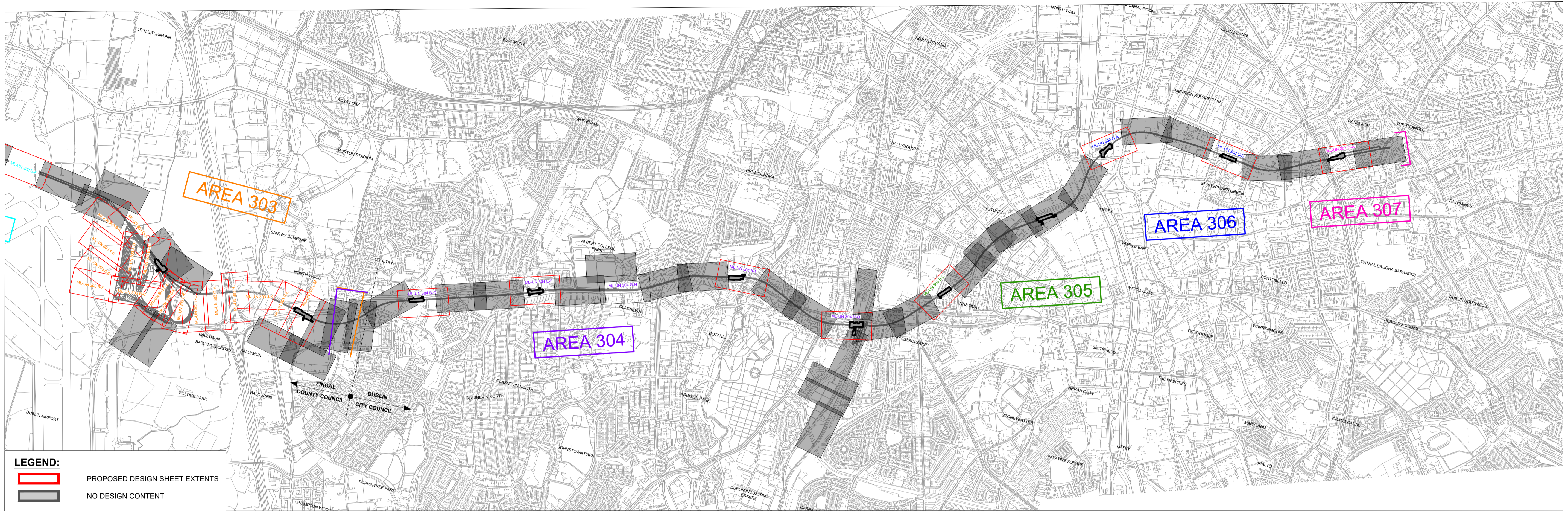




Estuary to Charlemont
Plans of Proposed Railway Works
Utilities – Surface Water
Dubin City Council
AREA ML304 – 307
Balbutcher Lane to Ranelagh Road
Book 4 of 4



KEY MAP LAYOUT

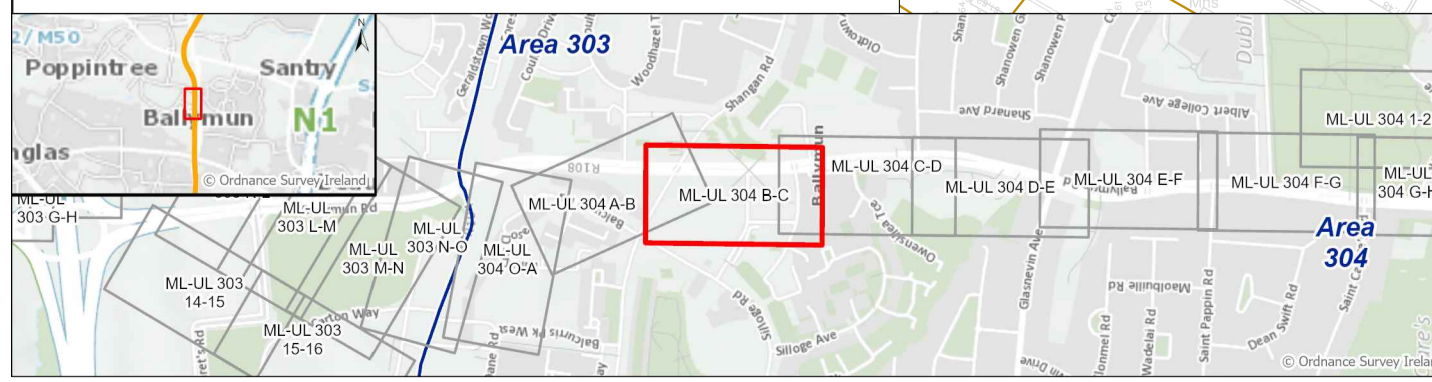
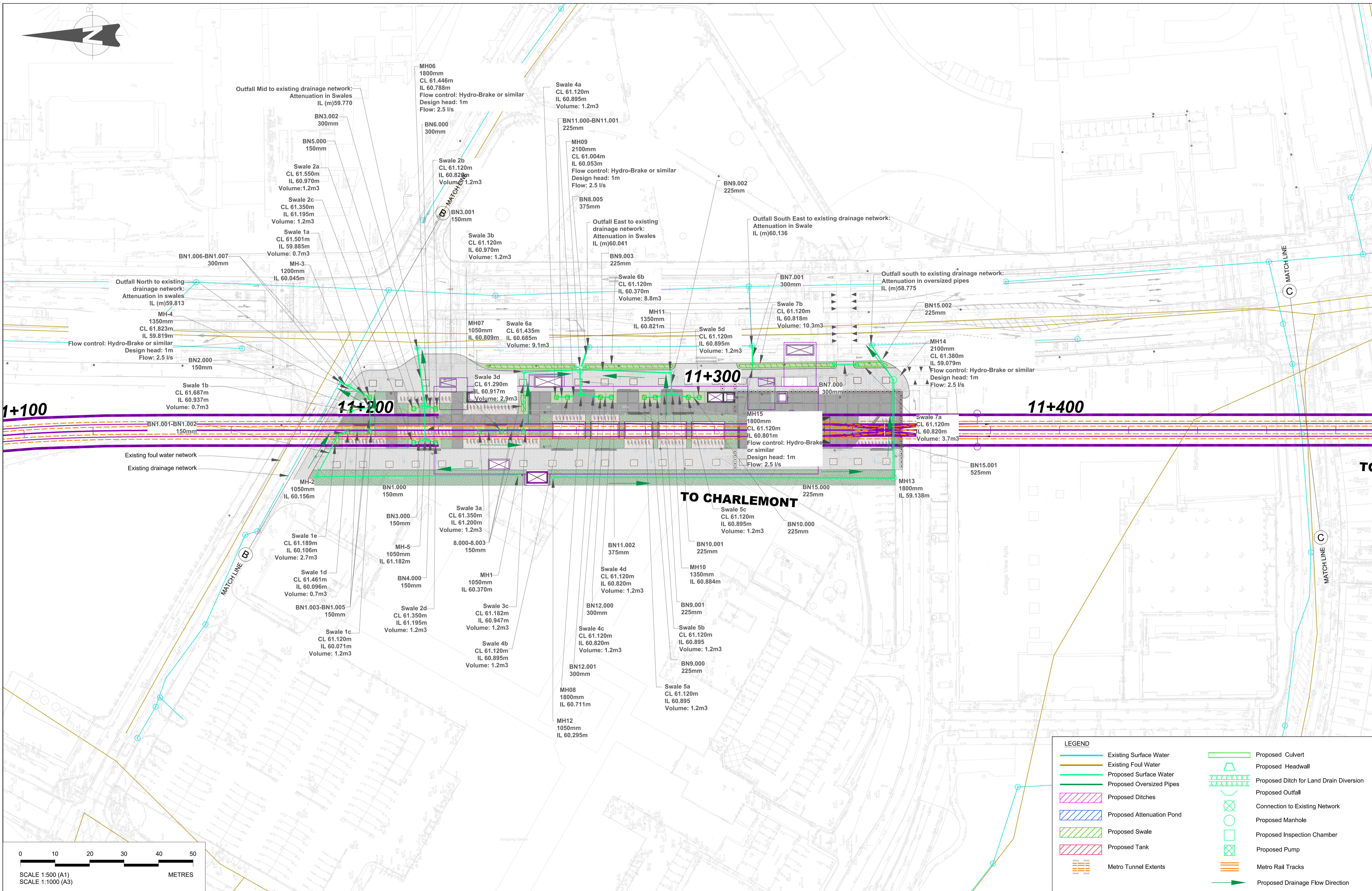
Area	Plan Drawing No.	Internal Drawing No.	Drawing Title
304	ML-UN 304 B-C	ML1-JAI-URD-ROUT_XX-DR-Y-02065	"METRO LINK - GENERAL ARRANGEMENT SHANGAN ROAD TO GATEWAY CRESCENT"
304	ML-UN 304 E-F	ML1-JAI-URD-ROUT_XX-DR-Y-02068	"METRO LINK - GENERAL ARRANGEMENT GLASNEVIN AVENUE TO SAINT PAPPIN ROAD"
304	ML-UN 304 G-H	ML1-JAI-URD-ROUT_XX-DR-Y-02070	"METRO LINK - GENERAL ARRANGEMENT SAINT CANICE'S ROAD TO GRIFFITH AVENUE"
304	ML-UN 304 K-L	ML1-JAI-URD-ROUT_XX-DR-Y-02073	"METRO LINK - GENERAL ARRANGEMENT SAINT MOBHI ROAD"
304	ML-UN 304 N-O	ML1-JAI-URD-ROUT_XX-DR-Y-02076	"METRO LINK - GENERAL ARRANGEMENT CLIFTONVILLE ROAD TO PROSPECT WAY"
305	ML-UN 305 B-C	ML1-JAI-URD-ROUT_XX-DR-Y-02084	"METRO LINK - GENERAL ARRANGEMENT CONNAUGHT STREET TO GOLDSMITH STREET"
306	ML-UN 306 O-A	ML1-JAI-URD-ROUT_XX-DR-Y-02090	"METRO LINK - GENERAL ARRANGEMENT GPO BUILDINGS TO BURGH QUAY"
306	ML-UN 306 C-D	ML1-JAI-URD-ROUT_XX-DR-Y-02093	"METRO LINK - GENERAL ARRANGEMENT LEINSTER STREET SOUTH TO SAINT STEPHEN'S GREEN"
307	ML-UN 307 O-A	ML1-JAI-URD-ROUT_XX-DR-Y-02096	"METROLINK - GENERAL ARRANGEMENT GRAND PARADE TO NORTHBROOK ROAD"

RAILWAY WORKS - METROLINK

PROPOSED SURFACE WATER DUBLIN CITY COUNCIL AREA BOOK 2 OF 2 (AREA ML304 TO ML307) BALBUTCHER LANE TO RANELAGH

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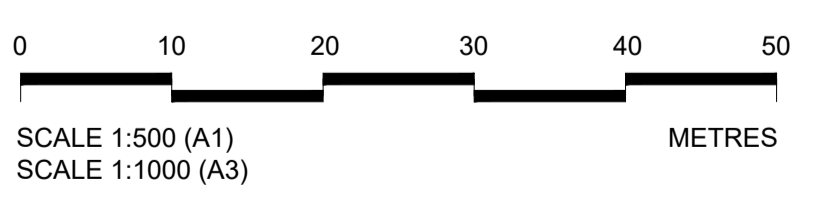
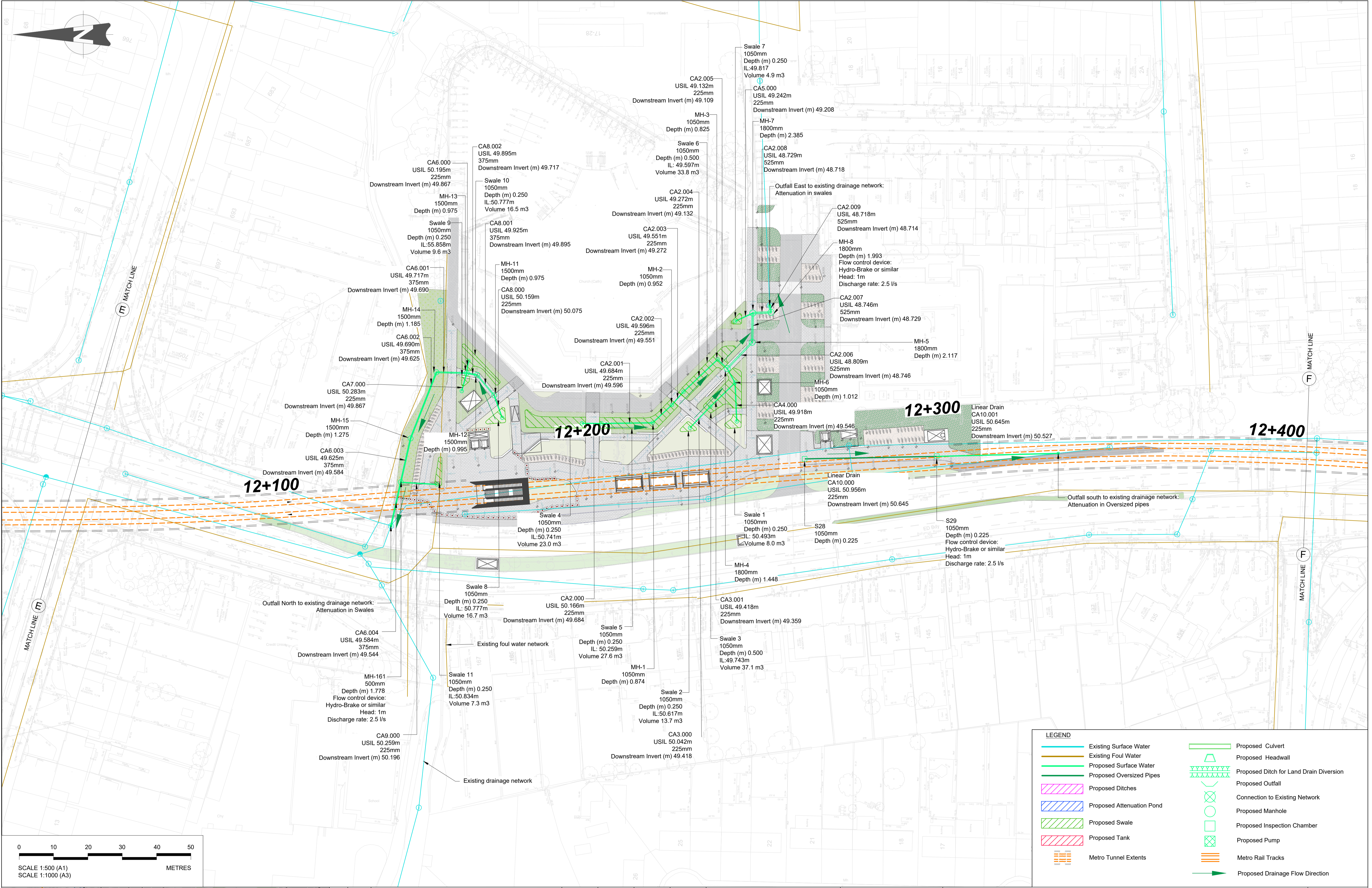




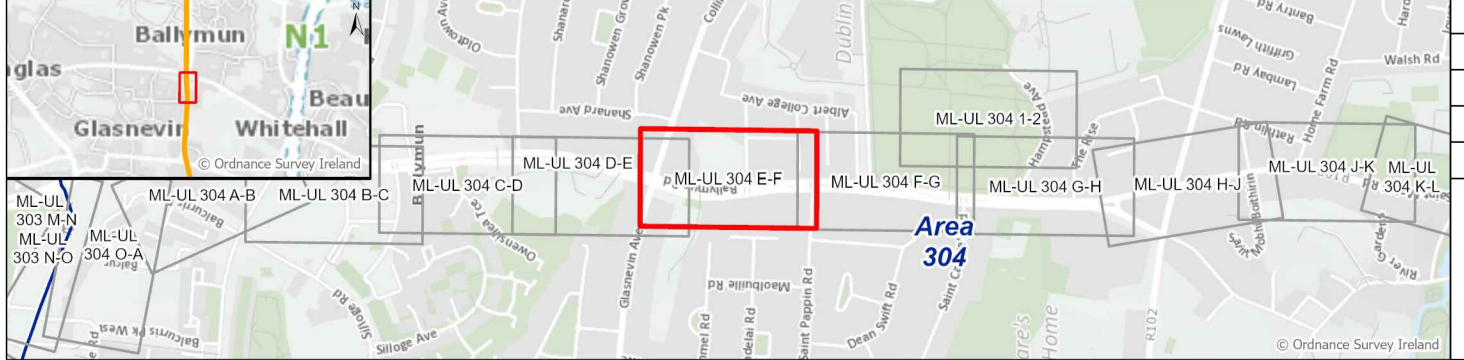
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P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

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Client TII NTA Údarás Náisiúnaí Ionadair National Transport Authority	Project METROLINK	Drawing Title METROLINK - PROPOSED SURFACE DRAINAGE SHANGAN ROAD TO GATEWAY CRESCENT	Drawing Status S0
Consultant JACOBS IDOM	Drawing N° ML1-JAI-URD-ROUT_XX-DR-Y-02065	Plan Drawing N° ML-UN 304 B-C	Sheet 1 of 1
Scales Original Size A1 1:500			



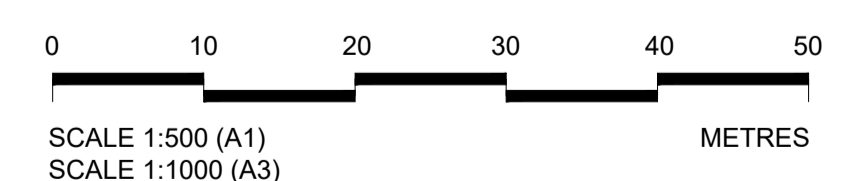
LEGEND	
	Existing Surface Water
	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



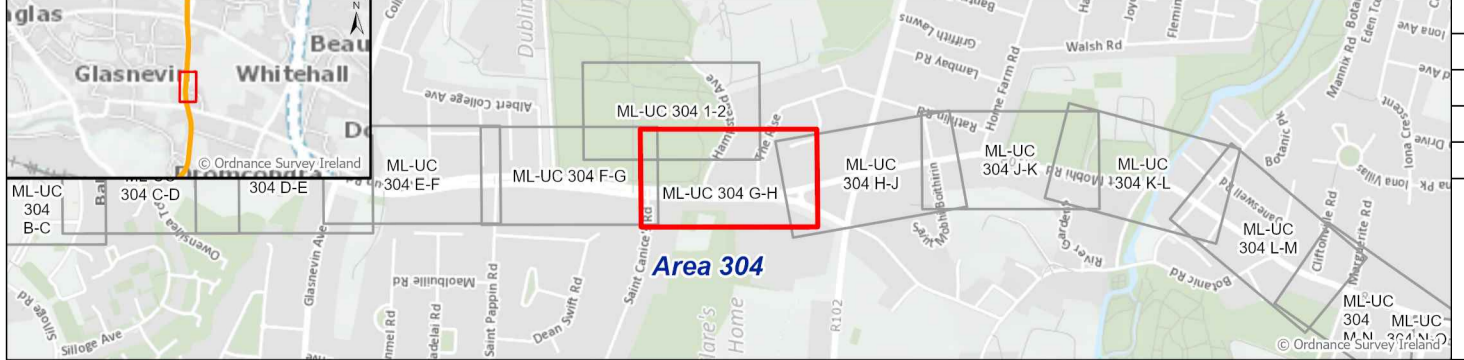
REV.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

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All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallagh College (TLG).

Client		Project	METROLINK	Drawing Title	METROLINK - PROPOSED SURFACE DRAINAGE GLASNEVIN AVENUE TO SAINT PAPPIN ROAD	Drawing Status	S0
Consultant		Drawing N°	ML1-JAI-URD-ROUT_XX-DR-Y-02068	Plan Drawing N°	ML-UN 304 E-F	Sheet 1 of 1	
		Scales Original Size A1	1:500				



LEGEND	
	Existing Surface Water
	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	30/07/22	For Railway Order	MP	DS	DS	PB
P02	02/08/22		ST	DS	DS	PB
P03	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

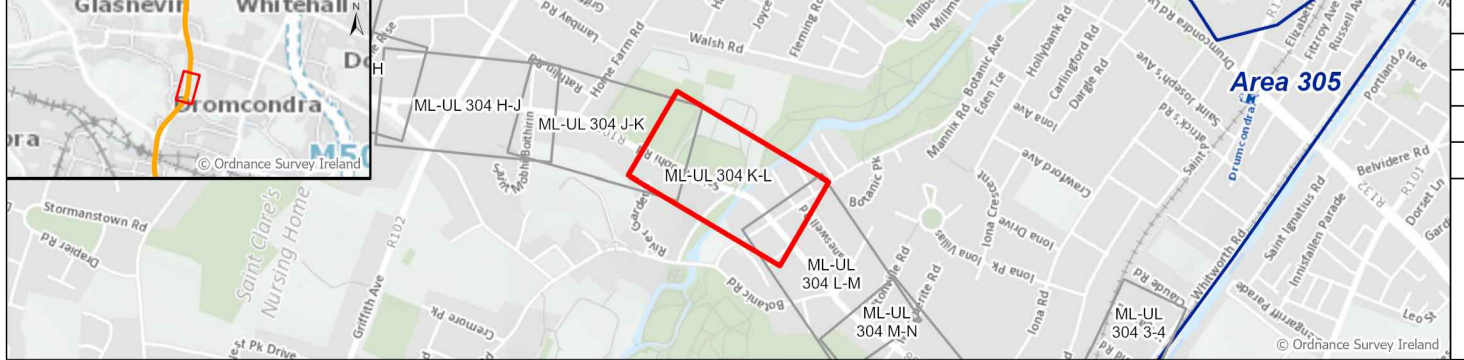
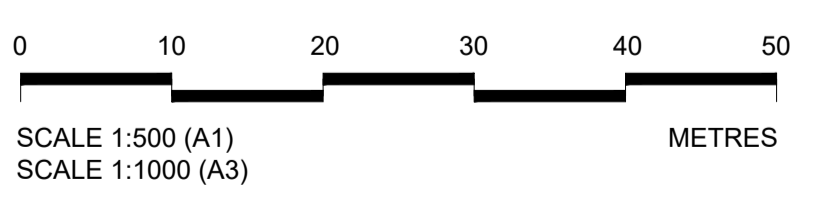
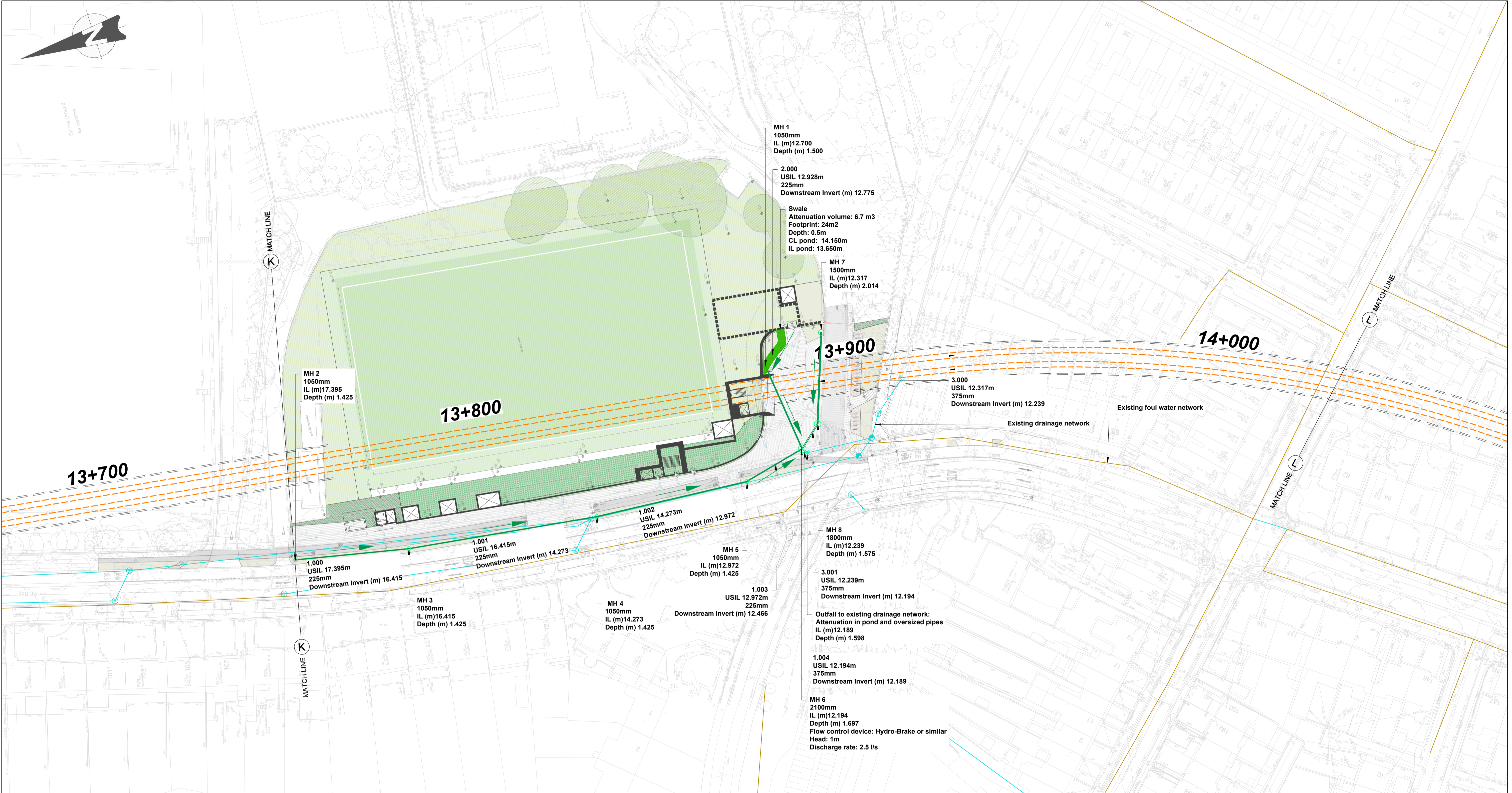
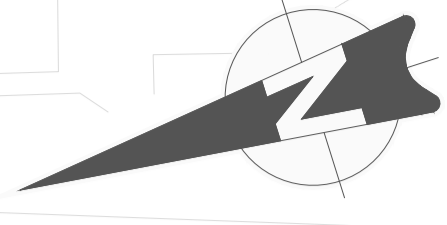
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Client: **TII** **NTA** (Údarás Náisiúnta Iompar National Transport Authority)

Project: **METROLINK**

Consultant: **JACOBS** **IDOM**

Drawing Title	METROLINK - PROPOSED SURFACE DRAINAGE SAINT CANICE'S ROAD TO GRIFFITH AVENUE	Drawing Status	S0
Drawing N°	ML1-JAI-URD-ROUT_XX-DR-Y-02070	Plan Drawing N°	ML-UN 304 G-H
Scales Original Size A1	1:500	Sheet	1 of 1



REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

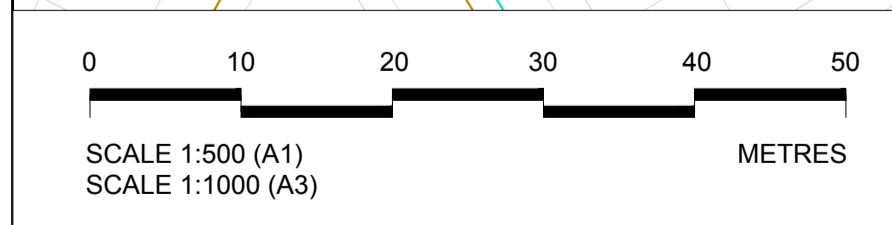
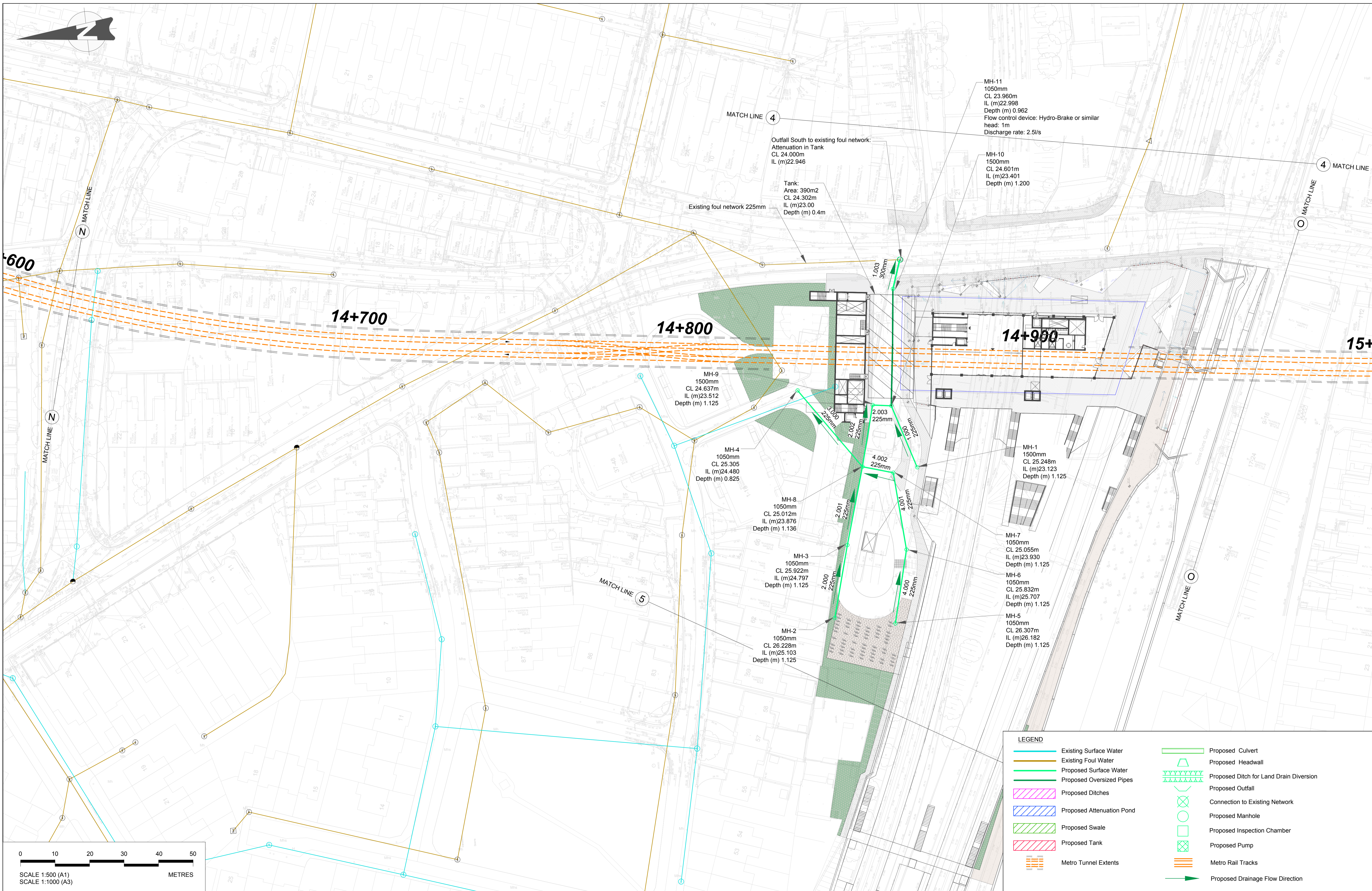
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 All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLG).

Client: **TII** **NTA**

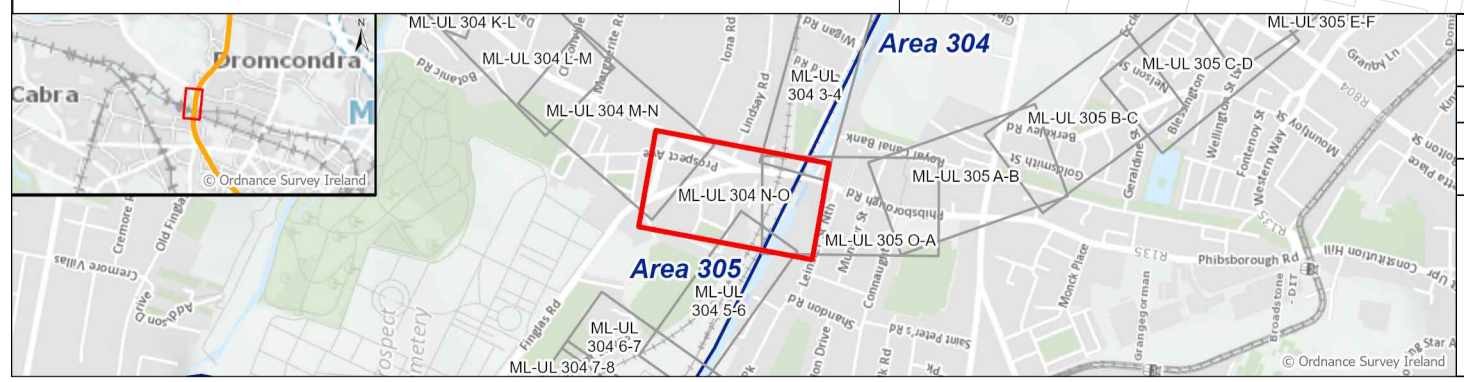
Project: **METROLINK**

Consultant: **JACOBS** **IDOM**

Drawing Title	METROLINK - PROPOSED SURFACE DRAINAGE GRIFFITH PARK TO BOTANIC AVENUE	Drawing Status	S0
Drawing N°	ML1-JAI-URD-ROUT_XX-DR-Y-02073	Plan Drawing N°	ML-UN 304 K-L
Scales Original Size A1	1:500	Sheet	1 of 1



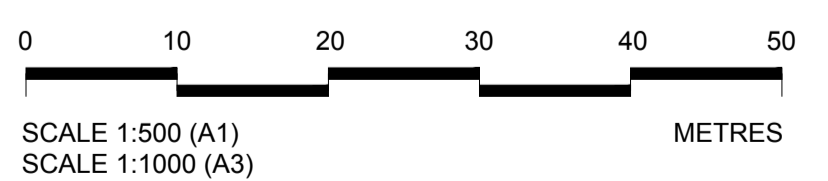
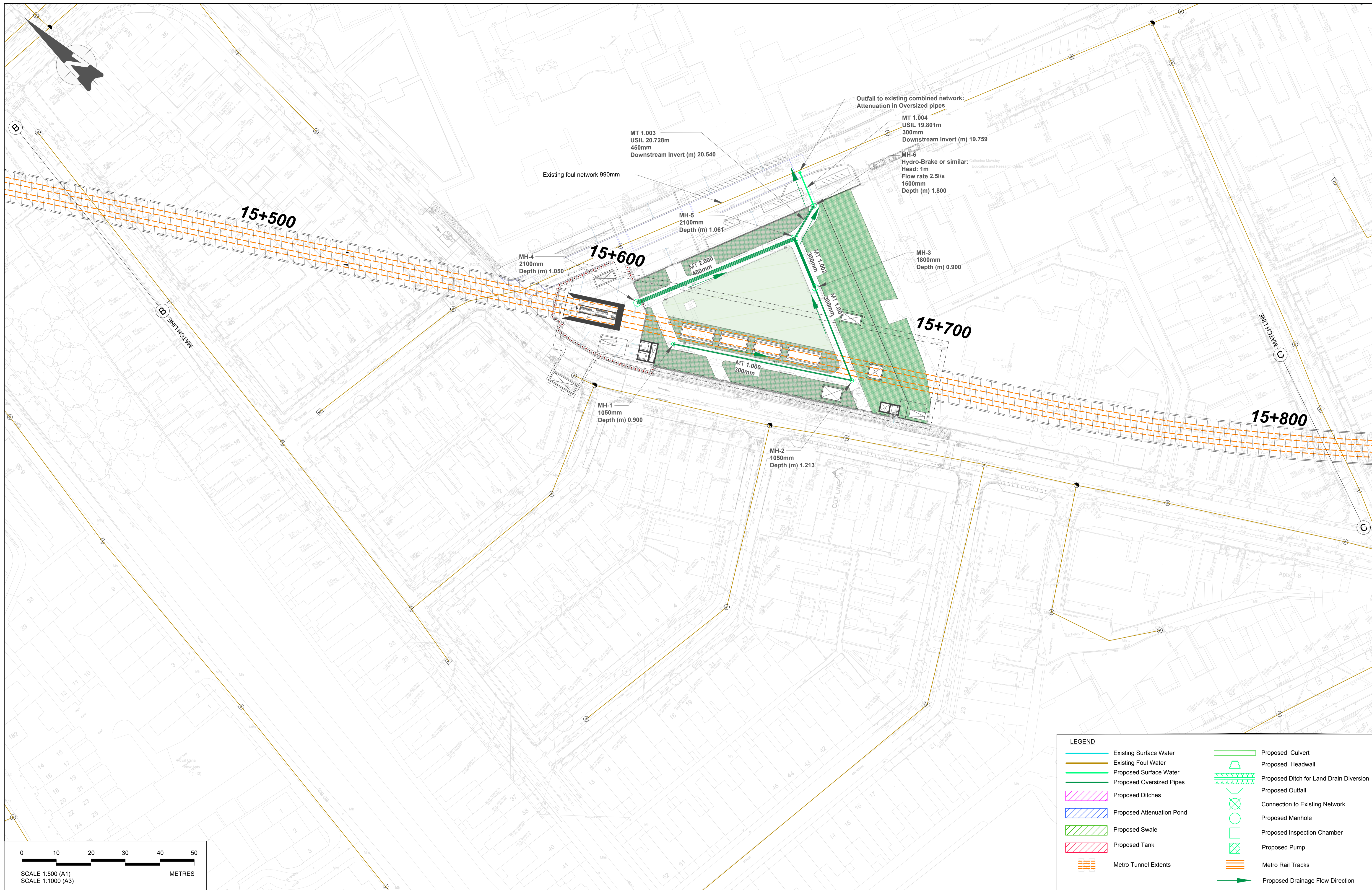
LEGEND	
	Existing Surface Water
	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	15/08/22		BT	DS	DS	PB
P03	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

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 All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLO).

Client		Project	METROLINK	Drawing Title	METROLINK - PROPOSED SURFACE DRAINAGE PROSPECT WAY TO ROYAL CANAL	Drawing Status	S0
Consultant		Drawing N°	ML1-JAI-URD-ROUT_XX-DR-Y-02076	Plan Drawing N°	ML-UL 304 N-O	Sheet 1 of 1	
		Scales Original Size A1	1:500				



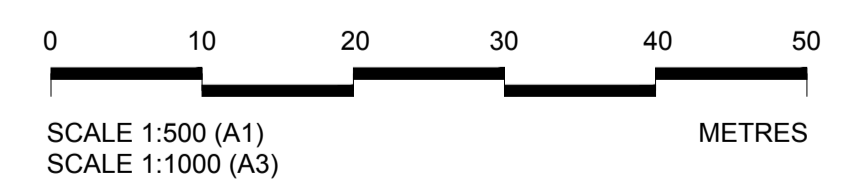
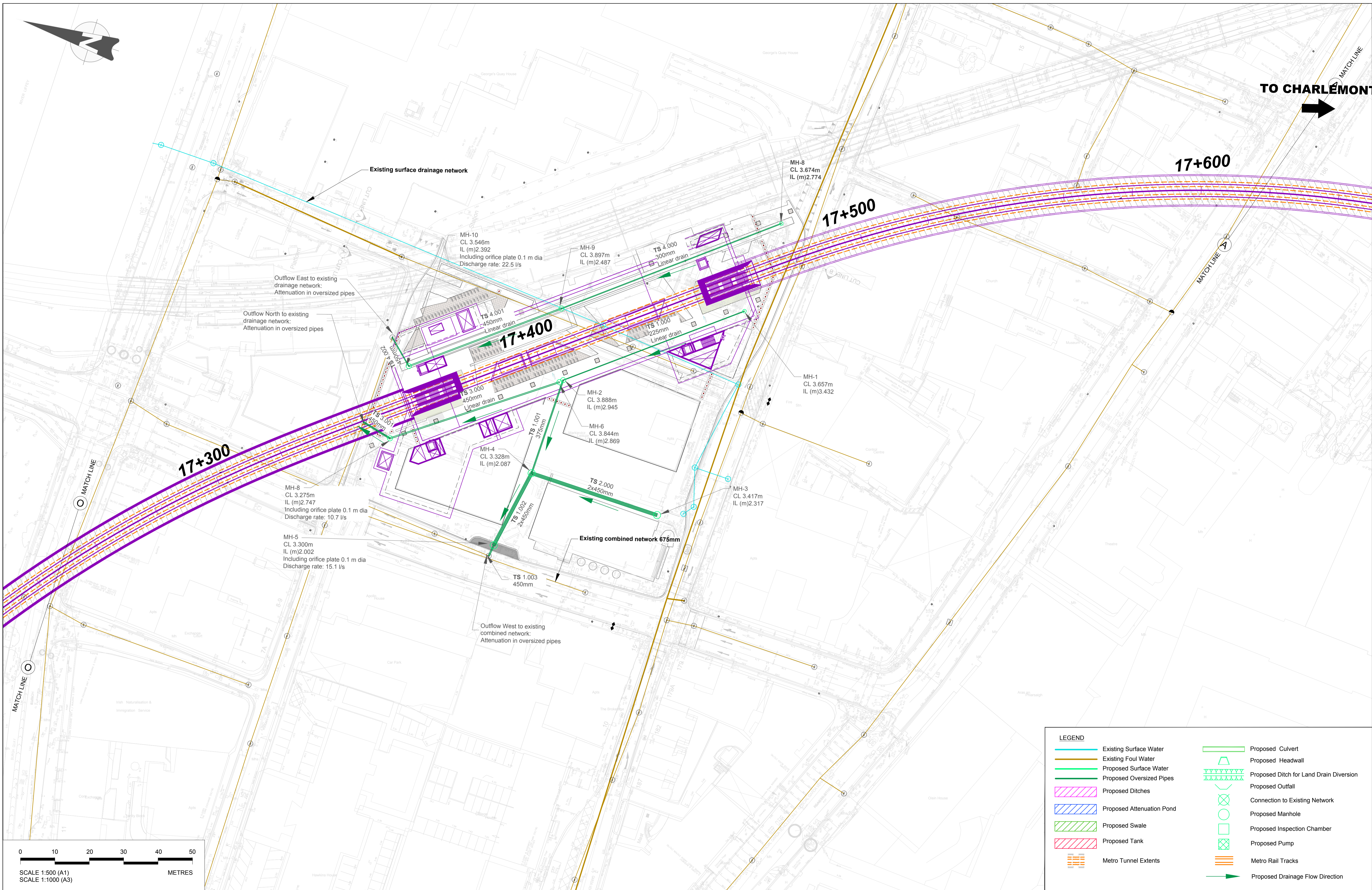
LEGEND	
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	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



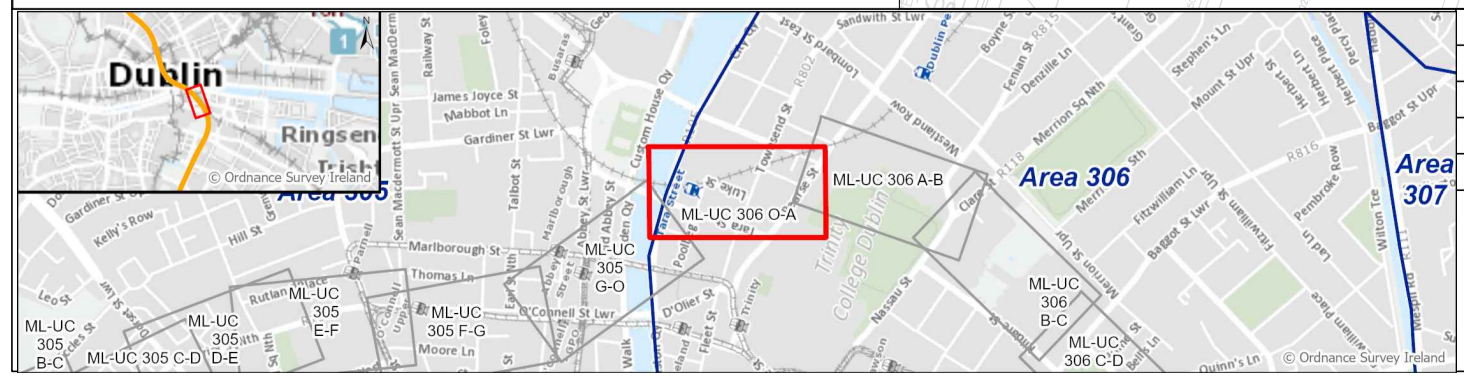
REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P02	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB
P01	14/02/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	NC

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Client 	Project METROLINK	Drawing Title METROLINK - PROPOSED SURFACE DRAINAGE GOLDSMITH STREET TO NELSON STREET	Drawing Status S0
Consultant JACOBS IDOM	Drawing N° ML1-JAI-URD-ROUT_XX-DR-Y-02084	Plan Drawing N° ML-UL 305 B-C	Sheet 1 of 1
Scales Original Size A1 1:500			



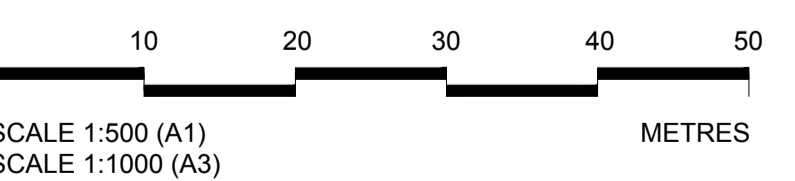
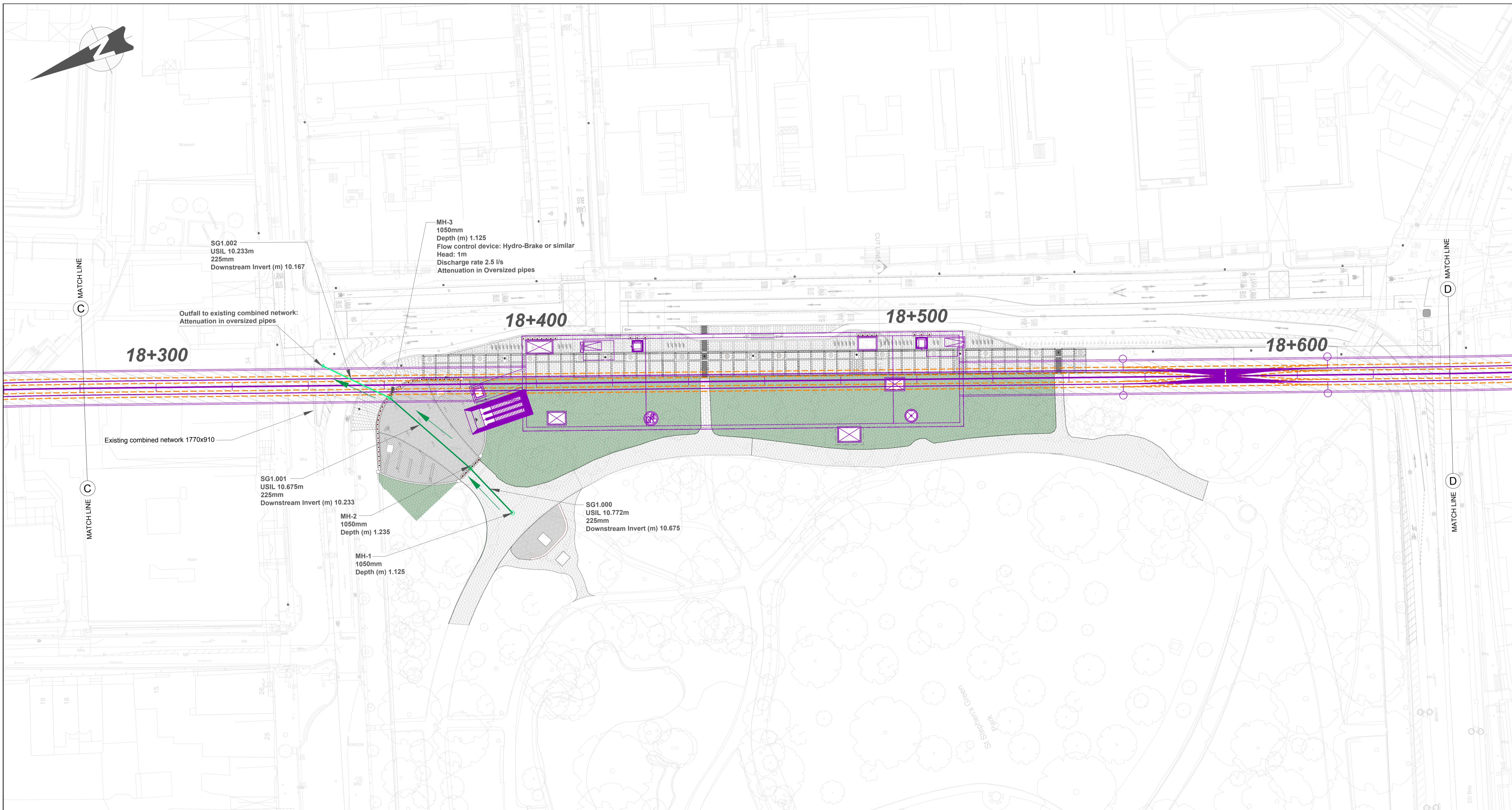
LEGEND	
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	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



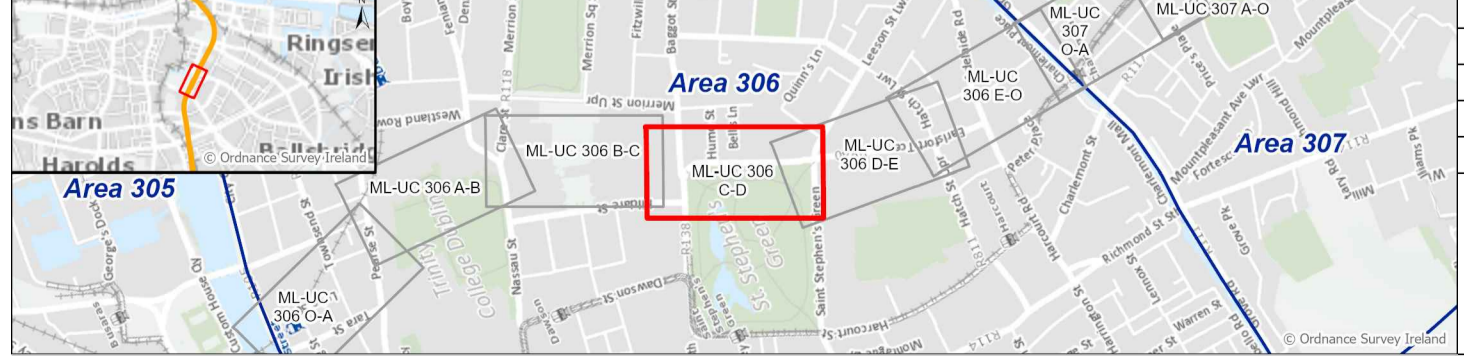
REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	12/05/22		BD	DS	DS	NC
P03	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

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Client 	Project METROLINK	Drawing Title METROLINK - PROPOSED SURFACE DRAINAGE BURGH QUAY TO PEARSE STREET	Drawing Status S0
Consultant JACOBS IDOM	Drawing N° ML1-JAI-URD-ROUT_XX-DR-Y-02090	Plan Drawing N° ML-UN 306 O-A	Sheet 1 of 1
Scales Original Size A1 1:500			



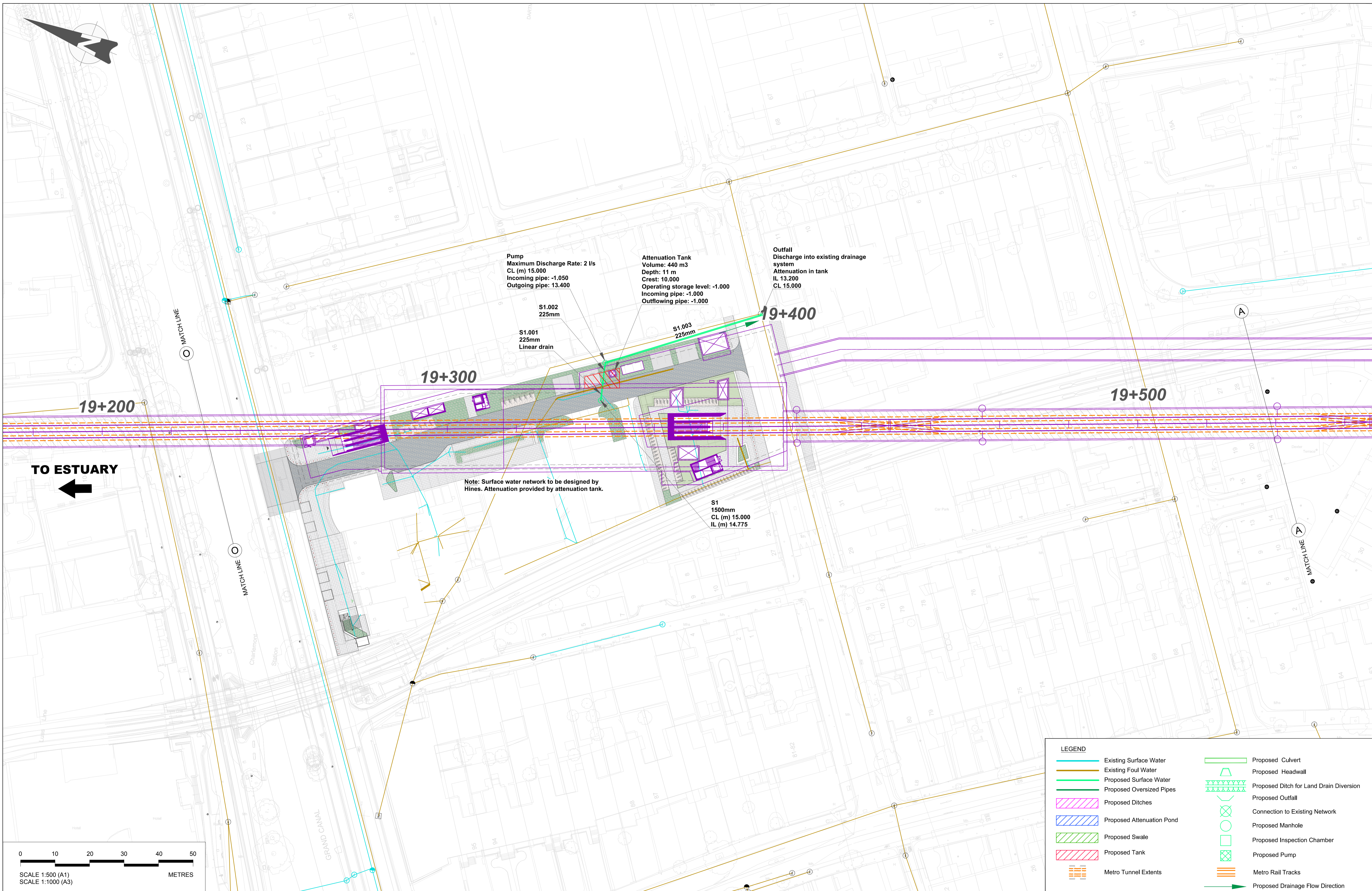
LEGEND	
	Existing Surface Water
	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
P01	14/02/22	PRELIMINARY DESIGN ISSUE	BD	DS	DS	NC
P02	12/05/22	PRELIMINARY DESIGN ISSUE - ALIGNMENT UPDATE	BD	DS	DS	NC
P03	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB

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 All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLLG).

Client 	Project METROLINK	Drawing Title METROLINK - PROPOSED SURFACE DRAINAGE SAINT STEPHEN'S GREEN	Drawing Status S0
Consultant JACOBS IDOM	Drawing N° ML1-JAI-URD-ROUT_XX-DR-Y-02093	Plan Drawing N° ML-UN 306 C-D	Sheet 1 of 1
Scales Original Size A1 1:500			



Pump
 Maximum Discharge Rate: 2 l/s
 CL (m) 15.000
 Incoming pipe: -1.050
 Outgoing pipe: 13.400

Attenuation Tank
 Volume: 440 m3
 Depth: 11 m
 Crest: 10.000
 Operating storage level: -1.000
 Incoming pipe: -1.000
 Outflowing pipe: -1.000

Outfall
 Discharge into existing drainage system
 Attenuation in tank
 IL 13.200
 CL 15.000

S1.002
225mm

S1.001
225mm
Linear drain

S1.003
225mm

19+400

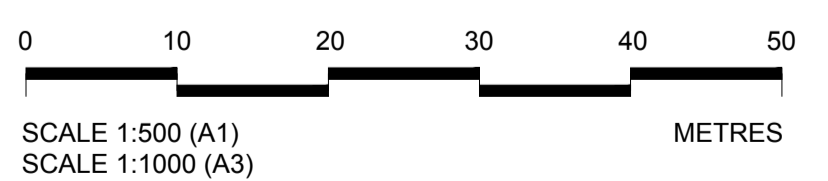
19+300

19+500

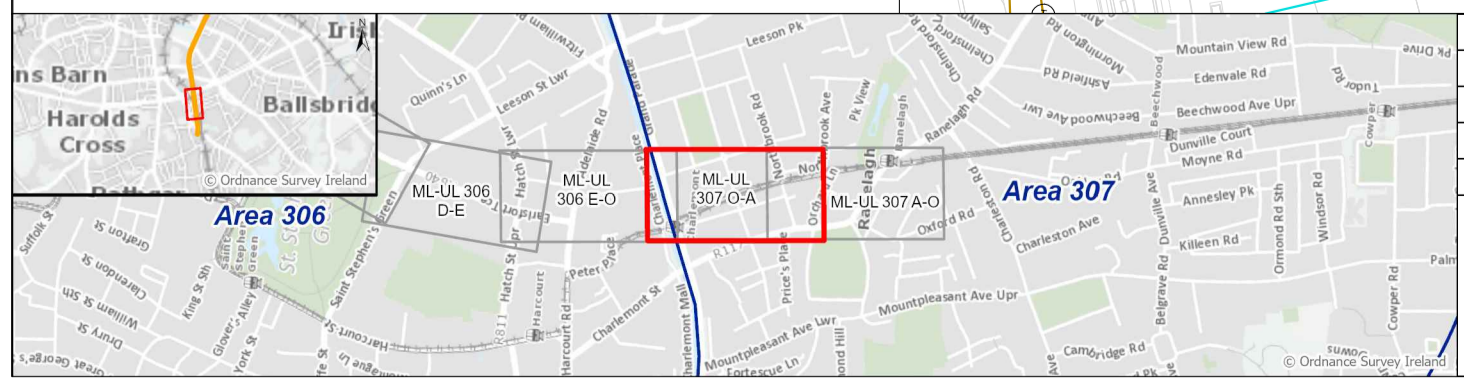
Note: Surface water network to be designed by Hines. Attenuation provided by attenuation tank.

S1
1500mm
CL (m) 15.000
IL (m) 14.775

TO ESTUARY



LEGEND	
	Existing Surface Water
	Existing Foul Water
	Proposed Surface Water
	Proposed Oversized Pipes
	Proposed Ditches
	Proposed Attenuation Pond
	Proposed Swale
	Proposed Tank
	Metro Tunnel Extents
	Proposed Culvert
	Proposed Headwall
	Proposed Ditch for Land Drain Diversion
	Proposed Outfall
	Connection to Existing Network
	Proposed Manhole
	Proposed Inspection Chamber
	Proposed Pump
	Metro Rail Tracks
	Proposed Drainage Flow Direction



P01	21/07/22	For Railway Order	BD	DS	DS	PB
P02	26/08/22	FOR RAILWAY ORDER ISSUE	BD	DS	DS	PB
REV.	DATE	Description	DRAWN BY	CHECKED BY	REVIEWED BY	APPROVED BY
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Client 	Project METROLINK	Drawing Title METROLINK - PROPOSED SURFACE DRAINAGE GRAND PARADE TO NORTHBROOK ROAD	Drawing Status S0
Consultant JACOBS IDOM	Drawing N° ML1-JAI-URD-ROUT_XX-DR-Y-02096	Plan Drawing N° ML-UL 307 O-A	Sheet 1 of 1
Scales Original Size A1 1:500			