



Appendix II
Proposed Surface Water
Drainage Works Drawings



BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS

KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME

PROPOSED SURFACE WATER DRAINAGE WORKS

DRAWING SERIES NUMBER(S)	DRAWING SERIES DESCRIPTION
BDIDD-ROT-DNG_IX-0011_XX_00-DR-CU-0001	KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS. COVER SHEET
BCIDD-ROT-DNG_KP-0011_XX_00-DR-CD-0001	KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS. KEY PLAN
BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0001 to 0014	KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME. PROPOSED SURFACE WATER DRAINAGE WORKS. DRAWINGS
BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-1001 to 1002	KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME. OVERALL CATCHMENT AREAS

\\vodubp1\1\2019\1917\1917-02_WIP\08 MODELS\01 CAD\01 PLANNING\11 KIMMAGE\COVER SHEETS\BCIDD-ROT-DNG_IX-0011_XX_00-DR-CU-0001.dwg

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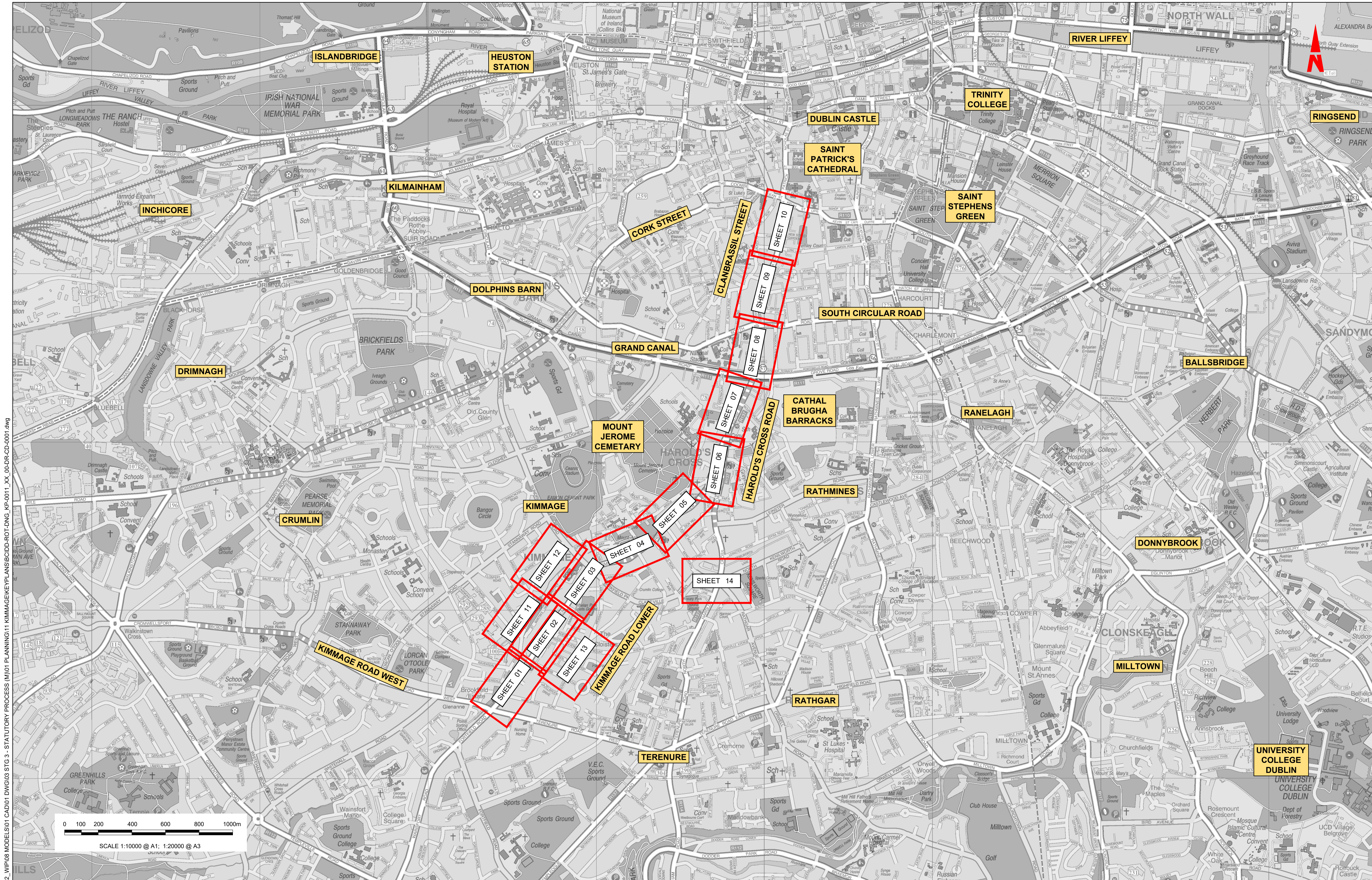


Rev	Date	Drn	Chk'd	App'd	Description
M01	FEB 2023	CG	SMG	SMG	ISSUE FOR PHASE 4: PLANNING

Client NTA Údarás Náisiúnta Iompair National Transport Authority		Engineering Designer ROD RUGHAN & O'DONOVAN TYP SA		
Date FEB 2023	Scale NTS @ A1 NTS @ A3	Drawn CG	Checked SMG	Approved SMG
Programme Code BCIDD	Originator Code ROT	QMS Code		

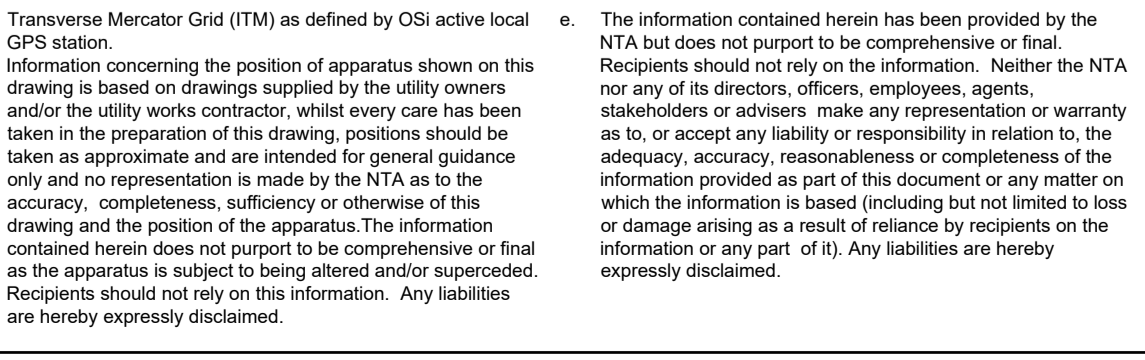
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Drawing Title KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS COVER SHEET				
Drawing File Name BCIDD-ROT-DNG_IX-0011_XX_00-DR-CU-0001	Sheet Number 01 of 01	Status A	Rev M01	

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Client
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 National Transport Authority

Engineering Designer
CIROD
 TYPSA

Date	Scale	Drawn	Checked	Approved
FEB 2023	1:10,000 @ A1 1:20,000 @ A3	CG	SMG	SMG

Programme Title
BUSCONNECTS DUBLIN
CORE BUS CORRIDORS INFRASTRUCTURE WORKS

Drawing Title
 KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME
 PROPOSED SURFACE WATER DRAINAGE WORKS
 KEYPLAN

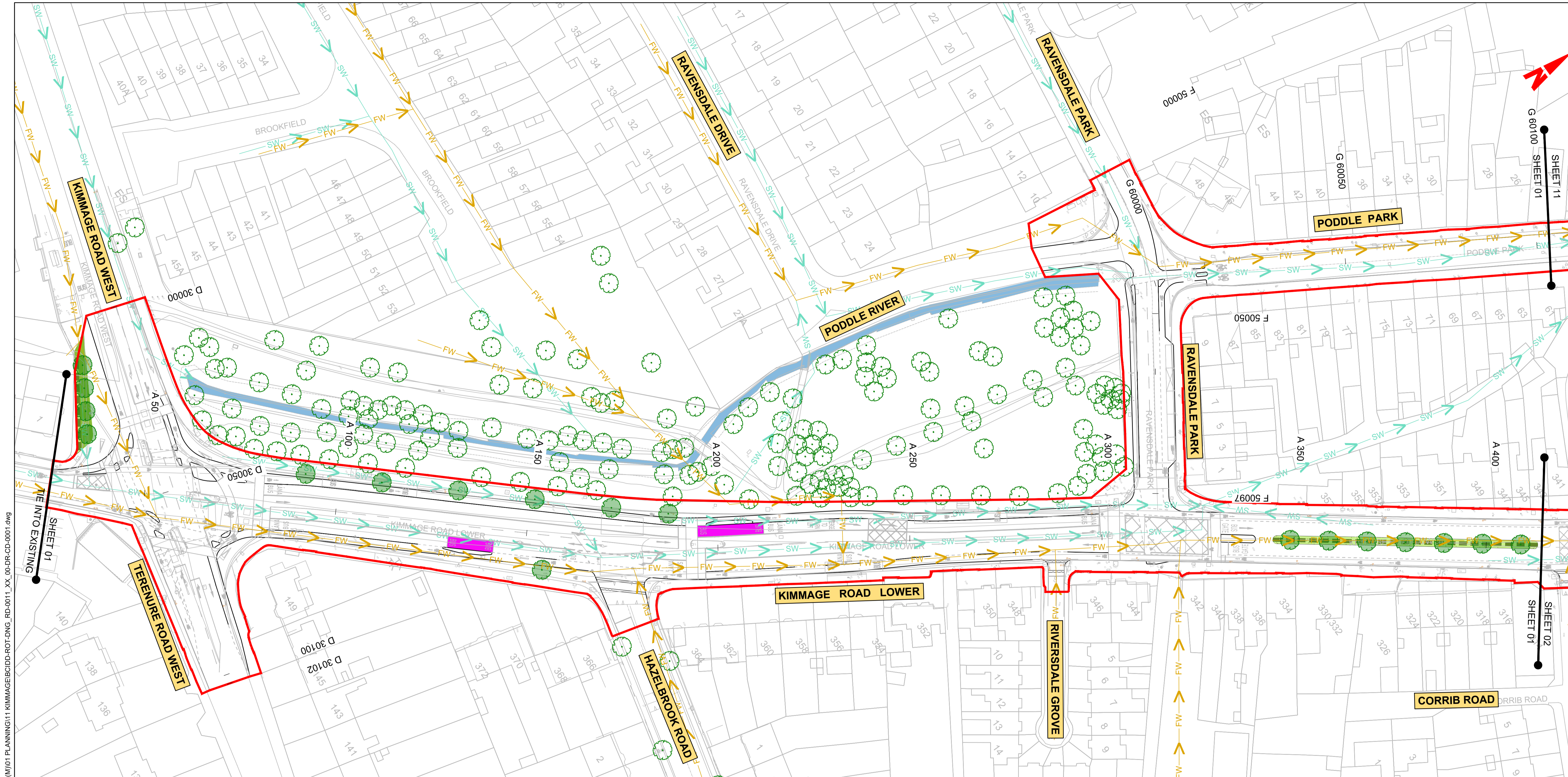
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Sheet Number
 01 of 01

Status
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Rev
 M01

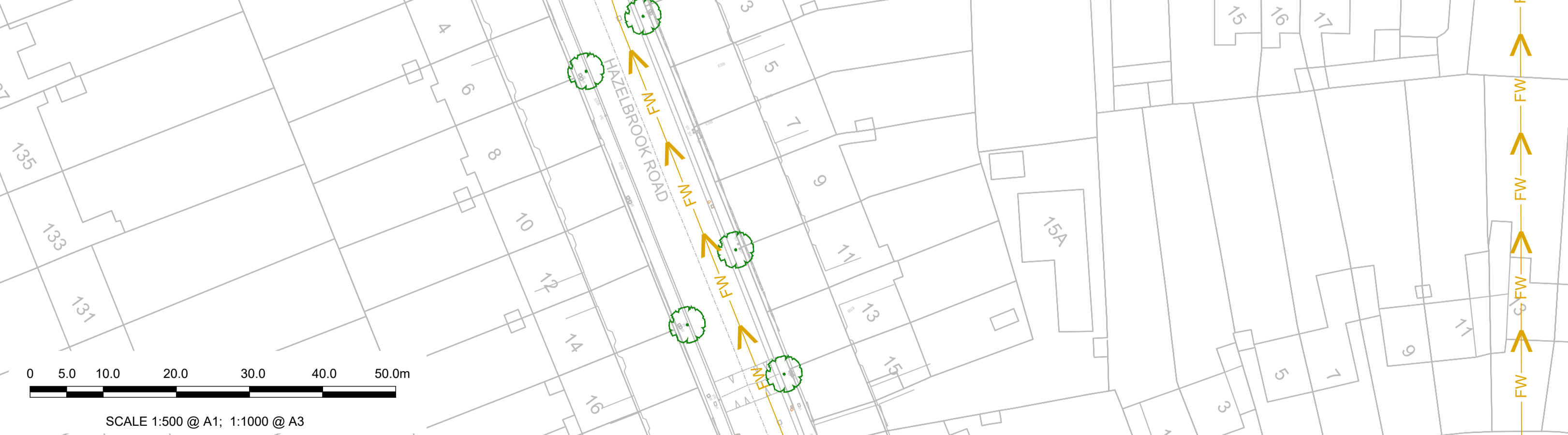
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LEGEND:

	ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)		PROPOSED RODDING EYE
	EXISTING PAVED AREAS TO BECOME GRASSED		PROPOSED MANHOLE
	EXISTING GRASSED AREAS TO BE MAINTAINED		PROPOSED INSPECTION CHAMBER
	EXISTING FOUL NETWORK		EXISTING TREE
	EXISTING COMBINED DRAINAGE NETWORK		EXISTING TREE TO BE REMOVED
	EXISTING SURFACE WATER NETWORK		PROPOSED NEW TREE
	EXISTING OVERFLOW PIPE		PROPOSED NEW TREE PIT
	SURFACE WATER PIPE - UNDER CONSTRUCTION		PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
	PROPOSED STORM WATER PIPE		EXISTING GULLY
	PROPOSED OVERSIZED PIPE		SITE BOUNDARY LINE
	PROPOSED FILTER DRAIN/PERFORATED PIPE		TEMPORARY LAND ACQUISITION
	PROPOSED PERMEABLE PAVING		

NOTE: PIPE SHAPE CODING DN = CIRCULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.



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 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND SPECIFICATIONS.
 - STORMWATER DRAINAGE TO BE CONSTRUCTED IN ACCORDANCE WITH THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS AND/OR THE DRAINAGE DESIGN BASIS REPORT FOR CBC BUSCONNECTS.
 - ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (MALIN HEAD DATUM). SURVEY GRID AND ALL COORDINATES ARE IN IRISH TRANSVERSE MERCATOR.
 - EXISTING DRAINAGE NETWORK BASED ON RECORDS FROM IRISH WATER. PHYSICAL DRAINAGE INVESTIGATIONS MIGHT BE REQUIRED AT DETAILED DESIGN STAGE TO CONFIRM DETAILS OF EXISTING DRAINAGE ALONG THE ROUTE, THE SIZE, NUMBER, DEPTH, AND LOCATION ETC. OF EACH DRAINAGE INFRASTRUCTURE ELEMENT PRESENT ALONG THE ROUTE.
 - EXISTING MANHOLE COVERS TO BE ADJUSTED TO MATCH FINISHED SURFACE.
 - ALL THE EXISTING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED ROAD WILL BE DEMOLISHED, REPLACED BY SPLIT GULLIES AND RELOCATED AT THE PROPOSED ROAD KERBLINE.
 - ALL THE EXISTING GULLY CONNECTIONS TO BE MAINTAINED WHERE POSSIBLE.
 - NEW SPLIT GULLIES AND CONNECTIONS WILL BE REQUIRED. NO. OF AND SPACING TO BE DETERMINED DURING DETAILED DESIGN.
 - 2NO. OF GULLIES TO BE PROVIDED AT LOW POINTS AND AT LEAST ONE GULLY TO BE PROVIDED IMMEDIATELY UPSTREAM OF PEDESTRIAN CROSSINGS.
 - ALL SUDS FEATURES WILL PROVIDE ATTENUATION AND SURFACE WATER QUALITY TREATMENT
 - 'NET IMPERMEABLE AREA TO BE ATTENUATED' HAS PERMEABILITY FACTORS APPLIED.
- ABBREVIATIONS:**
- ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION

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

Engineering Designer: **CIROD**
TYPSA

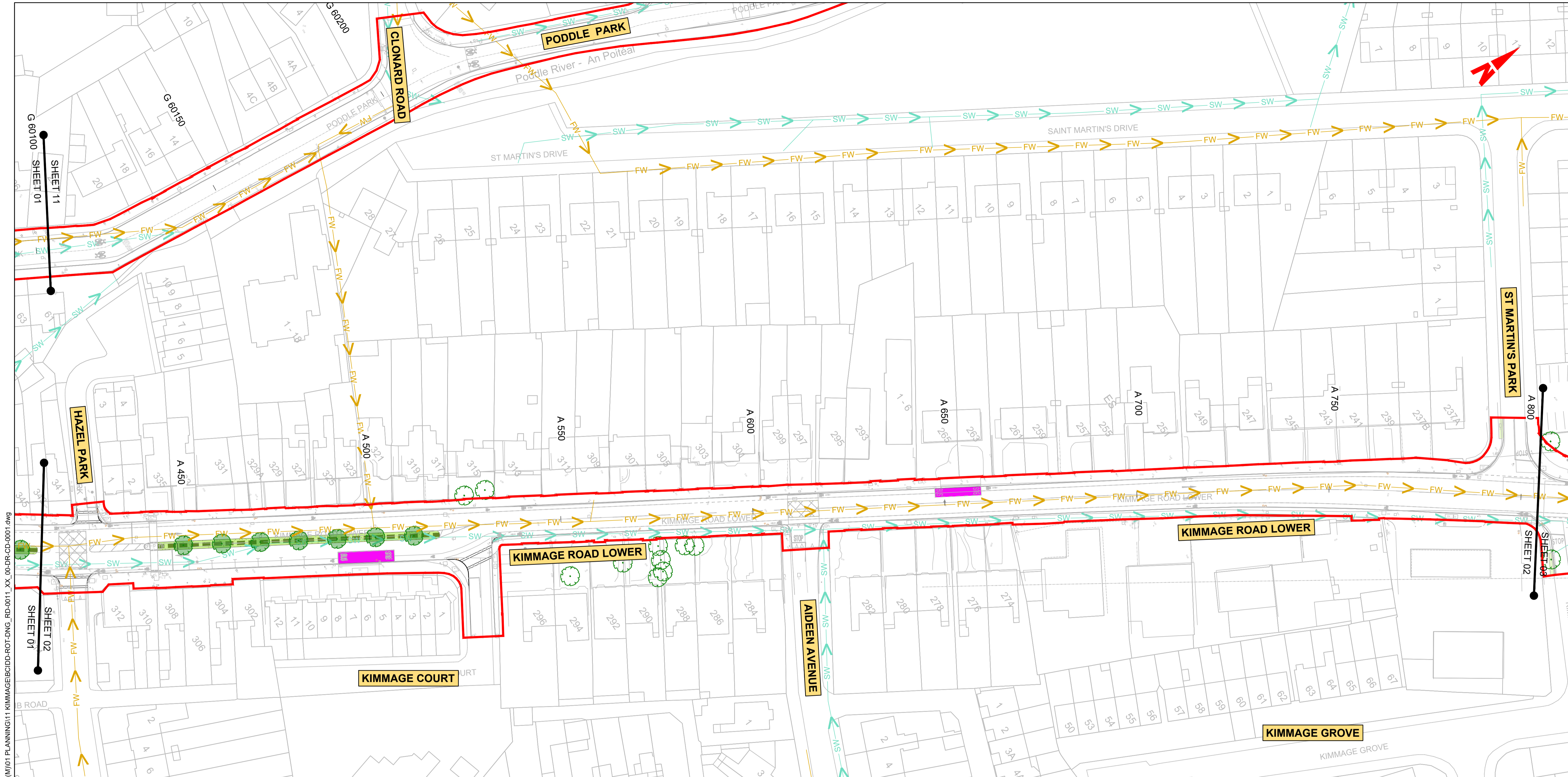
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1:1000 @ A3

Drawn: DS
Checked: LS
Approved: SMG

Programme Code: BCIDD
Originator Code: ROT

QMS Code:

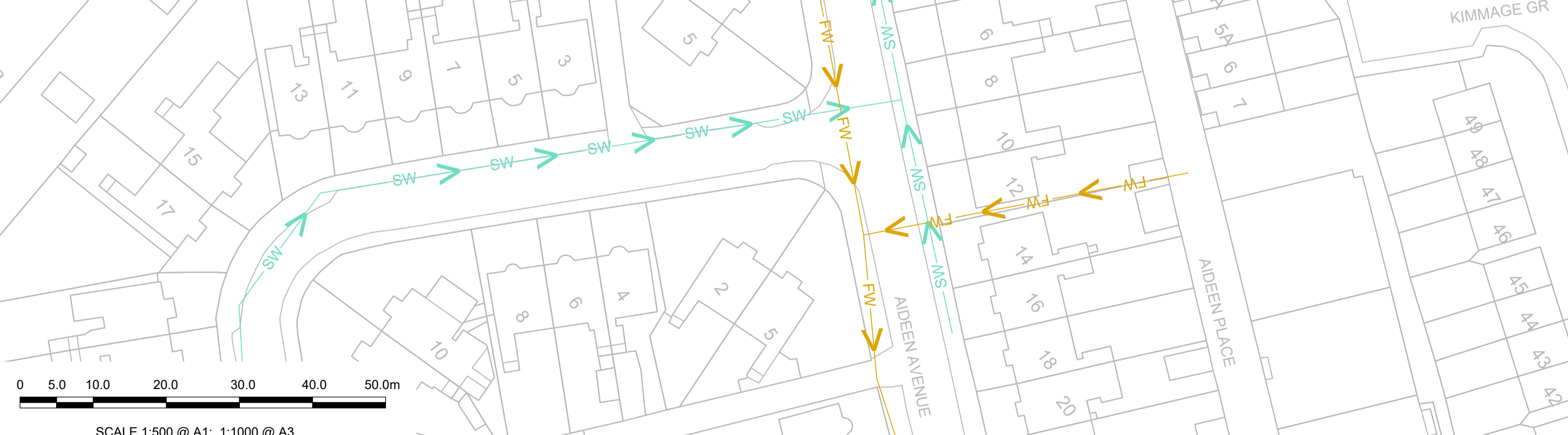
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Drawing Title: KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS			
Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0001	Sheet Number: 01 of 14	Status: A	Rev: M01



LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED DRAINAGE NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- SURFACE WATER PIPE - UNDER CONSTRUCTION
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
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ABBREVIATIONS:
 ADR: ALLOWABLE DISCHARGE RATE
 Vol_{att}: VOLUME OF ATTENUATION

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 National Transport Authority

Engineering Designer: **CIROD**
 TYPSA

Date: FEB 2023
 Scale: 1:500 @ A1
 1:1000 @ A3

Drawn: DS
 Checked: LS
 Approved: SMG

Programme Code: BCIDD
 Originator Code: ROT
 QMS Code:

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS			
Drawing File Name BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0002	Sheet Number 02 of 14	Status A	Rev M01

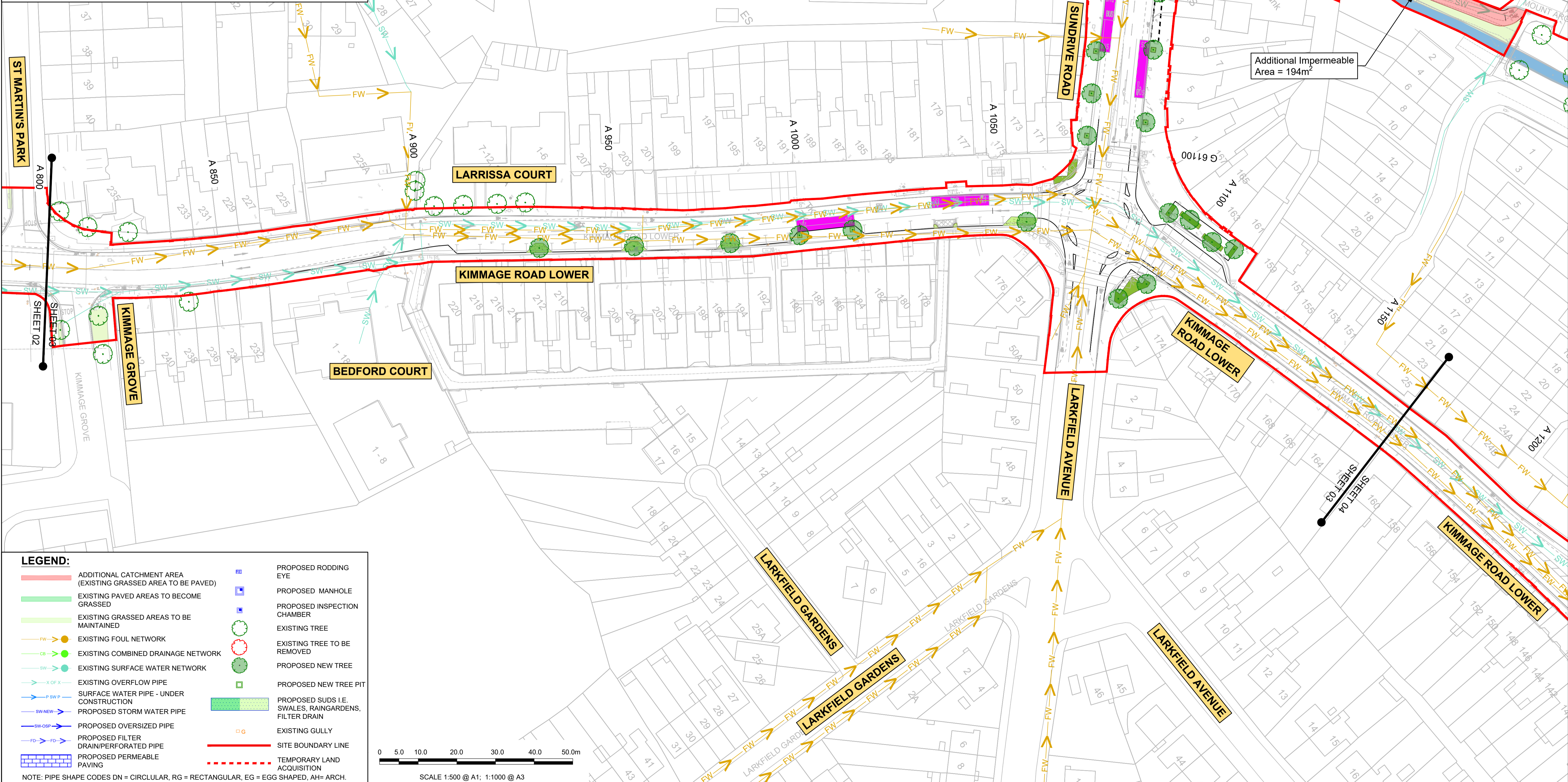
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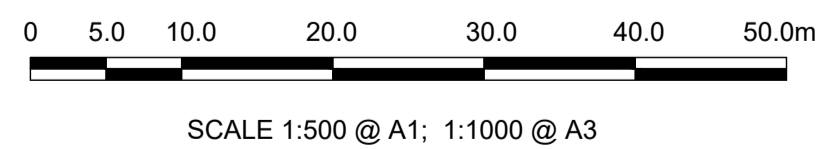
ABBREVIATIONS:

ADR: ALLOWABLE DISCHARGE RATE
Vol_{att}: VOLUME OF ATTENUATION



LEGEND:

- | | | | |
|--|---|--|--|
| | ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED) | | PROPOSED RODDING EYE |
| | EXISTING PAVED AREAS TO BECOME GRASSED | | PROPOSED MANHOLE |
| | EXISTING GRASSED AREAS TO BE MAINTAINED | | PROPOSED INSPECTION CHAMBER |
| | EXISTING FOUL NETWORK | | EXISTING TREE |
| | EXISTING COMBINED DRAINAGE NETWORK | | EXISTING TREE TO BE REMOVED |
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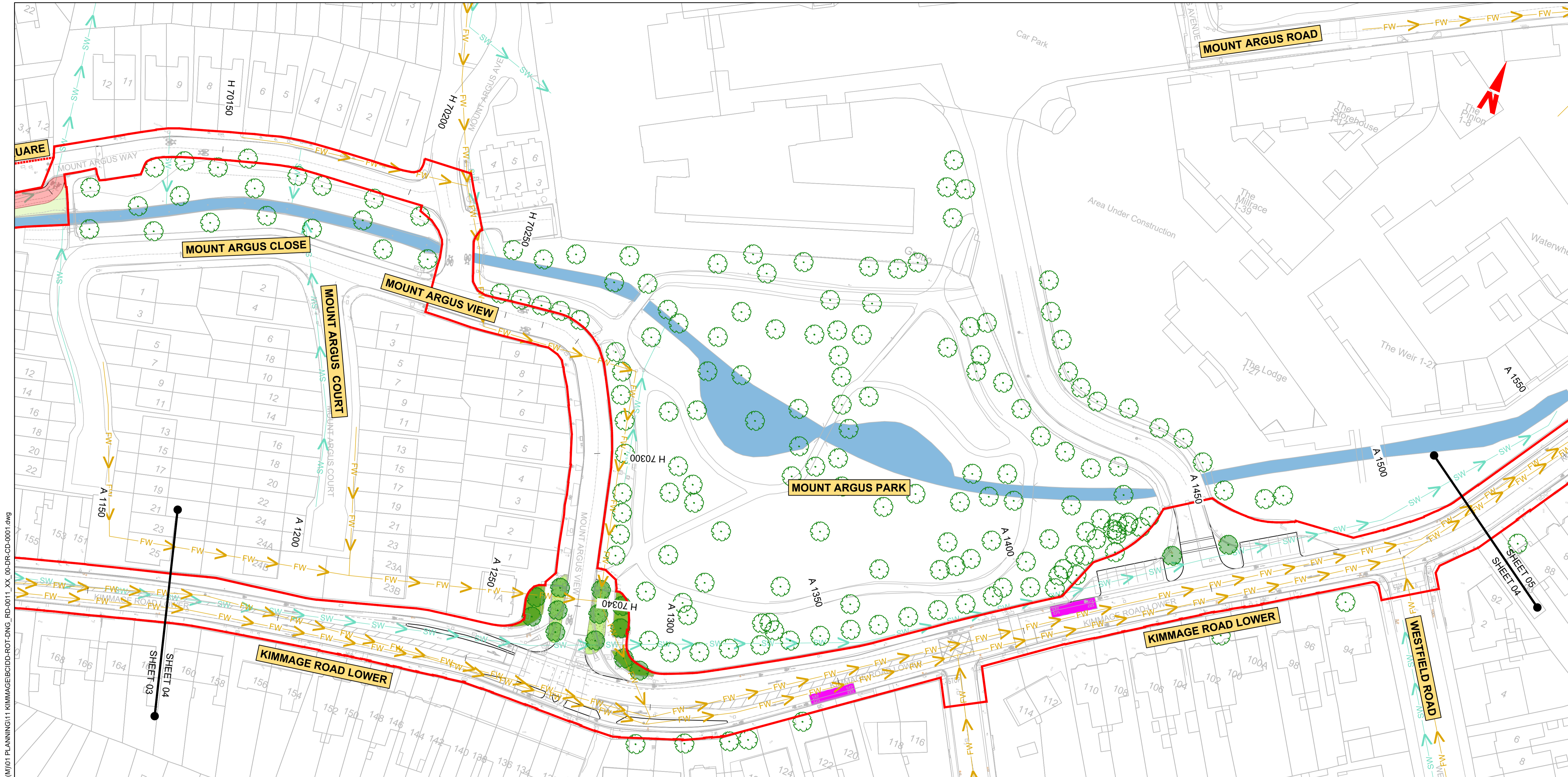
Engineering Designer: **CIROD**
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Date: FEB 2023
 Scale: 1:500 @ A1, 1:1000 @ A3
 Programme Code: BCIDD
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Drawn: DS
 Checked: LS
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Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0003	Sheet Number: 03 of 14	Status: A	Rev: M01

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ABBREVIATIONS:

ADR = ALLOWABLE DISCHARGE RATE
Vol_{att} = VOLUME OF ATTENUATION

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Rev	Date	Drn	Chk'd	App'd	Description
M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

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

Engineering Designer: **CIROD**
TYPSA

Date: FEB 2023
Scale: 1:500 @ A1
1:1000 @ A3

Programme Code: BCIDD
Originator Code: ROT

Drawn: DS
Checked: LS
Approved: SMG

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

Drawing Title: **KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS**

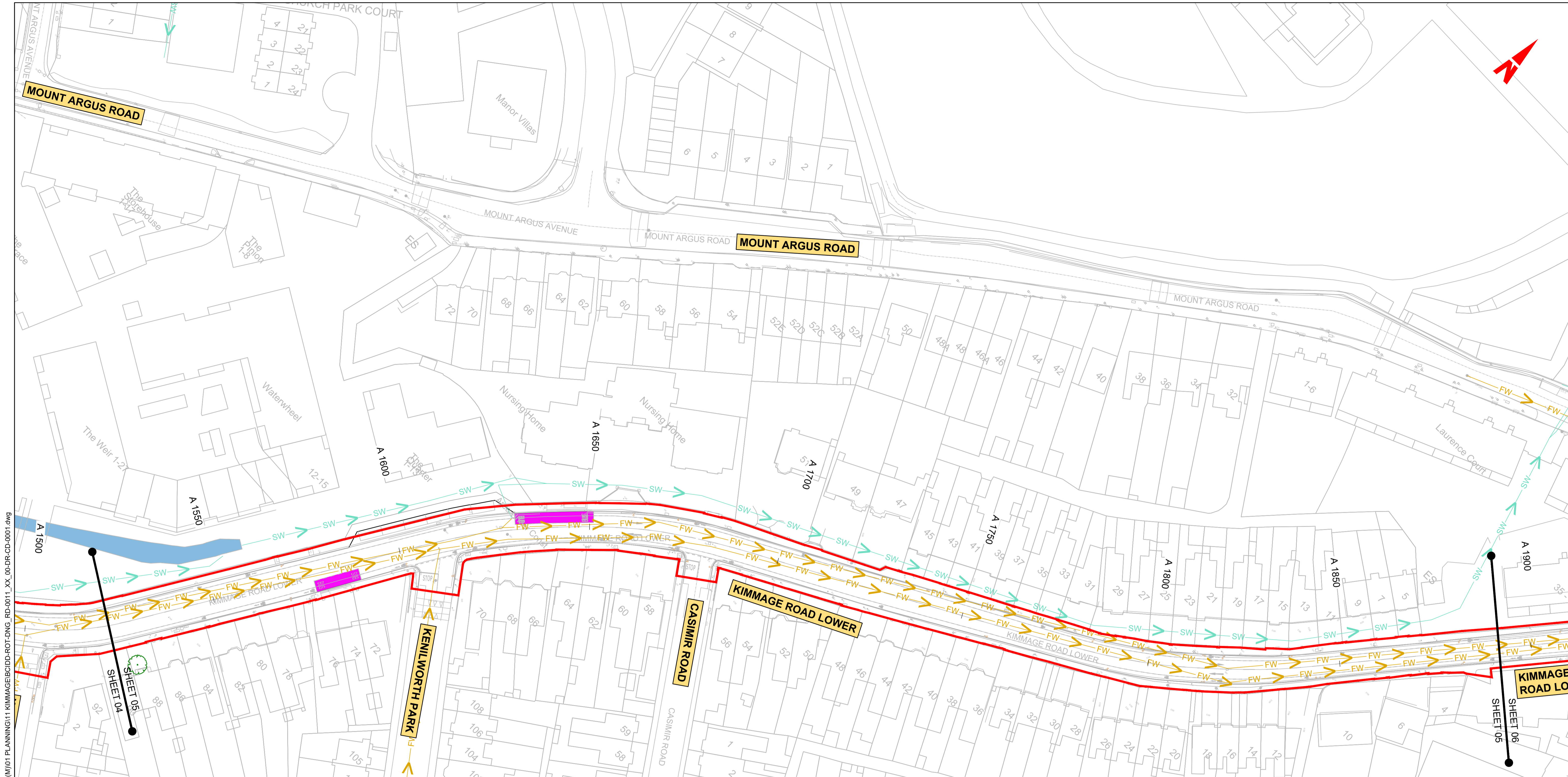
Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0004

Sheet Number: 04 of 14

Status: A

Rev: M01

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LEGEND:

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- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
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- EXISTING COMBINED DRAINAGE NETWORK
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- EXISTING OVERFLOW PIPE
- SURFACE WATER PIPE - UNDER CONSTRUCTION
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
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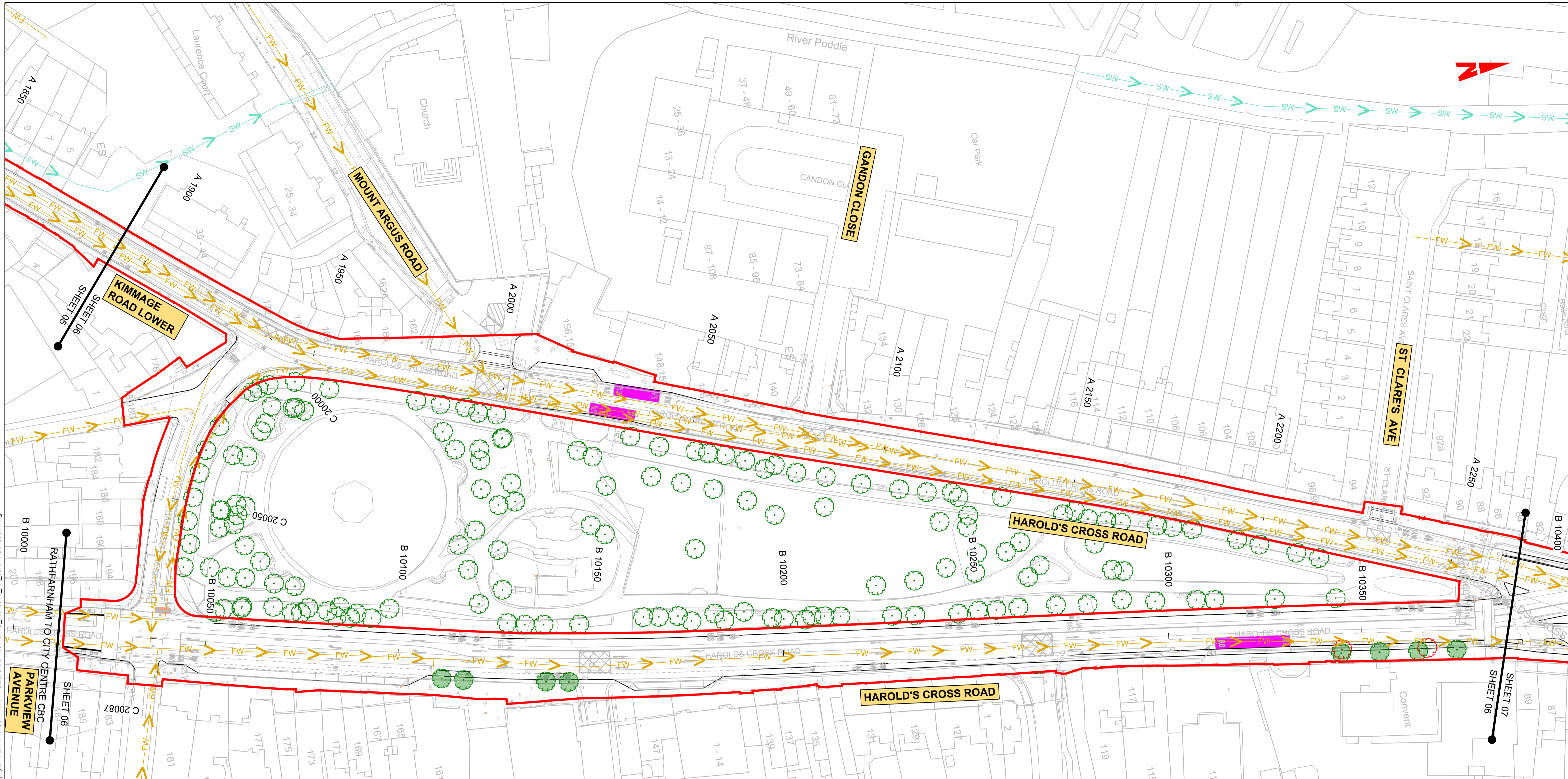
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Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0005

Sheet Number: 05 of 14

Status: A

Rev: M01



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<p>Rev M01 FEB 2023 DS LS SMG ISSUED FOR PHASE 4: PLANNING</p>					<p>Client: NTA Udarás Náisiúnta Iompair National Transport Authority</p>			<p>Engineering Designer: CIROD TYPSA</p>			<p>Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS</p>			
<p>Date: FEB 2023 Scale: 1:500 @ A1, 1:1000 @ A3</p>					<p>Date: FEB 2023 Scale: 1:500 @ A1, 1:1000 @ A3</p>			<p>Drawn: DS, Checked: LS, Approved: SMG</p>			<p>Drawing Title: KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS</p>			
<p>Programme Code: BCIDD</p>					<p>Originator Code: ROT</p>			<p>QMS Code:</p>			<p>Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0006</p>			
<p>Scale: 1:500 @ A1, 1:1000 @ A3</p>					<p>Scale: 1:500 @ A1, 1:1000 @ A3</p>			<p>Scale: 1:500 @ A1, 1:1000 @ A3</p>			<p>Sheet Number: 06 of 14, Status: A, Rev: M01</p>			

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W:\000000\11\171117-02_WIP\08 MODELS\01 CAD\01 DWG\03 STG 3 - STATUTORY PROCESS (M)\01 PLANNING\11 KIMMAGE\BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0001.dwg

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PERMEABLE CAR PARK
CONTROLLED DISCHARGE TO EXISTING NETWORK VIA HYDRO-BRAKE

CAR PARK AREA: 554M²
AVERAGE SURFACE SLOPE: 1 IN 100

GRANULAR STORAGE DEPTH: 0.30M
NUMBER OF CHECK-DAMS REQUIRED: 1
MINIMUM GRANULAR MATERIAL POROSITY: 30%

PROPOSED CONNECTION TO SW NETWORK
DN225MM

CONTRACTOR TO CHECK LOCATION AND LEVELS OF EXISTING SW NETWORK.

CONTROLLED DISCHARGE FROM PERMEABLE CARPARK. FLOW RESTRICTED USING HYDRO-BRAKE:
HYDRO-BRAKE REF: MD-SHE-0067-2000-1000-2000
DESIGN FLOW: 2 L/S
DESIGN HEAD 1 M

OVERSIZED PIPE
90m of DN675mm pipe for attenuation purposes
Assumed pipe slope: 1 in 100
Storage Required: 19m³

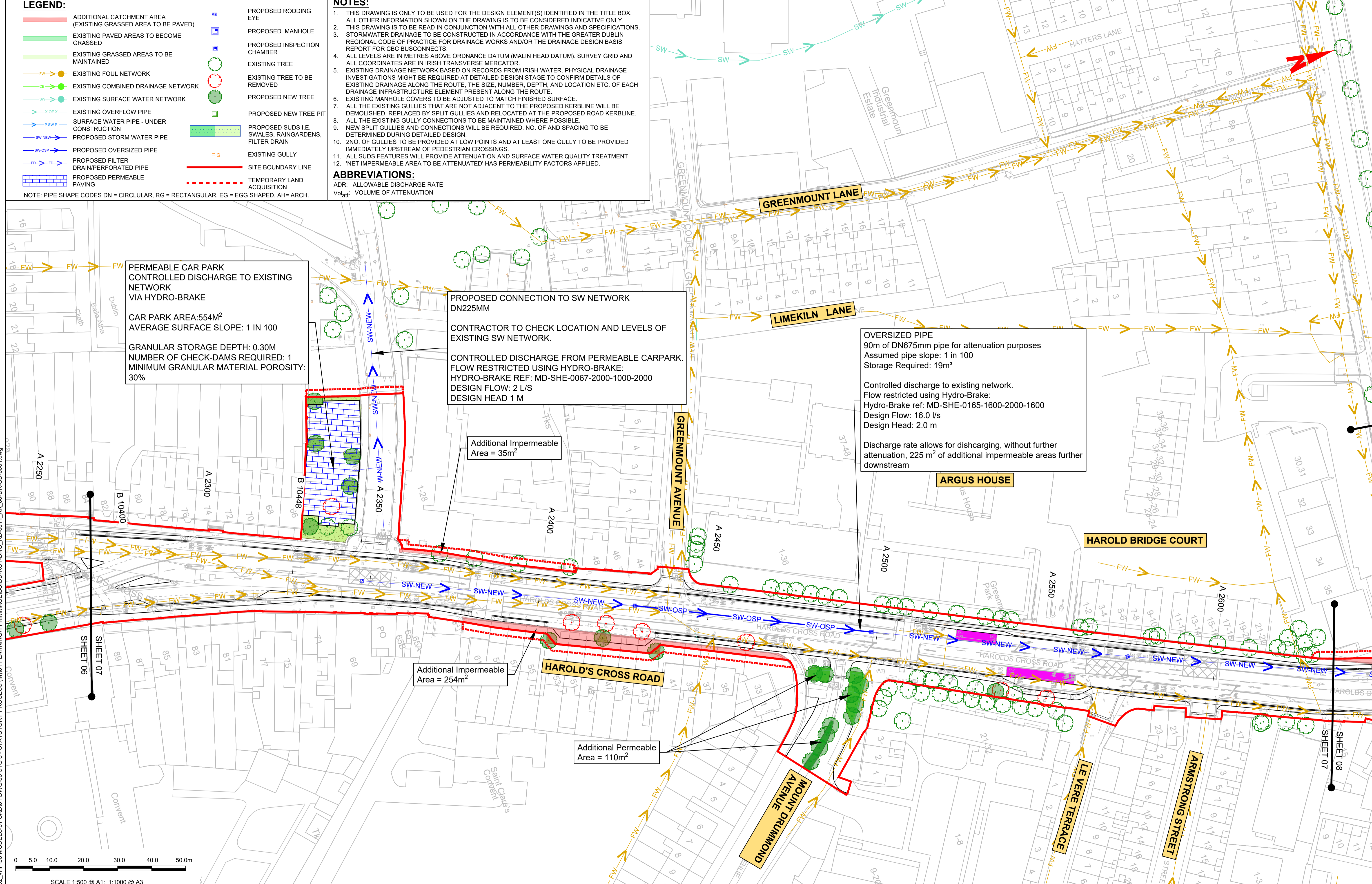
Controlled discharge to existing network.
Flow restricted using Hydro-Brake:
Hydro-Brake ref: MD-SHE-0165-1600-2000-1600
Design Flow: 16.0 l/s
Design Head: 2.0 m

Discharge rate allows for discharging, without further attenuation, 225 m² of additional impermeable areas further downstream

Additional Impermeable Area = 35m²

Additional Impermeable Area = 254m²

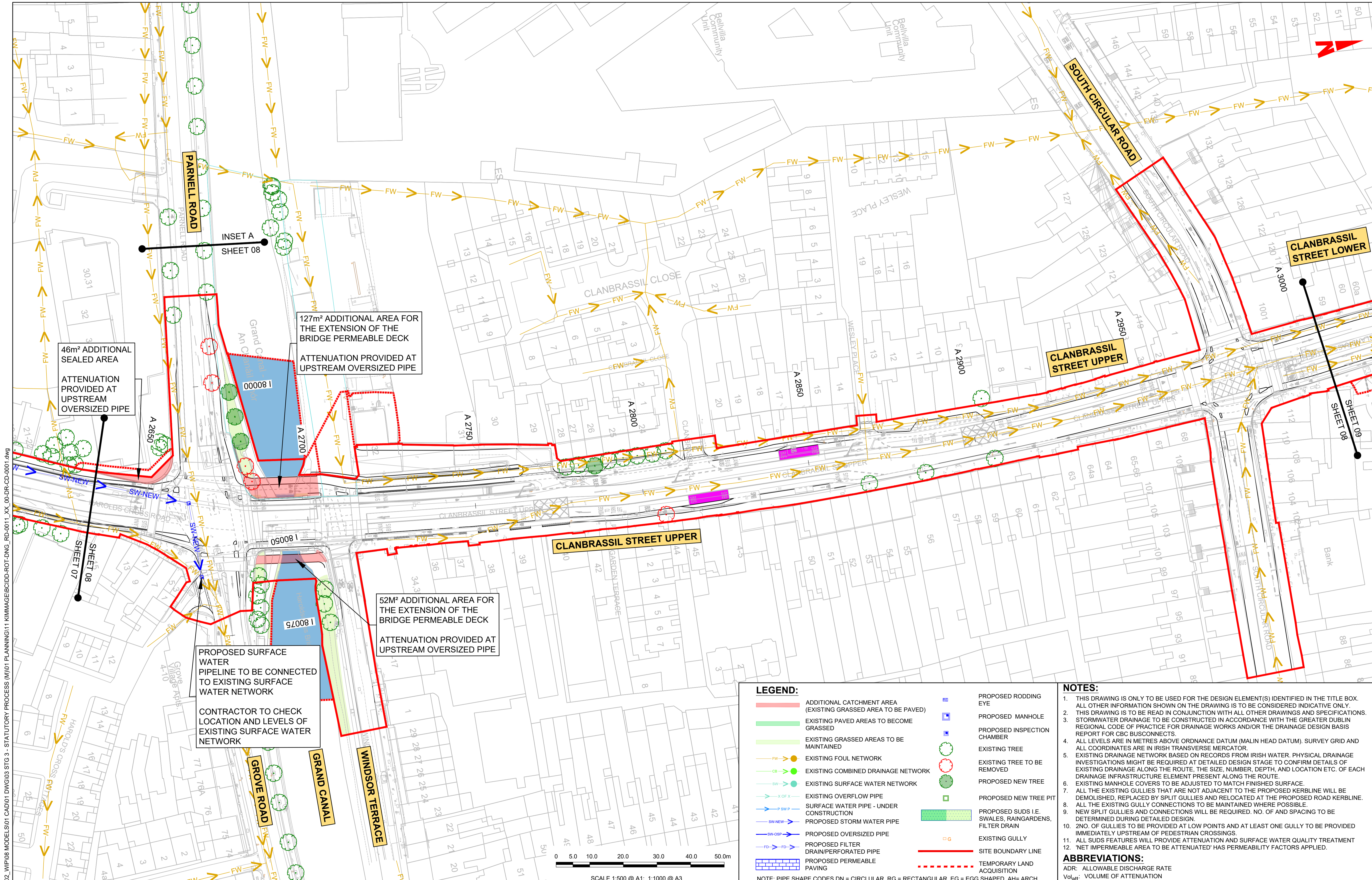
Additional Permeable Area = 110m²



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<p>Scale 1:500 @ A1; 1:1000 @ A3</p> <p>0 5.0 10.0 20.0 30.0 40.0 50.0m</p>		<p>Project Ireland 2040 Building Ireland's Future</p>		<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>Drn</th> <th>Chk'd</th> <th>App'd</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>M01</td> <td>FEB 2023</td> <td>DS</td> <td>LS</td> <td>SMG</td> <td>ISSUED FOR PHASE 4: PLANNING</td> </tr> </tbody> </table>		Rev	Date	Drn	Chk'd	App'd	Description	M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING	<p>Client: NTA Udarás Náisiúnta Iompair National Transport Authority</p>		<p>Engineering Designer: CIROD TYPSA</p>		<p>Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS</p>	
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<p>Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0007</p>		<p>Sheet Number: 07 of 14</p>		<p>Status: A</p>		<p>Rev: M01</p>																	

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46m² ADDITIONAL SEALED AREA
ATTENUATION PROVIDED AT UPSTREAM OVERSIZED PIPE

127m² ADDITIONAL AREA FOR THE EXTENSION OF THE BRIDGE PERMEABLE DECK
ATTENUATION PROVIDED AT UPSTREAM OVERSIZED PIPE

52m² ADDITIONAL AREA FOR THE EXTENSION OF THE BRIDGE PERMEABLE DECK
ATTENUATION PROVIDED AT UPSTREAM OVERSIZED PIPE

PROPOSED SURFACE WATER PIPELINE TO BE CONNECTED TO EXISTING SURFACE WATER NETWORK
CONTRACTOR TO CHECK LOCATION AND LEVELS OF EXISTING SURFACE WATER NETWORK

LEGEND:

	ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)		PROPOSED RODDING EYE
	EXISTING PAVED AREAS TO BECOME GRASSED		PROPOSED MANHOLE
	EXISTING GRASSED AREAS TO BE MAINTAINED		PROPOSED INSPECTION CHAMBER
	EXISTING FOUL NETWORK		EXISTING TREE
	EXISTING COMBINED DRAINAGE NETWORK		EXISTING TREE TO BE REMOVED
	EXISTING SURFACE WATER NETWORK		PROPOSED NEW TREE
	EXISTING OVERFLOW PIPE		PROPOSED NEW TREE PIT
	SURFACE WATER PIPE - UNDER CONSTRUCTION		PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
	PROPOSED STORM WATER PIPE		EXISTING GULLY
	PROPOSED OVERSIZED PIPE		SITE BOUNDARY LINE
	PROPOSED FILTER DRAIN/PERFORATED PIPE		TEMPORARY LAND ACQUISITION
	PROPOSED PERMEABLE PAVING		EXISTING GULLY

NOTE: PIPE SHAPE CODES DN = CIRCULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.

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- ALL SUDS FEATURES WILL PROVIDE ATTENUATION AND SURFACE WATER QUALITY TREATMENT 12 'NET IMPERMEABLE AREA TO BE ATTENUATED' HAS PERMEABILITY FACTORS APPLIED.

ABBREVIATIONS:
 ADR: ALLOWABLE DISCHARGE RATE
 Vol_{att}: VOLUME OF ATTENUATION

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Project Ireland 2040
Building Ireland's Future

Rev	Date	Drm	Chk'd	App'd	Description
M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

Client: NTA
Udárás Náisiúnta Iompair
National Transport Authority

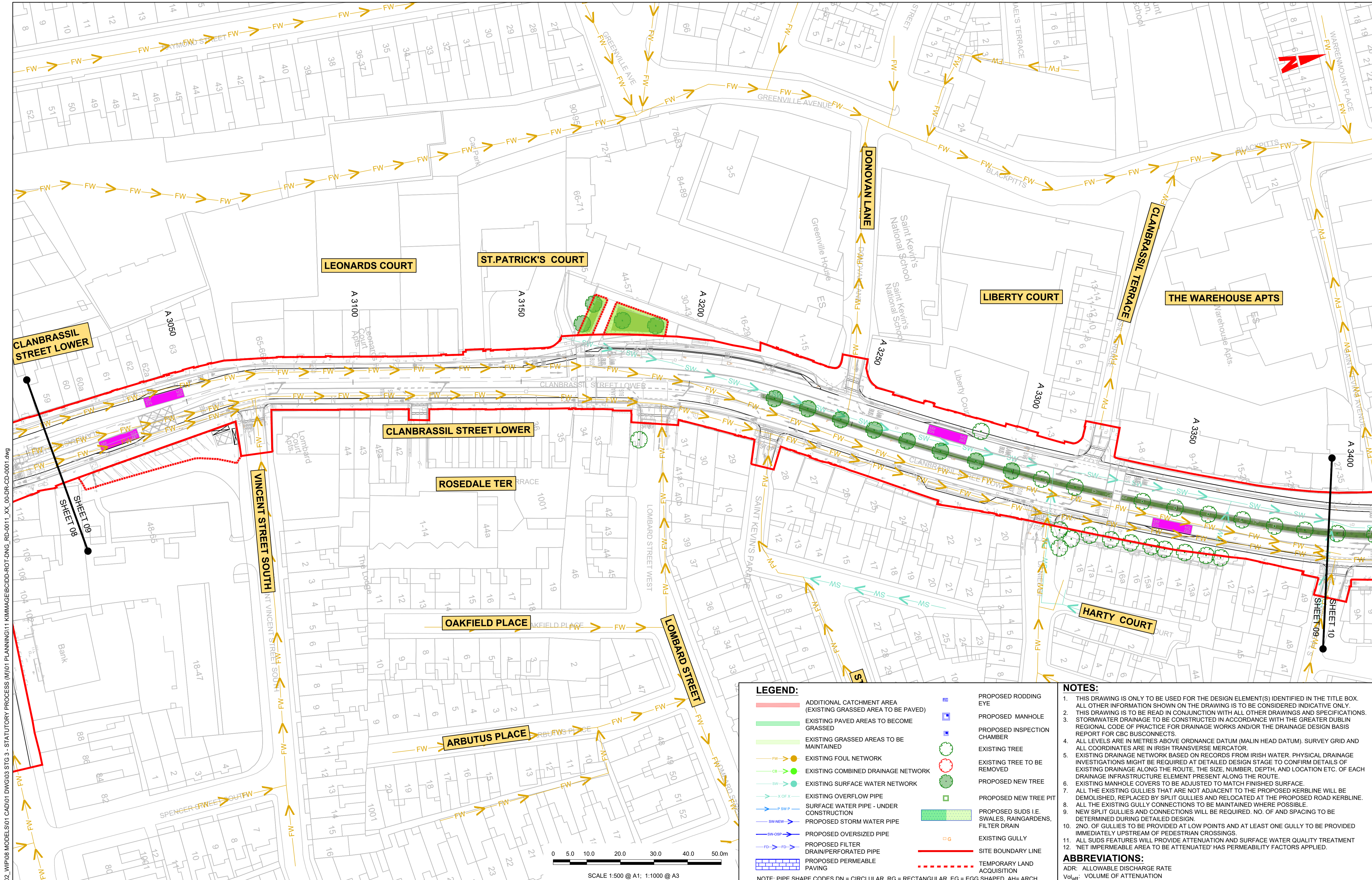
Engineering Designer: CIROD
TYPSA

Date	Scale	Drawn	Checked	Approved
FEB 2023	1:500 @ A1 1:1000 @ A3	DS	LS	SMG

Programme Code: BCIDD
Originator Code: ROT

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS			
Drawing File Name BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0008	Sheet Number 08 of 14	Status A	Rev M01

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LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
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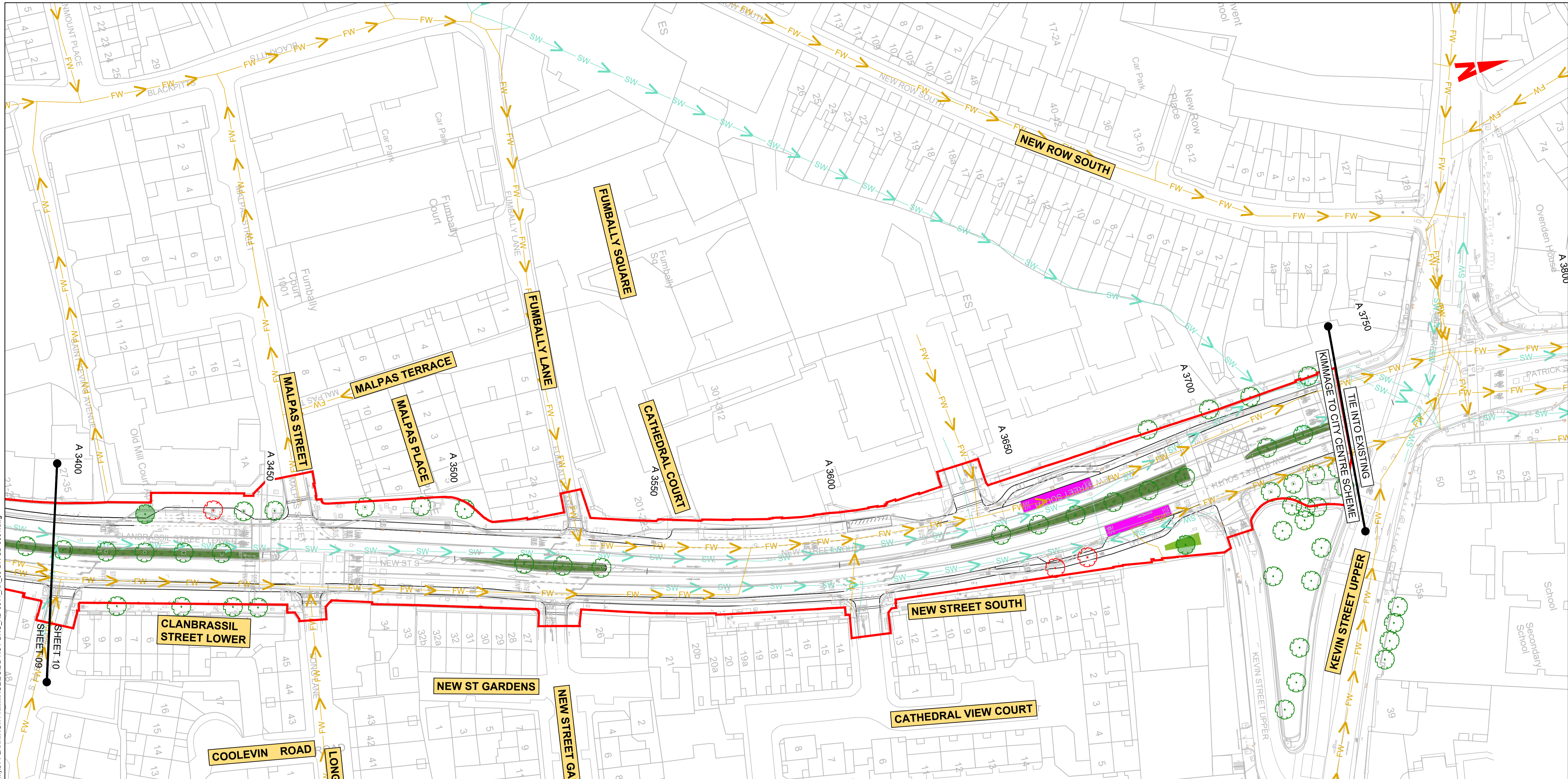
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ABBREVIATIONS:

ADR: ALLOWABLE DISCHARGE RATE
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<p>Programme Code</p> <p>BCIDD</p>		<p>Originator Code</p> <p>ROT</p>		<p>QMS Code</p>		<p>Drawing File Name</p> <p>BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0009</p>		<p>Sheet Number</p> <p>09 of 14</p>		<p>Status</p> <p>A</p>													
										<p>Rev</p> <p>M01</p>													

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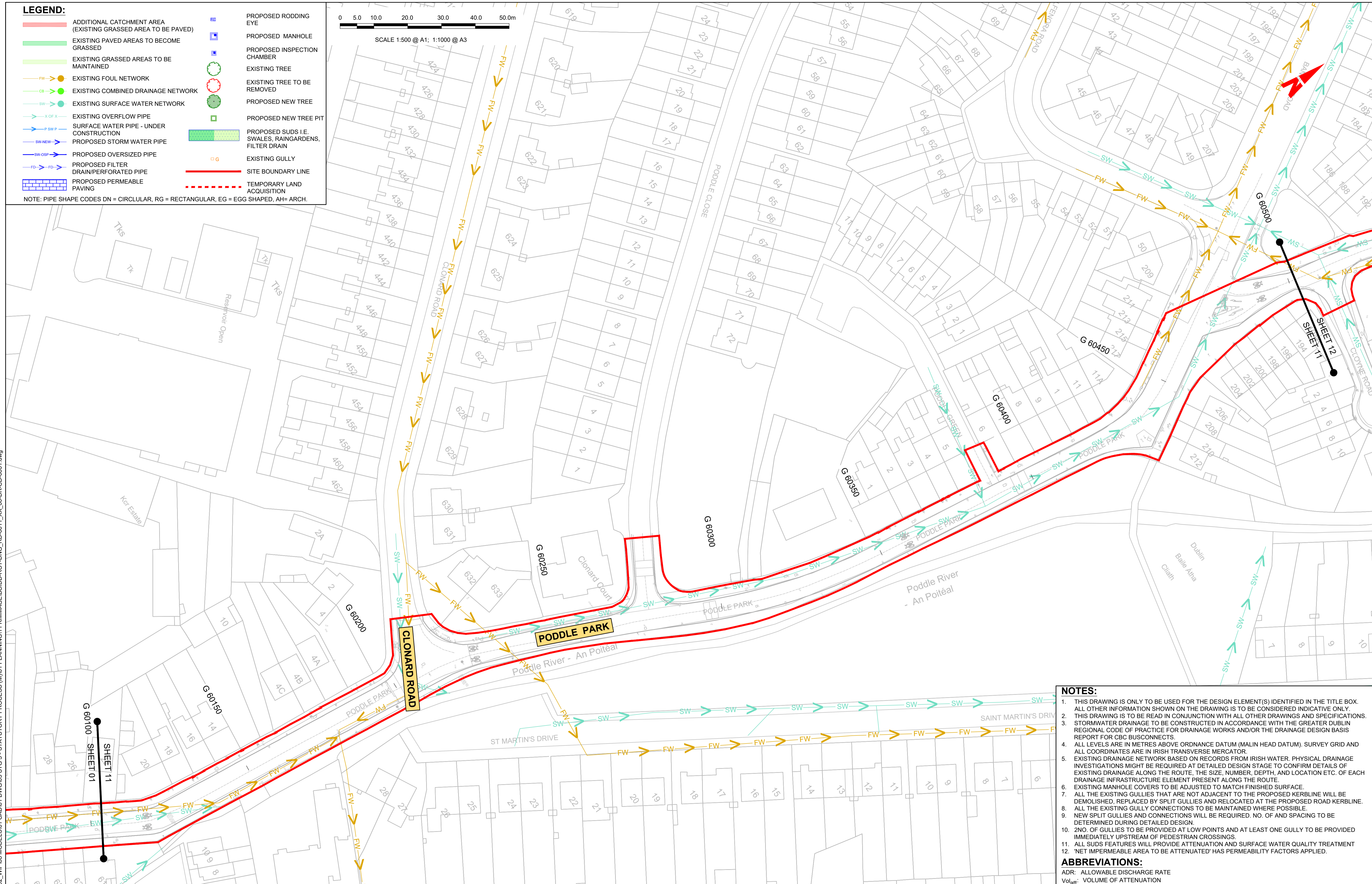
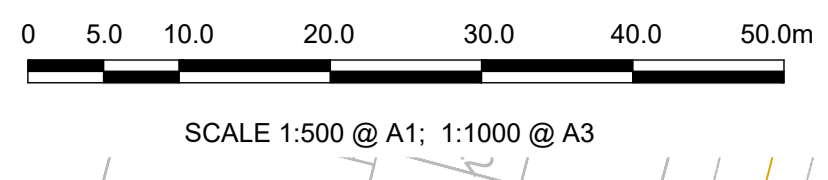
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<p>Date FEB 2023</p> <p>Scale 1:500 @ A1</p> <p>1:1000 @ A3</p> <p>Programme Code BCIDD</p> <p>Originator Code ROT</p> <p>QMS Code</p>		<p>Drawn DS</p> <p>Checked LS</p> <p>Approved SMG</p>		<p>Drawing Title</p> <p>KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME</p> <p>PROPOSED SURFACE WATER DRAINAGE WORKS</p>		<p>Drawing File Name</p> <p>BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0010</p>		<p>Sheet Number 10 of 14</p> <p>Status A</p> <p>Rev M01</p>	

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\\wddp\p1\2019\1719117-02_WIP\08 MODELS\01 CAD\01 DWG\03 STG 3 - STATUTORY PROCESS (M)\01 PLANNING\11 KIMMAGE\BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0001.dwg

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Building Ireland's Future

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M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

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

Engineering Designer: **CIROD**
 TYPSA

Date: FEB 2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: DS | Checked: LS | Approved: SMG

Programme Code: BCIDD | Originator Code: ROT | QMS Code:

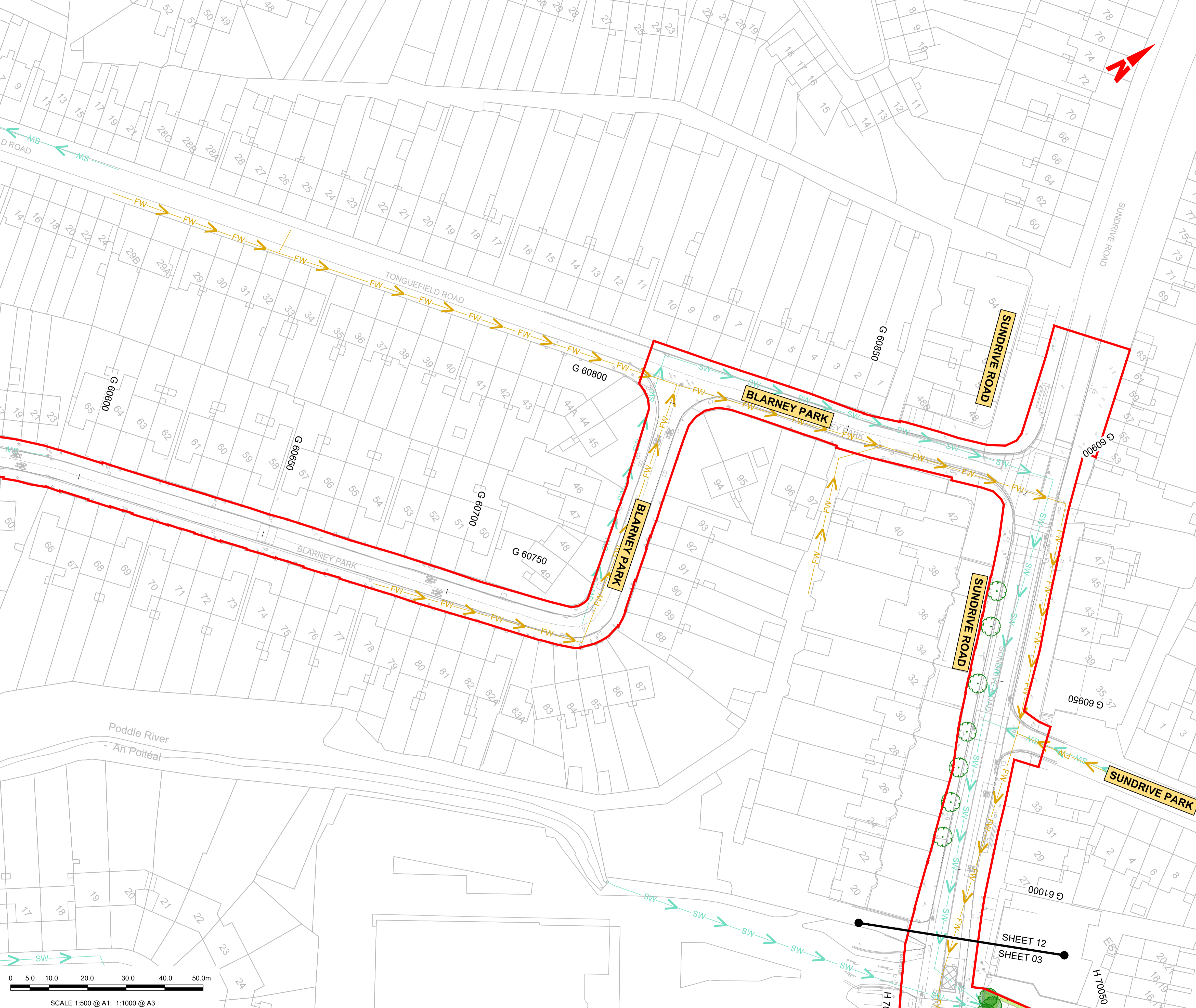
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Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0011	Sheet Number: 11 of 14	Status: A	Rev: M01

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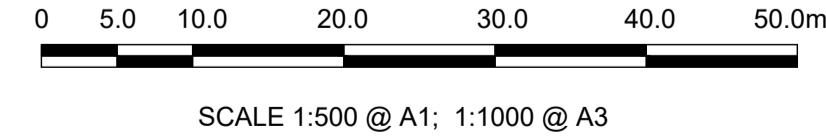
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 - EXISTING MANHOLE COVERS TO BE ADJUSTED TO MATCH FINISHED SURFACE.
 - ALL THE EXISTING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED KERBLINE WILL BE DEMOLISHED, REPLACED BY SPLIT GULLIES AND RELOCATED AT THE PROPOSED ROAD KERBLINE.
 - ALL THE EXISTING GULLY CONNECTIONS TO BE MAINTAINED WHERE POSSIBLE.
 - NEW SPLIT GULLIES AND CONNECTIONS WILL BE REQUIRED. NO. OF AND SPACING TO BE DETERMINED DURING DETAILED DESIGN.
 - 2NO. OF GULLIES TO BE PROVIDED AT LOW POINTS AND AT LEAST ONE GULLY TO BE PROVIDED IMMEDIATELY UPSTREAM OF PEDESTRIAN CROSSINGS.
 - ALL SUDS FEATURES WILL PROVIDE ATTENUATION AND SURFACE WATER QUALITY TREATMENT
 - 'NET IMPERMEABLE AREA TO BE ATTENUATED' HAS PERMEABILITY FACTORS APPLIED.

ABBREVIATIONS:
 ADR: ALLOWABLE DISCHARGE RATE
 Vol_{att}: VOLUME OF ATTENUATION



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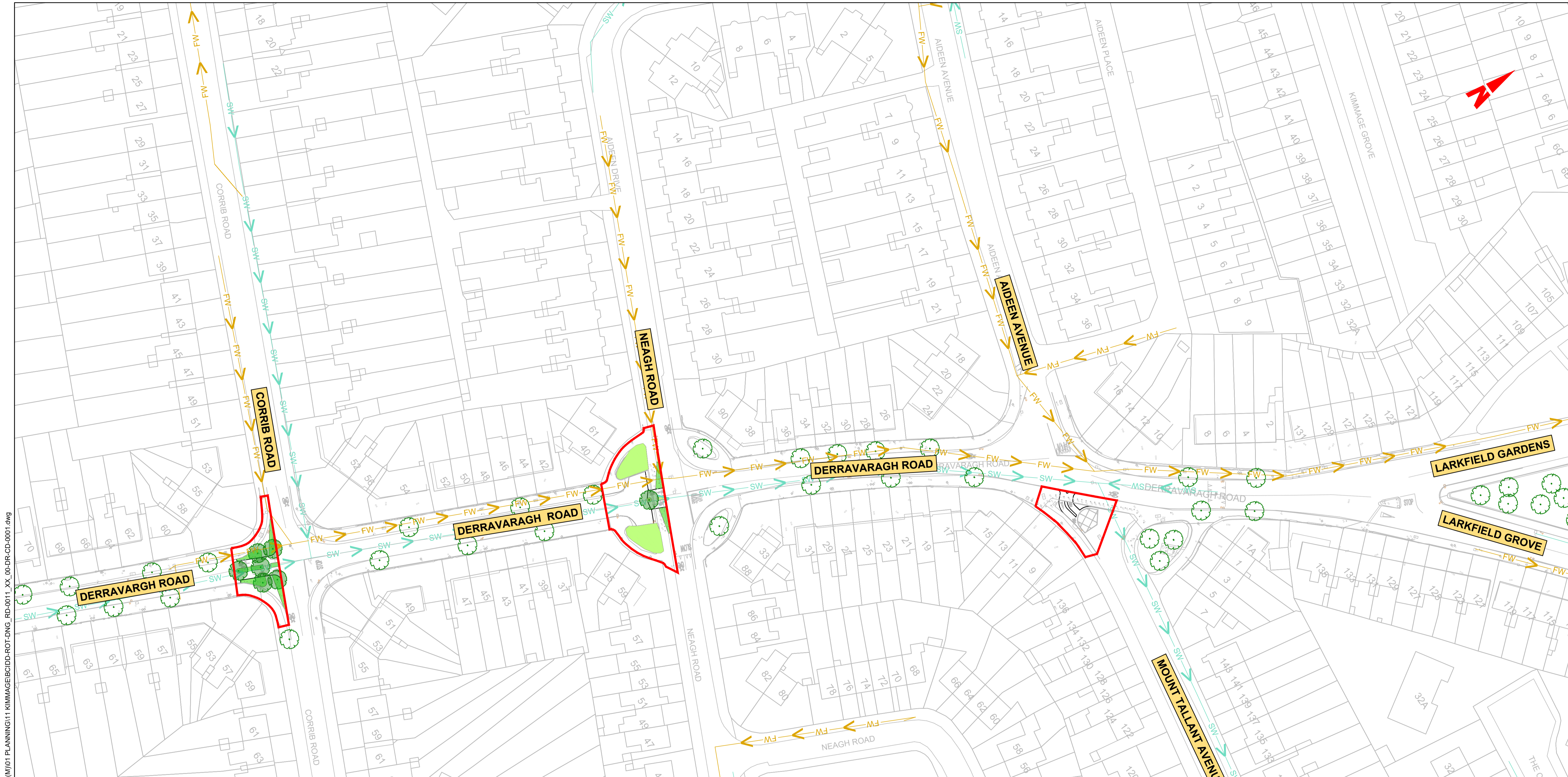
Rev	Date	Drn	Chk'd	App'd	Description
M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

Client NTA Udarás Náisiúnta Iompair National Transport Authority		Engineering Designer CIROD TYPSA		
Date FEB 2023	Scale 1:500 @ A1 1:1000 @ A3	Drawn DS	Checked LS	Approved SMG
Programme Code BCIDD	Originator Code ROT	QMS Code		

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS				
Drawing Title KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS				
Drawing File Name BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0012	Sheet Number 12 of 14	Status A	Rev M01	

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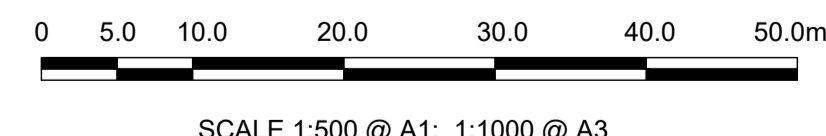
\\vdp01p1u2019191717117-02_WIP008 MODELS01 CAD001 DWG003 STG 3 - STATUTORY PROCESS (M)01 PLANNING11 KIMMAGE/BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0001.dwg



LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
- EXISTING FOUL NETWORK
- EXISTING COMBINED DRAINAGE NETWORK
- EXISTING SURFACE WATER NETWORK
- EXISTING OVERFLOW PIPE
- SURFACE WATER PIPE - UNDER CONSTRUCTION
- PROPOSED STORM WATER PIPE
- PROPOSED OVERSIZED PIPE
- PROPOSED FILTER DRAIN/PERFORATED PIPE
- PROPOSED PERMEABLE PAVING
- PROPOSED RODDING EYE
- PROPOSED MANHOLE
- PROPOSED INSPECTION CHAMBER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- PROPOSED NEW TREE
- PROPOSED NEW TREE PIT
- PROPOSED SUDS I.E. SWALES, RAINGARDENS, FILTER DRAIN
- EXISTING GULLY
- SITE BOUNDARY LINE
- TEMPORARY LAND ACQUISITION

NOTE: PIPE SHAPE CODES DN = CIRCLULAR, RG = RECTANGULAR, EG = EGG SHAPED, AH= ARCH.



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ABBREVIATIONS:

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- Vol_{att}: VOLUME OF ATTENUATION

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Rev	Date	Dwn	Chk'd	App'd	Description
M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

Client

Udarás Náisiúnta Iompair
National Transport Authority

Engineering Designer

TYPSA

Date FEB 2023

Scale 1:500 @ A1
1:1000 @ A3

Programme Code BCIDD

Originator Code ROT

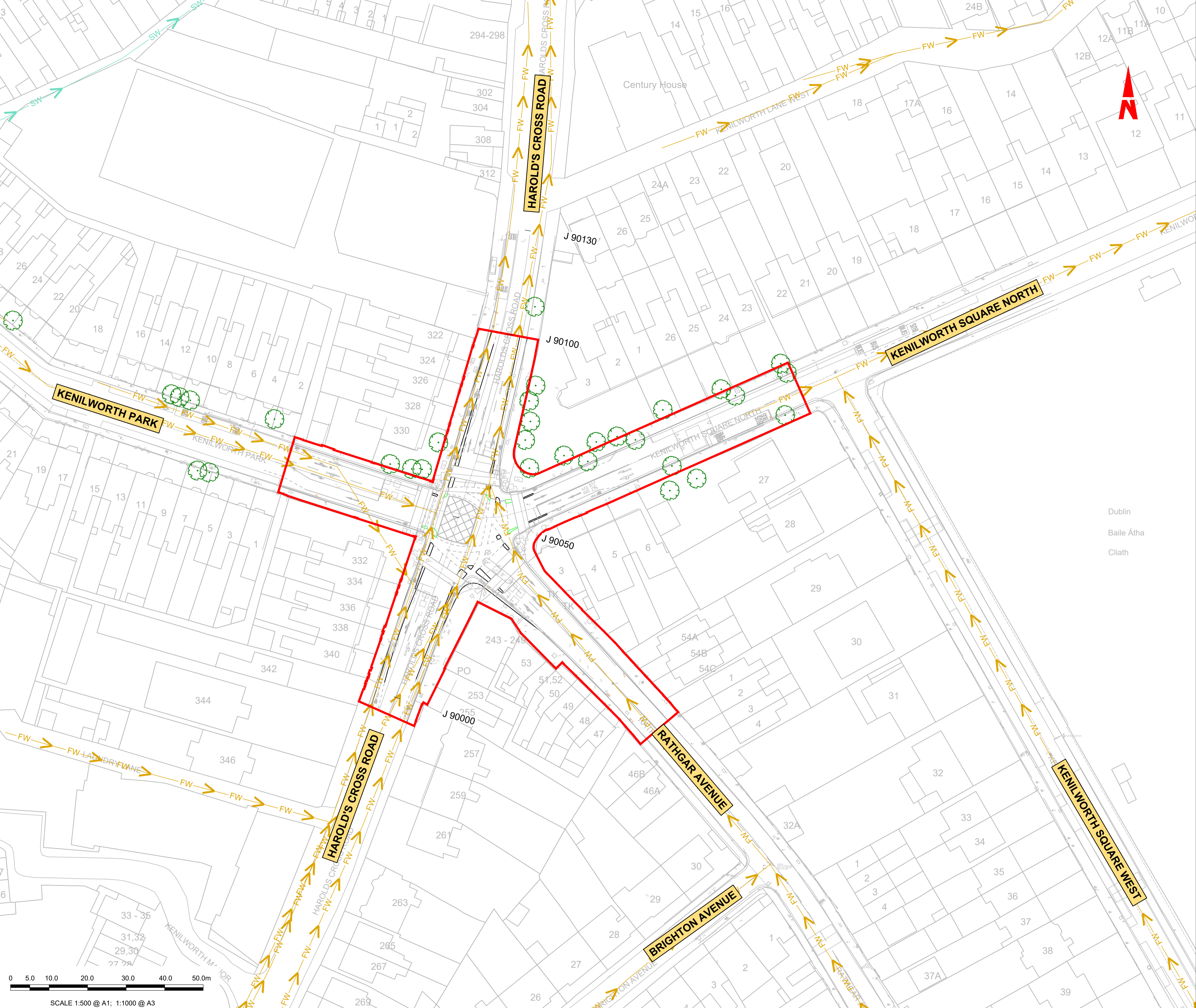
Programme Title			
BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title			
KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME PROPOSED SURFACE WATER DRAINAGE WORKS			
Drawing File Name	Sheet Number	Status	Rev
BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0013	13 of 14	A	M01

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LEGEND:

- ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREA TO BE PAVED)
- EXISTING PAVED AREAS TO BECOME GRASSED
- EXISTING GRASSED AREAS TO BE MAINTAINED
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Rev	Date	Drm	Chk'd	App'd	Description
M01	FEB 2023	DS	LS	SMG	ISSUED FOR PHASE 4: PLANNING

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

Engineering Designer: **CIROD**
TYPSA

Date: FEB 2023
Scale: 1:500 @ A1
1:1000 @ A3

Programme Code: BCIDD
Originator Code: ROT

Drawn: DS
Checked: LS
Approved: SMG

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

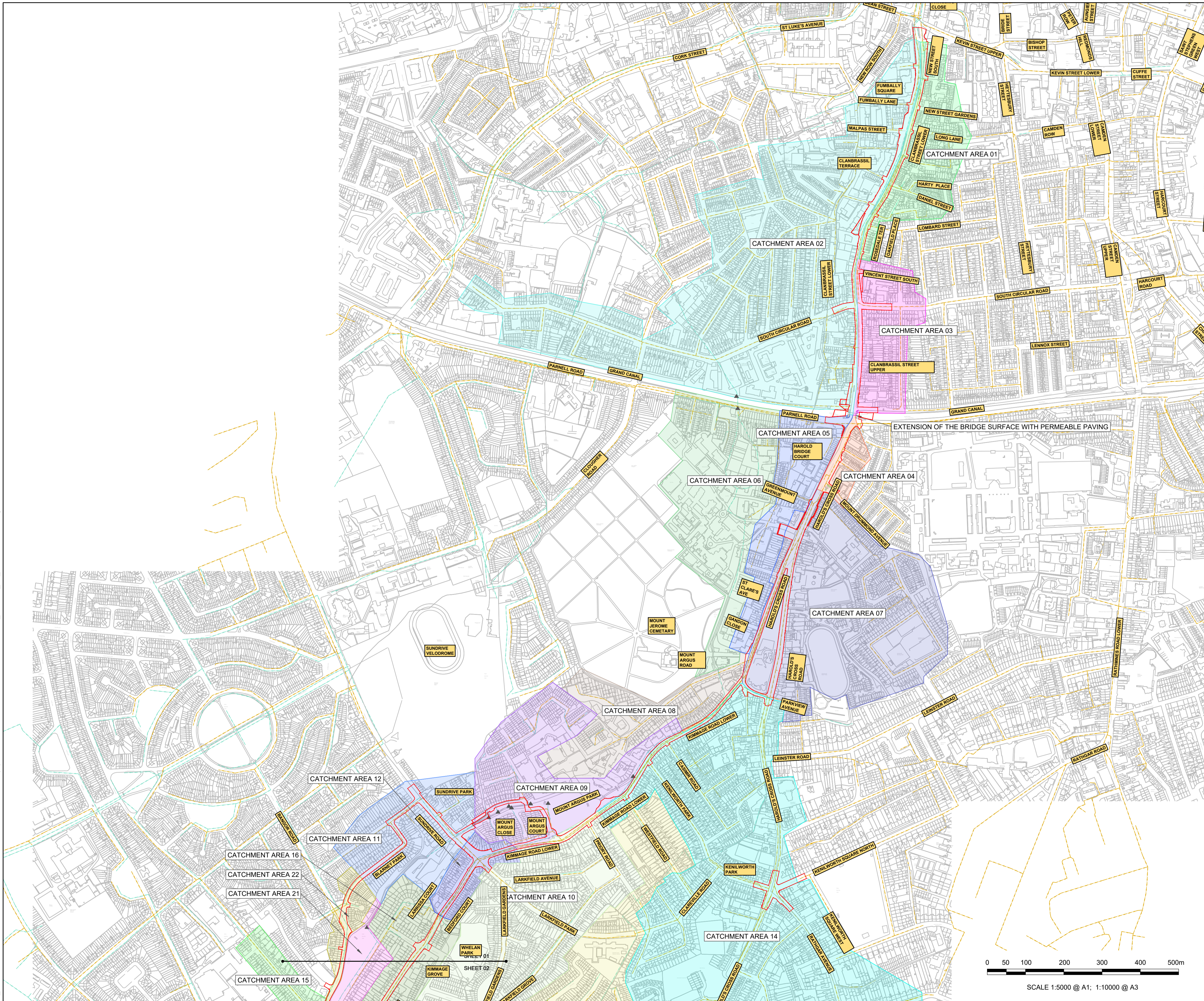
Drawing Title: **KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME
PROPOSED SURFACE WATER DRAINAGE WORKS**

Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-0014
Sheet Number: 14 of 14
Status: A
Rev: M01

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Dublin
Baile Átha
Cliath



LEGEND:

	CATCHMENT AREA 1		CATCHMENT AREA 12
	CATCHMENT AREA 2		CATCHMENT AREA 13
	CATCHMENT AREA 3		CATCHMENT AREA 14
	CATCHMENT AREA 4		CATCHMENT AREA 15
	CATCHMENT AREA 5		CATCHMENT AREA 16
	CATCHMENT AREA 6		CATCHMENT AREA 17
	CATCHMENT AREA 7		CATCHMENT AREA 18
	CATCHMENT AREA 8		CATCHMENT AREA 19
	CATCHMENT AREA 9		CATCHMENT AREA 20
	CATCHMENT AREA 10		CATCHMENT AREA 21
	CATCHMENT AREA 11		CATCHMENT AREA 22

	EXISTING SURFACE WATER DRAINAGE		DISCHARGE POINT
	EXISTING COMBINED DRAINAGE		
	EXISTING OVERFLOW DRAINAGE		
	EXISTING FOUL DRAINAGE		
	TEMPORARY LAND ACQUISITION		
	SITE BOUNDARY LINE		
	ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)		
	EXISTING PAVED AREAS TO BECOME GRASSED		

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Client: **NTA**
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National Transport Authority

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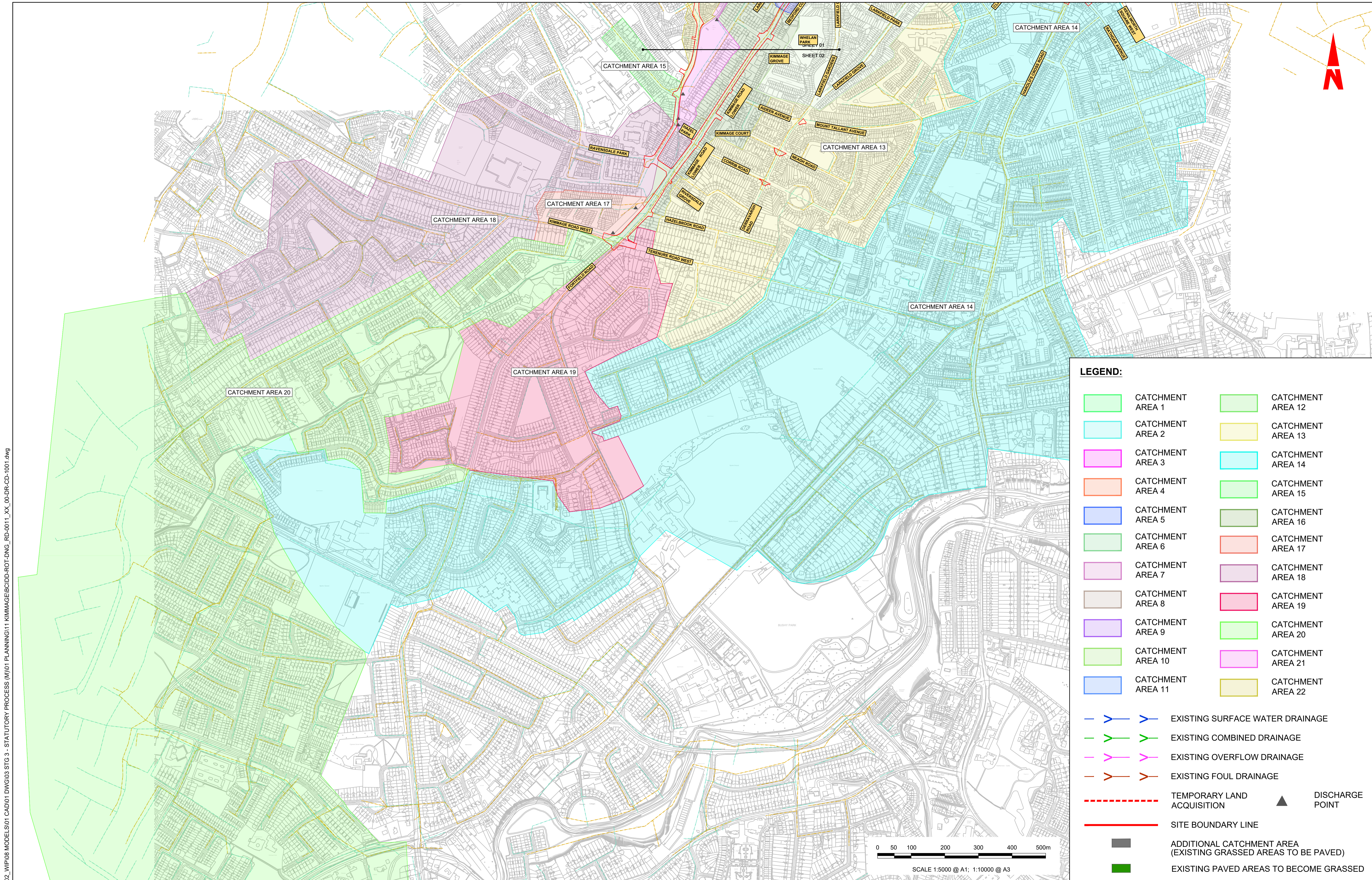
Date: FEB 2023
Scale: 1:5,000 @ A1
1:10,000 @ A3

Programme Code: BCIDD
Originator Code: ROT

Drawn: DS
Checked: LS
Approved: SMG

Programme Title: BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title: KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME OVERALL CATCHMENT AREAS			
Drawing File Name: BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-1001	Sheet Number: 01 of 02	Status: A	Rev: M01

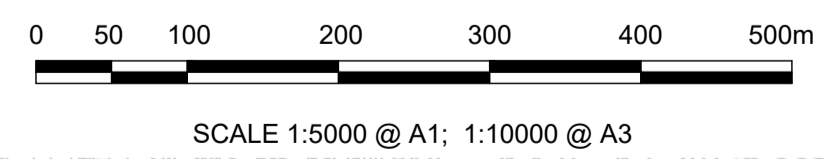
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LEGEND:

	CATCHMENT AREA 1		CATCHMENT AREA 12
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	CATCHMENT AREA 6		CATCHMENT AREA 17
	CATCHMENT AREA 7		CATCHMENT AREA 18
	CATCHMENT AREA 8		CATCHMENT AREA 19
	CATCHMENT AREA 9		CATCHMENT AREA 20
	CATCHMENT AREA 10		CATCHMENT AREA 21
	CATCHMENT AREA 11		CATCHMENT AREA 22

	EXISTING SURFACE WATER DRAINAGE		DISCHARGE POINT
	EXISTING COMBINED DRAINAGE		
	EXISTING OVERFLOW DRAINAGE		
	EXISTING FOUL DRAINAGE		
	TEMPORARY LAND ACQUISITION		
	SITE BOUNDARY LINE		
	ADDITIONAL CATCHMENT AREA (EXISTING GRASSED AREAS TO BE PAVED)		
	EXISTING PAVED AREAS TO BECOME GRASSED		



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Date	Scale	Drawn	Checked	Approved
FEB 2023	1:5,000 @ A1 1:10,000 @ A3	DS	LS	SMG
Programme Code	Originator Code	QMS Code		
BCIDD	ROT			

Programme Title BUSCONNECTS DUBLIN CORE BUS CORRIDORS INFRASTRUCTURE WORKS			
Drawing Title KIMMAGE TO CITY CENTRE CORE BUS CORRIDOR SCHEME OVERALL CATCHMENT AREAS			
Drawing File Name	Sheet Number	Status	Rev
BCIDD-ROT-DNG_RD-0011_XX_00-DR-CD-1002	02 of 02	A	M01

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