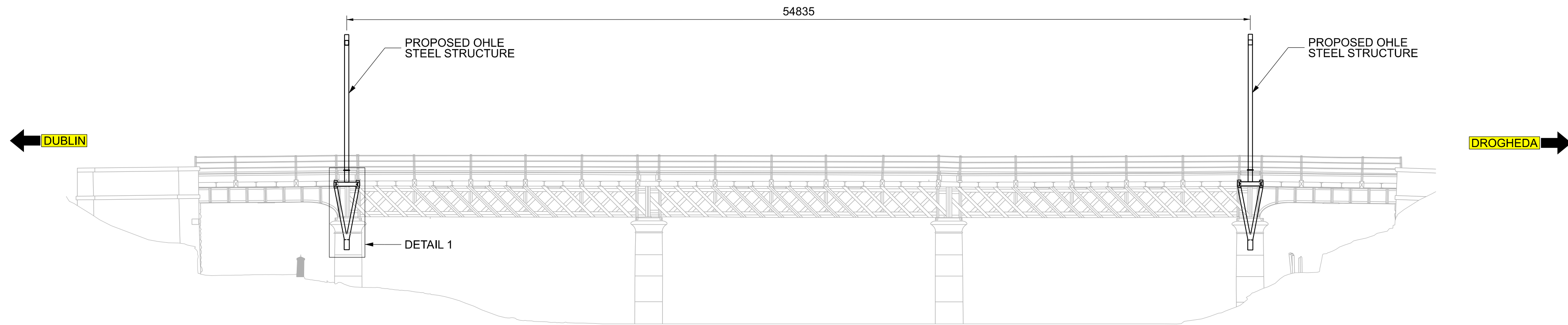
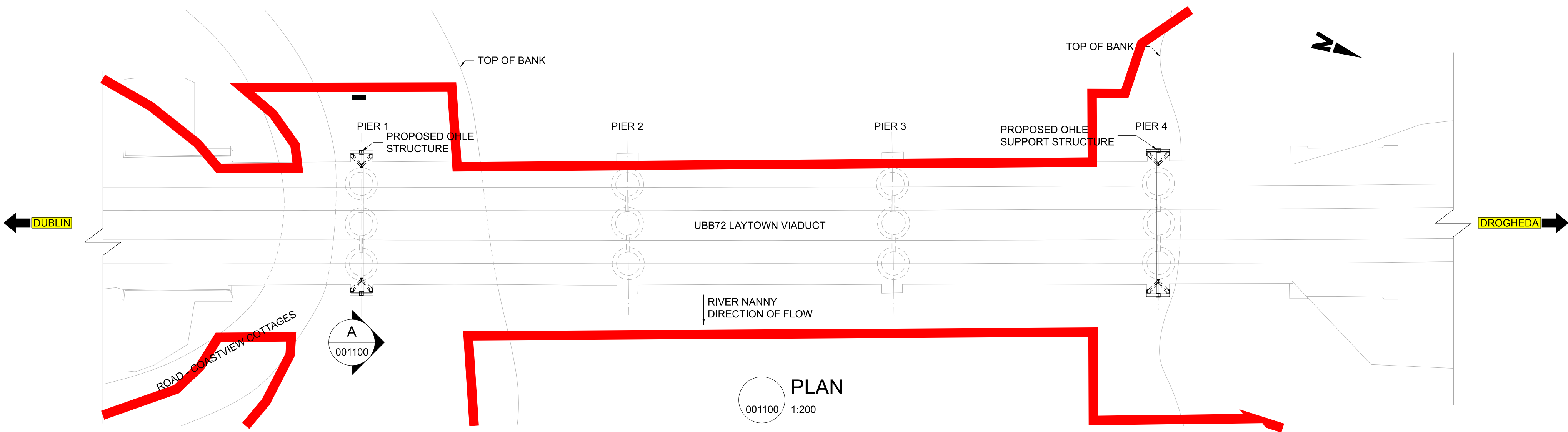


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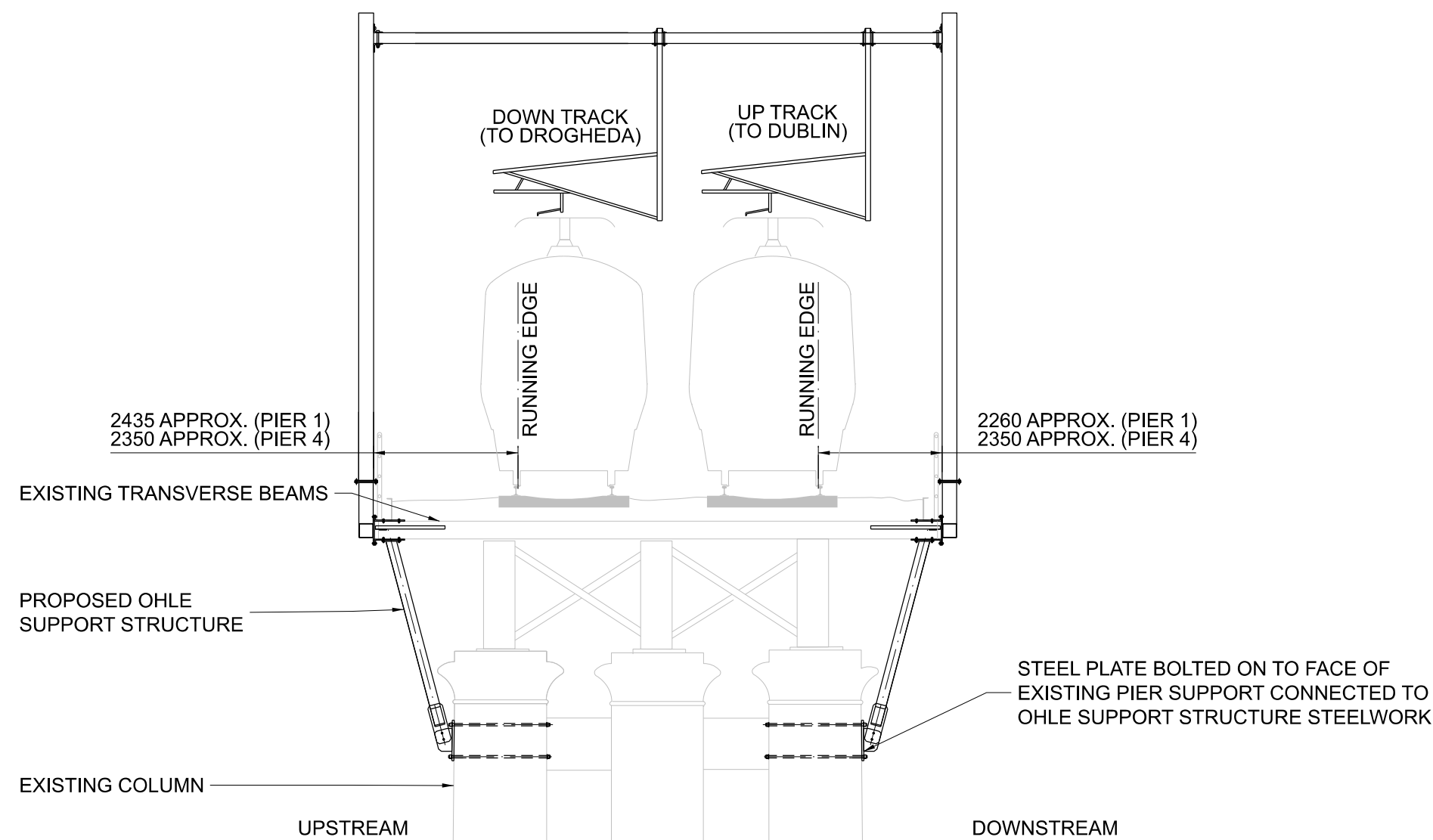
SPECIFIC LOCATIONS

11 Laytown and Bettystown

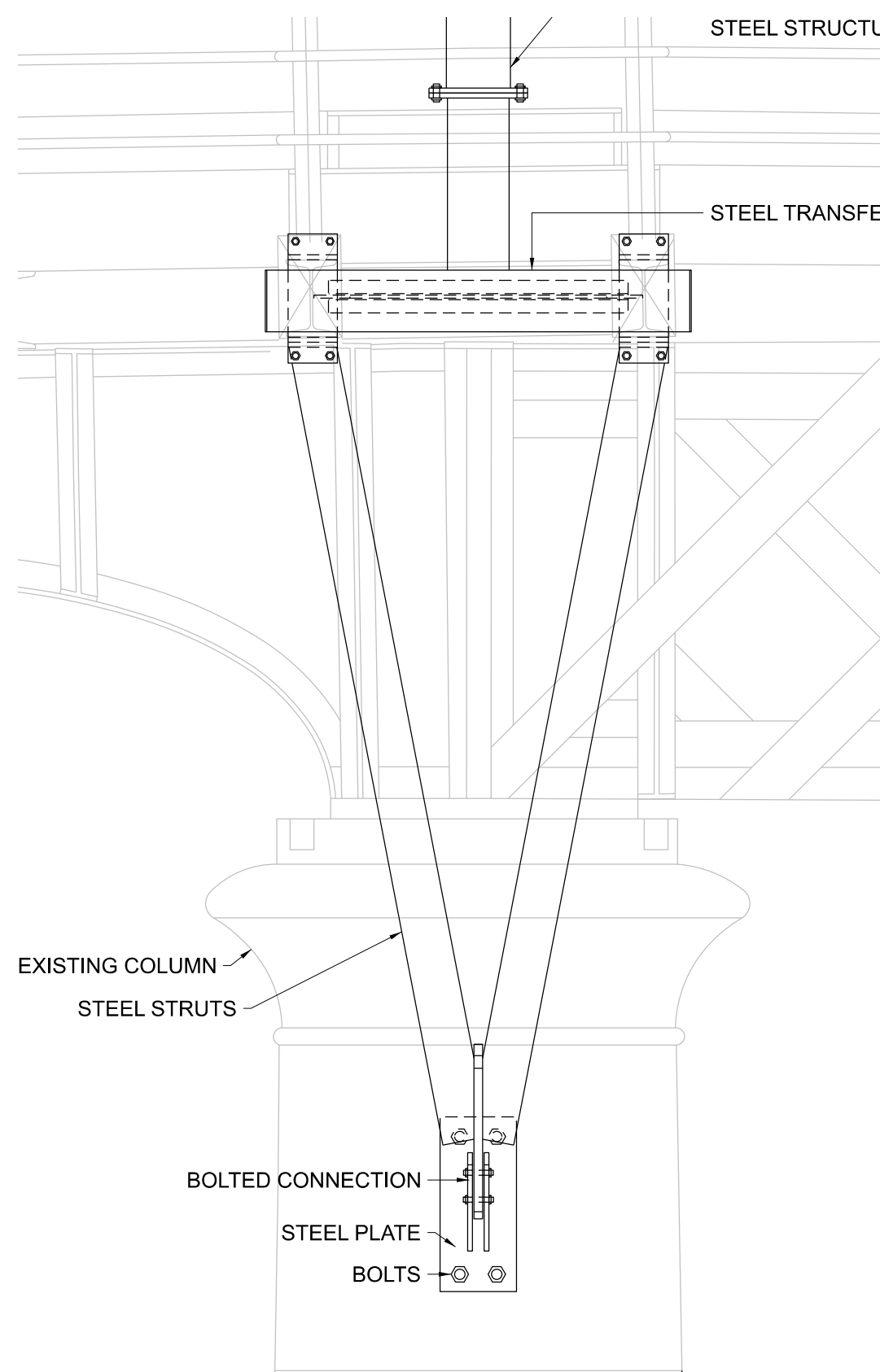
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ELEVATION
001100 1:200



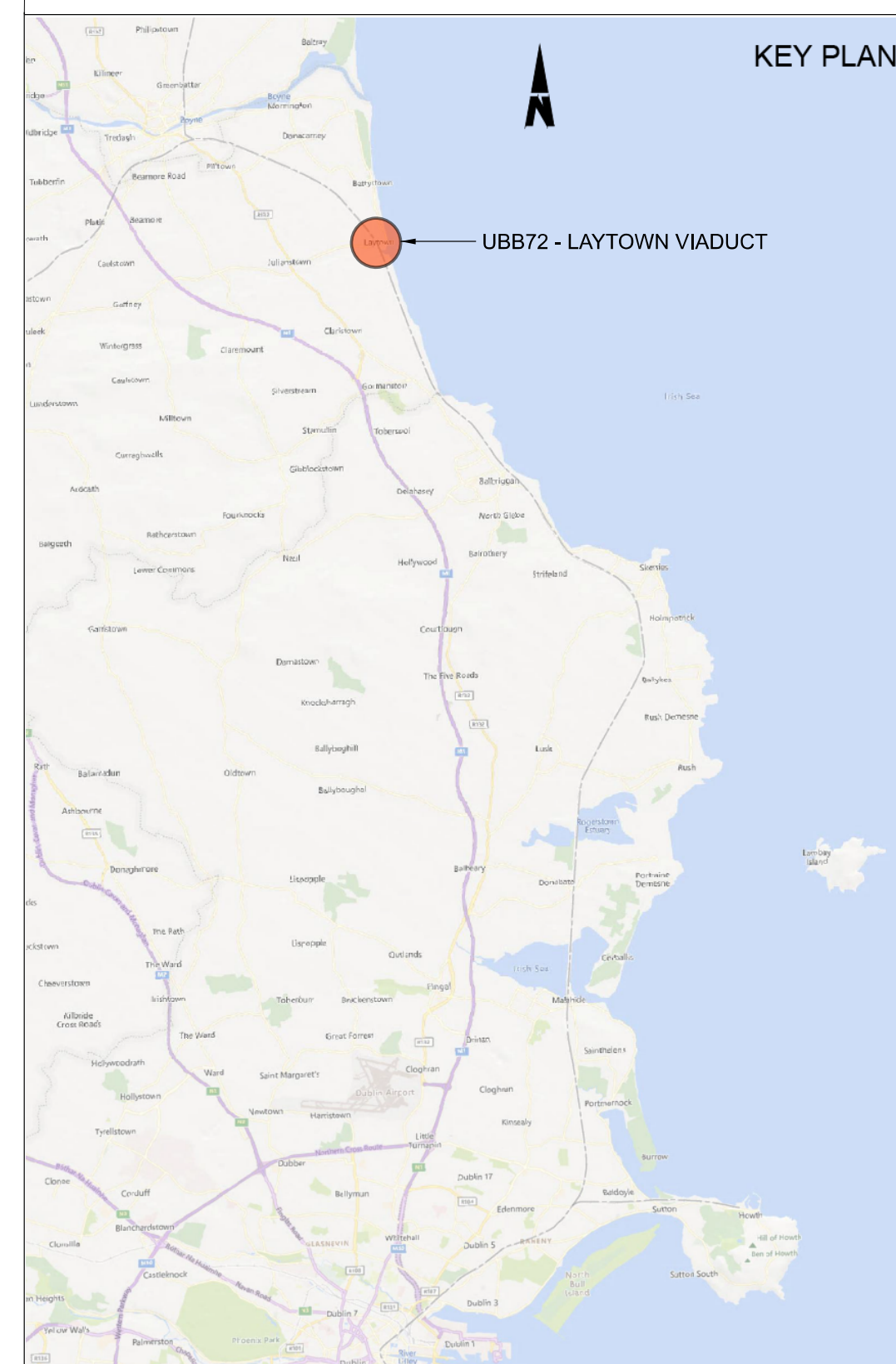
SECTION A (PIER 4 SIMILAR)
001100 1:100



DETAIL 1
001100 1:25

- NOTES**
- ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE SHOWN IN METERS ABOVE ORDINANCE DATUM.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL STEELWORK SHALL BE GRADE S355 UNLESS NOTED OTHERWISE. STEELWORK SHALL CONFORM TO THE FOLLOWING STANDARDS:
UB & UC SECTIONS - BS EN 10025
PFC & PLATES - BS EN 10025
RHS, SHS & CHS - BS EN 10210
EQUAL & UNEQUAL ANGLES - BS EN 10056
FLAT, SQUARE & ROUND BAR - BS EN 10025
 - OHLE STEEL STRUCTURES SHOWN INDICATIVELY. EXACT MEMBERS TYPES, HEIGHTS AND LENGTHS TO BE DETERMINED AT DETAILED DESIGN.

- LEGEND**
- DEVELOPMENT BOUNDARY
 - PROPOSED ELEMENTS
 - EXISTING ELEMENTS



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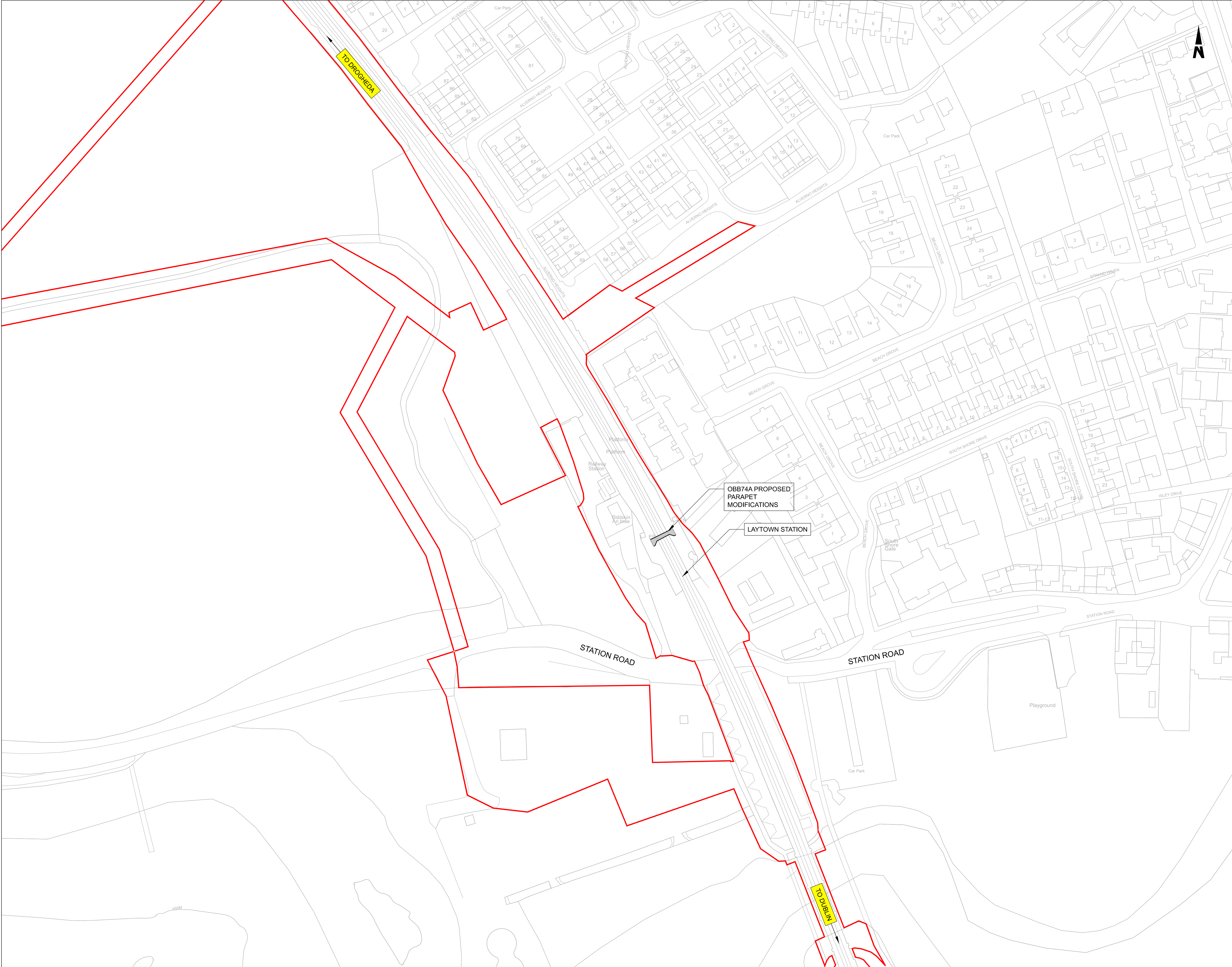
Rev	Date	Dm	Chk'd	App'd	Description
P01	13/10/2023	AA	CG	DB	PLANNING ISSUE

Client		Engineering Designer			
Iarnród Éireann Irish Rail		ARUP			
Date	01/06/2023	Scale	As Shown @ A1 @ A3	Drawn	AA
Project Code	D+WP56	Originator Code	ARP	Checked	CG
QMS Code		280275-00			
Approved		DB			

Project Title			
DART+ COASTAL NORTH			
Drawing Title			
UBB72 - LAYTOWN VIADUCT OHLE SUPPORT GENERAL ARRANGEMENT			
Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-P4-NL-DR-RO-001100	01 of 01	S3	P01

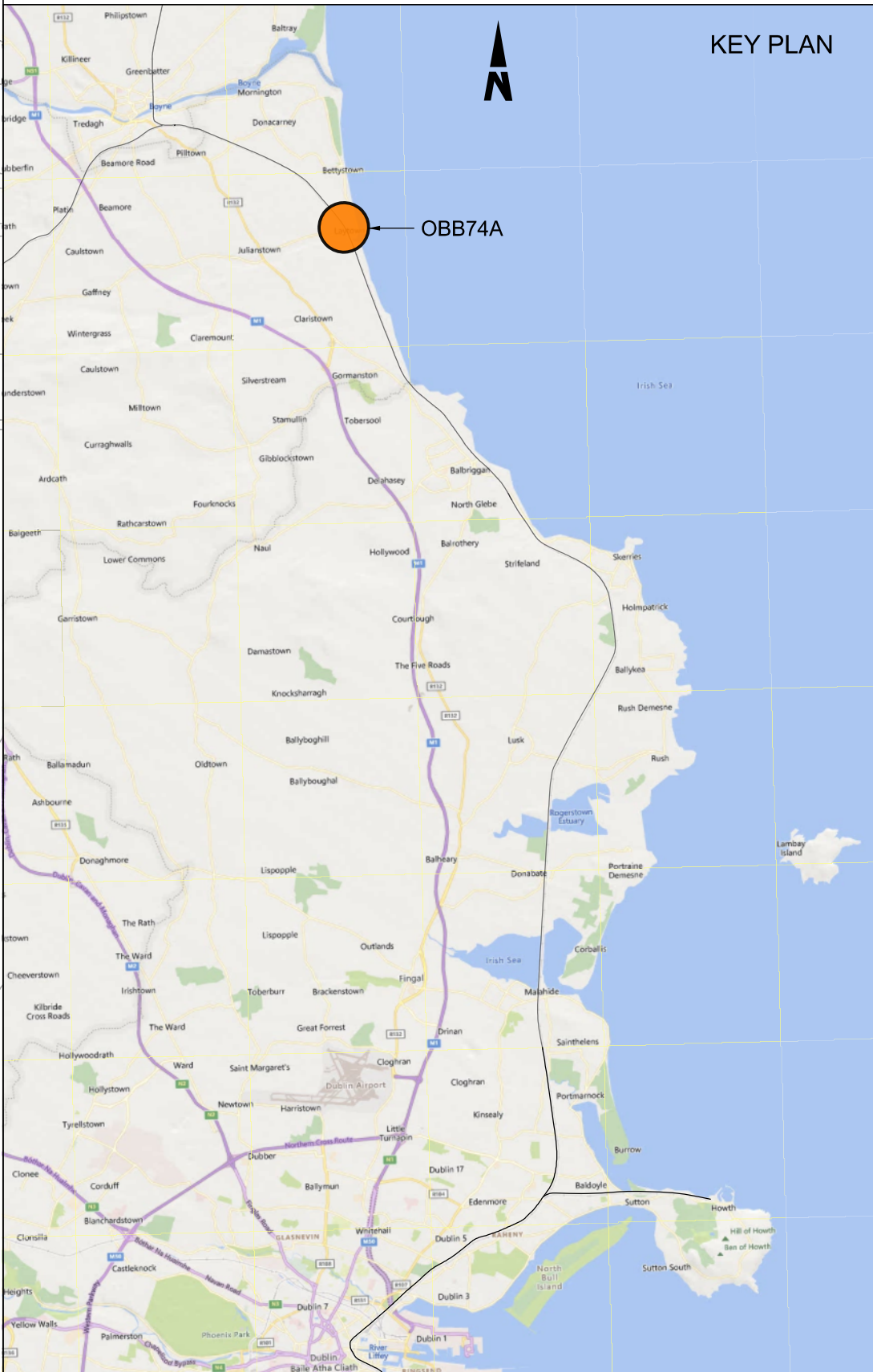
DO NOT SCALE USE FIGURED DIMENSIONS ONLY

**BRIDGE PARAPET
MODIFICATIONS**



- NOTES:**
1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS NOTED OTHERWISE.
 2. ALL LEVELS ARE SHOWN IN METERS ABOVE ORDNANCE DATUM.
 3. DO NOT SCALE FROM THIS DRAWING.

- LEGEND:**
- EXISTING ELEMENTS
 - PROPOSED ELEMENTS
 - DEVELOPMENT BOUNDARY
 - EXISTING BRIDGE



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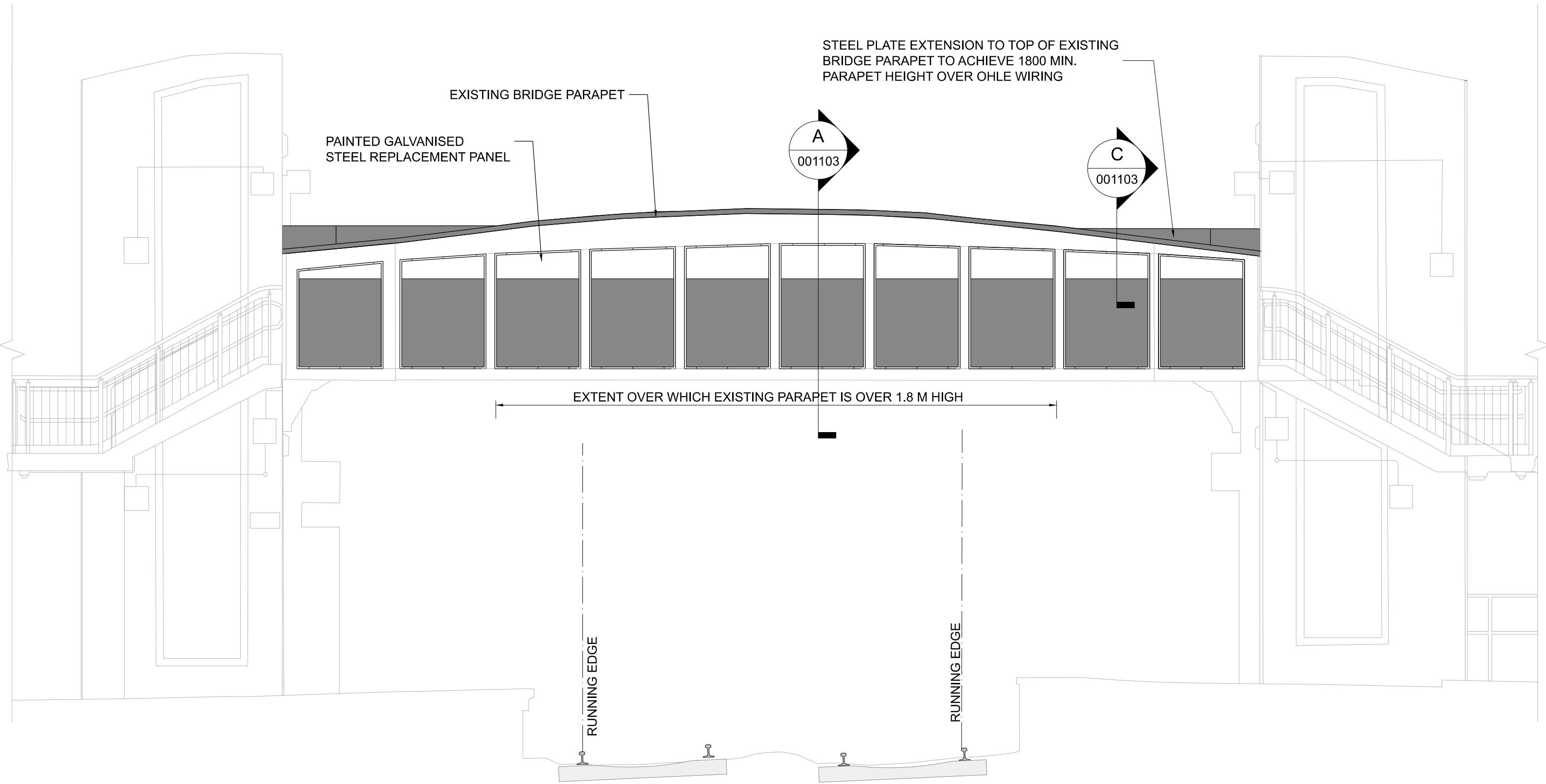


Rev	Date	Dm	Chk'd	App'd	Description
P01	13/10/2023	SF	CG	DB	PLANNING ISSUE

Client		Engineering Designer	
Date	Scale	Drawn	Checked
01/06/2023	1:1000 @ A1 @ A3	SF	CG
Project Code	Originator Code	QMS Code	Approved
D+WP56	ARP	280275-00	DB

Project Title			
DART+ COASTAL NORTH			
Drawing Title			
OBB74A LAYTOWN PARAPET MODIFICATIONS SITE LOCATION PLAN			
Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-P4-NL-DR-RO-001102	01 of 01	S3	P01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

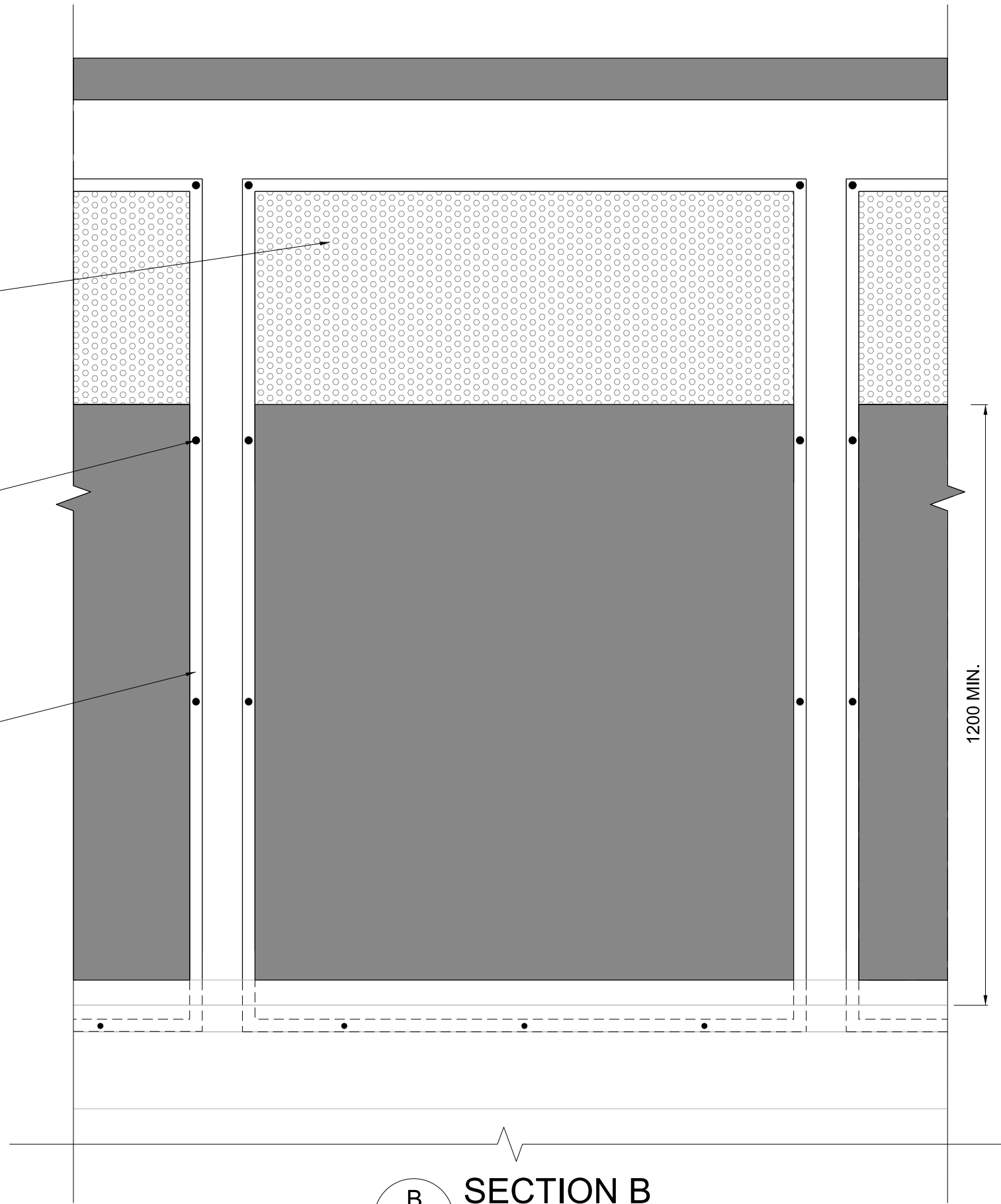


BRIDGE ELEVATION
001103 1:50

REPLACE EXISTING PANELS WITH NEW PAINTED GALVANISED STEEL PANELS. THE LOWER PORTION SHALL BE SOLID UP TO A HEIGHT OF 1.2 m MIN. ABOVE THE ADJACENT WALKING SURFACE. THE REMAINING PANEL HEIGHT SHALL BE FABRICATED WITH IP2X COMPLIANT PERFORATIONS.

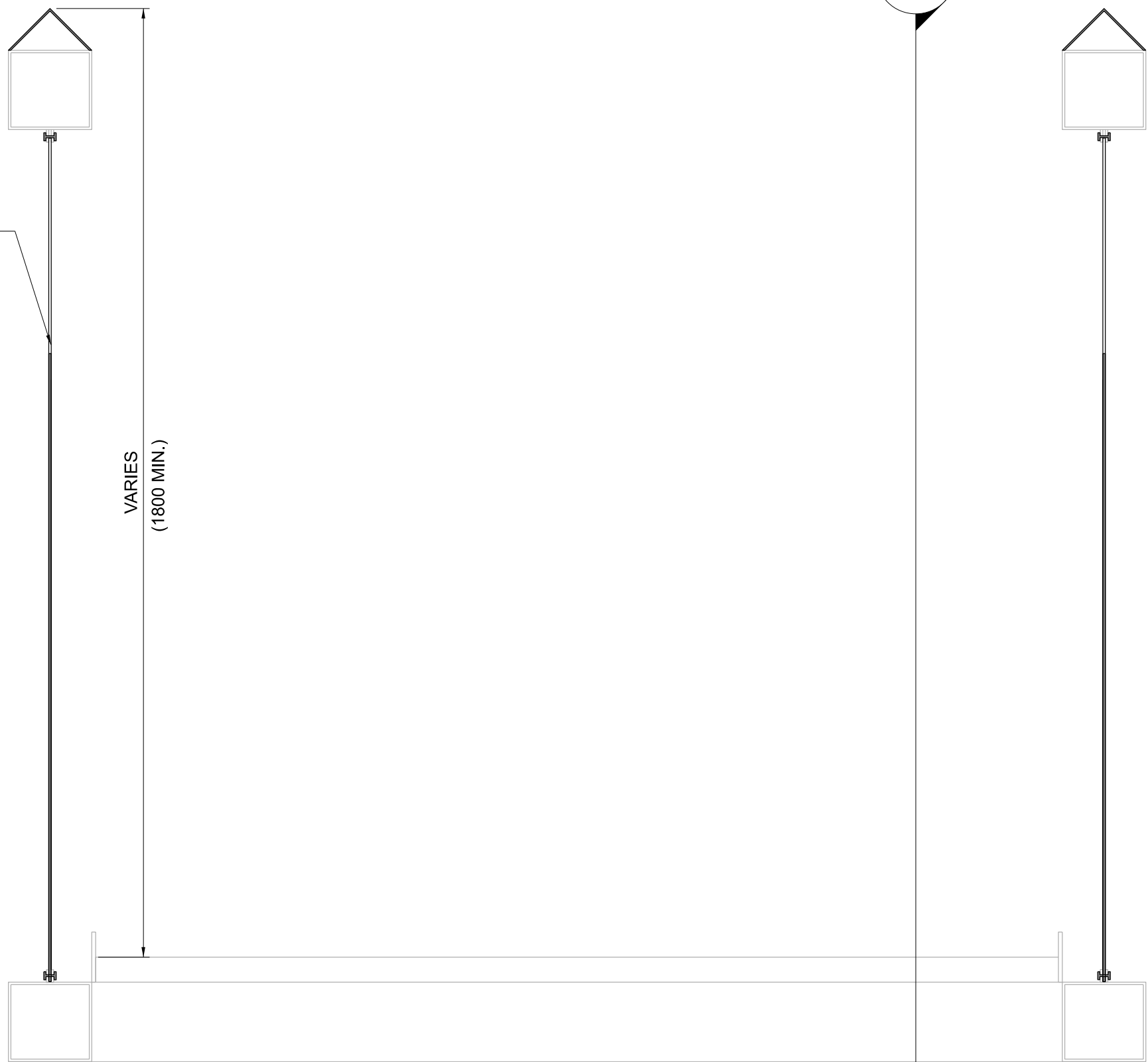
EXISTING BOLTS TO BE REPLACED

PANEL ATTACHMENT PLATES TO BE REMOVED, REPAIRED AND REINSTALLED WHERE NECESSARY

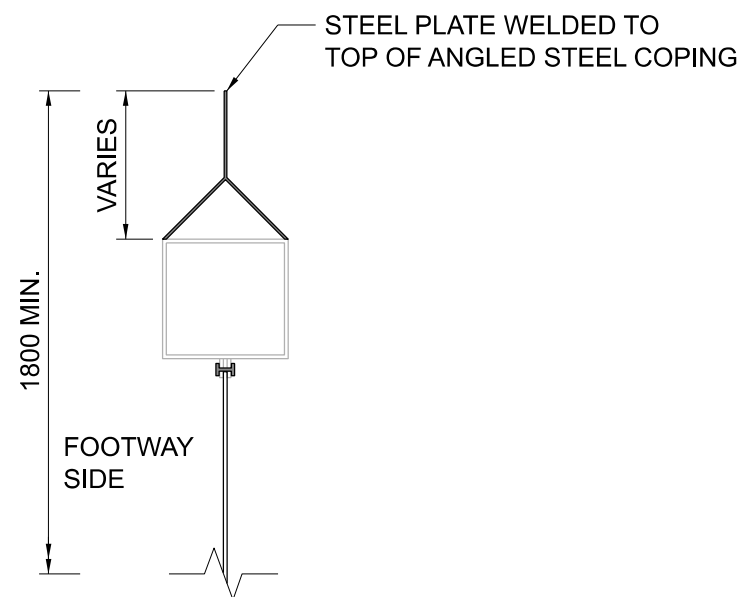


SECTION B
001103 1:10

EXISTING PARAPET PANEL TO BE REPLACED WITH NEW ONE (PANEL SHOWN INDICATIVELY)



SECTION A
001103 1:10



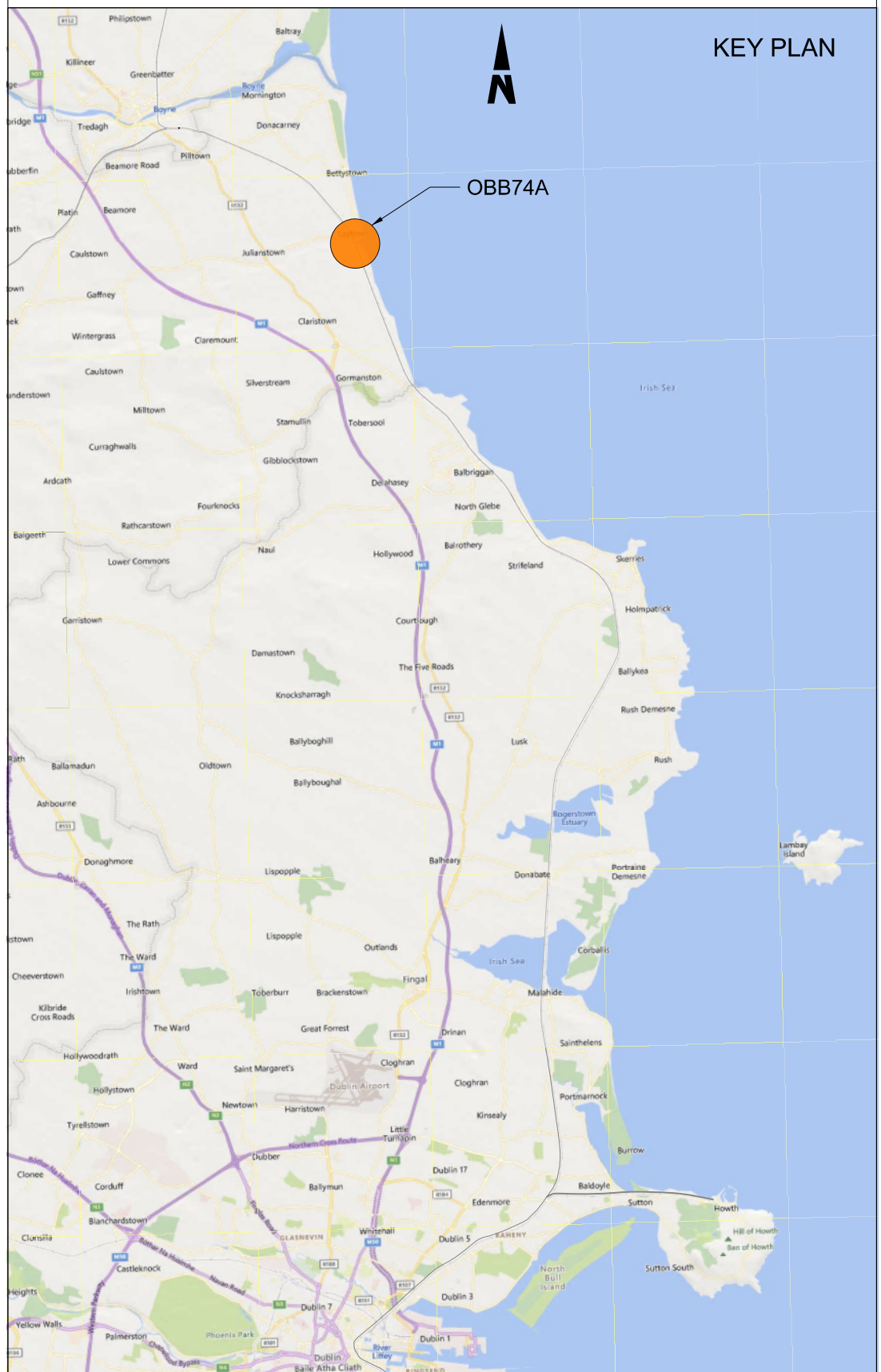
SECTION C
001103 1:10

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE SHOWN IN METERS ABOVE ORDINANCE DATUM.
3. DO NOT SCALE FROM THIS DRAWING.
4. ALL STEELWORK SHALL BE GRADE S355 UNLESS NOTED OTHERWISE. STEELWORK SHALL CONFORM TO THE FOLLOWING STANDARDS:
UB & UC SECTIONS - BS EN 10025
PFC & PLATES - BS EN 10025
RHS, SHS, & CHS - BS EN 10056
FLAT, SQUARE & ROUND BAR - BS EN 10025
5. ALL WELDED CONNECTIONS SHALL BE GRADE S355 UNLESS NOTED OTHERWISE.
6. ALL BOLT ASSEMBLIES SHALL BE OF PROPERTY CLASS 8.8 UNLESS NOTED OTHERWISE, WITH HEXAGONAL BOLTS CONFORMING TO BS EN 4014, NUTS TO BS EN 4032 AND HIGH STRENGTH STEEL WASHERS TO BS EN 7091.
7. ALL STEELWORK SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH IS EN ISO 1461.

LEGEND

- EXISTING ELEMENTS
PROPOSED ELEMENTS



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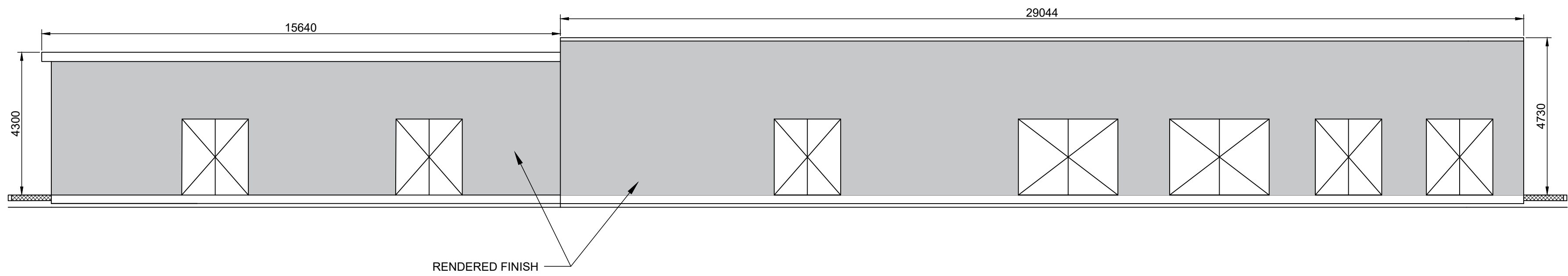


Rev	Date	Dm	Chk'd	App'd	Description
P01	13/10/2023	AS	CG	DB	PLANNING ISSUE

Client Iarnród Éireann Irish Rail		Engineering Designer ARUP		
Date 01/06/2023	Scale As Shown @ A1 @ A3	Drawn AS	Checked CG	Approved DB
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00		

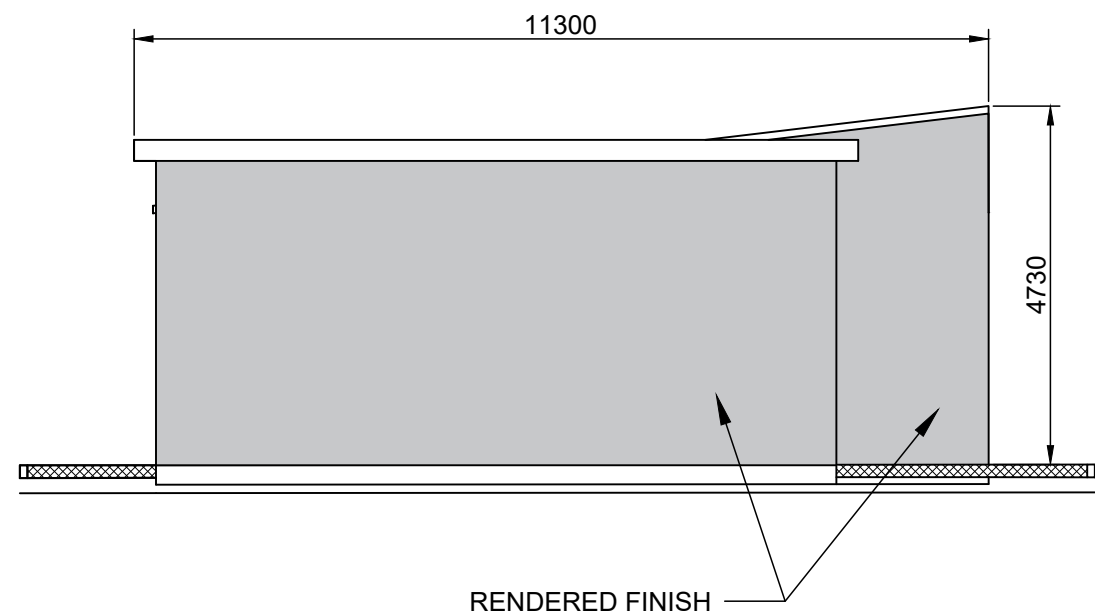
Project Title DART+ COASTAL NORTH				
Drawing Title OBB 74A LAYTOWN PARAPET MODIFICATIONS GENERAL ARRANGEMENT				
Drawing File Name D+WP56-ARP-P4-NL-DR-RO-001103	Sheet Number 01 of 01	Status S3	Rev P01	

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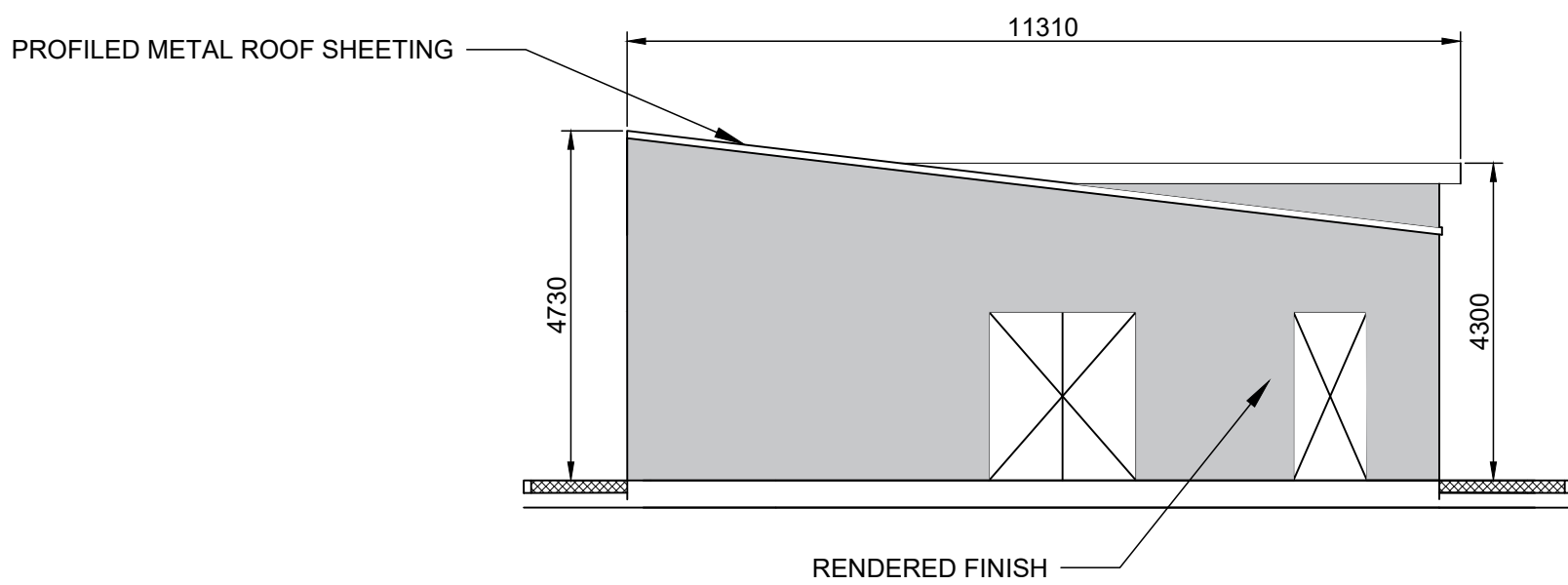
ELEVATION A

1:100 @ A1
1:200 @ A3



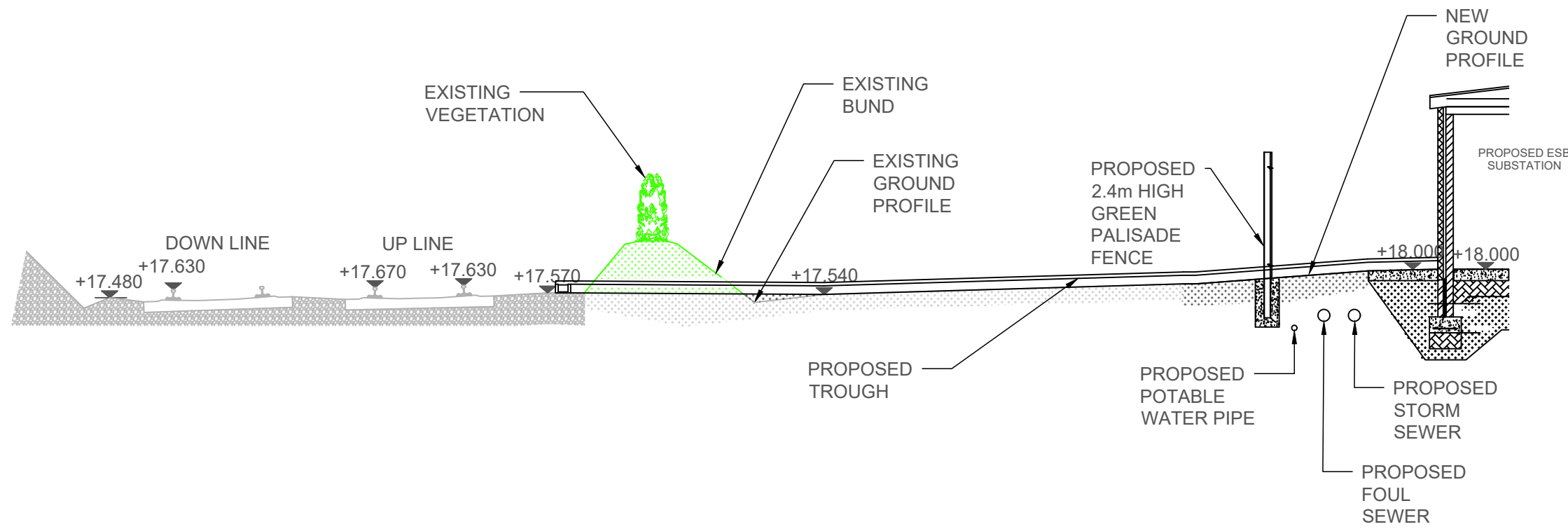
ELEVATION B

1:100 @ A1
1:200 @ A3



ELEVATION C

1:100 @ A1
1:200 @ A3



CROSS-SECTION

1:100 @ A1
1:200 @ A3

NOTES

- DO NOT SCALE FROM THIS DRAWING.
- ALL MEASUREMENTS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE METERS ABOVE ORDNANCE DATUM (mOD) UNLESS NOTED OTHERWISE.
- THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.
- LOCATION OF ALL BURIED SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION.

LEGEND

- EXISTING ELEMENTS
- PROPOSED ELEMENTS
- ELEMENTS TO BE REMOVED

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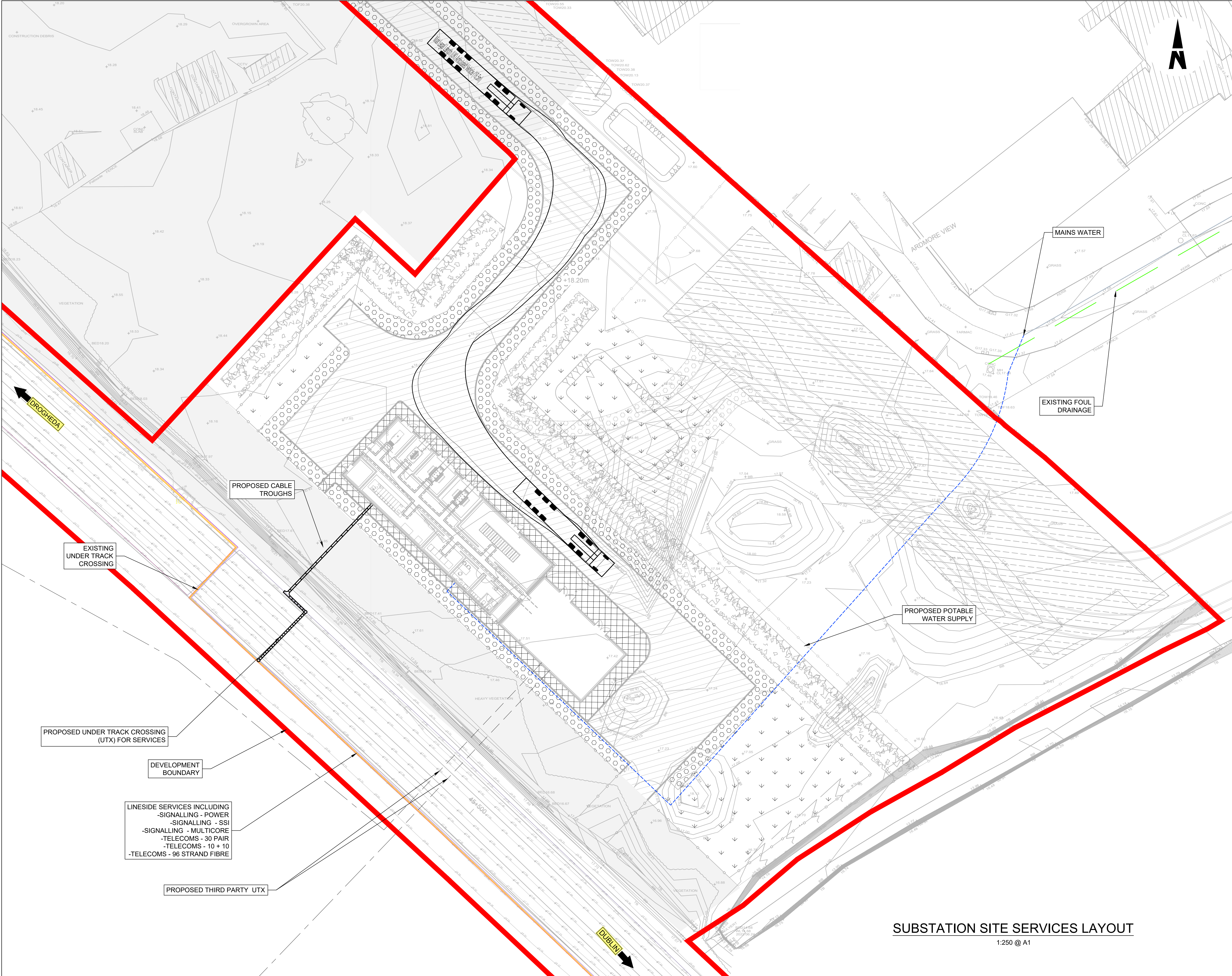


Rev	Date	Dwn	Chk'd	App'd	Description
P01	17/11/2023	SF	EJ	DB	PLANNING ISSUE

Client Iarnród Éireann Irish Rail		Engineering Designer ARUP		
Date 01/06/2023	Scale SHOWN @ A1 SHOWN @ A3	Drawn SF	Checked EJ	Approved DB
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00		

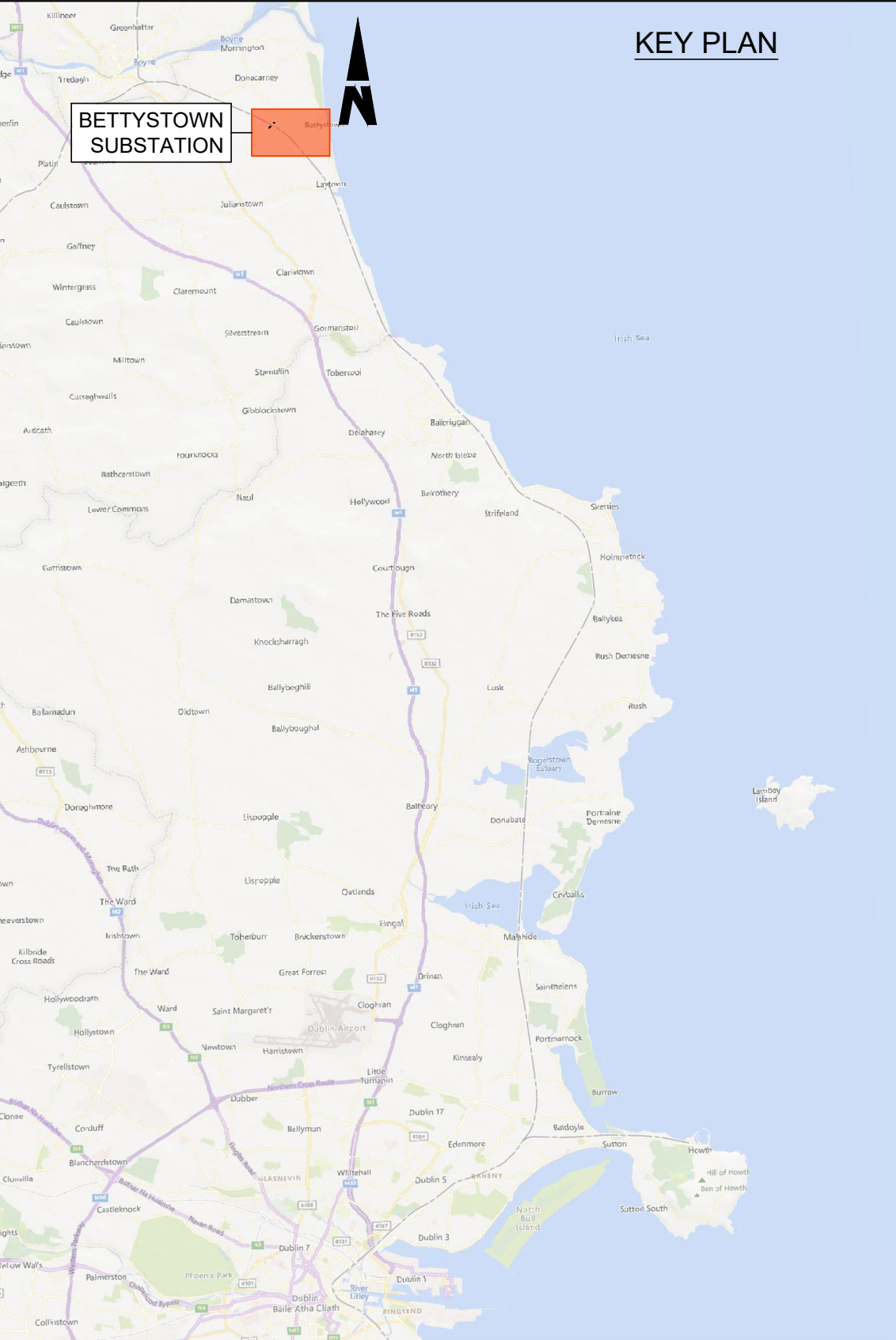
Project Title DART+ COASTAL NORTH				
Drawing Title BETTYSTOWN SUBSTATION SECTION AND ELEVATIONS				
Drawing File Name D+WP56-ARP-P4-NL-DR-RO-001111	Sheet Number 01 of 01	Status S3	Rev P01	

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- DO NOT SCALE FROM THIS DRAWING.
 - LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
 - LOCATION OF ALL BURIED SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION.
 - ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE STATED.
 - ALL CHAINAGES ARE IN KILOMETERS. (36+250 = 36.25km)
 - DRAWING TO BE PRINTED IN COLOUR.
 - ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM (mOD) UNLESS OTHERWISE STATED.
 - THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.

- LEGEND:**
- TEL - 10 + 10 (MOSTLY REDUNDANT)
 - TEL - 30 PAIR
 - SIG - MULTICORE
 - SIG - SSI
 - SIG - POWER
 - FIBRE (96 STRAND, APPROX. 10 OCCUPIED BY IE, OTHERS THIRD PARTY)
 - THIRD PARTY FIBRE
 - WATERMAIN
 - SEWER
 - POTABLE WATER
 - DEVELOPMENT BOUNDARY
 - PROPOSED ESB 38 KV OVERHEAD CABLES
 - PROPOSED ESB 38 KV BURIED CABLES



SUBSTATION SITE SERVICES LAYOUT
1:250 @ A1

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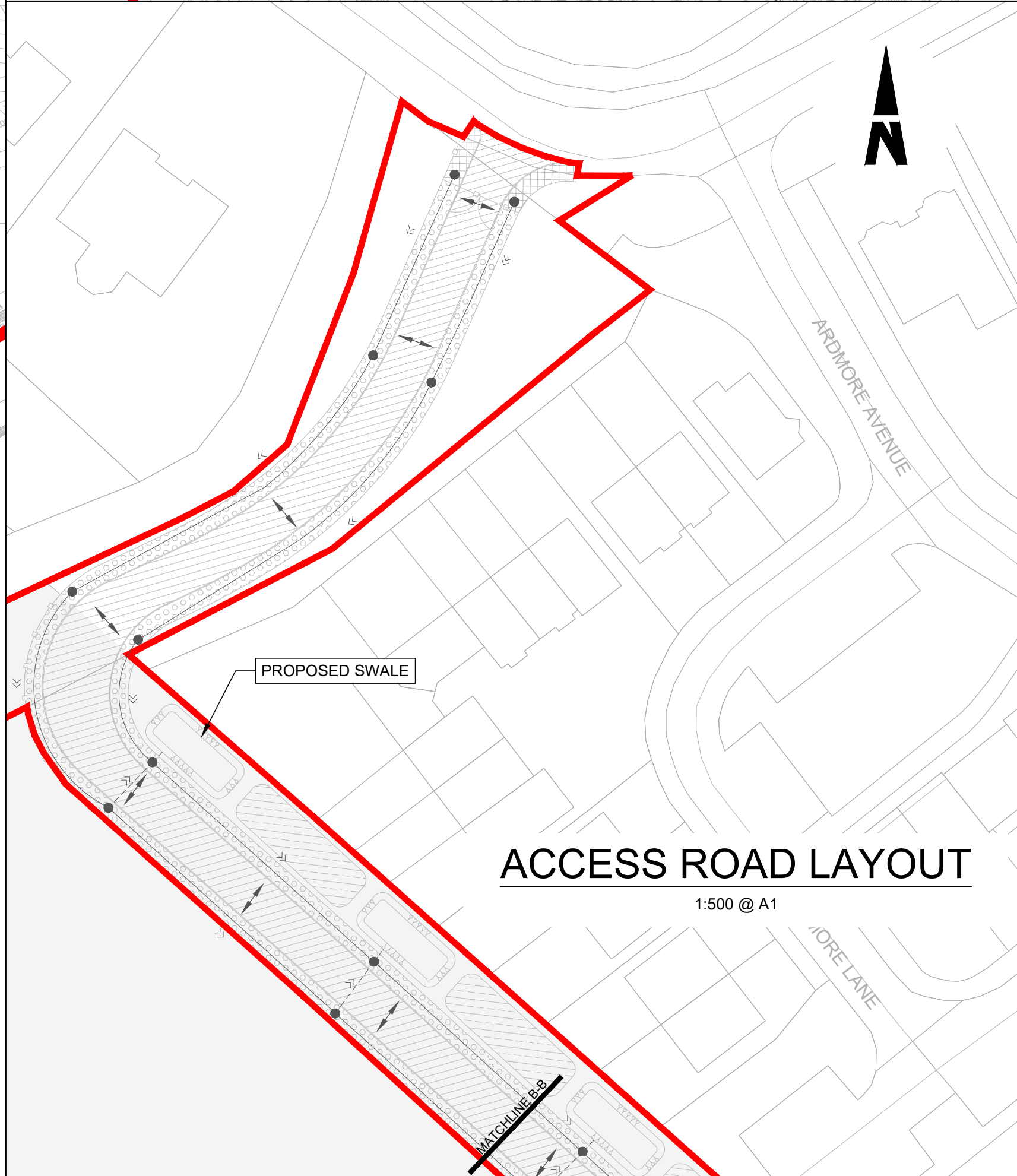
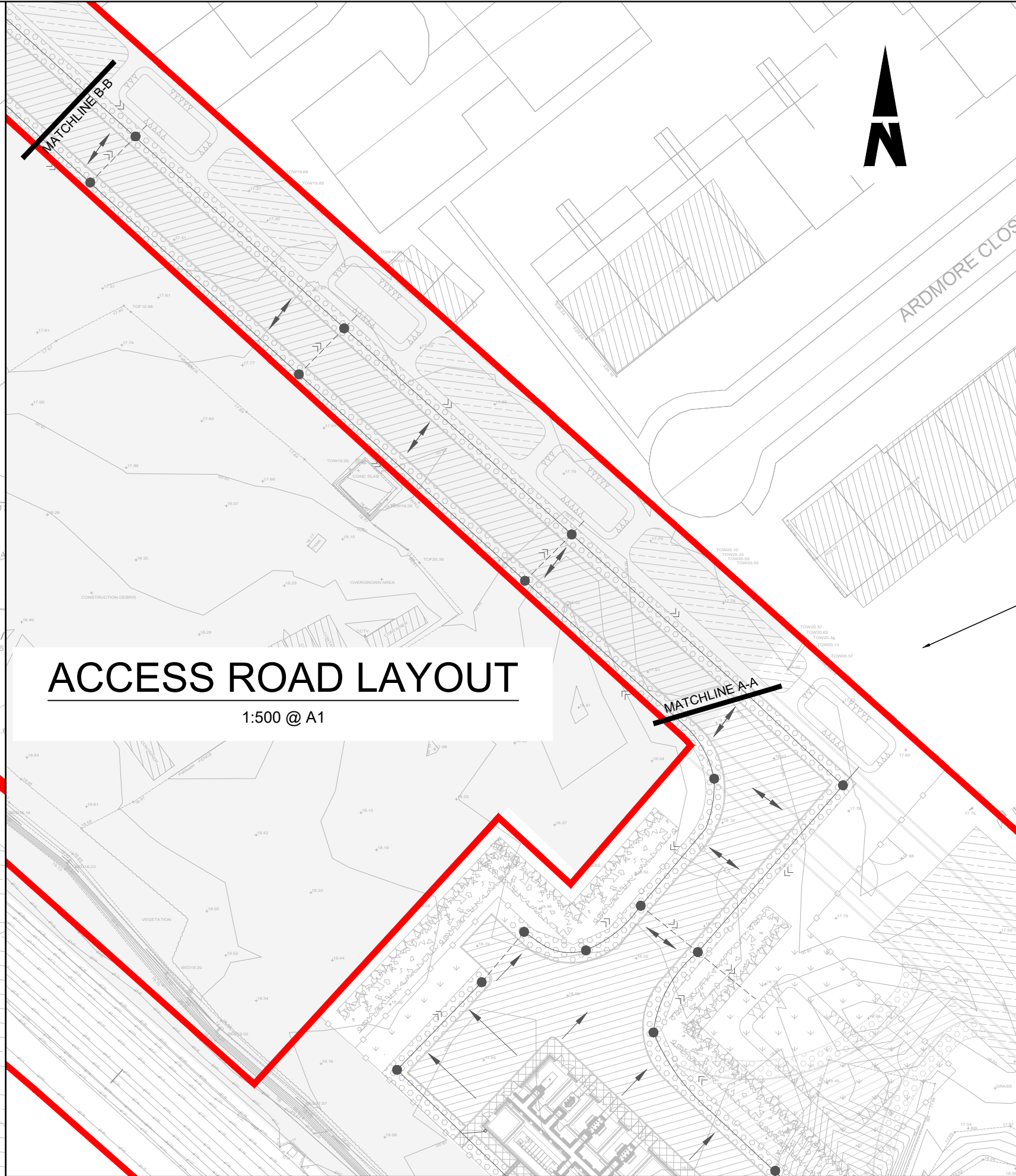


Rev	Date	Drm	Chk'd	App'd	Description
P01	17/11/2023	SF	EJ	DB	PLANNING ISSUE

Client		Engineering Designer		
Date	01/06/2023	Scale	1:250 @ A1 1:500 @ A3	Drawn SF
Project Code	D+WP56	Originator Code	ARP	Checked EJ
QMS Code		280275-00		
Approved		DB		

Project Title	DART+ COASTAL NORTH			
Drawing Title	BETTYSTOWN SUBSTATION SERVICES PLAN			
Drawing File Name	D+WP56-ARP-P4-NL-DR-RO-001112	Sheet Number	01 of 01	Status S3
Rev	P01			

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NOTES

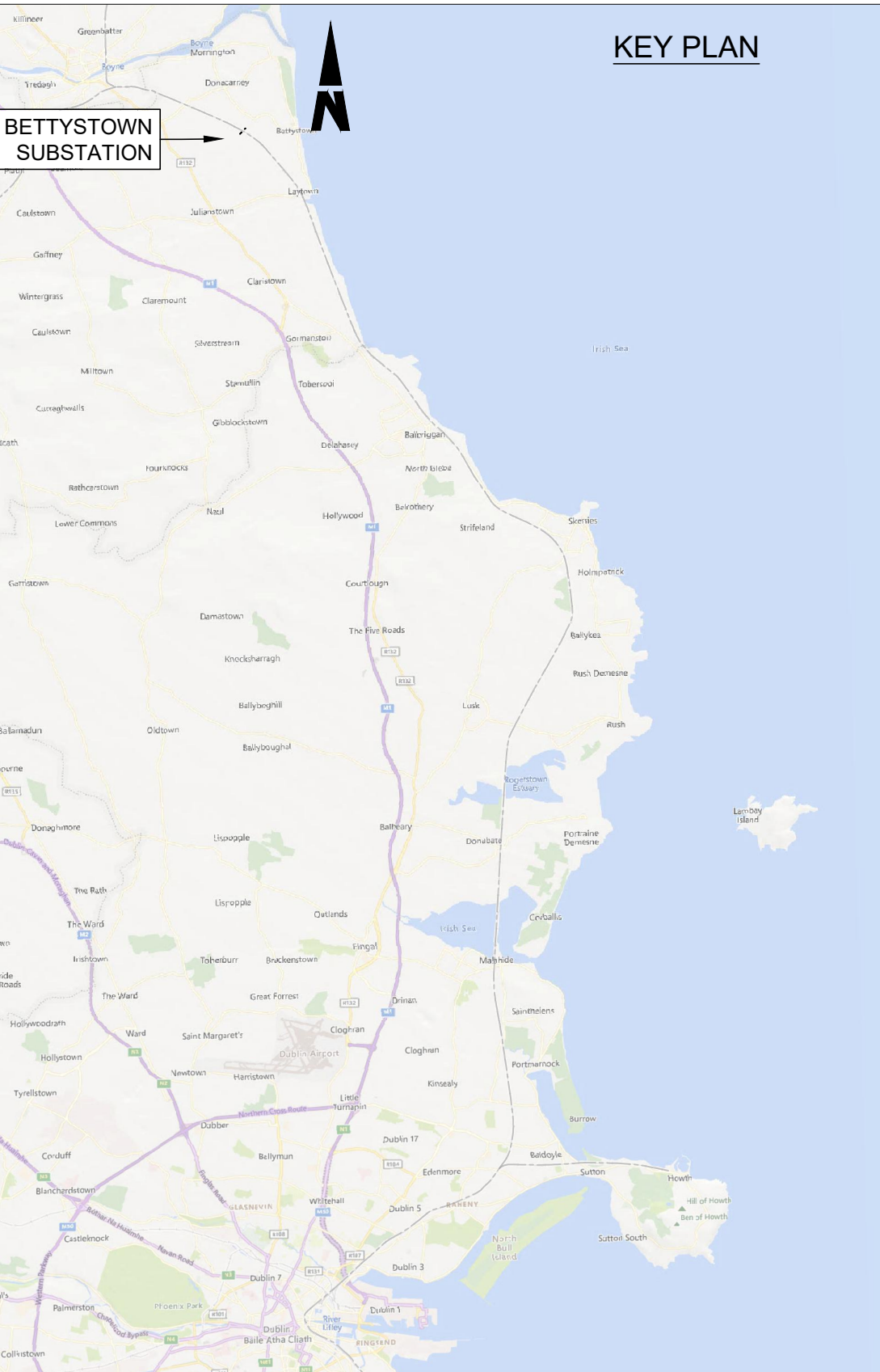
- DO NOT SCALE FROM THIS DRAWING.
- LOCATION OF ALL BURIED SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION.
- ALL DIMENSIONS ARE IN METERS, UNLESS NOTED OTHERWISE.
- ALL CHAINAGES ARE IN KILOMETERS, (36+250 = 36.25km)
- DRAWING TO BE PRINTED IN COLOUR.
- ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM (mOD) UNLESS OTHERWISE STATED.
- THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.

LEGEND

- INSPECTION CHAMBER
- POTABLE WATER
- GULLY TAILS
- SURFACE WATER GULLY, THESE ARE SHOWN INDICATIVELY, SPACING TBC
- SURFACE WATER FLOW PATHS (GENERAL FALLS OF THE ROAD TO BE 2.5%)
- PROPOSED FILTER TRENCH WITH FLOW DIRECTION. PLEASE REFER TO D+WP56-ARP-P3-NL-DR-CX-000592 FOR DETAILS
- PROPOSED 225mm DIAMETER PVC PIPE WITH FLOW DIRECTION
- FOUL MANHOLE
- FOUL SEWER WITH FLOW DIRECTION
- DEVELOPMENT BOUNDARY

DESIGN INFORMATION

- DESIGN RETURN PERIOD: 1:100yr
- CLIMATE CHANGE UPLIFT: 20%



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Tionscadal Éireann
Project Ireland
2040

Rev	Date	Dm	Chk'd	App'd	Description
P01	17/11/2023	SF	EJ	DB	PLANNING ISSUE

Date	01/06/2023	Scale	1:250 @ A1 1:500 @ A3	Drawn	SF	Checked	EJ	Approved	DB
Project Code	D+WP56	Originator Code	ARP	QMS Code	280275-00				

Project Title	DART+ COASTAL NORTH			
Drawing Title	BETTYSTOWN SUBSTATION DRAINAGE PLAN			
Drawing File Name	D+WP56-ARP-P4-NL-DR-RO-001113	Sheet Number	01 of 01	Status
				S3
Rev	P01			