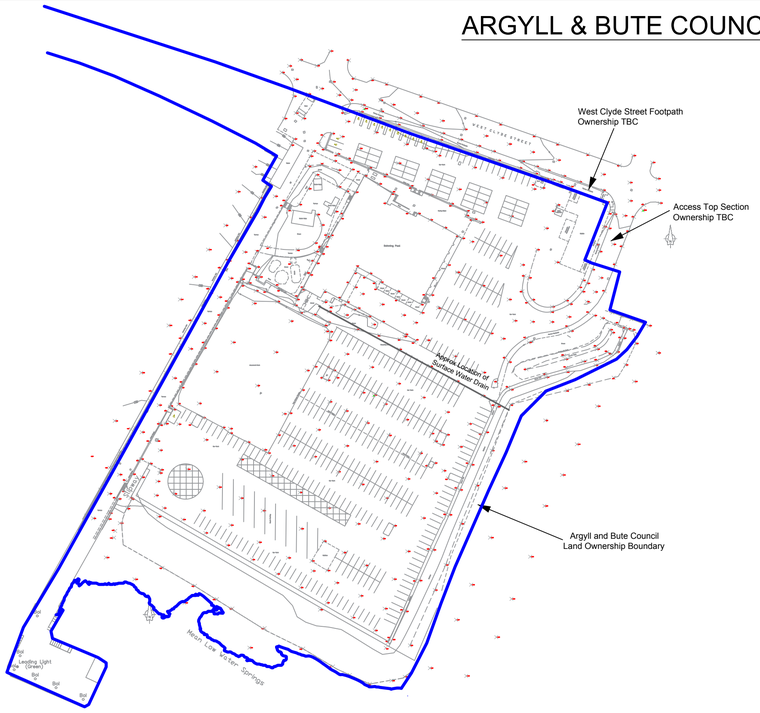
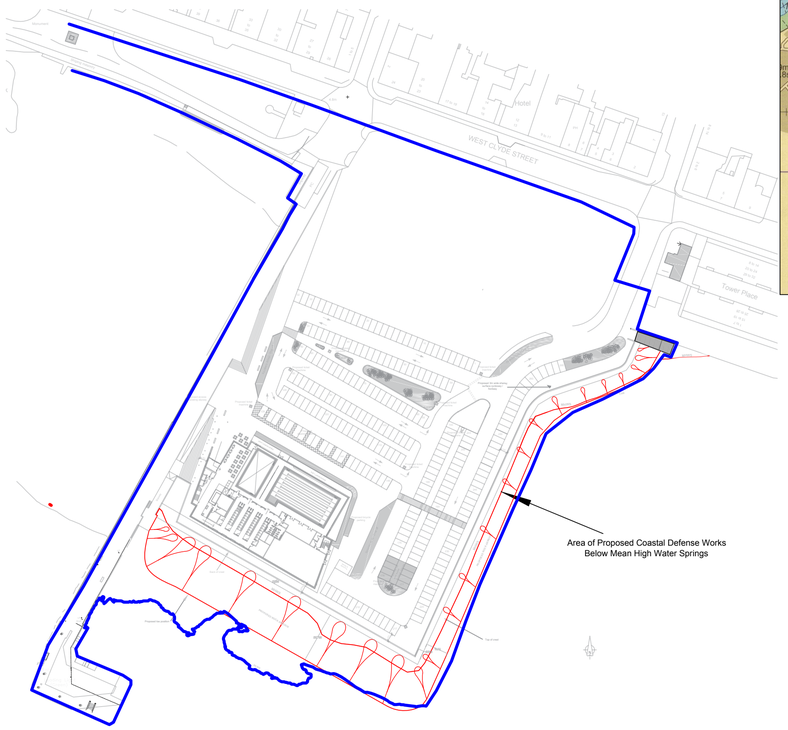
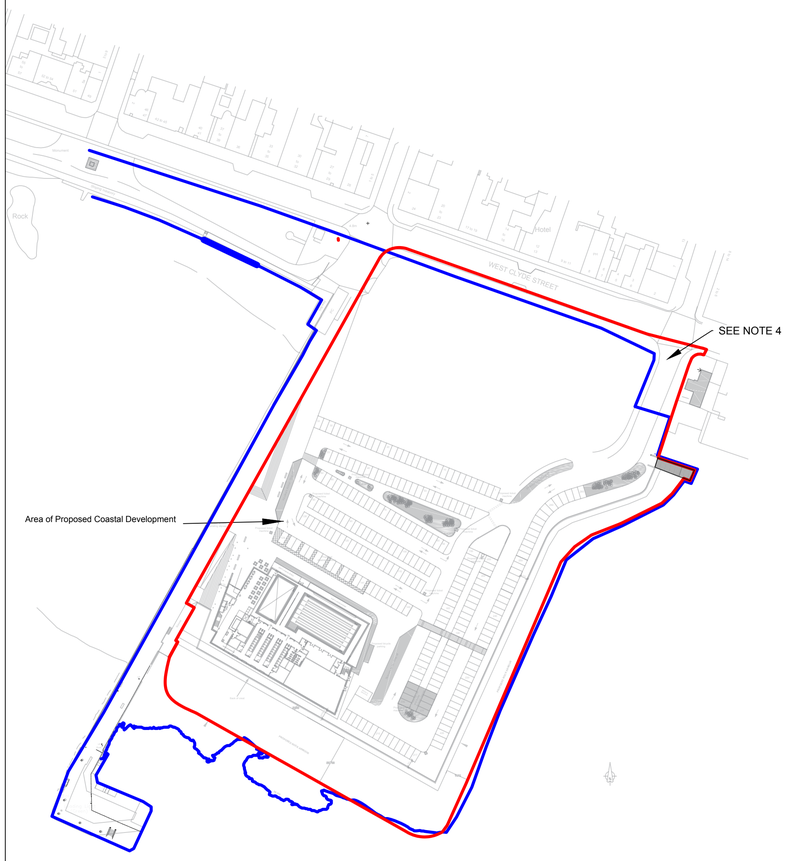
ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES



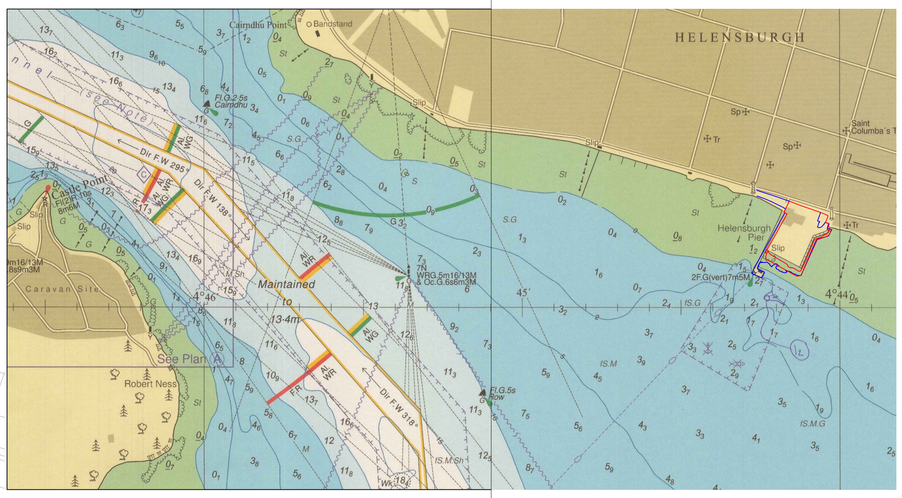
Helensburgh Waterfront Development - Existing Arrangement
Scale 1:1250



Helensburgh Waterfront Development -Area of Works Below MHWS
Scale 1:1250



Helensburgh Waterfront Development - Proposed Full Development Arrangement
Scale 1:1250



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Director
[Redacted]

DESIGN
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SCALES

Legend

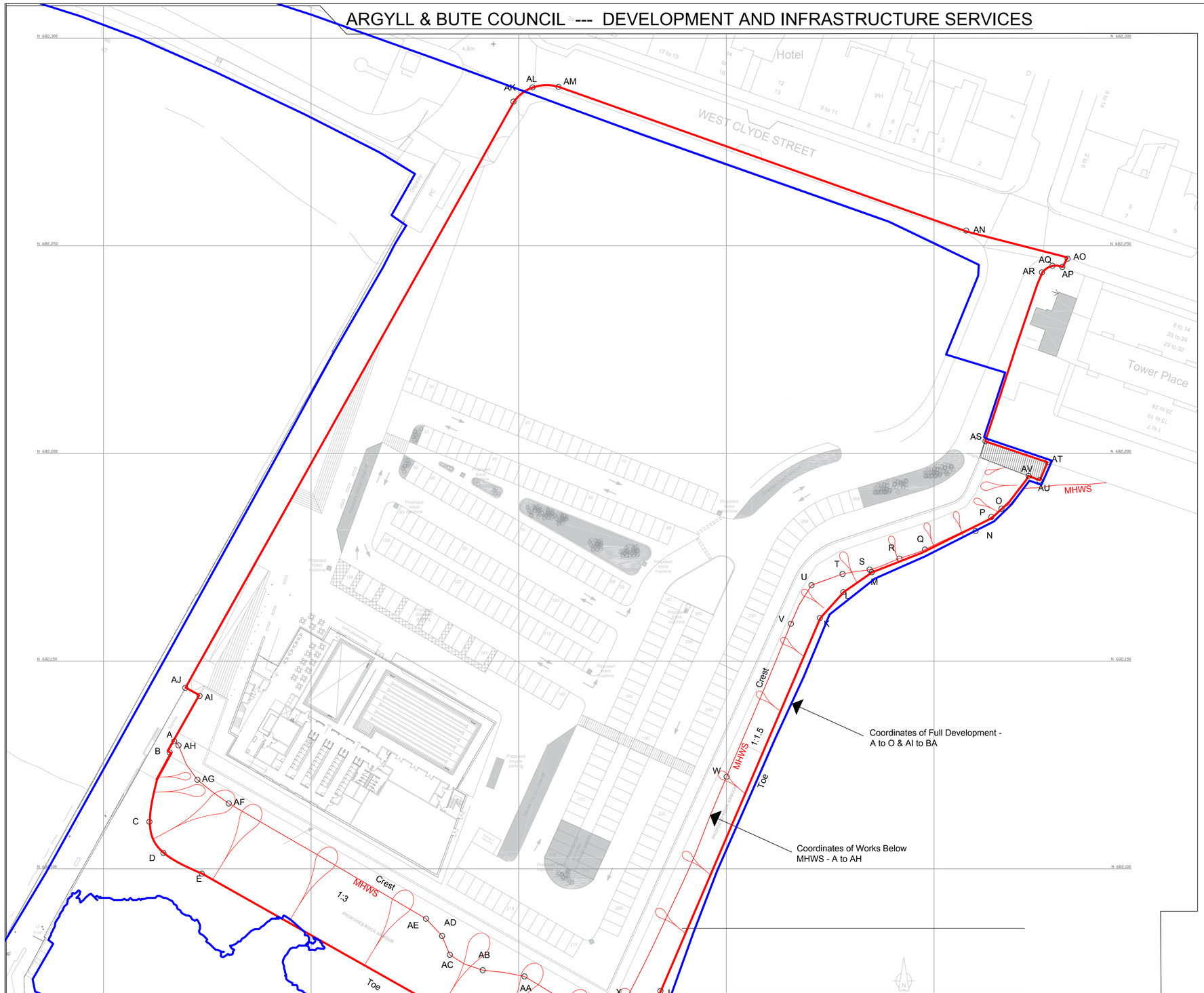
- Argyll and Bute Council Land Ownership Boundary
- Area of proposed coastal defense works below MHWS
- Area of works below MHWS 2,925m^2 or 0.2925ha
- Site Location: Easting: 229488, Northing: 682140 Latitude: 56.002 Longitude: -4.736
- Area of proposed development above MHWS 25,562m^2 or 2.5562 ha

SUFFIX	REVISION
D	Updated for Marine Scotland
C	Moved Site Boundary (DH)
B	Moved Retaining Wall, Revetment Crest and Rock Armour Toe Location (KH)

[Redacted]

PREPARED BY	APPROVED BY		PREPARED BY	APPROVED BY	DATE 05

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES



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	Point	
Site Boundary	A	
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	AF	
	AG	
	AH	
Site Boundary	AI	
	AJ	
	AK	
	AL	
	AM	
	AN	
	AO	
	AP	
	AQ	
	AR	
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	AT	
	AU	
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Works Below MHWS

TITLE

Helensburgh Waterfront Development Proposed Site Boundaries

Director of Development and Infrastructure Services
[Redacted]

DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

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[Redacted]

SUFFIX	REVISION
D	Updated for Marine Scotland
C	Moved Site Boundary (DH)
B	Moved Retaining Wall, Revetment Crest and Rock Armour Toe Location (KH)
A	Land Ownership Boundary Updated and South West Slipway (KH)
	Issued to MS Screening Opinion

INIT.	DATE	INIT.	DATE
PREPARED BY		APPROVED BY	

SCALES

DESIGNED

DRAWN BY

CHECKED

APPROVE

DATE

[Redacted]

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES

NOTES :

1) ALL DIM

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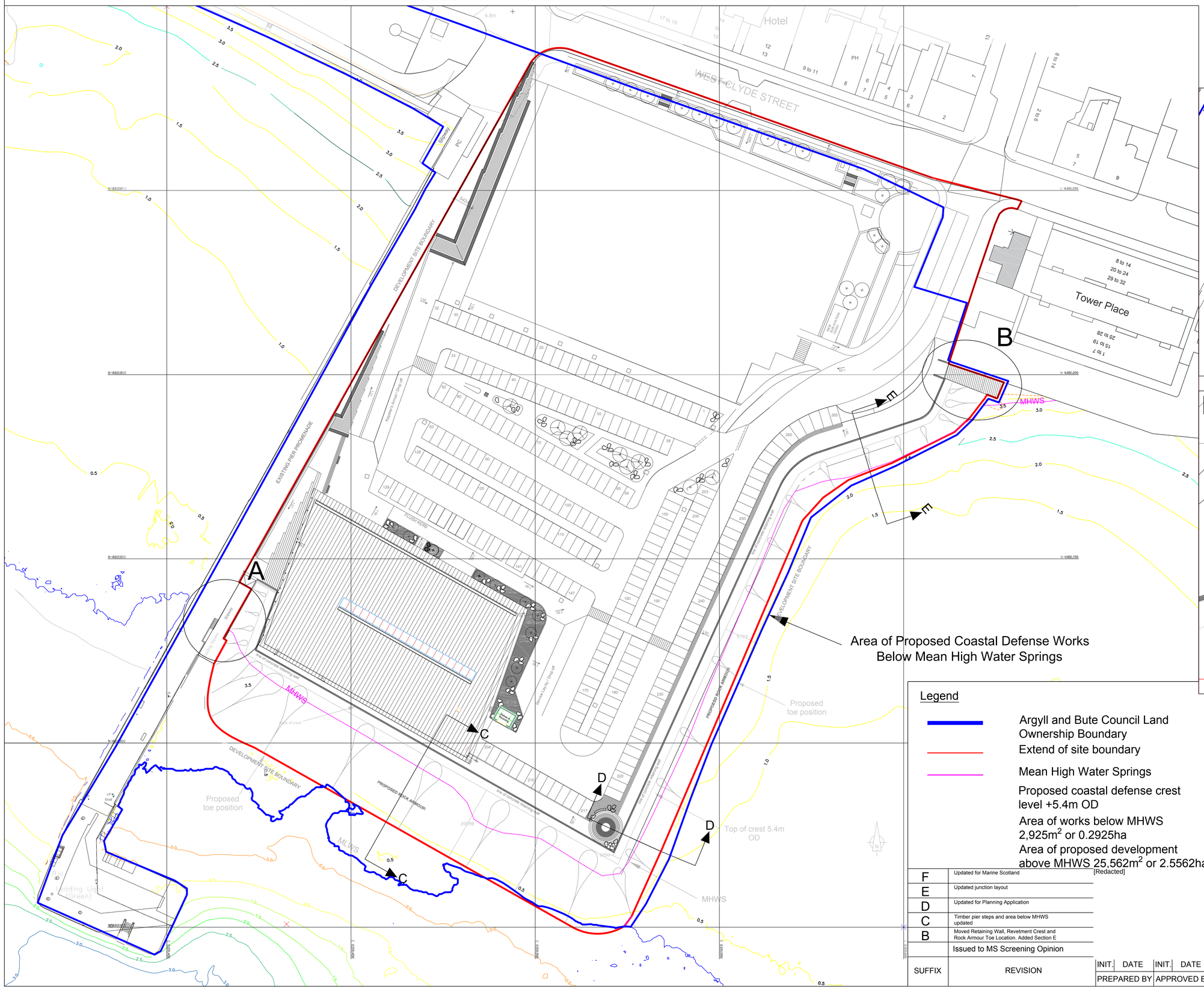

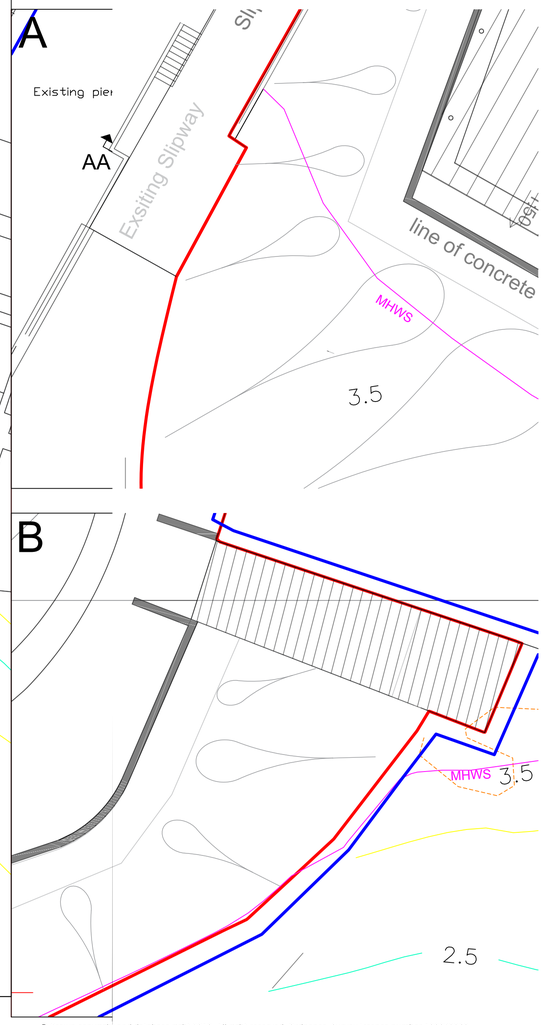

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Legend

- Argyll and Bute Council Land Ownership Boundary
- Extend of site boundary
- Mean High Water Springs
- Proposed coastal defense crest level +5.4m OD
- Area of works below MHWS 2,925m^2 or 0.2925ha
- Area of proposed development above MHWS 25,562m^2 or 2.5562ha

SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
F	Updated for Marine Scotland [Redacted]				
E	Updated junction layout				
D	Updated for Planning Application				
C	Timber pier steps and area below MHWS updated				
B	Moved Retaining Wall, Revetment Crest and Rock Armour Toe Location. Added Section E				
	Issued to MS Screening Opinion				
		PREPARED BY		APPROVED BY	

Director
[Redacted]

DESIGN
MANSE

TITLE

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SCALES

DESIGNED

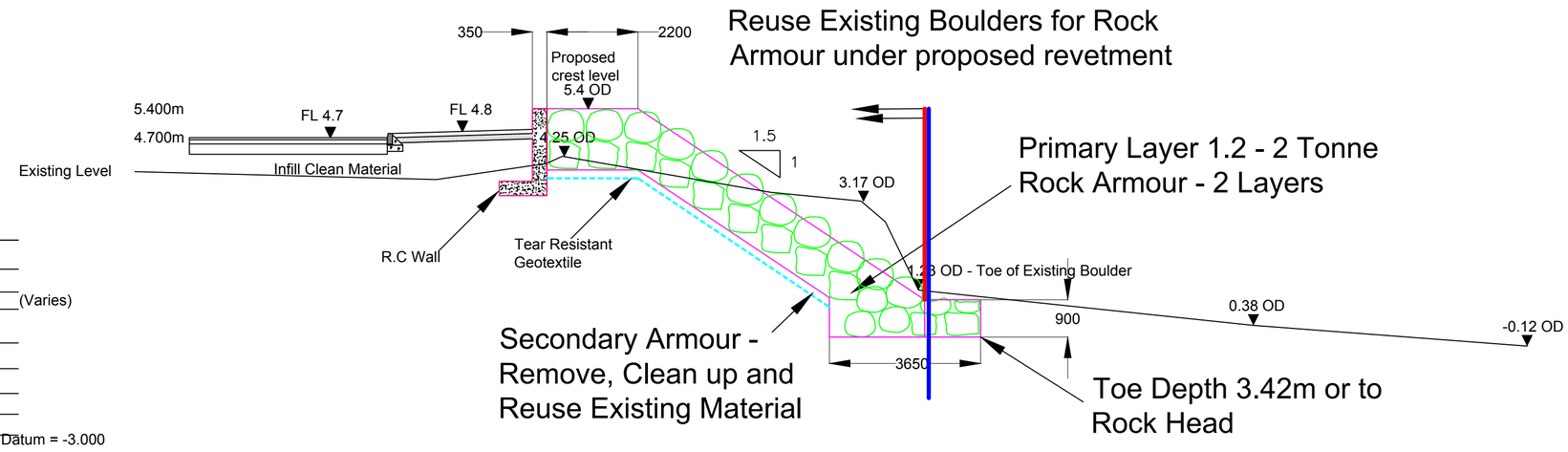
DRAWN BY

CHECKED

APPROVE

DATE 09/

[Redac
ted]

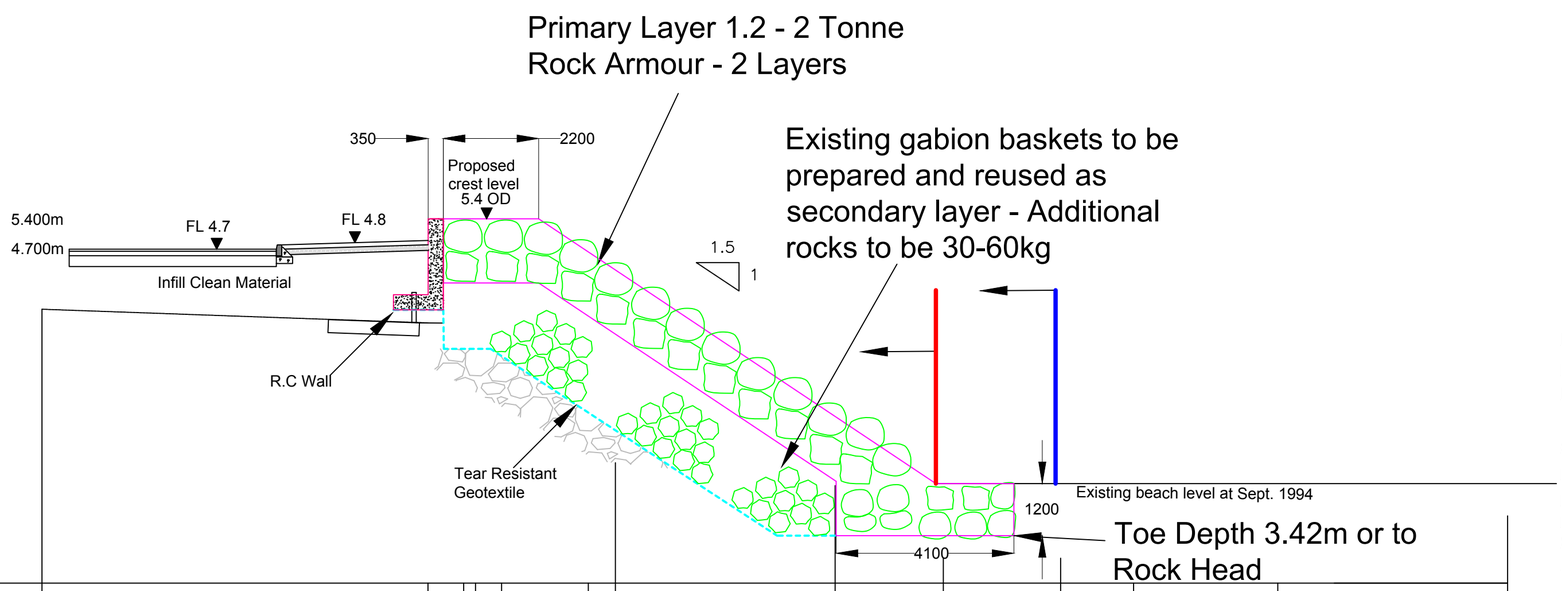


	CD	OD	
H.A.T.	+4.1	+2.48	
M.H.W.S.	+3.4	+1.78	
M.H.W.N.	+2.85	+1.23	
Seabed	+2.43	+0.81	(Varies)
O.D.	+1.62	+0.00	
M.L.W.N.	+1.00	-0.62	
M.L.W.S.	+0.4	-1.22	
L.A.T.	-0.1	-1.72	
Estimated Rock head	+2.59	+0.97 (Varies)	

Datum = -3.000

Proposed Levels											
Existing Levels											
Offset											

Section E-E
Section through proposed rock armour on north east side boulders - Scale 1:100

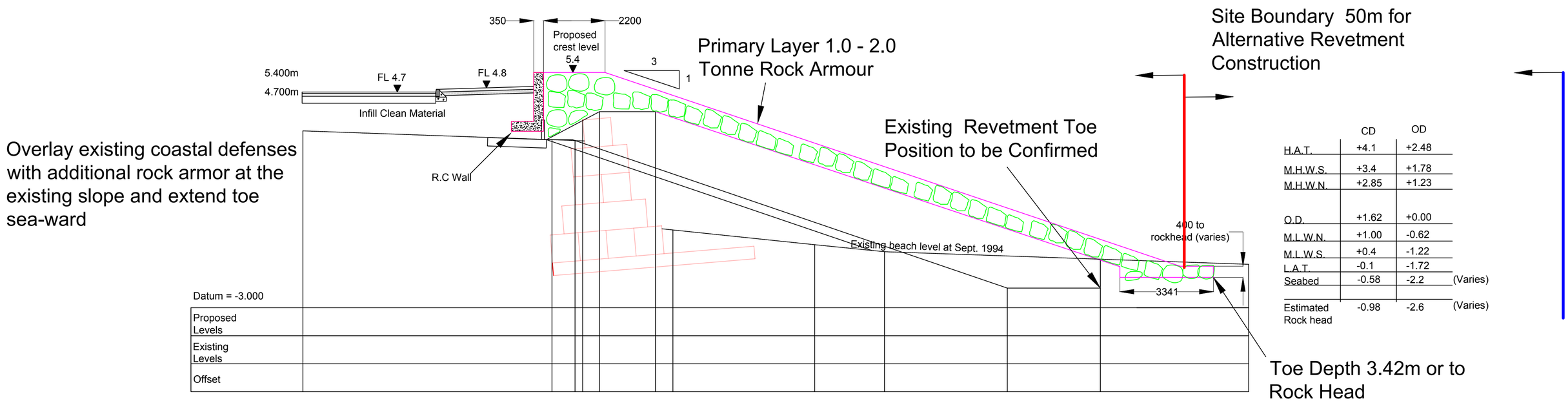


	CD	OD	
H.A.T.	+4.1	+2.48	
M.H.W.S.	+3.4	+1.78	
M.H.W.N.	+2.85	+1.23	
O.D.	+1.62	+0.00	
M.L.W.N.	+1.00	-0.62	
M.L.W.S.	+0.4	-1.22	
L.A.T.	-0.1	-1.72	
Seabed	-0.58	-2.2	(Varies)
Estimated Rock head	-1.78	-3.40	(Varies)

Datum = -3.000

Proposed Levels											
Existing Levels											
Offset											

Section D-D
Section through proposed rock armour on south east side gabions - Scale 1:100



	CD	OD	
H.A.T.	+4.1	+2.48	
M.H.W.S.	+3.4	+1.78	
M.H.W.N.	+2.85	+1.23	
O.D.	+1.62	+0.00	
M.L.W.N.	+1.00	-0.62	
M.L.W.S.	+0.4	-1.22	
L.A.T.	-0.1	-1.72	
Seabed	-0.58	-2.2	(Varies)
Estimated Rock head	-0.98	-2.6	(Varies)

Datum = -3.000

Proposed Levels											
Existing Levels											
Offset											

Section C-C
Section through proposed rock armour on south side - Scale 1:100

Legend

Argyll and Bute Council Land Ownership Boundary

Site Boundary

TITLE

Helensburgh Waterfront Development
Proposed Sections

SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
D	Updated for Marine Scotland	[Redacted]			
C	Updated for Planning Application				
B	Added Specification Notes				
A	Added Section E and Remove Footway Details				
	Issued to MS Screening Opinion				
		PREPARED BY		APPROVED BY	

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Director of Development and Infrastructure Services
[Redacted]

DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

SCALES: AS SHOWN
DESIGNED BY: [Redacted]
DRAWN BY
CHECKED BY
APPROVED BY
DATE: 09/02/2018

DRAWING No.: 00045-02/004D
DATE ISSUED: 09/02/2018

Argyll Bute COUNCIL

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES

NOTES :

1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

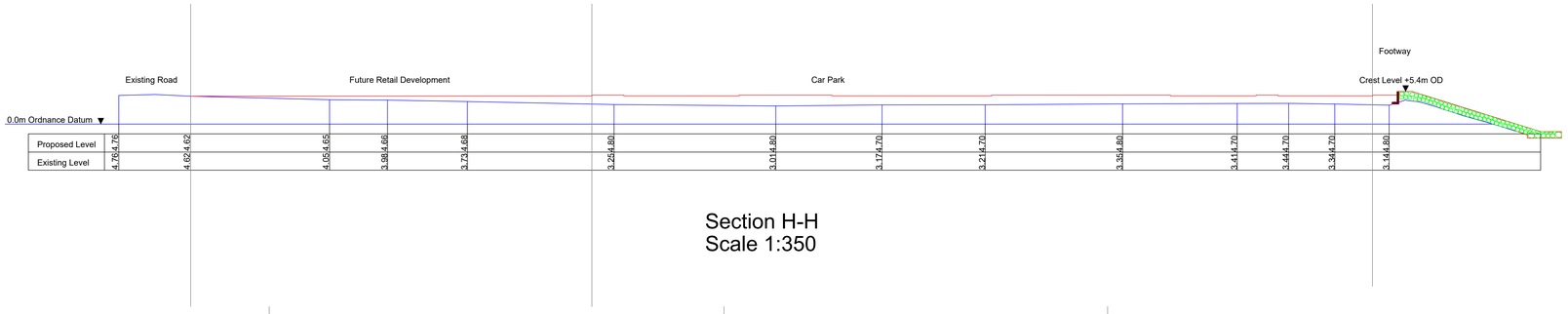
2) ALL LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM.

Section H-H: Area of section 200m2
Width of section 40m
Estimated Infill volume 8,000m3

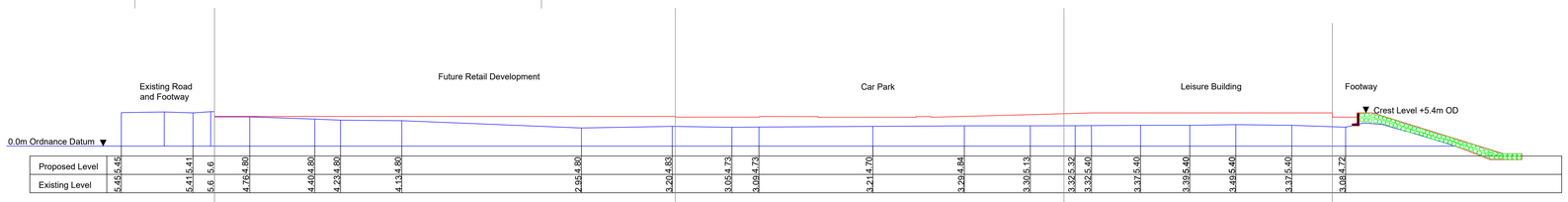
Section I-I: Area of section 230m2
Width of section 70m
Estimated Infill volume 16,100m3

Section J-J: Area of section 260m2
Width of section 7m
Estimated Infill volume 1,820m3

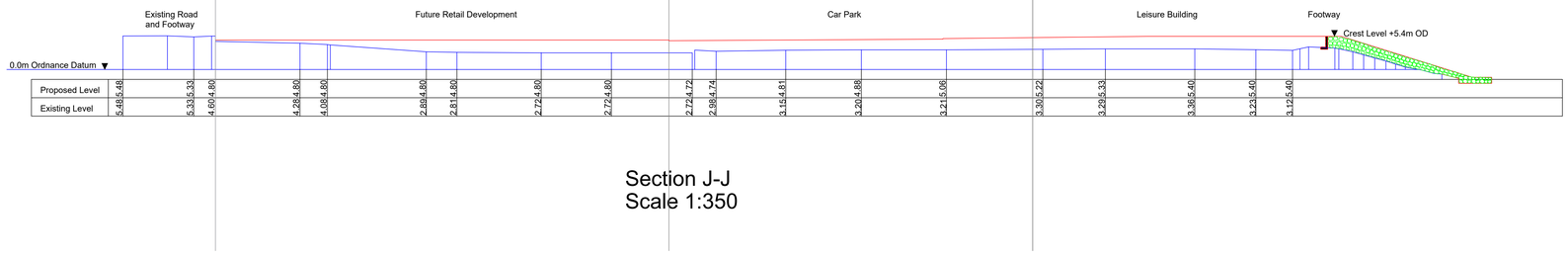
Total estimated infill volume: 25,920m3



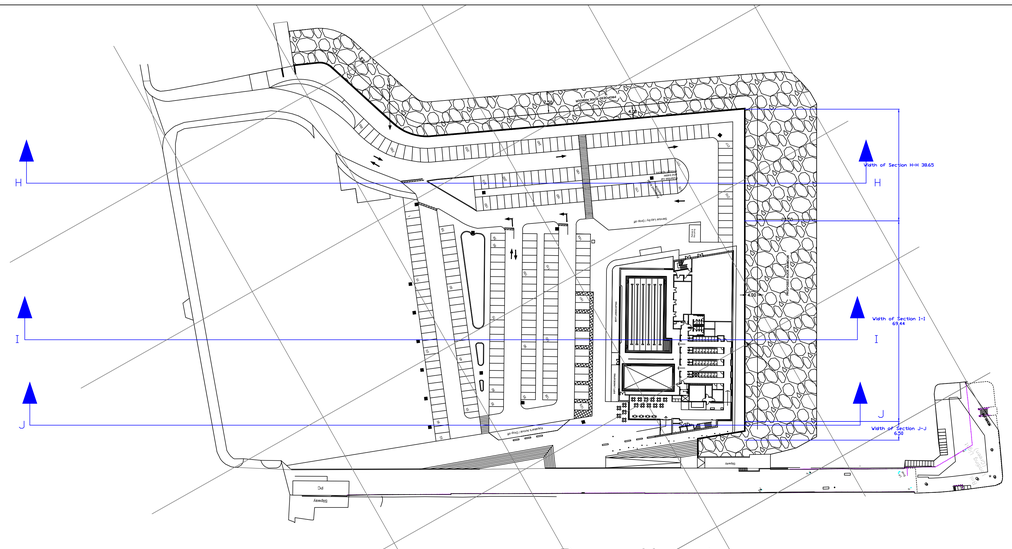
Section H-H
Scale 1:350



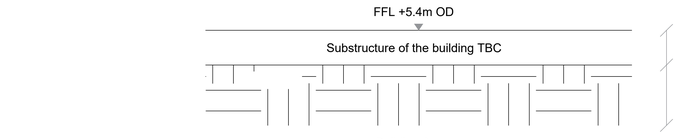
Section I-I
Scale 1:350



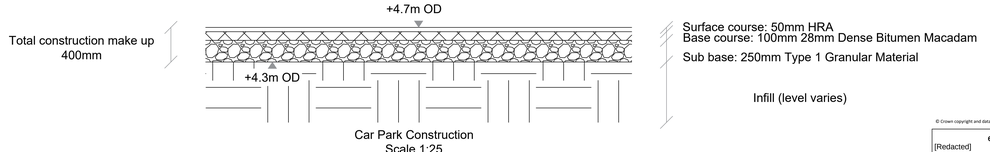
Section J-J
Scale 1:350



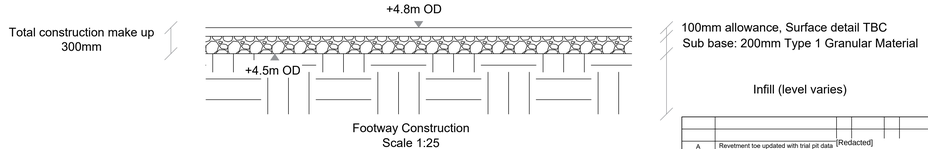
Proposed Layout
Scale 1:750



Building Area
Scale 1:25



Car Park Construction
Scale 1:25



Footway Construction
Scale 1:25

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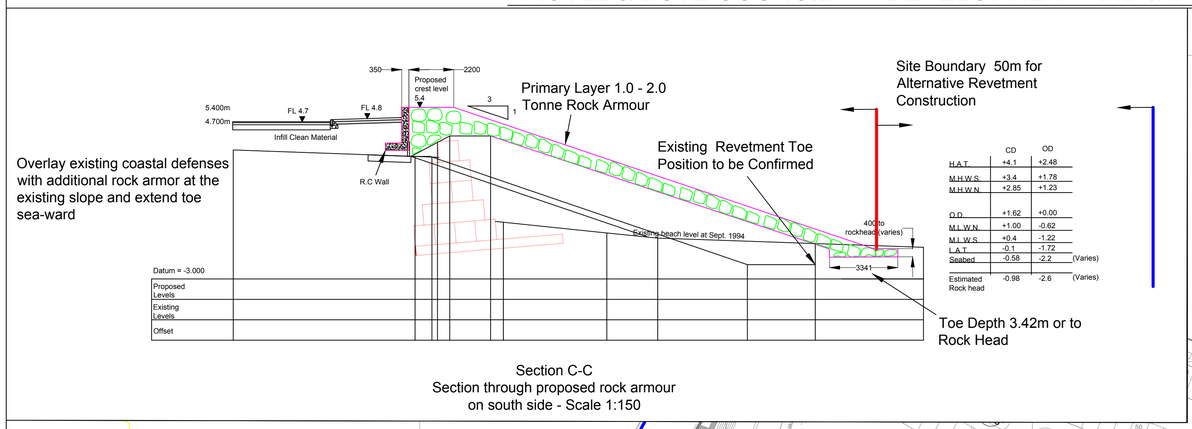
			evelopment and Infrastructure Services [Redacted]
			DESIGN OFFICE, MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD
			TITLE: Helensburgh Waterfront Development Site Sections, Infill Volumes and Surface Makeup
			SCALES: S SHOWN
			DESIGNED BY [Redacted] / DRAWING No. 00045-02/005A
A	Revetment toe updated with trial pit data	[Redacted]	DRAWN BY / CHECKED BY / APPROVED B
SUFFIX	REVISION		DATE 27/0 / DATE ISSUED 27/04/2018

Argyll & Bute COUNCIL

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES



	CD	OD	
H.A.T.	+4.1	+2.48	
M.H.W.S.	+3.4	+1.78	
M.H.W.N.	+2.85	+1.23	
O.D.	+1.62	+0.00	
M.L.W.N.	+1.00	-0.62	
M.L.W.S.	+0.4	-1.22	
L.A.T.	-0.1	-1.72	
Seabed	-0.58	-2.2	(Varies)
Estimated Rock head	-0.98	-2.6	(Varies)

Section C-C
Section through proposed rock armour on south side - Scale 1:150

Argyll and Bute Council Ownership - Outline in Blue

Slipway access - see Note 11

Indicative Barge Positions see Note 15

Waverley docking - see Note 9 and 10

Safety buoys - see Note 12

Area hatched red shows Proposed Site Boundary for potential revetment construction from sea.

Crown Estates Ownership - Below MLWS

Luss Estates Ownership - Above MLWS and outwith Council Boundary

Toe of proposed revetment

MHWS

MLWS

50m

Notes:

1) All dimensions are in millimetres unless noted otherwise.
2) All levels are in metres relative to chart datum unless noted otherwise.
3) Blue Line boundary represents extent of Argyll and Bute land ownership.
4) Luss Estates have ownership of lands above Mean Low Water Springs which is outwith the Blue Line boundary.
5) Crown Estates have ownership of lands below Mean Low Water Springs.
6) Revetment on the south side to be constructed from a barge, an additional 50m outwith the proposed toe position will be required.
7) Barge approximately 14m x 25m with 4no. legs, potential swept path and setup locations shown.
8) Revetment on the east side to be constructed from land.
9) Contractor to accomodate Waverley docking and maneuvers once per week.
10) Existing pier to remain open only for Waverley berth.
11) Contractor to provide emergency access via slipway throughout all construction.
12) Indicative safety buoys to be deployed by the contractor at approximately 10m centres to delineate site boundary.
13) South side construction estimated duration 7 -8 weeks.
14) Estimated total primary rock volume 9,000m3.
15) Barge Indicative Positions 1 to 4.

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SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
F	Update for Marine Scotland Application [Redacted]				
E	Update junction layout				
D	Remove outline of retail element				
C	Updated for Planning Application				
B	Timber pier steps and rock volume				
A	Updated Section C				
	For Consultations	PREPARED BY		APPROVED BY	

Director o
[Redacted]

DESIGN
MANSE

TITLE

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SCALES

DESIGNED [Redacted]

DRAWN BY

CHECKED

APPROVED

DATE

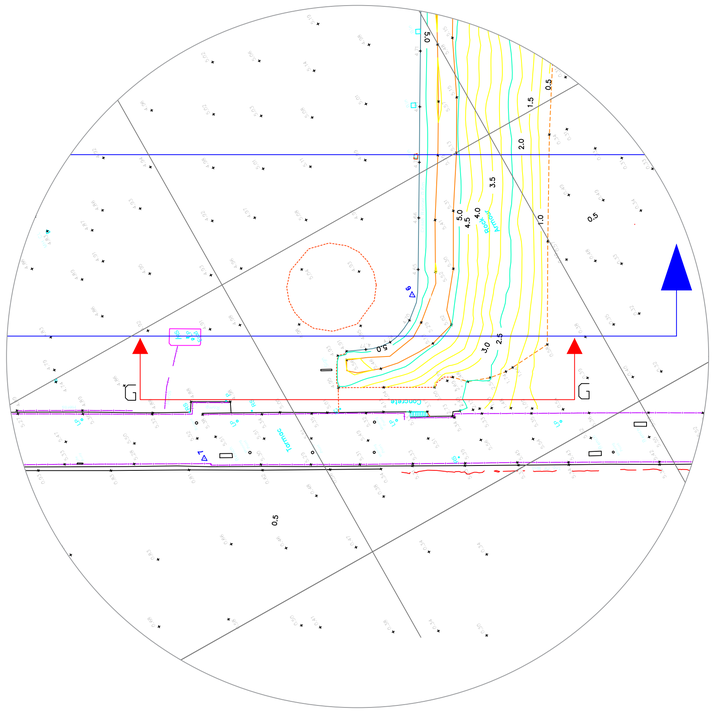
Argyll & Bute COUNCIL

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES

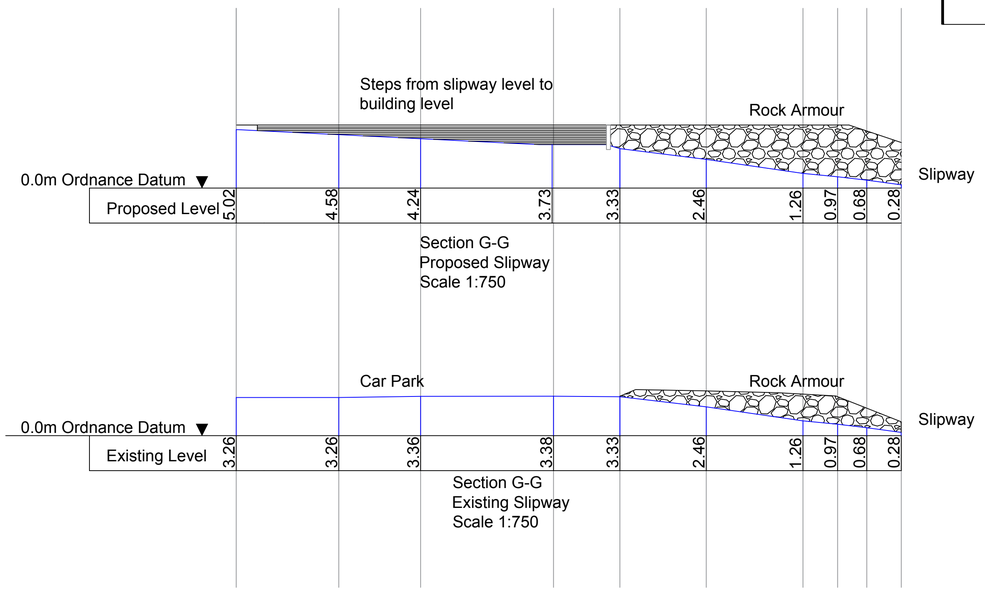
NOTES :

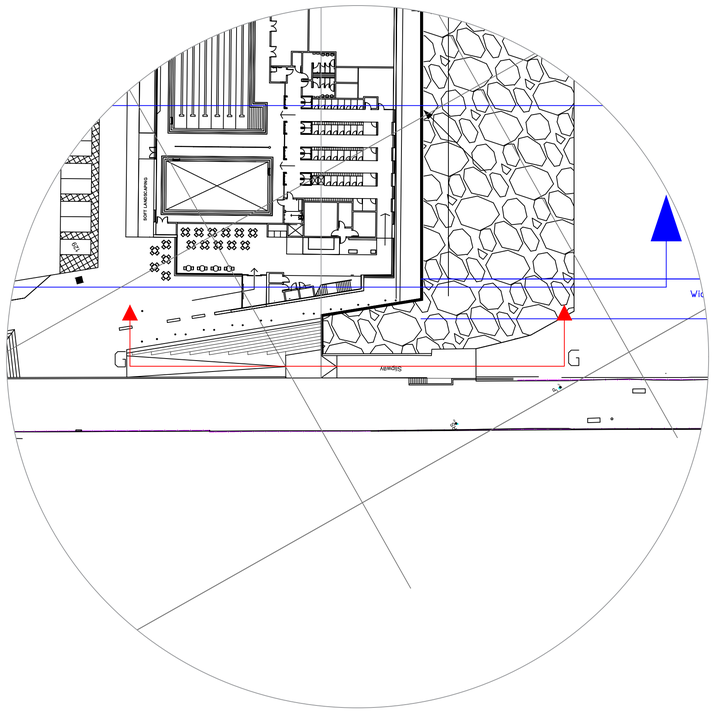
1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2) ALL LEVELS ARE IN METRES RELATIVE TO A LOCAL DATUM.

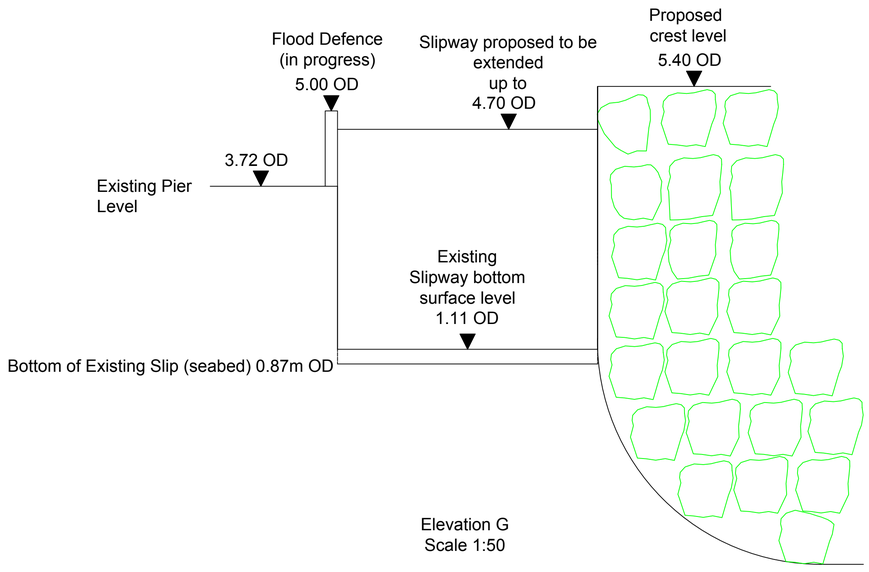


Existing Site - Scale 1:500





Proposed Site - Scale 1:500



Elevation G
Scale 1:50

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[Redacted] evelopment and Infrastructure Services

DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

TITLE

Helensburgh Waterfront Development
South-West Slipway Sections

SCALES AS SHOWN

DESIGNED BY [Redacted]

DRAWN BY

CHECKED BY

APPROVED BY

DATE

DRAWING No. 00045-02/007

DATE ISSUED 27/04/2018

SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
		CHECKED BY		APPROVED BY	

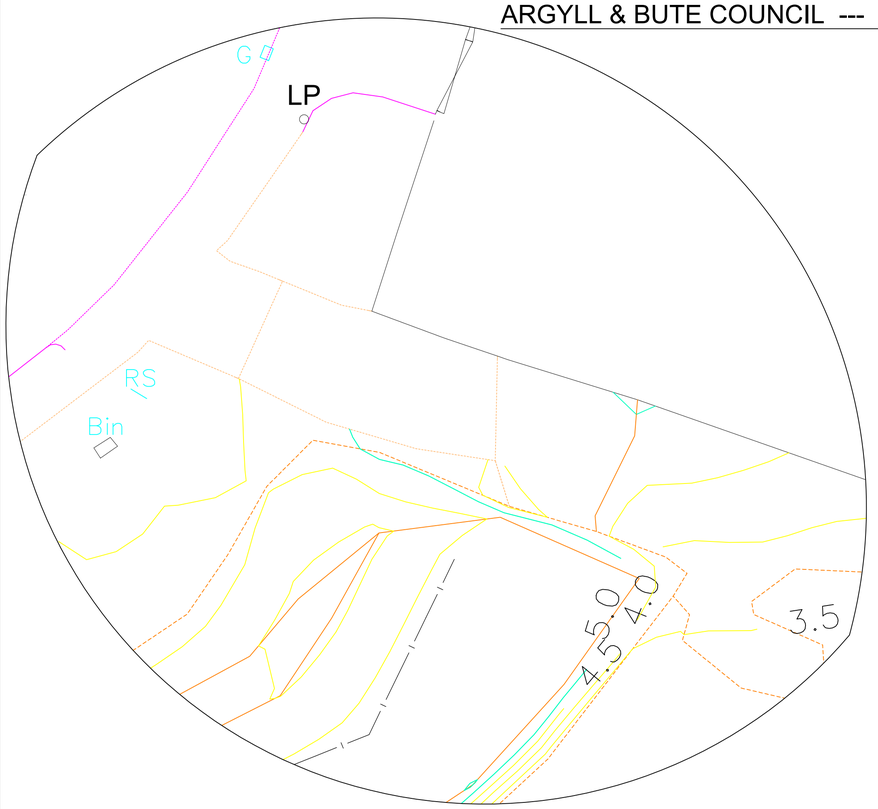
Argyll & Bute COUNCIL

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES

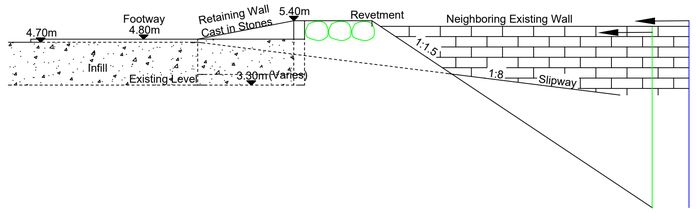
NOTES :

1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2) ALL LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM.

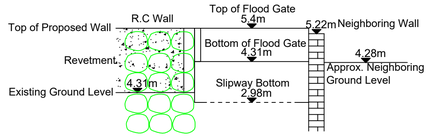


Existing Plan - Scale 1:200

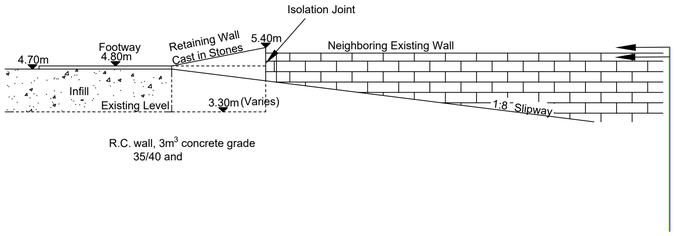


	CD	OD
H.A.T.	+4.1	+2.48
M.H.W.S.	+3.4	+1.78
M.H.W.N.	+2.85	+1.23
O.D.	+1.62	+0.00
M.L.W.N.	+1.00	-0.62
M.L.W.S.	+0.4	-1.22
L.A.T.	-0.1	-1.72

Elevation F - Scale 1:100

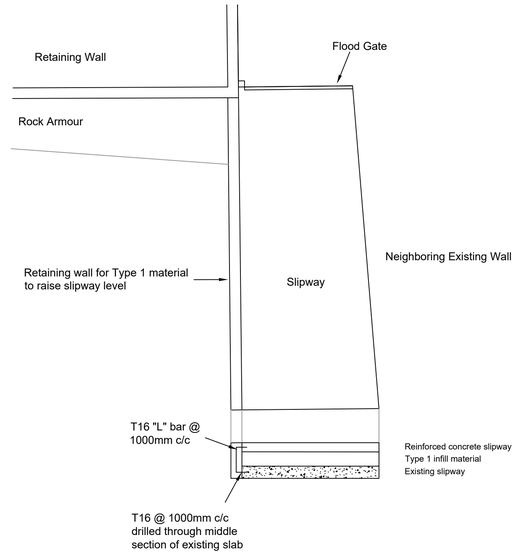


Elevation FFF - Scale 1:100

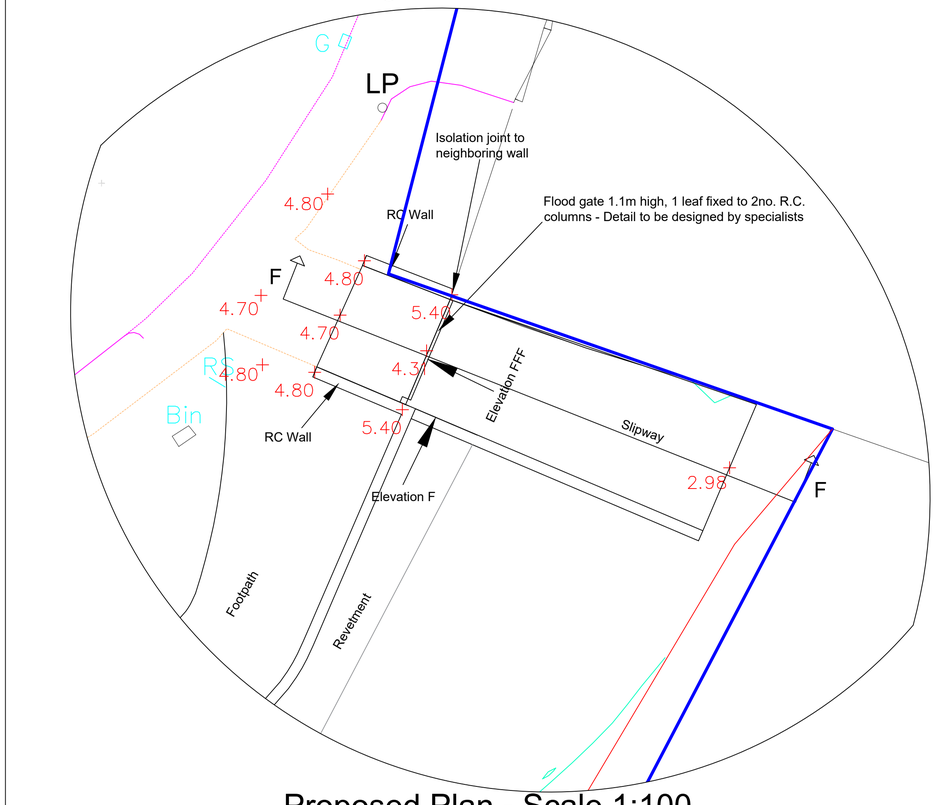


	CD	OD
H.A.T.	+4.1	+2.48
M.H.W.S.	+3.4	+1.78
M.H.W.N.	+2.85	+1.23
O.D.	+1.62	+0.00
M.L.W.N.	+1.00	-0.62
M.L.W.S.	+0.4	-1.22
L.A.T.	-0.1	-1.72

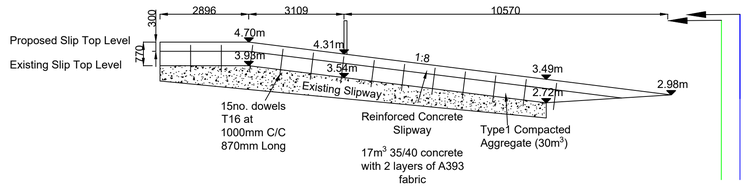
Elevation FF - Scale 1:100



Infill retaining wall detail - Scale 1:100



Proposed Plan - Scale 1:100



Section F-F Through the Slipway - Scale 1:100

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Argyll and Bute Council Land Ownership Boundary

Site Boundary

SUFFIX	REVISION	CHECKED BY	APPROVED BY
B	Detail for slipway retaining wall, updated for planning application	[Redacted]	
A	Additional Specification		

Director of Development and Infrastructure Services
[Redacted]

DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

TITLE

Helensburgh Waterfront Development
Proposed East Slipway

SCALES AS SHOWN

DESIGNED BY [Redacted]

DRAWN BY

CHECKED BY

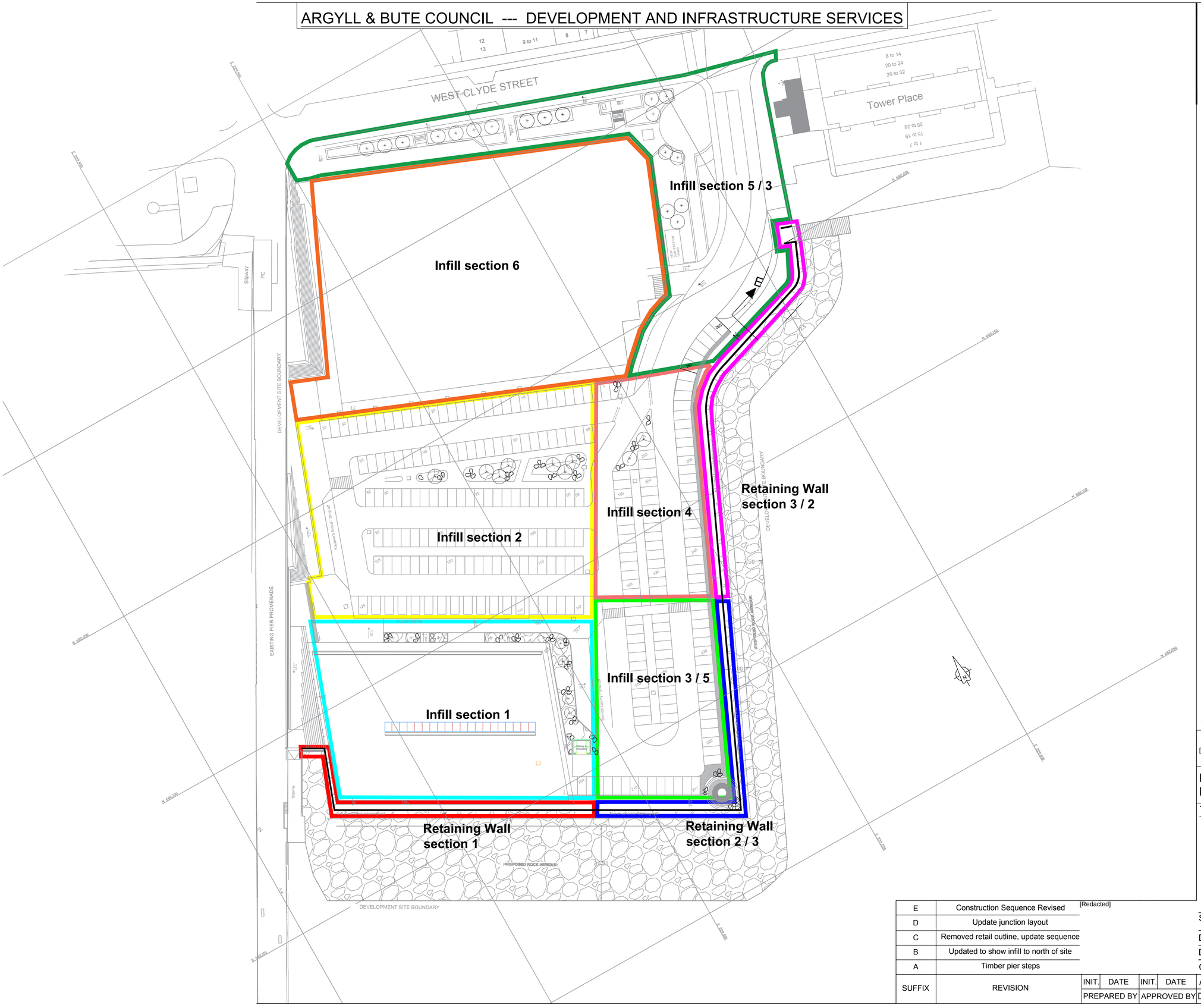
APPROVED BY

DATE 26/04/2018

RAWING No. 00045-02/008B

ATE ISSUED 07/06/2018

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES



NOTES :

1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2) ALL LEVELS ARE IN METRES RELATIVE TO A LOCAL DATUM.

- Phase 1: Construct 95m retaining wall along south side of site
- Phase 2: Infill site section 1 under proposed leisure building
- Phase 3: Construct 95m of retaining wall along south and east face
- Phase 4: Infill site section 2
- Phase 5: Infill site section 3 / 5
- Phase 6: Complete construction of retaining wall
- Phase 7: Infill site section 4
- Phase 8: Infill site section 5 / 3
- Phase 9: Infill site section 6

All infill material to be placed and compacted in layers not exceed 300mm. Slopes to be battered back at appropriate angles.

Rock armour to be constructed throughout phases.

South revetment - may be constructed from a barge.
East revetment - constructed from existing pier.

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TITLE

Helensburgh Waterfront Development
Flood Defences Construction Sequence

SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
E	Construction Sequence Revised [Redacted]				
D	Update junction layout				
C	Removed retail outline, update sequence				
B	Updated to show infill to north of site				
A	Timber pier steps				
		PREPARED BY		APPROVED BY	

SCALES	1:500
DESIGNED BY	[Redacted]
DRAWN BY	
CHECKED BY	
APPROVED BY	
DATE	
DRAWING No.	00045-02/009E
DATE ISSUED	04/05/2018

Argyll Bute COUNCIL

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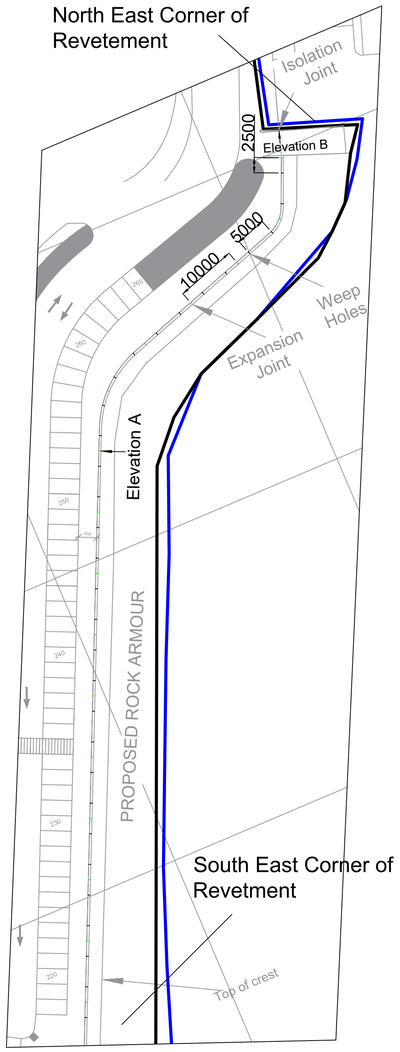
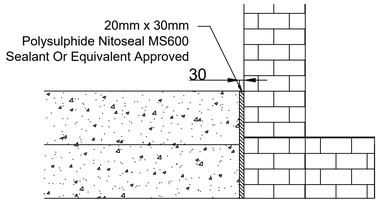
NOTES :

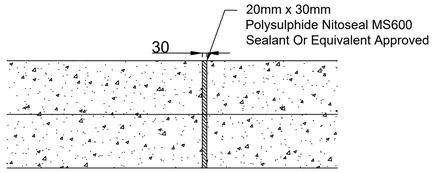
1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2) ALL LEVELS ARE IN METRES RELATIVE TO ORDINANCE DATUM.
3) DO NOT SCALE FROM THIS DRAWING



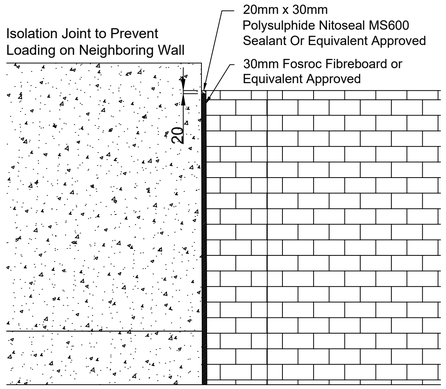
Retaining Wall Proposed Joints and Weep Hole Arrangement - East Section
Scale 1:500



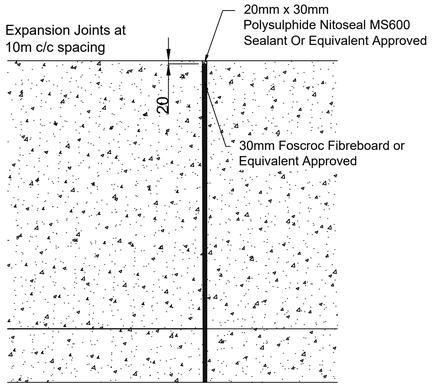
Isolation Joint - Plan
Scale 1:20



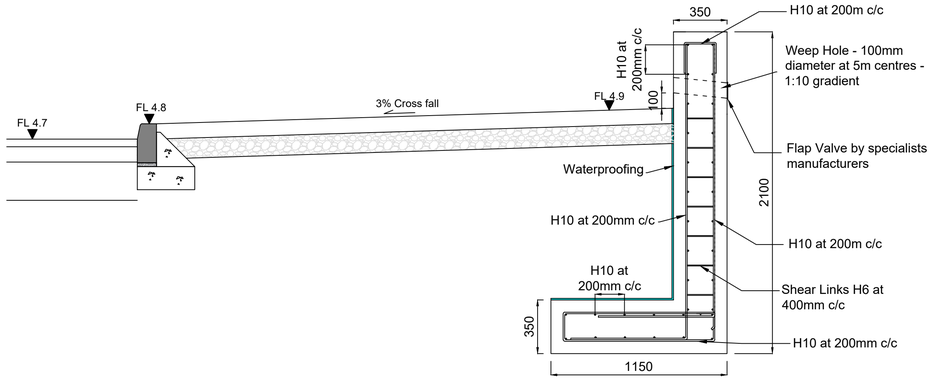
Expansion Joint - Plan
Scale 1:20



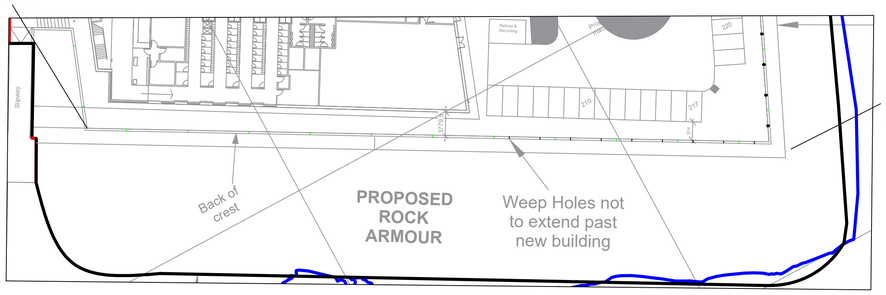
Isolation Joint - Elevation B
Scale 1:20



Expansion Joint - Elevation A
Scale 1:20



Retaining Wall Detail Section - Scale 1:20



Retaining Wall Proposed Joints and Weep Hole Arrangement -South Section
Scale 1:500

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Director of Development and Infrastructure Services
[Redacted]

DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

TITLE

Helensburgh Waterfront Development

Retaining Wall Plan and Detailed Sections

SCALES AS SHOWN

SUFFIX	REVISION	CHECKED BY	APPROVED BY
A	Updated for Planning Application	[Redacted]	

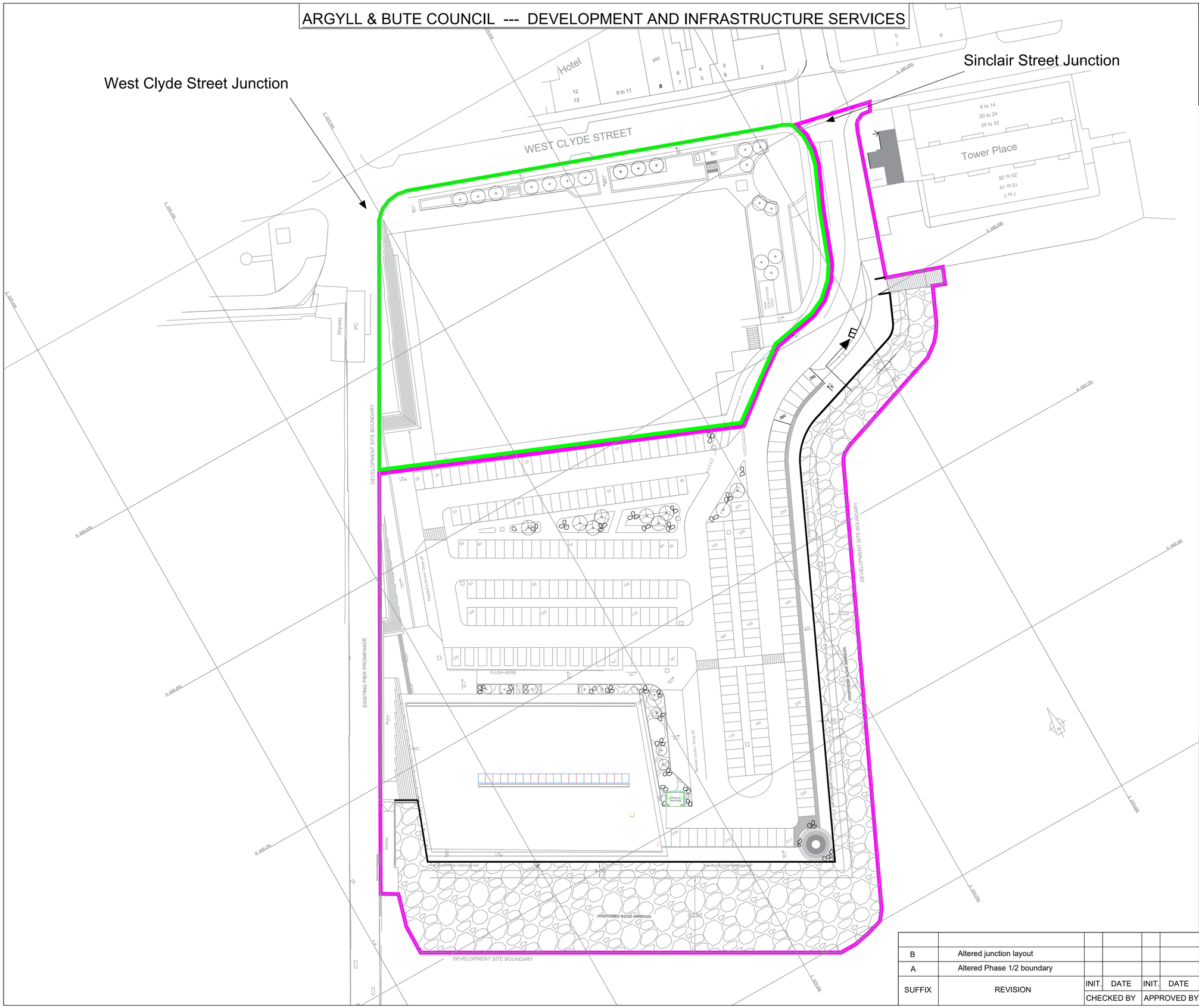
DESIGNED BY [Redacted]
DRAWN BY
CHECKED BY
APPROVED B
DATE 22/05/2018

RAWING No. 00045-02/010A

ATE ISSUED 07/06/2018

Argyll & Bute COUNCIL

ARGYLL & BUTE COUNCIL --- DEVELOPMENT AND INFRASTRUCTURE SERVICES



NOTES :

1) ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

2) ALL LEVELS ARE IN METRES RELATIVE TO A LOCAL DATUM.

Construction Phase 1: Leisure building, car parking and landscaping

Construction Phase 2: Demolition of existing leisure building and landscaping

West Clyde Street junction is currently exit only, to be changed to entrance / exit.

Phase 1:

Construction traffic to use Sinclair Street Junction entrance.
Public access to the existing pool to be via West Clyde Street entrance.

Phase 2:

Construction traffic to use West Cylde Street entrance.
Public access to be via Sinclair Street Junction.

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DESIGN OFFICE,
MANSE BRAE, LOCHGILPHEAD, ARGYLL, PA31 8RD

TITLE

Helensburgh Waterfront Development
Outline Traffic Management Plan

SUFFIX	REVISION	INIT.	DATE	INIT.	DATE
		CHECKED BY		APPROVED BY	
B	Altered junction layout				
A	Altered Phase 1/2 boundary				

SCALES	1:500
DESIGNED BY	[Redacted]
DRAWN BY	
CHECKED BY	
APPROVED BY	
DATE	
DRAWING No.	00045-02/011B
DATE ISSUED	18/07/2018

Argyll Bute COUNCIL