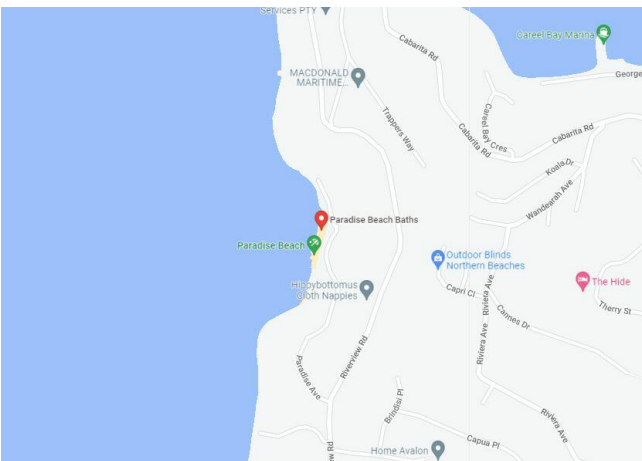




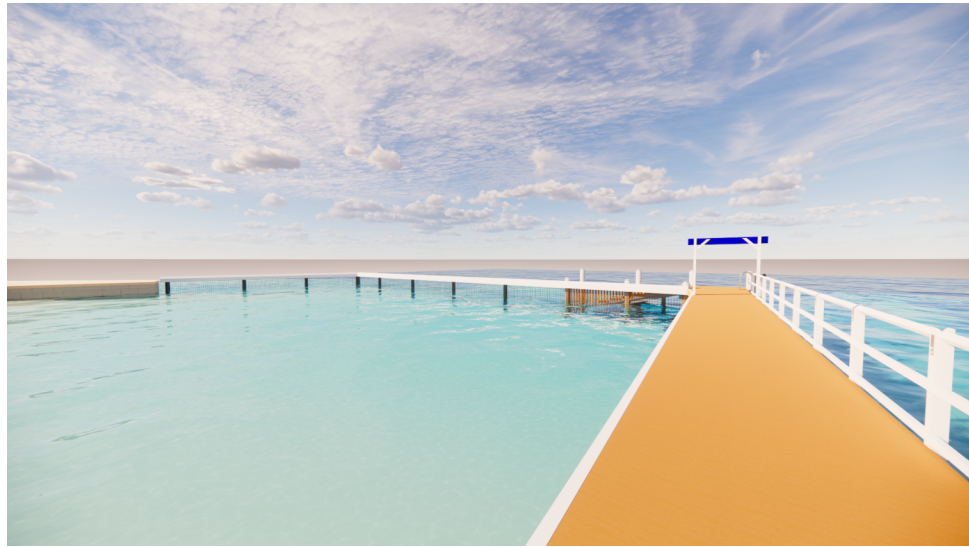
# PARADISE BEACH TIDAL POOL REPLACEMENT

## FOR

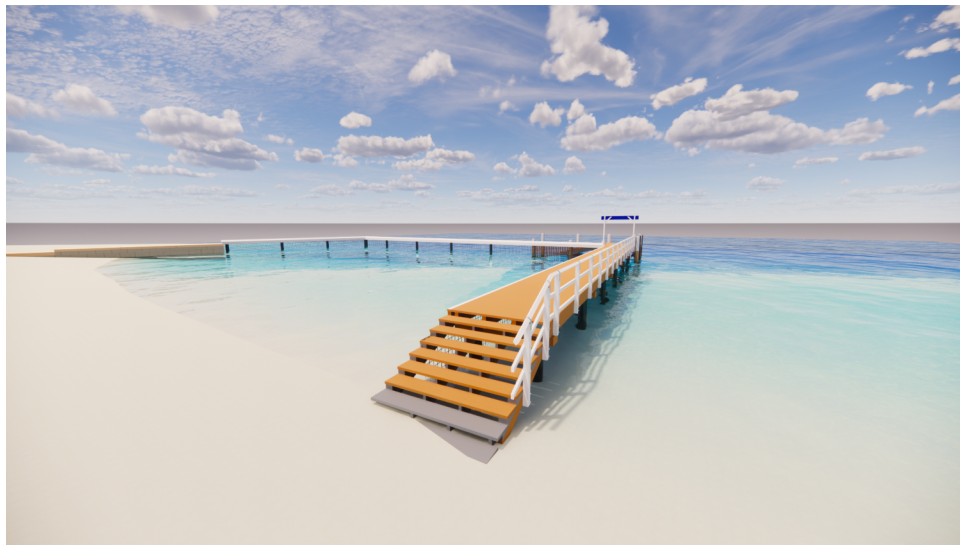
## NORTHERN BEACHES COUNCIL



LOCATION  
NTS



3D PERSPECTIVE

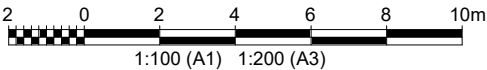


3D PERSPECTIVE

DRAWING SHEET SCHEDULE	
SHEET NO	DRAWING TITLE
0001	TITLE SHEET, LOCALITY PLAN & DRAWING LIST
0002	GENERAL NOTES - SHEET 1
0003	GENERAL NOTES - SHEET 2
0004	GENERAL NOTES - SHEET 3
0005	GENERAL NOTES - SHEET 4
0011	GENERAL ARRANGEMENT
0012	DEMOLITION PLAN
0021	PILE LAYOUT
0031	TYPICAL PILE ELEVATIONS
0032	TIMBER PILE DETAILS
0033	STEEL PILE DETAILS
0041	TYPICAL PILE BENT DETAILS
0051	TIDAL STEPS PLAN
0052	TIDAL STEPS SECTIONS - SHEET 1
0053	TIDAL STEPS SECTIONS - SHEET 2
0061	ACCESS STAIRS
0071	SHARK-NET WALER DETAILS
0081	SIGN DETAILS
0091	LADDER PLAN AND DETAILS
0101	GROYNE PLAN AND LONG SECTION
0111	GROYNE SECTIONS - SHEET 1
0112	GROYNE SECTIONS - SHEET 2

D2 FOR TENDER

NOT FOR CONSTRUCTION



C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
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REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
TITLE SHEET, LOCALITY PLAN & DRAWING LIST



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0001	SUITABILITY	S2	REVISION	C

GENERAL

1. THE DRAWINGS SHOW THE WORKS TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR, UNLESS NOTED AS "EXISTING" OR "BY OTHERS".
2. ALL MATERIALS TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR SHALL BE NEW EXCEPT WHERE NOTED AS 'RECYCLED'.
3. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
4. BEFORE UNDERTAKING ANY WORK, ESTABLISH THE LOCATIONS OF ALL EXISTING SERVICES AFFECTED BY THE WORKS. CARRY OUT DIAL-BEFORE-YOU-DIG. ADVISE THE SUPERINTENDENT IF THERE ARE ANY PREVIOUSLY UNKNOWN SERVICES THAT CAN POTENTIALLY BE AFFECTED BY THE WORKS.
5. THE CONTRACTOR SHALL VERIFY ALL CRITICAL ARRANGEMENTS AND DIMENSIONS ON SITE BEFORE COMMENCING WORK.
6. DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
8. ALL LEVELS ARE IN METRES RELATIVE TO AUSTRALIAN HEIGHT DATUM (AHD) UNLESS OTHERWISE NOTED.
9. ANY DISCREPANCY ON THE DRAWINGS SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.
10. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS EXCEPT WHERE VARIED BY THE SPECIFICATION HEREIN AND THE DRAWINGS. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.
11. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN THE STRUCTURE IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO KEEP THE WORKS STABLE AT ALL TIMES.
12. THE CONTRACTOR SHALL CARRY OUT THE WORKS COGNISANT OF THE SITE BEING SUBJECT TO TIDALLY VARIANT MARINE CONDITIONS.
13. THE CONTRACTOR SHALL PRESERVE EXISTING INFRASTRUCTURE TO REMAIN, INCLUDING ALL EXISTING SERVICES.
14. ALL DEMOLISHED AND EXCESS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR UNLESS NOTED OTHERWISE BY THE SPECIFICATION HEREIN OR BY THE DRAWINGS.
15. **PRIOR** TO PURCHASE OF MATERIALS THE CONTRACTOR SHALL SUBMIT MATERIAL CERTIFICATES TO THE SUPERINTENDENT FOR REVIEW AND ACCEPTANCE FOR EACH MATERIAL ORDER
16. THE SUPERINTENDENT RESERVES THE RIGHT TO CONDUCT INDEPENDENT MATERIAL TESTS.

DESIGN CRITERIA

17. THE STRUCTURE (EXCLUDING TIMBER DECKING) HAS BEEN DESIGNED AS SMALL CRAFT FACILITY FOR A 25 YEAR DESIGN LIFE ACCORDING TO AS4997 TABLE 6.1 DESIGN LIFE OF STRUCTURES. STEEL WITH HDPE SLEEVES HAVE A 50 YEAR DESIGN LIFE.
18. TIMBER DECKING HAS A DESIGN LIFE OF 10- 15 YEARS
19. SANDSTONE GROYNE WILL HAVE A DESIGN LIFE OF 50 YEARS.
20. DESIGN LOADING (AS1170 and AS4997):

- (i) IMPOSED ACTION – UNIFORMLY DISTRIBUTED:5 kPa

- (ii) IMPOSED ACTION – CONCENTRATED: 4.5 kN APPLIED OVER A 250mm<sup>2</sup> AREA
- (iii) WAVE LOADING – H<sub>1</sub> =1.5m wave (1 in 200 year wave)
- (iv) VESSEL BERTHING: MAX 10T VESSEL AT 0.25 M/S AT FENDER PILES TO AS4997

QUALITY ASSURANCE

21. THE CONTRACTOR SHALL IMPLEMENT A QUALITY ASSURANCE SYSTEM TO THE SUPERINTENDENT'S REQUIREMENTS AND SUCH THAT SATISFIES ISO 9001.
22. PROFORMAS OF RECORDS SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL AND WORK SHALL NOT COMMENCE UNTIL SUCH APPROVAL HAS BEEN GIVEN.
23. RECORDS, INCLUDING PHOTOGRAPHS, SHALL BE KEPT BY THE CONTRACTOR OF ALL ASPECTS AND STAGES OF THE WORK. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN ACCURATE AND UP TO DATE RECORDS AND SHALL CONVEY SUCH RECORDS TO THE SUPERINTENDENT.
24. AT THE COMPLETION OF EACH STAGE OF THE WORKS THE CONTRACTOR SHALL CERTIFY THAT THOSE WORKS HAVE BEEN UNDERTAKEN AND COMPLETED IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATION AND INSTRUCTIONS ISSUED DURING THE COURSE OF THE CONTRACT.
25. THE CONTRACTOR SHALL OBTAIN AND KEEP ON SITE ALL RELEVANT MATERIAL SAFETY DATA SHEETS (MSDS) FOR ANY MATERIALS THAT ARE USED IN THE WORKS. ALL TRANSPORTATION, STORAGE AND USE OF THESE MATERIALS SHALL BE IN ACCORDANCE WITH MSDS.

WORK HEALTH & SAFETY AND ENVIRONMENTAL CONTROLS

26. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE WHS ACT 2011 (NSW).
27. ALL DEBRIS FROM CONSTRUCTION WORKS SHALL BE COMPLETELY REMOVED CLEAR OF THE WATERWAY AND LAWFULLY DISPOSED.
28. WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A CEMP (CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN) PREPARED BY THE CONTRACTOR.

DEMOLITION

29. CARRY OUT DEMOLITION WORK IN ACCORDANCE WITH AS 2601 MAKING DUE ALLOWANCE FOR THE DETERIORATED CONDITION OF THE STRUCTURE.
30. PROTECT PROPERTY AND SERVICES WHICH ARE TO REMAIN ON OR ADJACENT TO THE SITE.
31. LAWFULLY DISPOSE OF ALL DEMOLITION MATERIALS.
32. ITEMS TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED CLEAR OF THE SEABED AND LAWFULLY DISPOSED. ALL PILES SHALL BE FULLY WITHDRAWN FROM THE SEABED AND NOT CUT OFF.
33. THE CONTRACTOR MUST SUPPPLY A BARGE CAPABLE OF APPLYING A LOAD PULL OF 50T TO FULLY REMOVE PILES FROM SEABED.

SURVEY

34. FOR THE PURPOSES OF THE WORK COUNCIL HAVE PROVIDED A SURVEY UNDERTAKEN BY C.M.S SURVEYORS PTY LIMITED UNDERTAKEN IN DECEMBER 2018. ALL WORKS HAVE BEEN SET OUT BASED ON THIS SURVEY.
35. THE CONTRACTOR SHALL CARRY OUT A PRECONSTRUCTION SURVEY FOR THE PURPOSES OF CONFIRMING EXISTING SURVEY AND PILE LOCATIONS.

GEOTECHNICAL INVESTIGATION

36. JK GEOTECHNICS HAVE UNDERTAKEN A GEOTECHNICAL INVESTIGATION OF THE SITE REF 34640SJRPT WITH THE REPORT DATED THE 4TH OF FEBRUARY 2022. ROCK LEVELS FROM THIS INVESTIGATION ARE SHOWN ON THE DRAWINGS.
37. THE CONTRACTOR SHOULD UNDERTAKE PROBING AS DEEMED NECESSARY TO IDENTIFY ROCK LEVELS AT PILE LOCATIONS AND THE GROYNE.

PILING

38. PILING WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 2159 AND TO THE REQUIREMENTS SPECIFIED BELOW AND ON THE DRAWINGS.
39. PRIOR TO INSTALLATION OF PILES THE CONTRACTOR SHALL PROBE THE PROPOSED PILE LOCATIONS IN ORDER TO ASSESS SEABED AND ROCK LEVELS AND SHALL MAKE THEIR OWN DETERMINATION OF PILE LENGTHS. RESULTS OF PROBING SHALL BE MADE PROMPTLY AVAILABLE TO THE SUPERINTENDENT.
40. THE CONTRACTOR SHALL RECORD PILE SETS AND EMBEDMENTS AND SUPPLY DOCEMENTATION TO CERTIFY THAT PILES ARE SET TO PROVIDE THE REQUIRED RESISTANCE.
41. REQUIRED DESIGN GEOTECHNICAL CAPACITY IS 150 kN IN COMPRESSION AND 30 kN APPLIED Laterally AT THE HEAD OF THE PILE.
42. PRIOR TO UNDERTAKING PILING WORKS THE CONTRACTOR SHALL SUPPLY CALCULATIONS OF THE REQUIRED SET FOR APPROVAL BY THE SUPERINTENDENT.
43. ALL STEEL PILES USED IN THE WORKS SHALL BE GRADE C350 to AS 1163.
44. STEEL PILES ARE NOT TO BE WELDED WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT
45. ALL TIMBER PILES USED IN THE WORK SHALL MEET THE REQUIREMENTS OF AS 3818.3 AND AS 2159 AND SHALL BE UNTREATED HARDWOOD GRADE F22 TURPENTINE.
46. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERINTENDENT IF IN THE CONTRACTOR'S OPINION, GROUND CONDITIONS VARY FROM THOSE SHOWN IN THE DRAWINGS.
47. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1720, AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
48. ALL PILE TOES AND HEADS MUST BE PREPARED BY THE CONTRACTOR TO ENSURE THAT THEY WILL NOT BE DAMAGED DURING INSTALLATION. THE CONTRACTOR WILL BE REQUIRED TO SATISFY THE SUPERINTENDENT OF THIS FOR THE PARTICULAR TYPE OF PILE AND METHOD OF INSTALLATION SELECTED.
49. TOE DETAILS ARE TO BE SUBMITTED BY THE CONTRACTOR FOR THE SUPERINTENDENT'S APPROVAL.

S2 FOR INFORMATION

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northern

beaches

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PROJECT

PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE

GENERAL NOTES - SHEET 1



Royal

HaskoningDHV

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50. THE CONTRACTOR SHALL MAINTAIN RECORDS FOR ALL PILES AS REQUIRED BY 2159. ACCURATE RECORDS OF ROCK LEVELS AND FOUNDING LEVEL OF PILES SHALL BE KEPT AND PROVIDED TO THE SUPERINTENDENT WITHIN 2 DAYS OF INSTALLING EACH PILE.
51. ALL PILES THAT ARE SOCKETED INTO ROCK SHALL BE DRIVEN (STEEL) OR POTTED (TIMBER) INTO ROCK SUCH THAT THE PILE IS RIGID WITHIN THE ROCK SOCKET.
52. PILE INSTALLATION TOLERANCES SHALL BE AS FOLLOWS UNLESS OTHERWISE APPROVED:

a) VARIATION OF SPECIFIED POSITION IN PLAN – ± 75mm AT TOP OF PILE

b) VARIATION FROM VERTICALITY – 1 IN 100

c) VARIATION IN SPECIFIED ELEVATION OF TOP OF PILES – ± 10mm
53. THE CONTRACTOR SHALL UNDERTAKE A POST CONSTRUCTION SURVEY OF THE PILES TO CONFIM THE ABOVE TOLERANCES.
54. ANY PILE DAMAGED DURING THE EXECUTION OF THE WORK OR WHICH DOES NOT COMPLY WITH REQUIREMENTS SHALL BE RECTIFIED AS ADVISED BY THE SUPERINTENDENT.
55. ALL PILES SHALL BE INSTALLED UNDER PERIODIC INSPECTION OF THE SUPERINTENDENT. THE CONTRACTOR SHALL GIVE TWO WORKING DAYS NOTICE OF INTENTION TO DRIVE PILES SO THAT THE SUPERINTENDENT CAN ARRANGE FOR ATTENDANCE.

STAINLESS STEEL

56. ALL STEEL (INCLUDING BOLTS, WASHERS, PLATES AND STEEL SECTIONS) USED IN THE WORKS SHALL BE STAINLESS STEEL GRADE 316 (UNS S 31603) WITH A MINIMUM YIELD STRENGTH OF 205 MPa IN ACCORDANCE WITH ASTM A955M OR BS 6744.WHERE STEEL IS TO BE WELDED GRADE 316L IS TO BE USED. MORE CORROSION RESISTANT GRADES SUCH AS DUPLEX 2205 (UNS 31803), MAY BE SUBSTITUTED, AND MUST BE USED BELOW RL 0 m AHD AS SET OUT IN THESE NOTES AND DRAWINGS.
57. WHERE STAINLESS STEEL IS BELOW RL 0 m AHD, STAINLESS STEEL DUPLEX GRADE 2205 ONLY SHALL BE USED.
58. WELDED OR HEATED STAINLESS STEEL SHALL BE PASSIVATED AFTER MANUFACTURE.
59. ALL STAINLESS STEEL USED IN THE WORKS SHALL BE PICKLED.
60. FINISH SURFACE ROUGHNESS OF ALL EXTERNAL SURFACES EXCEPT REINFORCEMENT IN CONCRETE SHALL HAVE AN Ra VALUE LESS THAN 0.5. IN ORDER TO ACHIEVE AN Ra < 0.5. ONLY SILICON CARBIDE ABRASIVE OF GRIT GRADE 320 SHALL BE USED.
61. THE SUPERINTENDENT MAY INSPECT ALL MATERIALS ARRIVING ON SITE WITH A ROUGHNESS METER TO ENSURE COMPLIANCE WITH THE Ra VALUES SPECIFIED ABOVE AND RESERVES THE RIGHT TO REJECT ANY NON COMPLYING MATERIAL.
62. STAINLESS STEEL SHALL BE HANDLED AND STORED TO MAINTAIN INTEGRITY. MINIMUM MEASURES SHALL INCLUDE:

a) CARBON STEEL BUNDLING WIRE IS NOT TO BE USED WITH STAINLESS STEEL COMPONENTS

b) TOOLS, WHICH HAVE BEEN USED ON CARBON STEEL, SHALL NOT BE USED ON STAINLESS STEEL UNDER ANY CIRCUMSTANCES

c) STAINLESS STEEL SHALL BE STORED CLEAR OF THE GROUND AND NOT STORED WITH CARBON STEEL.

BOLTS

63. ALL BOLTS TO BE USED IN THE WORKS SHALL BE STAINLESS STEEL GRADE 316 A4 – 70. EXCEPT WHERE BELOW RL 0 m AHD THEN DUPLEX STAINLESS STEEL GRADE 2205 BOLTS ARE TO BE USED.
64. FOR EACH BOLT SIZE THE CONTRACTOR SHALL UNDERTAKE TESTING IN AN AUSTRALIAN NATA CERTIFIED LABORATORY TO PROVE MATERIAL SPECIFICATIONS (YIELD STRENGTH, TENSILE STRENGTH AND CHEMICAL COMPOSITION). THE RESULTS OF THIS TESTING SHALL BE PROVIDED TO THE PRINCIPAL FOR REVIEW PRIOR TO THE ACCEPTANCE OF THE MATERIAL ORDER.
65. ALL BOLTS SHALL HAVE:

-MINIMUM DIAMETER M16 UNLESS NOTED OTHERWISE ON THE DRAWINGS;

-WASHERS PLACED UNDER ALL BOLT HEADS AND NUTS
66. UNO ALL WASHERS SHALL HAVE THE FOLLOWING SIZES:

a. M20 AND SMALLER – CONFORMING TO AS 1720.1.

b. M24 – 85 mm SQUARE x 6 mm THICK

c. M30 – 100 mm SQUARE x 8 mm THICK
67. ALL BOLTS SHALL BE INSTALLED WITH NYLOC DOME NUTS
68. USE BOLTS WITH SUFFICIENT THREAD LENGTH TO ALLOW FOR FUTURE TIGHTENING DUE TO SHRINKAGE OF TIMBERS.
69. THE CONTRACTOR SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND TIMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED IN THE DRAWINGS
70. WHERE CHEMICALLY FIXING RODS OR DOWELS INTO CONCRETE HILTI RE-500 OR SIMILAR APPROVED UNLESS NOTED OTHERWISE - REFER TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
71. ALL GROUT/ EPOXY USED SHALL BE SUITABLE FOR USE IN A MARINE ENVIRONMENT.
72. BOLTS SHALL BE RETIGHTENED BY THE CONTRACTOR AT THE END OF THE 12 MONTHS DEFECTS LIABILITY PERIOD.

TIMBER

73. MATERIALS, WORKMANSHIP AND TESTING SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING AUSTRALIAN STANDARDS INCLUDING ANY AMENDMENTS THERETO TO THE EXTENT THAT THEY ARE RELEVANT AND ARE NOT OVERRIDDEN BY THE SPECIFICATION.

-AS 1720 TIMBER STRUCTURES

-AS 2082 TIMBER-HARDWOOD-VISUALLY STRESS-GRADED FOR STRUCTURAL PURPOSES
74. TIMBER SHALL BE SOURCED FROM SUSTAINABLE MANAGED FORESTS WITHIN AUSTRALIA ONLY.
75. TIMBER DECKING SHALL BE KILN DRIED, SIZED, ARRISSED, STRUCTURAL GRADE 1 OR 2 TO AS 2082, ABOVE-GROUND DURABILITY CLASS 1 TO AS 5604, MIN. F27 HARDWOOD.
76. TIMBER JOISTS, HEADSTOCKS, WALERS ETC SHALL BE STRUCTURAL GRADE 1 OR 2, ABOVE-GROUND DURABILITY CLASS 1, F17 HARDWOOD SELECTED FROM THE FOLLOWING SPECIES UNLESS LOCATED IN THE TIDAL ZONE:

-GREY IRONBARK

-GREY GUM

-WHITE MAHOGANY

-TALLOWWOOD

-GREY BOX

- WOOLYBUTT
- SPOTTED GUM
77. ALL SAWN TIMBER SHALL BE PRESERVATIVE TREATED TO HAZARD CLASS H4 IN ACCORDANCE WITH AS 1604, EXCEPT SAWN TIMBER IN THE TIDAL OR SUBMERGED ZONE SHALL BE UNTREATED TURPENTINE STRUCTURAL GRADE 1 OR 2 TO AS 2082.
78. SAWN TIMBER SHALL BE SQUARE, SMOOTH, STRAIGHT, FREE FROM AXE MARKS AND SAPWOOD. TIMBER SHALL BE SOUND AND FREE FROM IMPAIRING GRUB HOLES, LIVE INSECTS, DECAY, KNOT HOLES, HEART ROT, KNOTS OTHER THAN SOUND INTERGROWN KNOTS, UNSOUND HEART, PIPE, RING SHAKES, SPLITS, TRANSVERSE SHAKES, EXCESSIVE WANE OR WANT, OR OTHER DEFECTS LIABLE TO IMPAIR THE UTILITY OF THE PIECE.
79. ALL TIMBER MEMBERS SHALL BE FIXED IN ACCORDANCE WITH THE DRAWINGS. BUTTING OR SPLICING, OTHER THAN SHOWN ON THE DRAWINGS, IS NOT PERMITTED.
80. TIMBERWORK SHALL BE EXECUTED USING NORMAL TECHNIQUES OF BRIDGE AND WHARF CARPENTRY. LAY SEASONED DECK PLANKS WITH 5 mm GAP. ALL JOINTS SHALL BE NEATLY MADE IN ORDER TO OBTAIN A TIGHT FIT; WEDGING OR PACKING SHALL NOT BE PERMITTED. UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, EACH PIECE OF TIMBER USED SHALL BE CONTINUOUS THROUGHOUT ITS LENGTH, AND THE ENDS OF THE TIMBER SHALL BE SAWN SQUARE AND WROUGHT TRUE AT ALL CONTACTING SURFACES.
81. ALL HOLES FOR BOLTS WHERE SPECIFIED AND OTHER FASTENINGS SHALL BE BORED TRUE AND ALL JOINTS SHALL BE CUT SO AS TO FIT ACCURATELY AND TIGHTLY. UNLESS OTHERWISE SPECIFIED, HOLES FOR BOLTS SHALL BE BORED WITH AUGERS WITH A DIAMETER NOT MORE THAN TWO (2) MILLIMETRES LARGER THAN THE NOMINAL DIAMETER OF THE BOLT. ALL TIMBER JOINTS AND CONNECTORS ARE TO BE 100 mm MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
82. ALL TIMBER SHALL BE STACKED ON SITE, AFTER DELIVERY, CLEAR OF THE GROUND BY USING ADEQUATE SUPPORTS AND ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT THE TIMBER DOES NOT DETERIORATE OR SUFFER ANY DAMAGE. THE HANDLING AND STACKING OF TIMBER SHALL AT ALL TIMES BE SUCH AS TO AVOID SURFACE AND EDGE DAMAGE ALL TIMBER PRODUCTS SHALL BE KEPT COVERED AT ALL TIMES TO PREVENT DAMAGE FROM THE SUN, SEA AND RAIN.
83. ANY TIMBERS IN THE TIDAL ZONE, CONTACT SURFACES (TIMBER TO TIMBER INTERFACE), EXPOSED ENDS OF TIMBERS, ALL CUT OR TRIMMED SURFACES EXPOSING THE END GRAIN, AND ALL BOLT HOLES AND BOLT RECESSES, SHALL BE PROTECTED WITH "PABCO HYDROSEAL", "PABCO COLORCOTE", "BLACKJACK BITUMEN PAINT" OR OTHER PROTECTIVE SURFACING AS APPROVED BY THE SUPERINTENDENT.
84. ALL VERTICAL RECESSES SHALL BE FILLED WITH A PORION EXTERIOR FLEXIBLE FILLER – COLOUR GREY
85. A LAYER OF 2 PLY MALTHOID SHALL BE LAID ON ANY AND ALL HORIZONTAL CONTACT SURFACES BETWEEN TIMBERS. THE MALTHOID SHALL EXTEND A MINIMUM OF 20 MM BEYOND THE CONTACT SURFACE AND SHALL BE TURNED DOWN TO SHED WATER. BOLTS IN THE TOP OF HORIZONTAL MEMBERS WHERE RECESSED ARE TO HAVE THEIR DEPRESSIONS FILLED WITH PARCHEM PLASTISEAL OR APPROVED EQUIVALENT.

D2 FOR TENDER

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PROJECT

PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE

GENERAL NOTES - SHEET 2



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86. AN INSPECTION CERTIFICATE CERTIFYING COMPLIANCE OF ALL  
TIMBER WITH THE SPECIFICATION SHALL BE SUBMITTED TO THE  
SUPERINTENDENT PRIOR TO ITS INCORPORATION INTO THE WORKS.  
ALL NEW TIMBER SHALL BE DELIVERED TO SITE IN SOUND  
CONDITION. DURING THE COURSE OF THE WORKS, SHOULD THE  
SUPERINTENDENT FIND THAT ANY PORTION OF DELIVERED OR FIXED  
NEW TIMBER HAS BECOME DAMAGED, IT WILL BE REJECTED AND  
REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
87. SCREWS FOR TIMBER DECKING TO BE 6mm DIAMETER STAINLESS  
STEEL GRADE 316 COUNTERSUNK AND TO EXTEND AT LEAST 50mm  
INTO JOISTS.
88. 2 SCREWS PER DECK PLANK PER JOIST SHALL BE INSTALLED AND  
OFFSET TO AVOID SPLITTING OF THE TIMBER BENEATH.
89. RETIGHTEN ALL BOLTS WHEN FULL LOAD IS APPLIED, AND AT THE  
COMPLETION OF WORK AND AT THE END OF THE DEFECTS LIABILITY  
PERIOD.
90. DETAILING OF FINISHES SHALL ALLOW FOR DRYING SHRINKAGE OF  
TIMBER.
91. SS GRADE 316 ANTI SPLIT NAIL PLATES SHALL BE USED ON THE ENDS  
OF ALL TIMBERS.

PAINTING OF TIMBERS

92. TIMBERS ARE TO BE PAINTED WHEN THE TIMBER ACHIEVES AN  
OPTIMUM MOISTURE CONTENT OF 10-15%.
93. PRIOR TO PAINTING TIMBERS ARE TO BE CLEANED TO REMOVE ALL  
SURFACE CONTAMINANTS INCLUDING DETERIORATED TIMBER.
94. ALL CRACKS, GROOVES AND THE LIKE SHALL BE FILLED WITH AN  
APPROPRIATE POLYESTER SANDING PUTTY OR FILLER TO PROVIDE A  
SMOOTH FLAT SURFACE LEVEL WITH SURROUNDING SURFACES.
95. ALL BARE TIMBER SHALL BE PRIMED USING A PROPRIETARY PRIMER  
RECOMMENDED BY THE FINISH COAT. THE SYSTEM SHALL BE  
RECOMMENDED BY THE MANUFACTURER FOR USE IN AN EXPOSED  
MARINE ENVIRONMENTS.
96. THE TOPCOAT PAINT USED SHALL BE A SEMI-GLOSS WATER-BORNE  
EXTERIOR GRADE ACRYLIC EMULSION PAINT, APPLIED IN TWO (2) OR  
MORE COATS BY BRUSH, ROLLER OR SPRAY AT A SPREADING RATE  
CORRESPONDING TO A TOTAL DFT OF AT LEAST 100 MM.

RECYCLED PLASTIC

97. ALL PLASTIC USED IN THE WORKS SHALL BE SUPPLIED BY  
AUSTRALIAN RECYCLED PLASTICS OR APPROVED EQUIVALENT.
98. ALL PROFILES USED SHALL BE SOLID IN PROFILE
99. ALL DECKING BOARDS SHALL BE A PREPREG GRIT COATED IN THE  
FACTORY USING A MEDIUM DAND AGGREGATE
100. RECYCLED PLASTIC USED IN THE WORKS SHALL HAVE THE  
FOLLOWING PROPERTIES

a. ESLS = 3150 MPA

b. Fb = 21 MPA

c. FV= 7.1 MPA
101. SCREWS FOR DECKING TO BE 6mm DIAMETER STAINLESS  
STEEL GRADE 316 COUNTERSUNK AND TO EXTEND AT LEAST 50MM  
INTO MATERIAL BENEATH.

FRP BEAMS

102. FRP BEAMS USED IN THE WORKS SHALL BE COMPRISED OF  
ARCHITEX FRP BEAMS BY TREADWELL OR EQUAL.

103. RESIN SYSTEM USED SHALL BE V SERIES by TREADWELL
104. ALL BEAMS SHALL HAVE A BLACK FINISH.

CONCRETE FORMWORK

105. ALL CONCRETE FORMWORK SHALL ACHIEVE A CLASS 2 FINISH  
TO AS 3610.
106. THE DESIGN CERTIFICATION, CONSTRUCTION AND  
PERFORMANCE OF THE FORMWORK AND FALSEWORK ARE THE  
RESPONSIBILITY OF THE CONTRACTOR.
107. DESIGN AND CONSTRUCTION AND STRIPPING TIMES SHALL  
COMPLY WITH AS 3610 AND AS 3600.
108. DURING CONSTRUCTION, APPLIED LOADS SHALL NOT EXCEED  
THE DESIGN CAPACITY OF THE STRUCTURE.
109. INSITU MEMBERS SHALL NOT BE LOADED UNTIL AT LEAST  
7 DAYS AFTER A CURING PERIOD OF 7 DAYS HAS ELAPSED,  
UNLESS APPROVED OTHERWISE.

CONCRETE

110. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE  
WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT  
WHERE VARIED BY THE SPECIFICATION HEREIN OR BY THE  
DRAWINGS.
111. CONCRETE USED IN THE WORKS SHALL BE REINFORCED  
CONCRETE AND SHALL SATISFY THE FOLLOWING  
REQUIREMENTS:

<u>PROPERTY</u>	
EXPOSURE CLASSIFICATION (TO AS 4997)	C2
MINIMUM 28 DAY COMPRESSIVE STRENGTH	50MPa
CEMENT TYPE	GP
CEMENT CONTENT (MINIMUM)	400kg/m <sup>3</sup>
WATER CEMENT RATIO (MAXIMUM)	0.4
APPROVED ADMIXTURES FOR INCREASED	FLY-ASH; AND
WORKABILITY	SUPERPLASTICISER
MIXING OF ADMIXTURES TO BE AS ADVISED BY THE MANUFACTURER	
	AND APPROVED BY THE SUPERINTENDENT
AGGREGATE SIZE (MAXIMUM)	20mm
CLEAR COVER TO REINFORCEMENT (MIN.)	75mm
SURFACE FINISH	
FORMED	CLASS 2
-TRAFFICABLE SURFACE	COVED FINISH

112. THE CONCRETE USED FOR THE GROYPNE SHALL BE CCS CANVAS  
COLOUR OR APPROVED EQUIVALENT. PRIOR TO ORDERING  
CONCRETE FROM A SUPPLIER, THE CONTRACTOR SHALL SUBMIT A  
SAMPLE TO THE PRINCIPAL TO APPROVE THE COLOUR PRIOR TO  
ORDERING.
113. SUBJECT TO THE SUPERINTENDENT'S PRIOR APPROVAL, THE ABOVE  
SPECIFIED CONCRETE MIX MAY BE REVISED TO SUIT A PARTICULAR  
MIX PROPOSED BY A SUPPLIER.
114. THE FINISHED CONCRETE SHALL BE DENSE HOMOGENEOUS MASS,  
COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING  
THE REINFORCEMENT AND FREE OF STONE POCKETS. CONCRETE  
SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
115. TESTING AND ASSESSMENT FOR COMPLIANCE OF CONCRETE SHALL  
BE CARRIED OUT IN ACCORDANCE WITH AS 1379.
116. ALL EXPOSED AND SHARP ARISES SHALL HAVE A 25mm x 25mm  
CHAMFER.

117. COVER TO REINFORCEMENT TO BE MAINTAINED AT CHAMFERS, DRIP  
GROOVES, REGLETS, ETC.
118. CONSTRUCTION JOINTS SHALL BE ONLY WHERE SHOWN.
119. DURING AND IMMEDIATELY FOLLOWING POURING, THE CONCRETE  
SHALL BE PROTECTED FROM THE DRYING EFFECTS OF WIND AND  
SUN. AWNINGS AND WIND BREAKS ARE TO BE UTILISED AS  
NECESSARY.
120. CURING OF ALL CAST INSITU CONCRETE SHALL BE ACHIEVED BY:

a. KEEPING FORMWORK IN PLACE FOR AT LEAST 72 HOURS  
AFTER CASTING

b. KEEPING EXPOSED SURFACES CONTINUOUSLY WET FOR A  
PERIOD OF 72 HOURS AFTER CASTING

c. PREVENTING LOSS OF MOISTURE FOR A FURTHER 7 DAYS,  
FOLLOWED BY A GRADUAL DRYING OUT

d. UTILISE POLYTHENE SHEETING OR WET HESSIAN AS  
NECESSARY TO PROTECT CONCRETE SURFACES FROM  
WIND AND TRAFFIC.
121. THE FINISHED CONCRETE SURFACE SHALL BE FREE OF CRACKS  
HAVING A CRACK WIDTH EQUAL TO OR GREATER THAN 0.2 mm AT  
THE END OF THE DEFECTS LIABILITY PERIOD. IF CRACKING EXCEEDS  
THIS LIMIT, THE CONTRACTOR SHALL MAKE GOOD, AT HIS EXPENSE,  
THE CRACKS TO THE SATISFACTION OF THE SUPERINTENDENT  
WHICH MIGHT COMPRISE REPLACEMENT OF CONCRETE ELEMENT OR  
SEALING THE CRACKS OR OTHER WORKS.

STEEL REINFORCEMENT

122. ALL STEEL REINFORCEMENT AND TIES IS TO BE HOT DIPPED  
GALVANISED TO AS 4680.
123. ALL REINFORCEMENT USED IN THE WORKS SHALL BE GRADE 500 N  
REINFORCEMENT.
124. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY ON  
DRAWINGS AND NOT NECESSARILY IN TRUE PROJECTION.
125. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON APPROVED  
CHAIRS PLACED AT A MAXIMUM 1000mm CENTRES BOTH WAYS.  
PLASTIC AND STEEL CHAIRS ARE NOT TO BE USED. CONCRETE  
BLOCKS SHALL BE MADE FROM THE SAME GRADE OF CONCRETE AND  
DURABILITY TO BE POURED AROUND THE BLOCK.
126. BARS SHALL BE TIED IN ALTERNATE INTERSECTIONS.
127. STEEL REINFORCEMENT LAP LENGTHS AND COG LENGTHS SHALL BE  
IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE  
DEVELOPMENT FOR EACH BARS AND SHALL BE A MINIMUM AS  
FOLLOWS:

BAR DIA	LAP LENGTH	COG LENGTH
(mm)	(mm)	(mm)
12	400	200
16	500	200

128. THE SUPERINTENDENT SHALL BE GIVEN 24 HOURS' NOTICE FOR  
REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE  
DELIVERED UNTIL SUCH INSPECTION HAS TAKEN PLACE.

SANDSTONE

129. INDIVIDUAL BLOCKS SUPPLIED TO THE SITE FOR CONSTRUCTION OF  
THE STONEMWORK SHALL BE FRESH OR ONLY SLIGHTLY WEATHERED,  
NON-FRIABLE, AND FREE FROM CRACKS, JOINTS, SEAMS, BEDDING

D2 FOR TENDER

NOT FOR CONSTRUCTION

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP
REVISIONS					
CLIENT					
<div><div>northern beaches council</div></div>					
PROJECT					
PARADISE BEACH TIDAL POOL REPLACEMENT					
TITLE					
GENERAL NOTES - SHEET 3					
<div><div>Royal HaskoningDHV Enhancing Society Together</div></div> <div><small>Laan 1914 no 35 3818 EX Amersfoort Tel: +31 (0)88 348 50 00 info@rhdhv.com www.royalhaskoningdhv.com</small></div>					
DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0004	SUITABILITY	S2	REVISION	C

PLANES CROSS-LAMINATIONS, SAND BALLS, CARBONATE CONCRETIONS, CHEMICAL ALTERATION AND OTHER DEFECTS WHICH COULD CONTRIBUTE TO THE ACCELERATED BREAKDOWN OF THE STONE AT A COASTAL SITE. THE SANDSTONE SHALL ACHIEVE THE FOLLOWING ACCEPTANCE PROPERTIES:

PROPERTY	TEST METHOD	CRITERIA	TEST FREQUENCY
SECONDARY OR DEUTERIC MINERALS	PETROGRAPHIC EXAMINATION	ROCKS MUST BE UNWEATHERED WITHOUT SIGNIFICANT QUANTITIES OF DELETERIOUS MINERALS AND EXPANSIVE CLAY MATERIALS, OR UNFAVOURABLE DELINEATIONS WITHIN THE MICROFABRIC	ONE TEST PRIOR TO SUPPLY
STRENGTH	DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH (AS4133.4.2 OR ASTM C170M) OR IS(50) POINT LOAD (WET) (AS 4133.4.1)	25 MPA (AS4133.4.2)  OR  >1.5 MPA (AS4133.4.1)	ONE TEST SAMPLE
DENSITY	DRY UNIT WEIGHT (AS 1141.6.1)	>2.25 T/M³	ONE TEST SAMPLE
DURABILITY	RESISTANCE TO SALT ATTACK MEAN MASS LOSS (AS/NZS4456.10)	<0.1% (CLASS AA)	TWO TEST SAMPLES

130. THE CONTRACTOR SHALL SUBMIT DOCUMENTATION OF THE ABOVE PROPERTIES TO THE PRINCIPAL PRIOR TO ACCEPTANCE OF THE BLOCKS.
131. THE SIDE FACES OF THE SANDSTONE BLOCK SHALL BE SAW CUT WITH THE EXTERIOR FACE CHISELLED TO PROVIDE A NATURAL FINISH. ON THE TOP AND BOTTOM OF THE SANDSTONE BLOCK A TOLERANCE OF +/- 5MM MUST BE ADHERED TO FACILITATE PLACEMENT OF BLOCK; THIS MAY REQUIRE FACTORY DIAMOND CUTTING.
132. A SAMPLE BLOCK SHALL BE FABRICATED TO FINISHING'S AS SPECIFIED ABOVE FOR PRINCIPAL INSPECTION AND APPROVAL PRIOR TO PREPARING ALL BLOCKS.
133. GROUT BEDDING OF SANDSTONE BLOCKS SHALL BE IN ACCORDANCE WITH AS3700 TYPE M4 MORTAR CLASS AND SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 32 MPA. THE CONTRACTOR SHALL SUBMIT A PROPOSED PRODUCT FOR ACCEPTANCE BY THE PRINCIPAL.
134. POINTING SHALL BE FINISHED FLUSH WITH THE STONEMWORK.
135. FINISHED POINTING MORTAR SHALL BE PROTECTED FROM RAIN AND FROM RAPID DRYING.
136. THE WORKS SHALL BE COVERED IN HESSIAN AND HEAVY-DUTY PLASTIC SHEETING AT THE END OF EACH DAY'S WORK TO PREVENT. UNWANTED WETTING OR RAPID CURING OF THE MORTAR.
137. ON COMPLETION OF THE STONEMASONRY WORKS, THE STONEMWORK SHALL BE CLEANED DOWN TO REMOVE ALL DUST, DEBRIS AND OTHER GENERAL SOILING USING FRESH WATER.

COMPLETION

138. UPON COMPLETION OF THE WORKS BUT PRIOR TO PRACTICAL COMPLETION, THE AREAS OF THE SITE SHALL BE CLEARED OF ALL SURPLUS MATERIALS, SPOIL, PLANT, SITE SHEDS, NOTICE BOARDS, FENCES AND THE LIKE TO THE SATISFACTION OF THE SUPERINTENDENT.
139. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL SURPLUS SPOIL AND RUBBISH. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FINAL CLEANING UP OF ALL AREAS COVERED BY THE CONTRACT WHICH SHALL BE LEFT CLEAN AND TIDY ON COMPLETION OF THE CONTRACT. IN PARTICULAR THIS INCLUDES THE ROAD AREA AND NEIGHBOURING BUSHLAND AREA.
140. ANY AREAS UTILISED BY THE CONTRACTOR FOR EXECUTION OF THIS CONTRACT SHALL BE FULLY RESTORED TO NOT LESS THAN THE PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
141. THE CONTRACTOR SHALL CONDUCT A POST CONSTRUCTION SURVEY WITH THE PROVISION OF AS BUILT DRAWINGS.

D2 FOR TENDER

NOT FOR CONSTRUCTION

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.08.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



northern  
beaches  
council

PROJECT

PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE

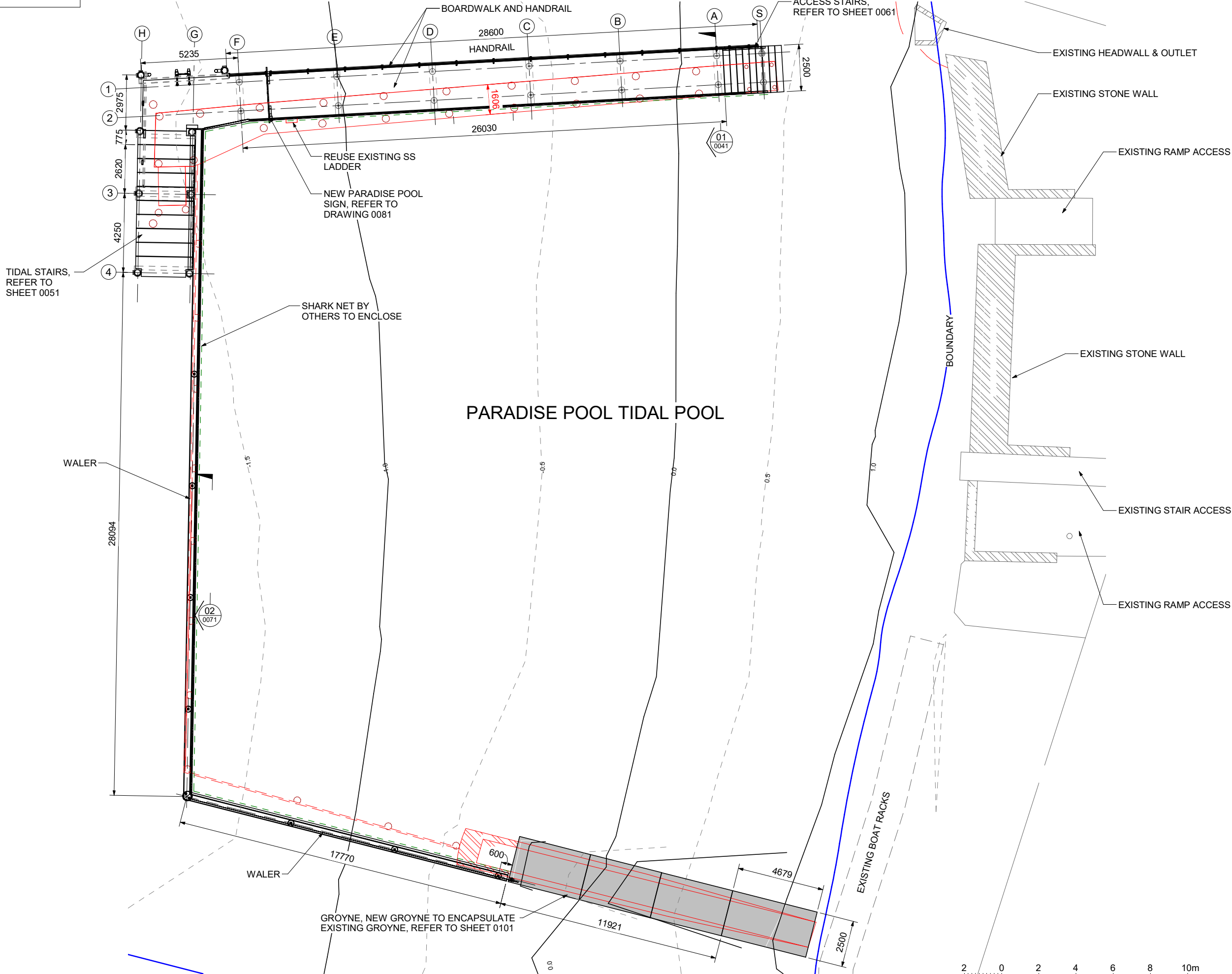
GENERAL NOTES - SHEET 4



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DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0005	SUITABILITY	S2	REVISION	C



NOTES:

1. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE GENERAL NOTES. REFER TO SHEETS 0002 TO 0005.
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.

REV	DATE	DESCRIPTION	BY	CHK	APP
D	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
C	17.06.2022	FOR TENDER	BR	HHZ	SHJ
B	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
A	25.02.2022	FOR REVIEW	BR	TE	SHJ

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
GENERAL ARRANGEMENT

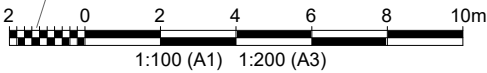


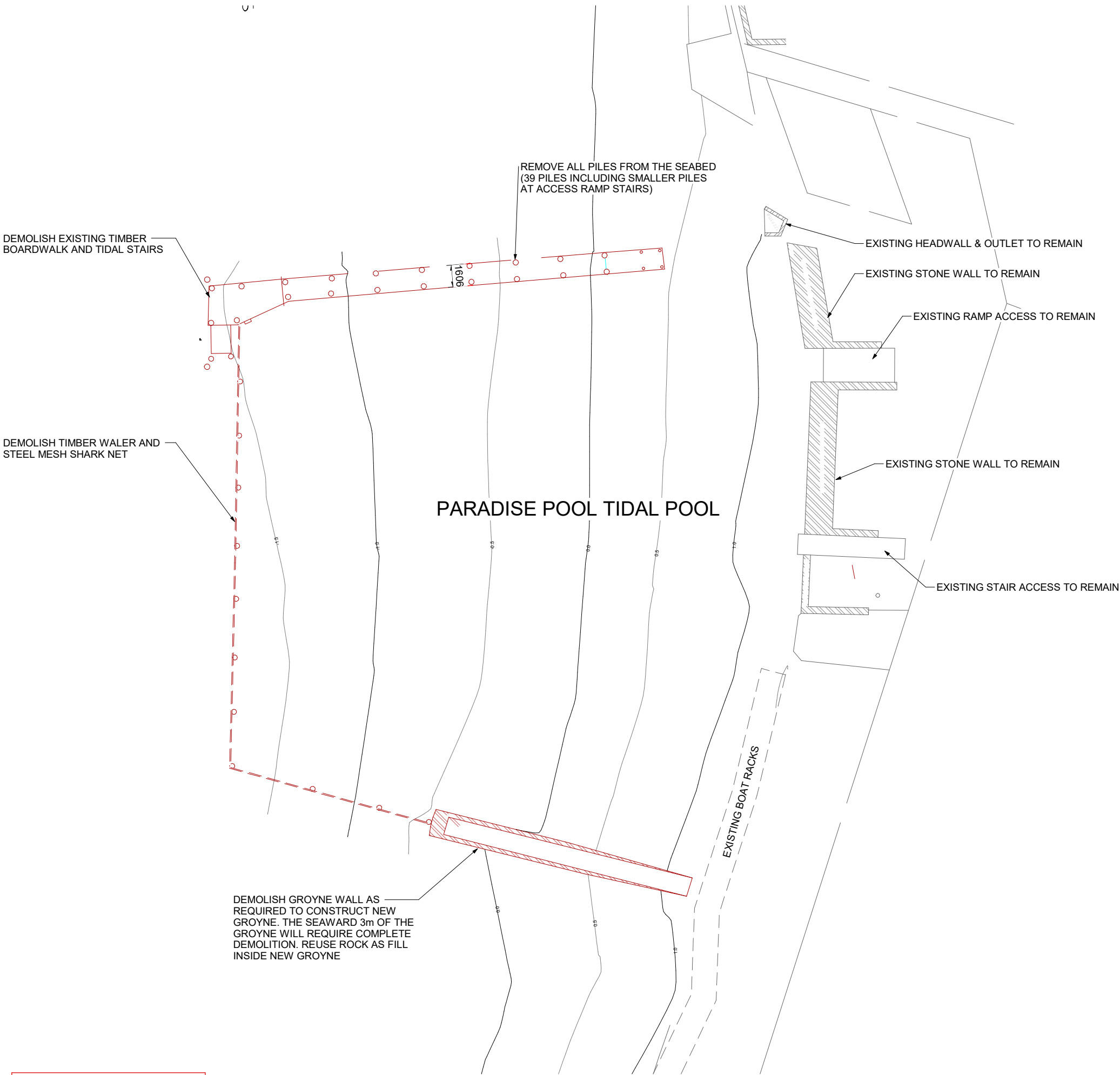
DRAWN	BR	CHECKED	TE	APPROVED	SH
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0011	SUITABILITY	S2	REVISION	B1

NOT FOR CONSTRUCTION

D2 FOR TENDER

SITE PLAN  
1 : 100(A1)





PARADISE POOL TIDAL POOL

DEMOLITION PLAN  
1 : 150(A1)

NOT FOR CONSTRUCTION      D2      FOR TENDER

- NOTES:**
1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
  2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
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REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

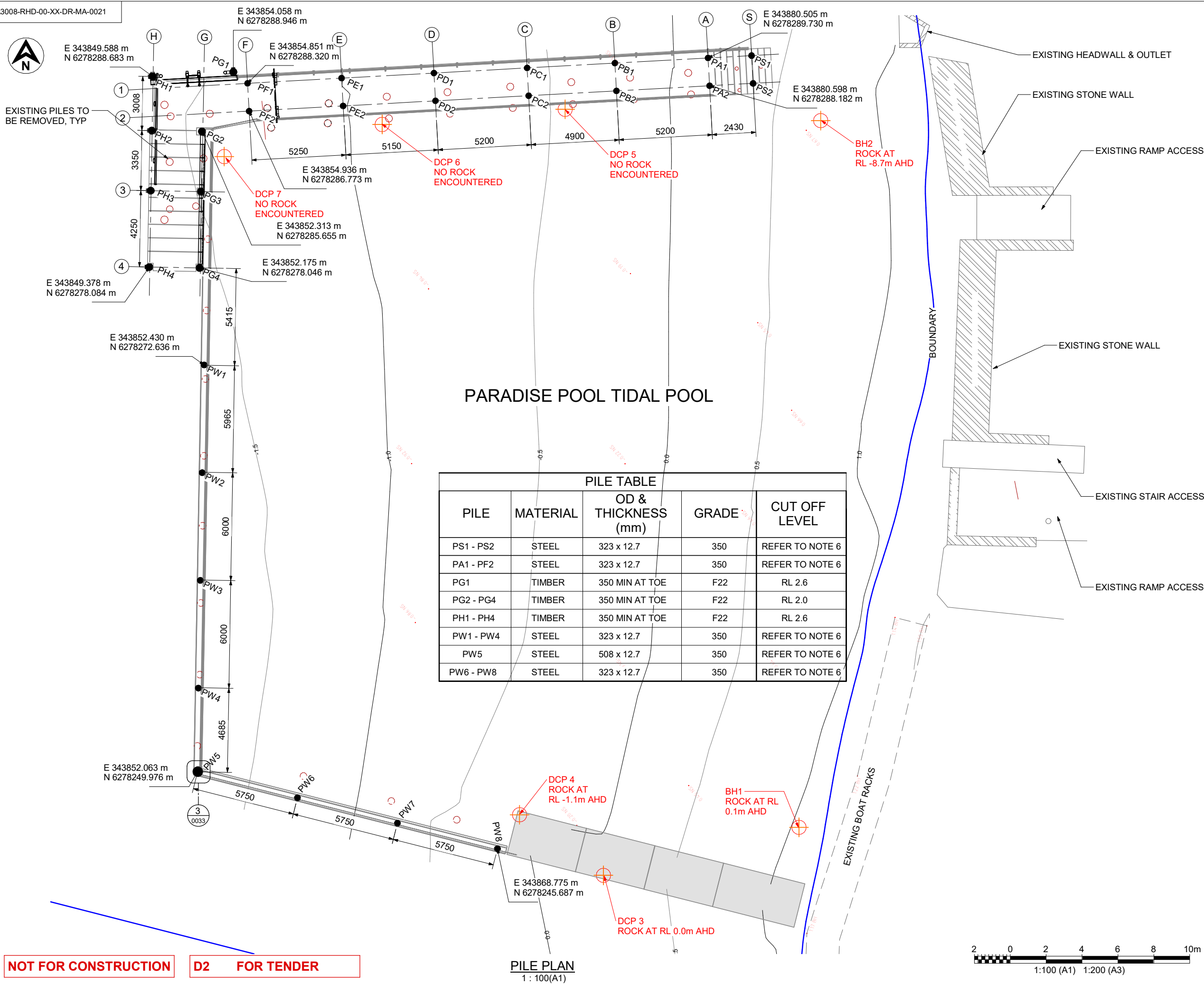
TITLE  
DEMOLITION PLAN



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	1 : 150	REF.
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0012	SUITABILITY	S2	REVISION	C



EXISTING PILES TO BE REMOVED, TYP



NOT FOR CONSTRUCTION D2 FOR TENDER

PARADISE POOL TIDAL POOL

PILE TABLE				
PILE	MATERIAL	OD & THICKNESS (mm)	GRADE	CUT OFF LEVEL
PS1 - PS2	STEEL	323 x 12.7	350	REFER TO NOTE 6
PA1 - PF2	STEEL	323 x 12.7	350	REFER TO NOTE 6
PG1	TIMBER	350 MIN AT TOE	F22	RL 2.6
PG2 - PG4	TIMBER	350 MIN AT TOE	F22	RL 2.0
PH1 - PH4	TIMBER	350 MIN AT TOE	F22	RL 2.6
PW1 - PW4	STEEL	323 x 12.7	350	REFER TO NOTE 6
PW5	STEEL	508 x 12.7	350	REFER TO NOTE 6
PW6 - PW8	STEEL	323 x 12.7	350	REFER TO NOTE 6

PILE PLAN  
1: 100(A1)

EXISTING HEADWALL & OUTLET

EXISTING STONE WALL

EXISTING RAMP ACCESS

EXISTING STONE WALL

EXISTING STAIR ACCESS

EXISTING RAMP ACCESS

BOUNDARY

EXISTING BOAT RACKS

NOTES:

1. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE GENERAL NOTES. REFER TO SHEETS 0002 TO 0005.
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL TIMBER PILES SHALL BE TURPENTINE WITH BARK LEFT ON.
4. CONTRACTOR TO PROVIDE CERTIFICATION FROM A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO CONFIRM MINIMUM PILE EMBEDMENTS (DRAWING 0031) AND DESIGN LOADS (NOTE 5) ARE ACHIEVED.
5. PILES TO BE SET TO PROVIDE AT LEAST 150kN DESIGN AXIAL CAPACITY AND DESIGN LATERAL CAPACITY SUFFICIENT FOR 30kN ULTIMATE LOAD APPLIED AT PILE HEAD.
6. CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF PILE CUT OFFS TO ACHIEVE THE SPECIFIED DESIGN LEVELS.
8. CONTRACTOR TO UNDERTAKE PRECONSTRUCTION SURVEY FOR THE PURPOSES OF CONFIRMING PILE LOCATION, EXISTING PILE LOCATION AND TO ENSURE PROPOSED PILES DO NOT COINCIDE WITH EXISTING PILES
- 9.REFER TO DRAWINGS 0031 TO 0033 FOR PILE DETAILS

D	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
C	17.06.2022	FOR TENDER	BR	HHZ	SHJ
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REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT

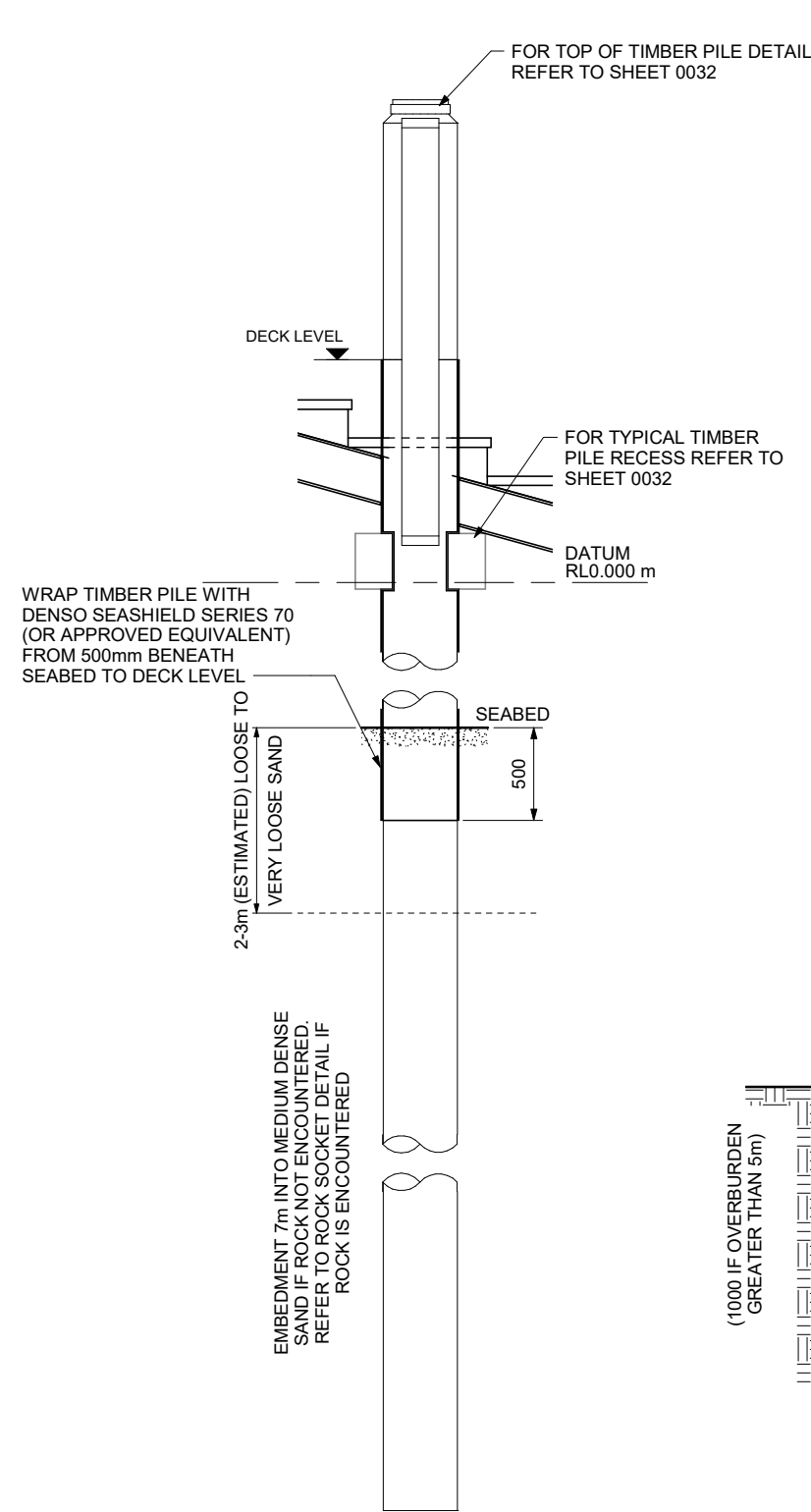


PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
PILE LAYOUT

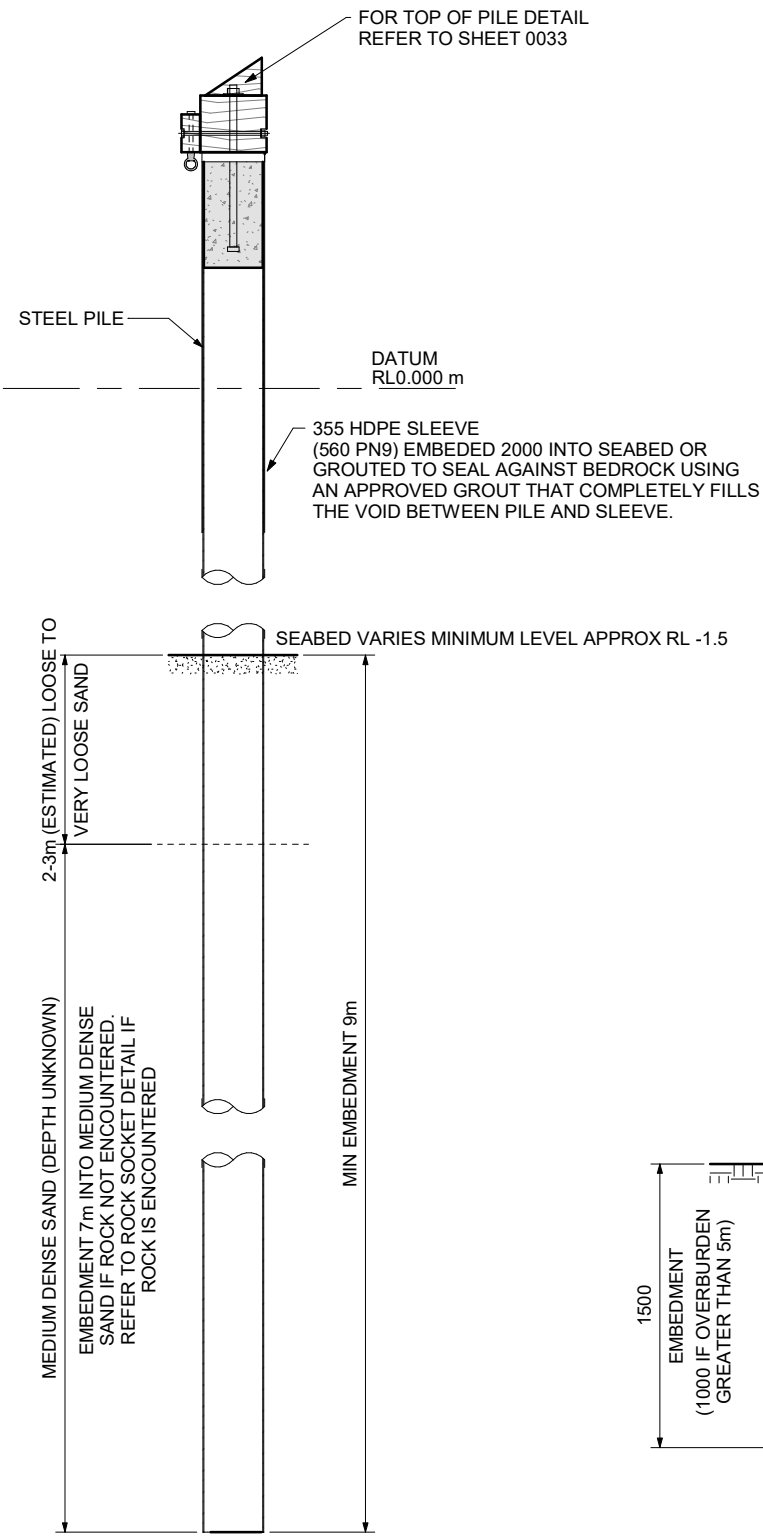


DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0021	SUITABILITY	S2	REVISION	D



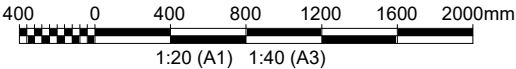
TYPICAL TIMBER PILE ROCK SOCKET  
1 : 20(A1)

TYPICAL TIMBER PILE  
1 : 20(A1)



TYPICAL STEEL PILE ROCK SOCKET DETAIL  
1 : 20(A1)

TYPICAL STEEL PILE  
1 : 20(A1)



NOTES:

1. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE GENERAL NOTES. REFER TO SHEETS 0002 TO 0005.
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
- 3.
4. GEOTECHNICAL INVESTIGATION UNDERTAKEN BY JK GEOTECHNICS REF 34640SJrpt
5. CONTRACTOR TO OBSERVE DRIVING CONDITIONS AND TO CONTACT DESIGNER IF DRIVING CONDITIONS INDICATE SOILS DIFFERENT TO ASSUMED GEOTECHNICAL LEVELS.
6. FOR TIMBER PILES REFER TO DRAWING 0032 AND FOR STEEL PILE DETAILS REFER TO DRAWING 0033

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
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REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS
CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
TYPICAL PILE ELEVATIONS



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0031	SUITABILITY	S2	REVISION	C

NOTES:

1. FOR GENERAL NOTES REFER TO  
SHEETS 0002 TO 0005

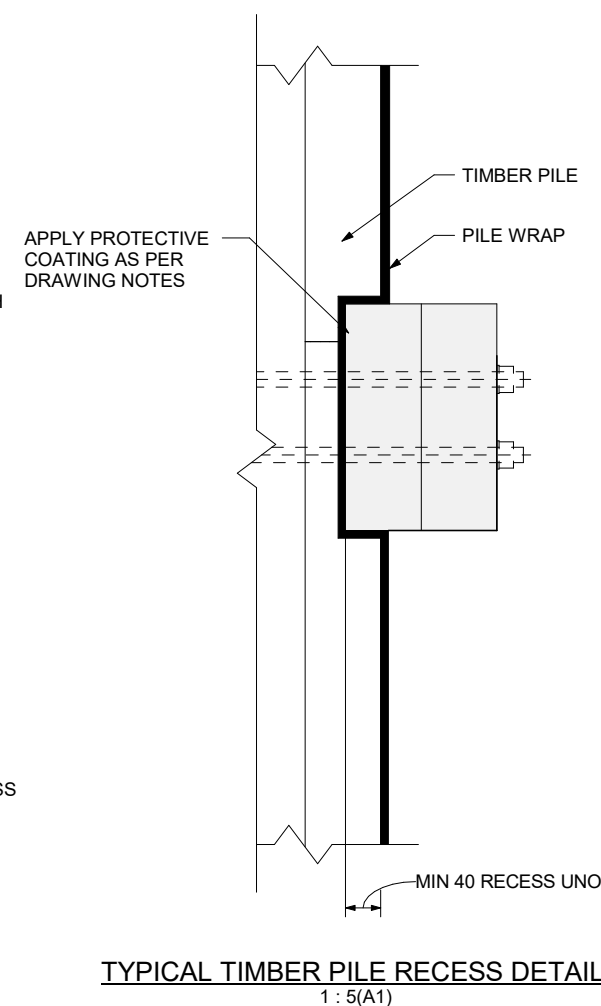
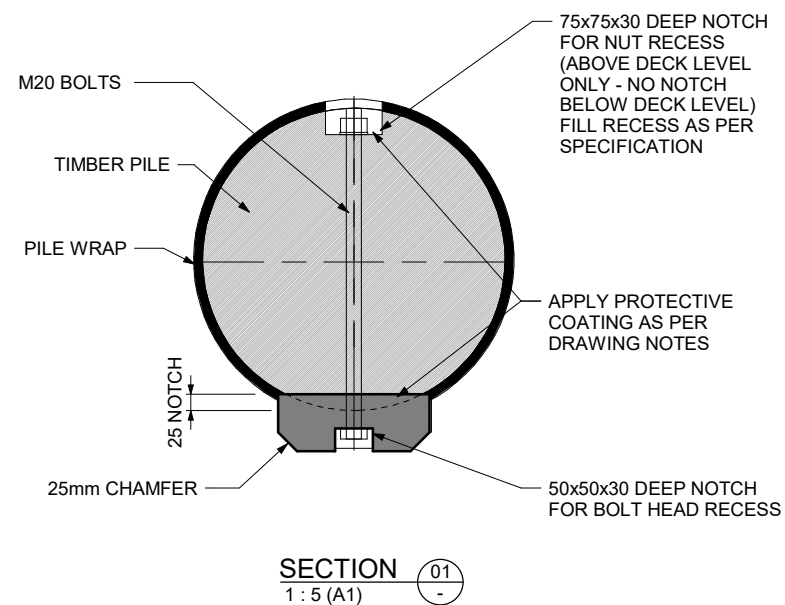
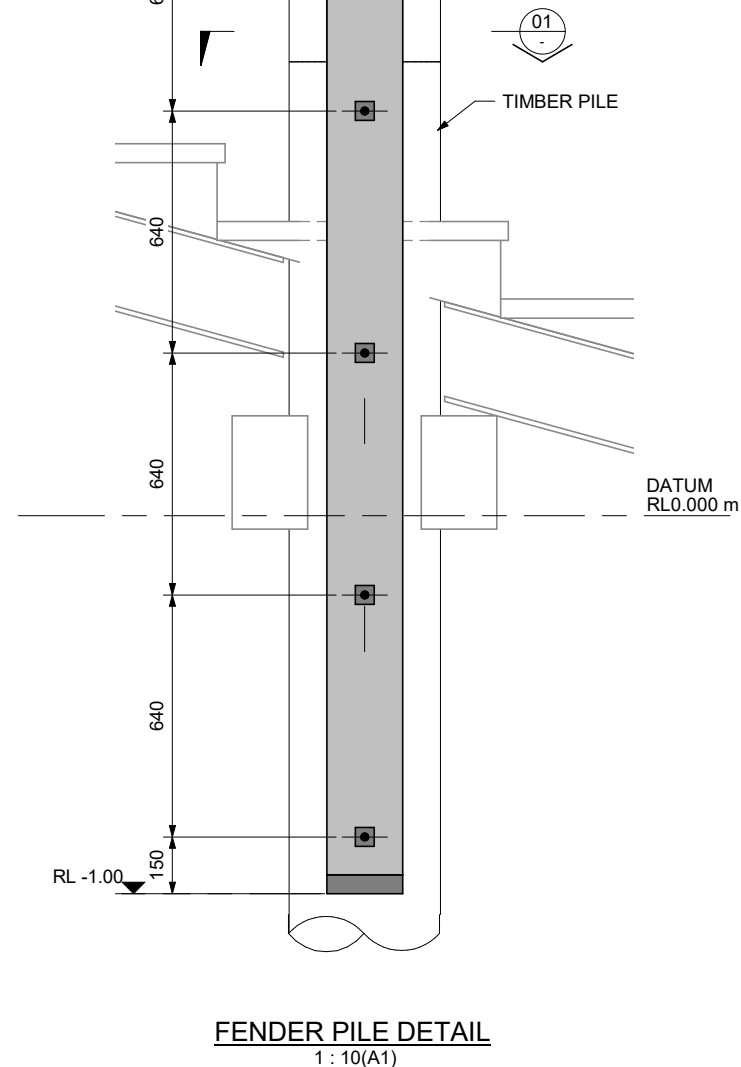
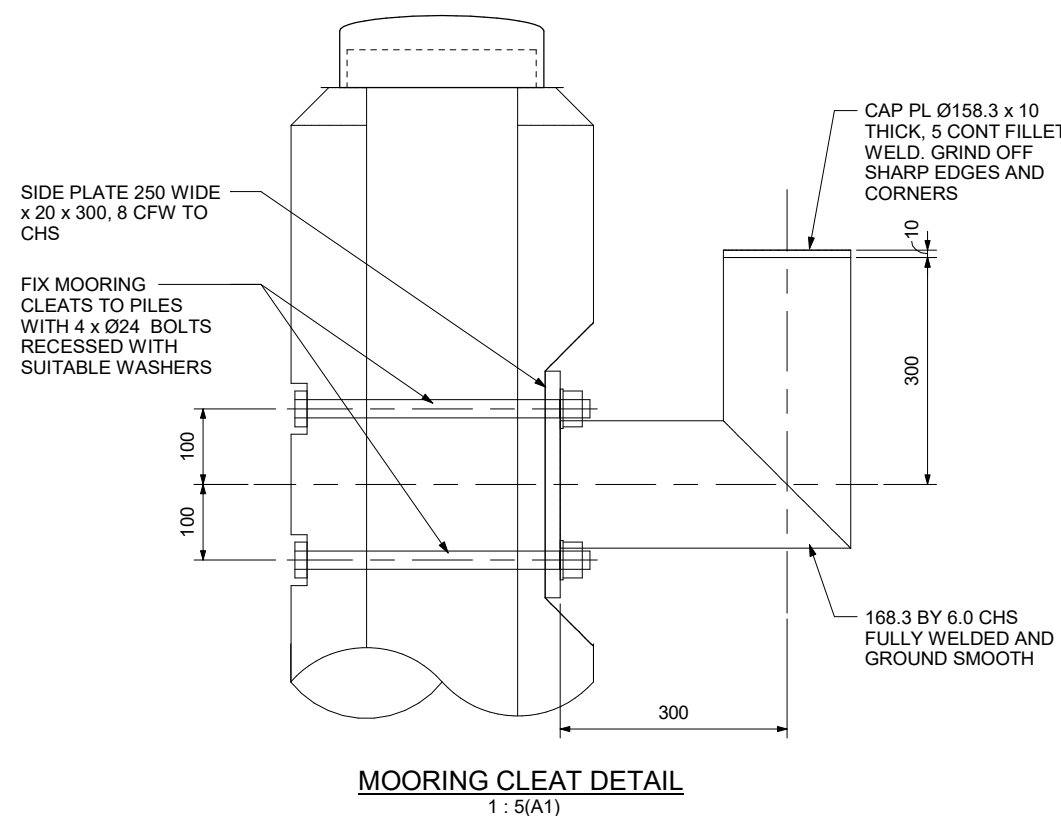
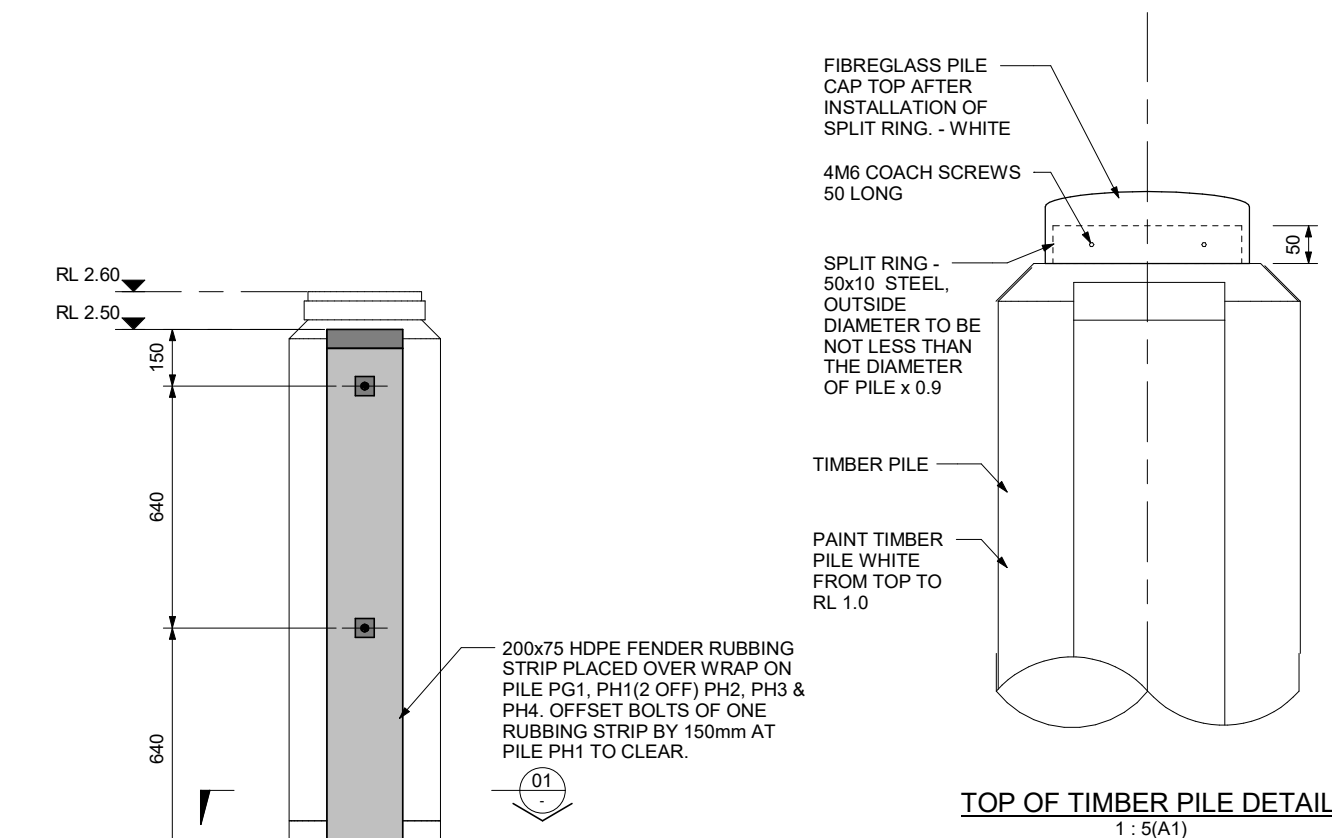
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.

3. ALL MATERIALS & WORKMANSHIP  
WILL BE AS DEFINED IN THE  
SPECIFICATION UNLESS NOTED  
OTHERWISE

4. ALL TIMBER PILES SHALL BE  
TURPENTINE WITH BARK LEFT ON.

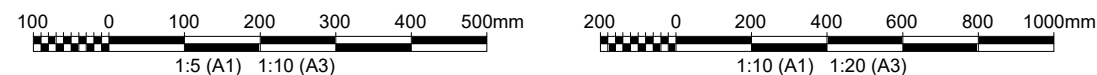
5. ALL STEELWORK, BOLTS AND  
FIXINGS TO BE STAINLESS STEEL  
UNLESS NOTED OTHERWISE.  
REFER TO GENERAL NOTES.

6. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, ALL RECESSES AND BOLT HOLES



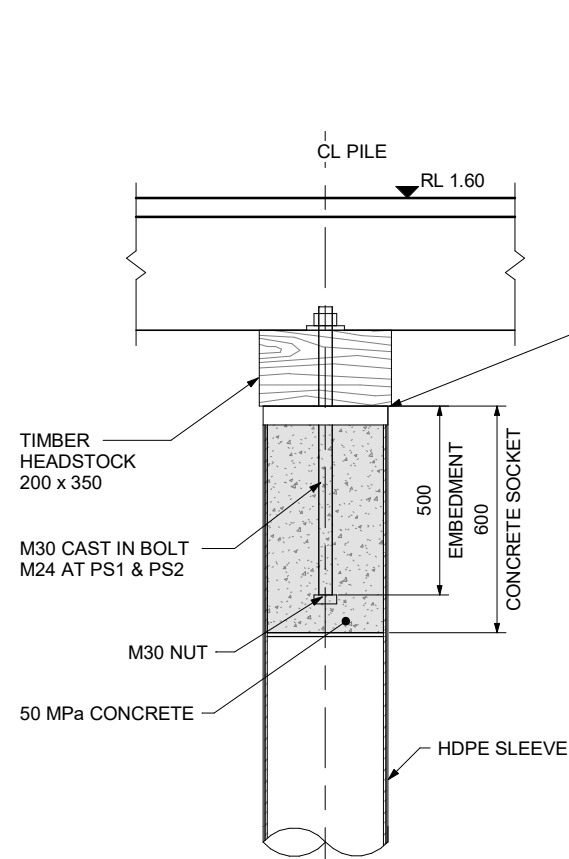
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D2 FOR TENDER

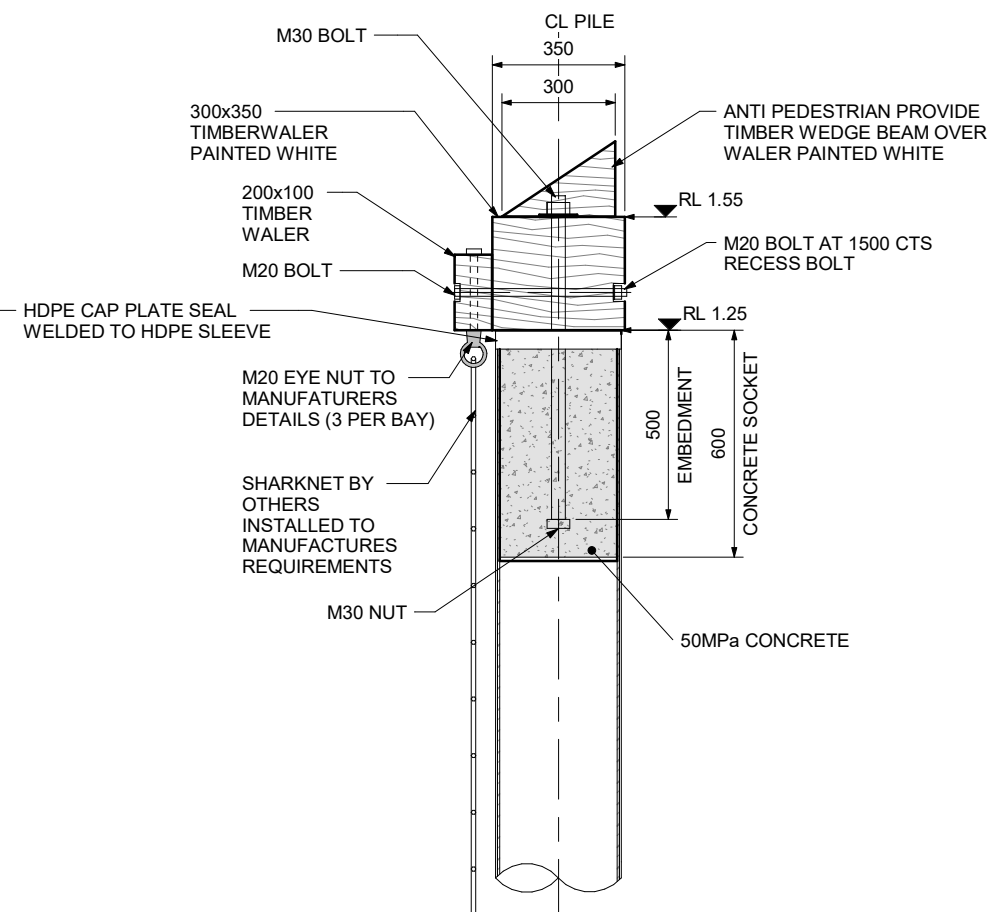


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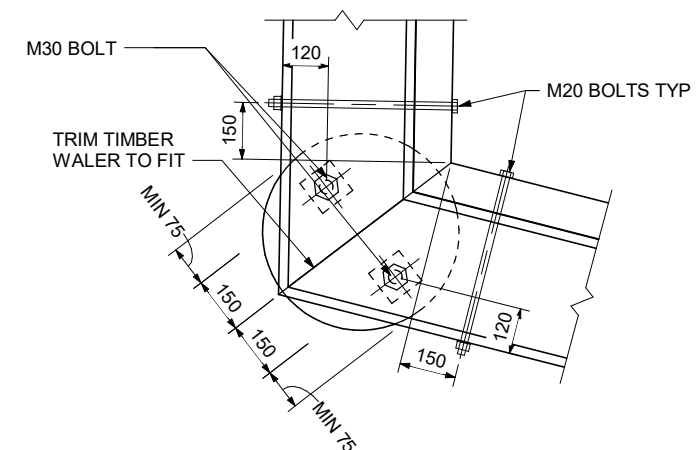
1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. 300 BY 350 WALER AND 200 BY 100 WALER AND ANTI PEDESTRIAN PIECE TO BE PAINTED WHITE AS PER THE SPECIFICATION
5. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL UNLESS NOTED OTHERWISE. REFER TO GENERAL NOTES.
6. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, ALL RECESSES AND BOLT HOLES



STEEL PILE TO HEADSTOCK DETAIL  
1 : 10(A1)



STEEL PILE TO WALER DETAIL  
1 : 10(A1)



DETAIL 3  
1 : 10 (A1) 0021

PW5 WALER CONNECTION DETAIL PLAN

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT	
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PROJECT
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## PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE
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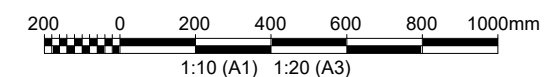
## STEEL PILE DETAILS

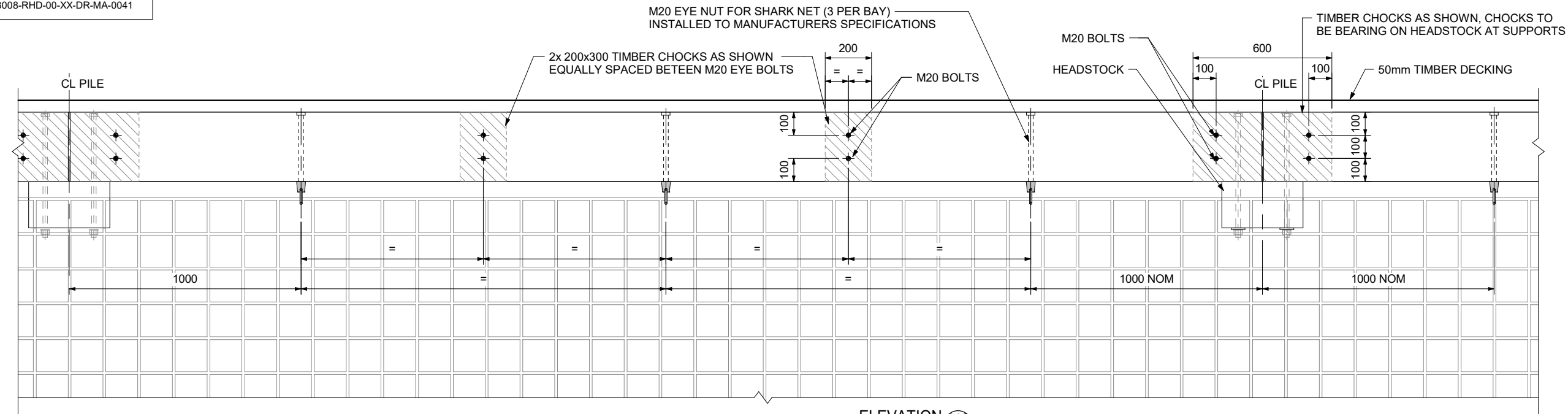


DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	As indicated	REF.
DRAWING No.				SUITABILITY	REVISION
PA3008-RHD-00-XX-DR-MA-0033				S2	C

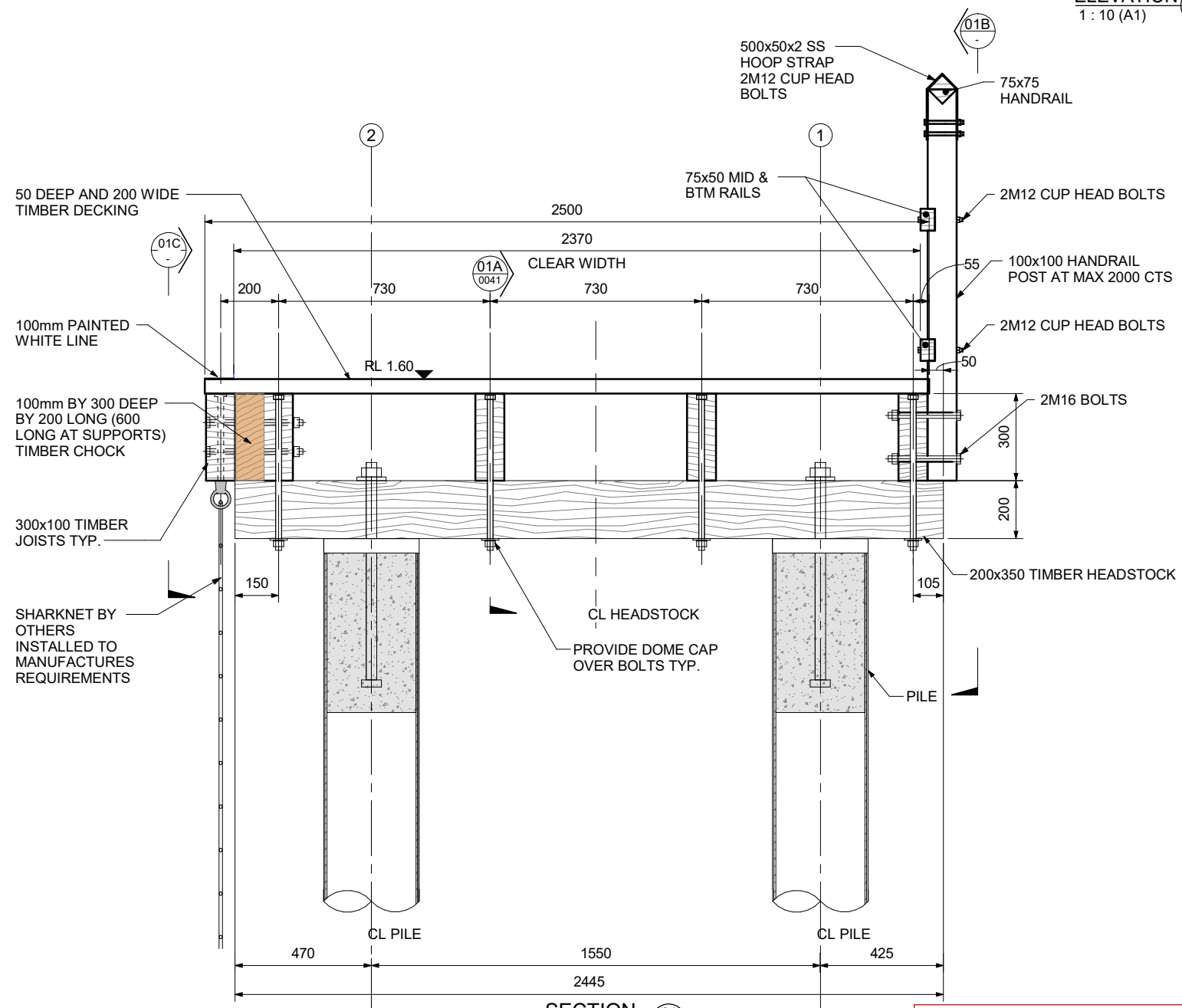
**NOT FOR CONSTRUCTION**

**D2 FOR TENDER**

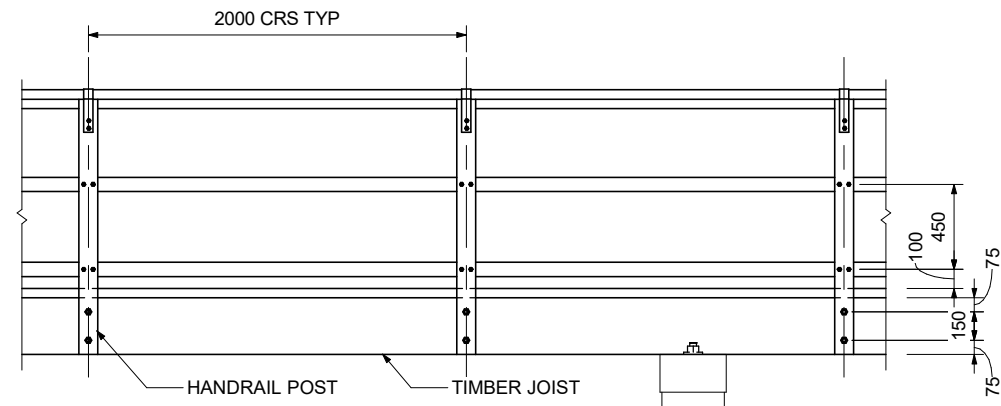




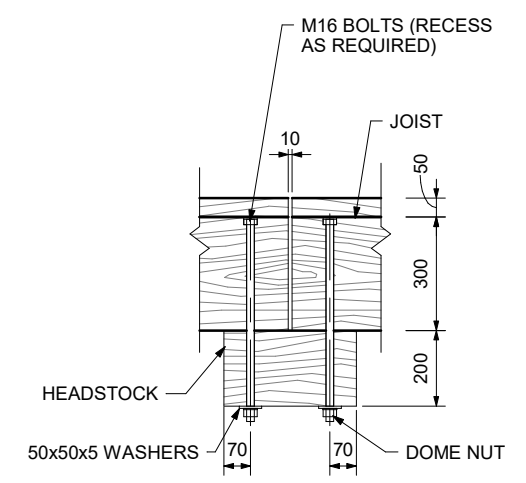
ELEVATION 01C  
1 : 10 (A1)



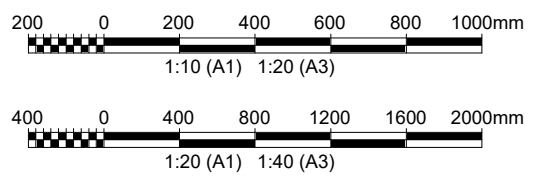
SECTION 01  
1 : 10 (A1)  
TYPICAL BOARDWALK CROSS SECTION



ELEVATION 01B  
1 : 20 (A1)



SECTION 01A  
1 : 10 (A1)



NOT FOR CONSTRUCTION D2 FOR TENDER

- NOTES:**
1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
  2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
  3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
  4. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL UNLESS NOTED OTHERWISE. REFER TO GENERAL NOTES.
  5. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, ALL RECESSES AND BOLT HOLES
  6. HANDRAIL TO BE PAINTED WHITE AS PER THE SPECIFICATION.

D	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
C	17.06.2022	FOR TENDER	BR	HHZ	SHJ
B	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
A	25.02.2022	FOR REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

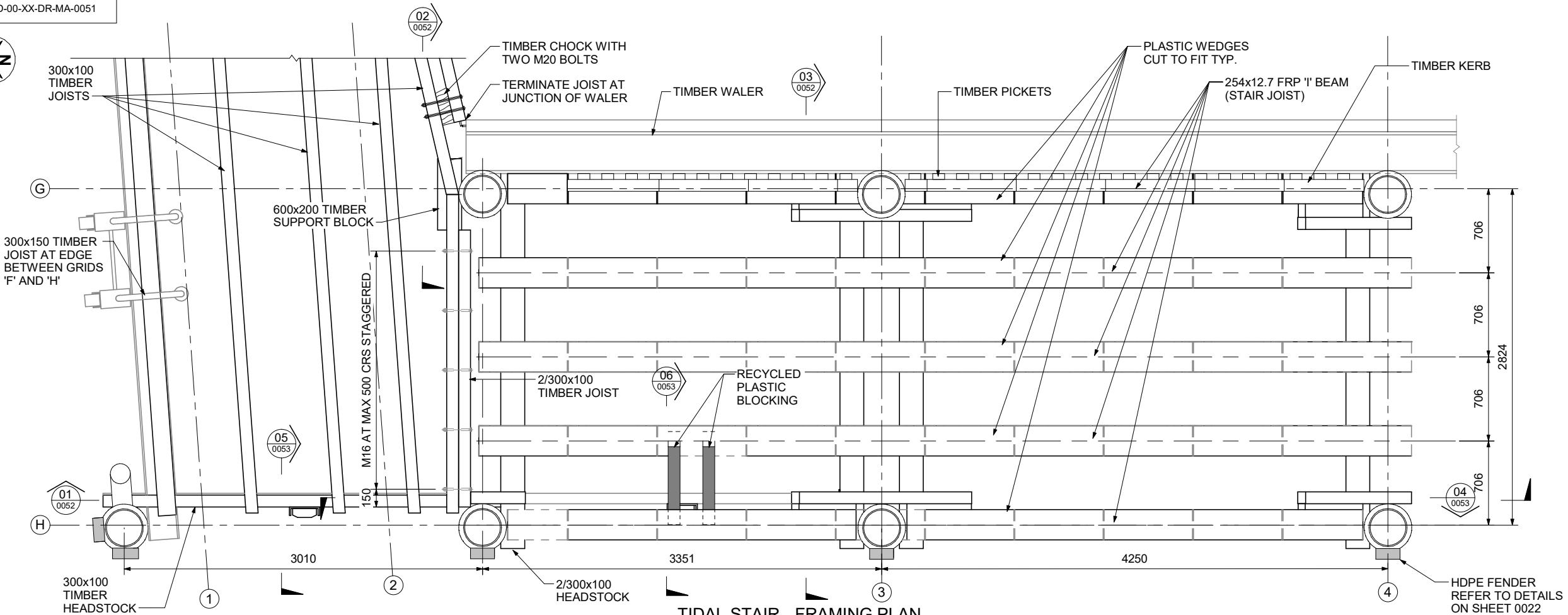


PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

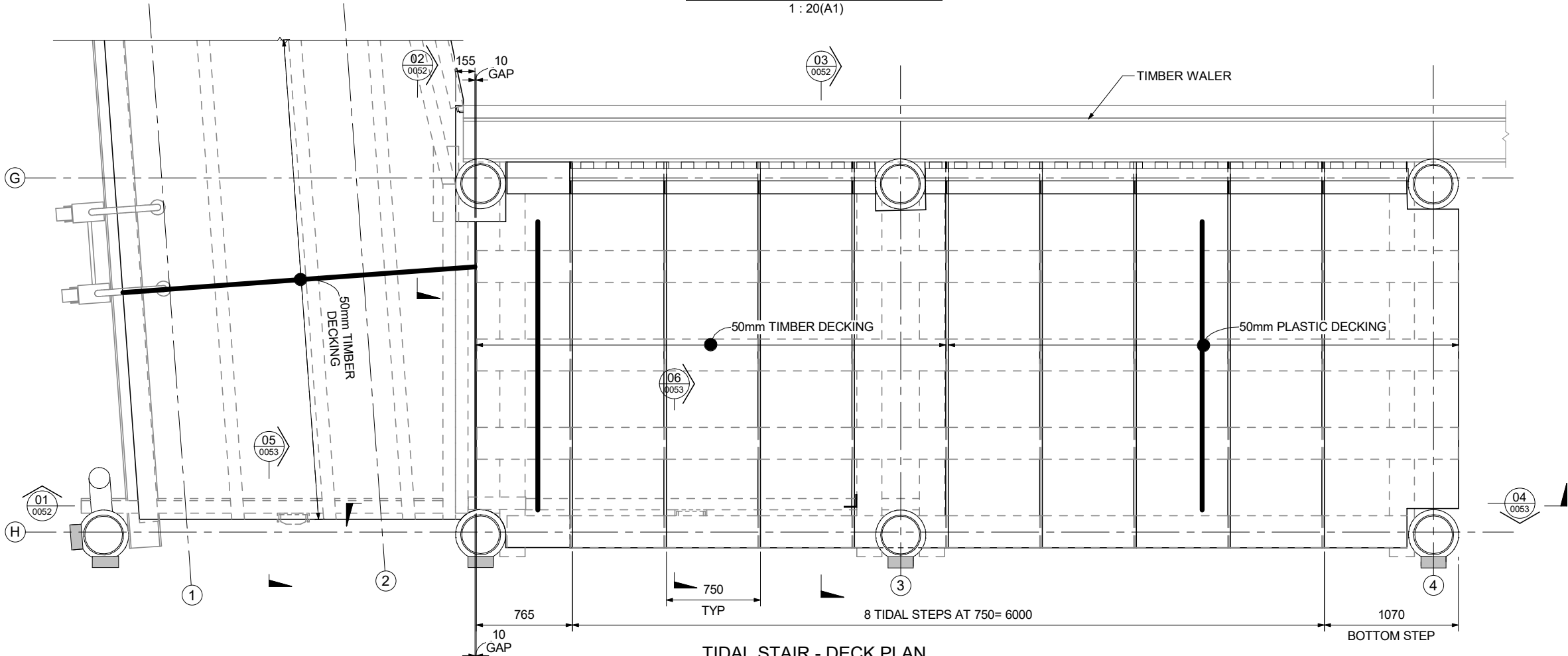
TITLE  
TYPICAL PILE BENT DETAILS



DRAWN	BR	CHECKED	TE	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0041	SUITABILITY	S2	REVISION	D

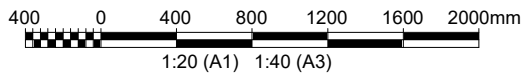


TIDAL STAIR - FRAMING PLAN  
1 : 20(A1)



TIDAL STAIR - DECK PLAN  
1 : 20(A1)

NOT FOR CONSTRUCTION D2 FOR TENDER



NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE

REV	DATE	DESCRIPTION	BY	CHK	APP
C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ

REVISIONS

CLIENT

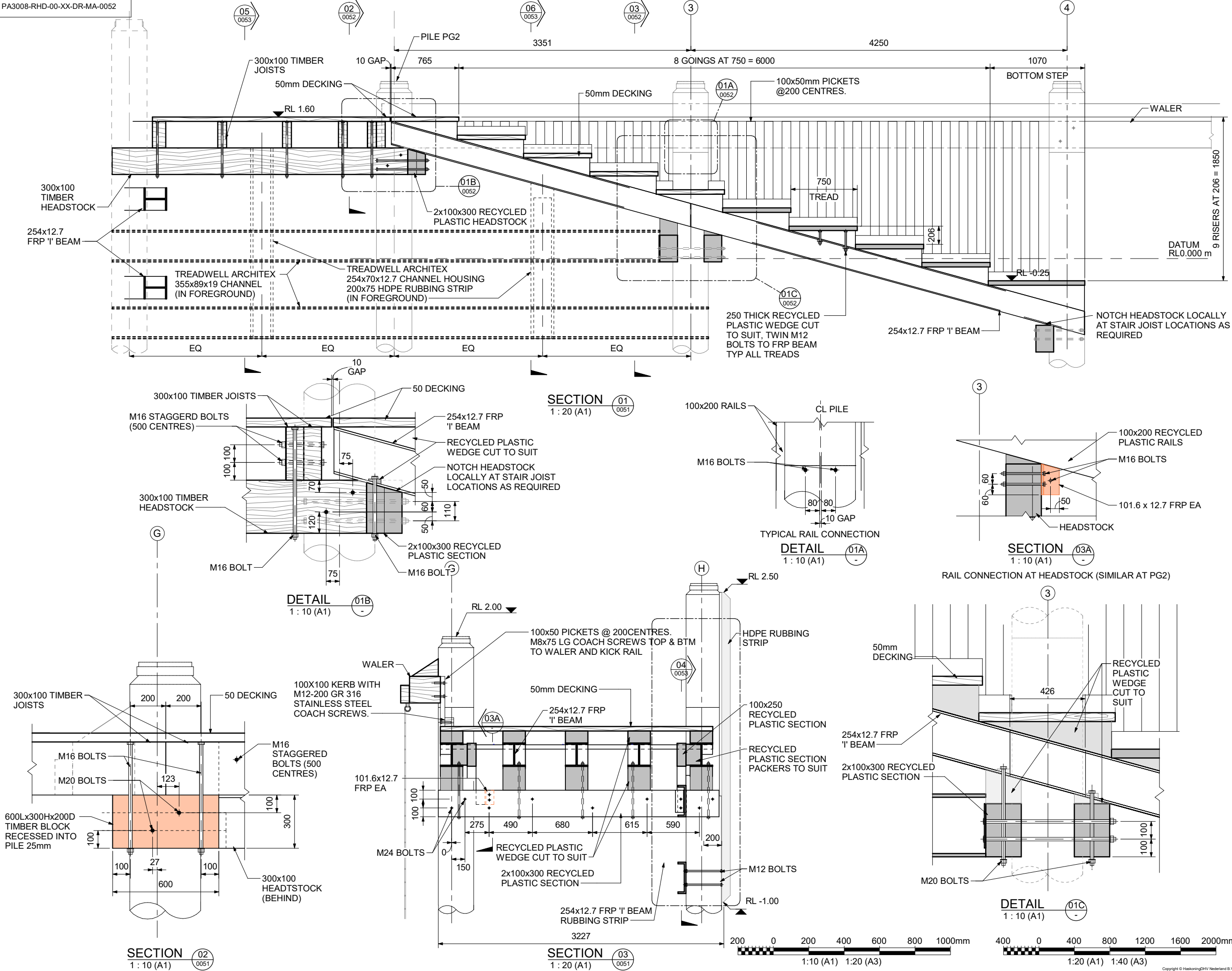


PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
TIDAL STEPS PLAN



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0051	SUITABILITY	S2	REVISION	C



NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL. ALL STAINLESS STEEL BENEATH RL 0 TO BE SS GRADE 2205 DUPLEX BOLTS.
5. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, RECESSES AND BOLT HOLES.
6. FRP BEAM TO BE 254 x12.7 FRP BEAM BY TREADWELL.
7. ALL RECYCLED PLASTIC PRODUCTS ARE TO BE BY AUSTRALIAN RECYCLED PLASTICS.

NOT FOR CONSTRUCTION

D2 FOR TENDER

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
TIDAL STEPS SECTIONS - SHEET 1



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	AT A1	As indicated	REF.
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0052	SUITABILITY	S2	REVISION	C



7. ALL RECYCLED PLASTIC PRODUCTS ARE TO BE BY AUSTRALIAN RECYCLED PLASTICS.

## D2 FOR TENDER

## REVISIONS

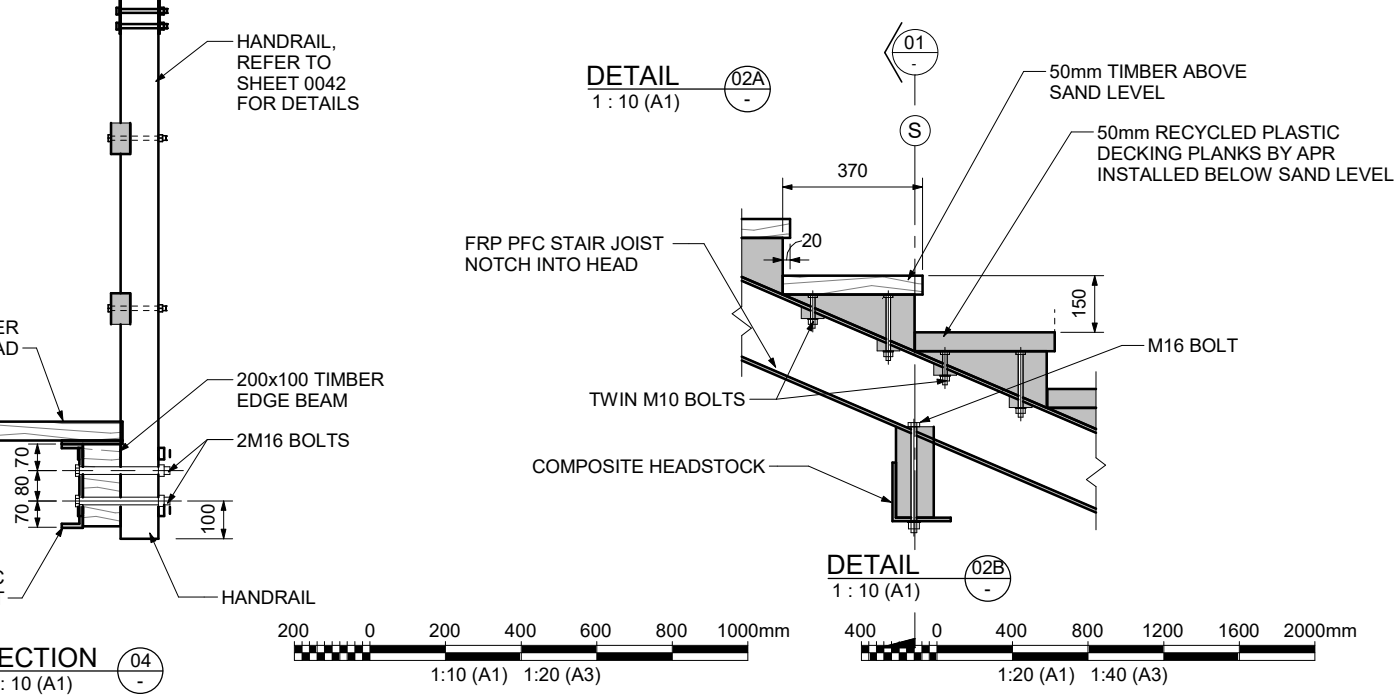
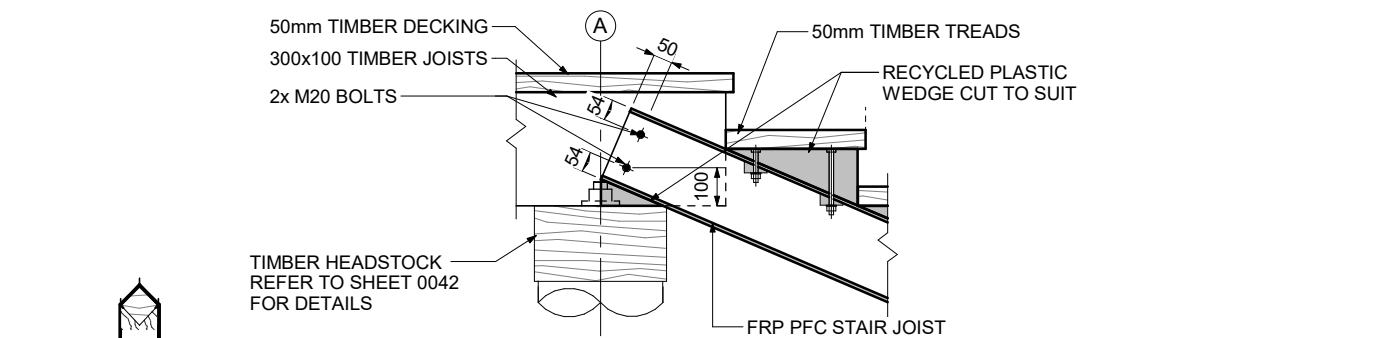
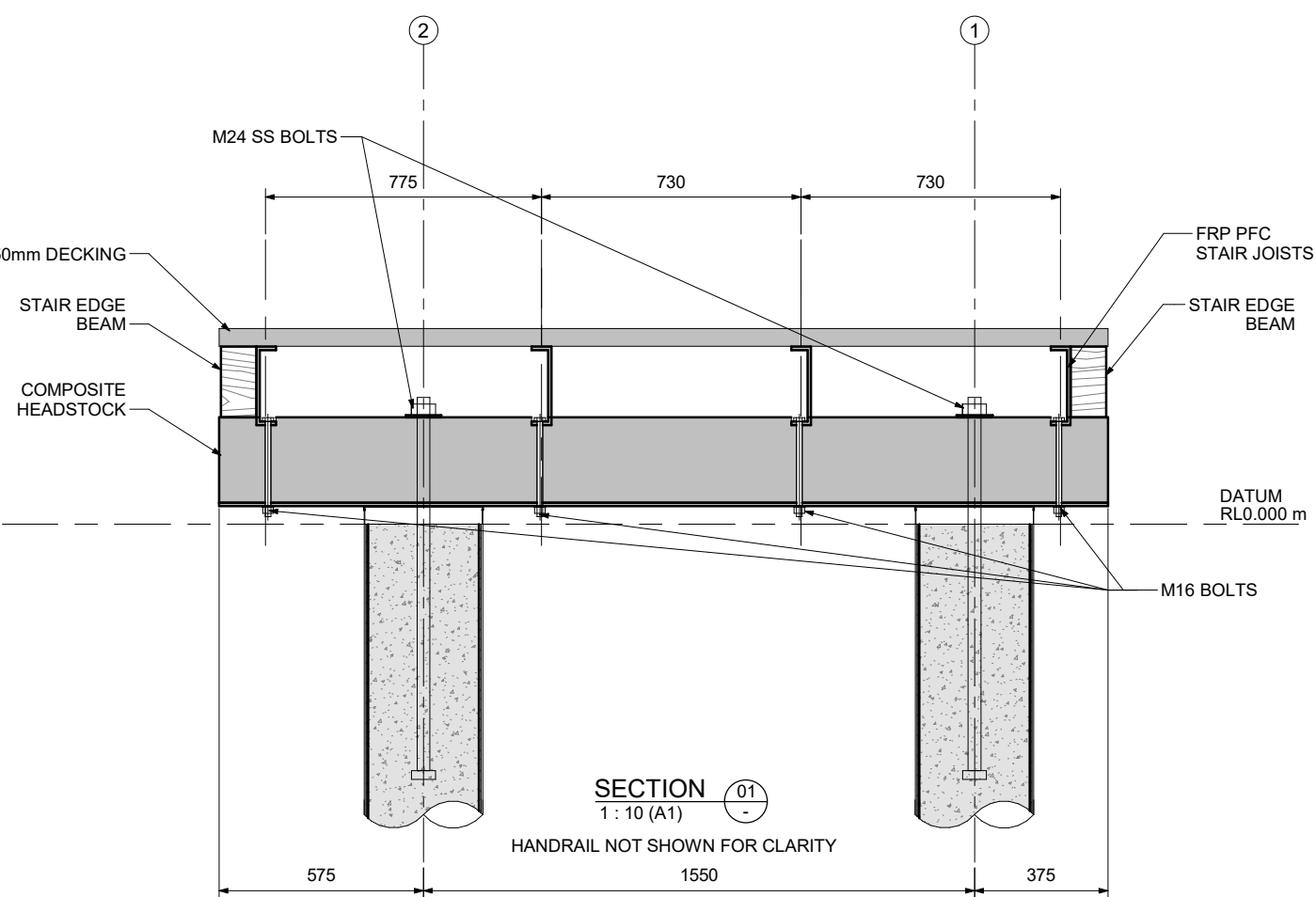
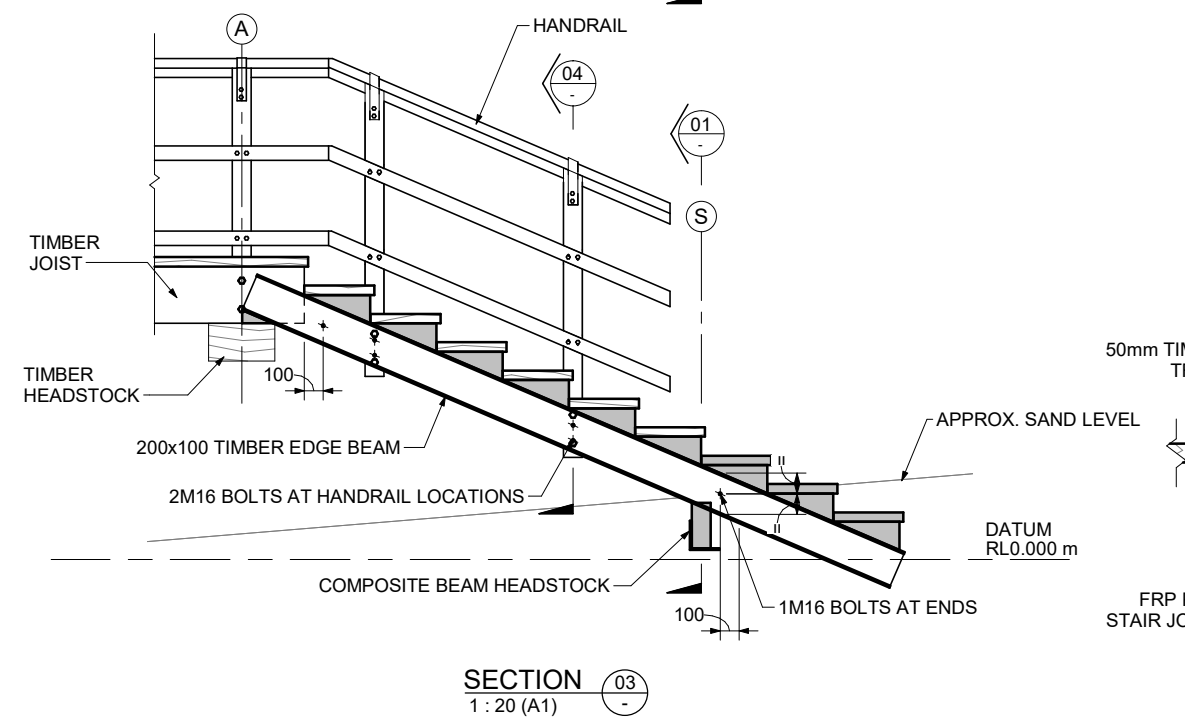
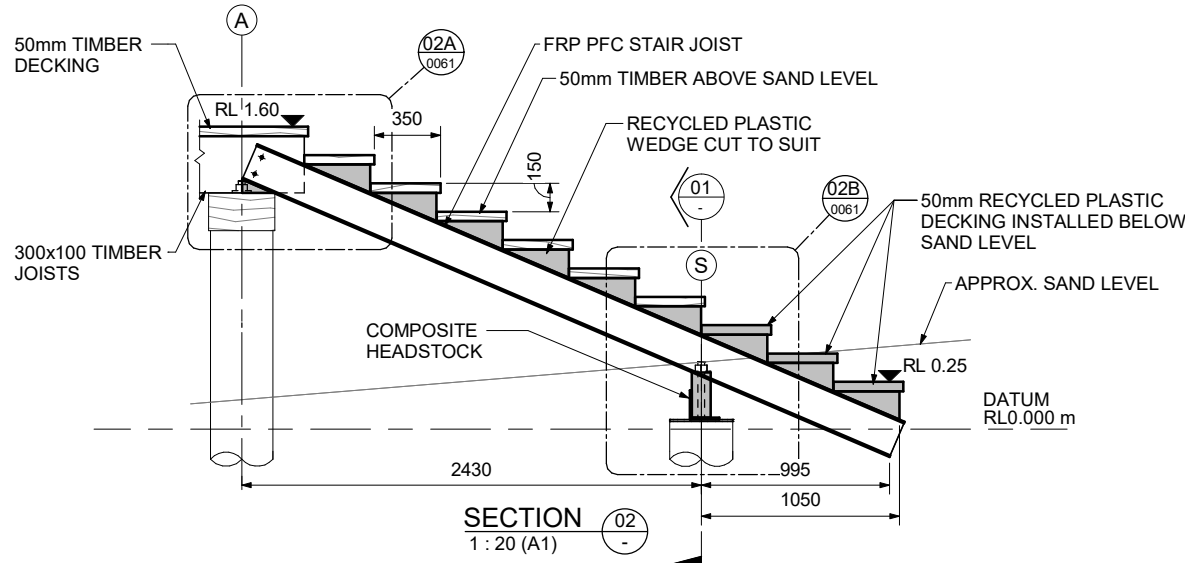
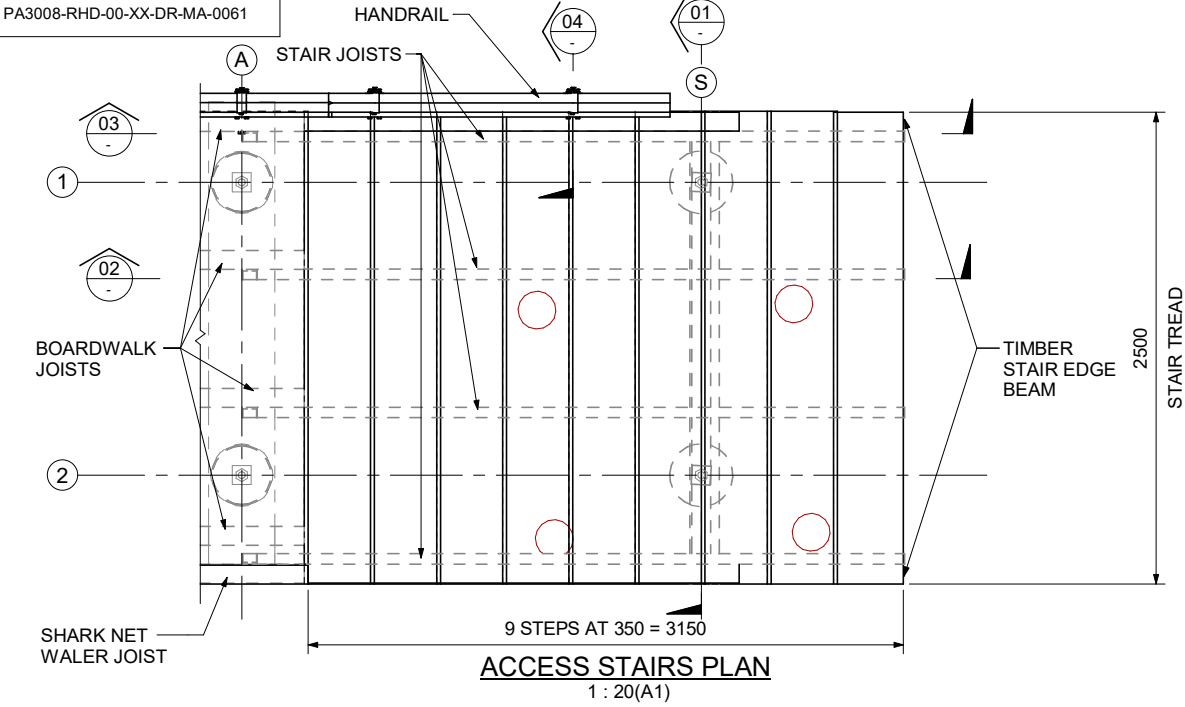


TITLE

TIDAL STEPS  
SECTIONS - SHEET  
2



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE AT A1	As indicated	REF.	
DRAWING No.				SUITABILITY	REVISION
PA3008-RHD-00-XX-DR-MA-0053				S2	B



NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL. ALL STAINLESS STEEL BENEATH RL 0 TO BE SS GRADE 2205 DUPLEX BOLTS.
5. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, ALL RECESSES AND BOLT HOLES.
6. FRP JOISTS TO BE 203.2 x 55.6 x 9.6 PFC BEAM BY TREADWELL.
7. COMPOSITE HEADSTOCK TO CONSIST OF 152.4 x 9.6 EQUAL ANGLE AND 230 x 130 RECYCLED PLASTIC SECTION BY APR.
8. ALL RECYCLED PLASTIC PRODUCTS ARE TO BE BY AUSTRALIAN RECYCLED PLASTICS.
9. CONTRACTOR TO INSTALL ANTI-CRUSH BLOCKS TO PFC'S AS SUPPORTS.

NOT FOR CONSTRUCTION

D2 FOR TENDER

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

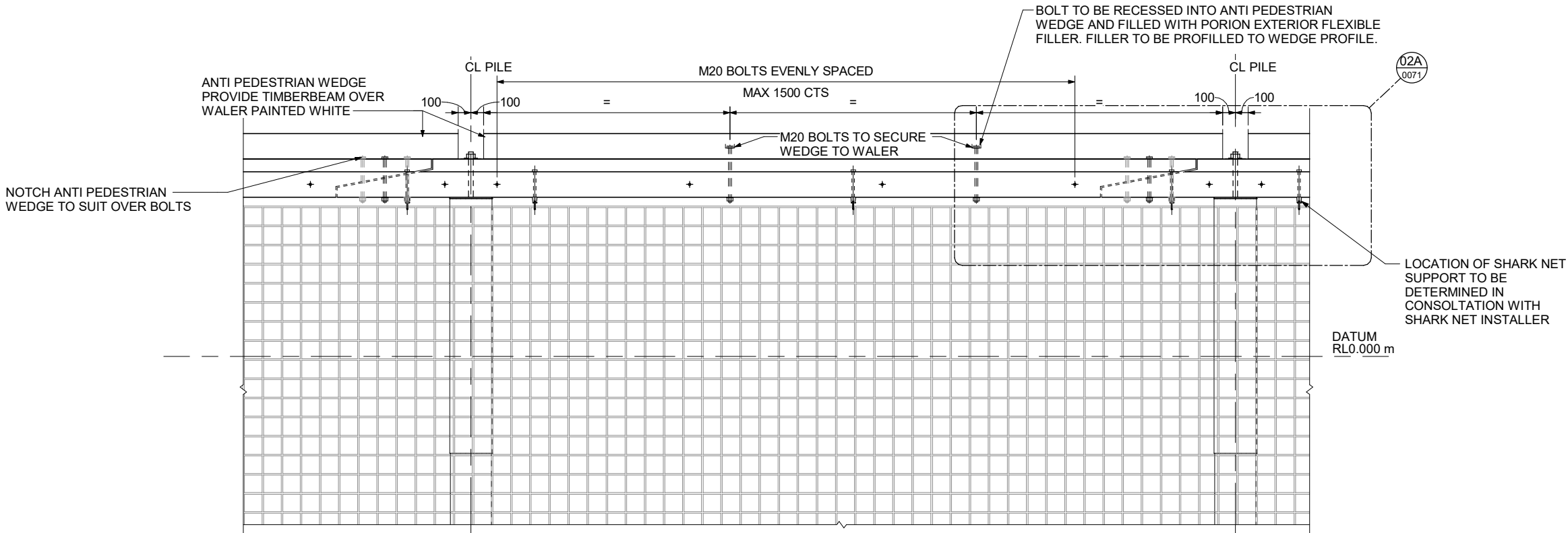


PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

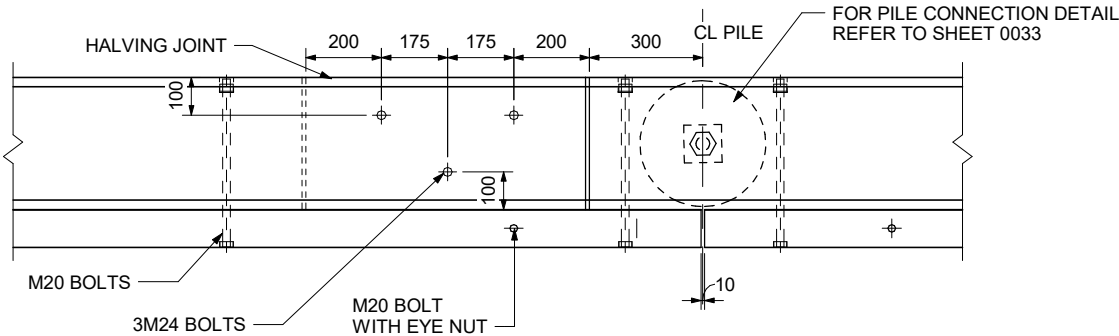
TITLE  
ACCESS STAIRS



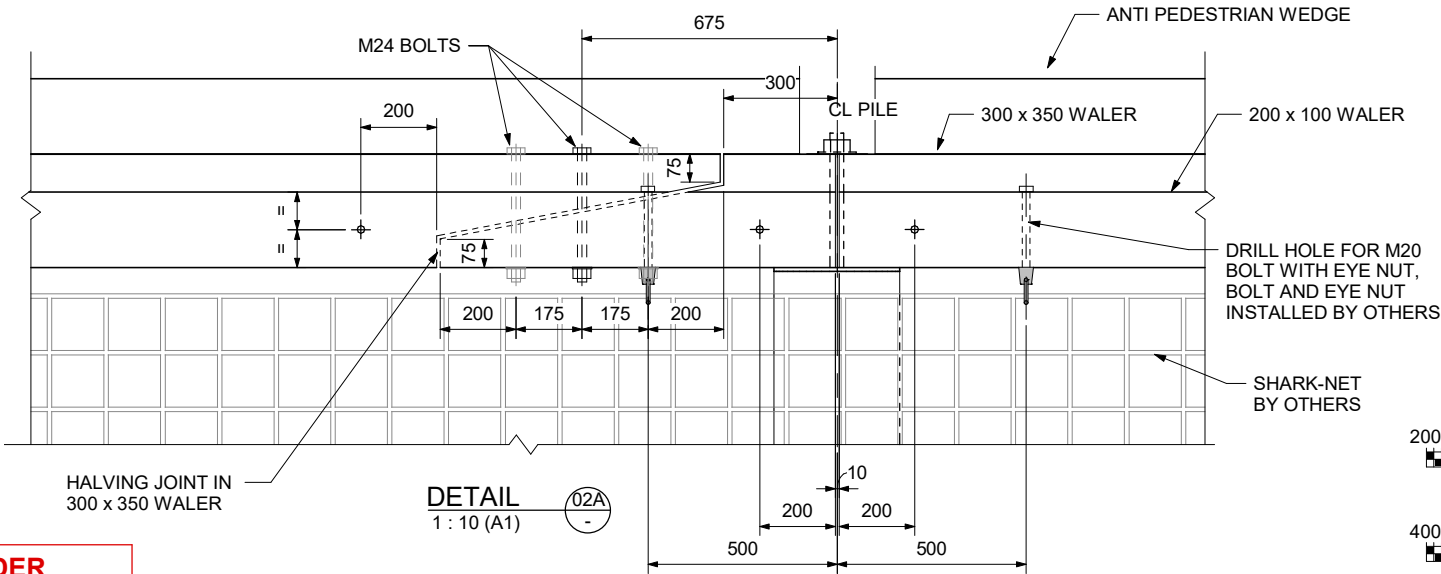
DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0061	SUITABILITY	S2	REVISION	C



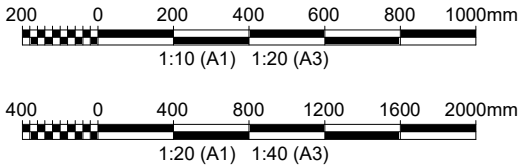
ELEVATION 02  
1 : 20 (A1) 0011



SHARK-NET WALER DETAIL PLAN  
1 : 10(A1)



DETAIL 02A  
1 : 10 (A1) -



NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, ALL RECESSES AND BOLT HOLES.
5. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL. ALL STAINLESS STEEL BENEATH RL 0 TO BE SS GRADE 2205 DUPLEX BOLTS
6. 1ST WALER PLACED IN EITHER DIRECTION TO BE PLACED OVER TWO SUPPORTS FOR STABILITY.

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
SHARK-NET WALER DETAILS



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0071	SUITABILITY	S2	REVISION	C

NOT FOR CONSTRUCTION

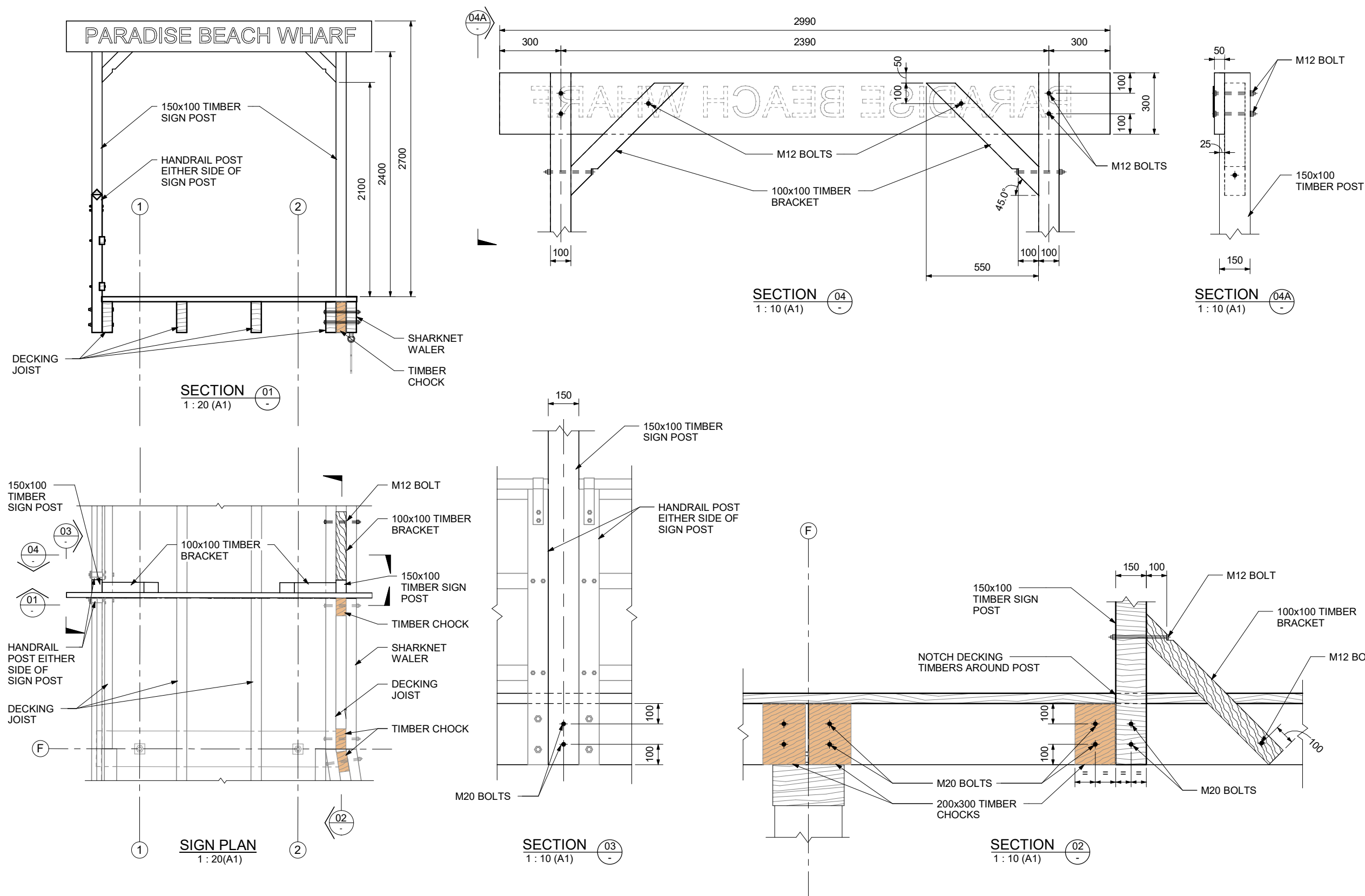
D2 FOR TENDER

NOTES:

1. FOR GENERAL NOTES REFER TO  
SHEETS 0002 TO 0005

2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.

3. ALL MATERIALS & WORKMANSHIP  
WILL BE AS DEFINED IN THE  
SPECIFICATION UNLESS NOTED  
OTHERWISE



B	01.03.2023	AMENDMENTS	ACT	SHJ	S
A	17.06.2022	FOR TENDER	BR	HHZ	S
REV	DATE	DESCRIPTION	BY	CHK	A

REVISIONS



PROJECT

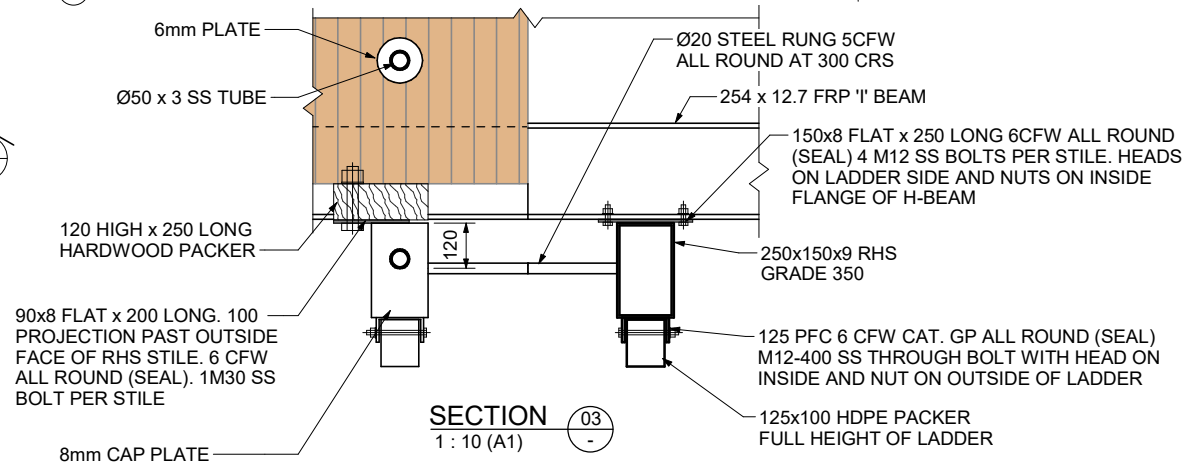
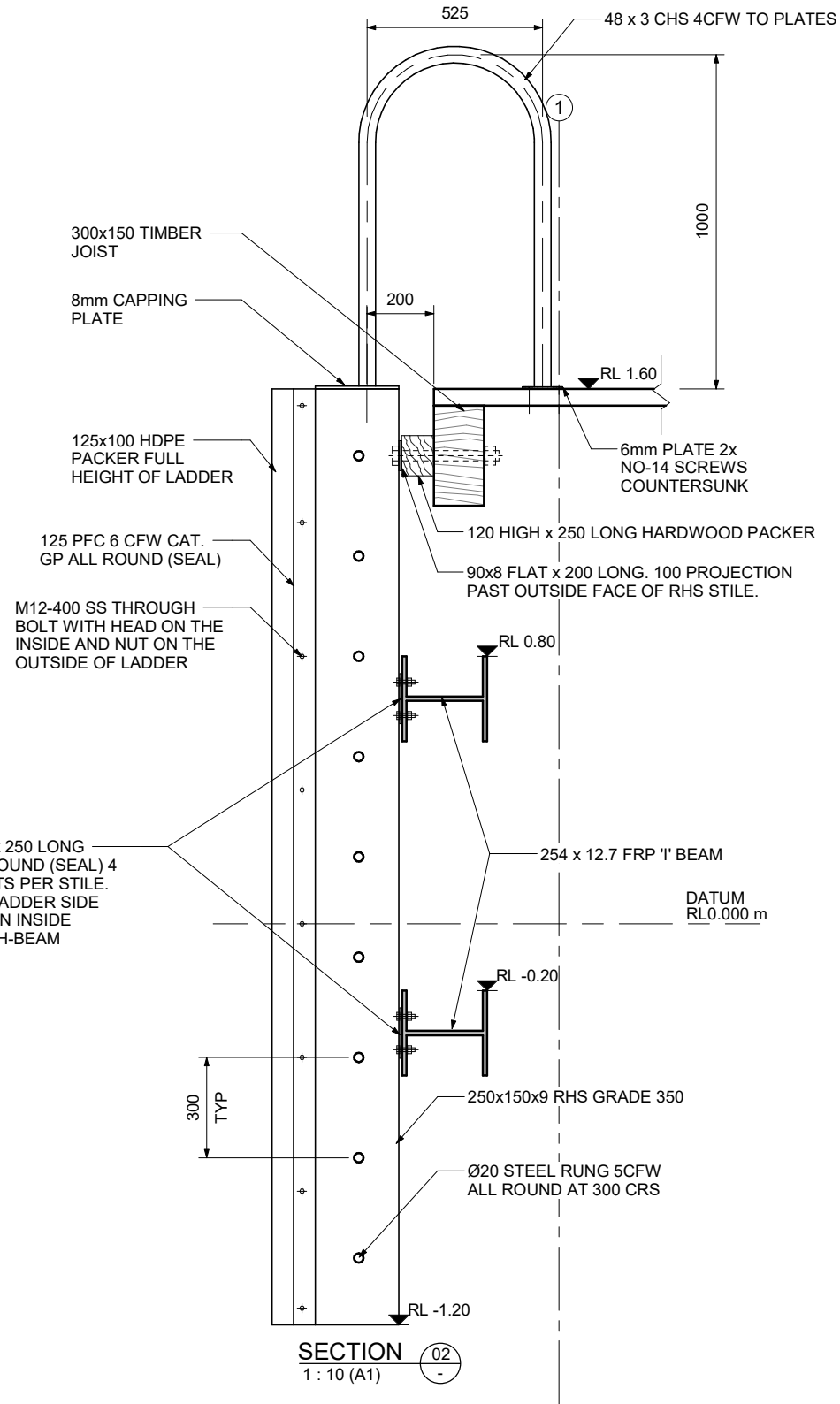
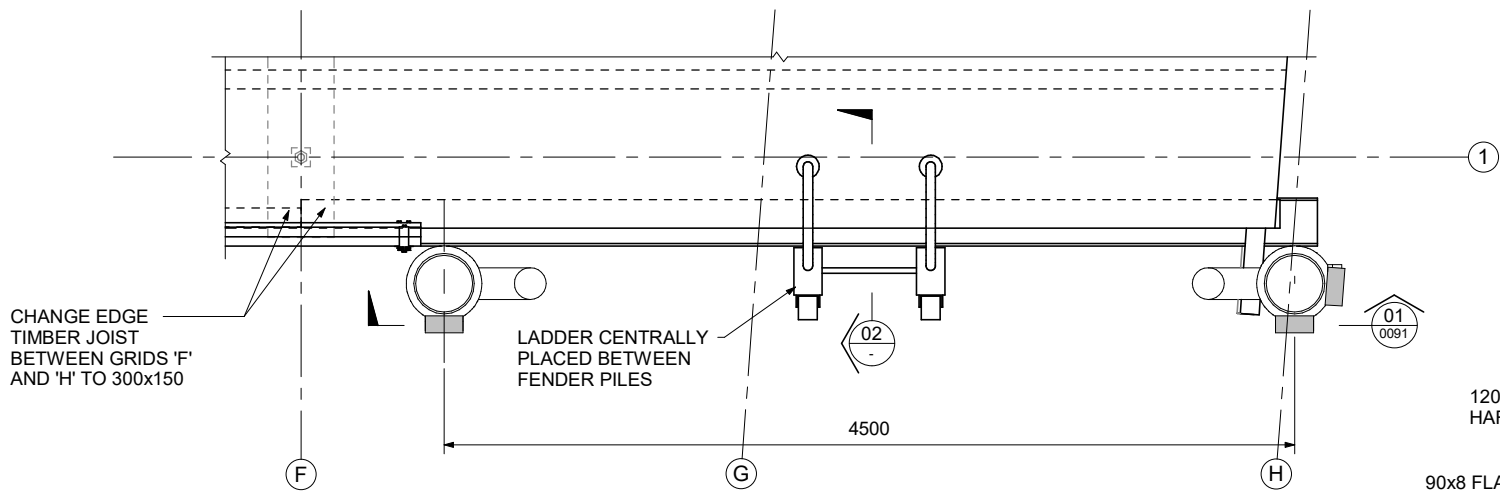
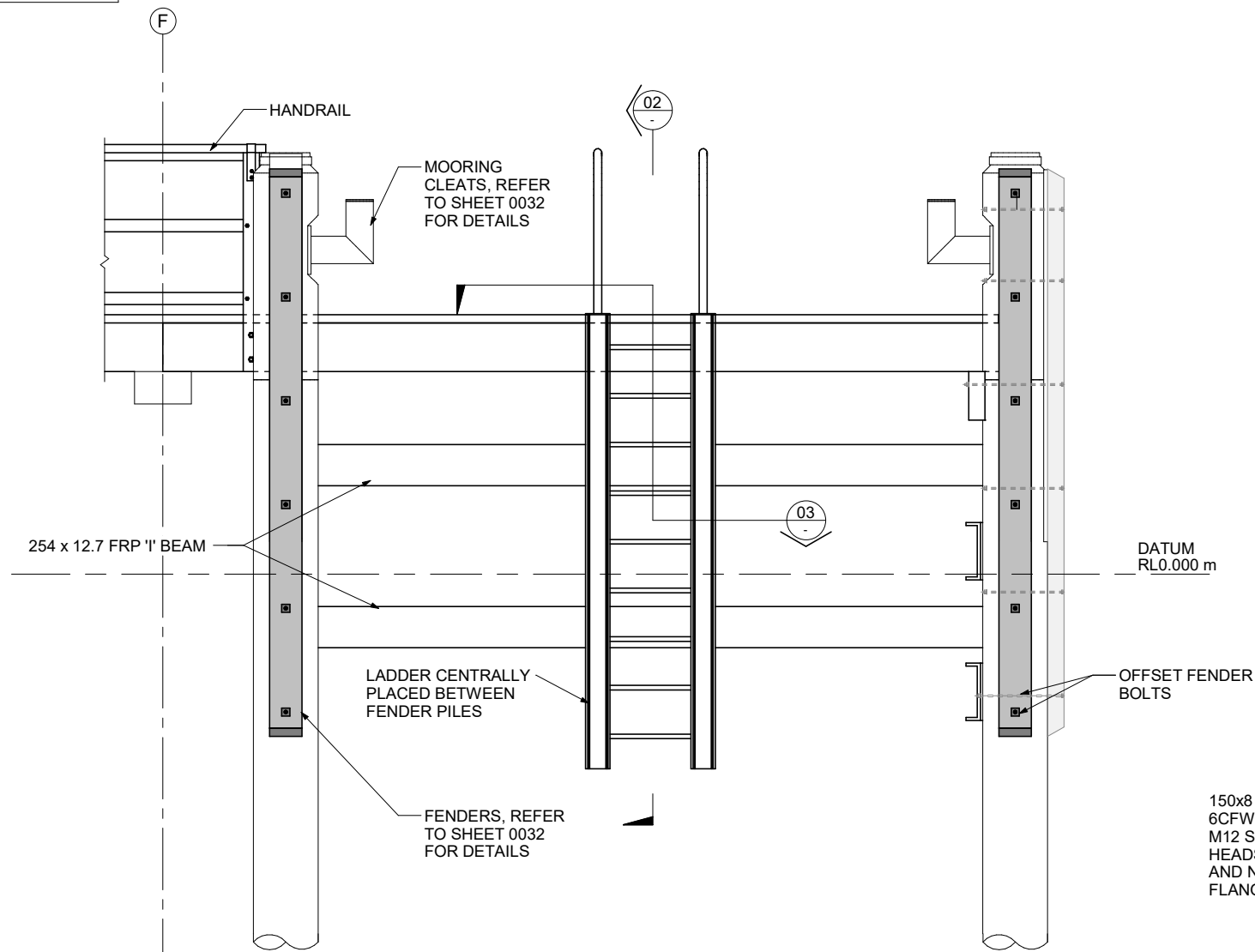
## PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE
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SIGN DETAILS



DRAWN	BR	CHECKED	HHZ	APPROVED	SH
DATE	28.02.2023	SCALE	AT A1 As indicated	REF.	
DRAWING No.				SUITABILITY	REVISION
PA3008-RHD-00-XX-DR-MA-0081				S2	B



- NOTES:**
1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
  2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
  3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
  4. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL. ALL STAINLESS STEEL BENEATH RL 0 TO BE SS GRADE 2205 DUPLEX BOLTS.
  5. APPLY PROTECTIVE COATING TO ALL TIMBER IN TIDAL ZONE, TIMBER TO TIMBER INTERFACE, TRIMMED SURFACES, RECESSES AND BOLT HOLES.
  6. FRP BEAM TO BE 254 x12.7 FRP BEAM BY TREADWELL.
  7. ALL RECYCLED PLASTIC PRODUCTS ARE TO BE BY AUSTRALIAN RECYCLED PLASTICS.

**NOT FOR CONSTRUCTION**

**D2 FOR TENDER**

B	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
A	17.06.2022	FOR TENDER	BR	HHZ	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT

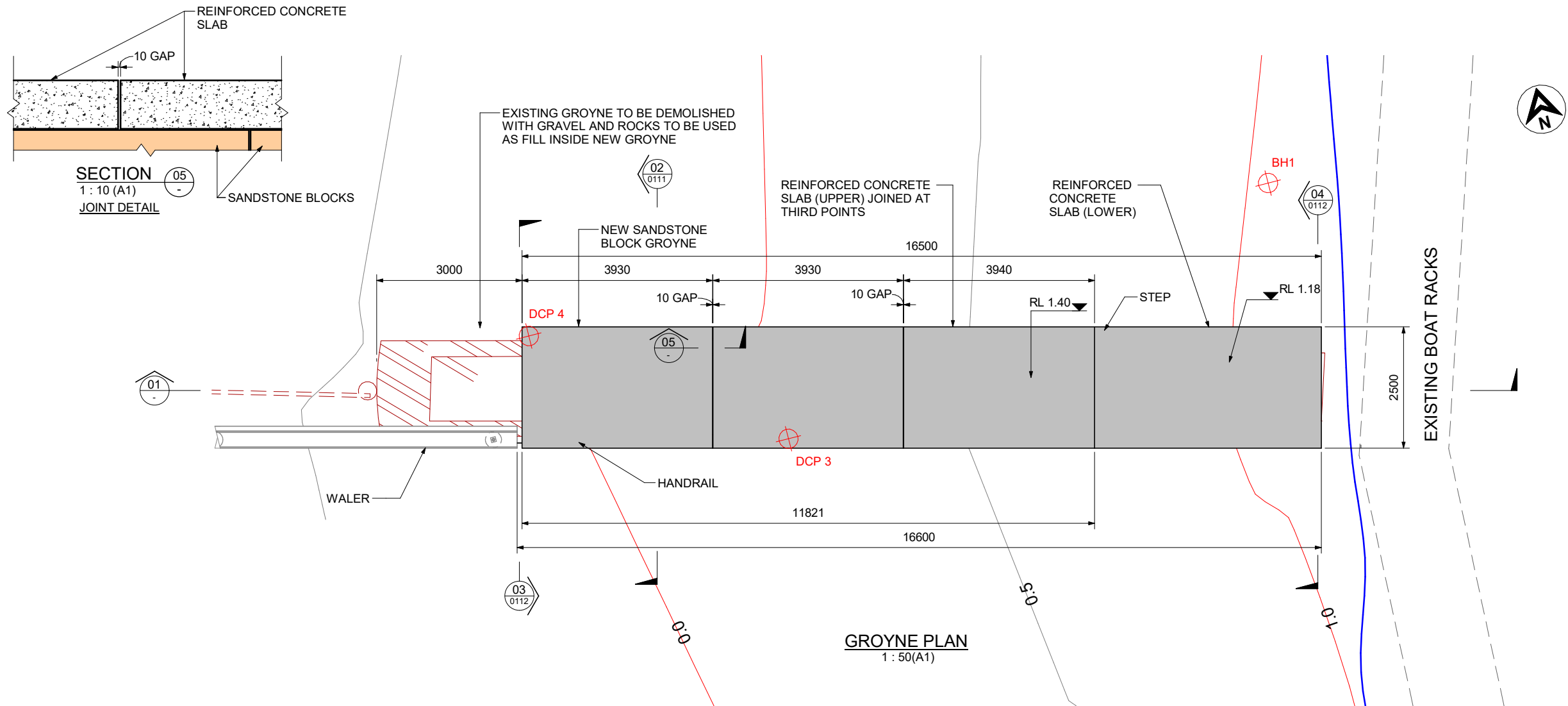


PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

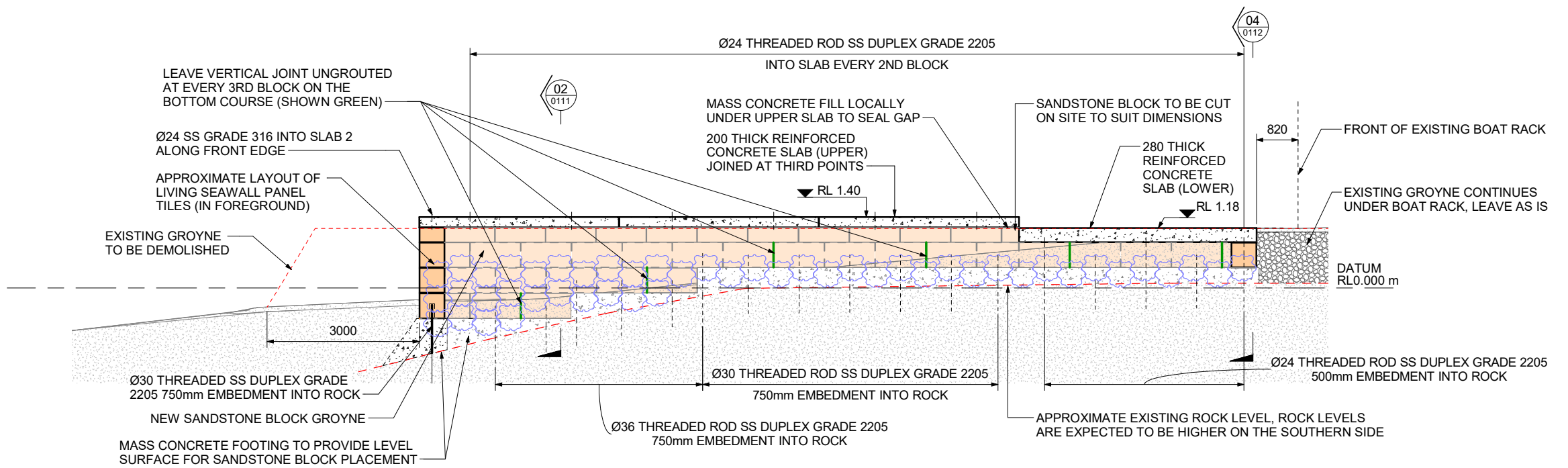
TITLE  
LADDER PLAN AND DETAILS



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0091	SUITABILITY	S2	REVISION	B



GROYNE PLAN  
1 : 50(A1)



SECTION  
1 : 50 (A1)

INDICATIVE PLACEMENT OF SANDSTONE BLOCKS -  
CONTRACTOR TO ADJUST DEPENDING ON ROCK LEVELS

**NOT FOR CONSTRUCTION** **D2 FOR TENDER**

NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. CONCRETE USED FOR MASS CONCRETE FOUNDATION SHALL HAVE F<sub>c</sub> = 32MPa
5. CONCRETE USED FOR THE GROUYNE SLAB SHALL HAVE F<sub>c</sub> = 50MPa
6. ROCK LEVELS TAKEN FROM GEOTECH REPORT
7. SANDSTONE BLOCKS ARE 1000L x 500H x 500 HIGH

C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS
CLIENT

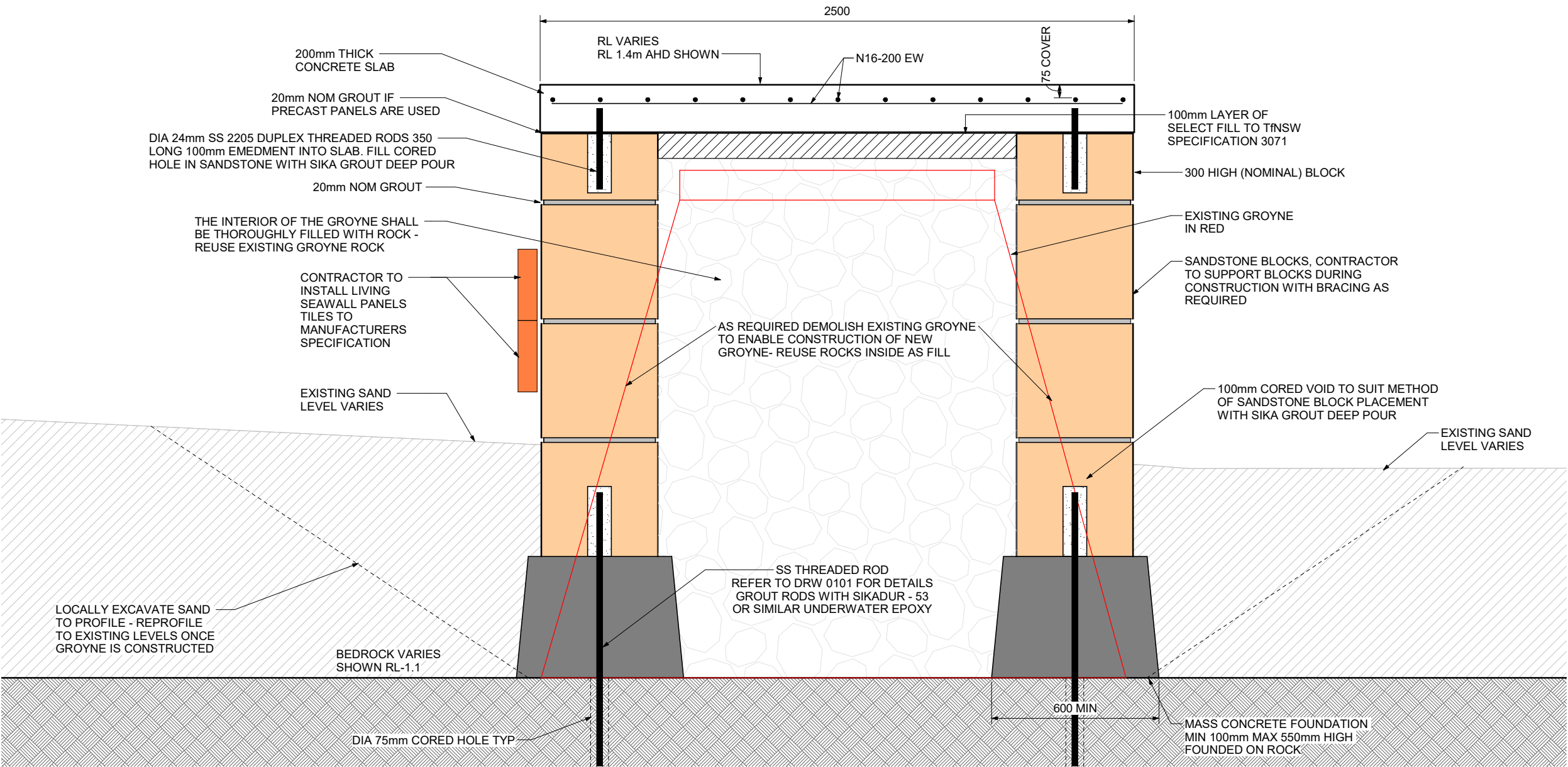


PROJECT
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE
GROYNE PLAN AND LONG SECTION



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0101	SUITABILITY	S2	REVISION	C

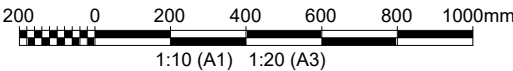


SECTION 02  
1 : 10 (A1) 0101

TYPICAL GROYPE SECTION

NOT FOR CONSTRUCTION

D2 FOR TENDER



NOTES:

1. FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
2. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
3. ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
4. CONCRETE USED FOR MASS CONCRETE FOUNDATION SHALL HAVE F<sub>c</sub> = 32MPa
5. CONCRETE USED FOR THE GROYPE SLAB SHALL HAVE F<sub>c</sub> = 50MPa
6. MORTAR TO BE GRADE M4 TO AS3700 MIN COMPRESSIVE STRENGTH 30 MPA
7. ALL REINFORCEMENT USED IN THE WORKS SHALL BE HOT DIPPED GALVANISED
8. ALL STEELWORK, BOLTS AND FIXINGS TO BE STAINLESS STEEL. ALL STAINLESS STEEL BENEATH RL 0 TO BE SS GRADE 2205 DUPLEX BOLTS

D	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
C	17.06.2022	FOR TENDER	BR	HHZ	SHJ
B	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
A	25.02.2022	FOR REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT

PARADISE BEACH TIDAL POOL REPLACEMENT

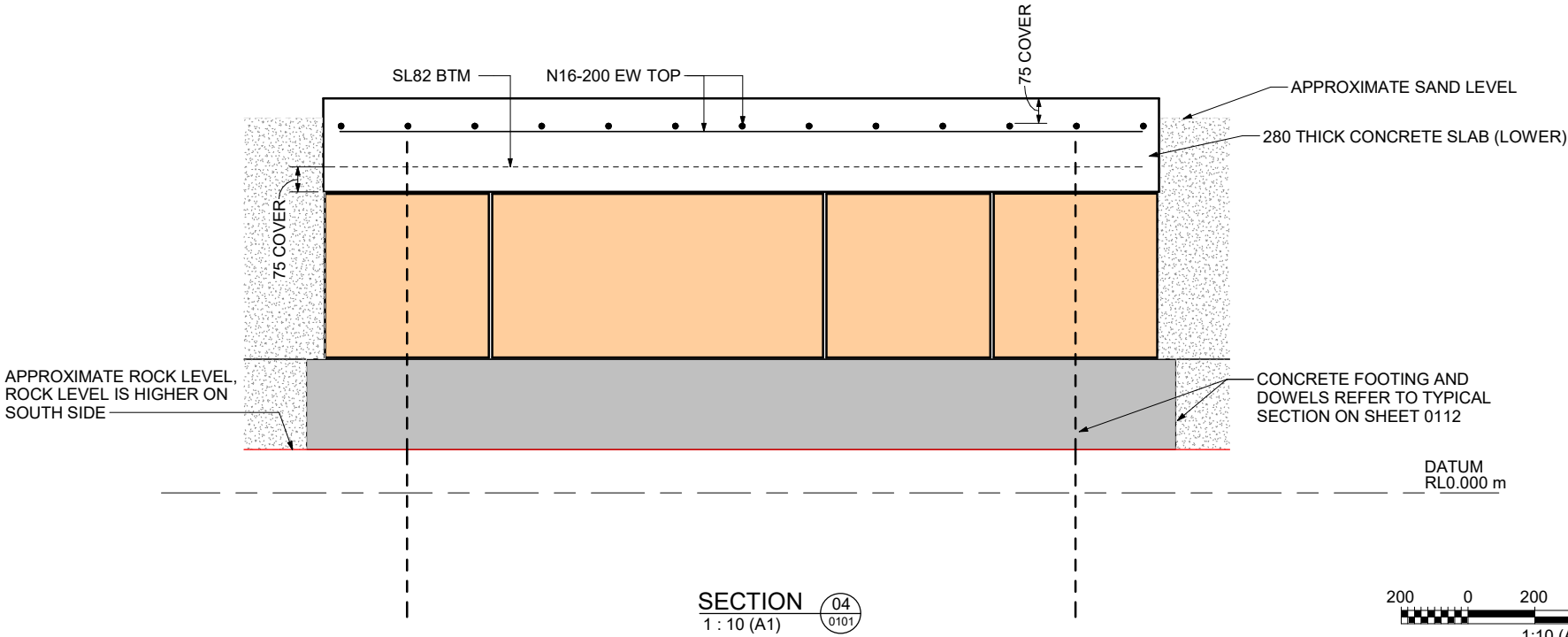
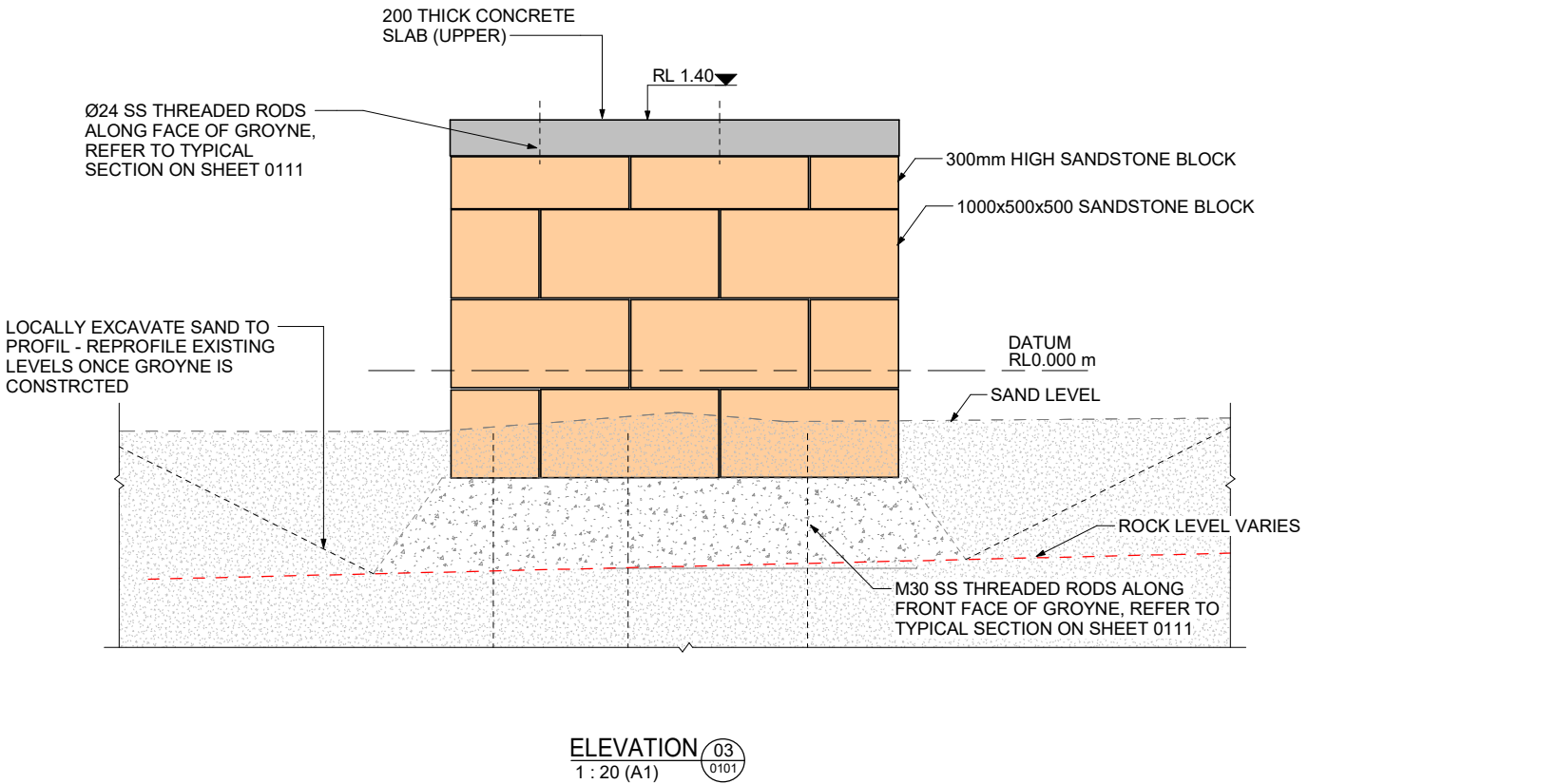
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GROYPE SECTIONS  
- SHEET 1

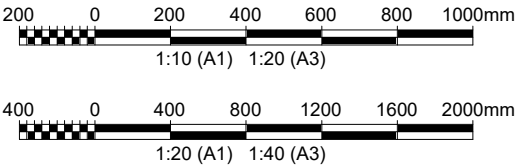


DRAWN	BR	CHECKED	TE	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0111	SUITABILITY	S2	REVISION	D

- NOTES:**
- FOR GENERAL NOTES REFER TO SHEETS 0002 TO 0005
  - ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AHD UNLESS NOTED OTHERWISE.
  - ALL MATERIALS & WORKMANSHIP WILL BE AS DEFINED IN THE SPECIFICATION UNLESS NOTED OTHERWISE
  - CONCRETE USED FOR MASS CONCRETE FOUNDATION SHALL HAVE F<sub>c</sub> = 32MPa
  - CONCRETE USED FOR THE GROYNE SLAB SHALL HAVE F<sub>c</sub> = 50MPa
  - MORTAR TO BE GRADE M4 TO AS3700 MIN COMPRESSIVE STRENGTH 30 MPA
  - ALL REINFORCEMENT USED IN THE WORKS SHALL BE HOT DIPPED GALVANISED



**NOT FOR CONSTRUCTION** **D2 FOR TENDER**



C	01.03.2023	AMENDMENTS	ACT	SHJ	SHJ
B	17.06.2022	FOR TENDER	BR	HHZ	SHJ
A	25.03.2022	ISSUED FOR CLIENT REVIEW	BR	TE	SHJ
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
PARADISE BEACH TIDAL POOL REPLACEMENT

TITLE  
GROYNE SECTIONS  
- SHEET 2



DRAWN	BR	CHECKED	HHZ	APPROVED	SHJ
DATE	28.02.2023	SCALE	As indicated	REF.	
DRAWING No.	PA3008-RHD-00-XX-DR-MA-0112	SUITABILITY	S2	REVISION	C