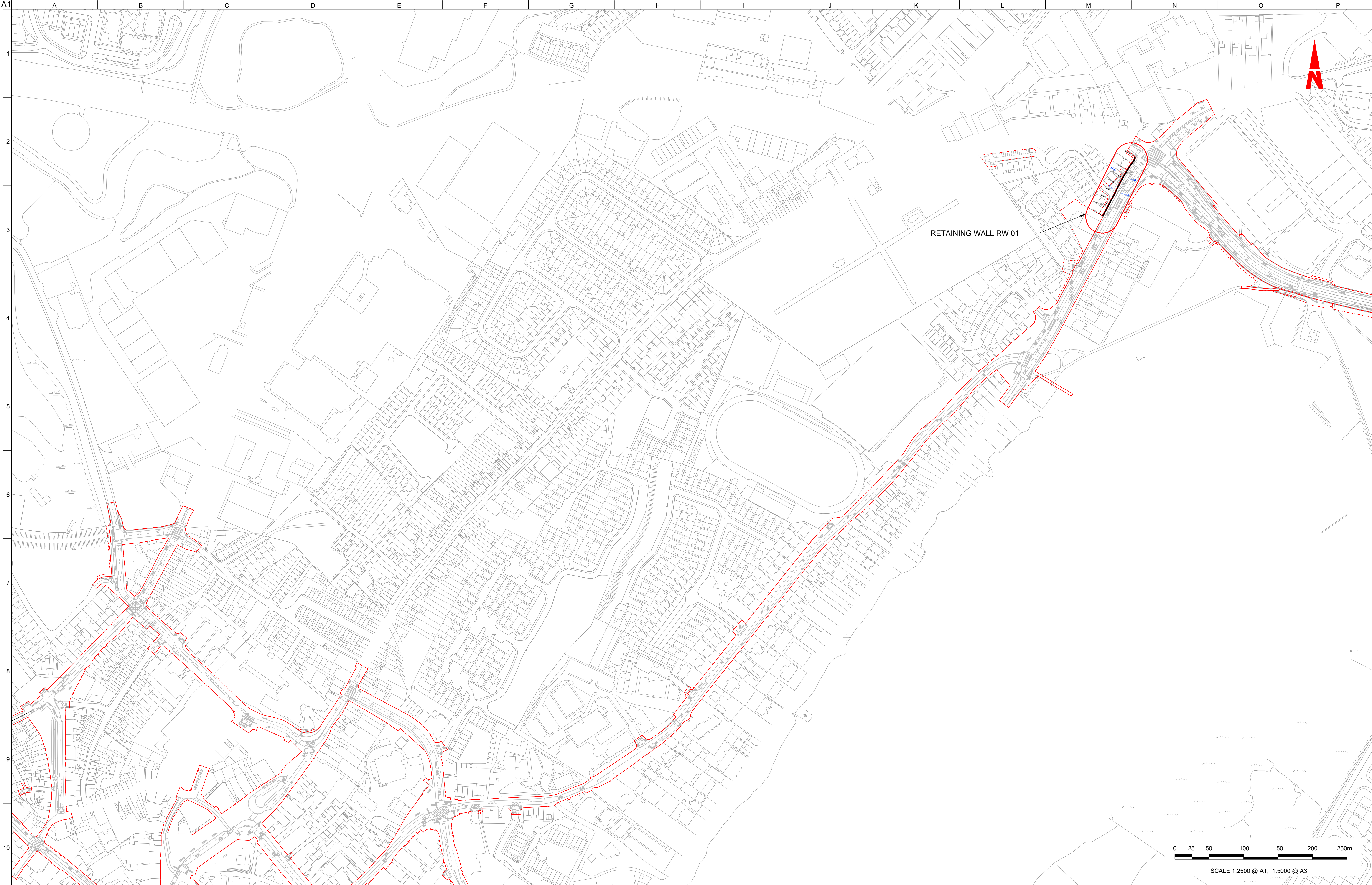


Retaining Walls







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Client  
**Galway City Council**

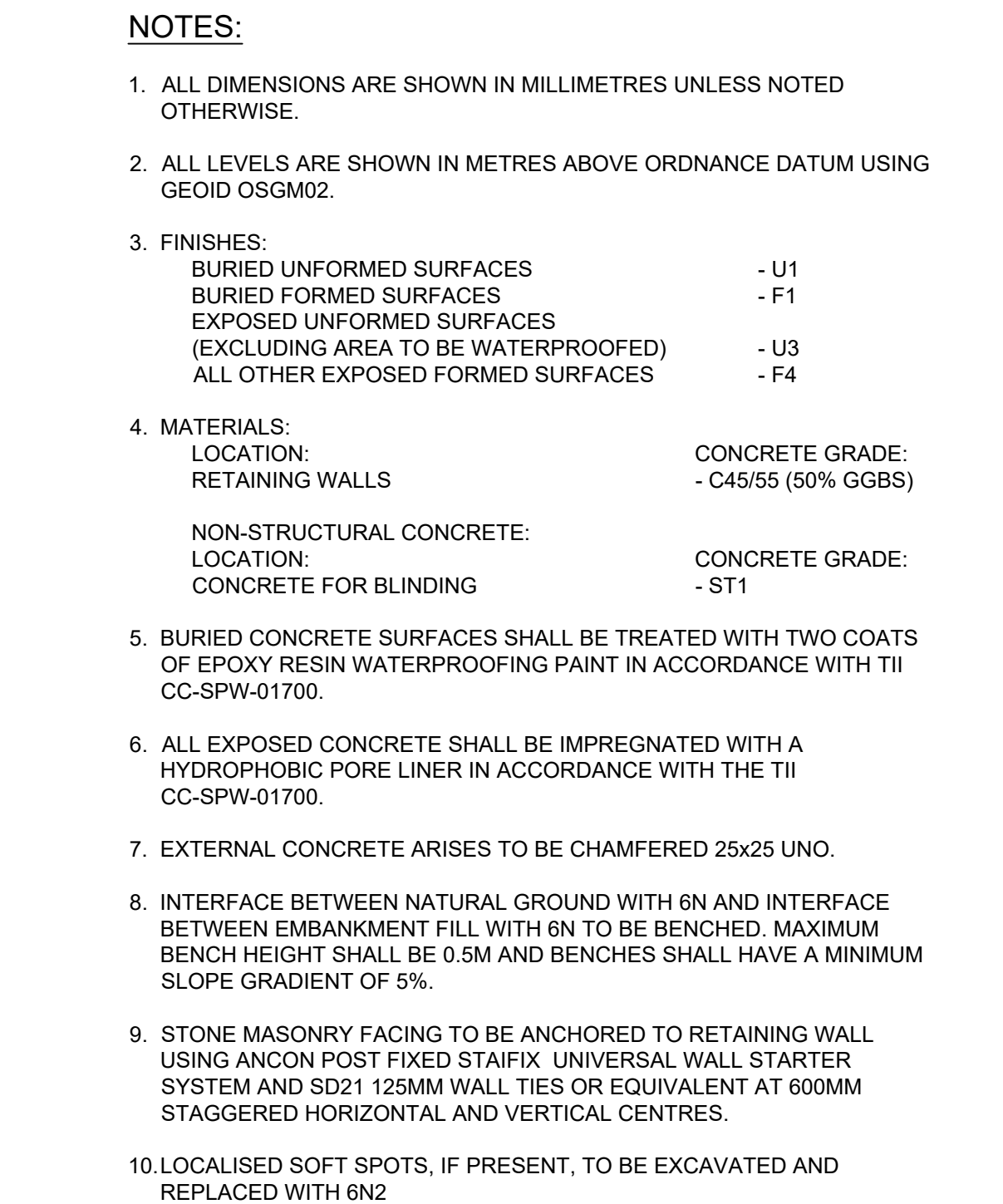
Project Title  
**BusConnects Galway:  
Cross-City Link  
(University Road to Dublin Road)**

Drawing Title  
**Retaining Wall RW 01  
Keyplan**









Scale at A1  
**1:2500 @ A1 (1:5000 @ A3)**

Role	Transport Infrastructure	Rev
Suitability	Planning	
Arup Job No	<b>253352-00</b>	<b>PL01</b>
Name	<b>BCG-RW-01-00</b>	

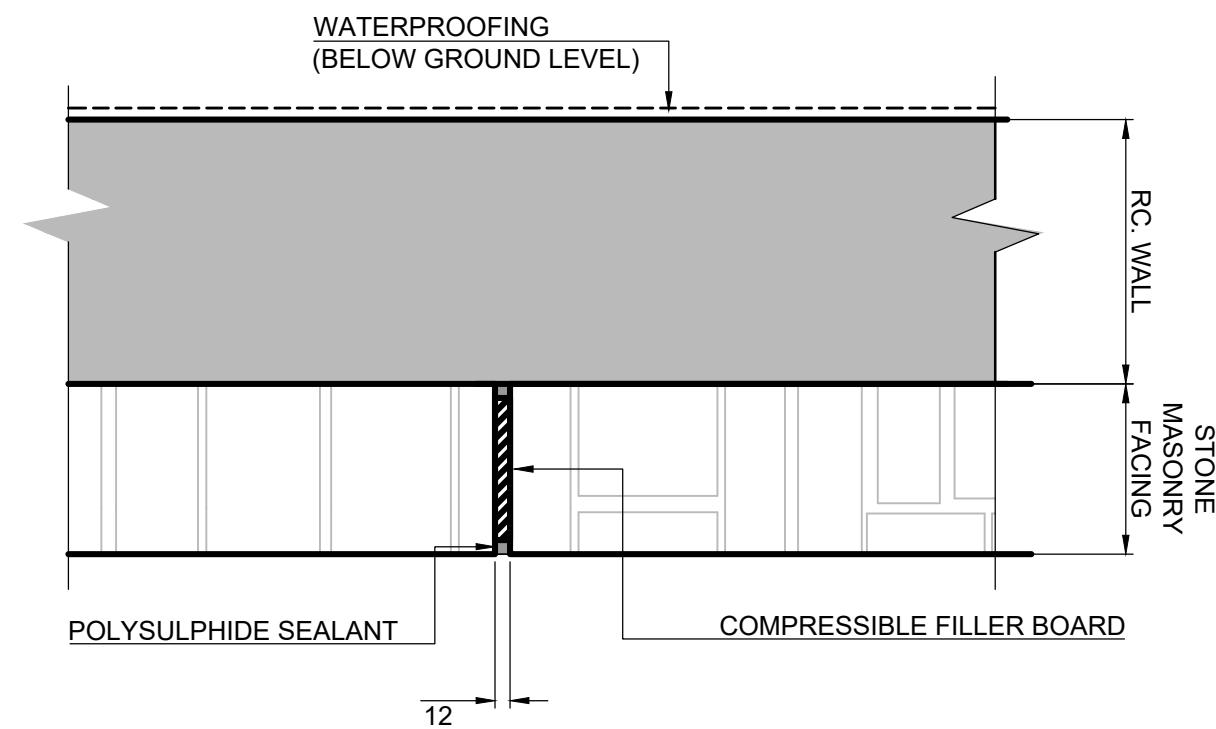
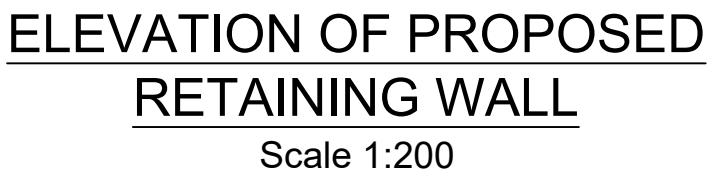




**LEGEND:**

	FW	FW	EXISTING FOUL WATER DRAINAGE
	CB	CB	EXISTING COMBINED NETWORK
	VM	VM	EXISTING VIRGIN MEDIA NETWORK
	ESB LV UG		EXISTING LV ELECTRICITY (UNDERGROUND)
	GNI LP	GNI LP	EXISTING LP GAS NETWORK
	SW	SW	EXISTING STORM WATER DRAINAGE
			SITE BOUNDARY LINE
			TEMPORARY LAND TAKE

**NOTE:** UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS



### TYPICAL MASONRY EXPANSION JOINT DETAIL

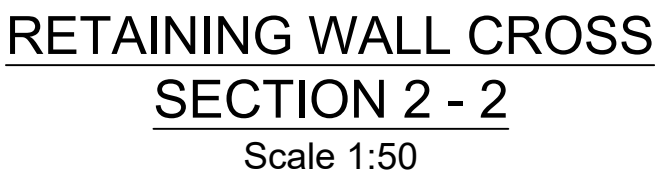
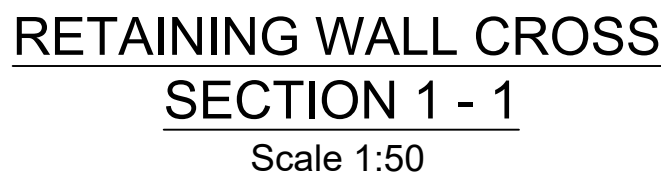
Scale 1:10

Do not scale

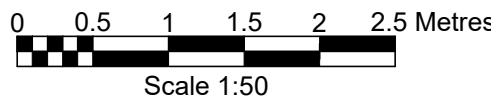
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© Arup






- NOTES:**
1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS NOTED OTHERWISE.
  2. ALL LEVELS ARE SHOWN IN METRES ABOVE ORDNANCE DATUM USING GEOID OSGM02.
  3. FINISHES:  
BURIED UNFORMED SURFACES - U1  
BURIED FORMED SURFACES - F1  
EXPOSED UNFORMED SURFACES  
(EXCLUDING AREA TO BE WATERPROOFED) - U3  
ALL OTHER EXPOSED FORMED SURFACES - F4
  4. MATERIALS:  
LOCATION: CONCRETE GRADE:  
RETAINING WALLS - C45/55 (50% GGBS)  
  
NON-STRUCTURAL CONCRETE:  
LOCATION: CONCRETE GRADE:  
CONCRETE FOR BLINDING - ST1
  5. BURIED CONCRETE SURFACES SHALL BE TREATED WITH TWO COATS OF EPOXY RESIN WATERPROOFING PAINT IN ACCORDANCE WITH TII CC-SPW-01700.
  6. ALL EXPOSED CONCRETE SHALL BE IMPREGNATED WITH A HYDROPHOBIC PORE LINER IN ACCORDANCE WITH THE TII CC-SPW-01700.
  7. EXTERNAL CONCRETE ARISES TO BE CHAMFERED 25x25 UNO.
  8. INTERFACE BETWEEN NATURAL GROUND WITH 6N AND INTERFACE BETWEEN EMBANKMENT FILL WITH 6N TO BE BENCHED. MAXIMUM BENCH HEIGHT SHALL BE 0.5M AND BENCHES SHALL HAVE A MINIMUM SLOPE GRADIENT OF 5%.
  9. STONE MASONRY FACING TO BE ANCHORED TO RETAINING WALL USING ANCON POST FIXED STAFIX UNIVERSAL WALL STARTER SYSTEM AND SD21 125MM WALL TIES OR EQUIVALENT AT 600MM STAGGERED HORIZONTAL AND VERTICAL CENTRES.
  10. LOCALISED SOFT SPOTS, IF PRESENT, TO BE EXCAVATED AND REPLACED WITH G2



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**NTA**  
**Údárás Náisiúnta Iompair**  
**National Transport Authority**

PL01	31/08/22	BM	BB	DMcD
Issue for Planning				
Rev	Date	By	Chkd	Appd

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Client

Galway City Council

The logo of Galway City Council, featuring a large stylized 'G' in maroon and gold, with the council's name in a circular arrangement around it.

Project Title

# BusConnects Galway: Cross-City Link (University Road to Dublin Road)




Drawing Title

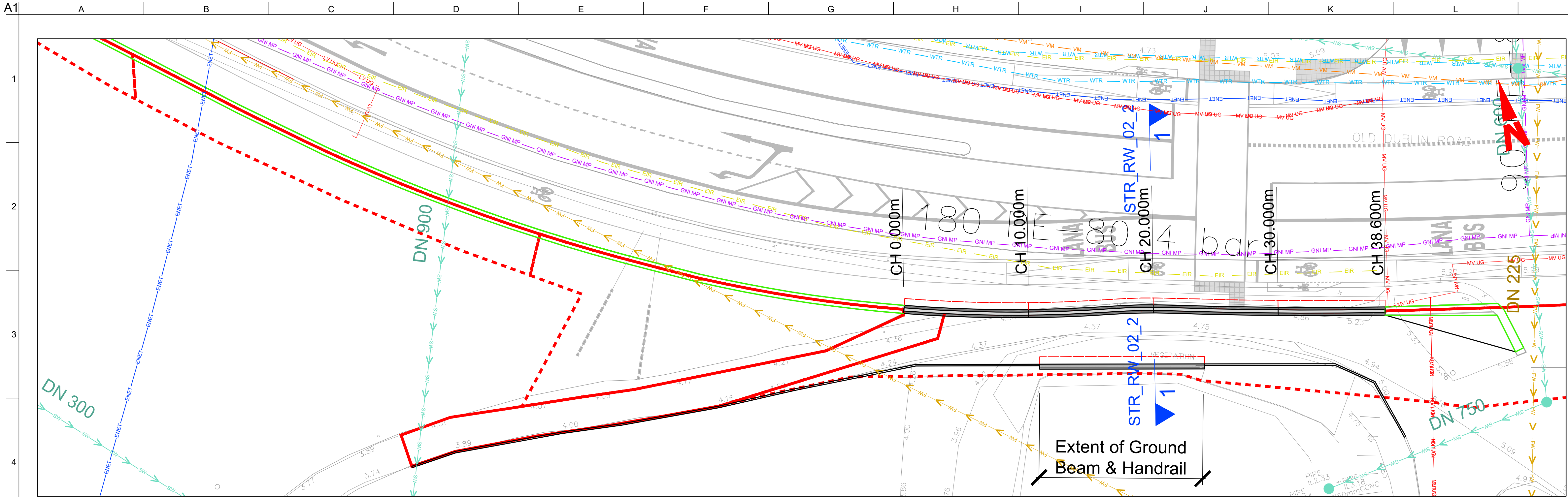
Retaining Wall 01  
Cross Sections

Scale at A1	1:50 @ A1 (1:100 @ A3)	
Role	Transport Infrastructure	
Suitability	Planning	
Arup Job No	253352-00	Rev PL01
Name BCG-RW-01-02		



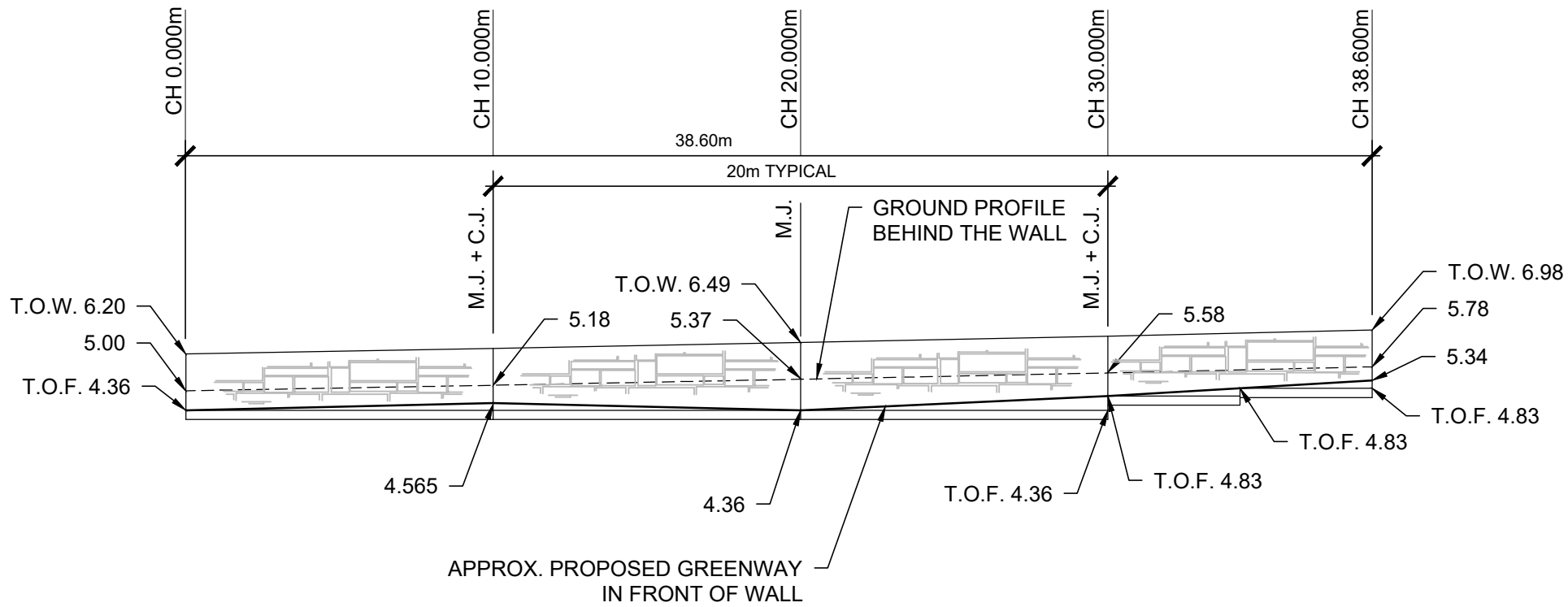
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<p></p>		<p></p> <p><b>Údaráis Náisiúnta Iompair</b> National Transport Authority</p>		<table><tr><td>PL01</td><td>31/08/22</td><td>BM</td><td>BB</td><td>DMcD</td></tr><tr><td colspan="5">Issue for Planning</td></tr><tr><td>Rev</td><td>Date</td><td>By</td><td>Chkd</td><td>Appd</td></tr></table>		PL01	31/08/22	BM	BB	DMcD	Issue for Planning					Rev	Date	By	Chkd	Appd	<p>Arup, One Albert Quay, Cork, T12 X8NG, Ireland Tel +353 (0)21 422 3200 Fax +353 (0)1 668 3169 www.arup.ie</p>		<p></p>			
PL01	31/08/22	BM	BB	DMcD																						
Issue for Planning																										
Rev	Date	By	Chkd	Appd																						





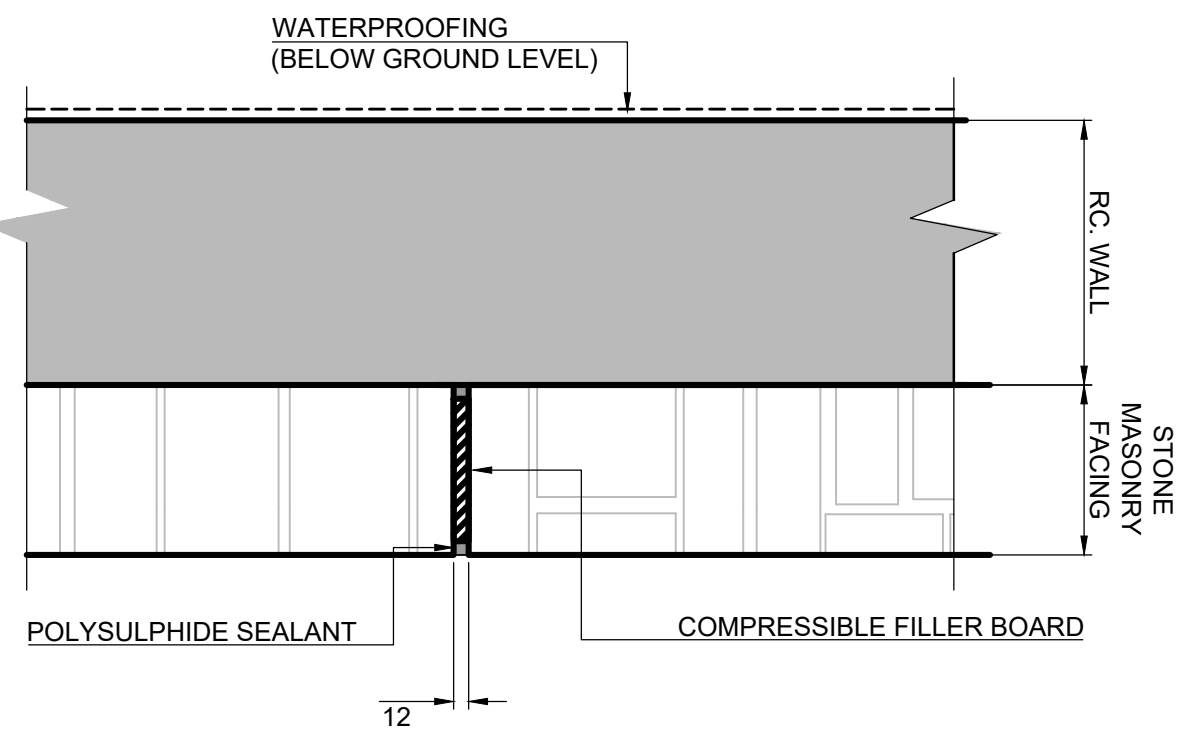
PLAN OF PROPOSED  
RETAINING WALL RW02

Scale 1:200



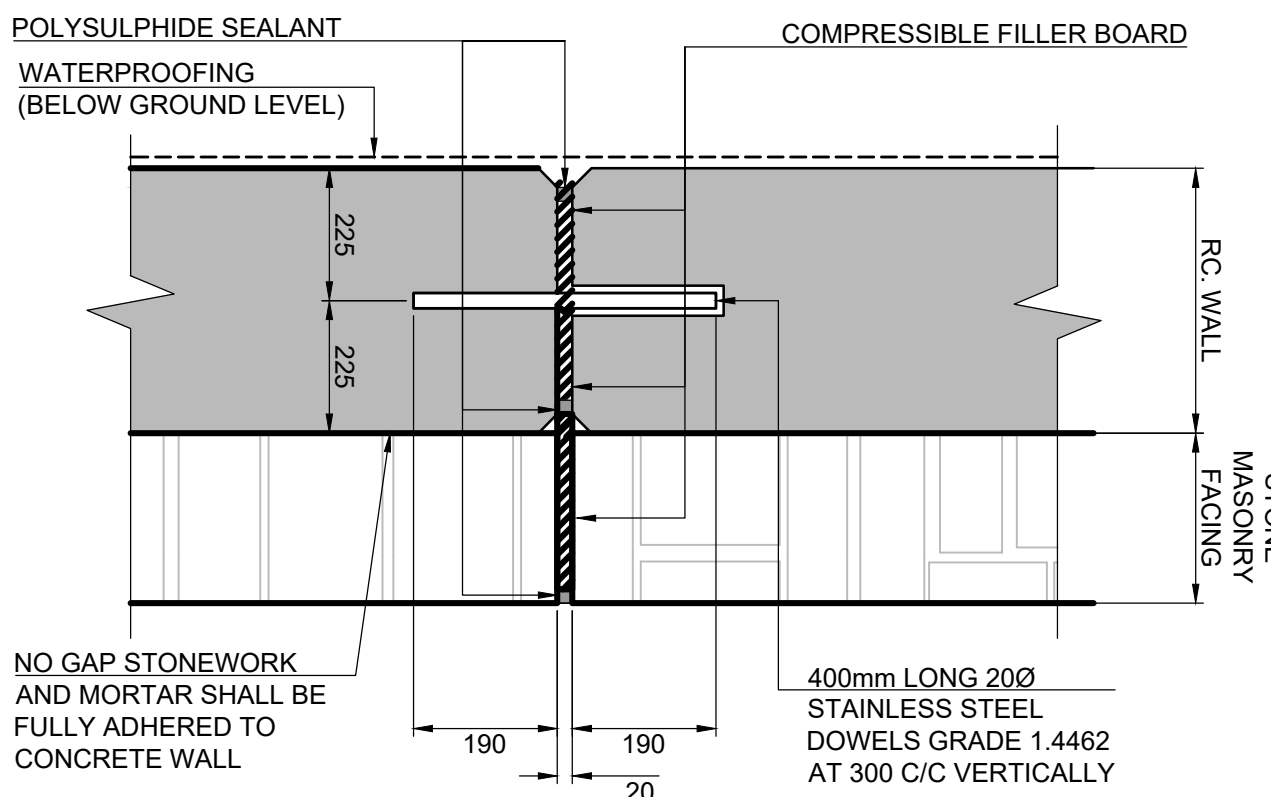
ELEVATION OF PROPOSED  
RETAINING WALL RW02

Scale 1:200



TYPICAL MASONRY EXPANSION  
JOINT DETAIL

Scale 1:10



TYPICAL RC WALL AND  
MASONRY EXPANSION JOINT DETAIL

Scale 1:10

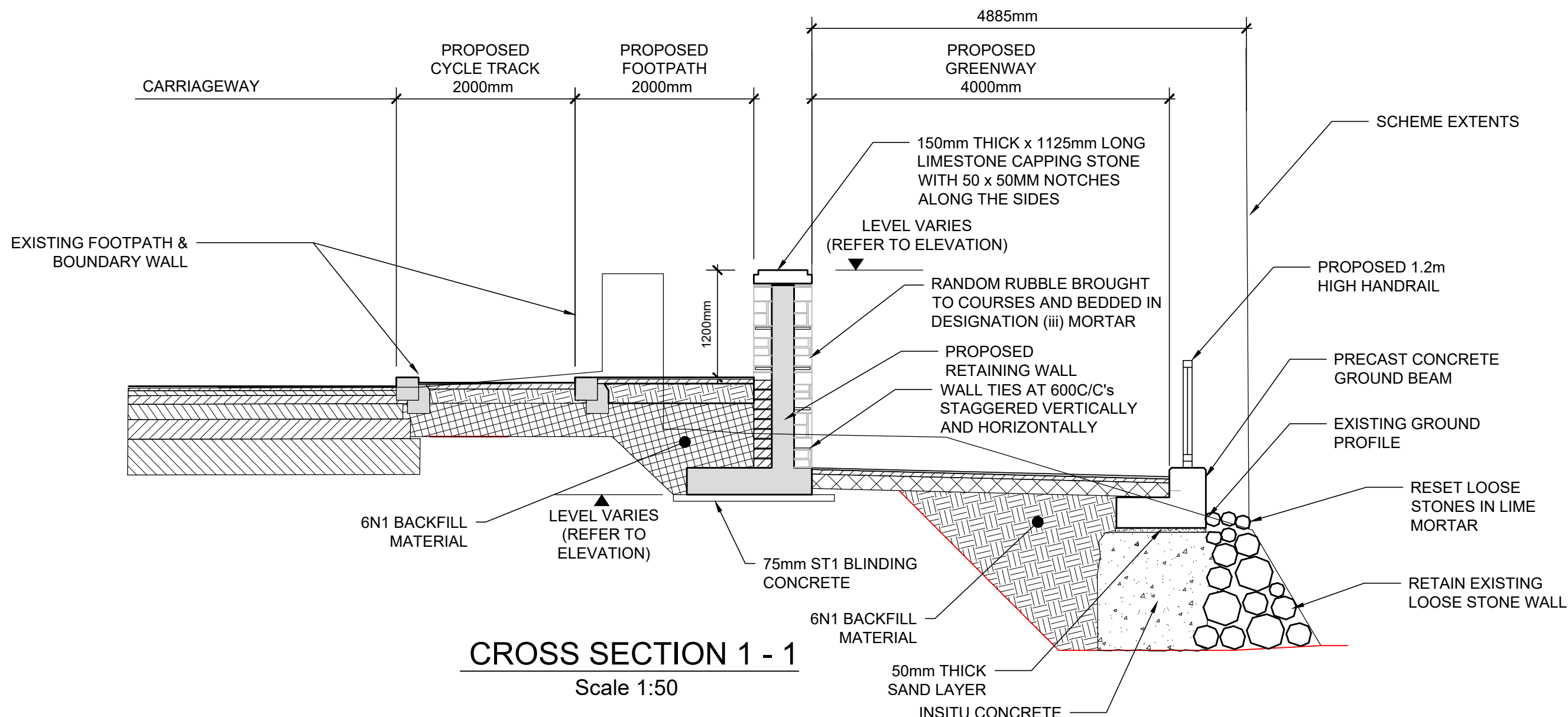
NOTES:

- ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE SHOWN IN METRES ABOVE ORDNANCE DATUM USING GEOID OSGM02.
- FINISHES:
  - BURIED UNFORMED SURFACES - U1
  - BURIED FORMED SURFACES - F1
  - EXPOSED UNFORMED SURFACES (EXCLUDING AREA TO BE WATERPROOFED) - U3
  - ALL OTHER EXPOSED FORMED SURFACES - F4
- MATERIALS:
  - LOCATION: CONCRETE GRADE: - C45/55 (50% GGBS)
  - RETAINING WALLS
  - NON-STRUCTURAL CONCRETE: CONCRETE GRADE: - ST1
  - LOCATION: CONCRETE FOR BLINDING
- BURIED CONCRETE SURFACES SHALL BE TREATED WITH TWO COATS OF EPOXY RESIN WATERPROOFING PAINT IN ACCORDANCE WITH TII CC-SPW-01700.
- ALL EXPOSED CONCRETE SHALL BE IMPREGNATED WITH A HYDROPHOBIC PORE LINER IN ACCORDANCE WITH THE TII CC-SPW-01700.
- EXTERNAL CONCRETE ARISES TO BE CHAMFERED 25x25 UNO.
- INTERFACE BETWEEN NATURAL GROUND WITH 6N AND INTERFACE BETWEEN EMBANKMENT FILL WITH 6N TO BE BENCHED. MAXIMUM BENCH HEIGHT SHALL BE 0.5M AND BENCHES SHALL HAVE A MINIMUM SLOPE GRADIENT OF 5%.
- STONE MASONRY FACING TO BE ANCHORED TO RETAINING WALL USING ANCON POST FIXED STAFFIX UNIVERSAL WALL STARTER SYSTEM AND SD21 125MM WALL TIES OR EQUIVALENT AT 600MM STAGGERED HORIZONTAL AND VERTICAL CENTRES.
- LOCALISED SOFT SPOTS, IF PRESENT, TO BE EXCAVATED AND REPLACED WITH 6N2

LEGEND:

- FW -> FW -> EXISTING FOUL WATER DRAINAGE
- CB -> CB -> EXISTING COMBINED NETWORK
- VM -> VM -> EXISTING VIRGIN MEDIA NETWORK
- ESB LV UG -> ESB LV UG -> EXISTING LV ELECTRICITY (UNDERGROUND)
- GNI LP -> GNI LP -> EXISTING LP GAS NETWORK
- SW -> SW -> EXISTING STORM WATER DRAINAGE
- SITE BOUNDARY LINE
- - - - - TEMPORARY LAND TAKE

NOTE: UTILITY LOCATIONS ARE INDICATIVE ONLY AND BASED ON UTILITY PROVIDER RECORDS



CROSS SECTION 1 - 1

Scale 1:50

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National Transport Authority

PL01	31/08/22	BM	BB	DMcD
Issue for Planning				
Rev	Date	By	Chkd	Appd

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www.arup.ie

Client  
Galway City Council



Project Title  
BusConnects Galway:  
Cross-City Link  
(University Road to Dublin Road)

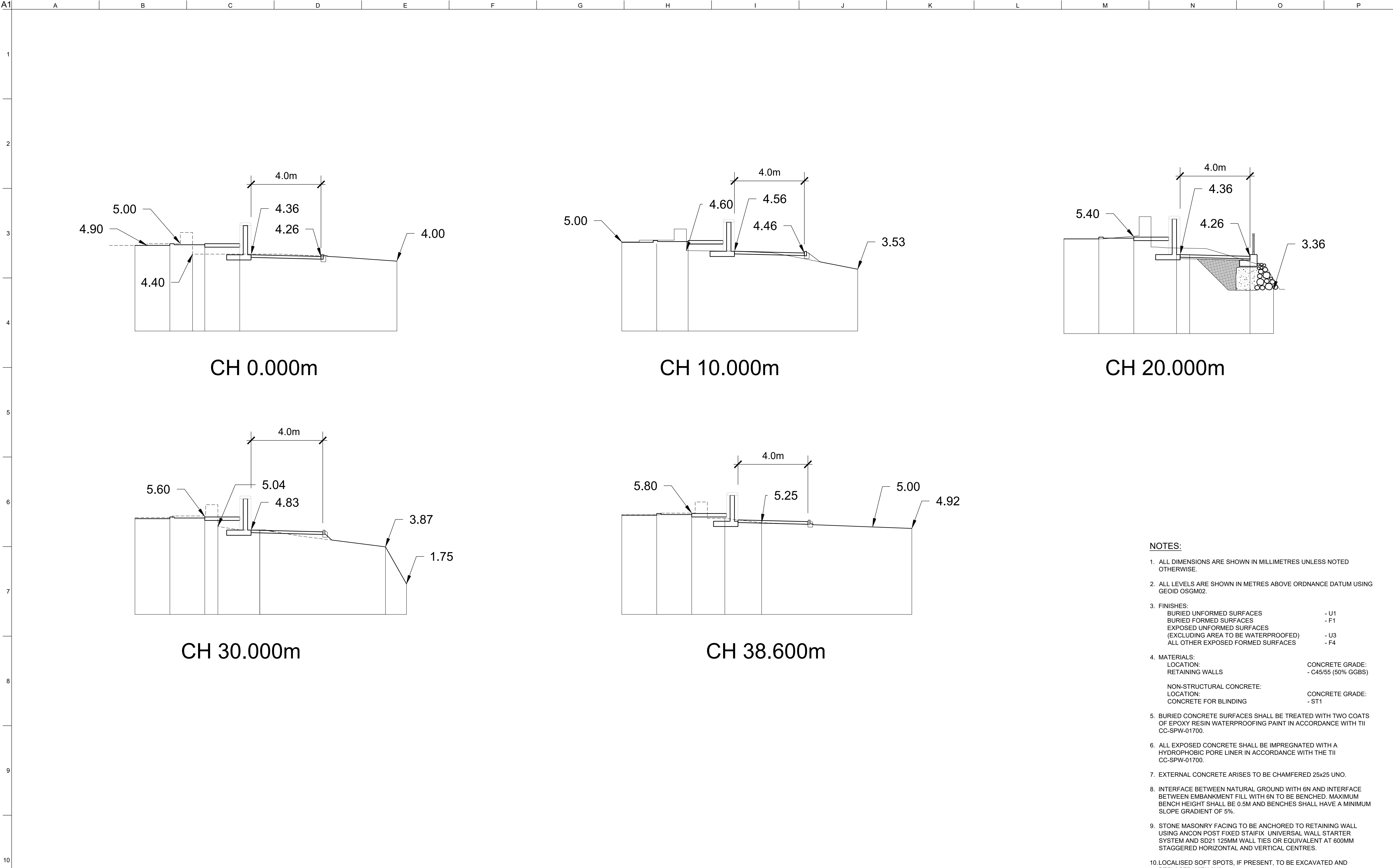


Drawing Title  
Retaining Wall RW02  
General Arrangement

Scale at A1  
As Shown

Role	Transport Infrastructure
Suitability	Planning
Arup Job No	253352-00
Name	BCG-RW-02-01
Rev	PL01





- NOTES:**
- ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS NOTED OTHERWISE.
  - ALL LEVELS ARE SHOWN IN METRES ABOVE ORDNANCE DATUM USING GEOID OSGM02.
  - FINISHES:
    - BURIED UNFORMED SURFACES - U1
    - BURIED FORMED SURFACES - F1
    - EXPOSED UNFORMED SURFACES (EXCLUDING AREA TO BE WATERPROOFED) - U3
    - ALL OTHER EXPOSED FORMED SURFACES - F4
  - MATERIALS:
    - LOCATION: CONCRETE GRADE: - C45/55 (50% GGBS)
    - RETAINING WALLS
    - NON-STRUCTURAL CONCRETE: CONCRETE GRADE: - ST1
    - LOCATION: CONCRETE FOR BLINDING
  - BURIED CONCRETE SURFACES SHALL BE TREATED WITH TWO COATS OF EPOXY RESIN WATERPROOFING PAINT IN ACCORDANCE WITH TII CC-SPW-01700.
  - ALL EXPOSED CONCRETE SHALL BE IMPREGNATED WITH A HYDROPHOBIC PORE LINER IN ACCORDANCE WITH THE TII CC-SPW-01700.
  - EXTERNAL CONCRETE ARISES TO BE CHAMFERED 25x25 UNO.
  - INTERFACE BETWEEN NATURAL GROUND WITH 6N AND INTERFACE BETWEEN EMBANKMENT FILL WITH 6N TO BE BENCHED. MAXIMUM BENCH HEIGHT SHALL BE 0.5M AND BENCHES SHALL HAVE A MINIMUM SLOPE GRADIENT OF 5%.
  - STONE MASONRY FACING TO BE ANCHORED TO RETAINING WALL USING ANCON POST FIXED STAIFIX UNIVERSAL WALL STARTER SYSTEM AND SD21 125MM WALL TIES OR EQUIVALENT AT 600MM STAGGERED HORIZONTAL AND VERTICAL CENTRES.
  - LOCALISED SOFT SPOTS, IF PRESENT, TO BE EXCAVATED AND REPLACED WITH 6N2

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www.arup.ie

Client  
**Galway City Council**

Project Title  
**BusConnects Galway:  
Cross-City Link  
(University Road to Dublin Road)**

Drawing Title  
**Retaining Wall RW02  
Typical Cross Sections**

Scale at A1  
**1:100 @ A1 ( 1:200 @ A3)**

Role	Transport Infrastructure	
Suitability	Planning	
Arup Job No	<b>253352-00</b>	Rev
Name	<b>BCG-RW-02-02</b>	
		<b>PL01</b>