

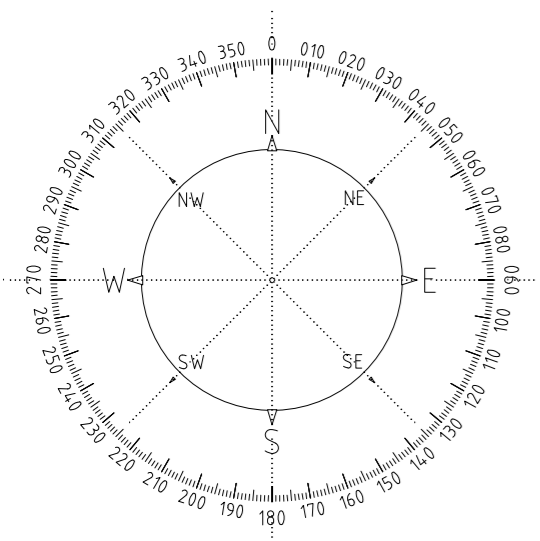
- NOTES**
1. Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  2. Horizontal coordinates are Fiji Map Grid (FMG), referenced to SS6120 S03264.
  3. Height Datum is Lowest Astronomical Tide (LAT=0.0m), based on Garmin BlueChart Pacific v5 tide predictions for Lautoka and sea level observations during the survey period from Jan-Feb 2023.
  4. PIN-# were installed by Erasito. PIN-# is a machine screw drilled into an existing concrete wharf deck.
  5. Topographical survey undertaken by Erasito Consultants Ltd (ECL) on 15th, 16th, 20th, 21st & 22nd Feb 2023, using RTK-GNSS. Drone survey undertaken by Erasito on the same day using DJI Phantom 4 Pro.
  6. Bathymetric survey undertaken by Erasito Consultants Ltd (ECL) on 25th-27th Jan, 1st-3rd Feb & 8th-9th Feb 2023. Soundings from Lowrance HDS single beam, 200kHz (10 degree divergence), 1 second ping, 5m nominal spacing of vessel runs, parallel to wharf length axis, 3 knots, 2 second sounding interval recording (4m nominal spacing). Horizontal vertical position via RTK-GNSS referenced to SS6120 S03264. Vertical adjusted as per Note 3.
  7. All coordinates, elevation and distances are in metres unless noted otherwise (u.n.o).
  8. Boundary adopted from FLIS digital drawing.



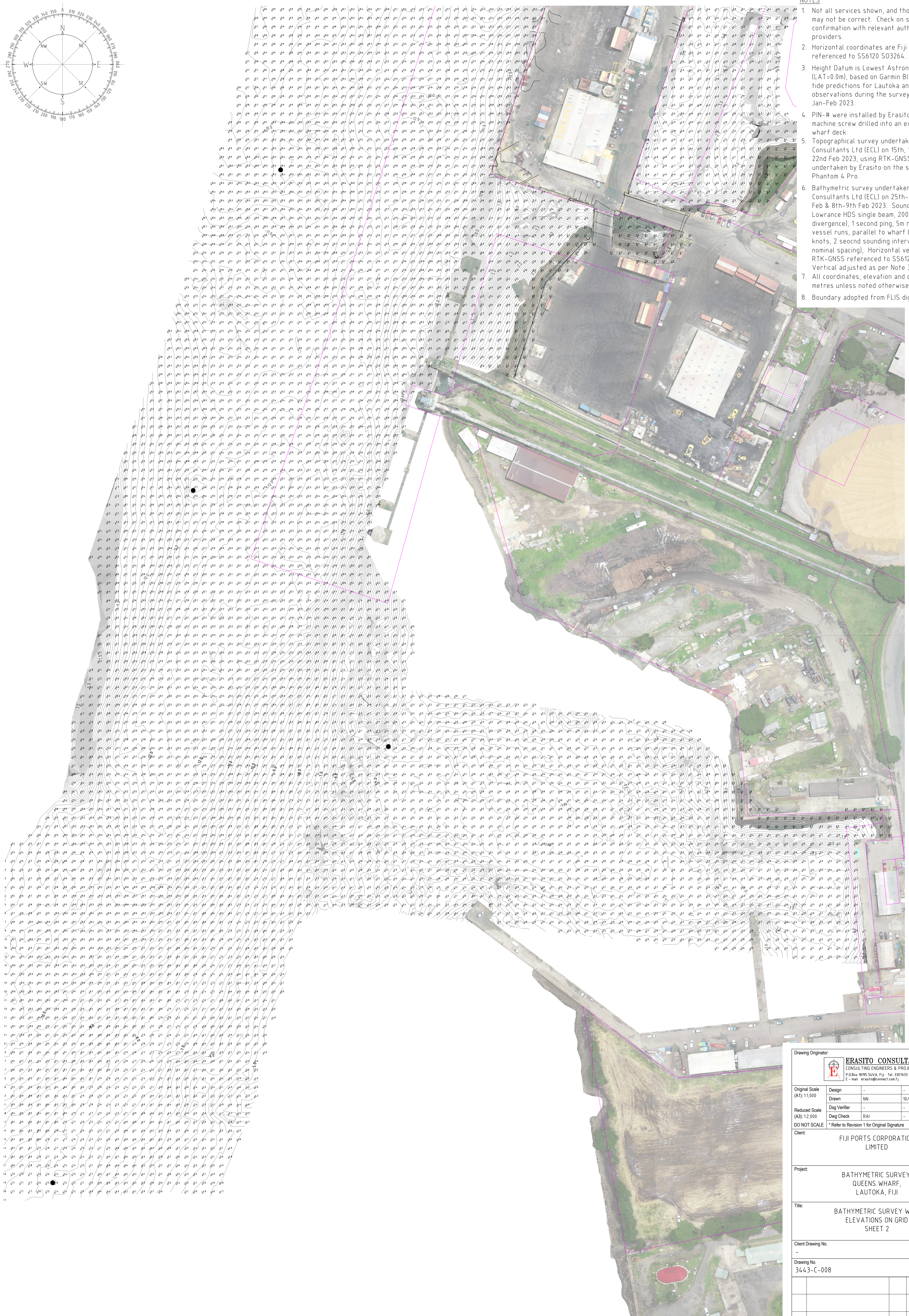
**SEABED CONTOURS PLAN WITH ELEVATIONS ON 5m GRID**  
SCALE 1:1,000 @ A1  
SCALE 1:2,000 @ A3

Drawing Originator:			
<b>ERASITO CONSULTANTS PTE LTD.</b> CONSULTING ENGINEERS & PROJECT MANAGERS P.O. Box 8955 Suva, Fiji   Tel: 3209333 FAX: 3297819 E-mail: erasito@connect.com.fj			
Original Scale (A1): 1:1,000	Design	-	Approved For Construction*
Reduced Scale (A3): 1:2,000	Drawn	NN	10/03/23
	Dwg Verifier	-	-
	Dwg Check	RAI	Date
DO NOT SCALE	* Refer to Revision 1 for Original Signature		
Client: <b>FIJI PORTS CORPORATION LIMITED</b>			
Project: <b>BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI</b>			
Title: <b>BATHYMETRIC SURVEY WITH ELEVATIONS ON GRID SHEET 1</b>			
Client Drawing No.	-	Rev.	-
Drawing No.	3443-C-007	Rev.	A
B	AMENDED PROJECT NAME	NN	RAI - 31/03/23
A	FOR INFORMATION	NN	RAI - 10/03/23
No.	Revision	By	Chk Appd Date





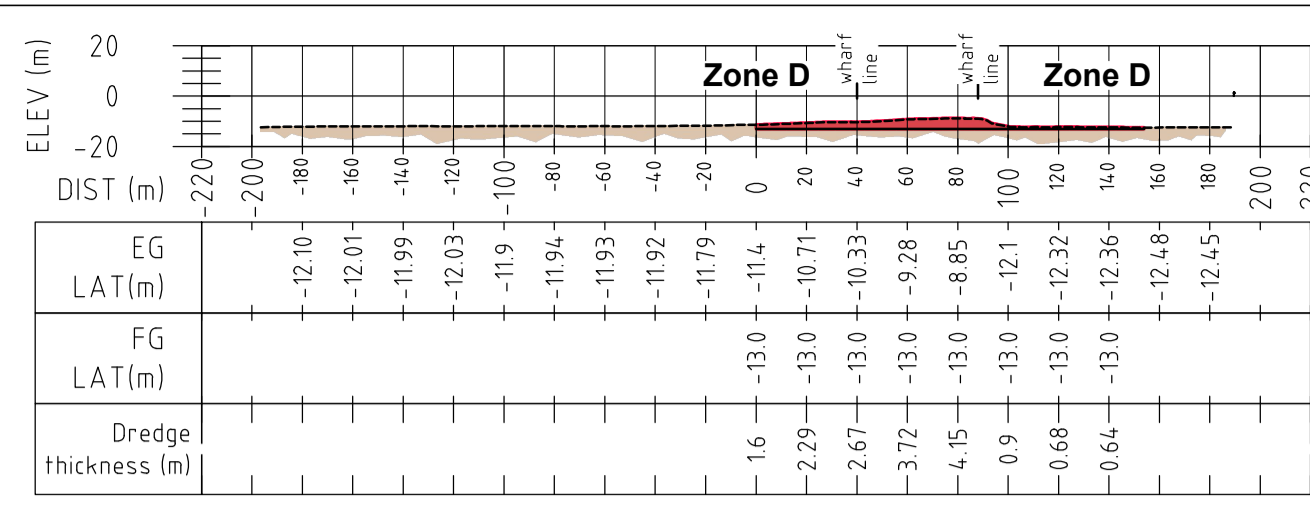
- NOTES**
1. Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  2. Horizontal coordinates are Fiji Map Grid (FMG), referenced to SS6120 S03264.
  3. Height Datum is Lowest Astronomical Tide (LAT=0.0m), based on Garmin BlueChart Pacific v5 tide predictions for Lautoka and sea level observations during the survey period from Jan-Feb 2023.
  4. PIN-# were installed by Erasito. PIN-# is a machine screw drilled into an existing concrete wharf deck.
  5. Topographical survey undertaken by Erasito Consultants Ltd (ECL) on 15th, 16th, 20th, 21st & 22nd Feb 2023, using RTK-GNSS. Drone survey undertaken by Erasito on the same day using DJI Phantom 4 Pro.
  6. Bathymetric survey undertaken by Erasito Consultants Ltd (ECL) on 25th-27th Jan, 1st-3rd Feb & 8th-9th Feb 2023. Soundings from Lowrance HDS single beam, 200kHz (10 degree divergence), 1 second ping, 5m nominal spacing of vessel runs, parallel to wharf length axis, 3 knots, 2 second sounding interval recording (4m nominal spacing). Horizontal vertical position via RTK-GNSS referenced to SS6120 S03264. Vertical adjusted as per Note 3.
  7. All coordinates, elevation and distances are in metres unless noted otherwise (u.n.o).
  8. Boundary adopted from FLIS digital drawing.



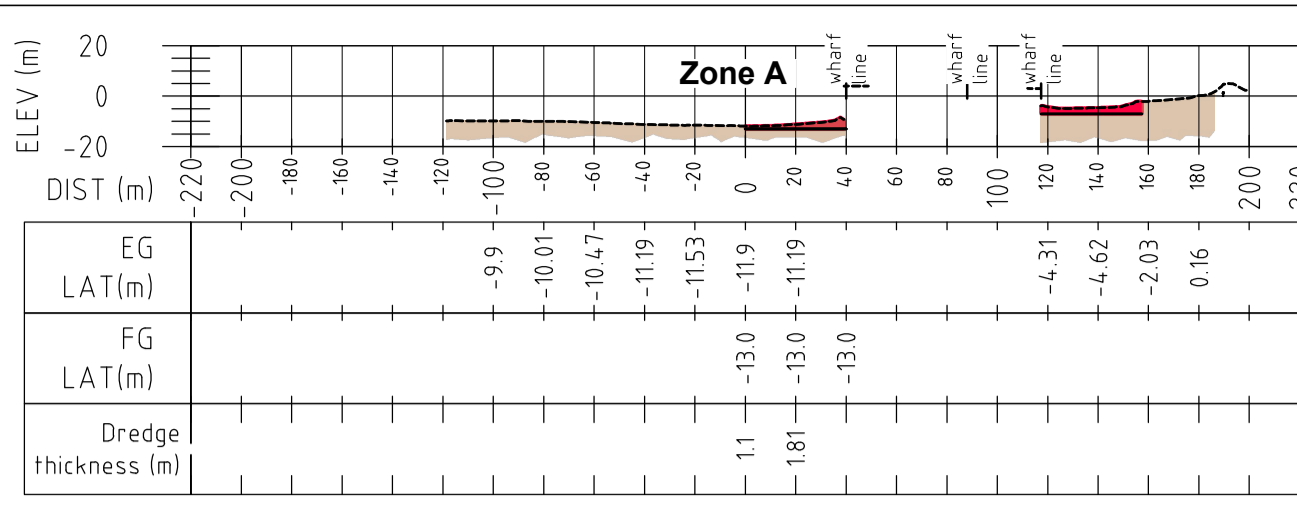
**SEABED CONTOURS PLAN WITH ELEVATION ON 5m GRID**  
 SCALE 1: 1,000 @ A1  
 SCALE 1: 2,000 @ A3

<p><b>ERASITO CONSULTANTS PTE LTD.</b>          CONSULTING ENGINEERS &amp; PROJECT MANAGERS          P.O. Box 8855 Suva, Fiji   Tel: 3378333 FAX: 3378415          E-mail: erasito@connect.com.fj</p>			
Original Scale (A1): 1:1,000	Design: -	Approved For Construction*	10/03/23
Reduced Scale (A3): 1:2,000	Dwg Verifier: -	Dwg Check: RAI	Date
DO NOT SCALE * Refer to Revision 1 for Original Signature			
Client: <b>FIJI PORTS CORPORATION LIMITED</b>			
Project: <b>BATHYMETRIC SURVEY, QUEENS WHARF, LAUTOKA, FIJI</b>			
Title: <b>BATHYMETRIC SURVEY WITH ELEVATIONS ON GRID SHEET 2</b>			
Client Drawing No.:	-	Rev.:	-
Drawing No.:	34.3-C-008	Rev.:	A
B	AMENDED PROJECT NAME.	NN	RAI - 31/03/23
A	FOR INFORMATION.	NN	RAI - 10/03/23
No.	Revision	By	Chk Appd Date
IF IN DOUBT ASK.			

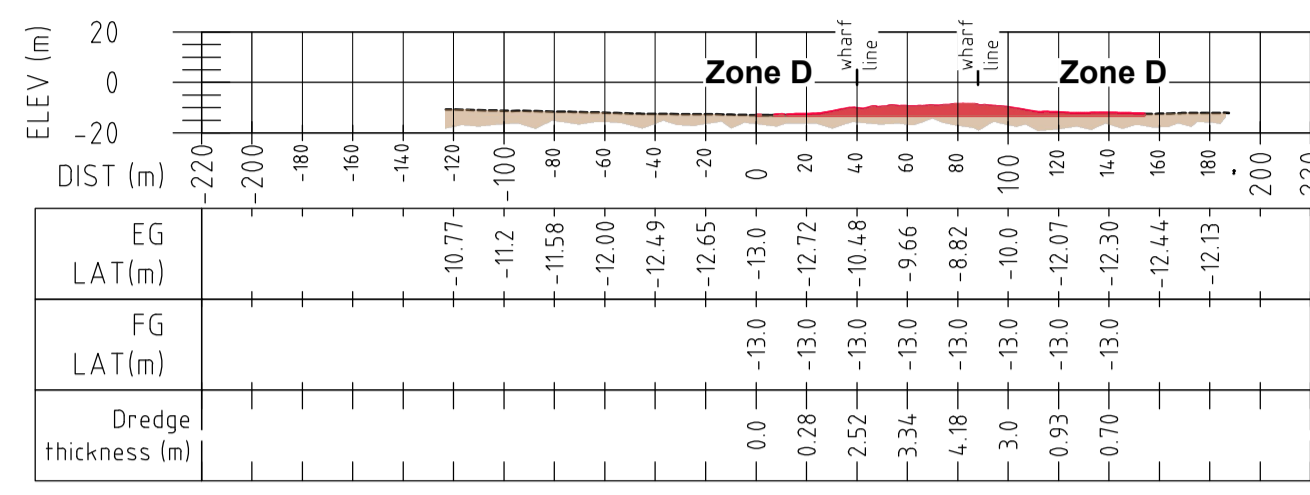




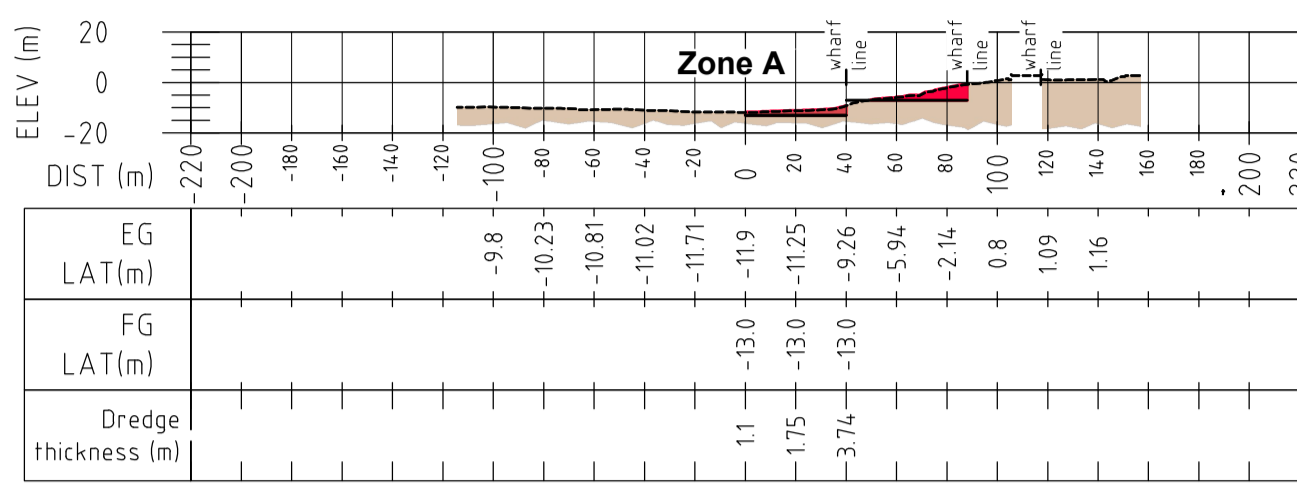
**A** CROSS SECTION  
ZONE D  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



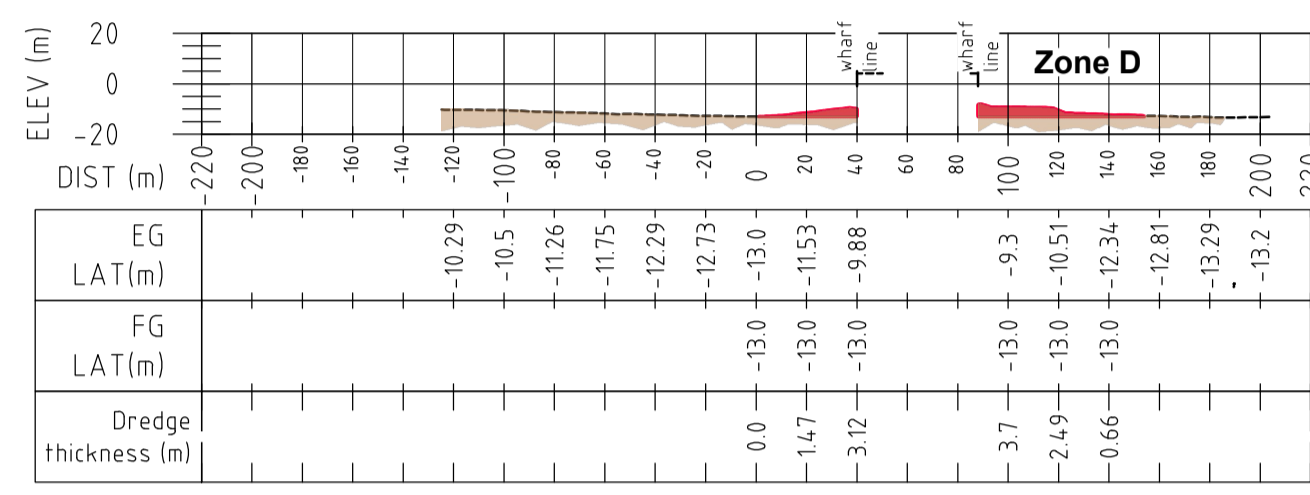
**F** CROSS SECTION  
ZONE A  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



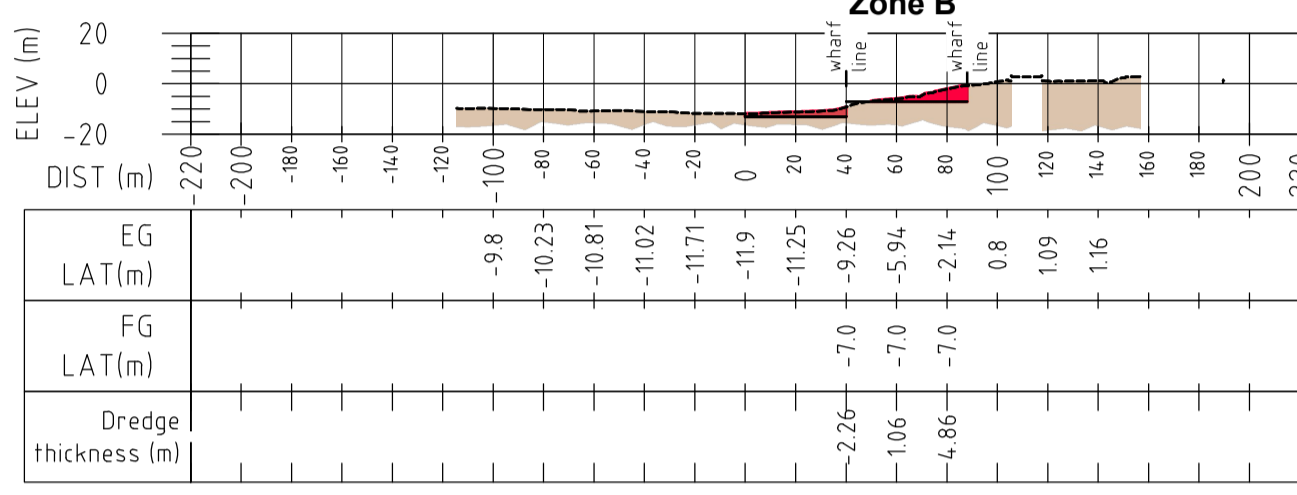
**B** CROSS SECTION  
ZONE D  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



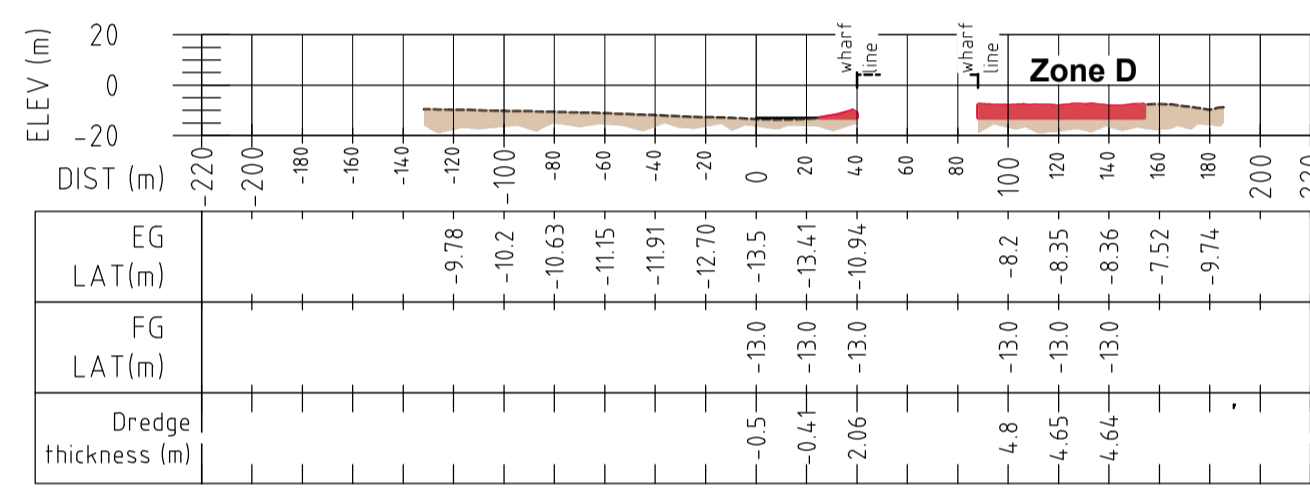
**G** CROSS SECTION  
ZONE A  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



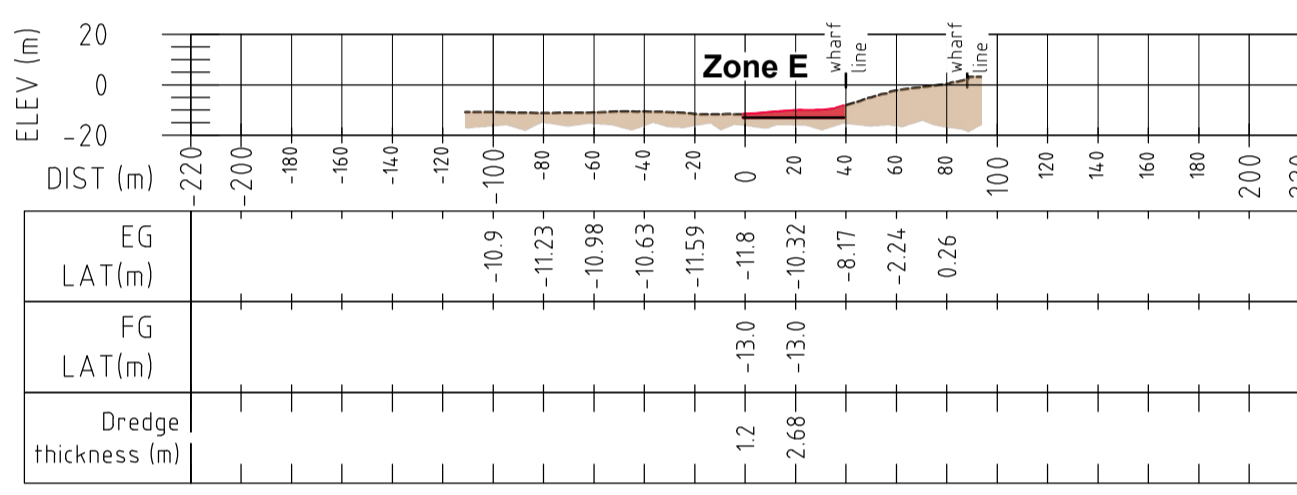
**C** CROSS SECTION  
ZONE D  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



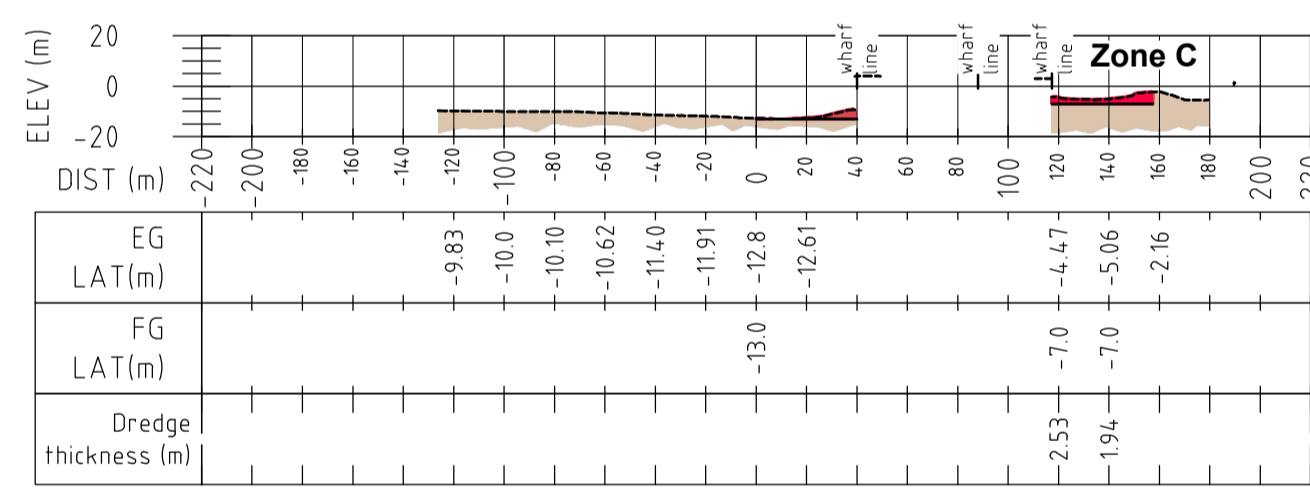
**H** CROSS SECTION  
ZONE B  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



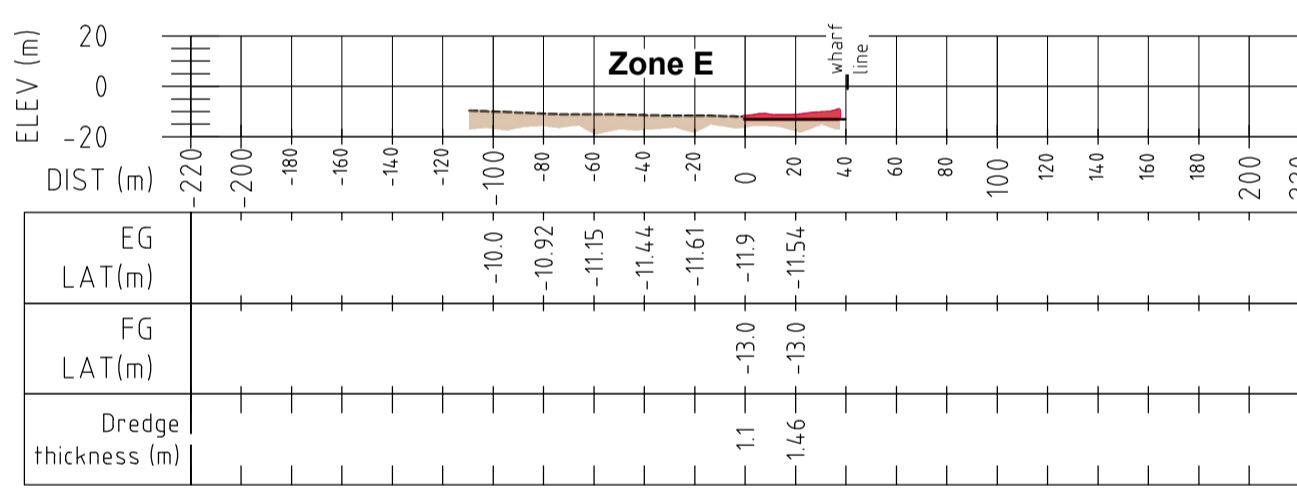
**D** CROSS SECTION  
ZONE D  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



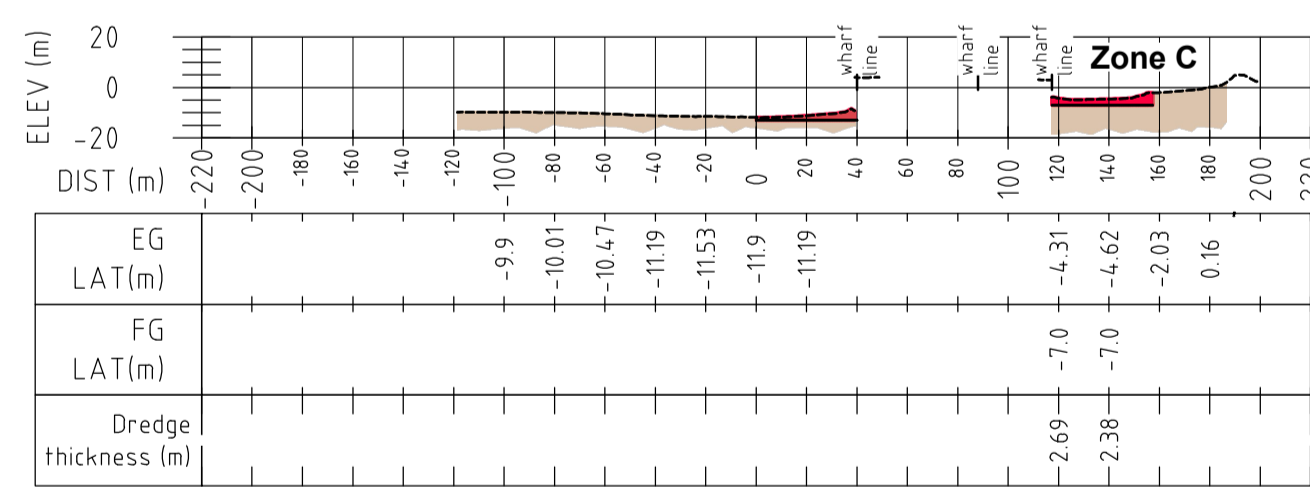
**I** CROSS SECTION  
ZONE E  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



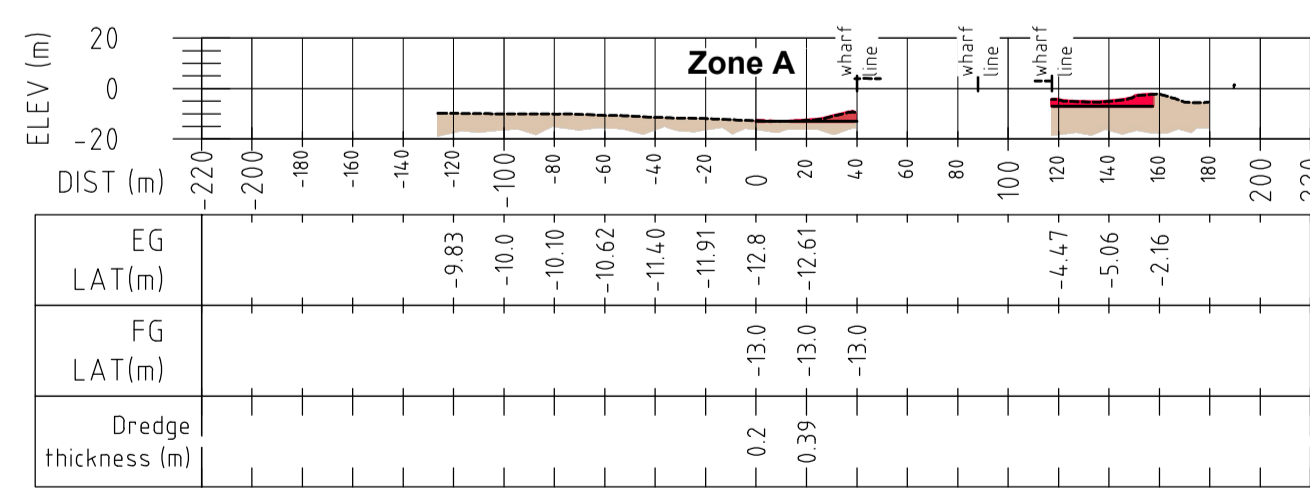
**E** CROSS SECTION  
ZONE C  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



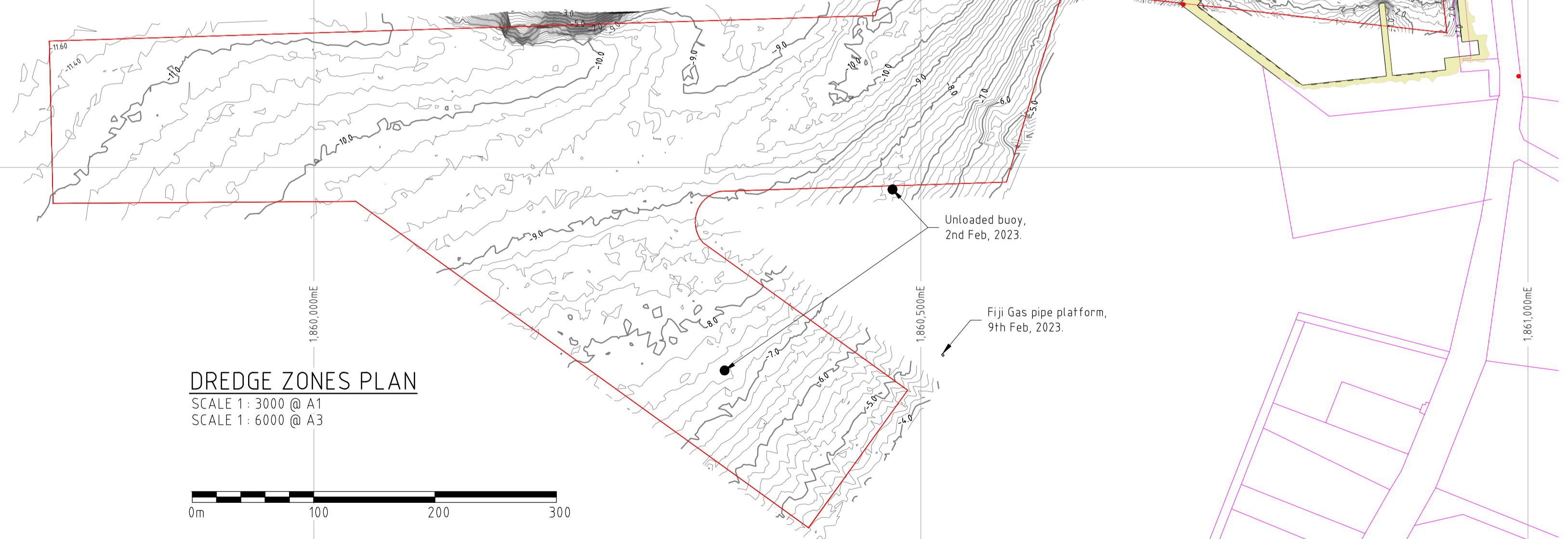
**J** CROSS SECTION  
ZONE A  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



**F** CROSS SECTION  
ZONE C  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



**G** CROSS SECTION  
ZONE A  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3



**DREDGE ZONES PLAN**  
SCALE 1: 3000 @ A1  
SCALE 1: 6000 @ A3

- NOTES**
- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  - Refer to DWG 3443-C-001 for general notes.
  - Dredge areas and depths, per FPCL instructions.

Range	Min	Max	Color
1	-8.0	-7.0	Blue
2	-7.0	-6.0	Green
3	-6.0	-5.0	Yellow
4	-5.0	-4.0	Orange
5	-4.0	-3.0	Red
6	-3.0	-2.0	Purple
7	-2.0	-1.0	Light Blue
8	-1.0	0.0	Light Green
9	0.0	0.2	Light Yellow
10	0.2	5.0	Light Purple

- LEGEND EXISTING FEATURES:**
- Dolphin bridge.
  - Concrete wharf deck/dolphin.
  - Container yard.
  - Boundary. Refer to Note 8.
  - Buoy.
  - Extent of bathymetric survey.
  - Low water (LW 0.2 LAT).

DREDGE ZONE DATA			
ZONE	ELEVATION LAT (m)	AREA (m <sup>2</sup> )	VOLUME (m <sup>3</sup> )
A	-13	7,660	12,300
B	-7	2,350	6,200
C	-7	5,120	13,500
D	-13	40,210	78,500
E	-13	8,170	14,470

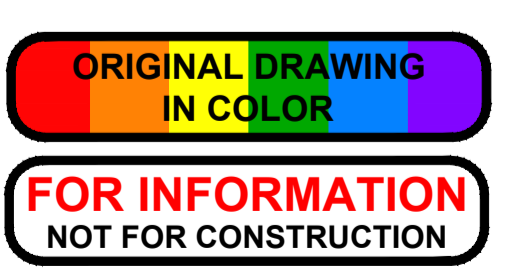
No.	Revision	By	Chk	Appd	Date
B	ADDED ZONE E, ZONE E PROFILES & ZONE DREDGE DATA.	NN	RAI		04/04/23
A	DRAFT, FOR INFORMATION.	RAI	RAI		23/03/23

<b>ERASITO CONSULTANTS PTE LTD.</b> CONSULTING ENGINEERS & PROJECT MANAGERS P.O. Box 18195 SUVA, Fiji. Tel: 3397633 FAX 3397643 E-mail: erasito@connect.com.fj		Original Scale (A1) 1: 3000 Reduction Scale (A3) 1: 6000 * Refer to Revision 1 for Original Signature	Design Drawn RAI 23/03/23 Dwg Checker RAI 23/03/23 Date	Approved For Construction*
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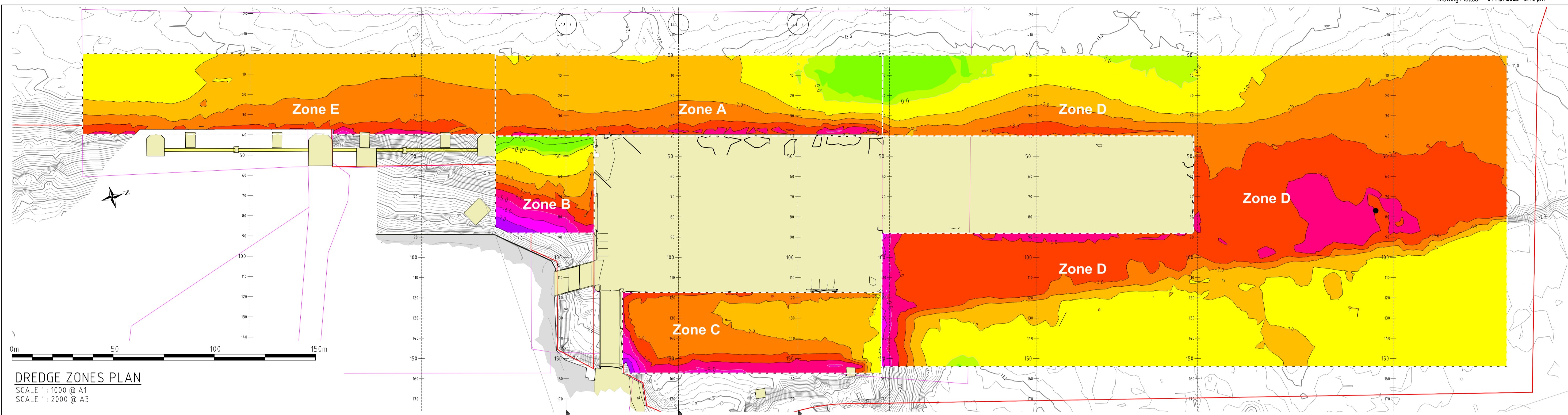
Client: <b>FIJI PORTS CORPORATION LIMITED</b>	Project: <b>BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI</b>
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Title: <b>QUEENS WHARF PROPOSED DREDGING PLAN &amp; PROFILES</b>	Discipline: -
Drawing No: 3443-C-100	Rev: B

Document No. FPCL/LTK/BATH-12/DWG  
IF IN DOUBT ASK.

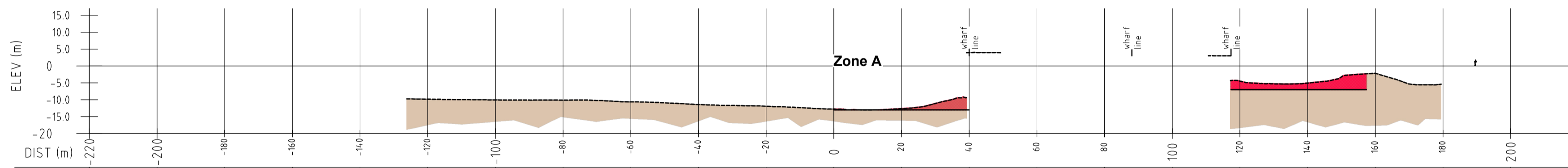




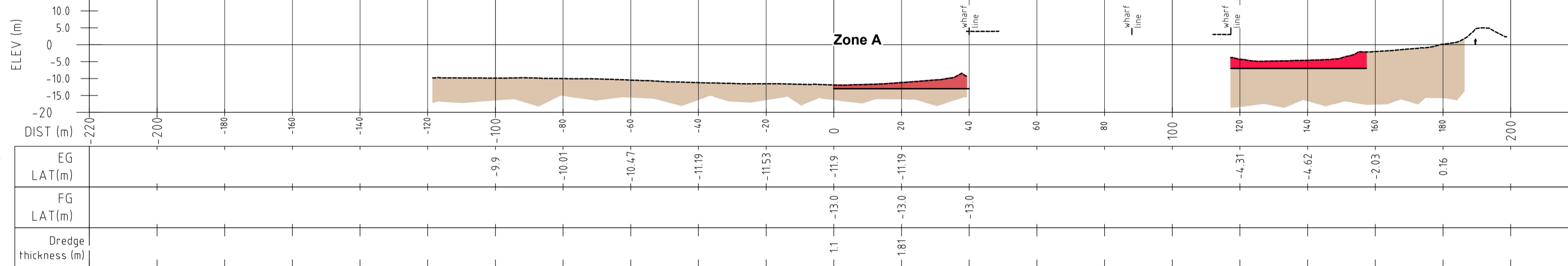


**DREDGE ZONES PLAN**  
 SCALE 1: 1000 @ A1  
 SCALE 1: 2000 @ A3

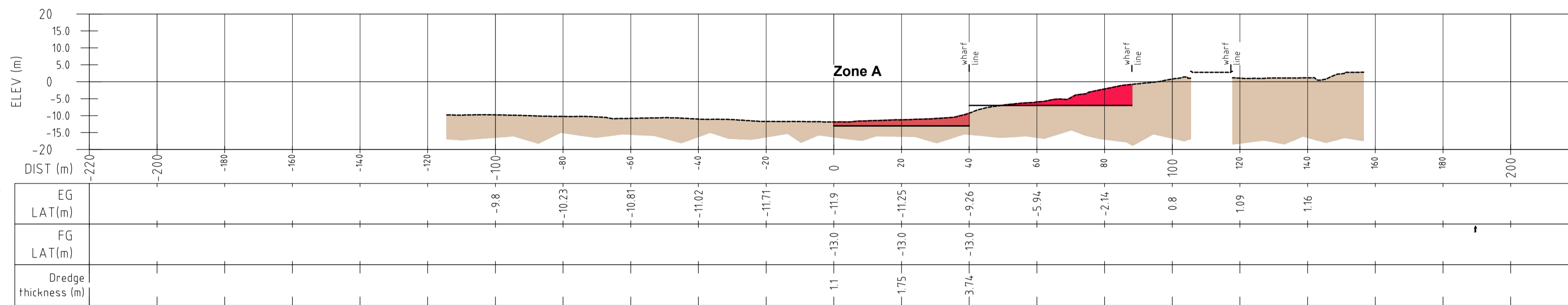
**E CROSS SECTION ZONE A**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



**F CROSS SECTION ZONE A**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



**G CROSS SECTION ZONE A**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



- NOTES**
- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  - Refer to DWG 3443-C-001 for general notes.
  - Dredge areas and depths, per FPCL instructions.

Cut (-) or Fill (+) Thickness (m)			
Range	Min	Max	Color
1	-8.0	-7.0	Blue
2	-7.0	-6.0	Green
3	-6.0	-5.0	Yellow
4	-5.0	-4.0	Orange
5	-4.0	-3.0	Red
6	-3.0	-2.0	Light Blue
7	-2.0	-1.0	Light Green
8	-1.0	0.0	Light Yellow
9	0.0	0.2	Light Cyan
10	0.2	5.0	Light Blue

- LEGEND EXISTING FEATURES:**
- Dolphin bridge.
  - Concrete wharf deck/dolphin.
  - Container yard.
  - Boundary. Refer to Note 8.
  - Buoy.
  - Extent of bathymetric survey.
  - Low water (LW 0.2 LAT).

DREDGE ZONE DATA			
ZONE	ELEVATION LAT (m)	AREA (m <sup>2</sup> )	VOLUME (m <sup>3</sup> )
A	-13	7,660	12,300
B	-7	2,350	6,200
C	-7	5,120	13,500
D	-13	40,210	78,500
E	-13	8,170	14,470

**ORIGINAL DRAWING IN COLOR**  
**FOR INFORMATION NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
E	ADDED ZONE E & ZONE E DREDGE ZONE DATA.	NN	RAI		04/04/23
A	DRAFT, FOR INFORMATION	RAI	RAI		23/03/23

**ERASITO CONSULTANTS PTE LTD.**  
 CONSULTING ENGINEERS & PROJECT MANAGERS  
 P.O. Box 18195 SUVA, Fiji Tel. 3307633 FAX 3307613  
 E-mail: erasito@connect.com.fj

Original Scale (A1)	1: 1000	Design Drawn	RAI	23/03/23	Approved For Construction*
Reduced Scale (A3)	1: 2000	Dwg Verifier	RAI	23/03/23	Date
		Dwg Check	RAI	23/03/23	Date

\* Refer to Revision 1 for Original Signature

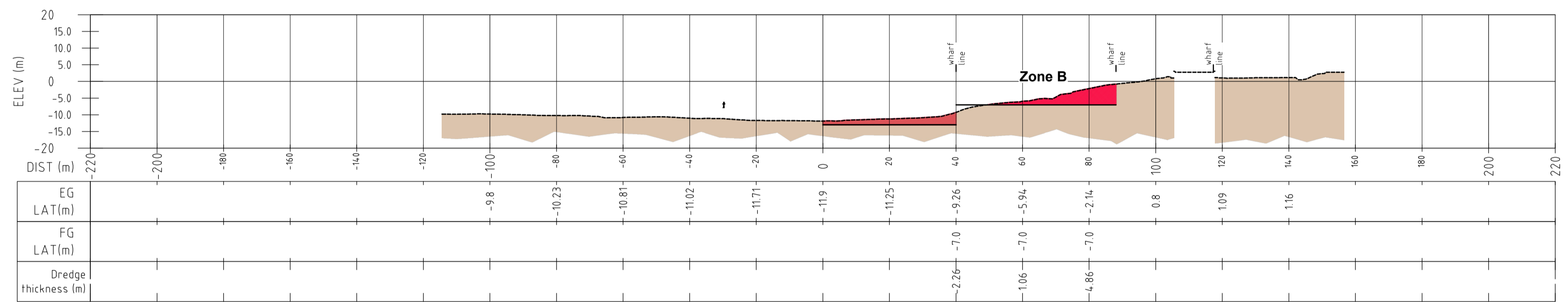
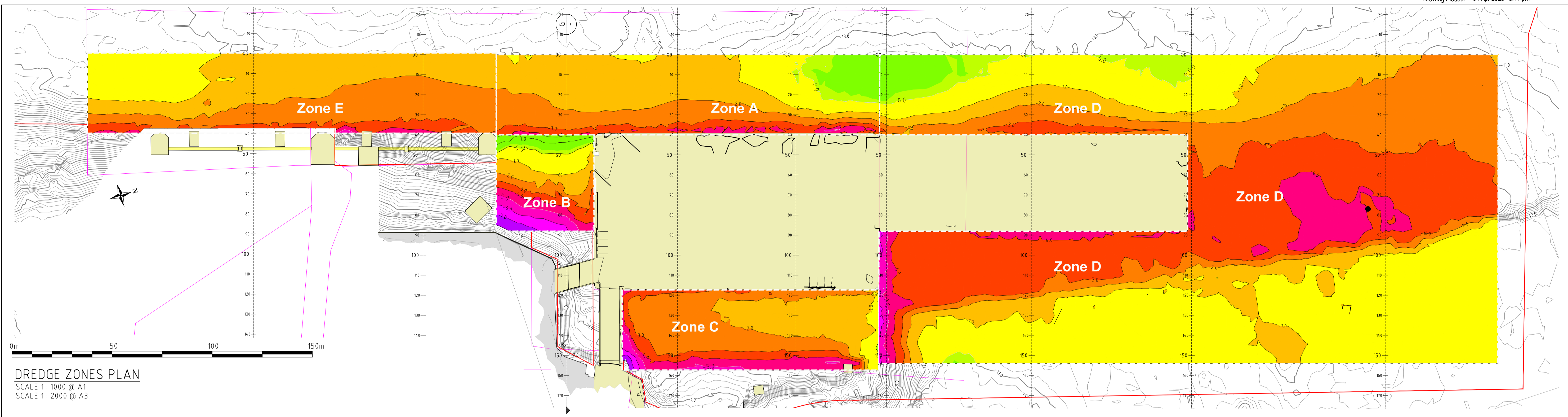
Client: **FIJI PORTS CORPORATION LIMITED**

Project: **BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI**

Title: **QUEENS WHARF PROPOSED DREDGING PLAN & PROFILES ZONE A**

Discipline:	-	Rev.	B
Drawing No.	3443-C-101		





- NOTES**
- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  - Refer to DWG 3443-C-001 for general notes.
  - Dredge areas and depths, per FPCL instructions.

Cut (-) or Fill (+) Thickness (m)			
Range	Min	Max	Color
1	-8.0	-7.0	Blue
2	-7.0	-6.0	Light Blue
3	-6.0	-5.0	Light Green
4	-5.0	-4.0	Light Yellow
5	-4.0	-3.0	Yellow
6	-3.0	-2.0	Orange
7	-2.0	-1.0	Light Orange
8	-1.0	0.0	Light Red
9	0.0	0.2	Red
10	0.2	5.0	Dark Red

- LEGEND EXISTING FEATURES:**
- Dolphin bridge.
  - Concrete wharf deck/dolphin.
  - Container yard.
  - Boundary. Refer to Note 8.
  - Buoy.
  - Extent of bathymetric survey.
  - Low water (LW 0.2 LAT).

DREDGE ZONE DATA			
ZONE	ELEVATION LAT (m)	AREA (m <sup>2</sup> )	VOLUME (m <sup>3</sup> )
A	-13	7,660	12,300
B	-7	2,350	6,200
C	-7	5,120	13,500
D	-13	40,210	78,500
E	-13	8,170	14,470

**G CROSS SECTION ZONE B**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3

No.	Revision	By	Chk	Appd	Date
B	ADDED ZONE E & ZONE E DREDGE ZONE DATA.	NN	RAI		04/04/23
A	DRAFT, FOR INFORMATION	RAI	RAI		23/03/23

**ERASITO CONSULTANTS PTE LTD.**  
 CONSULTING ENGINEERS & PROJECT MANAGERS  
 P.O. Box 18195 SUVA, Fiji Tel: 3307633 FAX 3307613  
 E-mail: erasito@connect.com.fj

Original Scale (A1)	1: 1000	Design Drawn	RAI	23/03/23	Approved For Construction*
Reduced Scale (A3)	1: 2000	Dwg Verifier	RAI	23/03/23	Date
		Dwg Check	RAI	23/03/23	Date

\* Refer to Revision 1 for Original Signature

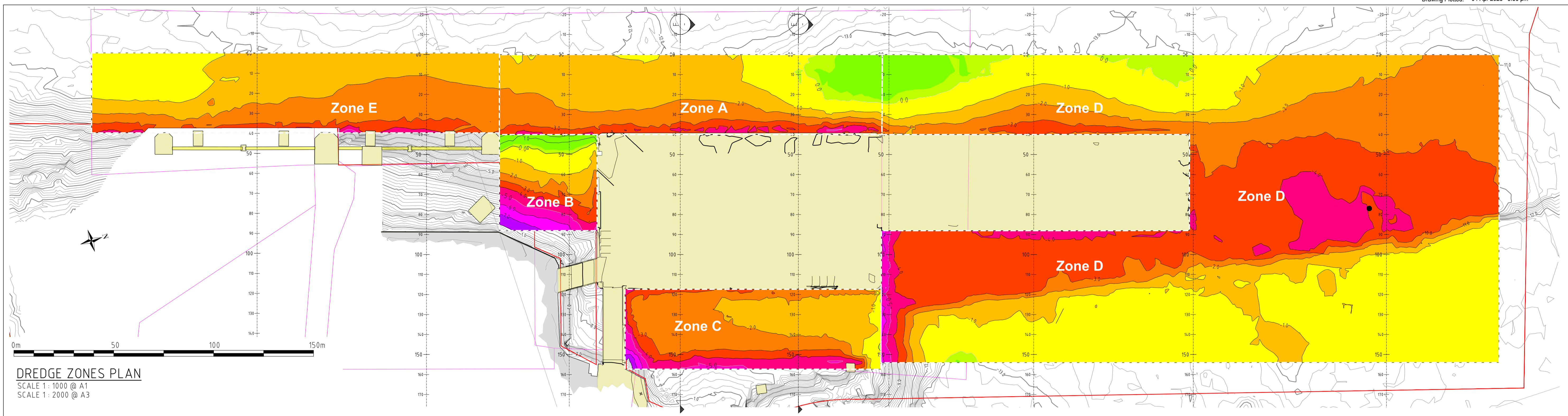
Client: FIJI PORTS CORPORATION LIMITED

Project: BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI

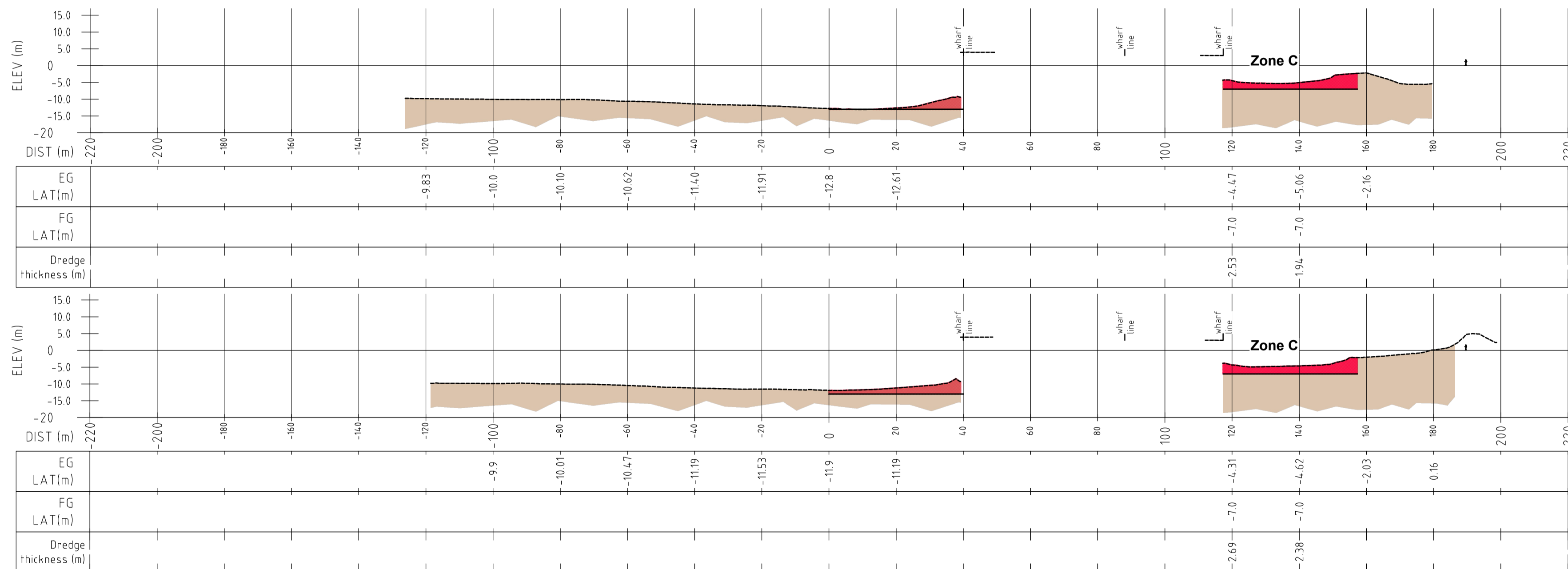
Title: QUEENS WHARF PROPOSED DREDGING PLAN & PROFILES ZONE B

Discipline:	-
Drawing No.	3443-C-102
Rev.	B





**DREDGE ZONES PLAN**  
 SCALE 1: 1000 @ A1  
 SCALE 1: 2000 @ A3



**E CROSS SECTION ZONE C**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3

**F CROSS SECTION ZONE C**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3

**NOTES**

- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
- Refer to DWG 3443-C-001 for general notes.
- Dredge areas and depths, per FPCL instructions.

Cut (-) or Fill (+) Thickness (m)			
Range	Min	Max	Color
1	-8.0	-7.0	Light Green
2	-7.0	-6.0	Yellow
3	-6.0	-5.0	Orange
4	-5.0	-4.0	Red
5	-4.0	-3.0	Light Green
6	-3.0	-2.0	Yellow
7	-2.0	-1.0	Orange
8	-1.0	0.0	Red
9	0.0	0.2	Light Green
10	0.2	5.0	Yellow

**LEGEND EXISTING FEATURES:**

- Dolphin bridge.
- Concrete wharf deck/dolphin.
- Container yard.
- Boundary. Refer to Note 8.
- Buoy.
- Extent of bathymetric survey.
- Low water (LW 0.2 LAT).

DREDGE ZONE DATA			
ZONE	ELEVATION LAT (m)	AREA (m <sup>2</sup> )	VOLUME (m <sup>3</sup> )
A	-13	7,660	12,300
B	-7	2,350	6,200
C	-7	5,120	13,500
D	-13	40,210	78,500
E	-13	8,170	14,470

No.	Revision	By	Chk	Appd	Date
B	ADDED ZONE E & ZONE E DREDGE ZONE DATA.	NN	RAI		04/04/23
A	DRAFT, FOR INFORMATION	RAI	RAI		23/03/23

**ERASITO CONSULTANTS PTE LTD.**  
 CONSULTING ENGINEERS & PROJECT MANAGERS  
 P.O. Box 18195 SUVA, Fiji Tel: 3307633 FAX 3307613  
 E-mail: erasito@connect.com.fj

Original Scale (A1)	Design	Drawn	RAI	23/03/23	Approved For Construction*
1: 1000	Drawn	RAI			
Reduced Scale (A3)	Dwg Verifier	RAI			Date
1: 2000	Dwg Check	RAI		23/03/23	

\* Refer to Revision 1 for Original Signature

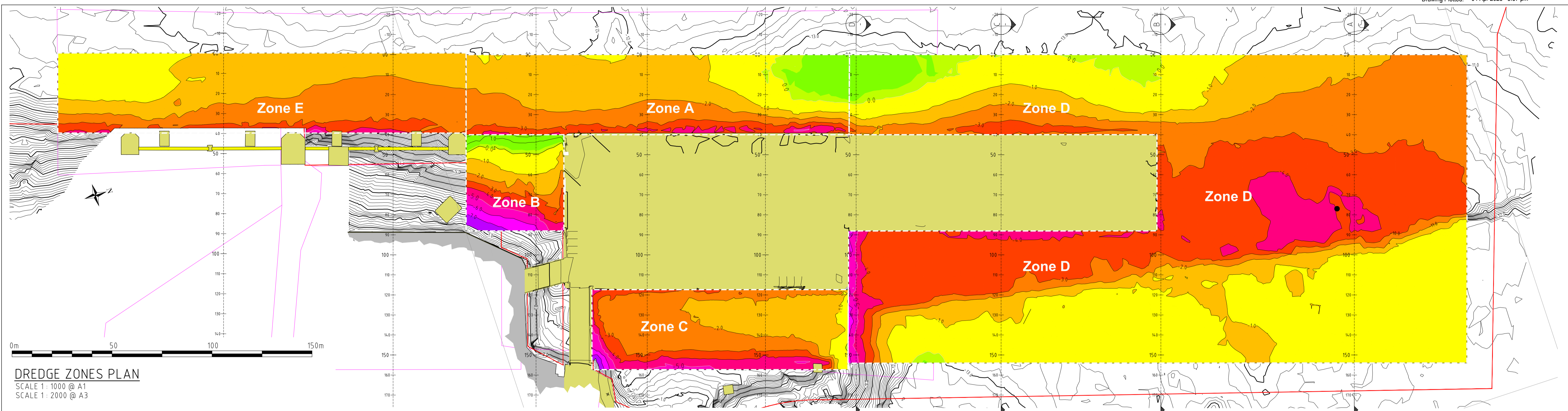
Client: FIJI PORTS CORPORATION LIMITED

Project: BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI

Title: QUEENS WHARF PROPOSED DREDGING PLAN & PROFILES ZONE C

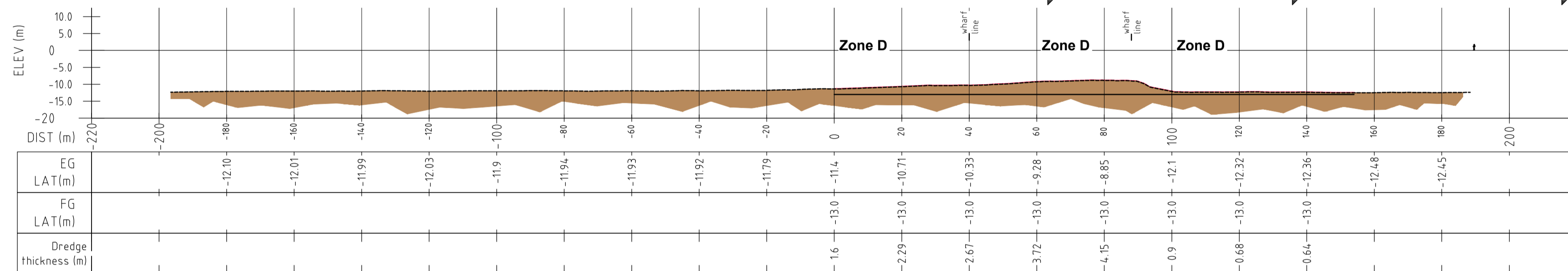
Discipline:	-
Drawing No.	3443-C-103
Rev.	B



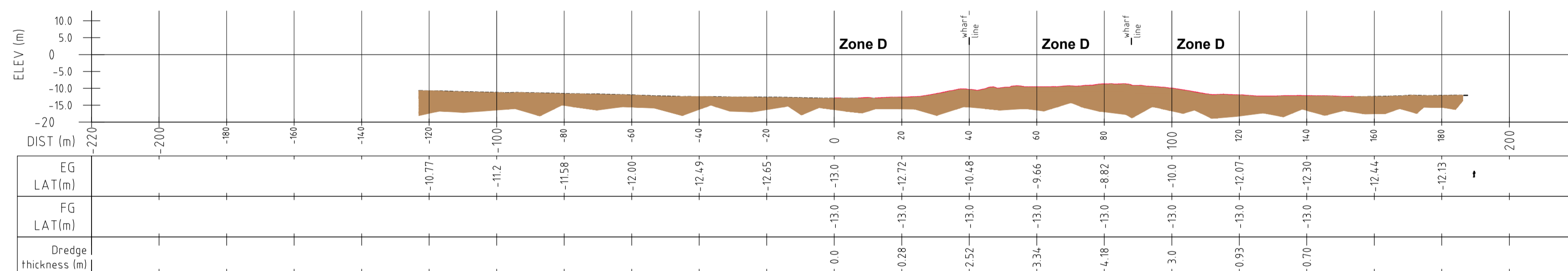


**DREDGE ZONES PLAN**  
 SCALE 1: 1000 @ A1  
 SCALE 1: 2000 @ A3

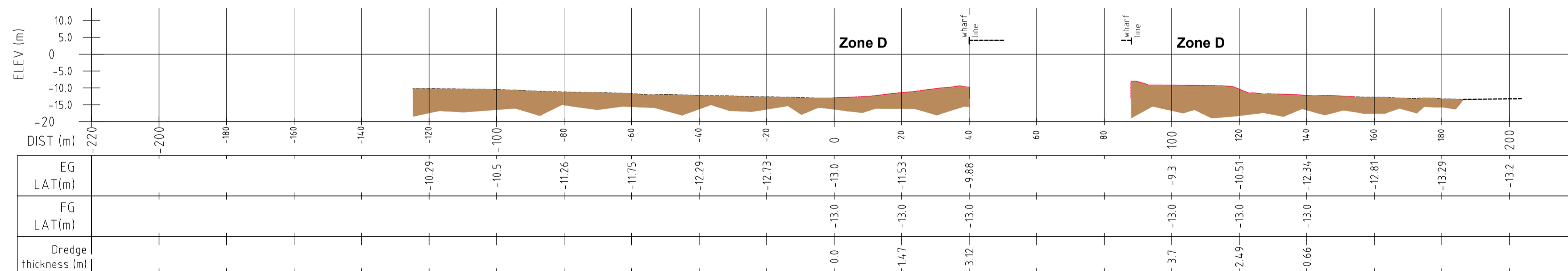
**A CROSS SECTION ZONE D**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



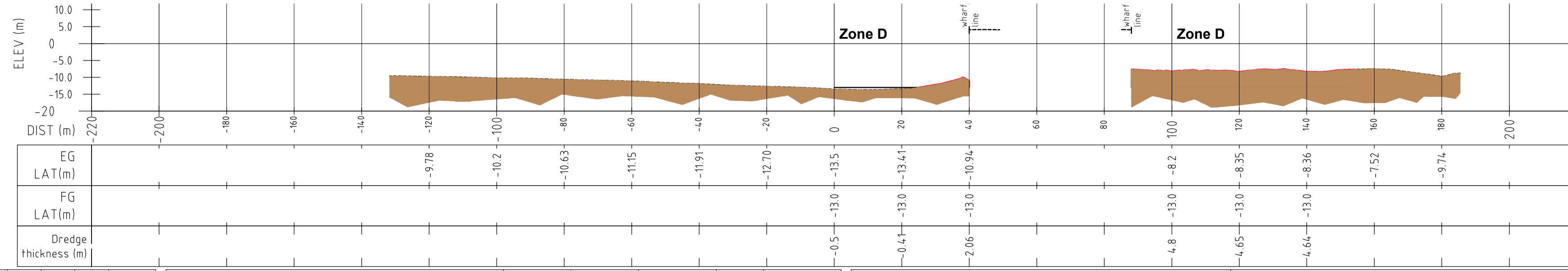
**B CROSS SECTION ZONE D**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



**C CROSS SECTION ZONE D**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



**D CROSS SECTION ZONE D**  
 SCALE 1: 1000 @ A1, 1: 2000 @ A3



- NOTES**
- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  - Refer to DWG 3443-C-001 for general notes.
  - Dredge areas and depths, per FPCL instructions.

Cut (-) or Fill (+) Thickness (m)			
Range	Min	Max	Color
1	-8.0	-7.0	Light Blue
2	-7.0	-6.0	Light Green
3	-6.0	-5.0	Light Yellow
4	-5.0	-4.0	Light Orange
5	-4.0	-3.0	Light Red
6	-3.0	-2.0	Light Purple
7	-2.0	-1.0	Light Cyan
8	-1.0	0.0	Light Blue
9	0.0	0.2	Light Green
10	0.2	5.0	Light Yellow

- LEGEND EXISTING FEATURES:**
- Dolphin bridge.
  - Concrete wharf deck/dolphin.
  - Container yard.
  - Boundary. Refer to Note 8.
  - Buoy.
  - Extent of bathymetric survey.
  - Low water (LW 0.2 LAT).

DREDGE ZONE DATA			
ZONE	ELEVATION LAT (m)	AREA (m <sup>2</sup> )	VOLUME (m <sup>3</sup> )
A	-13	7,660	12,300
B	-7	2,350	6,200
C	-7	5,120	13,500
D	-13	40,210	78,500
E	-13	8,170	14,470

**ORIGINAL DRAWING IN COLOR**

**FOR INFORMATION NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
B	ADDED ZONE E & ZONE D DREDGE ZONE DATA.	NN	RAI		04/04/23
A	DRAFT, FOR INFORMATION	RAI	RAI		23/03/23

**ERASITO CONSULTANTS PTE LTD.**  
 CONSULTING ENGINEERS & PROJECT MANAGERS  
 P.O. Box 18195 SUVA, Fiji Tel: 3307633 FAX 3307613  
 E-mail: erasito@connect.com.fj

Original Scale (A1)	1: 1000	Design Drawn	RAI	23/03/23	Approved For Construction*
Reduced Scale (A3)	1: 2000	Dwg Check	RAI	23/03/23	Date

\* Refer to Revision 1 for Original Signature

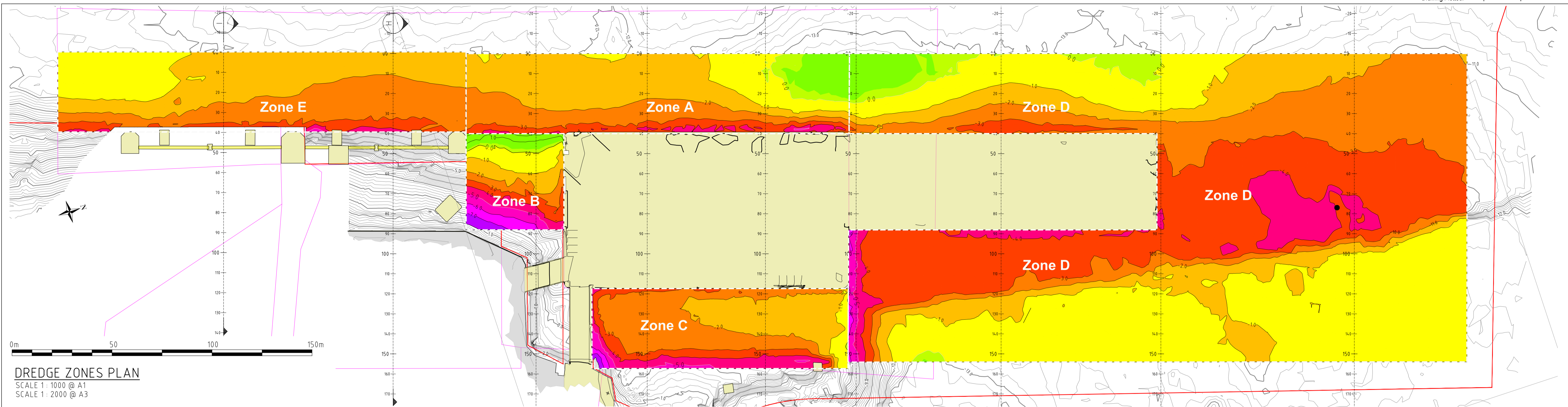
Client: **FIJI PORTS CORPORATION LIMITED**

Project: **BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI**

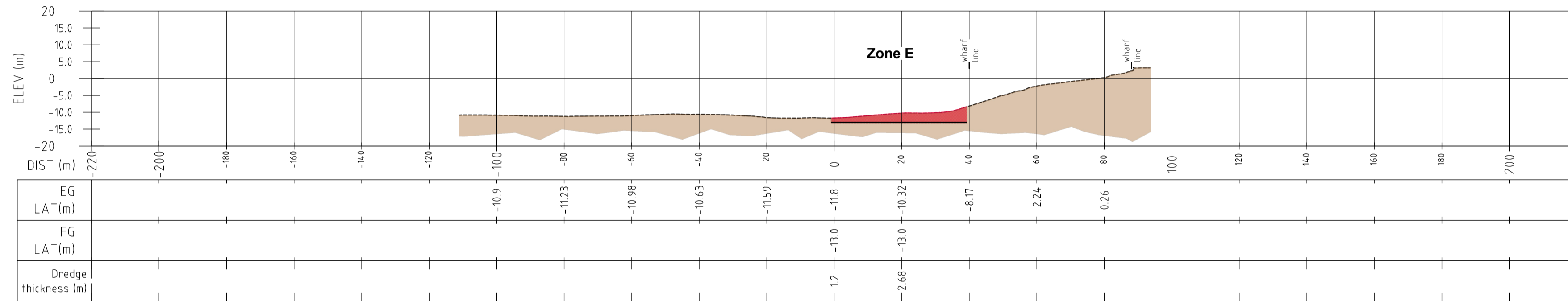
Title: **QUEENS WHARF PROPOSED DREDGING PLAN & PROFILES ZONE D**

Discipline:	-	Rev.	B
Drawing No.	3443-C-104		

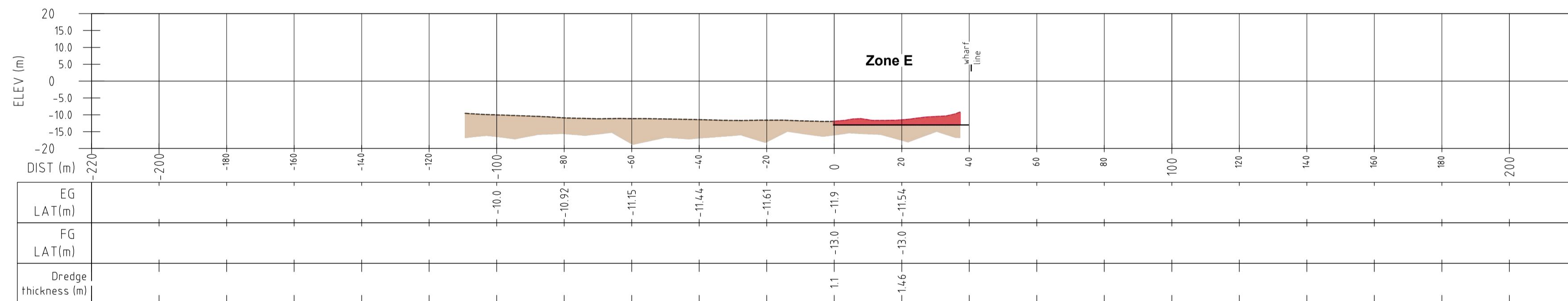




**DREDGE ZONES PLAN**  
SCALE 1: 1000 @ A1  
SCALE 1: 2000 @ A3



**H CROSS SECTION ZONE E**  
SCALE 1: 1000 @ A1, 1: 2000 @ A3



**I CROSS SECTION ZONE E**  
SCALE 1: 1000 @ A1, 1: 2000 @ A3

- NOTES**
- Not all services shown, and those that are shown may not be correct. Check on site, including confirmation with relevant authorities and service providers.
  - Refer to DWG 3443-C-001 for general notes.
  - Dredge areas and depths, per FPCL instructions.

Cut (-) or Fill (+) Thickness (m)			
Range	Min	Max	Color
1	-8.0	-7.0	Blue
2	-7.0	-6.0	Green
3	-6.0	-5.0	Yellow
4	-5.0	-4.0	Orange
5	-4.0	-3.0	Red
6	-3.0	-2.0	Light Blue
7	-2.0	-1.0	Light Green
8	-1.0	0.0	Light Yellow
9	0.0	0.2	Light Cyan
10	0.2	5.0	Light Blue

- LEGEND EXISTING FEATURES:**
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No.	Revision	By	Chk	Appd	Date
A	DRAFT, FOR INFORMATION	NN	RAI		04/04/23

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\* Refer to Revision 1 for Original Signature

Client: **FIJI PORTS CORPORATION LIMITED**

Project: **BATHYMETRIC SURVEY QUEENS WHARF LAUTOKA, FIJI**

Title: **QUEENS WHARF PROPOSED DREDGING PLAN & PROFILES ZONE E**

Discipline:	-
Drawing No.	3443-C-105
Rev.	A