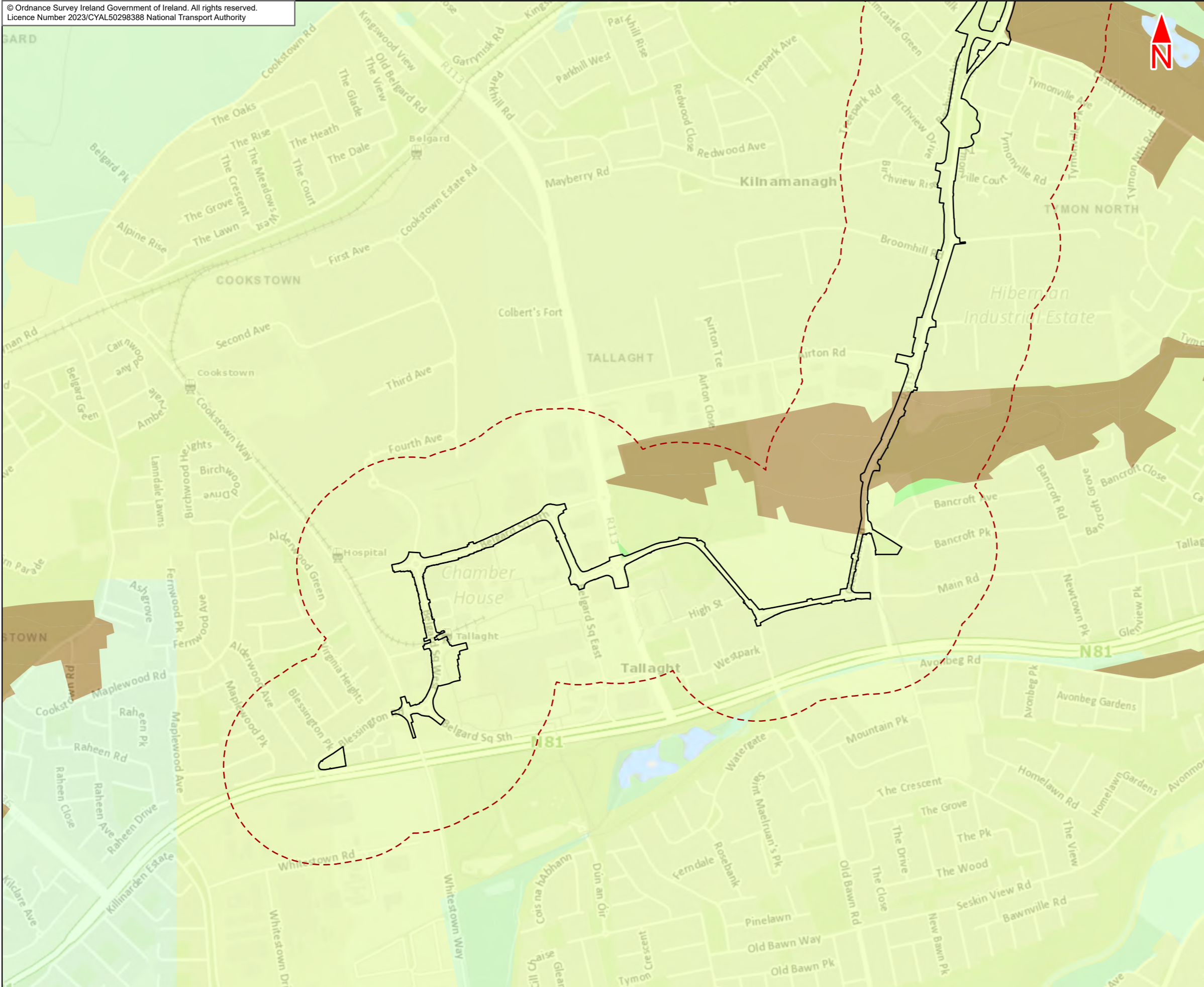
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Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.14 Groundwater Vulnerability				
Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0806	Sheet Number: 6 of 6	Status: A	Rev: M01	

14.15
Groundwater Recharge





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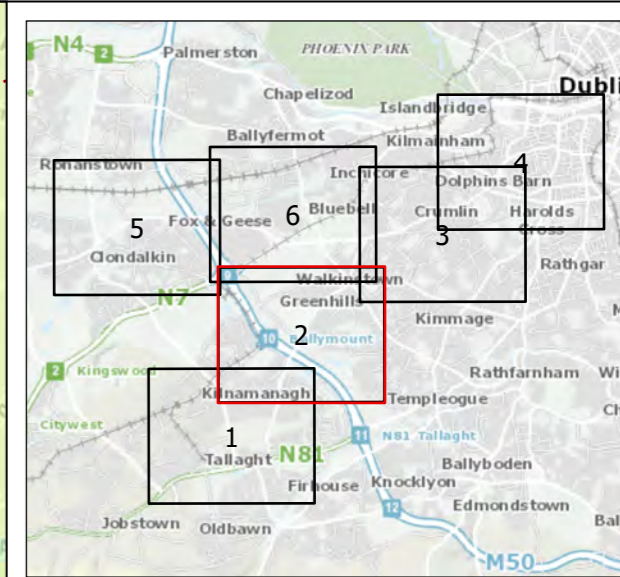
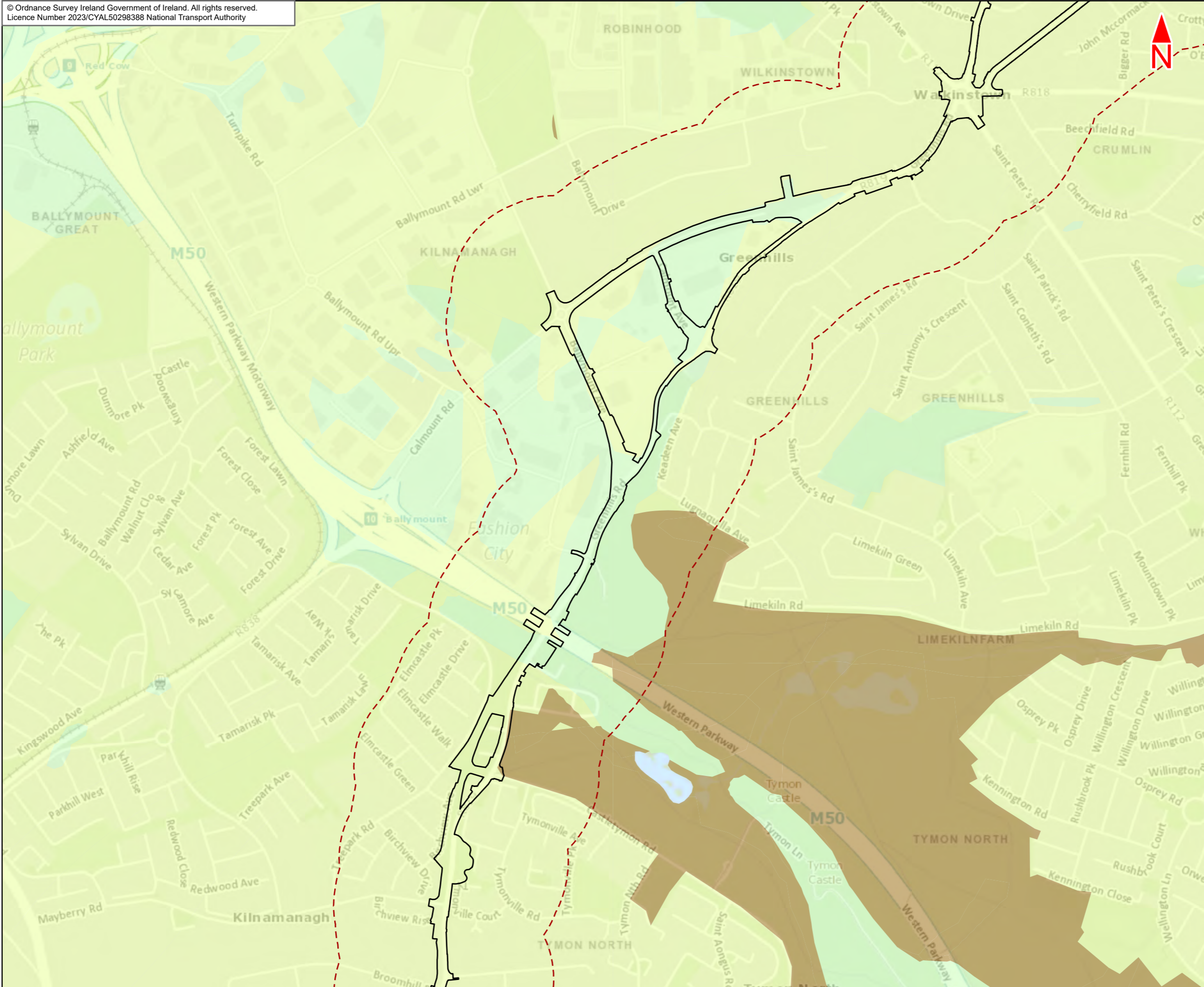
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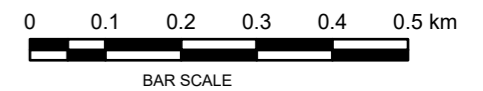
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Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.15 Groundwater Recharge				
Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0901	Sheet Number 1 of 6	Status A	Rev M01	

Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		



- Legend :**
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
 - 250m Study Area
 - GSI Groundwater Recharge**
 - Annual Recharge (mm)**
 - 151-200 mm
 - 51-100 mm
 - 1-50 mm

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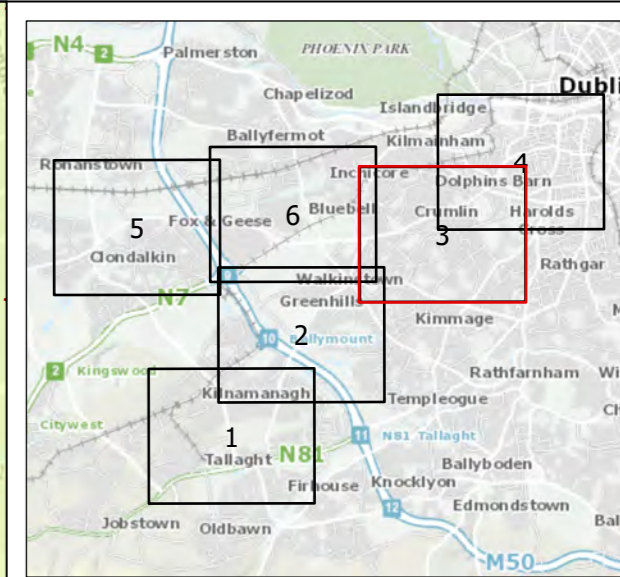
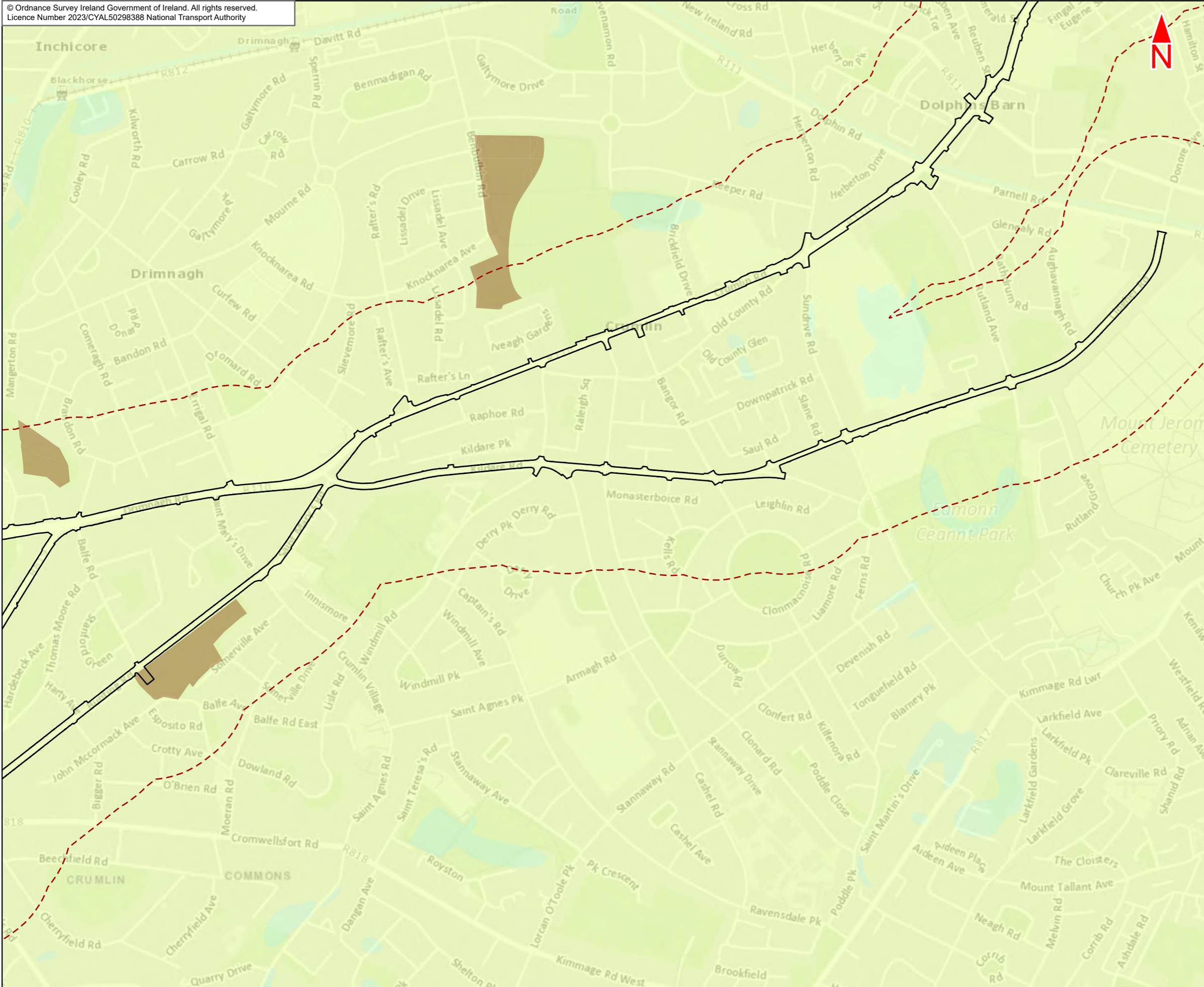
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Project Code	BCIDE	Originator Code	JAC	QMS Code					

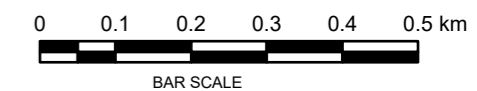
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Drawing File Name	BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0902	Sheet Number	2 of 6	Rev	M01
Status	A				



Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area
- GSI Groundwater Recharge**
- Annual Recharge (mm)**
- 151-200 mm
- 51-100 mm
- 1-50 mm

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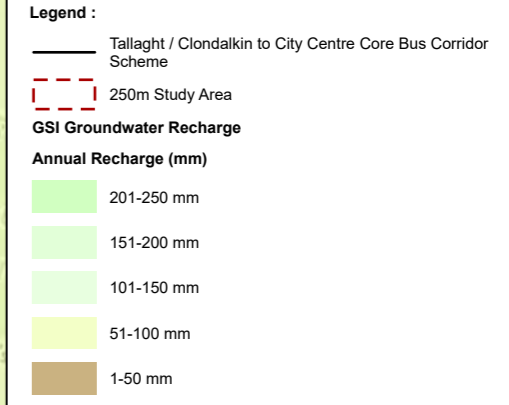
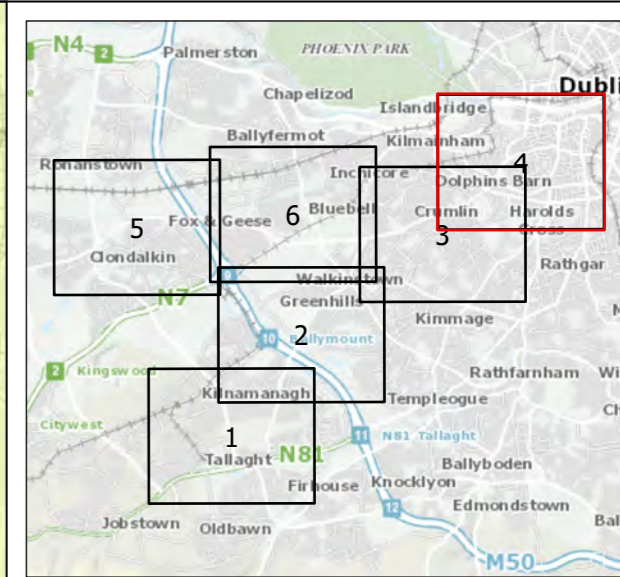
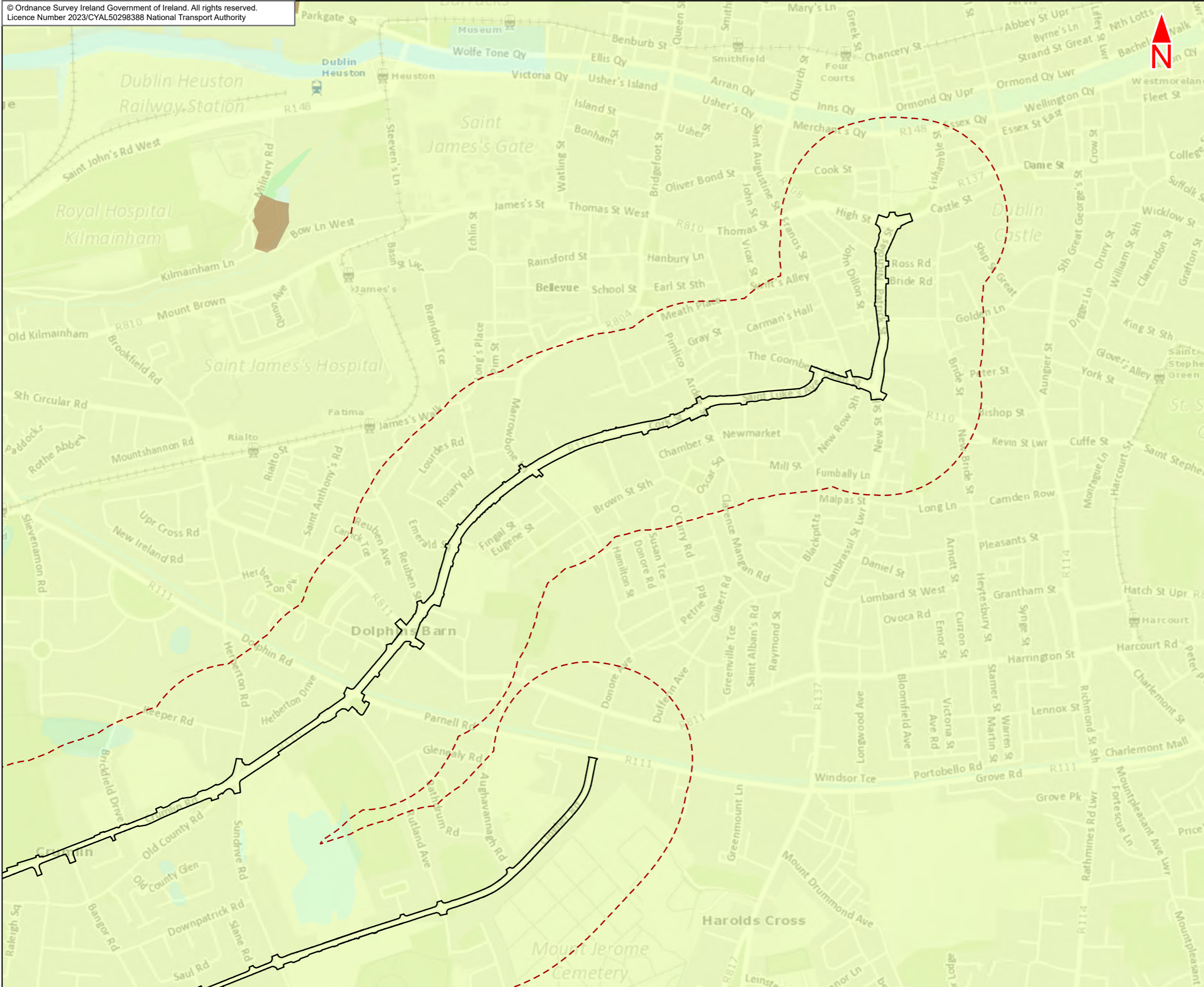
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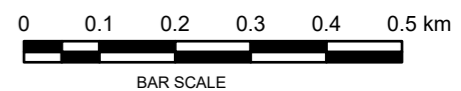
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Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0903	Sheet Number 3 of 6	Status A	Rev M01	

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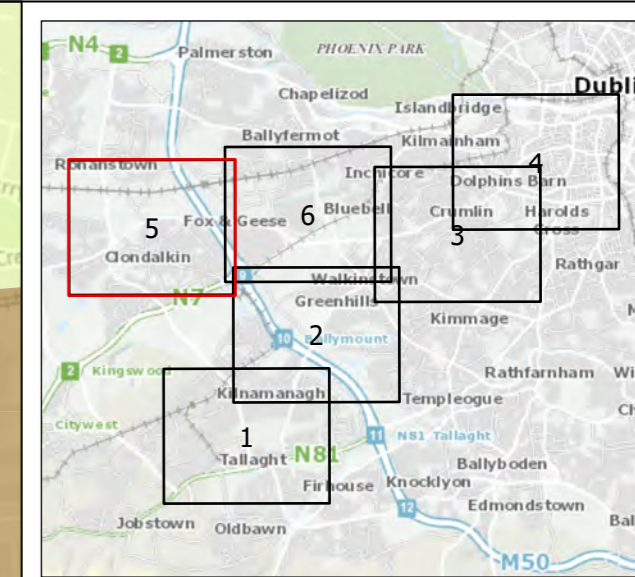
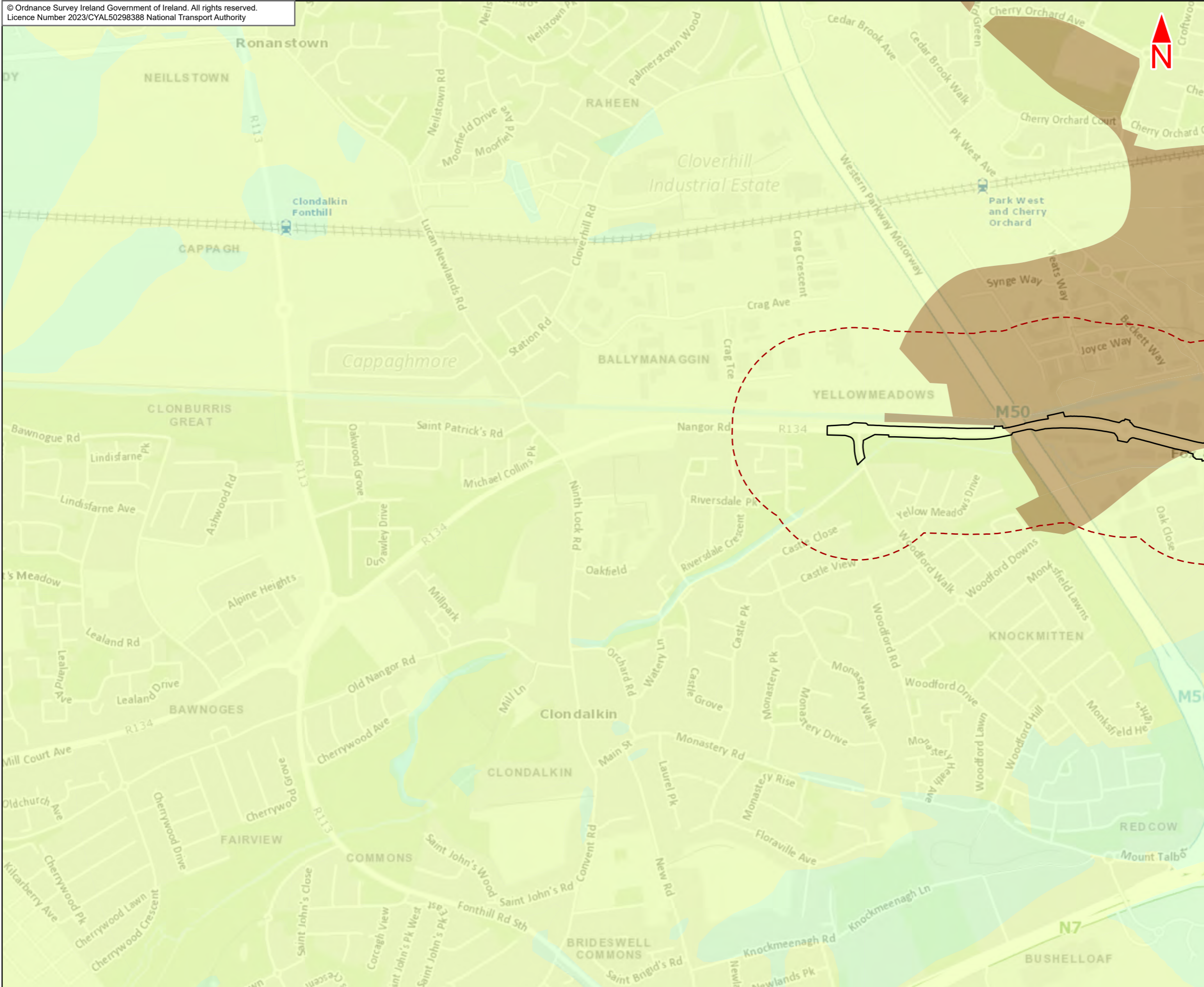


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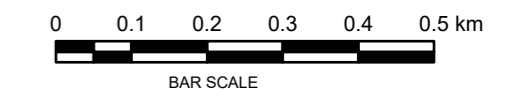
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Date 22/03/2023	Scale @ A3 1:10000	Drawn FG	Checked PW	Approved DK
Project Code BCIDE	Originator Code JAC	QMS Code		Drawing File Name BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0904
Sheet Number 4 of 6		Status A	Rev M01	



Legend :

- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- 250m Study Area
- GSI Groundwater Recharge**
- Annual Recharge (mm)**
- 151-200 mm
- 51-100 mm
- 1-50 mm

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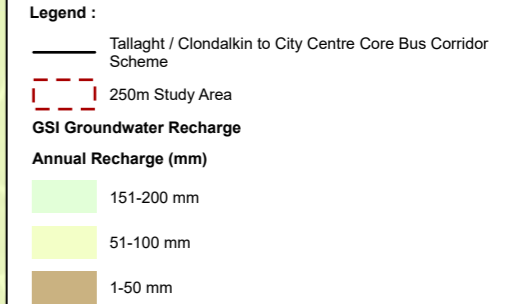
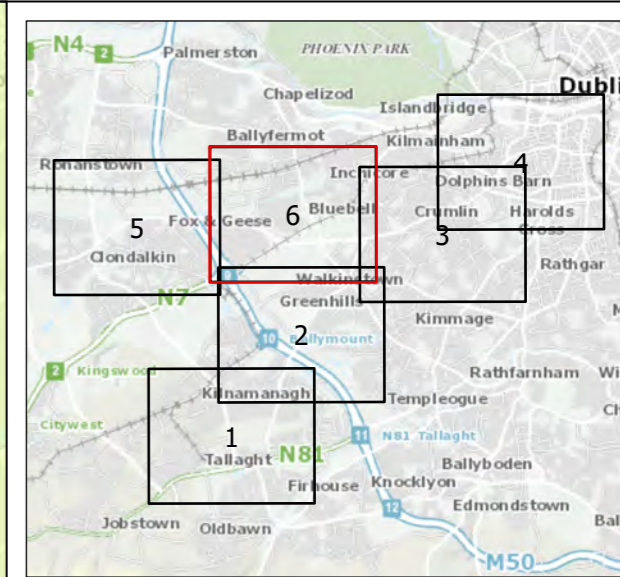
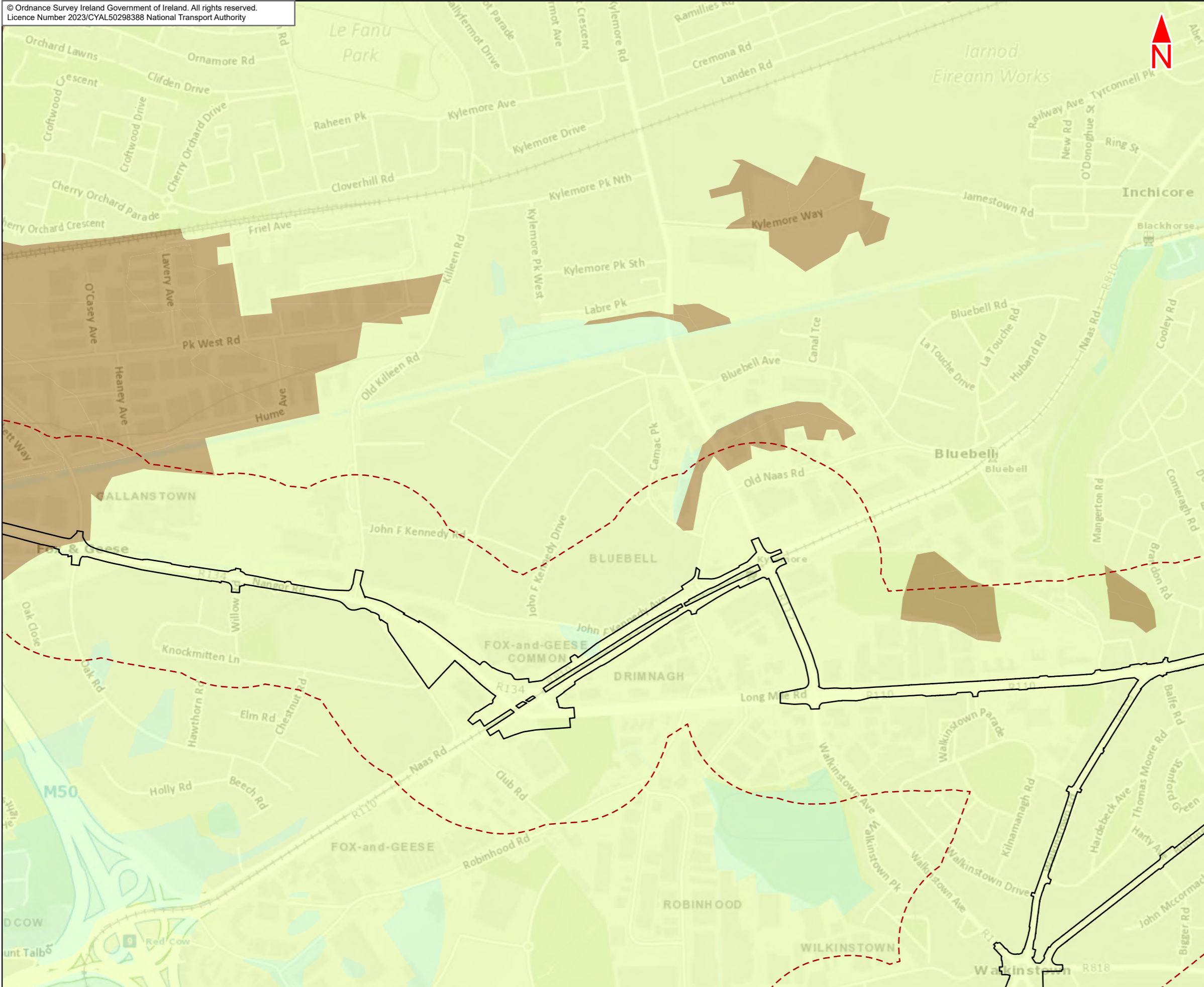
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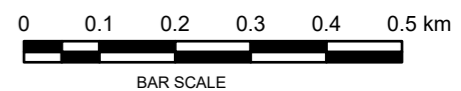
Rev	Date	Drn	Chk'd	App'd	Description
M01	Mar 23	FG	PW	DK	ISSUE FOR PHASE 4 : PLANNING

Date	22/03/2023	Scale @ A3	1:10000	Drawn	FG
Project Code	BCIDE	Originator Code	JAC	Checked	PW
				Approved	DK
				QMS Code	

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS					
Drawing Title Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme Figure 14.15 Groundwater Recharge					
Drawing File Name	BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0905	Sheet Number	5 of 6	Status	A
Rev	M01				



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Client: **NTA**
Udarás Náisiúnta Iompair
National Transport Authority

Consultant: **JACOBS ARUP SYSTRA**

Date: 22/03/2023 Scale @ A3: 1:10000
Project Code: BCIDE Originator Code: JAC

Drawn: FG Checked: PW Approved: DK
QMS Code: _____

Programme Title: **BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS**

Drawing Title: Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
Figure 14.15
Groundwater Recharge

Drawing File Name: BCIDE-JAC-ENV_GT-0809_XX_00-DR-GG-0906 Sheet Number: 6 of 6 Status: A Rev: M01

