



COOK ISLAND  
INVESTMENT  
CORPORATION



# ARUTANGA HARBOUR PHASE 2



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ISSUED FOR TENDER  
NOT FOR CONSTRUCTION

PROJECT NO.	SHEET	REVISION
713345	S00	0

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### Distribution Details

COOK ISLAND INVESTMENT CORPORATION

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### Document Details

Document Number	Rev	Document Title
713345-S00	0	COVER SHEET
713345-SN1	0	STANDARD NOTES SHEET 1
713345-SN2	0	STANDARD NOTES SHEET 2
713345-S01	0	PROPOSED SITE PLAN
713345-S02	0	WALL ELEVATIONS
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713345-S04	0	WALL SECTIONS SHEET 2
713345-S05	0	SECTIONS AND DETAILS SHEET 1
713345-S06	0	SECTIONS AND DETAILS SHEET 2
713345-S07	0	PLAN OF NEW DECK SLAB AND RETAINING WALL DETAILS

GENERAL	
1.	THE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE DESIGN FEATURES REPORT AND SPECIFICATION, AND WITH ARCHITECTURAL SERVICES, CIVIL AND OTHER PROJECT DRAWINGS. ANY DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER FOR RESOLUTION.
2.	THE PRESENCE, LOCATION AND DETAILS OF NIBS, PLINTHS, RECESSES, REBATES, PENETRATIONS, SLEEVES, CHASES, DUCTS, CAST-IN FIXINGS, INSERTS, BRACKETS, FLASHINGS, DAMP-PROOFING AND WATERPROOFING etc ARE NOT NECESSARILY SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL, SERVICES, CIVIL, AND OTHER PROJECT DRAWINGS AND SPECIFICATIONS FOR THESE ITEMS.
3.	THE LOCATION, SIZE AND DETAILS OF ALL NIBS, PLINTHS, RECESSES, REBATES, PENETRATIONS etc IN STRUCTURAL MEMBERS, MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION UNLESS SHOWN ON THE STRUCTURAL DRAWINGS. THESE ITEMS SHALL BE CAST-IN, FORMED, OR SHOP FABRICATED AND SHALL NOT BE CUT OR CORED ON SITE, UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER.
4.	SUBSTITUTION FOR OR AMENDMENT OF DETAILS SHOWN OR MATERIALS SPECIFIED SHALL NOT BE CARRIED OUT WITHOUT APPROVAL OF THE ENGINEER.
5.	UNLESS OTHERWISE SPECIFIED OR DETAILED ON THE DRAWINGS, THESE NOTES AND DETAILS SHALL APPLY. INCLUSION OF THIS SN SERIES OF SHEETS IN THIS CONTRACT DOES NOT IMPLY THAT ALL DETAILS APPLY.
6.	ANY DISCREPANCIES IN THESE DRAWINGS AND/OR SPECIFICATION OR WITH ARCHITECTURAL OR OTHER TRADES DRAWINGS AND/OR SPECIFICATION SHALL BE REFERRED TO THE ENGINEER/ARCHITECT FOR CLARIFICATION PRIOR TO COMMENCING THAT SECTION OF WORK.
7.	THE CONTRACTOR IS RESPONSIBLE FOR THE ADEQUACY OF COMPONENTS FOR LIFTING AND ERECTION, AND FOR PROPPING AND PROVIDING LATERAL RESTRAINT DURING CONSTRUCTION, UNTIL ALL STEEL IS FULLY IN PLACE AND ALL CONCRETE UP TO THAT LEVEL IS ADEQUATELY CURED TO CARRY THE CONSTRUCTION LOADS.
8.	REFER TO THE DESIGN FEATURES REPORT AND BUILDING CONSENT FOR REQUIRED INSPECTIONS.

DIMENSIONS	
1.	ALL DIMENSIONS ARE IN MILLIMETRES, EXCEPT LEVELS AND COORDINATES WHICH ARE IN METRES.
2.	DO NOT SCALE THE DRAWINGS.
3.	ALL DIMENSIONS TO EXISTING WORK SHALL BE VERIFIED BY SITE MEASUREMENT PRIOR TO FABRICATION UNLESS NOTED OTHERWISE
4.	DIMENSIONS ARE AS FOLLOWS: (a) FOR UB & UC SECTIONS: TO CENTRE LINE (b) FOR CHANNELS AND ANGLES: TO BACK (c) FOR CLEATS: TO ONE SIDE

SITE AND EARTHWORKS	
1.	ALL VEGETATION, TURF, AND ORGANIC TOP SOIL SHALL BE STRIPPED FROM THE BUILDING PLATFORM AREA AND EXTEND A MINIMUM OF 600mm IN PLAN BEYOND THE EDGE OF THE FOUNDATIONS AND COMPLY WITH FIGURE 3.1 OF NZS3604:2011 WITH REGARD TO RELATIONSHIP OF SLOPING GROUND SURFACE. THE DEPTH OF TOPSOIL STRIPPING SHALL BE SUFFICIENT TO REMOVE ALL ORGANIC MATERIAL, TURF, AND PLANT ROOTS GREATER THAN 20mm DIAMETER.
2.	EARTH FILL SHALL MEET THE REQUIREMENTS OF NZS4431:2022 - Code of practice for earth fill for residential development.
3.	FILL PLACEMENT: a. THE AREA ON WHICH FILL IS TO BE PLACED SHALL BE STRIPPED OF ALL VEGETATION, TOPSOIL, AND MATERIAL DEEMED UNSUITABLE. b. THE EXPOSED SUBGRADE SHALL BE PROOF ROLLED, WHERE POSSIBLE, TO PROVIDE A LEVEL AND FIRM PLATFORM ON WHICH TO PLACE THE FILL. c. REFER TO THE GEOTECHNICAL ENGINEER'S REPORT FOR THE SPECIFICATION OF GEOTEXTILE FABRICS, IF ANY, AS WELL AS SPECIFICATIONS FOR LAP LENGTHS, TERMINATION AT ENDS AND THE LIKE. d. SUITABLE FILL MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING 200mm THICK (PRIOR TO COMPACTION). e. APPROPRIATE COMPACTION EQUIPMENT SHALL BE USED TO ACHIEVE THE SPECIFIED COMPACTION CRITERIA. AN ULTIMATE GEOTECHNICAL BEARING CAPACITY OF 300 kPa IN ACCORDANCE WITH NZS3604:2011 UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER. IN THE CASE OF ANY DISCREPANCIES THE GEOTECHNICAL ENGINEERS SPECIFICATION SHALL TAKE PRECEDENCE. f. FILL MATERIAL SHALL BE COMPACTED TO ACHIEVE 95% OF THE MATERIALS MAXIMUM DRY DENSITY IN ACCORDANCE WITH NZS4431:2022. g. FILL OVER 600mm DEPTH SHALL BE TESTED AND APPROVED BY A SUITABLY QUALIFIED CHARTERED PROFESSIONAL ENGINEER (UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT). CONFIRM WITH ENGINEER FOR SOIL TESTING / CERTIFICATION REQUIREMENTS TO ORIGINAL GROUND AND COMPACTED FILL PRIOR TO COMMENCING EXCAVATION.

ABBREVIATIONS			
1. GENERAL ABBREVIATIONS			
ALT	ALTERNATING	SJ	SAWCUT JOINT
APPROX	APPROXIMATE	SQ	SQUARE
ADDNL	ADDITIONAL	SS	STAINLESS STEEL
BLKG	BLOCKING	SSL	STRUCTURAL SLAB LEVEL
BS	BOTH SIDES	STD	STANDARD
C/C	CENTRE TO CENTRE	STAG	STAGGER
CJ	CONSTRUCTION JOINT	SYM	SYMMETRICAL
CL	CENTRE LINE	t	TONNES
COL	COLUMN	THK	THICK
CONC	CONCRETE	TOC	TOP OF CONCRETE
CONN	CONNECTION	TOF	TOP OF FOUNDATION
CONT	CONTINUOUS	TOG	TOP OF GRATING
COS	CHECK ON SITE	TORC	TOP OF ROUGH CONCRETE
CRS	CENTRES	TRM	TRIMMER
C/W	COMPLETE WITH	TYP	TYPICAL
d	BOLT OR BAR DIAMETER	UNO	UNLESS NOTED OTHERWISE
D'	DEPTH	U/S	UNDERSIDE
DET	DETAIL	VERT	VERTICAL
DIA, Ø	DIAMETER	W	WIDTH
DIAG	DIAGONAL	2. REINFORCED CONCRETE ABBREVIATIONS	
DIM	DIMENSION	B	BOTTOM
DOS	DETERMINE ON SITE	Bb	BOTTOM BARS, BOTTOM LAYER
DP	DOWN PIPE	Bt	BOTTOM BARS, TOP LAYER
DPC	DAMP PROOF COURSE	CAR	COVER ALL ROUND
DPM	DAMP PROOF MEMBRANE	CVR	COVER
DWG	DRAWING	EF	EACH FACE
EF	EACH FACE	EW	EACH WAY
ELEV	ELEVATION	LAR	LAP AT RANDOM
EX	OUT OF	REBAR	REINFORCING BARS
EXTG	EXISTING	REINF'	REINFORCEMENT
FDN	FOUNDATION	STRIP(S)	STRIP(S)
FF	FAR FACE	STR(S)	STARTER(S)
FFL	FINISHED FLOOR LEVEL	T	TOP
FIG	FIGURE	Tt	TOP BARS, TOP LAYER
FLG	FLANGE	Tb	TOP BARS, BOTTOM LAYER
FRR	FIRE RESISTANCE RATING	R	PLAIN ROUND REINF' BARS
FS	FAR SIDE	HR	PLAIN ROUND REINF' BARS GRADE 300
GL	GROUND LEVEL	D	DEFORMED REINF' BARS GRADE 300
HD BOLT	HOLDING DOWN BOLT	HD	DEFORMED REINF' BARS GRADE 500
GALV	HOT DIPPED GALVANISED	RB	DEFORMED REID BAR GRADE 500
HORIZ	HORIZONTAL	3. STRUCTURAL STEEL ABBREVIATIONS	
ID	INSIDE DIAMETER	BT	TEE CUT FROM UB
IJ	ISOLATION JOINT	CHS	CIRCULAR HOLLOW SECTION
IL	INVERT LEVEL	CT	TEE CUT FROM UC
IP	INTERSECTION POINT	DHS	PURLIN / GIRT
LG	LONG	EA	EQUAL ANGLE
MAX	MAXIMUM	FL	FLAT PLATE
MIN	MINIMUM	g	GAUGE
(N)	NEW	MS	MILD STEEL
N/A	NOT APPLICABLE	PFC	PARALLEL FLANGE CHANNEL
NB	NOMINAL BORE	PL	PLATE
NDT	NON DESTRUCTIVE TESTING	RHS	RECTANGULAR HOLLOW SECTION
NF	NEAR FACE	SHS	SQUARE HOLLOW SECTION
NOM	NOMINAL	TFB	TAPER FLANGE BEAM
NS	NEAR SIDE	TFC	TAPER FLANGE CHANNEL
NTS	NOT TO SCALE	UA	UNEQUAL ANGLE
O/A	OVERALL	UB	UNIVERSAL BEAM
O/H	OVERHEAD	UC	UNIVERSAL COLUMN
OD	OUTSIDE DIAMETER	JL	DOUBLE ANGLE BACK TO BACK
OPP	OPPOSITE	STIFF	STIFFENER
PC	PRECAST CONCRETE	TOP	TOP OF PURLINS
PCD	PITCH CIRCLE DIAMETER	TOS	TOP OF STEEL
PSC	PRESTRESSED CONCRETE	FPBW	FULL PENETRATION BUTT WELD
RAD	RADIUS	FW	FILLET WELD
RC	REINFORCED CONCRETE	FWAR	FILLET WELD ALL AROUND
REF	REFER, REFERENCE		
RL	REDUCED LEVEL		
SIM	SIMILAR		

FOUNDATIONS	
1.	REFER TO THE GEOTECHNICAL REPORT BY FOR THE SITE.
2.	ALL SERVICES SHALL BE IDENTIFIED AND CLEARLY MARKED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION OR GROUND DISTURBANCE OCCURRING.
3.	ANY SOFT SPOTS AT FORMATION LEVEL ARE TO BE DUG OUT AND REPLACED WITH WELL-COMPACTED HARDFILL.
4.	THE TOP SURFACE OF ALL HARDFILL TO RECEIVE A DPM IS TO BE CHOKED WITH SAND.
5.	WHERE REQUIRED PLACE 40mm SITE CONCRETE UNDER FOUNDATIONS, UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT.

FIRE RESISTANCE RATING (FRR)			
1.	ALL FLOORS, COLUMNS AND BEAMS TO HAVE FRR=60min. RATING.		
2.	FOR REINFORCED CONCRETE MEMBERS MAIN BAR REINFORCING MINIMUM CONCRETE COVERS FOR FIRE (DURABILITY MAY REQUIRE LARGER COVERS) ARE:		
		REBAR	PRESTRESSING
	SIMPLY SUPPORTED BEAMS	25	40
	CONTINUOUS BEAMS (1 END)	15	30
	RIBBED FLOOR SLABS	25	40
	FLAT FLOOR SLABS	20	30
	COLUMNS	45	50
	WALLS (120 MIN. THK)	30	-
3.	ALL STEEL MEMBERS SUPPORTING FLOORS OR FLOOR MEMBERS SHALL HAVE AN APPROVED COATING (INTUMESCENT PAINT, FIBRE INSULATION OR EQUIVALENT) TO PROVIDE THE "FRR" RATING ABOVE AT LT (LIMITING TEMPERATURE) OF 500°C FOR BEAMS AND 350°C FOR COLUMNS. THE PAINT SHALL BE COMPATIBLE WITH DURABILITY AND AESTHETIC REQUIREMENTS, REFER TO THE SPECIFICATION.		
4.	ALL STEEL MEMBERS (COLUMNS, BEAMS AND TRUSSES) SUPPORTING THE ROOF, ARE NOT REQUIRED TO BE FIRE RATED.		

REV	AMENDMENTS	DES	DRN	CHK	APP	DATE
0	FOR TENDER	JT	MMT	GA	GA	05.08.2024

SURVEYED	DATE
J.TABORGA	29.05.2024
M.TOLEDO	29.05.2024
G.ANDERSON	31.05.2024
G.ANDERSON	31.05.2024



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COOK ISLAND INVESTMENT CORPORATION

CLIENT	PROJECT TITLE
	ARUTANGA HARBOUR PHASE 2
SHEET TITLE	STANDARD NOTES SHEET 1

ISSUED FOR TENDER NOT FOR CONSTRUCTION		
SCALE (A1 ORIGINAL)	NOT TO SCALE	
PROJECT No.	SHEET	REVISION
713345	SN1	0

CONCRETE

- ALL STRUCTURAL CONCRETE WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH NZS 3109:2017 AND NZS 3101:2006.
- ALL STRUCTURAL CONCRETE SHALL BE NORMAL GRADE TO NZS 3104 UNLESS NOTED OTHERWISE. STRENGTHS SHALL BE AS FOLLOWS UNO:
 

RETAINING WALLS	- 40 MPa
CAST INSITU CONCRETE HARDSTAND AND GROUND BEAMS	- 40 MPa
PRE-CAST ITEMS	- 40 MPa
- SURFACE FINISHES SHALL BE TO NZS 3114, TYPICALLY AS FOLLOWS UNLESS NOTED OTHERWISE. REFER ALSO TO THE SPECIFICATION;
 

BURIED FOUNDATIONS	- F1 / U1
CONCRETE EXPOSED TO VIEW	- F4 / U3
TOP OF HARDSTAND	- F4 / U5
- ALL CONCRETE SHALL BE FULLY CURED IN ACCORDANCE WITH NZS 3109. SPRAY-ON MEMBRANES SHALL BE COMPATIBLE WITH FINISHES.
- REINFORCEMENT SHALL BE TO AS/NZS 4671:2019 Steel for the reinforcement of concrete.

REINFORCING NOMENCLATURE:

- HD - DEFORMED BAR GRADE 500E
- HR - PLAIN BAR GRADE 500E
- RB - REIDBAR GRADE 500E

REINFORCING NOTATION:



- NO REINFORCING IS TO BE WELDED WITHOUT THE WRITTEN AUTHORITY OF THE ENGINEER. THE WELDING OF REINFORCING IS TO BE IN ACCORDANCE WITH AS/NZS 1554.3.
- NO REINFORCING SHALL BE RE-BENT ON SITE UNLESS SHOWN ON THE DRAWINGS, AND WHERE RE-BENT SHALL ONLY BE RE-BENT ONCE.
- LAP OR SPLICE LENGTHS:

SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH NZS 3101 AND FOR F'c SHOWN SHALL BE A MINIMUM OF:

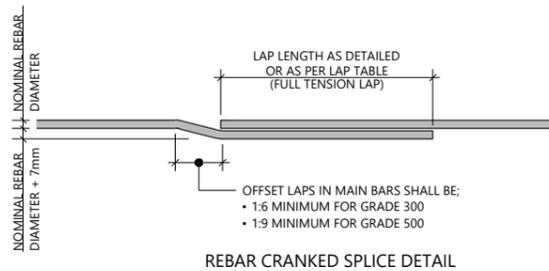
NOTE:  
IF LAP LENGTHS ARE NOT SPECIFICALLY STATED ON THE DRAWINGS, THE FOLLOWING SHALL BE USED:

DEFORMED BAR LAP LENGTHS (mm)						
GRADE 500	10	12	16	20	25	32
TOP BAR FACTOR = 1.3	520	625	830	1040	1300	1665
BAR FACTOR = 1	400	480	640	800	1000	1270

- TOP BAR FACTOR IS 1.0 FOR ALL VERTICAL BARS AND FOR HORIZONTAL BARS WITH LESS THAN 300mm OF FRESH CONCRETE CAST BENEATH THE BAR (TYPICALLY BOTTOM BARS OF CAPPING AND ANCHOR BEAM, HARDSTAND REINFORCEMENT AND BERTHING PANELS)
- TOP BAR FACTOR IS 1.3 FOR ALL HORIZONTAL BARS WITH MORE THAN 300mm OF FRESH CONCRETE CAST BENEATH THE BAR (TYPICALLY TOP OF CAPPING AND ANCHOR BEAM)
- ROUND BARS SHALL NOT BE LAPPED
- LAP LOCATIONS SHALL BE STAGGERED U.N.O.
- FOR NON-CONTACT LAPS, LARGER LENGTHS WILL BE REQUIRED. CONTACT THE ENGINEER FOR DETAILS.

CRANKS AND SPLICES:

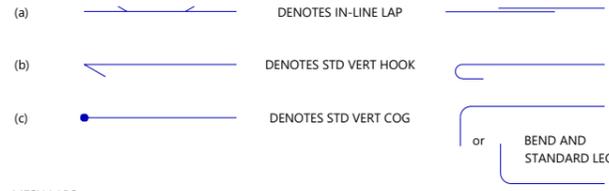
CRANKED BARS SHALL BE DIMENSIONED AS FOLLOWS:



REBAR CRANKED SPLICE DETAIL

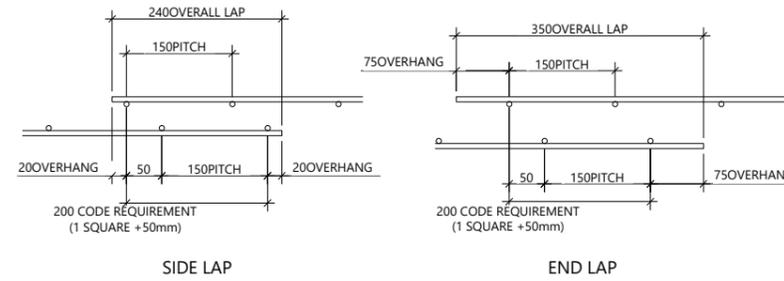
CONCRETE

- SINGLE LINE REINFORCING BARS:  
SINGLE LINE REINFORCING IN PLANS ARE AN INDICATION OF BAR SHAPES. REFER BELOW FOR SYMBOLOGY;



MESH LAPS:

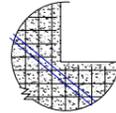
- MINIMUM LAPS SHALL BE AS SHOWN BELOW, OR AS REQUIRED BY THE MANUFACTURER.
- NO MORE THAN THREE SHEETS AT ANY POINT.



REINFORCING MESH LAPPING DETAILS

RE-ENTRANT CORNERS:

ALL RE-ENTRANT CORNERS SHALL HAVE DIAGONAL TRIM BARS OF 2-HD12, 1200 LONG.



COVER TO REINFORCEMENT:

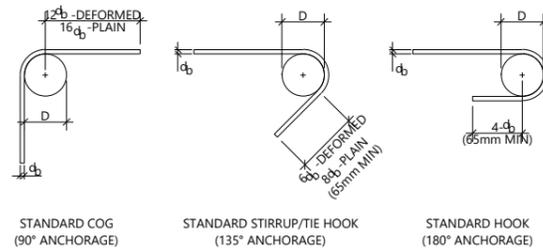
COVER SHALL BE AS NOTED BELOW UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

CONCRETE COVERS	
ENVIRONMENT	CONCRETE COMPRESSIVE STRENGTH f'c (MPa)
	40
SURFACES CAST AGAINST AND EXPOSED TO EARTH	75
SURFACES CAST AGAINST DPM ON EARTH	50
EXTERIOR ENVIRONMENT WITHIN 500m OF HIGH TIDE MARK	40
OTHER EXTERIOR ENVIRONMENT	30
SURFACES EXPOSED TO EARTH (NON-AGGRESSIVE OR PROTECTED BY DPM)	30

NOTE:  
CONCRETE COVERS ARE THE MINIMUM DISTANCE TO ANY REINFORCING STEEL, INCLUDING STIRRUPS AND TIES.

REINFORCEMENT DETAILS:

- QT (QUENCHED AND TEMPERED), STEEL SHALL NOT BE USED WHERE BENDING OR HEATING OF BARS IS REQUIRED, (BARS WITH HOOKS OR SPLICE OFFSETS, GALVANISING, WELDING, THREADING, ETC).
- LINKS, TIES, STIRRUPS, AND U BARS SHALL BE BENT GENERALLY AROUND PINS OF THE SAME DIAMETER AS THE BARS THEY ARE TO ENCLOSE WITH A MINIMUM DIAMETER OF BENDS AS PER REINFORCING BENDING DETAILS.
- ALL TIES AND LINKS SHALL FIT CLOSELY AROUND MAIN BARS.
- THE FIRST STIRRUPS SHALL BE PLACED NOT FURTHER THAN HALF THE TIE SPACING FROM FACE OF SUPPORT.
- DETAILS OF BAR BENDS AND COG LENGTHS SHALL BE AS SHOWN.



BAR SIZE	MAIN STEEL	STIRRUPS AND TIES
6	30	22
10	50	32
12	60	40
16	80	60
20	100	70
25	150	-
32	195	-
40	240	-

MINIMUM FORMER PIN DIAMETERS "D" FOR BENDING REINFORCING BARS

REINFORCING BENDING DETAILS

CONCRETE

- BARS TERMINATED WITH COGS AND HOOKS SHALL BE EMBEDDED AS DEEP AS POSSIBLE INTO THE CONCRETE ELEMENT (MAINTAINING COVERS ETC), AND AS DETAILED ON THE DRAWINGS. REFER BELOW FOR MINIMUM ANCHORAGE DEPTHS.

MINIMUM COG & HOOK ANCHORAGE LENGTH TABLE

CONCRETE GRADE	REINFORCING GRADE	COG TYPE	BAR SIZES					
			10	12	16	20	25	32
	500E	1	190	230	310	380	480	610
		2	140	160	220	270	340	430

TYPE 1: STANDARD COG  
TYPE 2: STANDARD COG WITH  $\alpha_1 = 0.7$ , SIDE COVER NORMAL TO THE PLANE OF THE COG  $\geq 60$ mm, AND COVER ON THE TAIL EXTENSION OF 90 COG  $\geq 40$ mm

- CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE ENGINEER. CONSTRUCTION JOINTS SHALL BE PREPARED BY RETARDING THE INTERFACE SURFACE THEN WATER BLASTING TO PRODUCE A SURFACE WHICH IS CLEAN, FREE OF LAITANCE AND INTENTIONALLY ROUGHENED TO A FULL AMPLITUDE OF NOT LESS THAN 5mm.
- SAWCUTS TO BE 5mm WIDE AND EXTEND TO A THIRD DEPTH OF SLAB. SAW CUTTING TO TAKE PLACE NO LATER THAN 24 HOURS U.N.O.

DESIGN CRITERIA

- BERTHING LOADING EFFECTS ON THE WHARF HAVE BEEN DERIVED FOR THE FOLLOWING CONDITIONS:

CRITERIA	SMALL POWERED BOATS
VESSEL TYPE	GENERAL CARGO
DEAD WEIGHT (DWT)	430 t
DISPLACEMENT TONNAGE	650 t
LENGTH OVERALL (LOA)	40
MAXIMUM BEAM (B)	8
DRAFT (D)	3.5
MAXIMUM BERTHING ANGLE	15 deg.
MAXIMUM BERTHING VELOCITY	0.3m/s
WATER CUSHION EFFECT Cc	1
SOFTENING EFFECT Cs	1
BLOCK COEFFICIENT Cb	0.8

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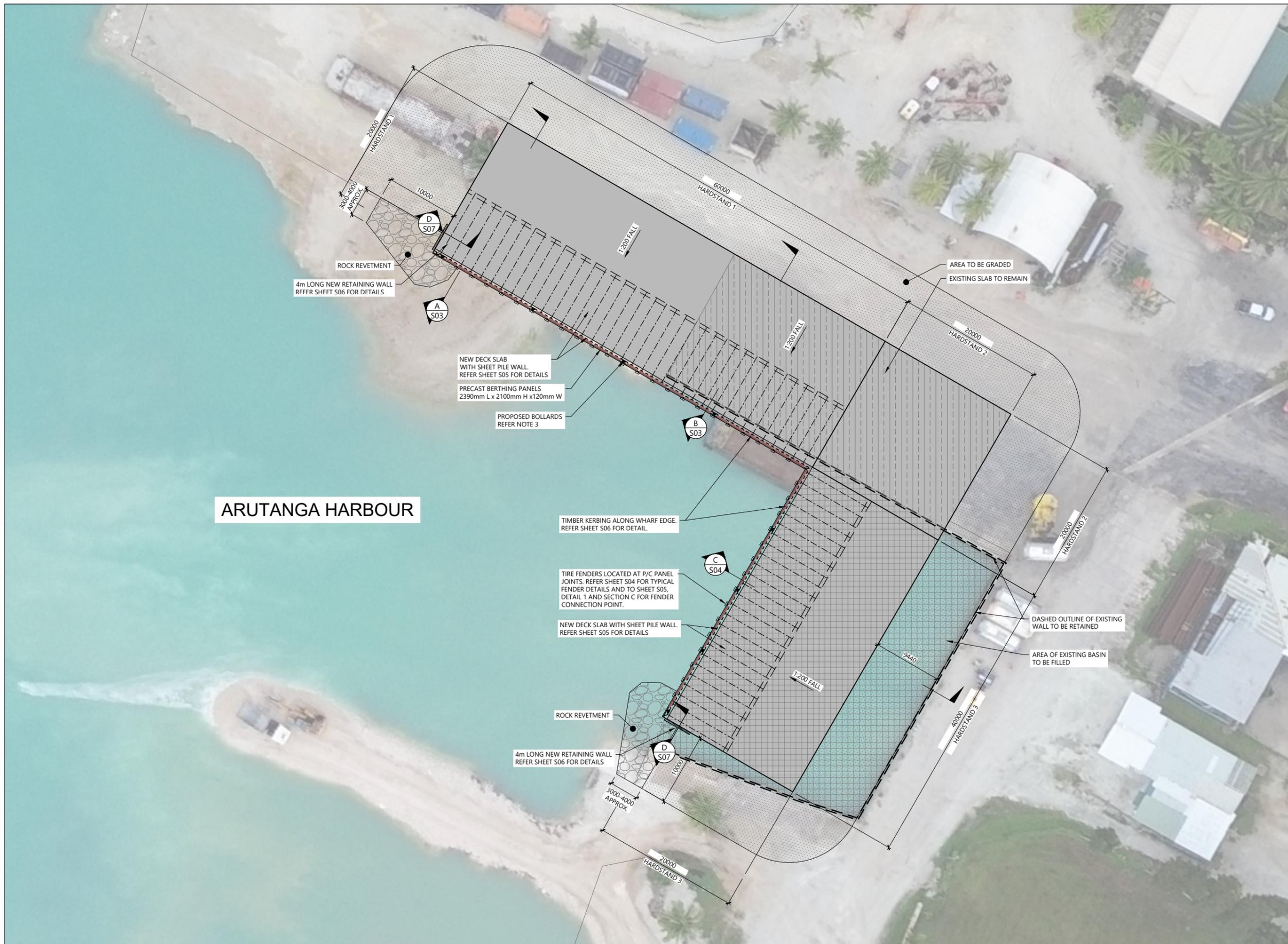
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SHEET TITLE	STANDARD NOTES SHEET 2

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PROJECT No.	713345	
SHEET	SN2	
REVISION	0	



NOTES:

1. ALL DIMENSIONS TO BE CONFIRMED ON SITE.
2. ALL REINFORCING STEEL TO BE HOT DIP GALVANIZED.
3. PROPOSED BOLLARDS TO BE TRELLEBORG TEE TYPE BOLLARD RATED 15 TONNES OR SIMILAR TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION. FINAL POSITION OF BOLLARDS TO BE CONFIRMED ON SITE.



# ARUTANGA HARBOUR

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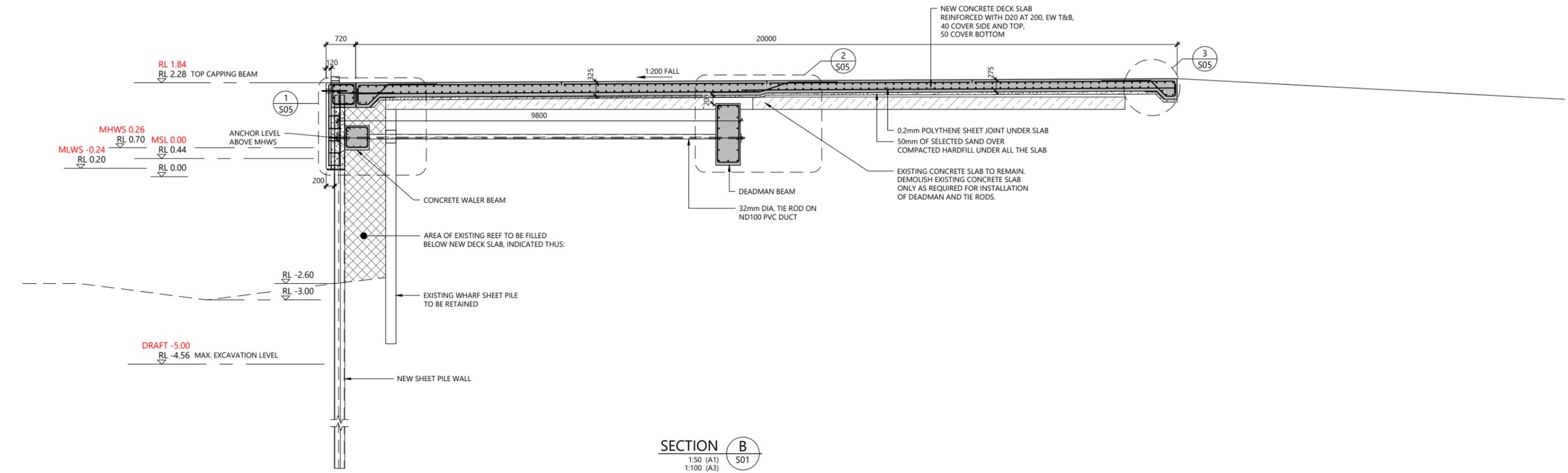
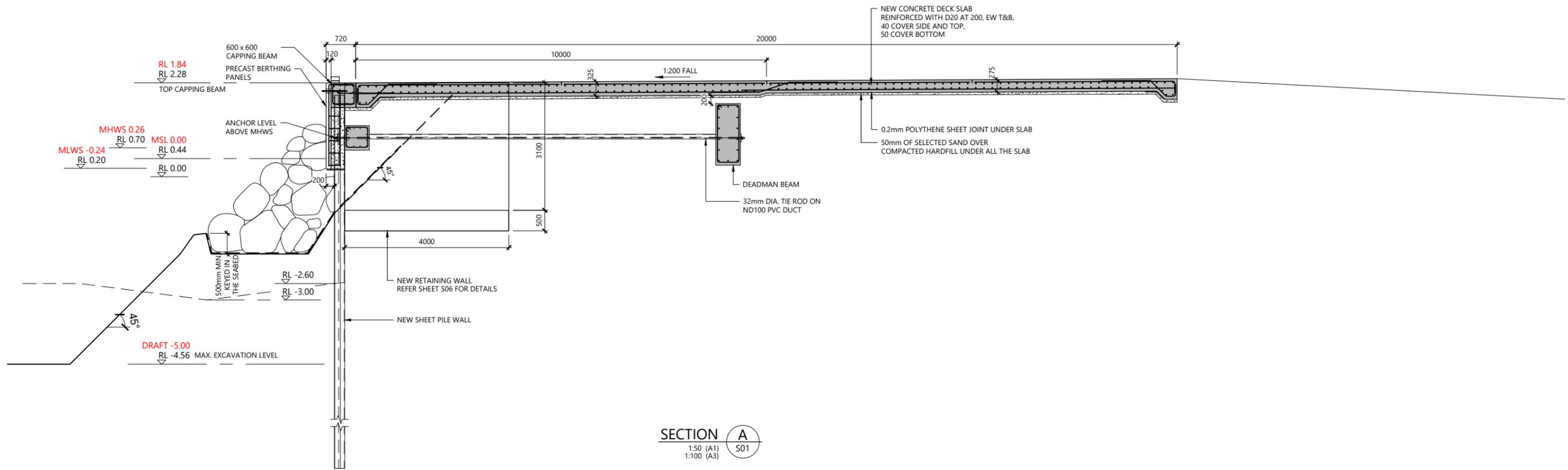
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SHEET TITLE	PROPOSED SITE PLAN	

<b>ISSUED FOR TENDER NOT FOR CONSTRUCTION</b>		
SCALE (A1 ORIGINAL)	1:250	(A3) 1:500
PROJECT No.	SHEET	REVISION
713345	S01	0

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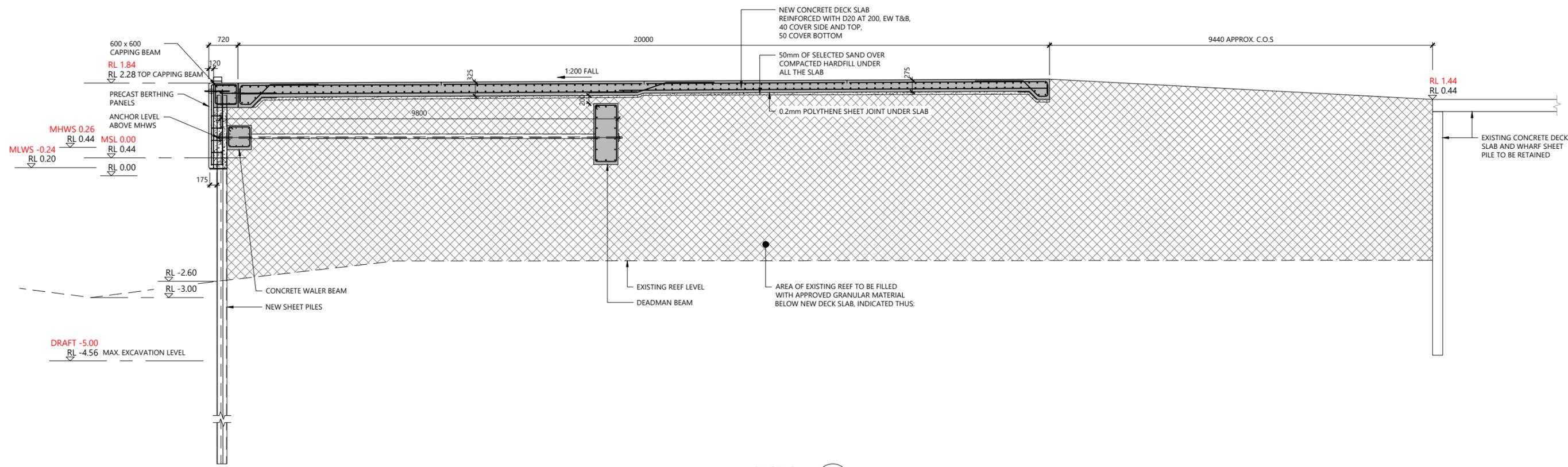
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G.ANDERSON	31.05.2024



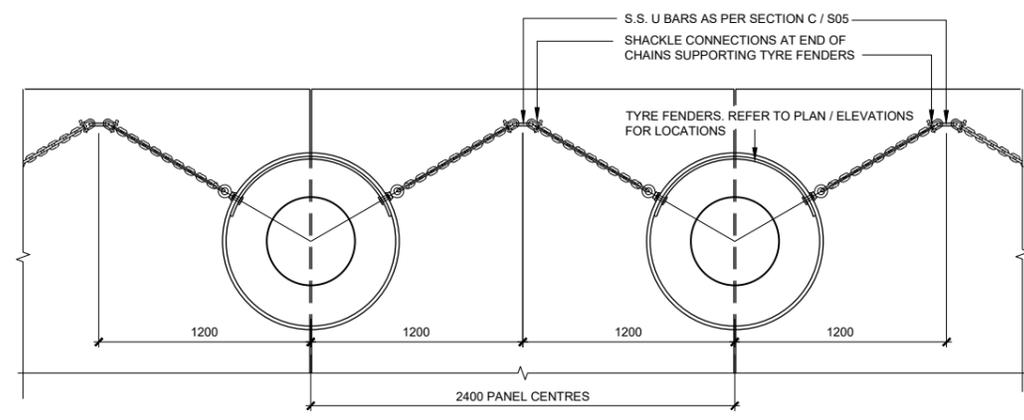
PROJECT TITLE	ARUTANGA HARBOUR PHASE 2
SHEET TITLE	WALL SECTIONS SHEET 1

ISSUED FOR TENDER NOT FOR CONSTRUCTION		
SCALE (A1 ORIGINAL)	SCALE AS NOTED	
PROJECT No.	SHEET	REVISION
713345	S03	0

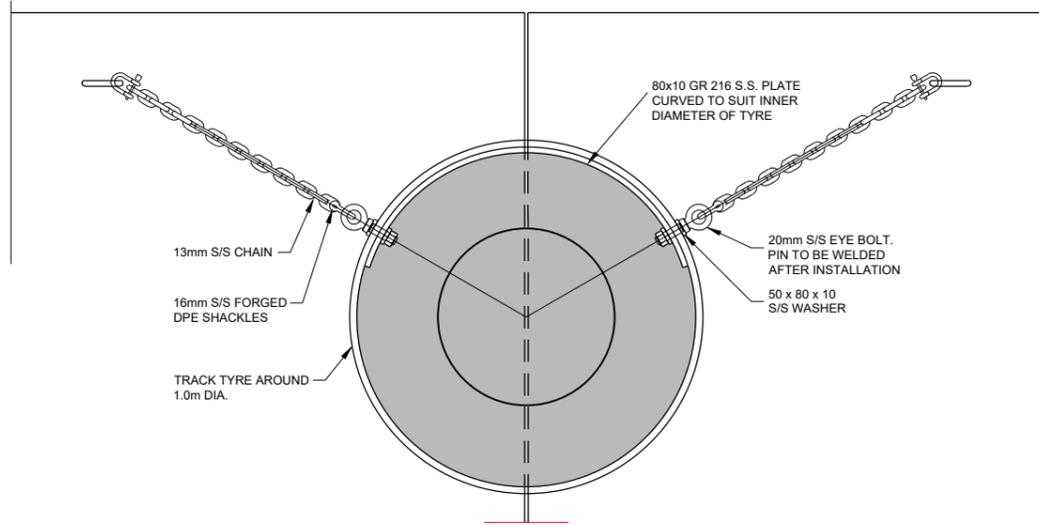
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SECTION C  
 1:50 (A1)  
 1:100 (A3)



TYPICAL TYRE FENDER DETAILS  
 1:20 @ A1  
 1:40 @ A3



TYRE FENDER CONNECTION DETAIL  
 1:10 @ A1  
 1:20 @ A3

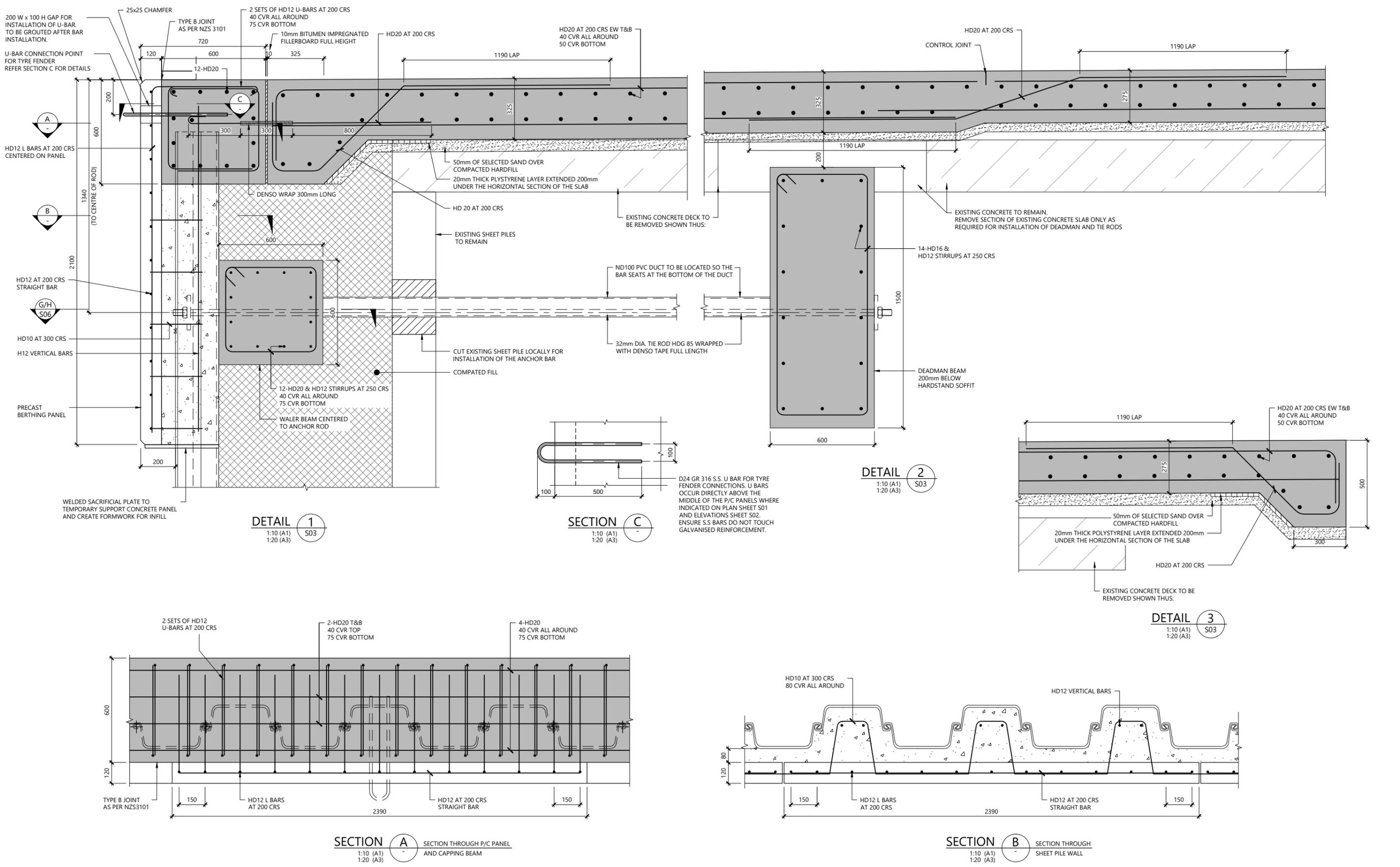
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SURVEYED	DATE
J.TABORGA	29.05.2024
M.TOLED0	29.05.2024
G.ANDERSON	31.05.2024
G.ANDERSON	31.05.2024



PROJECT TITLE	ARUTANGA HARBOUR PHASE 2
SHEET TITLE	WALL SECTIONS SHEET 2

ISSUED FOR TENDER NOT FOR CONSTRUCTION		
SCALE (A1 ORIGINAL)	SCALE AS NOTED	
PROJECT No.	SHEET	REVISION
713345	S04	0



REV	AMENDMENTS	DES	DRN	CHK	APP	DATE
0	FOR TENDER	JT	MMT	GA	GA	05.08.2024

SURVEYED	DATE
J.TABORGA	29.05.2024
M.TOLED0	29.05.2024
G.ANDERSON	31.05.2024
G.ANDERSON	31.05.2024



**CLIENT**  
**COOK ISLAND INVESTMENT CORPORATION**

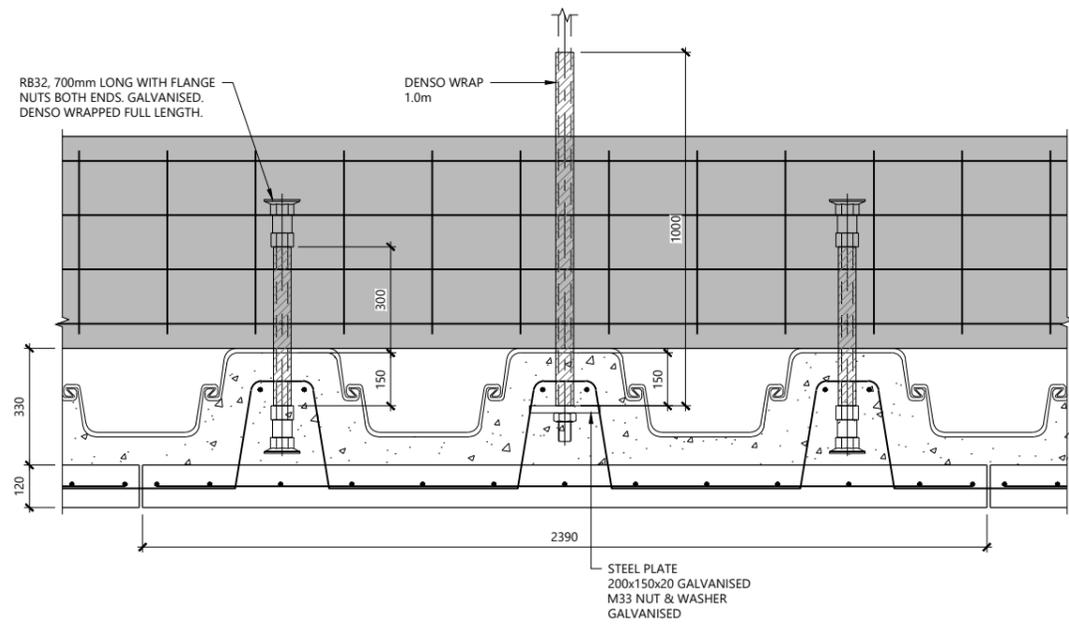
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**SHEET TITLE**  
SECTIONS AND DETAILS  
SHEET 1

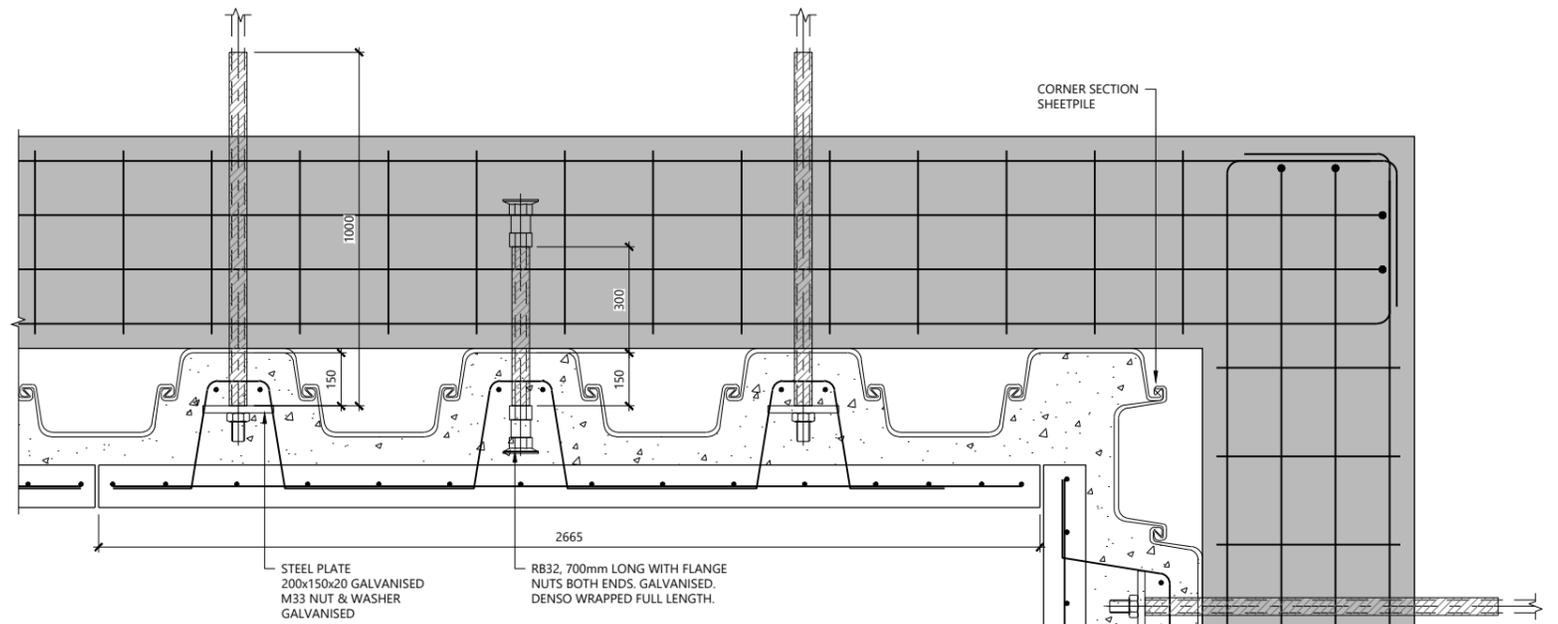
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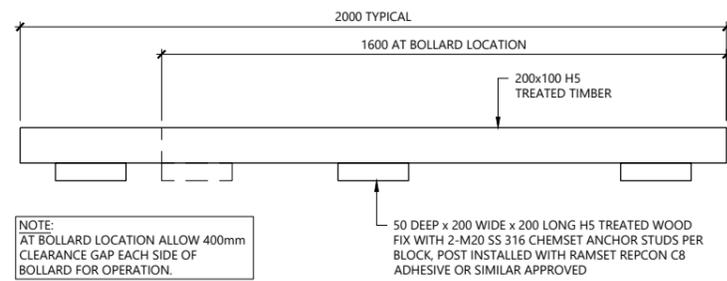
PROJECT No. SHEET REVISION  
713345 S05 0



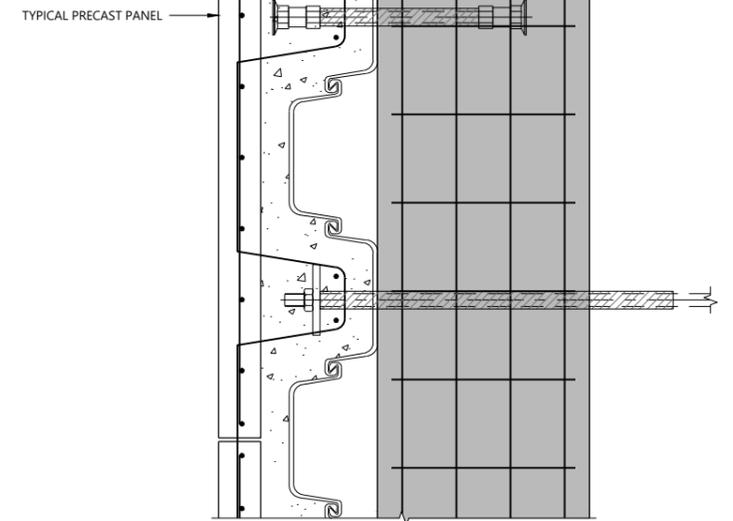
**SECTION G**  
SECTION THROUGH  
1:10 (A1)  
1:20 (A3)  
S05  
WALER BEAM



**SECTION H**  
WALER BEAM  
CORNER DETAIL  
1:10 (A1)  
1:20 (A3)  
S05



**TIMBER KERBING DETAIL**  
1:10 @ A1  
1:20 @ A3



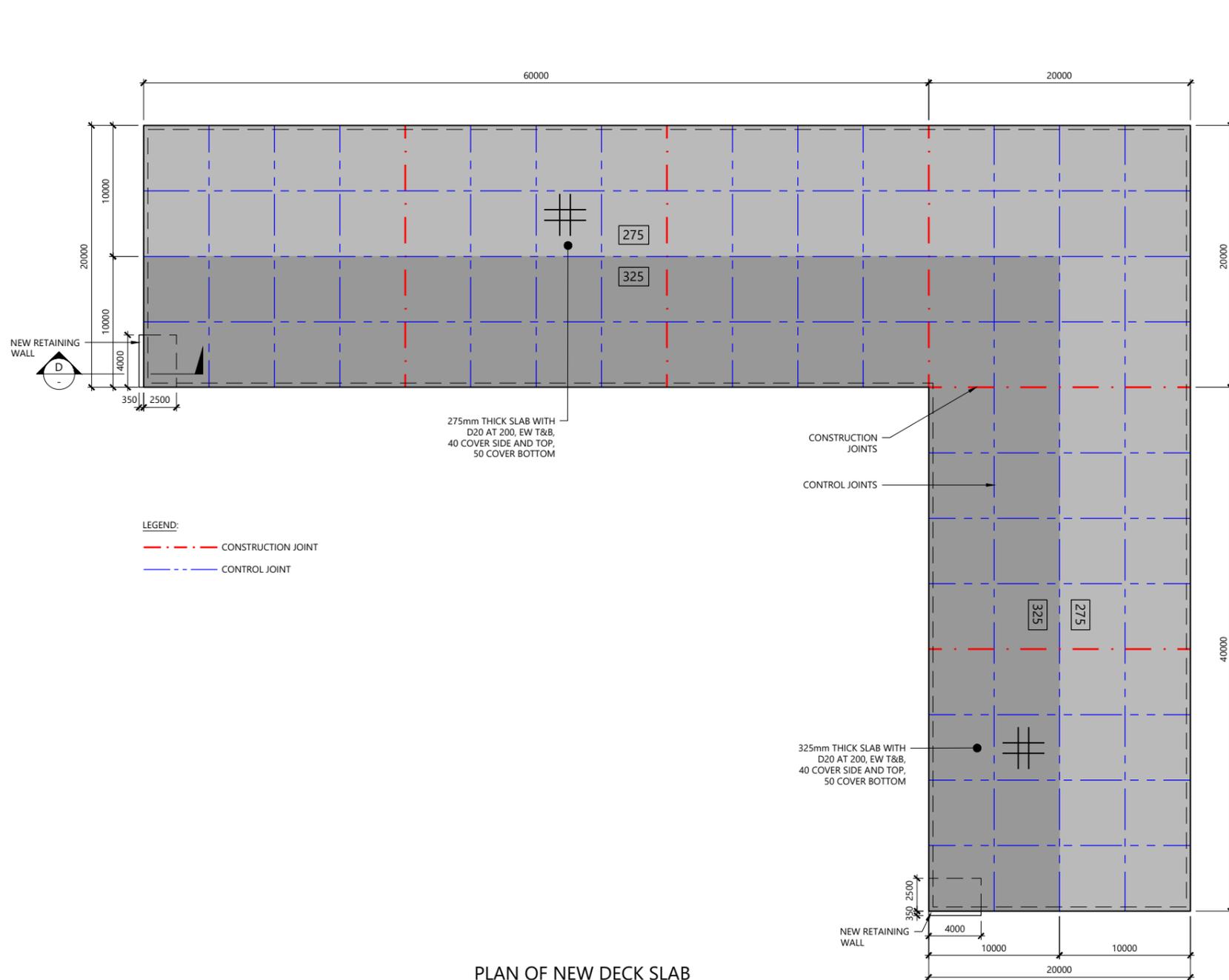
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0	FOR TENDER	JT	MMT	GA	GA	05.08.2024

SURVEYED	DATE
J.TABORGA	29.05.2024
M.TOLED0	29.05.2024
G.ANDERSON	31.05.2024
G.ANDERSON	31.05.2024



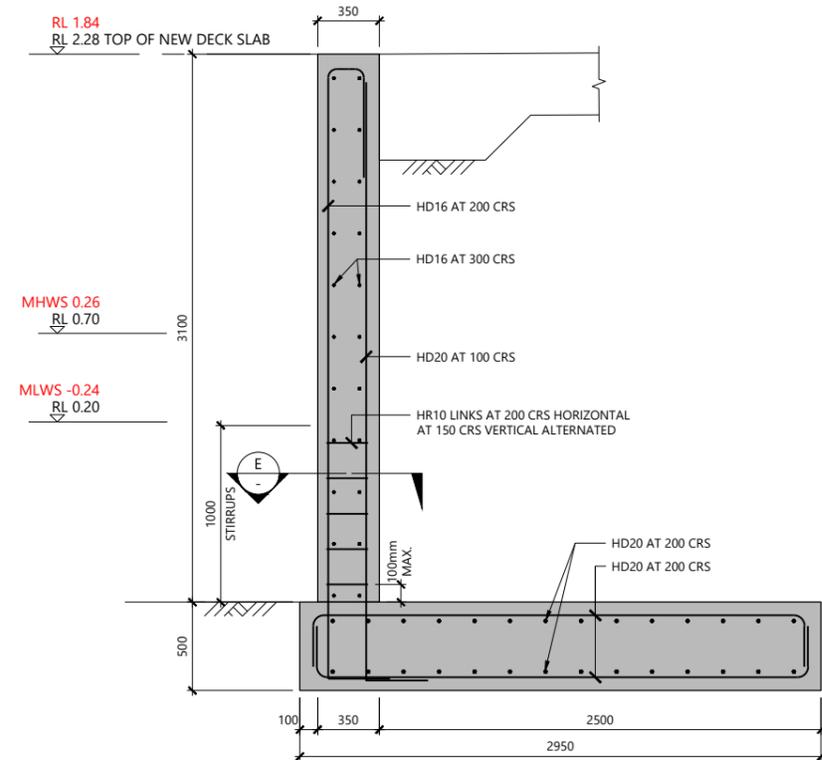
PROJECT TITLE
ARUTANGA HARBOUR PHASE 2
SHEET TITLE
SECTIONS AND DETAILS SHEET 2

ISSUED FOR TENDER NOT FOR CONSTRUCTION		
SCALE (A1 ORIGINAL)	SCALE AS NOTED	
PROJECT No.	SHEET	REVISION
713345	S06	0

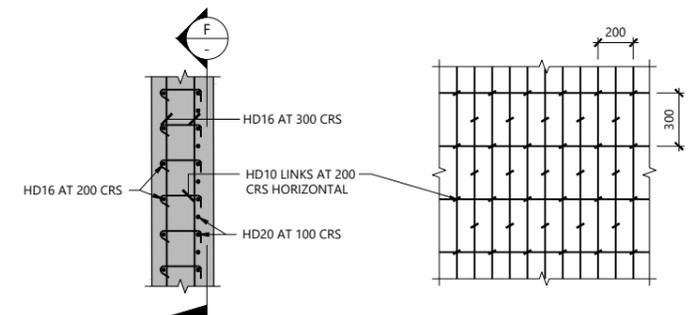


PLAN OF NEW DECK SLAB

1:200 @ A1  
1:400 @ A3

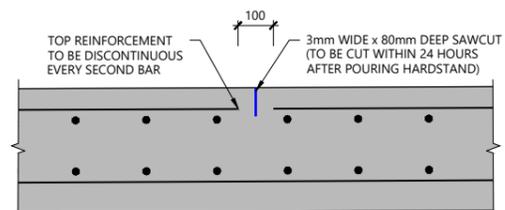


SECTION D  
1:20 (A1)  
1:40 (A3)



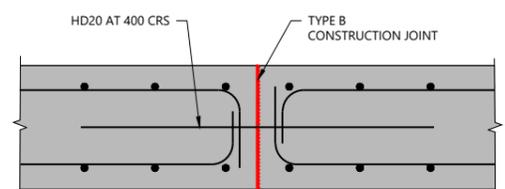
SECTION E  
1:20 (A1)  
1:40 (A3)

SECTION F ALTERNATED LINKS DETAIL  
1:20 (A1)  
1:40 (A3)



CONTROL JOINT DETAIL

1:10 @ A1  
1:20 @ A3



CONSTRUCTION JOINT DETAIL

1:10 @ A1  
1:20 @ A3

REV	AMENDMENTS	DES	DRN	CHK	APP	DATE
0	FOR TENDER	JT	MMT	GA	GA	05.08.2024

SURVEYED	DATE
J.TABORGA	29.05.2024
M.TOLED0	29.05.2024
CHECKED	DATE
G.ANDERSON	31.05.2024
APPROVED	DATE
G.ANDERSON	31.05.2024



PROJECT TITLE
ARUTANGA HARBOUR PHASE 2
SHEET TITLE
PLAN OF NEW DECK SLAB AND RETAINING WALL DETAILS

ISSUED FOR TENDER NOT FOR CONSTRUCTION		
SCALE (A1 ORIGINAL)	SCALE AS NOTED	
PROJECT No.	SHEET	REVISION
713345	S07	0