GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS, THE SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

2. ANY DISCREPANCY ON THE DRAWINGS OR BETWEEN THE DRAWINGS AND/OR THE SPECIFICATION AND/OR THE SPECIFIED AUSTRALIAN STANDARD SHALL BE REFERRED TO THE SUPERINTENDENT AND A WRITTEN INSTRUCTION RECEIVED PRIOR TO PROCEEDING WITH THE WORK. DURING TENDERING THE TENDERER SHALL ASSUME THE LARGER/GREATER CRITERIA IN TERMS OF COST IN THE ABSENCE OF OTHER INSTRUCTIONS.

3. THE DOCUMENTED DESIGN CONSTITUTES THE MAIN STRUCTURAL FRAMING BUT DOES NOT INCLUDE A FULL SCOPE OF SECONDARY STEEL TO SUPPORT FACADE CLADDING, HANDRAILS.

4. THESE DRAWINGS SHOW TYPICAL CONNECTION DETAILS ONLY. THE SHOP DRAFTER IS REQUIRED TO DEVELOP ALL CONNECTION DETAILS NOT SPECIFICALLY SHOWN. THE CONTRACTOR IS REQUIRED TO PRICE FOR ALL ASSOCIATED DETAILING FOR CONNECTIONS NOT SPECIFICALLY SHOWN.

5. THE STRUCTURAL DRAWINGS DO NOT SHOW ALL DETAILS OF FIXTURES, INSERTS, SLEEVES, OPENINGS, ETC. REQUIRED BY THE VARIOUS TRADES. ALL SUCH DETAILS, INCLUDING OPENINGS FOR CONSTRUCTION PURPOSES, MUST BE APPROVED BY THE SUPERINTENDENT BEFORE PROCEEDING WITH CONSTRUCTION.

6. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS INCLUDING ALL AMENDMENTS CURRENT AT THE TIME OF CONTRACT AWARD AND THE REQUIREMENTS OF THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

8. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION OR FABRICATION IS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.

9. INNOVIS' ENGAGEMENT IS TO PROVIDE DOCUMENTED DESIGN FOR THE PERMANENT CONDITION SUITABLE FOR THE DOCUMENTED INTENDED OCCUPANCY USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE GROUND AND ANY ADJACENT STRUCTURES IN A SAFE AND STABLE CONDITION AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO DEVELOP A DETAILED SAFE WORK METHOD STATEMENT OUTLINING THE CONSTRUCTION SEQUENCE AND METHODOLOGY. THE CONTRACTOR IS TO ENGAGE A QUALIFIED AND SUITABLY EXPERIENCED ERECTION ENGINEER TO REVIEW THE CONSTRUCTION METHODOLOGY AND PROVIDE DESIGN OF TEMPORARY WORKS (SUCH AS PROPPING AND TEMPORARY BRACING) TO SUIT THE CONSTRUCTION SEQUENCE AND METHODOLOGY CHOSEN BY THE CONTRACTOR.

10. THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IT IS NOT AN AUTHORISATION FOR A VARIATION. ANY CLAIM FOR A VARIATION MUST BE SUBMITTED TO THE SUPERINTENDENT BEFORE THE WORK COMMENCES.

11. THE STRUCTURAL WORK ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

a) SUPERIMPOSED DEAD AND LIVE LOAD

AREA	SDL kPa	LIVE LOAD kPa
DECK AND STAIRS	NIL	3
LOOKOUT DECK	NIL	4

b) WIND LOADING - AS1170.2:2011(R2016)

WIND LOADING	
REGION:	A5
TERRAIN CATEGORY:	TC1
WIND SPEED:	45m/s

3D AND ISOMETRIC VIEWS IN THESE DOCUMENTS ARE INDICATIVE ONLY AND SHOULD ONLY BE USED AS A VISUAL AID TO ASSIT IN THE INTERPETATION OF THE ORTHOGRAPHIC DRAWING VIEWS.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF AS3600 INCLUDING AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

3. HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT.

4. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN ON THE DRAWINGS OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

5. ALL EXPOSED CONCRETE CORNERS TO HAVE 15 mm CHAMFER UNO.

6. FORMWORK AND BACK PROPPING SHALL BE DESIGNED BY A COMPETENT CHARTERED ENGINEER EXPERIENCED IN SUCH WORKS, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610. REFER TO ARCHITECTURAL DRAWINGS AND THE SPECIFICATION FOR CLASSES OF SURFACE FINISH.

7. CONCRETE COMPONENTS AND QUALITY SHALL BE AS FOLLOWS:

ELEMENT	f'c (MPa)	SPECIAL REQUIREMENT
CONCRETE PADS	N40	-

MAXIMUM AGGREGATE SIZE SHALL BE 20 mm

8. ALL CEMENT IS TO BE "GP" GENERAL PURPOSE PORTLAND CEMENT OR "GB" GENERAL PURPOSE BLENDED CEMENT OR TYPE "SR" SULPHATE-RESISTING CEMENT AS REQUIRED COMPLYING WITH AS3972 UNLESS NOTED OTHERWISE ON THE DRAWINGS. EXTRA RAPID HARDENING SUPERSULPHATED AND HIGH ALUMINA CEMENTS AND CEMENTS CONTAINING CHLORIDE SHALL NOT BE USED. THE USE OF FLY ASH AND/OR SILICA FUME AS A CEMENT SUBSTITUTE, OTHER THAN THAT PROPORTION ALLOWED AS PART OF THE "GB" CEMENT CONTENT WILL ONLY BE PERMITTED AS PART OF A DESIGNED CONCRETE MIX WHICH HAS BEEN APPROVED IN WRITING BY THE SUPERINTENDENT.

9. CONCRETE SLUMP TO BE A MAXIMUM OF 80 mm UNLESS NOTED OTHERWISE ON THE DRAWINGS.

10. FREE DROPPING OF CONCRETE FROM A HEIGHT GREATER THAN 1000 mm IS NOT PERMITTED.

11. SURFACES RECEIVING GROUT SHALL BE LEFT ROUGH AND FREE OF LAITANCE.

12. CONCRETE MUST BE CURED BY AN APPROVED METHOD IN ACCORDANCE WITH THE SPECIFICATION FOR SEVEN DAYS AFTER POURING.

13. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE.

14. REINFORCEMENT SYMBOLS:

N NORMAL DUCTILITY CLASS HOT ROLLED DEFORMED BARS OR MESH TO AS/NZS 4671 WITH fsy=500 MPa.

R NORMAL DUCTILITY CLASS 250N PLAIN ROUND BAR TO AS/NZS 4671 WITH fsy=250 MPa.

L LOW DUCTILITY CLASS 500L REINFORCING MESH OR BAR TO AS/NZS 4671 WITH fsy=500 MPa. LOW DUCTILITY CLASS L REINFORCEMENT IS NOT TO BE USED OTHER THAN WHERE SHOWN ON DRAWINGS.

THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NORMAL BAR DIAMETER IN MILLIMETERS.

15. PULL OUT BARS OR OTHER BARS WHICH ARE SHOWN ON THE DRAWING TO BE RE-BENT ON SITE SHALL BE MADE FROM QUENCHED AND SELF TEMPERED STEEL. THE BARS SHALL BE POSITIONED WITH THE INITIAL BEND CLEAR OF THE CONCRETE FACE.

16. SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A PROPER BAR RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS 3600 - 2001. BARS SHOULD BE RE-BENT ONCE ONLY.

17. MINIMUM COVER (mm) TO ALL REINFORCEMENT UNLESS OTHERWISE SHOWN SHALL BE AS FOLLOWS

ELEMENT	FORMED & NOT EXPOSED TO WEATHER	FORMED & EXPOSED TO GROUND WATER & WEATHER	NOT FORMED CAST AGAINST GROUND
FOOTINGS	45	55	55

18. SPLICES IN REINFORCEMENT SHALL BE MADE IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE SUPERINTENDENT. MINIMUM LAP FOR ALL FABRICS SHALL BE THE SPACING OF TWO TRANSVERSE WIRES PLUS 25 mm. GRADE 500N BARS SHALL BE LAPPED IN ACCORDANCE WITH THE STANDARD LAP LENGTH TABLE IF NOT STATED OTHERWISE ON THE DRAWINGS.

19. WELDING OF REINFORCEMENT INCLUDING TACK WELDING SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE SUPERINTENDENT. WHERE APPROVED, ALL WELDING SHALL BE UNDERTAKEN STRICTLY IN ACCORDANCE WITH AS 1554.3

20. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS AT 1000 mm MAXIMUM CENTRES. THE CHAIR MATERIAL SHALL SUIT THE EXPOSURE CONDITIONS.

21. BARS SHALL BE EVENLY DISTRIBUTED OVER THE WIDTH OF THE STRIP INDICATED ON THE DRAWINGS UNLESS NOTED OTHERWISE.

22. ALL EMBEDMENTS SHALL BE HOT DIP GALVANIZED.

FORMWORK NOTES

FN1. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS3610 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

FN2. PRIOR TO PLACEMENT OF CONCRETE, THE CONTRACTOR SHALL HAVE THE FORMWORK INSPECTED BY THE FORMWORK DESIGN ENGINEER AND SUPPLY THE SUPERINTENDENT WITH A WRITTEN CERTIFICATION THAT THE FORMWORK COMPLIES WITH THE REQUIREMENTS AS SET OUT IN CLAUSE 5.4.1.7 OF AS3610.

FN3. THE CLASS AND COLOUR OF THE CONCRETE SURFACE FINISH SHALL BE AS SPECIFIED ON THE ARCHITECTURAL DRAWINGS AND/OR THE SPECIFICATION. APPROVAL OF THE CONCRETE MIX DOES NOT ABSOLVE THE CONTRACTOR OF THE NEED TO COMPLY WITH THE REQUIRED CONCRETE COLOUR REQUIREMENTS.

FN4. THE FOLLOWING REQUIREMENTS SHALL BE INCORPORATED INTO THE FORMWORK DESIGN AND/ OR ALLOWED FOR BY THE FORMWORK SUB CONTRACTOR AS APPROPRIATE.

a) MINIMUM FORMWORK STRIPPING TIMES ARE TO BE AS FOLLOWS:

i) VERTICAL SURFACES MAY BE STRIPPED OF FORMWORK WHEN THE MINIMUM MEAN COMPRESSIVE STRENGTH OF CONCRETE f'cm HAS REACHED 5.0 MPa. IF THE STRENGTH CANNOT BE ACCURATELY ASSESSED VIA THE USE OF TEST CYLINDERS STORED ON SITE AND CURED IN A SIMILAR MANNER TO THE PERMANENT STRUCTURE THEN THE MINIMUM FORMWORK STRIPPING TIME IS TO BE 2 DAYS PROVIDED THE AVERAGE AMBIENT TEMPERATURE OVER THAT PERIOD IS BETWEEN 12 AND 20 DEGREES CELSIUS.

b) HORIZONTAL LOADS ON FRAMEWORK ARE TO BE RESISTED BY THE FORMWORK BRACING. STRUTTING OF THE FORMWORK FROM THE PERMANENT STRUCTURE TO RESIST HORIZONTAL LOADS IS NOT PERMITTED.

c) THE SEQUENCE OF CONCRETE PLACEMENT FOR THE WORKS IS TO BE SPECIFIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE ON THE DRAWINGS.

FOOTING NOTES

1. THE ASSUMED FOUNDING LEVELS OF THE FOOTINGS ARE TO BE AS INDICATED ON THE DRAWINGS. BEFORE ANY REINFORCEMENT OR CONCRETE IS PLACED, THE SAFE BEARING CAPACITY OF THE GROUND IS TO BE VERIFIED BY THE GEOTECHNICAL ENGINEER. EXCAVATION SHALL CONTINUE UNTIL THE REQUIRED BEARING CAPACITY IS FOUND. THE OVER-EXCAVATION SHALL BE BACK-FILLED WITH BLINDING CONCRETE TO THE ASSUMED FOUNDING LEVEL.

2. OVER-EXCAVATION WITHIN THE INFLUENCE ZONE (45 DEGREE LINE DOWN FROM BASE OF WALL) OF ANY RETAINING WALL IS NOT ALLOWED WITHOUT THE PRIOR APPROVAL OF THE EXCAVATION SEQUENCE BY THE SUPERINTENDENT.

REFERENCE DESIGN DOCUMENTS

1. THE DETAILS, QUANTITIES, LENGTHS AND LOCATIONS OF THE ANCHOR BAR ELEMENTS FOR THIS PROJECT ARE SPECIFIED ON THE DESIGN REPORTS SUPPLIED BY CMW GEOSCIENCES:
   (i) ADL2022-0229AB Rev2 Kurnabinna Revised Load Design dated 15/08/22
   (ii) ADL2022-0229AC Rev0 Grey Gully Revised Load Design dated 15/08/22
   (iii) ADL2022-0229 AD Rev1 Specification

2. THE DESING LOADS ON THE CMW REPORTS ARE REFERENCED FROM:
   (i) 2402B-REACTION MARKS (002) (002)

3. SURVEY FILES FROM ALEXANDER SYMONDS:
   (i) 20A0144DET_(0)
   (ii) Hallet Cove Coastal Walk Cell 5 (POINT CLOUD FILE - 27/08/2020)
   (iii) Hallet Cove Coastal Walk Cell 6 (POINT CLOUD FILE - 27/08/2020)

THE BRIDGE FOUNDATION HAS BEEN DESIGNED FOR THE FOLLOWING LOADS ADVISED BY MOODIE:

MARK	DESCRIPTION	X (kN) Longitudinal	Y (kN) Lateral	Z(kN) Vertical
KP-S-E	KURNABINNA GULLY SOUTH PORTAL (EAST)	64.5	35	514.2
KP-S-W	KURNABINNA GULLY SOUTH PORTAL (WEST)	64.5	35	514.2
KA-S-E	KURNABINNA GULLY SOUTH ANCHOR (EAST)	571	28	330
KA-S-W	KURNABINNA GULLY SOUTH ANCHOR (WEST)	571	28	330
KE-S-E	KURNABINNA GULLY SOUTH EXTENSION (EAST)	0.19	5.08	18.81
KE-S-W	KURNABINNA GULLY SOUTH EXTENSION (WEST)	0.19	5.08	18.81
KP-N-E	KURNABINNA GULLY NORTH PORTAL (EAST)	64.5	35	514.2
KP-N-W	KURNABINNA GULLY NORTH PORTAL (WEST)	64.5	35	514.2
KA-N-E	KURNABINNA GULLY NORTH ANCHOR (EAST)	571	28	330
KA-N-W	KURNABINNA GULLY NORTH ANCHOR (WEST)	571	28	330
KE-N-E	KURNABINNA GULLY NORTH EXTENSION (EAST)	0.19	5.08	18.81
KE-N-W	KURNABINNA GULLY NORTH EXTENSION (WEST)	0.19	5.08	18.81
GP-S-E	GREY ROAD GULLY SOUTH PORTAL (EAST)	64.5	35	514.2
GP-S-W	GREY ROAD GULLY SOUTH PORTAL (WEST)	64.5	35	514.2
GA-S-E	GREY ROAD GULLY SOUTH ANCHOR (EAST)	571	28	330
GA-S-W	GREY ROAD GULLY SOUTH ANCHOR (WEST)	571	28	330
GE-S-E	GREY ROAD GULLY SOUTH EXTENSION (EAST)	0.19	5.08	18.81
GE-S-W	GREY ROAD GULLY SOUTH EXTENSION (WEST)	0.19	5.08	18.81
GP-N-E	GREY ROAD GULLY NORTH PORTAL (EAST)	64.5	35	514.2
GP-N-W	GREY ROAD GULLY NORTH PORTAL (WEST)	64.5	35	514.2
GA-N-E	GREY ROAD GULLY NORTH ANCHOR (EAST)	571	28	330
GA-N-W	GREY ROAD GULLY NORTH ANCHOR (WEST)	571	28	330
GE-N-E	GREY ROAD GULLY NORTH EXTENSION (EAST)	0.19	5.08	18.81
GE-N-W	GREY ROAD GULLY NORTH EXTENSION (WEST)	0.19	5.08	18.81

FIBREGLASS REINFORCED PLASTIC NOTES

SCOPE:

1. THE FIBREGLASS REINFORCED PLASTIC (FRP) SHALL CONFORM TO THE MATERIAL AND FABRICATION REQUIREMENTS PER THIS SPECIFICATION FOR ALL COMPONENTS THROUGHOUT THE SITE AND NO DEVIATION FROM THIS STANDARD WILL BE ACCEPTED.

2. THE FRP STRUCTURAL SECTIONS MENTIONED ARE TO BE DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.

3. THE FRP DESIGN, ENGINEERING, DRAFTING, MANUFACTURE AND SUPPLY SHALL BE (MADE BY PULTRUSION, COMPRESSION MOULDING AND FABRICATION) FROM TREADWELL GROUP PTY LTD AND SHALL CONFORM TO FABRICATION REQUIREMENTS AS LISTED IN THIS SPECIFICATION. REFER NOTE STRT OF THIS SPECIFICATION.

4. SHOP DRAWING OF ALL FRP COMPONENTS SHALL BE SUBMITTED BY THE FRP MANUFACTURERS SHOP DETAILER, CLEARLY DISPLAYING DIMENSIONS, TYPES AND SIZES OF FASTENERS AND BRACKETS FOR FABRICATING THE STRUCTURE.

5. TECHNICAL DATA AND SAMPLE PIECES SHALL BE SUBMITTED IF REQUESTED.

6. ALL ENGINEERING AND DRAFTING IN ADDITION TO THIS DRAWING SET TO BE COMPLETED AND APPROVED BY THE FRP MANUFACTURER. REFER NOTE D1 OF THIS SPECIFICATION.

7. ALL FRP COMPONENTS SHALL BE MANUFACTURED WITH I-SERIES® RESIN SYSTEM, RESISTANT TO ULTRAVIOLET RAYS. ALL PULTRUDED COMPONENTS SHALL COMPLETELY POSSESS A SYNTHETIC VEIL AROUND THE OUTSIDE FACE OF THE COMPONENT. IN ADDITION, UV STABILIZATION SHALL BE PROVIDED AS INTEGRAL CONSTITUENT OF THE RESIN SYSTEM. CERTIFICATION ON THE USE OF EX-SERIES® RESIN SYSTEM OR SIMILAR APPROVED MUST BE PROVIDED TO THE SUPERINTENDANT.

8. GLASS REINFORCEMENT
- THE GLASS REINFORCEMENT SHALL BE A COMMERCIAL HIGH-GRADE E-GLASS
- THE GLASS FIBRE TO RESIN CONTENT SHALL BE:
- 50% - 55% WEIGHT IN ALL PULTRUDED COMPONENTS
- 25% - 40% BY WEIGHT IN ALL MOULDED FITTING AND ACCESSORY COMPONENTS.

9. COLOUR – REFER ARCHITECTURAL SPECIFICATION.
- ALL STRUCTURAL PROFILES/ GRATING MUST HAVE INTEGRALLY PIGMENTED RESIN SYSTEM. CERTIFICATION MUST BE PROVIDED TO SUPERINDENTENT.
- A PAINTED SURFACE WILL NOT BE ACCEPTED DUE TO DELAMINATION ISSUES.

10. ALL FRP MATERIAL MUST HAVE A MINIMUM DESIGN LIFE OF 55 YEARS "CASE PROVEN". CERTIFICATION MUST BE PROVIDED TO SUPERINDENTENT.

11. THE (FRP) STRUCTURES TO BE MANUFACTURED BY TREADWELL GROUP PTY LTD OF AUSTRALIA OR EQUIVALENT OTHER. REFER NOTE D1 OF THIS SPECIFICATION.

DISCLAIMERS:

D1. THE MEMBER SIZES DOCUMENTED IN THESE DRAWINGS HAVE BEEN SIZED USING TREADWELL GROUP'S ARCHITEX™ PULTRUSION DESIGN GUIDE AND GRATEX® GRATING DESIGN GUIDE. ALL MEMBER SIZES TO BE CONFIRMED BY TREADWELL GROUP.

D2. ALL FRP-TO-FRP CONNECTIONS TO BE DESIGNED BY TREADWELL GROUP PTY LTD.

D3. FINAL DETAILED DESIGN OF THE FRP STRUCTURES ARE THE RESPONSIBILITY OF TREADWELL GROUP PTY LTD.

REINFORCEMENT

RE1. SYMBOLS:

N	HOT ROLLED DEFORMED BARS OR MESH TO AS/NZS 4671, NORMAL DUCTILITY CLASS N (fsy=500 MPa)

RE2. ALL REINFORCEMENT BARS TO BE TYPE N UNLESS NOTED OTHERWISE.

RE3. DISTRIBUTION BARS TO MAIN REINFORCEMENT BARS IN FOOTINGS SHALL BE N12 AT 300mm CENTRES UNLESS NOTED OTHERWISE. REFER TO REINFORCEMENT LAP SCHEDULE FOR LAP LENGTHS.

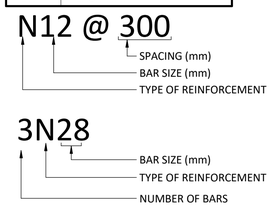
RE4. WELDING OF REINFORCEMENT IS NOT ALLOWED WITHOUT PRIOR APPROVAL.

RE5. TOP AND BOTTOM REINFORCEMENT SHALL BE SUPPORTED IN BOTH DIRECTIONS AT MAXIMUM CENTRES 1000mm.

RE6. THE MINIMUM CLEAR SPACING BETWEEN CONDUITS AS PER AS3600 BUT NOT LESS THAN THREE DIAMETERS. CONDUITS IN SLABS TO BE PLACED ABOVE THE BOTTOM REINFORCEMENT AND BELOW THE TOP REINFORCEMENT. MINIMUM CLEAR SPACING FROM PARALLEL BARS IS 3x THE LARGER OF THE CONDUIT AND REINFORCEMENT DIAMETER.

RE7. ABBREVIATIONS USED FOR REINFORCEMENT:

B	BOTTOM
T	TOP
EF	EACH FACE
EW	EACH WAY



STAINLESS STEEL NOTES

1. ALL STAINLESS STEEL SHALL BE GRADE 316L, UNO.

2. REMOVE ALL WELD SPLATTER, SHARP EDGES, CORNERS AND BURRS. ALL COMPONENTS TOBE GENERALLY FREE FROM GRIND MARKS.

3. MARK ASSEMBLIES AND LOOSE ITEMS AS NOTED ON SHOP DETAIL DRAWINGS.

4. ALL PLASMA CUT STAINLESS STEEL SURFACES SHALL BE PASSIVATED.

5. ALL BOLTS AND NUTS SHALL BE STAINLESS STEEL GRADE 316 A4-70 UNO.

6. ALL WASHERS SHALL BE STAINLESS STEEL GRADE 316 A4-70 UNO.

7. THE TREADS OF ALL STAINLESS-STEEL BOLTS ARE TO BE COATED WITH A NICKLE BASED ANTI-SEIZE COMPOUND.

8. ALL BOLTS JOINING STELL TO STEEL SHALL BE 'SNUG' TIGHTED IN ACCORDANCE WITH AISC BOLTING PROCEDURES, UNO.

9. ALL BOLTS JOINGING STAINLESS STEEL TO FIBREGLASS REINFORCED PLASTIC PULTRUDED SECTIONS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

10. ALL WELDS TO BE PICKLED AND PASSIVATED.

11. ALL STAINLESS-STEEL MATERIAL MUST BE FREE FROM IRON AND CARBON CONTAMINATION.

TIMBER NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1684, AS1684.1 AND AS1720 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. ALL TIMBER CONNECTIONS TO BE IN ACCORDANCE WITH AS1684 UNLESS NOTED OTHERWISE ON THE DRAWINGS.

3. ALL PROPRIETARY CONNECTORS AND FIXINGS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

4. TIMBER MEMBERS SHALL HAVE THE FOLLOWING MINIMUM STRESS GRADES UNLESS NOTED OTHERWISE ON THE DRAWINGS .
   MGP10 FOR SEASONED PINE
   F8 FOR UNSEASONED HARDWOOD
   F8 FOR OREGON
   F17 FOR SEASONED HARDWOOD

5. MAXIMUM UNDERSIDE FOR ALL TIMBER MEMBERS SHALL BE AS FOLLOWS:
   (i) 0mm FOR SEASONED PINE SPECIES AND OTHER SEASONED SOFTWOODS
   (ii) 3mm FOR UNSEASONED HARDWOOD
   (iii) 0mm FOR SEASONED HARDWOOD
   (iv) 4mm FOR OREGON

6. TIMBER MEMBERS NOT SIZED OR SCHEDULED ON THE DRAWINGS SHALL BE SELECTED USING AS1684.1

7. TIMBER JOINTS SHALL BE FREE OF DEFECTS.

8. ALL NAILS, BOLTS AND SCREWS SHALL BE 316 STAINLESS STEEL.

9. ALL TIMBER TO HAVE HAZARD CLASS OF H5.

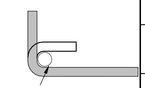
TENSION DEVELOPMENT LENGTH/SPLICE SCHEDULE (mm)

BAR SIZE	LESS THAN 300 mm CONCRETE BELOW BAR OR VERTICAL BAR	MORE THAN 300 mm CONCRETE BELOW BAR
N12	500	650
N16	700	950
N20	950	1250
N24	1250	1600
N28	1500	1950
N32	1800	2300
N36*	2100	2700

NOTE:

ALL BARS SHALL BE BENT AROUND A PIN WITH DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS3600-2018.

COG BARS



BAR DIA.	6	10	12	16	20	24	28	32	36
PIN DIA.	50	50	75	75	120	120	160	160	175
COG LENGTH	120	140	170	200	250	300	350	400	450

IFC

CLIENT:	REV:	DATE:	DESCRIPTION:	APR'D:
ASPECT Studios				
PRINT IN COLOUR	C1	31/08/2022	ISSUED FOR CONSTRUCTION	JA

TITLE:	NAME:
DRAFTER	ESA
DRAFTING CHECK	TM
DESIGNER	JB
DESIGN CHECK	JA/CMW
PROJECT MANAGER	JA
PROJECT DIRECTOR	JA

MARION COASTAL WALKWAY UPGRADE
CELL 5 AND 6
HALLETT COVE, SA 5158
STRUCTURAL STANDARD NOTES

INNOVIS Agile Outcomes www.innovis.com.au

SCALE:	DATE:	PHASE:	SHT SIZE:
1 : 1	31/08/2022	IFC	A1
DRAWING NUMBER:			REVISION:
J0439-STR-DRG-S1010			C1

FILE LOCATION: C:\Users\chad.shepherd\Documents\J0439-STR-MOD_Coastal Walking Trail Bridge Setout_R21_chad.shepherdC553Q.rvt

©2021, INNOVIS PTY LTD reserves all rights to these drawings, designs and/or any other data contained herein. No part of the said drawings, designs and/or other data may be reproduced, modified, transmitted or used in any form or by any means for any purpose without the prior written consent of INNOVIS PTY LTD other than the sole purpose for which such drawings, designs and/or other data are provided to licensed users on such terms as INNOVIS PTY LTD may prescribe.

PRINT DATE: 31/08/2022 7:18:55 PM

0 10mm AT A1 20 30 40 50 60 70 80 90 100