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E: info@beca.com // www.beca.com

Wellington Water
Level 4, 25 Victoria Street
Petone
Lower Hutt, 5045

11 July 2025

Attention: [REDACTED]

Dear [REDACTED]

Wellington International Airport Ltd Southern Seawall Renewal – Wastewater and Stormwater Interface

Further to previous correspondence between Beca and Wellington Water and our meeting on the 10 April 2025 regarding the above project, the latest Moa Point stormwater outfall drawings and the following supporting documents relating to stormwater and wastewater interfaces are attached:

- WIAL Southern Seawall Renewal – relevant Southern Seawall and Eastern Bank Remediation detailed design drawings 3324338-CA-0211, 0301, 0302, 0304, 0370, 0501 and 0502.
- Moa Pt Wastewater Outfall alignment and section sketch
- Moa Pt Wastewater Outfall As Built Drawings
- 16 December 2024 Moa Pt Stormwater and Wastewater Meeting Notes
- 10 April 2025 Moa Pt Outfall and WIAL Sea Defences Renewal Interface Meeting Notes.

Over the design period we have been in contact with [REDACTED] from Wellington Water regarding these services Moa Point wastewater. As previously discussed, construction on the Southern Seawall renewal is likely to commence in the late 2020s/early 2030s. The key elements of the proposed works in relation to three waters services are as follows:

- The seaward approx.. 20m of the existing 675mm diameter stormwater outfall opposite Stewart Duff Drive will be replaced by a new outfall of the same diameter (refer drawing 3324338-CA-0304 and 370)
- The works will avoid the Moa Point Wastewater Outfall opposite Stewart Duff Drive, other than the edge of fill placed above the existing pipeline towards Moa Point Road, which will not exceed the level of existing fill mounds on the site above the pipeline (refer to drawing 3324338-CA-0301 and 0304).
- The works will avoid the emergency wastewater overflow gravity pipelines, which we understand from Wellington Water are presently not carrying any flow but which remain available for use, on eastern Moa Point Road; with a 0.1m clearance between the proposed small underpass and existing pipeline locations as requested by Wellington Water, as far as these existing locations are known from Wellington Water's information and site survey (refer to drawing 3324338-CA-0501).
- The existing potable water pipe on eastern Moa Point Road will be slightly relocated e.g. beneath the proposed underpass as indicated by Note 4 on drawing 3324338-CA-0501.
- The works will avoid the wastewater rising main and stormwater pipes on eastern Moa Point Road (refer to drawing 3324338-CA-0501).

**make
everyday
better.**

- A subsoil drain underneath the rear slope rock protection along Moa Pt Road will connect into an existing manhole as indicated on 3324338-CA-0302.
- The MGC yard works include stormwater cut off drains discharging to the existing pond and existing water and wastewater connections to be maintained to the existing shed as indicated on 3324338-CA-0211.

We understand from our previous correspondence and meetings and the recent call with your team (7 July 2025) that Wellington Water has no objection or further comment in relation to the proposed works. This letter seeks to formalise that understanding.

Should you have any queries please email [REDACTED]
[REDACTED]

Yours sincerely

[REDACTED]

on behalf of

Beca Limited

Phone Number: +64 3 366 3521

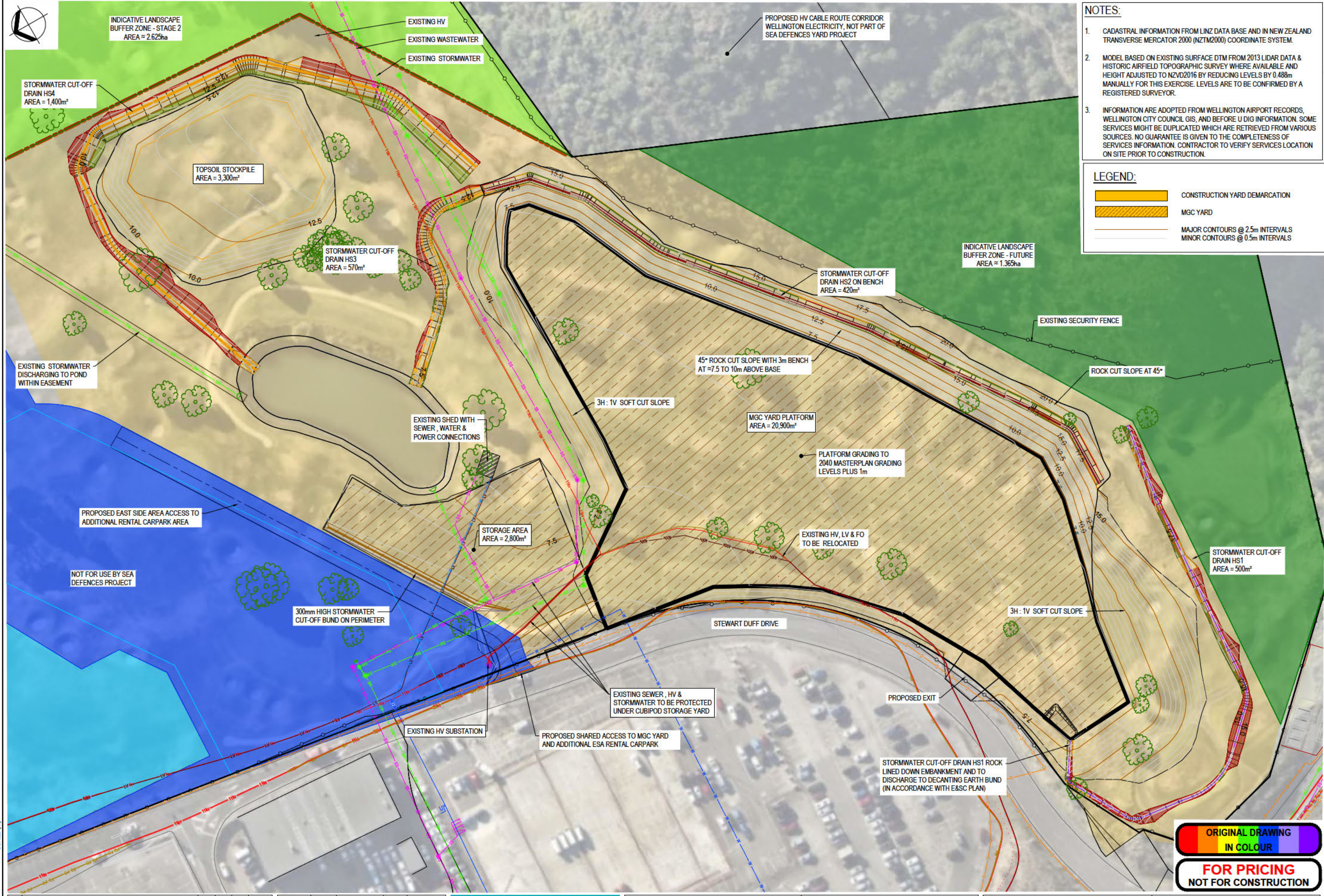
Email: [REDACTED]

Copy

[REDACTED]
[REDACTED]

Att:

- WIAL Sea Defence Structures Renewal – Southern Seawall and Eastern Bank Remediation detailed design drawings (relevant to Moa Pt Stormwater), 3324338-CA-0211, 0301, 0302, 0304, 0370, 0501 and 0502
- Moa Pt Wastewater Outfall alignment and section sketch
- Moa Pt Wastewater Outfall As Built Drawings
- 16 December 2024 Moa Pt Stormwater and Wastewater Meeting Notes
- 10 April 2025 Moa Pt Outfall and WIAL Sea Defences Renewal Interface Meeting Notes



NOTES:

- CADASTRAL INFORMATION FROM LINZ DATA BASE AND IN NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
- MODEL BASED ON EXISTING SURFACE DTM FROM 2013 LIDAR DATA & HISTORIC AIRFIELD TOPOGRAPHIC SURVEY WHERE AVAILABLE AND HEIGHT ADJUSTED TO NZVD2016 BY REDUCING LEVELS BY 0.488m MANUALLY FOR THIS EXERCISE. LEVELS ARE TO BE CONFIRMED BY A REGISTERED SURVEYOR.
- INFORMATION ARE ADOPTED FROM WELLINGTON AIRPORT RECORDS, WELLINGTON CITY COUNCIL GIS, AND BEFORE U DIG INFORMATION. SOME SERVICES MIGHT BE DUPLICATED WHICH ARE RETRIEVED FROM VARIOUS SOURCES. NO GUARANTEE IS GIVEN TO THE COMPLETENESS OF SERVICES INFORMATION. CONTRACTOR TO VERIFY SERVICES LOCATION ON SITE PRIOR TO CONSTRUCTION.

LEGEND:

- CONSTRUCTION YARD DEMARCATION
- MGC YARD
- MAJOR CONTOURS @ 2.5m INTERVALS
- MINOR CONTOURS @ 0.5m INTERVALS

0 5 10 20 30
FULL SIZE 1:500; HALF SIZE 1:1000
SCALE (m)

Original Scale (A1) 1:500		Design TNM 08.07.24	Approved For Construction*
Reduced Scale (A3) 1:1000		Drawn SZ 08.07.24	
		Day Checker CJB 08.07.24	
		Day Checker CGK 08.07.24	
		* Refer to Revision 1 for Original Signature	

No.	Revision	By	CHK	Appd	Date
0	FOR PRICING (2025)	SZ	TNM	JH	08.07.24

Client:

Project: WIAL SEA DEFENCE STRUCTURES RENEWAL

Title: MGC CONSTRUCTION YARD STORAGE AREAS & STORMWATER DRAINAGE

Discipline: CIVIL ENGINEERING

Drawing No. 3324338-CA-0211

Rev. 0

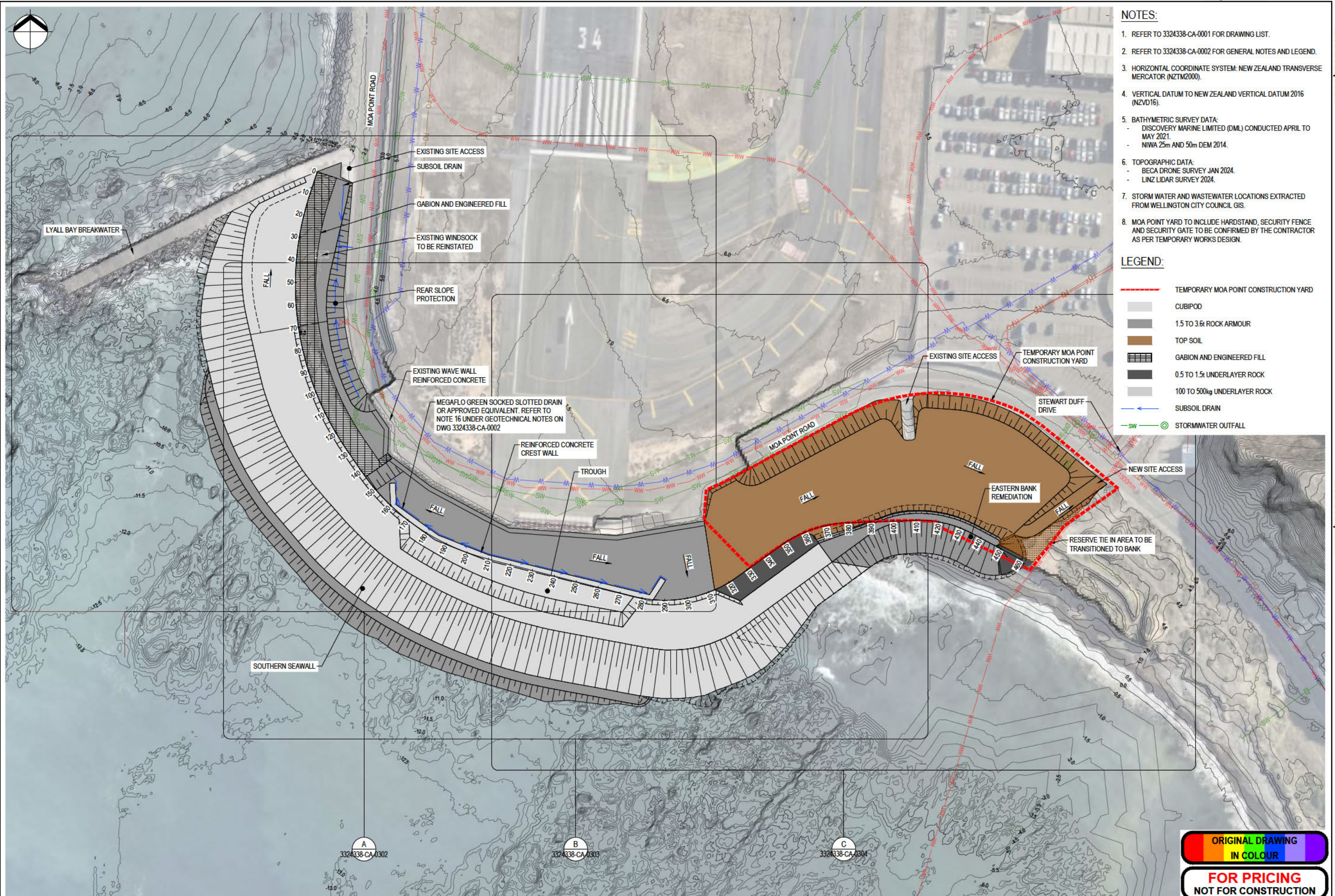
DO NOT SCALE FOR SET OUT DIMENSIONS

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Document No. 3324338-CA-0211.DWG



No.	Revision	By	Chk	Appd	Date
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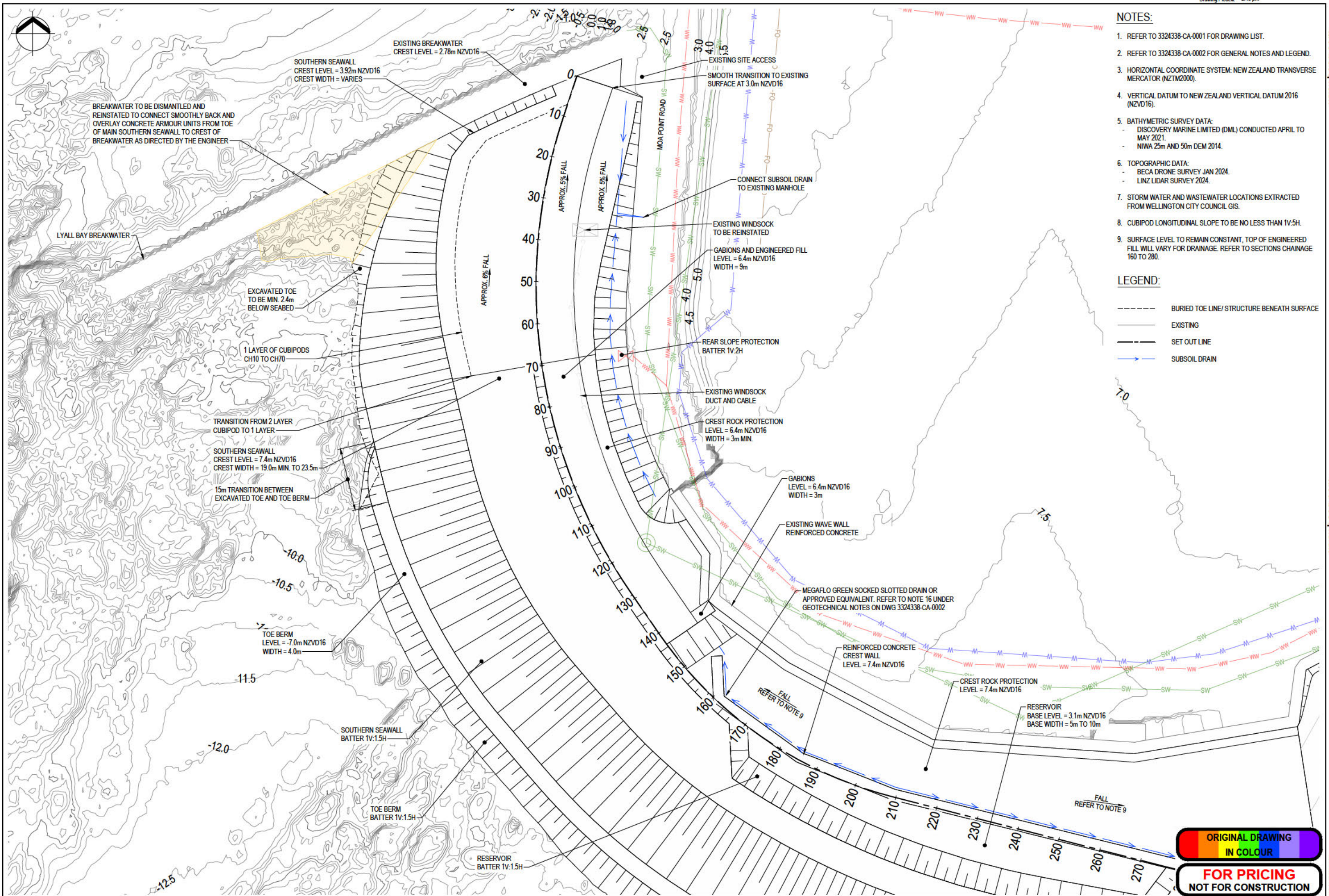
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Reduced Scale (A3)	Day Checker	JH	08.07.24	
1:1500	Day Check	WN	08.07.24	Date



Client: WIAL SEA DEFENCE STRUCTURES RENEWAL

Project: SOUTHERN SEAWALL AND EASTERN BANK REMEDIATION GENERAL ARRANGEMENT

Discipline	CIVIL ENGINEERING
Drawing No.	3324338-CA-0301
Rev.	0



NOTES:

1. REFER TO 3324338-CA-0001 FOR DRAWING LIST.
2. REFER TO 3324338-CA-0002 FOR GENERAL NOTES AND LEGEND.
3. HORIZONTAL COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR (NZTM2000).
4. VERTICAL DATUM TO NEW ZEALAND VERTICAL DATUM 2016 (NZVD16).
5. BATHYMETRIC SURVEY DATA:
 - DISCOVERY MARINE LIMITED (DML) CONDUCTED APRIL TO MAY 2021.
 - NIWA 25m AND 50m DEM 2014.
6. TOPOGRAPHIC DATA:
 - BECA DRONE SURVEY JAN 2024.
 - LINZ LIDAR SURVEY 2024.
7. STORM WATER AND WASTEWATER LOCATIONS EXTRACTED FROM WELLINGTON CITY COUNCIL GIS.
8. CUBIPOD LONGITUDINAL SLOPE TO BE NO LESS THAN 1V:5H.
9. SURFACE LEVEL TO REMAIN CONSTANT, TOP OF ENGINEERED FILL WILL VARY FOR DRAINAGE. REFER TO SECTIONS CHAINAGE 160 TO 280.

LEGEND:

- BURIED TOE LINE/ STRUCTURE BENEATH SURFACE
- EXISTING
- SET OUT LINE
- SUBSOIL DRAIN

ORIGINAL DRAWING
IN COLOUR

**FOR PRICING
NOT FOR CONSTRUCTION**

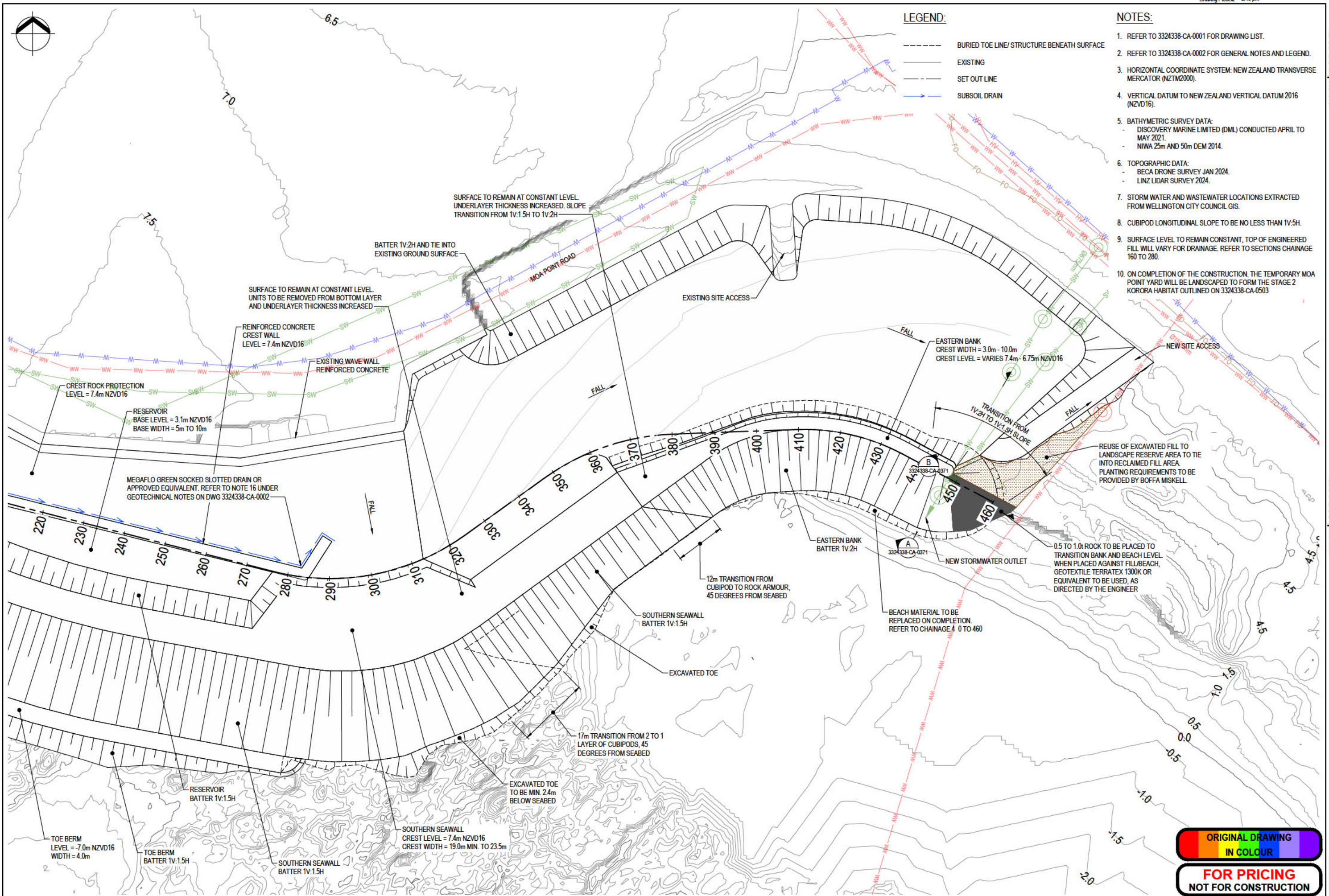
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Reduced Scale (A3)	Day Checker	JH	08.07.24	
1:800	Day Check	WN	08.07.24	Date
* Refer to Revision 1 for Original Signature				



Client: WIAL SEA DEFENCE
STRUCTURES RENEWAL

Title: SOUTHERN SEAWALL AND
EASTERN BANK REMEDIATION
GENERAL ARRANGEMENT SHEET 1

Discipline: CIVIL ENGINEERING
Drawing No. 3324338-CA-0302
Rev. 0



No.	Revision	By	Chk	Appd	Date
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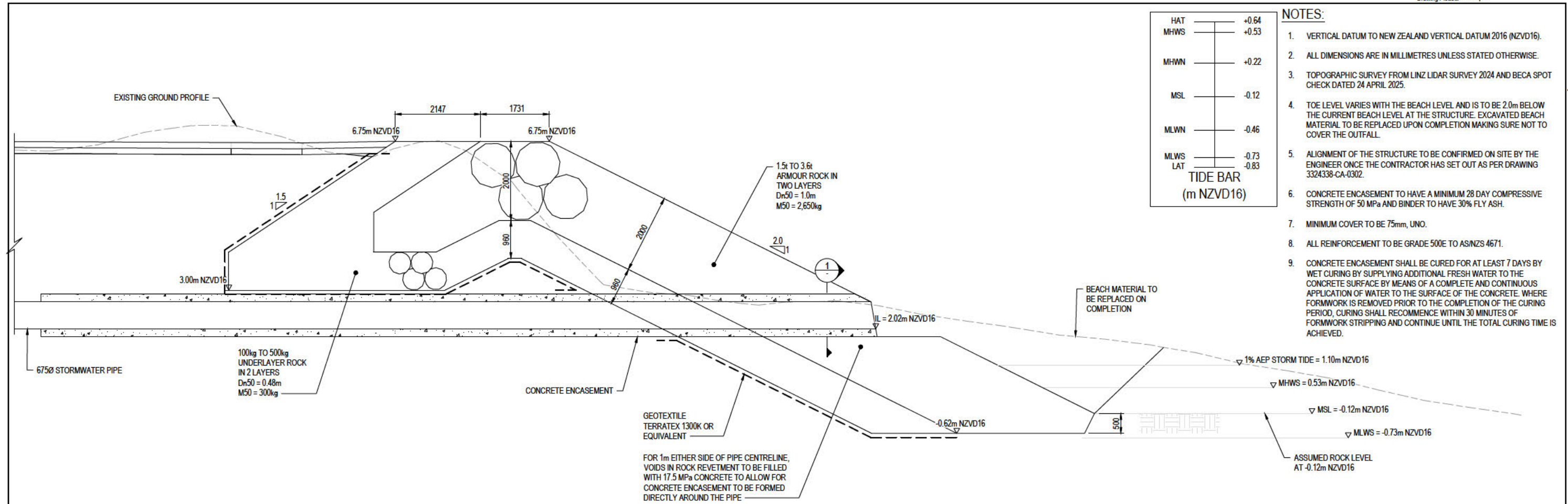
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1:800	Day Check	WN	08.07.24	Date



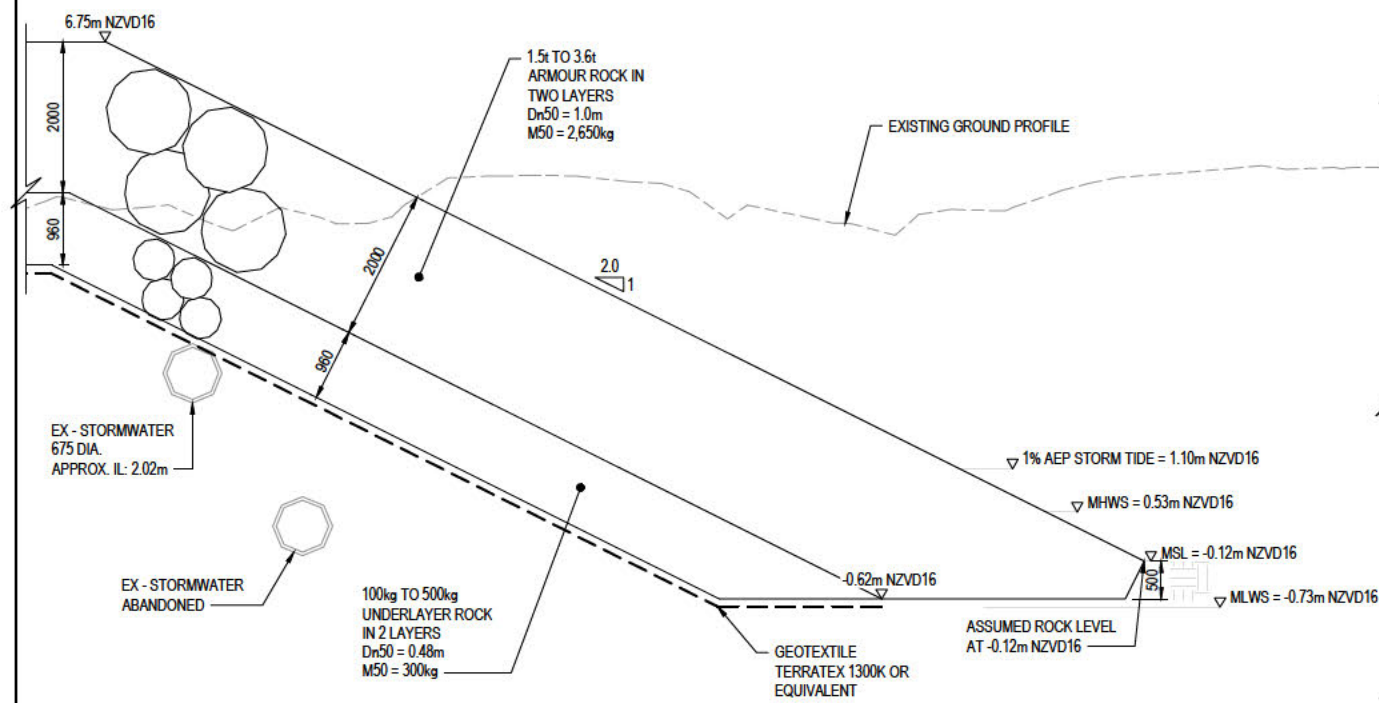
Client: WIAL SEA DEFENCE STRUCTURES RENEWAL

Title: SOUTHERN SEAWALL AND EASTERN BANK REMEDIATION GENERAL ARRANGEMENT SHEET 3

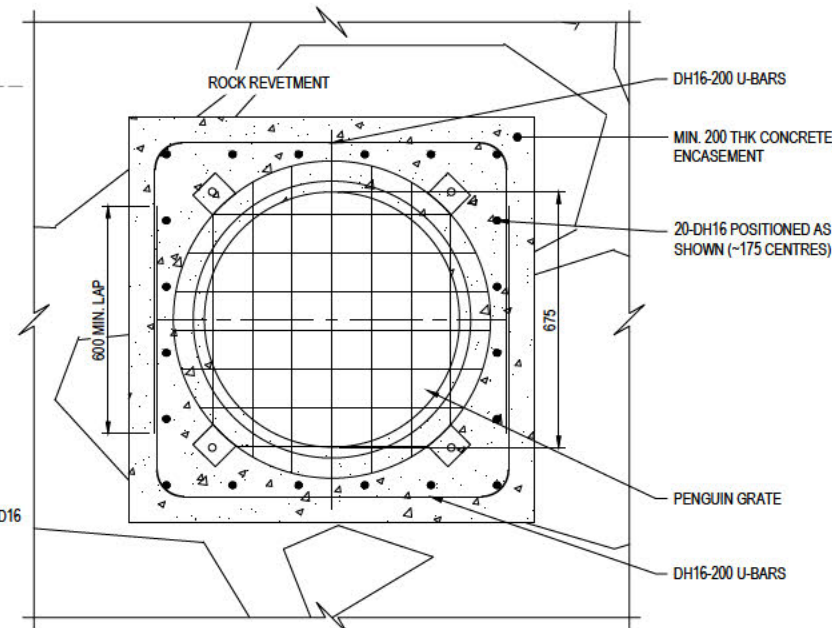
Discipline: CIVIL ENGINEERING
Drawing No: 3324338-CA-0304
Rev: 0



A LONG SECTION THROUGH REVETMENT AT STORMWATER OUTFALL AT CH 449
3324338-CA-0304 SCALE 1:50



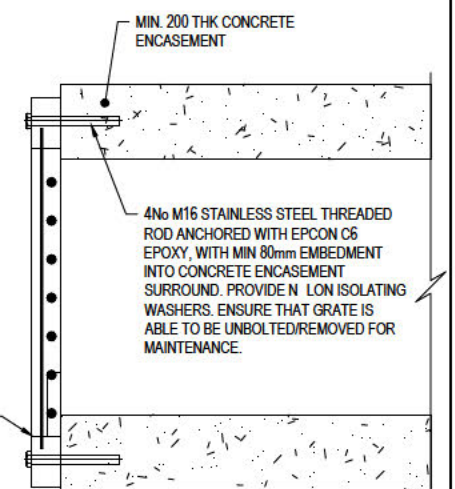
B CROSS SECTION THROUGH REVETMENT AT STORMWATER OUTFALL
3324338-CA-0304 SCALE 1:50



1 CROSS SECTION THROUGH CONCRETE ENCASEMENT
SCALE 1:10

GRATE UNIT FOR PREVENTION OF PENGUIN INGRESS INTO PIPE. FABRICATE UNIT WITH FOLLOWING COMPONENTS/FEATURES

- OUTER RING OF 50mm WIDE, MIN 6mm THICK STAINLESS STEEL 316L. OUTER RING MAY BE CIRCULAR, OCTAGONAL OR SQUARE IN AGREEMENT WITH ENGINEER.
- INNER CROSS BARS MIN 16mm DIA STAINLESS STEEL 316L, AT SPACING TO ENSURE MAX 75mm OPENINGS IN EITHER DIRECTION. CROSS BARS TO BE 5FWAR TO OUTER RING.
- 4No OUTER ANCHORAGE TABS AS SHOWN, MIN 50mm WIDE AND 6mm THICKNESS. LENGTH OF TABS AS SUCH TO ENSURE MIN 75mm EDGE DISTANCE BETWEEN M16 THREADED ROD AND CONCRETE ENCASEMENT PENETRATION EDGE. 5FWAR TABS TO OUTER RING.
- BOLT FIX GRATE TO THE CONCRETE ENCASEMENT AS SHOWN, ENSURING THAT GRATE IS ABLE TO BE UNBOLTED/REMOVED FOR MAINTENANCE.



2 DETAIL
SCALE 1:10

NOTES:

1. VERTICAL DATUM TO NEW ZEALAND VERTICAL DATUM 2016 (NZVD16).
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
3. TOPOGRAPHIC SURVEY FROM LINZ LIDAR SURVEY 2024 AND BECA SPOT CHECK DATED 24 APRIL 2025.
4. TOE LEVEL VARIES WITH THE BEACH LEVEL AND IS TO BE 2.0m BELOW THE CURRENT BEACH LEVEL AT THE STRUCTURE. EXCAVATED BEACH MATERIAL TO BE REPLACED UPON COMPLETION MAKING SURE NOT TO COVER THE OUTFALL.
5. ALIGNMENT OF THE STRUCTURE TO BE CONFIRMED ON SITE BY THE ENGINEER ONCE THE CONTRACTOR HAS SET OUT AS PER DRAWING 3324338-CA-0302.
6. CONCRETE ENCASEMENT TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 50 MPa AND BINDER TO HAVE 30% FLY ASH.
7. MINIMUM COVER TO BE 75mm, UNO.
8. ALL REINFORCEMENT TO BE GRADE 500E TO ASINZS 4671.
9. CONCRETE ENCASEMENT SHALL BE CURED FOR AT LEAST 7 DAYS BY WET CURING BY SUPPLYING ADDITIONAL FRESH WATER TO THE CONCRETE SURFACE BY MEANS OF A COMPLETE AND CONTINUOUS APPLICATION OF WATER TO THE SURFACE OF THE CONCRETE. WHERE FORMWORK IS REMOVED PRIOR TO THE COMPLETION OF THE CURING PERIOD, CURING SHALL RECOMMENCE WITHIN 30 MINUTES OF FORMWORK STRIPPING AND CONTINUE UNTIL THE TOTAL CURING TIME IS ACHIEVED.

HAT	+0.64
MHWS	+0.53
MHWN	+0.22
MSL	-0.12
MLWN	-0.46
MLWS	-0.73
LAT	-0.83
TIDE BAR (m NZVD16)	

Original Scale (A1)	Design	WP/AS	08.07.24	Approved For Construction*
AS SHOWN	Drawn	JV/WP	08.07.24	
Reduced Scale (A3)	Day Verifier	JH	08.07.24	
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* Refer to Revision 1 for Original Signature				

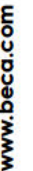


Client: WIAL SEA DEFENCE
STRUCTURES RENEWAL

Title: EASTERN BANK REMEDIATION
STORMWATER OUTFALL

Discipline	CIVIL ENGINEERING
Drawing No.	3324338-CA-0370
Rev.	0

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0	FOR PRICING (2025)	WP	AS	JH 08.07.24
No.	Revision	By	Chk	Appd Date

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Reduced	Dwg Verifier	JH	08.07.24	
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HALF SHOWN	* Refer to Revision 1 for Original Signature			Date



Client:  **WL Group**

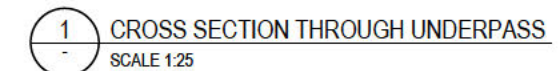
Title: STAGE 1 KORORA HABITAT
GENERAL ARRANGEMENT &
UNDERPASS SECTION

Discipline		CIVIL ENGINEERING
Drawing No.	3324338-CA-0501	Rev. 0

Document No. 3324338-CA-0501.DWG

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. HORIZONTAL COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR (NZTM2000).
3. VERTICAL DATUM TO NEW ZEALAND VERTICAL DATUM 2016 (NZVD16).
4. ALL EXISTING SERVICES SHALL BE LOCATED AND MARKED PRIOR TO START OF CONSTRUCTION ON SITE. ALL EXISTING SERVICES SHALL BE PROTECTED OR RELOCATED TO AVOID DAMAGE DURING AND AFTER CONSTRUCTION.
5. THE KORORA UNDERPASS SHALL BE DESIGNED TO MEET THE KORORA SPECIALIST'S REQUIREMENTS. THE UNDERPASS SHALL BE DESIGNED TO COMPLY WITH THE NZTA BRIDGE MANUAL, NZS 3101:2006: PART 1, AND THE NZ BUILDING CODE. THE UNDERPASS SHALL WITHSTAND HN-HO-72 TRAFFIC LOADING WITH 0mm COVER (PAVEMENT LAID DIRECT ON UNDERPASS). THE UNDERPASS DESIGN LIFE SHALL BE MIN. 50 YEARS. CONCRETE SHALL BE MARINE GRADE CONCRETE MIN. 40 MPa. SURFACE FINISHES SHALL COMPLY WITH NZS 3114:1986 F3 UNLESS OTHERWISE REQUIRED BY THE KORORA SPECIALIST. PRECAST MANUFACTURE SHALL COMPLY WITH NZS 3109:1997.
6. UNDERPASS INSTALLATION INCLUDING BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE UNDERPASS DESIGNER'S SPECIFICATIONS.

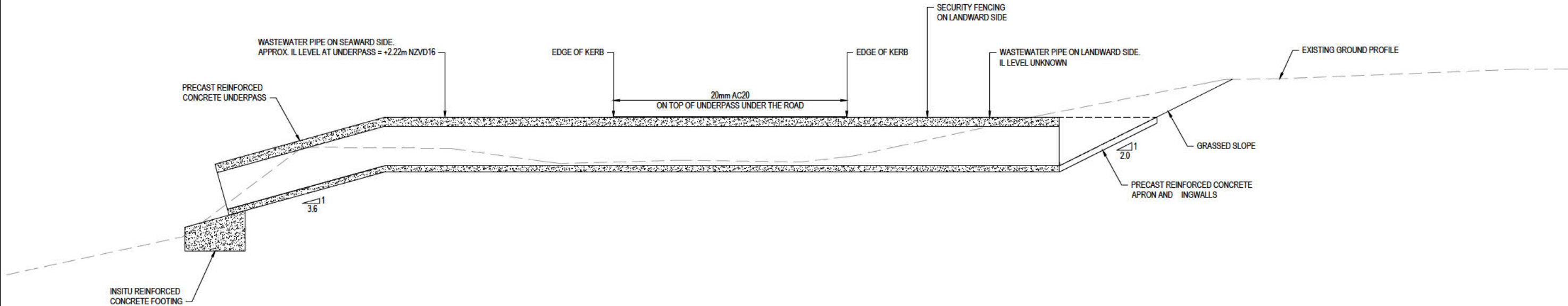
	LAND PARCEL BOUNDARY
	EXISTING WASTEWATER
	EXISTING WATER
	FENCING
	ROAD GRADIENT
	SECURITY FENCING
	LANDWARD BOUNDARY OF KORORA AREA



FOR PRICING
NOT FOR CONSTRUCTION

NOTES:

- 1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
- 2. HORIZONTAL COORDINATE SYSTEM: NEW ZEALAND TRANSVERSE MERCATOR (NZTM2000).
- 3. VERTICAL DATUM TO NEW ZEALAND VERTICAL DATUM 2016 (NZVD16).
- 4. ALL EXISTING SERVICES SHALL BE LOCATED AND MARKED PRIOR TO START OF CONSTRUCTION ON SITE. ALL EXISTING SERVICES SHALL BE PROTECTED OR RELOCATED TO AVOID DAMAGE DURING AND AFTER CONSTRUCTION.
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- 6. UNDERPASS INSTALLATION INCLUDING BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE UNDERPASS DESIGNER'S SPECIFICATIONS.



2 LONG SECTION THROUGH UNDERPASS
3324338-CA-0501 SCALE 1:50

0	FOR PRICING (2025)	WP	AS	JH	08.07.24
No.	Revision	By	Chk	Appd	Date

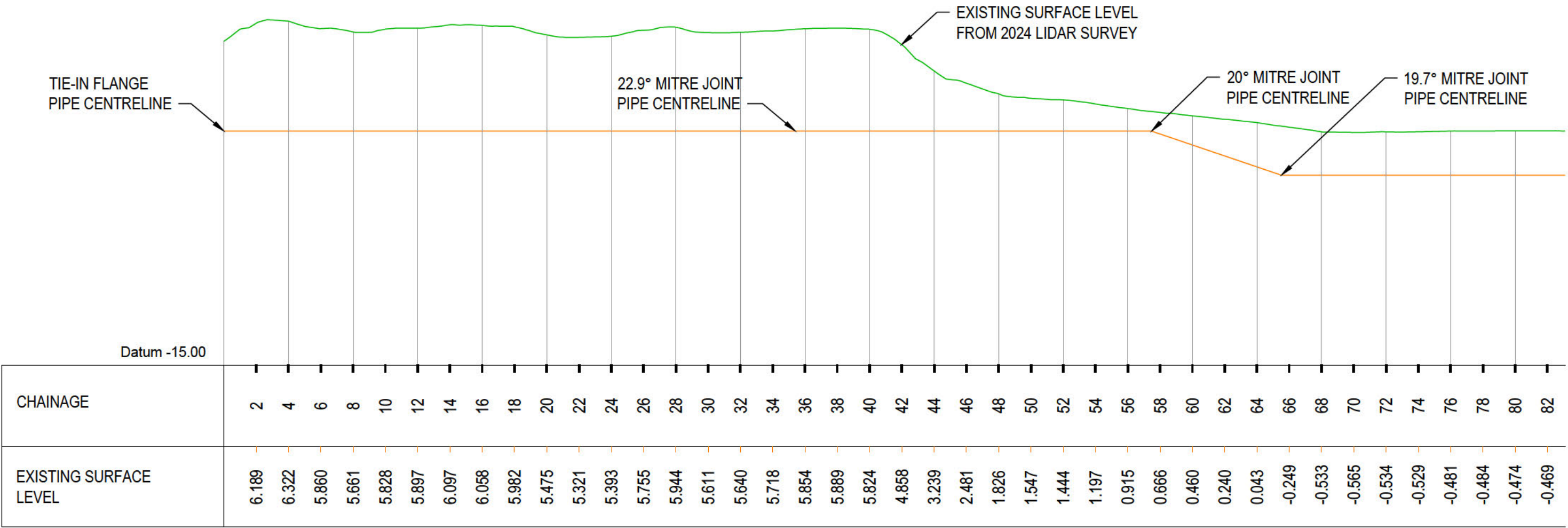
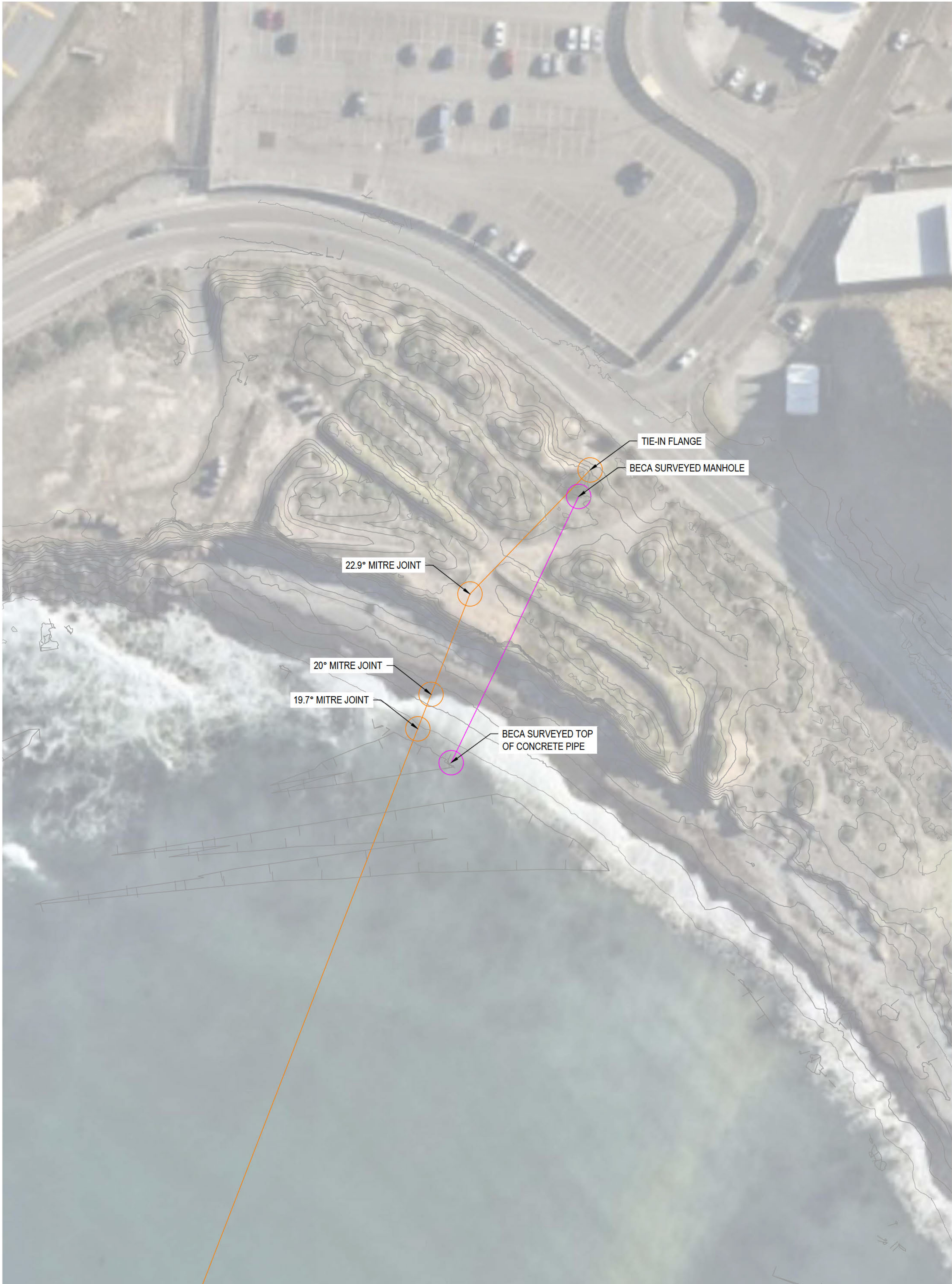
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Reduced Scale (A3)	Day Verifier	JH	08.07.24	
HALF SHOWN	Day Check	WN	08.07.24	Date
* Refer to Revision 1 for Original Signature				



Client: WIAL SEA DEFENCE STRUCTURES RENEWAL

Title: STAGE 1 KORORA HABITAT UNDERPASS LONG SECTION AND ELEVATION

Discipline	CIVIL ENGINEERING
Drawing No.	3324338-CA-0502
Rev.	0



FOR INFORMATION ONLY

+	UNDER REVISION				
No.	Revision	By	Chk	Appd	Date

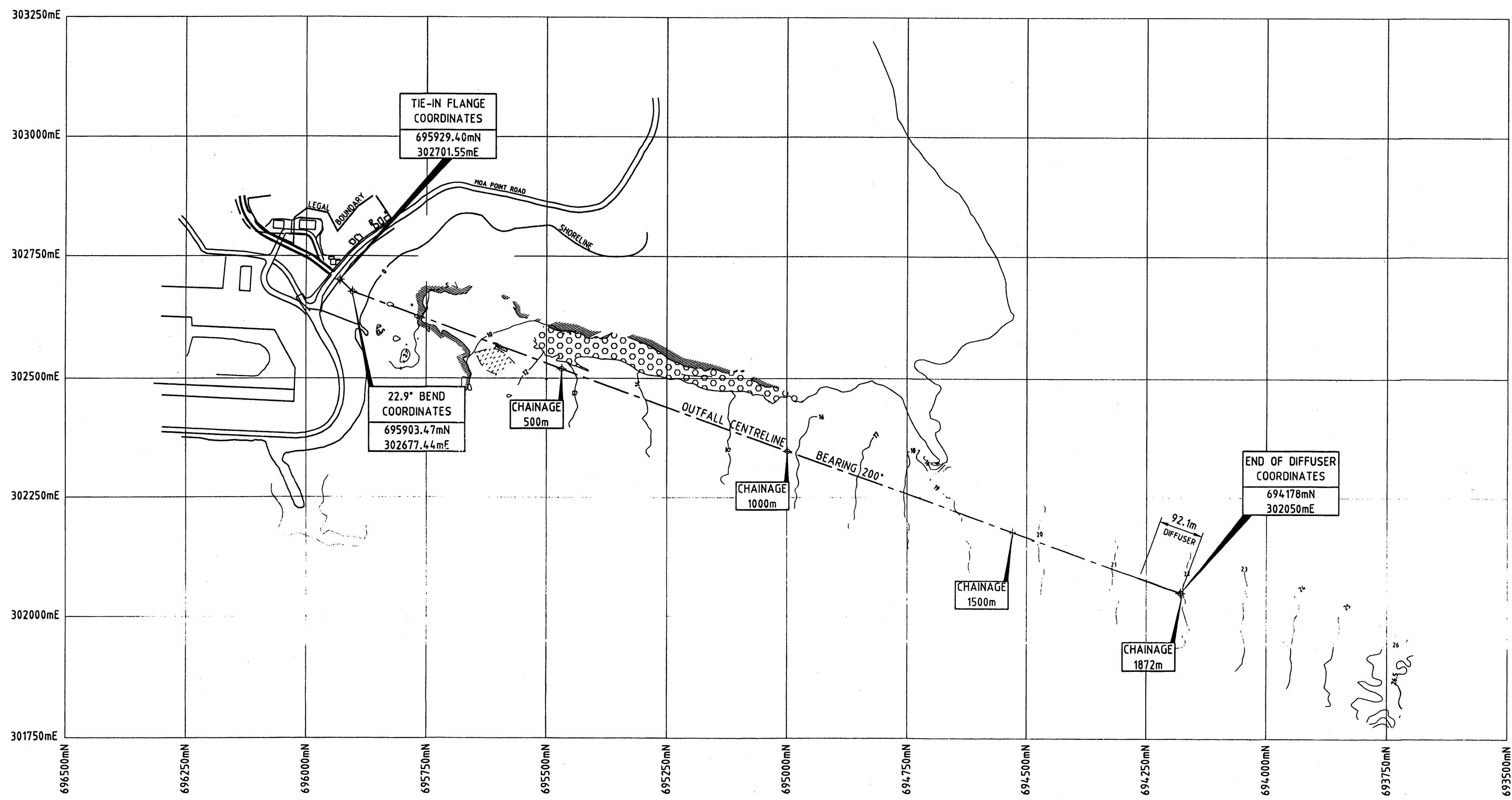
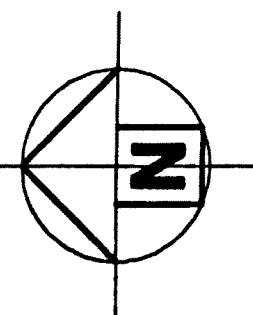
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Client:

Project:

FILL THIS IN



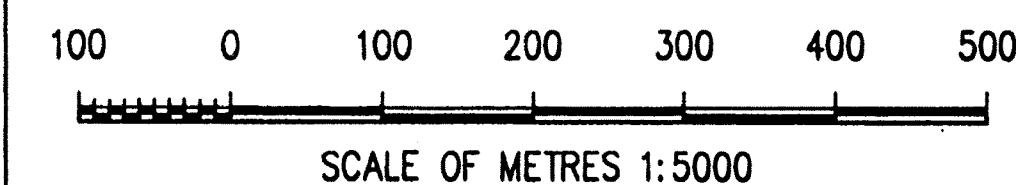
PLAN OF OUTFALL

LEGEND

- PEBBLE - COBBLE GRAVEL
- ROCK
- SANDY/COBBLE SEABED
- SAND

NOTES

- WATER DEPTH REDUCED TO MSL ON NEW CITY DATUM.
- UNITS ARE IN METRES.
- BATHYMETRIC DATA SOURCED FROM WELLINGTON OCEAN OUTFALL BATHYMETRY CONTOURS DRAWINGS Nos. NZ0196/BCP-001 TO 004.
- SURVEY RUN PERFORMED USING DGPS STATION ON WGS84 SPHEROID. GRID COORDINATES IN MT. COOK (WELLINGTON CIRCUIT).
- FOR OUTFALL ALIGNMENT DETAILS REFER TO DRAWINGS 18-001, 18-002 & 18-003.



CADFILE : 01-001_B.DWG 09/06/97 - 22:11

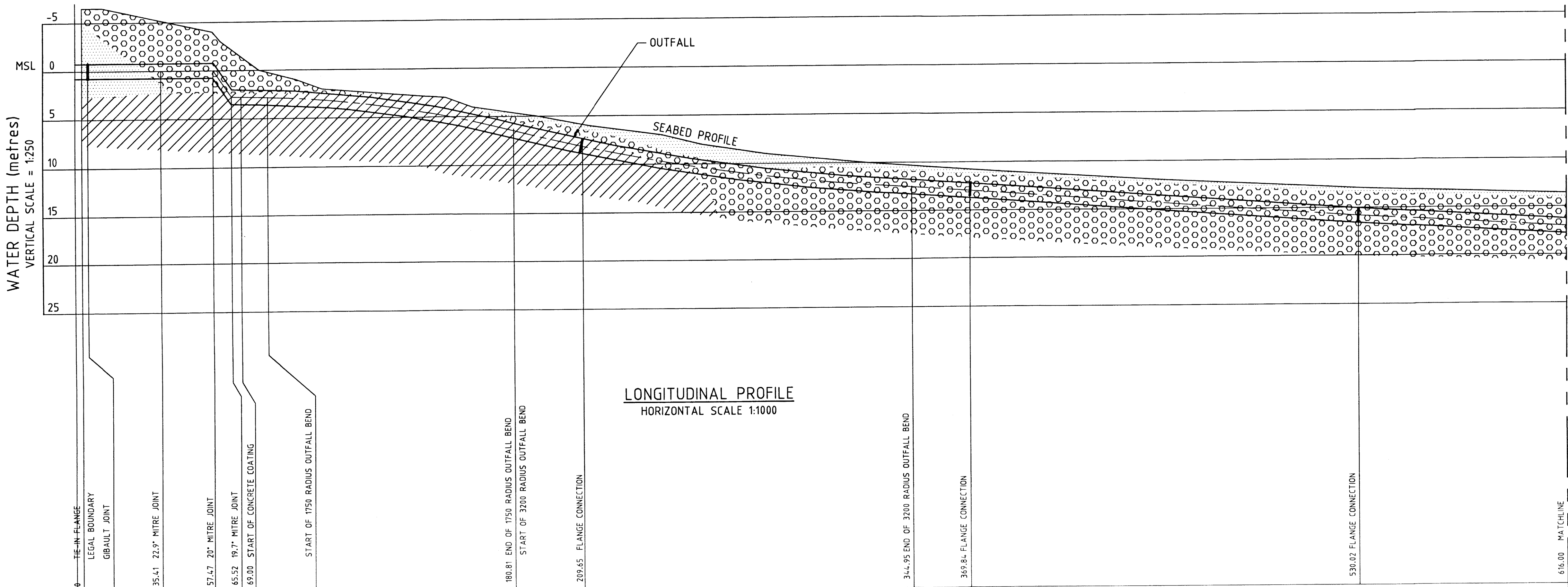
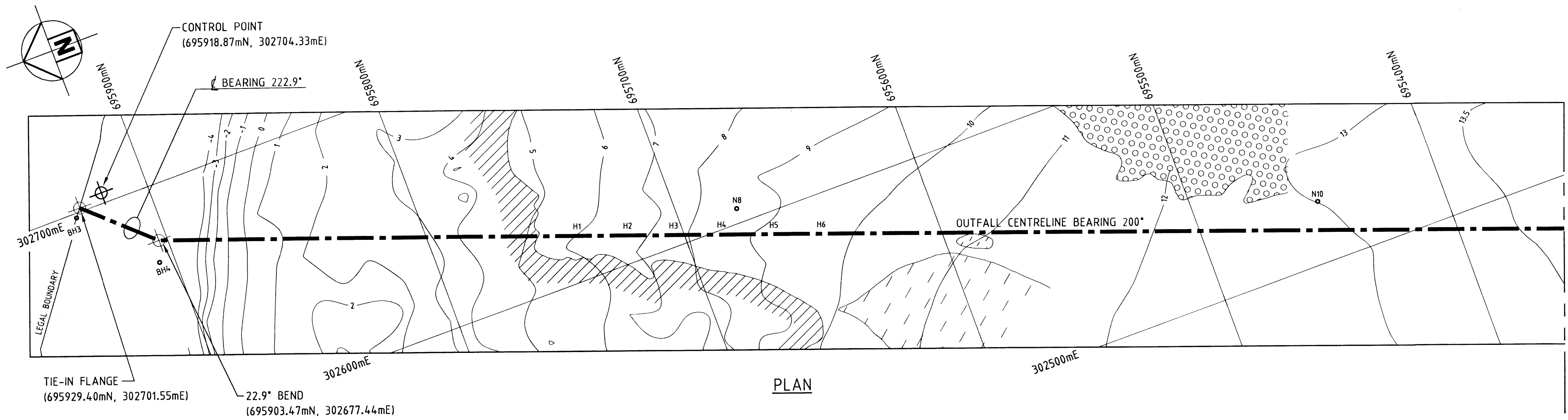
Kvaerner R J Brown Pty Ltd
A.C.N. 003 046 866
South Tower, The Interchange,
67 Albert Avenue, CHATSWOOD
N.S.W. 2067 AUSTRALIA
P.O. Box 369, CHATSWOOD, N.S.W. 2057
Tel: (02) 412-9777 Fax: (02) 412-9655

			BY			CHECKED	DATE
			Survey				
			Design	S. BATTALIS	LBC		30.01.96
			Drawn	E. FELIPE	S.B.		01.02.96
			Recom'd				
			Approval				
			Status:	AS BUILT			A1
REV	DATE	DESCRIPTION	DRN	CHK	APP		
B	11.06.97	AS BUILT					
A	10.05.96	ISSUED FOR CONSTRUCTION	EF	LBC	LBC		

CANDAC PERRY
JOINT VENTURE
P.O. BOX 14-283
KILBIRNIE, WELLINGTON

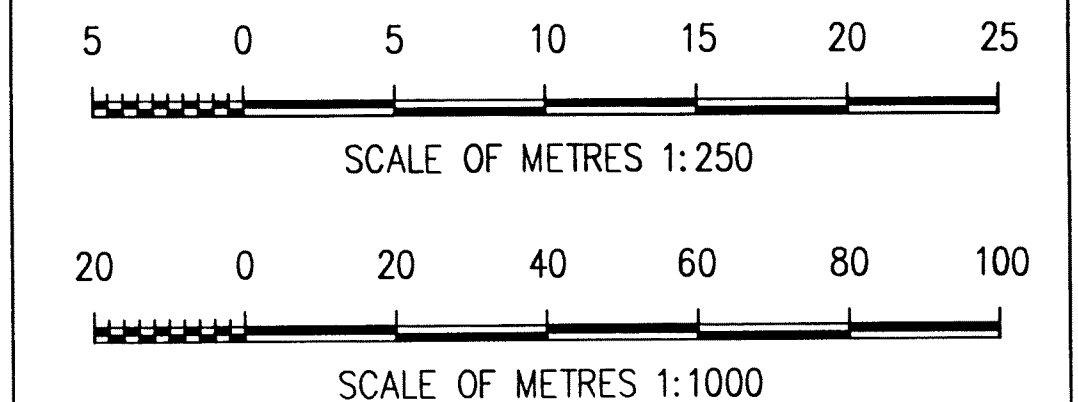
WELLINGTON CITY COUNCIL
TUMEKE PONEKE
101 Wakefield Street Wellington New Zealand
P.O. Box 2199 Telephone (04) 499-4444
Anglian Water
INTERNATIONAL (NZ) Ltd
296 Lambton Quay
James Cook Arcade
Wellington
New Zealand
Ph. (04) 499-9182

WELLINGTON WASTE WATER PROJECT
OCEAN OUTFALL
Title: **GENERAL ARRANGEMENT OUTFALL PLAN**
Drawing No. **951096 01-001**
Scale: 1:5000 Sheet: 1 REV: B



- LEGEND**
- SAND
 - PEBBLE - COBBLE GRAVEL
 - ROCK
 - SANDY/COBBLE SEABED (SEE NOTE 8)

- NOTES**
1. WATER DEPTH REDUCED TO MSL ON NEW CITY DATUM.
 2. UNITS ARE IN METRES.
 3. BATHYMETRIC DATA SOURCED FROM WELLINGTON OCEAN OUTFALL BATHYMETRY CONTOURS DRAWINGS Nos. NZ0196/BCP-001 TO 004.
 4. SURVEY RUN PERFORMED USING DGPS STATION ON WGS84 SPHEROID. GRID COORDINATES IN MT. COOK (WELLINGTON) CIRCUIT.
 5. GEOLOGICAL PROFILE BASED ON INTERPOLATION OF BORE HOLE LOG DATA. BORE HOLE LOCATIONS GIVEN ON ALIGNMENT PLAN.
 6. OUTFALL PROFILE IN NEAR SHORE ZONE (CH 0.0 TO CH 320) BASED ON A MINIMUM PERMISSIBLE BEND RADIUS OF 1500m.
 7. SOIL/ROCK BOUNDARY IS BASED ON GEOTECHNICAL DATA OBTAINED DURING CONSTRUCTION PREPARATORY WORKS.
 8. THE AREA OF SAND/COBBLE SEABED WAS REGISTERED ON THE SIDE SCAN SONAR SURVEY AND IS MOST LIKELY A TEXTUAL CHANGE IN THE SANDY SEABED SURFACE.



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CADFILE : 18-001_E.DWG 09/06/97 - 2146

Kvaerner R J Brown Pty Ltd
A.C.N. 003 046 866
South Tower, The Interchange,
67 Albert Avenue, CHATSWOOD
N.S.W. 2067 AUSTRALIA
P.O. Box 369, CHATSWOOD, N.S.W. 2057
Tel: (02) 412-9777 Fax: (02) 412-9655

(CAD) A1

JOB No. 4240

E	11.06.97	AS BUILT	E	LBC	LBC	BY	CHECKED	DATE
D	17.03.97	REMOVABLE PIGGING FACILITY ADDED, CONCRETE COATING EXTENT MODIFIED	EF	PC	LBC	Survey		
C	03.10.96	MITRED BEND GEOMETRY REVISED	EF	PC	LC	Design	S. BATTALIS	28.02.96
B	05.09.96	ROCK PROFILE & OUTFALL PROFILE MODIFIED. NOTES 9 & 10/ROCK BACKFILL REMOVED.	SAW	R.H.	R.H.	Drawn	E. FELIPE	28.02.96
A	10.05.96	ISSUED FOR CONSTRUCTION	E.F.	L.B.C.	L.B.C.	Recom'd		
REV	DATE	DESCRIPTION	DRN	CHK	APP	Status:	AS BUILT	A1

CANDAC PERRY
JOINT VENTURE
P.O. BOX 14-283
KILBIRNIE, WELLINGTON

WELLINGTON CITY COUNCIL
TUMEKE PONEKE
101 Wakefield Street Wellington New Zealand
P.O. Box 2199 Telephone (04) 499-4444

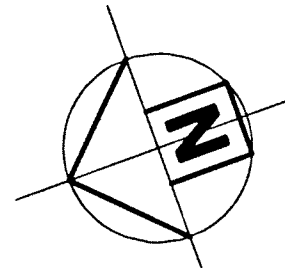
Anglian Water
INTERNATIONAL (NZ) Ltd.
296 Lambton Quay
James Cook Arcade
Wellington
New Zealand
Ph. (04) 499-9182

WELLINGTON WASTE WATER PROJECT
OCEAN OUTFALL

Title: ALIGNMENT SHEET
OCEAN OUTFALL
CHAINAGE 0.00 TO 616.00

Scale: 1:1000 Sheet: 1 OF 3 REV: E

Drawing No. 951096 18-001



MATCHLINE CONTINUED FROM DWG No. 18-001

LEGEND

- SAND
- PEBBLE - COBBLE GRAVEL
- ROCK
- SANDY/GRAVEL MIX

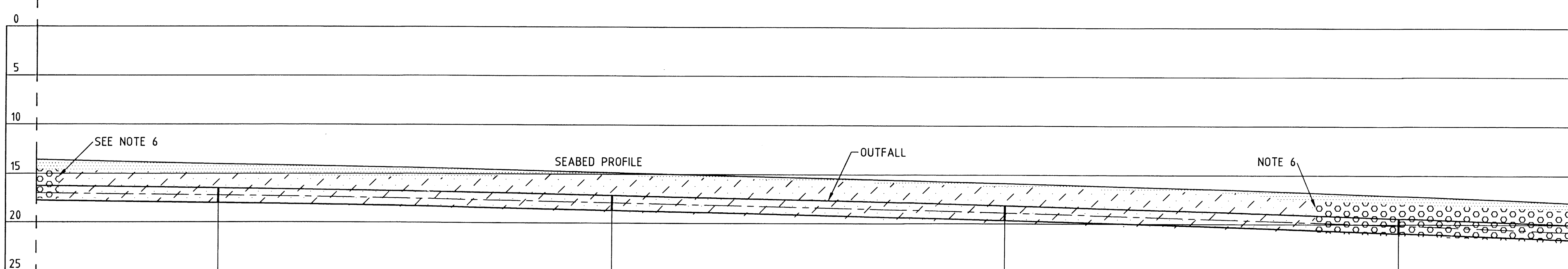
MATCHLINE CONTINUED ON DWG No. 18-003

NOTES

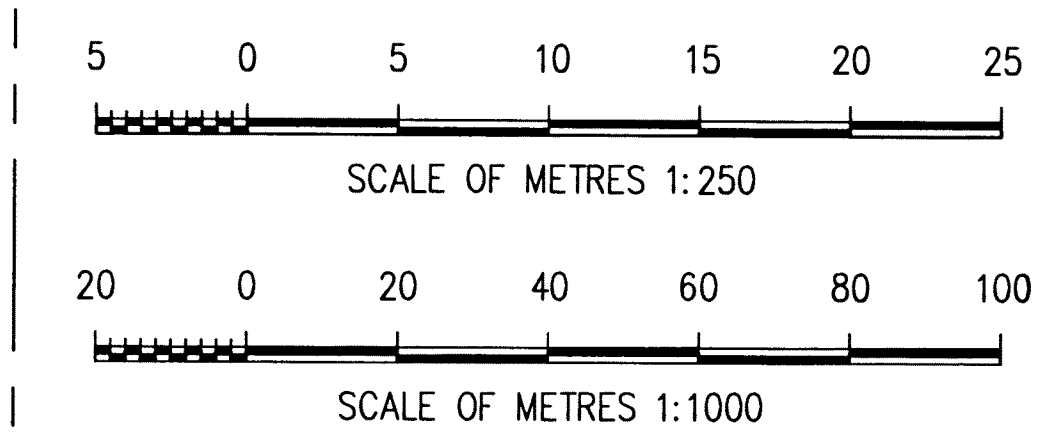
1. WATER DEPTH REDUCED TO MSL ON NEW CITY DATUM.
2. UNITS ARE IN METRES.
3. BATHYMETRIC DATA SOURCED FROM WELLINGTON OCEAN OUTFALL BATHYMETRY CONTOURS DRAWINGS Nos. NZ0196/BCP-001 TO 004.
4. SURVEY RUN PERFORMED USING DGPS STATION ON WGS84 SPHEROID. GRID COORDINATES IN MT. COOK (WELLINGTON) CIRCUIT.
5. GEOLOGICAL PROFILE BASED ON INTERPOLATION OF BORE HOLE LOG DATA. BORE HOLE LOCATIONS GIVEN ON ALIGNMENT PLAN.
6. LOCATION OF BOUNDARY BETWEEN SOIL TYPES IS ESTIMATED BASED ON INTERPOLATION OF BOREHOLE DATA.

PLAN

WATER DEPTH (metres)
VERTICAL SCALE = 1:250



LONGITUDINAL PROFILE
HORIZONTAL SCALE 1:1000



CHAINAGE	
PIPE SIZE, WALL THICKNESS & GRADE	
INTERNAL LINING TYPE, DENSITY & THICKNESS	
EXTERNAL CORROSION COATING TYPE & THICKNESS	
CONCRETE THICKNESS, DENSITY & PIPE SUB. WEIGHT (EMPTY)	
ANODE TYPE & SPACING	
NOMINAL BURIAL COVER	

1265mm O.D. x 12.5mm WT / API 5L GRADE B (REFER SPECIFICATION S-4240-SSS-002)	
CEMENT MORTAR LINING / 2300 kg/m ³ / 20mm THK. (REFER SPECIFICATION S-4240-SSS-003)	
MULTI-LAYER POLYETHYLENE TAPE WRAP / 2.5mm THK (REFER SPECIFICATION S-4240-SSS-004)	
122mm / 2500 kg/m ³ / 60 kg/m (REFER SPECIFICATION S-4240-SSS-004)	
REFER TO WILSON WALTON DRAWINGSWN 199 & WN 200	
1.0m	

CADFILE : 18-002_B.DWG 09/06/97 - 2151

Kvaerner R J Brown Pty Ltd
A.C.N. 003 046 866
South Tower, The Interchange,
67 Albert Avenue, CHATSWOOD
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P.O. Box 369, CHATSWOOD, N.S.W. 2057
Tel: (02) 412-9777 Fax: (02) 412-9655

(CAD) A1

JOB No. 4240

REV	DATE	DESCRIPTION
B	11.06.97	AS BUILT
A	10.05.96	ISSUED FOR CONSTRUCTION

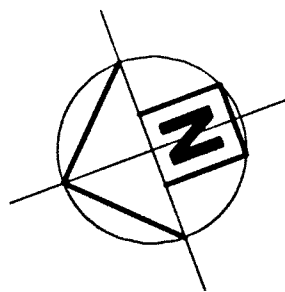
BY	CHECKED	DATE
Survey		
Design	S. BATTALIS	LBC 28.02.96
Drawn	E. FELIPE	S.B. 28.02.96
Recom'd		
Approval		
Status:	AS BUILT	A1

CANDAC PERRY
JOINT VENTURE
P.O. BOX 14-283
KILBIRNIE, WELLINGTON

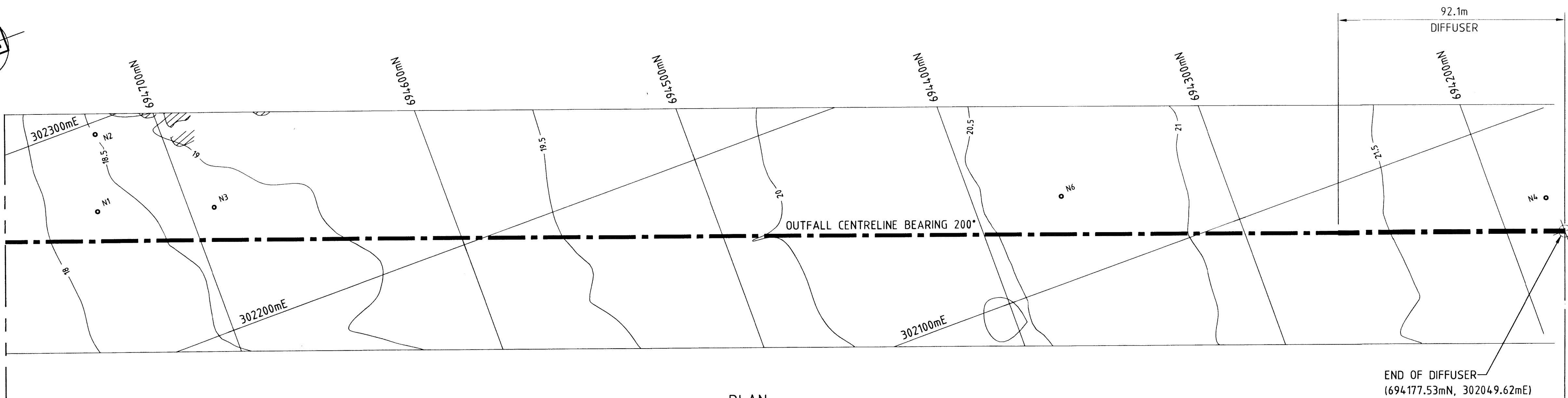
WELLINGTON CITY COUNCIL
TUMEKE PONEKE
101 Wakefield Street Wellington New Zealand
P.O. Box 2199 Telephone (04) 499-4444

Anglian Water
INTERNATIONAL (NZ) Ltd
296 Lambton Quay
James Cook Arcade
Wellington
New Zealand
Ph. (04) 499-9182

WELLINGTON WASTE WATER PROJECT			
OCEAN OUTFALL			
Title:	ALIGNMENT SHEET OCEAN OUTFALL CHAINAGE 616.00 TO 1242.00		Drawing No. 951096 18-002
Scale	1:1000	Sheet	2 OF 3
REV	B		

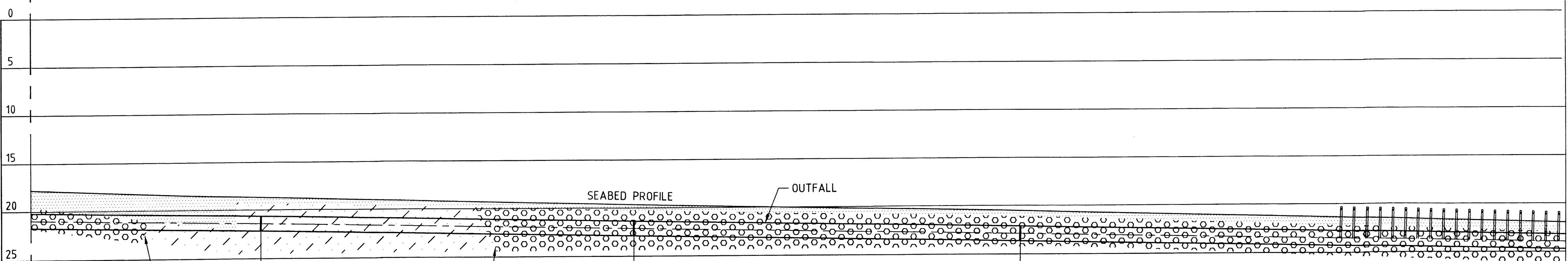


MATCHLINE CONTINUED FROM DWG No. 18-002



PLAN

WATER DEPTH (metres)
VERTICAL SCALE = 1:250



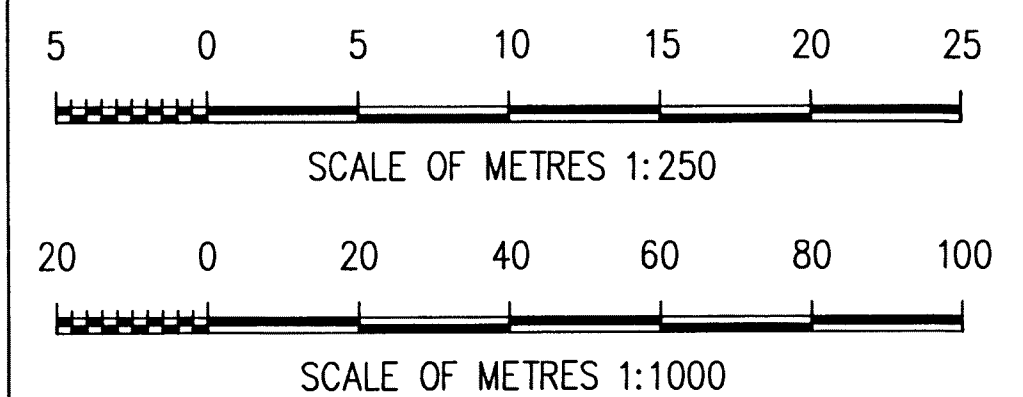
LONGITUDINAL PROFILE
HORIZONTAL SCALE 1:1000

LEGEND

- SAND
- PEBBLE - COBBLE GRAVEL
- ROCK
- SANDY/GRAVEL MIX

NOTES

1. WATER DEPTH REDUCED TO MSL ON NEW CITY DATUM.
2. UNITS ARE IN METRES.
3. BATHYMETRIC DATA SOURCED FROM WELLINGTON OCEAN OUTFALL BATHYMETRY CONTOURS DRAWINGS Nos. NZ0196/BCP-001 TO 004.
4. SURVEY RUN PERFORMED USING DGPS STATION DN WGS84 SPHEROID. GRID COORDINATES IN MT. COOK (WELLINGTON) CIRCUIT.
5. GEOLOGICAL PROFILE BASED ON INTERPOLATION OF BORE HOLE LOG DATA. BORE HOLE LOCATIONS GIVEN ON ALIGNMENT PLAN.
6. LOCATION OF BOUNDARY BETWEEN SOIL TYPE IS ESTIMATED BASED ON INTERPOLATION OF BOREHOLE DATA.



CHAINAGE

PIPE SIZE, WALL THICKNESS & GRADE
INTERNAL LINING TYPE, DENSITY & THICKNESS
EXTERNAL CORROSION COATING TYPE & THICKNESS
CONCRETE THICKNESS, DENSITY & PIPE SUB. WEIGHT (EMPTY)
ANODE TYPE & SPACING
NOMINAL BURIAL COVER

CAOFILE : 18-003_C.OWG 09/06/97 - 21:57

Kvaerner R J Brown Pty Ltd
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South Tower, The Interchange,
67 Albert Avenue, CHATSWOOD
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Tel: (02) 412-9777 Fax: (02) 412-9655

(CAD) A1

JOB No. 4240

REV	DATE	DESCRIPTION	DRN	CHK	APP	BY	CHECKED	DATE
C	11.06.97	AS BUILT				Survey		
B	22.11.96	BURIAL COVER INCREASED FOR DIFFUSER				Design	S. BATTALIS	28.02.96
A	08.05.96	ISSUED FOR CONSTRUCTION				Drawn	E. FELIPE	28.02.96
						Recom'd		
						Approval		
						Status:	AS BUILT	A1



**CANDAC PERRY
JOINT VENTURE**
P.O. BOX 14-283
KILBIRNIE, WELLINGTON

WELLINGTON CITY COUNCIL
TUMEKE PONEKE

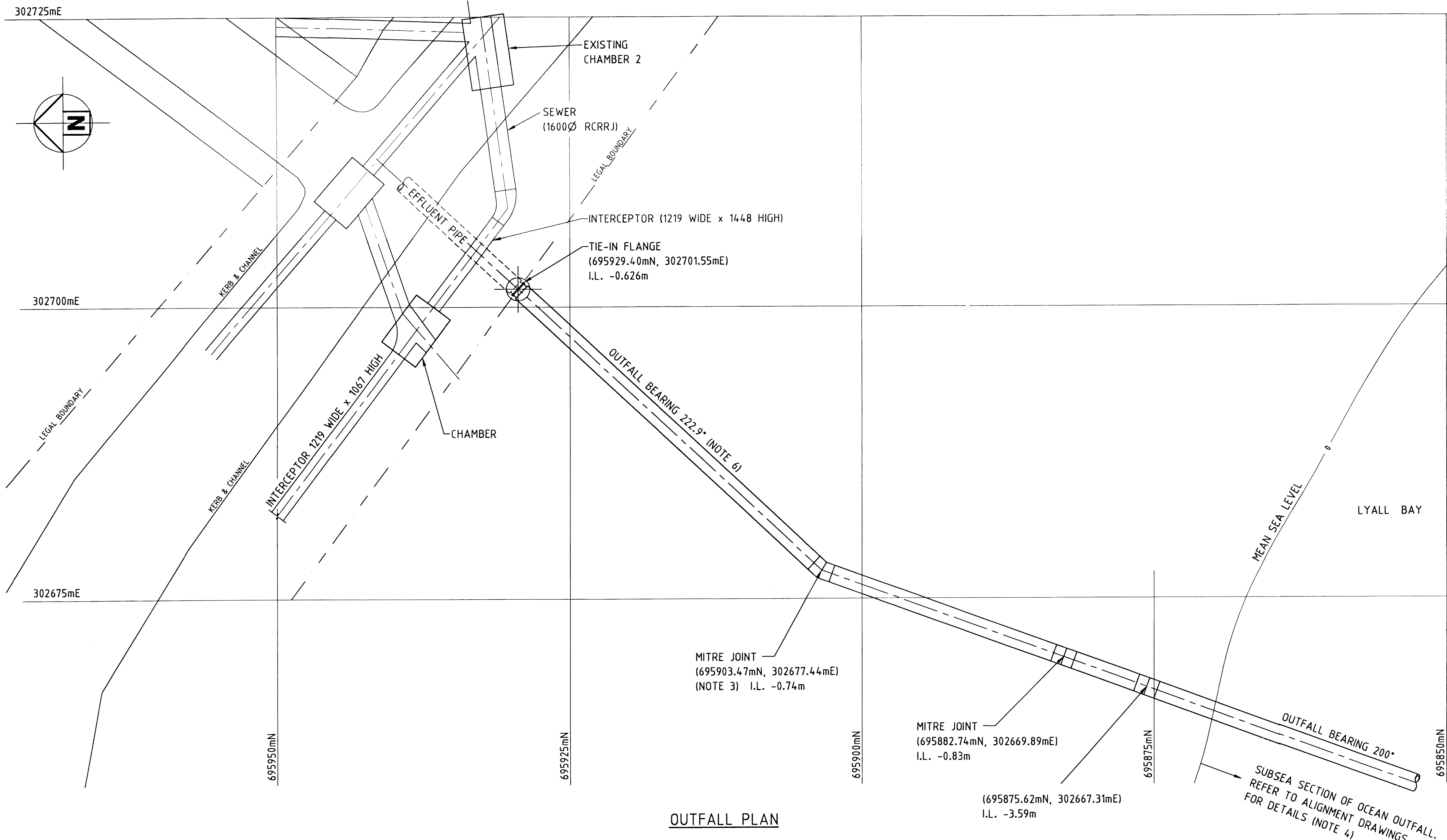
101 Wakefield Street Wellington New Zealand
P.O. Box 2199 Telephone (04) 499-4444



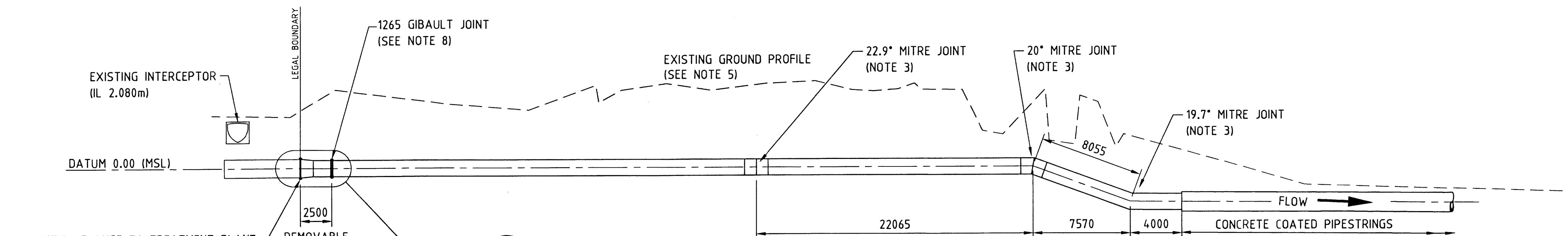
296 Lambton Quay
James Cook Arcade
Wellington
New Zealand
Ph. (04) 499-9182

WELLINGTON WASTE WATER PROJECT
OCEAN OUTFALL

Title:	ALIGNMENT SHEET OCEAN OUTFALL CHAINAGE 1242.00 TO 1870.00	Drawing No.	951096 18-003
Scale	1:1000	Sheet	3 OF 3
REV	C		



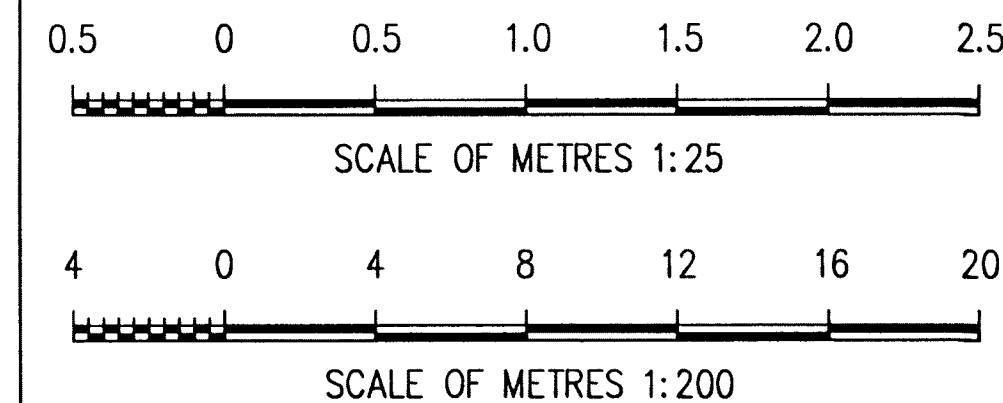
OUTFALL PLAN



OUTFALL ELEVATION
(SECTION ON CENTRELINE)

NOTES:

- ALL DIMENSIONS IN MILLIMETRES UNLESS NOTIFIED OTHERWISE.
- CONNECTION FLANGE TO TREATMENT PLANT TO BE IN ACCORDANCE WITH DETAIL A ON DRAWING 18-009. FLANGE SHALL BE LINED WITH CEMENT MORTAR LINING IN ACCORDANCE WITH SPECIFICATION S-4240-SS-003. FLANGE TO BE FABRICATED OUT OF GRADE 250 PLATE IN ACCORDANCE WITH AS 3678 (OR EQUIVALENT).
- BENDS SHALL BE FABRICATED FROM OUTFALL PIPE IN ACCORDANCE WITH NZS4442 : 1988. BEND GEOMETRY SHALL BE IN ACCORDANCE WITH FIGURE 5 OF NZS4442, WITH THE EXCEPTION OF DIMENSION 'F' WHICH SHALL BE 920mm.
- FOR OUTFALL DETAILS REFER ALIGNMENT DRAWINGS 18-001, 18-002 & 18-003.
- EXISTING GROUND PROFILE IS BASED ON LONGITUDINAL SECTION THROUGH EFFLUENT PIPELINE ON DWG No. 2807424/C005 REV. 1.
- OUTFALL IS ALIGNED WITH THE EFFLUENT PIPELINE, THE BEARING OF WHICH IS SCALED OFF DRAWING 28074004 REV 1.
- OUTFALL I.D. AT FLANGE TO MATCH EFFLUENT PIPE I.D.
- GIBALT JOINT SHALL BE MADE TO SUIT 1265 O.D. PIPE AND 0.5 MPa DESIGN PRESSURE, COMPLETE WITH RUBBER O-RING SEALS AND GALVANISED BOLTS.



CADFILE : 18-004_E.DWG 09/06/97 - 22:03

Kvaerner R J Brown Pty Ltd A.C.N. 003 046 866 South Tower, The Interchange, 67 Albert Avenue, CHATSWOOD N.S.W. 2067 AUSTRALIA P.O. Box 369, CHATSWOOD, N.S.W. 2057 Tel: (02) 412-9777 Fax: (02) 412-9655 (CAD) A1 JOB No. 4240	E	11.06.97	AS BUILT	EF	LBC	LBC	BY	CHECKED	DATE
	D	17.03.97	REMOVABLE PIGGING FACILITY ADDED.	EF	PC	LBC	Survey		
	C	03.10.96	MITRED BEND GEOMETRY REVISED	EF	PC	LC	Design	S.BATTALIS	L.B.C 01.03.96
	B	06.09.96	MITRED BEND GEOMETRY REVISED: DIMENSION 6869 WAS 5000, 19" MITRE WAS 18"	SAW	R.H.	R.H.	Drawn	E. FELIPE	S.B. 01.03.96
	A	08.05.96	ISSUED FOR CONSTRUCTION	E.F.	L.B.C.	L.B.C.	Recom'd		
REV	DATE	DESCRIPTION				DRN	CHK	APP	Status: AS BUILT

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JOINT VENTURE
P.O. BOX 14-283
KILBIRNIE, WELLINGTON

WELLINGTON CITY COUNCIL
TUMEKE PONEKE
101 Wakefield Street Wellington New Zealand
P.O. Box 2199 Telephone (04) 499-4444

Anglian Water
296 Lambton Quay
James Cook Arcade
Wellington
New Zealand
Ph. (04) 499-9182

WELLINGTON WASTE WATER PROJECT
OCEAN OUTFALL
Title: **OCEAN OUTFALL
ONSHORE TIE-IN
DETAILS**
Drawing No. 951096
18-004
Scale 1:200 UNO Sheet 1 OF 1 REV E



Outlook

Meeting Notes from Moa Point Outfall and WIAL Sea Defences Renewal Interface Meeting

From [REDACTED]

Date Fri 4/11/2025 3:00 PM

To [REDACTED]

Cc [REDACTED]

H [REDACTED]

Please find a summary of the meeting notes from the meeting yesterday about the Moa Point Outfall and the Moa Point Rd "Short Outfall" Wastewater Pipes.

Feel free to let us know if you have any questions.

Moa Point Outfall and WIAL Sea Defences Renewal Interface Meeting

Date: 10/04/2025

Time: 11:00am - 12:15pm

Attendees:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Moa Point Outfall

Background:

- The WIAL Sea Defences Renewal Project includes concrete armour unit and rock overlay on the Southern Seawall and a rock revetment extending east of the Southern Seawall to Stewart Duff Drive, transitioning between the main seawall and the eastern beach. The existing bank in this area, created by placement of fill in the 1950s and 1970s, is actively eroding.
- The project has been discussed with Wellington Water over the past 9-12 months. Detailed design completion is planned for end of April 2025.
- A stormwater outfall is located in the proposed rock revetment, west of Stewart Duff Drive. As already agreed with Wellington Water, the seaward end of the existing outfall pipe, will be replaced be a straight pipe matching the existing pipe diameter, without wingwalls and headwalls and directed perpendicular to the shoreline.
- Approx. 10m of lower rock revetment on the upper beach is proposed extending east of the rock revetment to increase protection from existing, ongoing erosion to Moa Point outfall. The rock protection would be placed above the outfall pipe, at beach level. Excavation of the eroding bank is not proposed as part of this rock protection. This meeting seeks Wellington Water's comment on this proposed rock protection.
- The location of Moa Point outfall has been estimated from Wellington Water's As-built Drawings and a recent Beca survey. The exact location of the pipe (in plan and level) at the eroding bank cannot be precisely established due to inconsistencies between the As-built Drawings and present-day information however it appears that the outfall is close to being exposed by erosion.
- The seawall overlay is expected to start construction on site around 2029. The rock revetment and extended rock protection are expected to be constructed around 2031-2. (Materials will be stored on a yard on the southern MGC prior to construction; this is expected to start in 2026 subject to consenting processes).

Design Considerations, Comments & Actions:

- Wellington Water noted the Mean Sea Level (MSL) vertical datum on the As-built Drawings is WVD1953, and that typically 900mm cover would be needed over a wastewater pipe.
- Wellington Water is generally comfortable with the proposed approach but would like further information on location of proposed rock protection and outfall to help consider rock load on pipe. Beca to provide drawings. Extension landward of concrete pipe encasement is a possible option, using existing encasement design. Noted that further investigation may be useful to determine exact pipe location at the eroding bank e.g. Wellington Water's specialist pipe inspection contractor TDG.
- Wellington Water asked whether rock protection could be placed earlier in the project and requested recent survey information. Beca to discuss with WIAL.
- Wellington Water to clarify whether a public drainage permit would be needed.

Moa Point Rd "Short Outfall" Wastewater Pipes

Background

- As part of the project, a low underpass beneath Moa Point Rd, near Moa Point, is being considered. The underpass would have a rectangular cross section, perhaps 2m wide x 1.2m high external dimensions. It would pass above the existing wastewater gravity pipes which run along the west and east sides of Moa Point Rd. It would not cross the rising main, which lies further east of the gravity wastewater pipes.
- Drawings of the western (1960s) pipe from Wellington Water indicate the top of the pipe is approx. 0.84m below ground level. A recent survey found only one manhole in this area, with pipe invert level 1.4m below present day ground level.
- Localised raising of the road is being considered as part of the concept.

Design Considerations, Comments & Actions:

- Wellington Water noted the existing wastewater pipes are quite old (approx. 1920 for eastern pipe, 1960s for western pipe), and their condition is unknown. They are not carrying flows at present but provide a back-up overflow facility.
- Wellington Water commented that separation between the existing pipes and the possible underpass would need to be 50 or 100mm, and that any additional load from the underpass on the existing pipes would need to be bridged/supported across each pipe. Wellington Water also noted that they might require rebuilding of sections of existing pipe directly below the underpass as these sections might be more difficult to uncover and maintain once the underpass was in place, although also recognising that no-dig maintenance methods were probably more likely to be used. Wellington Water will check internally with Operations team and advise additional comments, if any.
- Wellington Water noted that a public drainage permit and condition assessment (e.g. by TDG) might be required, and requested recent survey information. Beca to discuss with WIAL.

Post Meeting Note:

- *Post meeting, Beca compared the mass of the underpass (based on present initial concept) with the mass of the existing soil. The mass of the underpass is estimated to be lighter than the soil mass it would replace.*

Thanks and kind regards,

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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Outlook

Moa Point Stormwater and Wastewater Outfall

Date Mon 12/16/2024 3:12 PM

To

Cc

1 attachment (8 MB)

Moa Point Wastewater Outfall Drawings.pdf;

Hi

Thank you for the meeting regarding the stormwater outfall this morning.

Stormwater Outfall:

As discussed in the meeting:

- A wing wall outfall is not a requirement for sea outfalls from Wellington Water and is instead considered on a case by case basis.
- There is no objection to the proposed pipe encased in concrete option.
- Wellington Water to confirm if an increased pipe size is needed, due to internal Wellington Water directive to upgrade pipe diameter if work is being completed on an outfall.

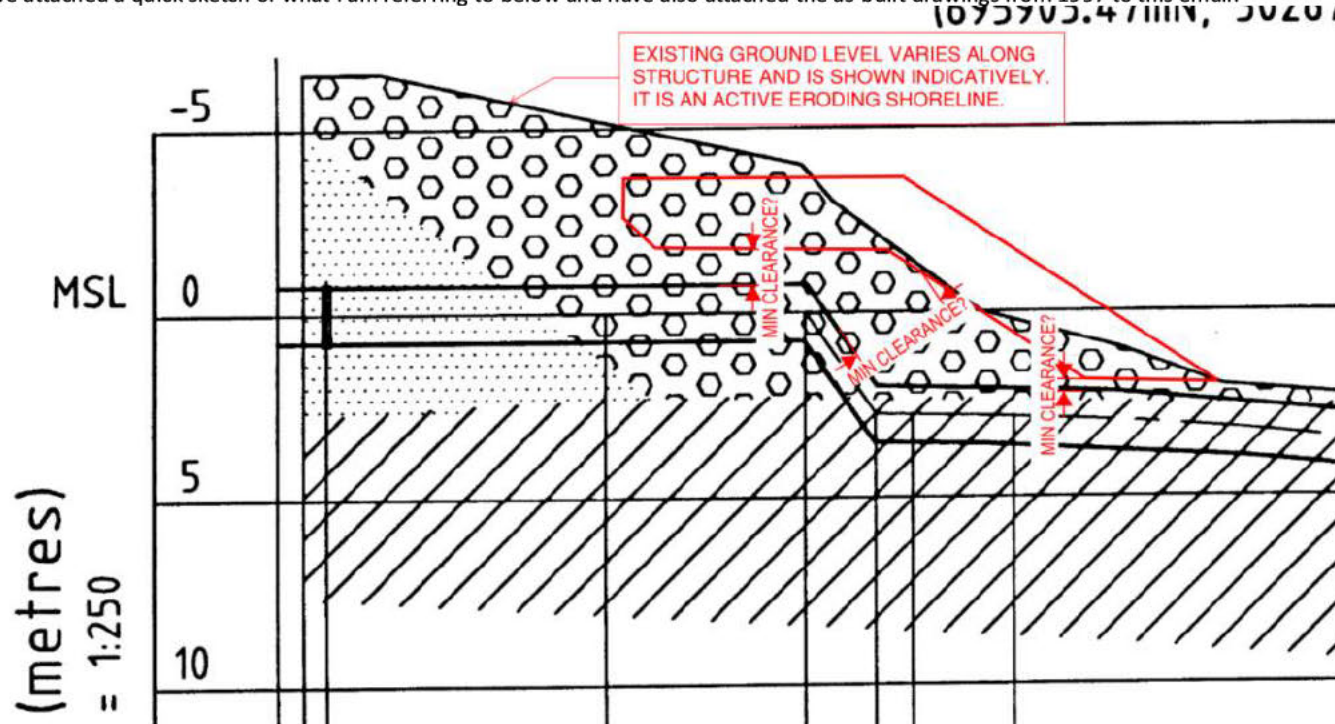
Based on the above we will further progress the stormwater outfall design with the pipe encased in concrete option and have another discussion with you and your team in the New Year.

Wastewater Outfall:

However, we would also like to understand the following regarding the wastewater pipe:

- What protection is required for the pipe knee joint area? We believe the knee joint area may be closer to the shoreline due to rapid erosion since the wastewater outfall was built in 1997.
- What minimum clearances from a rock revetment to the wastewater pipe are required (is there a minimum clearance zone)?

I have attached a quick sketch of what I am referring to below and have also attached the as-built drawings from 1997 to this email:



I am happy for you to forward this email to anyone in your team who can provide us with some guidance.