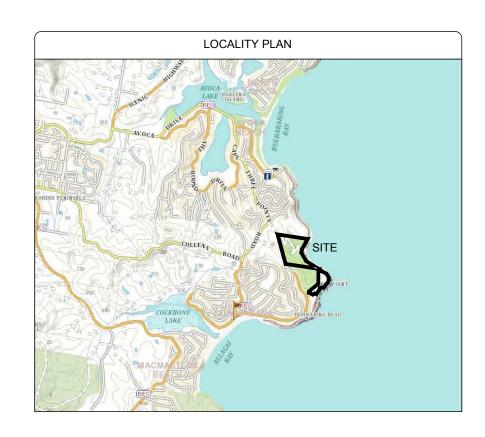


PROPOSED WINNEY BAY CLIFFTOP WALK, **5 LANDS COASTAL WALKWAY - STAGE 5, CAPTAIN COOK LOOKOUT - WINNEY BAY**

COPACABANA, NSW







| | DRAWING LIST |
|---|---|
| A5.01 A5.02 A5.03 A5.04 A5.05 A5.06 A5.07 | PLATFORM STRUCTURE COVER SHEET STRUCTURAL NOTES DETAIL PLATFORM STRUCTURE PLAN PLATFORM STRUCTURE PILING AND ABUTMENT SETOUT PLAN PLATFORM STRUCTURE MARKING PLAN PLATFORM STRUCTURE DETAILS SHEET 1 PLATFORM STRUCTURE DETAILS SHEET 2 |
| A5.08 | PLATFORM STRUCTURE DETAILS SHEET 3 |



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DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS ON SITE.

| EVISION | DESCRIPTION | DATE | REVISION | DESCRIPTION | DATE |
|---------|-------------------|----------|----------|-------------|------|
| Α | RE-ISSUE TO | 24.06.15 | | | |
| | QUANTITY SURVEYOR | | | | |
| В | 90% ISSUE | 29.06.15 | | | |
| С | COUNCIL APPROVAL | 19.08.15 | | | |
| | | | | | |
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WINNEY BAY RESERVE COPACABANA N.S.W.

5 LANDS COASTAL WALKWAY - STAGE 5 CAPTAIN COOK LOOKOUT TO WINNEY BAY

| PLATFORM STRUCTURE |
|---------------------------------|
| I LI III OI III OI II OO I OI L |
| COVER SHEET AND NOTES |

| | SCALE | NTS | INIT. | SHEET |
|------|------------|---------|--------|----------|
| | DRAWN | JG/CW | | A5.01 |
| | DESIGNED | CF | | 7 (0.0) |
| | CHECKED | AJG | | REV |
| | DATE | JANUAR' | Y 2015 | |
| date | JOB NUMBER | 20140 | 492 | |

CONCEPT PLANS

NOT FOR CONSTRUCTION



CONCRETE (C)

C01. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600, AS 1379 & AS 3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS

C02 ALL CEMENT TO BE TYPE SL. SHRINKAGE LIMITED CEMENT IN ACCORDANCE WITH AS3972, EXCEPT THAT THE MAXIMUM SHRINKAGE OF THE CEMENT IN THE MORTAR TEST SAMPLE IN ACCORDANCE WITH AS3600 SHALL BE LESS THAN 600 MICROSTRAIN

| ELEMENT | STRENGTH GRADE (MPa) | SLUMP (mm) | MAXIMUM AGGREG. SIZE (mm) | MINIMUM CEMENT CONTENT (kg/cu.m |
|----------|-------------------------|---------------|------------------------------|------------------------------------|
| SLABS | S65 | 80 | 20 | 250 |
| FOOTINGS | S65 | 80 | 20 | 250 |
| | | | | |

PROJECT ASSESSMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379 CLAUSE B7

ALL CONCRETE IN SLABS AND BEAMS TO BE PROPORTIONED TO LIMIT DRYING SHRINKAGE TO 650 MICROSTRAIN AT 56 DAYS.
b. DETAILS OF THE PROPOSED MIX TO BE SUBMITTED & APPROVAL OBTAINED PRIOR TO POURING ANY CONCRETE.

SHRINKAGE TESTS SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY IN ACCORDANCE WITH AS 1012 PART 13. TESTS SHALL BE CONDUCTED ON THE FIRST BATCH OF CONCRETE USED IN SUSPENDED SLABS AND SUBSEQUENTLY AT THE RATE OF ONE TEST EVERY ADDITIONAL 100m3 OF CONCRETE SUPPLIED. THREE SPECIMENS SHALL BE TAKEN FOR EACH TEST AND THE SHRINKAGE SHALL BE THE AVERAGE OF THE THREE RESULTS.

THE COST OF TESTING SHALL BE BORNE BY THE CONTRACTOR AS SHALL ANY ADDITIONAL TESTS REQUIRED IF THE CONCRETE FAILS TO MEET THE SPECIFIED SHRINKAGE LIMITS

CO4. NO ADMIXTURES OTHER THAN LOW RANGE WRA SHALL BE USED.

C05. CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE. COVER MAY NEED TO BE INCREASED FOR FIRE RATING.

| EXPOSURE CLASS TO AS 3600 | MINIMUM CONCRETE GRADE | CAST AGAINST GROUND | CAST IN FORMS & EXPOSED | CAST IN FORMS & NOT EXPOSED |
|---------------------------------|------------------------------|---------------------------|-------------------------------|--------------------------------------|
| A1 (INTERNAL) | 20 | 40mm | - | 20mm |
| A2 (EXTERNAL) | 20 | 50mm | 30mm | - |
| B1 (EXTERNAL) | 32 | 60mm | 40mm | - |
| B2 (EXTERNAL) | 40 | 65mm | 45mm | - |
| C2 | 50 | 65mm | - | - |

NOTE: WHERE CONCRETE IS POURED ON A VAPOURPROOF MEMBRANE 0.2mm MINIMUM THICKNESS. THE COVER TO CONCRETE CAST AGAINST GROUND MAY BE REDUCED BY 10

- CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES. NO FINISH WHICH DECREASES COVER IS ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
- DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.
- FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.
- NO HOLES, CHASES, BLOCKOUTS, DUCTS OR EMBEDMENT OF PIPES SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER
- ALL CONCRETE COLUMNS GREATER THAN 1.2 METRES IN HEIGHT HALL BE POURED A MINIMUM OF 4 HOURS PRIOR TO SLAB OF BEAM OVER
- THE FINISHED CONCRETE SHALL BE MECHANICALLY VIBRATED TO ACHIEVE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.
- C13. CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING CURING OF ALL CONCRETE IS TO BE ACHIEVED BY REEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF THREE DAYS, AND THE PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS THAT COMPLY WITH AS 3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED (REFER MANUFACTURERS SPECIFICATION). POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.
- CONSTRUCTION SUPPORT PROPPING IS TO BE LEET IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING, NO BRICKWORK OR PARTITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL SEVEN DAYS AFTER PROPPING HAS BEEN REMOVED AND THE SLAB PRE-LOADED WITH THE BRICKS OR UNITS TO BE USED IN THE WALL
- C15. REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE
- C16 CAST-IN FIXINGS BOLTS ETC. SHALL NOT BE ALTERED WITHOUT
- CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE THIRD OF THE SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. CONDUITS AND PIPES SHALL NOT BE PLACED WITHIN THE COVER TO REINFORCEMENT.
- SLABS AND BEAMS SHALL BE CONSTRUCTED TO BEAR ONLY ON THE SEAMS, WALLS, COLUMNS ETC. SHOWN ON THE DRAWINGS. AL OTHER BUILDING ELEMENTS SHALL BE KEPT 12mm CLEAR OF SOFFITS OF STRUCTURE.
- C19 PLASTIC FORMWORK SPACERS AND BAR CHAIRS TO BE USED IN ALL EXPOSED CONCRETE WORK

REINFORCEMENT (R)

R01. REINFORCEMENT SYMBOLS:

- DENOTES GRADE 500 N BARS TO AS 4671 DENOTES GRADE 250 R HOT ROLLED PLAIN BARS TO AS
- DENOTES GRADE 500 L HARD-DRAWN WIRE
- REINFORCING FABRIC TO AS 4671 DENOTES GRADE 450 W HARD-DRAWN PLAIN WIRE TO AS w
- DENOTES GRADE 500 TRENCH MESH TO AS 4671

NUMBER OF BARS IN GROUP 17N20-250 -SPACING IN mr

NOMINAL BAR SIZE IN mm THE FIGURES FOLLOWING THE FABRIC SYMBOLS RL, SL, L \dots TM IS THE REFERENCE NUMBER TO AS 4671.

REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN SPELICES IN REINFURCEMENT STALL BE MADE UNLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3800 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR, AS PER THE TABLE BELOW:

| SPLICE LENGTHS (mm) | | | | | |
|---------------------|---------------------------|--------------|--|--|--|
| BAR SIZE | LESS THAN 300 CONCRETE | | | | |
| | BELOW BAR OR VERTICAL BAR | | | | |
| | 25MPa | 25MPa ≽32MPa | | | |
| N12 | 300 | 300 | | | |
| N16 | 550 | 500 | | | |
| N20 | 750 | 650 | | | |
| N24 | 1000 | 900 | | | |
| N28 | 1350 | 1200 | | | |
| N32 | 1650 | 1450 | | | |
| N36 | 2000 | 1750 | | | |
| | MORE THAN 3 | 00 CONCRETE | | | |
| | BELOW BAR BAR | | | | |
| 25MPa ≽32MPa | | | | | |
| N12 | 400 | 400 | | | |
| N16 | 650 | 600 | | | |
| N20 | 950 | 850 | | | |
| N24 | 1300 | 1150 | | | |
| N28 | 1650 | 1500 | | | |
| N32 | 2050 | 1850 | | | |
| N36 | 2500 | 2200 | | | |

BOTTOM BAR LAPPED @ SUPPORTS AND TOP BAR LAPPED AT

- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.
- FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 25mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.
- WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm UNLESS NOTED.
- JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.
- ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD. ALL REINFORCEMENT STALL BE FINNET SUPPORTED ON WILLD STEEL PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS. AS FURRIWORK PROVIDE PLATES UNDER ALL BAR CHAIRS.
 PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON
 EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C
 ONLY PLASTIC OR PLASTIC OR CONCRETE CHAIRS.
- AT A SIMPLE OR END SUPPORT OF A SLAB ON A MASONRY WALL, ALL BOTTOM SLAB REINFORCEMENT SHALL EXTEND OVER THE MASONRY WALL BY A LENGTH 75mm FOR N12 BARS & 95mm FOR N16 BARS. IF THIS CANNOT BE ACHIEVED DUE TO COVER REQUIREMENTS THEN THE BARS SHALL BE COGGED. FOR FABRIC THE LAST WELDED CROSS ROD SHALL BE LOCATED OVER THE WALL AND 50mm MINIMUM BEYOND THE FACE OF THE
- R10. SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE RPN1 OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA
- R11 THE STRUCTURAL ENGINEER SHALL BE GIVEN 24 HOURS NOTICE FOR REINFORCEMENT INSPECTION AND CONCRETE SHALL NOT BE DELIVERED UNTIL FINAL APPROVAL HAS BEEN OBTAINED FROM THE STRUCTURAL ENGINEER.

STRUCTURAL STEEL (SS)

ALL WORKMANSHIP AND MATERIALS SHALL BE IN WITH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS

LINEESS NOTED OTHERWISE ALL MATERIAL SHALL BE-GRADE 250 HOT-ROLLED PLATES COMPLYING WITH AS 3678
 GRADE 250 HOT-ROLLED FLATS...

GRADE 250 HOT-ROLLED FLATS.
 GRADE 300PLUS UB, UC, PFC, ANGLES, AND TFB, GRADE 300 WB, WC COMPLYING WITH AS 3679.2;
 GRADE C350 RHS, CHS COMPLYING WITH AS 116

S03. THREE(3) COPIES OF WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION AND PERMISSION TO USE OBTAINED PRIOR TO FABRICATION. PERMISSION TO USE DOES NOT RELIEVE THE BUILDER OF THE FULL RESPONSIBILITY FOR DIMENSIONS, FIT AND COMPLIANCE WITH ARCHITECTURAL AND ENGINEERING

S04. BOLTS:• 4.6/S - COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111, SNUG

8.8/S - HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252,

 8.8/TB - HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS BEARING JOINT. 8.8/TF - HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS A FRICTION JOINT WITH FACING

SURFACES LEFT UNCOATED. ALL BOLTS SHALL BE M20 GRADE 8 8/S LINLESS NOTED, NO. ALL BOLTS SHALL BE MIZU GRADE 6.0/3 UNLESS NOTED. NOTED. NOTECONNECTION SHALL HAVE LESS THAN 2 BOLTS. ALL BOLTS, NUTS & WASHERS TO BE GALVANISED. TB AND TF BOLTS TO BE INSTALLED USING APPROVED LOAD INDICATING WASHERS, OR BY TURN OF NUT

S05. WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. WELDING S5 CONSUMABLES SHALL BE E48XX OR W50X U.N.O. ALL WELD SHALL BE 6 MM CFW SP CATEGORY U.N.O. CPBW SHALL BE SP CATEGORY U.N.O. INSPECTION SHALL BE CARRIED OUT TO AS 1554.1 ALL GPISP WELDS SHALL BE 100% VISUALLY SCANNED. BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS TO AS 1554.

ALL DETAILS, GAUGE LINES ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND AISC STANDARDIZED STRUCTURAL CONNECTIONS. PLATES TO BE 10mm THICK, EX-STANDARD SQUARE EDGE FLATS U.N.O.

S07. STEELWORK TO BE CONCRETE ENCASED SHALL BE WRAPPED WITH F41 STEELWIRE FABRIC AND SHALL HAVE 50mm MINIMUM CONCRETE COVER TO THE STRUCTURAL STEEL.

S08. PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS, PROVIDE VENT HOLES TO HOLLOW MEMBERS & DRAIN HOLES TO ALL MEMBERS TO BE HOT DIP GAI VANISED

S09 IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT STEELWORK IS SECURELY TEMPORARILY BRACED AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

\$10. STRUCTURAL STEELWORK SHALL HAVE THE FOLLOWING SURFACE TREATMENT IN ACCORDANCE WITH THE SPECIFICATION.

| ELEMENT | | ELEMENT | SURFACE CLEANING | PROTECTIVE COATING | |
|---------|---|----------|---------------------|---|--|
| | • | EXTERNAL | MECHANICAL | HOT DIPPED GALV. + 2 COAT EPOXY TO MANUF. SPEC. | |

THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.

THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE UNDERTAKEN BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET. ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP

S13. REFERENCE SHOULD BE MADE TO AS 2312 FOR APPROPRIATE COATING SYSTEMS FOR ALL EXTERNAL APPLICATIONS. COATING OF EXTERNAL LINTELS SHALL BE IN ACCORDANCE WITH B.C.A AND AS 3700

STRUCTURAL STAINLESS STEEL (SSS)

- SS1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE TH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE
- SS2. UNLESS NOTED OTHERWISE ALL STAINLESS STEEL SHALL BE COMPLYING WITH AS/NZS 4673. OF A GRADE SUITABLE FOR USE IN
- THREE(3) COPIES OF WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST? DAYS PRIOR TO COMMENCEMENT OF FABRICATION AND PERMISSION TO USE OBTAINED PRIOR TO FABRICATION. PERMISSION TO USE DOES NOT RELIEVE THE BUILDER OF THE FULL RESPONSIBILITY FOR DIMENSIONS, FIT AND COMPELIANCE WITH ARCHITECTURAL AND ENGINEEPING DRAWINGS ENGINEERING DRAWINGS.
- ALL BOLTS SHALL BE M16 GRADE 304/S UNLESS NOTED OTHERWISE. ALL BOLTS, NUTS & WASHERS TO BE STAINLESS STEEL.
 (GRADE 304) TO ISO 3506, SNUG TIGHTENED WITH NYLON LOCK NUTS.
 STAINLESS STEEL TO BE SEPARATED FROM OTHER METALS WITH NEOPRENE WASHERS.
- SS5. WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. AND AS 1554.6 WELDING CONSUMABLES SHALL BE SUITABLE FOR AND AS 1594.6 WELDING CONSUMBLES STRALL BE SUTHBLE FOR STAINLESS STEEL OR ALUMINIUM U.N.O. ALL WELDS SHALL BE 3mm C.F.W. SP GATEGORY U.N.O. CPBW SHALL BE SP CATEGORY U.N.O. INSPECTION SHALL BE CARRIED OUT TO AS 1554.1. AND AS 1554.6 ALL GP/SP WELDS SHALL BE 100% VISUALLY SCANNED. BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS TO AS 1554
- SS6. ALL DETAILS, GAUGE LINES ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND AISC STANDARDIZED STRUCTURAL CONNECTIONS. PLATES TO BE 6mm THICK, EX-STANDARD SQUARE EDGE FLATS U.N.O.
- SS7. PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS.
- SS8. IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT STEEL WORK IS SECURELY TEMPORARILY BRACED AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION
- SS9. THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES. CESSARY FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL WHETHER OR NOT DETAILED ON THE DRAWING
- SS10. THE FABRICATION AND ERECTION OF THE STRUCTURAL STEEL WORK THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELUNGS SHALL BE UNDERTAKEN BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP.

FORMWORK (FW)

- THE DESIGN, CONSTRUCTION AND PERFORMANCE OF THE FORMWORK AND FALSEWORK IS THE RESPONSIBILITY OF THE BUILDER.
- FW2. DESIGN AND CONSTRUCTION AND STRIPPING TIMES SHALL COMPLY WITH AS 3610 AND AS 3600 UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- FW3. DURING CONSTRUCTION, SUPPORT PROPPING SHALL BE PROVIDED WHERE LOADS FROM STACKED MATERIALS, FORMWORK AND OTHER SUPPORTED SLABS INDUCE LOADS IN A SLAB OR BEAM WHICH EXCEED THE DESIGN LOAD FOR STRENGTH OR SERVICEABILITY AT THAT AGE ONCE THE NOMINATED 28 DAY STRENGTH HAS BEEN ATTAINED. THESE OADS SHALL NOT EXCEED THE DESIGN SUPERIMPOSED OADS SET OUT IN THE GENERAL NOTES
- EW4 IN MULTI-STOREY CONSTRUCTION PROPPING SHALL BE IM MULTI-STOREY CONSTRUCTION PROPPING SHALL BE PROVIDED A TLEAST 3 LEVELS BELOW THE FLOOR BEING CAST. PROP REMOVAL IS TO BE PROGRAMMED TO AVOID DISTRESS TO PREVIOUSLY CAST FLOORS. RE-SHORING OR BACK-PROPPING IS SUBJECT TO THE APPROVAL OF THE PROJECT DESIGN ENGINEER.
- FW5. THE FORMWORK SHALL BE DESIGNED TO RELY ON NO RESTRAINT OR SUPPORT FROM THE PERMANENT STRUCTURE WITHOUT PRIOR APPROVAL FROM THE PROJECT DESIGN
- FW5. FORMWORK SHALL BE DESIGNED TO ACCOMMODATE MOVEMENTS AND LOAD RE DISTRIBUTION DUE TO
- FW6. WHERE NECESSARY SPECIAL REQUIREMENTS FOR SEQUENCE OF CONCRETE PLACEMENT AND STRIPPING ARE SET OUT ON
- FW7. DESIGN INFORMATION CONCERNING THE FOUNDATION FORMWORK SHALL BE DETERMINED FROM THE CONDITIONS EXISTING ON SITE AT THE TIME OF CONSTRUCTION. REFER ALSO TO THE GEOTECHNICAL REPORT WHERE AVAILABLE.
- EW8 LINEESS NOTED OTHERWISE PROVIDE LIPWARD CAMBER TO UNLESS NOTED OTHERWISE PROVIDE DEWARD CAMBER IT FORMWORK OF CANTILEVERS OF LIZO, WHERE I IS THE SHORTEST PROJECTION BEYOND COLUMN OR WALL FACE, AND TO FORMWORK OF SLABS WHERE NOTED ON PLAN. MAINTAIN THE SLAB AND BEAM DEPTHS SHOWN.

CHEMICALLY ANCHORED REINFORCEMENT

- CAR1. WHERE SHOWN ON THE DRAWINGS REINFORCMENT BARS SHALL BE CHEMICALLY ANCHORED INTO EXISTING CONCRETE AS DESCRIBED BELOW.
- CAR2. PERCUSSION DRILL (CORING NOT PERMITTED) A HOLE TO THE CORRECT DIAMETER AND DEPTH FOR THE PARTICULAR SIZE REINFORCING BARS AS TABULATED BELOW, UNLESS SHOWN

| BAR SIZE (Y OR N) | HOLE DIA (mm) | HOLE DEPTH (mm) |
|-------------------|---------------|-----------------|
| 12 | 16 | 120 |
| 16 | 22 | 150 |
| 20 | 28 | 250 |
| 24 | 32 | 280 |

- CAR3. THOROUGHLY CLEAN THE HOLE USING A ROUND WIRE BRUSH
- CAR4. ENSURE HOLE IS CLEAN AND DRY AND INSERT SUFFICIENT HILTI HY 150 RESIN INTO THE BASE OF THE HOLE TO ENSURE THAT WHEN THE BAR IS INSTALLED RESIN APPEARS AT THE
- CAR5. IMMEDIATELY INSERT THE REINFORCING BAR INTO THE HOLE BY ROTATING SLOWLY TO FULLY COAT THE BAR WITH RESIN, AND PUSH FULLY INTO THE HOLE.
- CAR6. ENSURE BAR IS NOT DISTURBED WHILST RESIN IS CURING.
- 7. DRILLING CONTRACTOR IS TO OBTAIN WRITTEN AUTHORISATION FROM ADJOINING PROPERTY OWNERS BEFORE CARRYING OUT PLACEMENT OF PILING ANCHORS.

ANCHOR NOTES

MINIMUM 28 DAY COMPRESSIVE STRENGTH OF ALL CONCRETE SHALL

BE 40MPa.
CONCRETE EXPOSURE CLASSIFICATION: B2

ROCK ANCHOR NOTES (PASSIVE ANCHORS)
IN ADDITION TO THE FOLLOWING NOTES REFER TO RTA SPECIFICATION

B114

PASSIVE ROCK ANCHORS
ROCK ANCHOR BARS TO BE N32 BARS PLACED IN Ø125 HOLE.
ANCHOR TO BE EMBEDDED 3m. INTO ROCK CLASS 111 SANDSTONE OR
BETTER IN ACCORDANCE WITH THE FOLLOWING NOTES AND SPECIFICATION

DRILL HOLES
WITHIN A TOLERANCE OF +10mm/-0mm HOLES MAY BE ADVANCED BY
ROTARY DRILL HOLES SHALL BE CLEAN AND HAVE A SURFACE
ROUGHNESS OF R2 OR ROUGHER.

ROUGHINESS OF RZOR ROUGHER.
DRILL HOLES SHALL BE CLEARED OF ALL DELETERIOUS MATERIAL ON
COMPLETION OF DRILLING AND THE OPENING SEALED TO PREVENT THE
ENTRY OF FOREIGN MATTER.

PLACING PLASTIC CENTRALISERS SHALL BE PROVIDED ALONG THE ENTIRE LENGTH OF THE ANCHOR BAR AT SUITABLE INTERVALS TO INSURE UNIFORM GROUT COVER AROUND THE PERIMETER OF THE BAR. CENTRALISERS SHALL NOT OBSTRUCT THE FREE FLOW OF GROUT ALONG THE BAR, TEMPORARY WALL/ANCHORS TO BE STRUCTURALLY MONITORED DURING WORKS

DESIGN REFERENCE STANDARDS:

CONCRETE STRUCTURES

CONCRETE STRUCTURES
STEEL STRUCTURES
STRUCTURAL DESIGN ACTIONS
CONCRETE TESTING
SOIL TESTING
CONCRETE MANUFACTURE
CONCRETE ADMIXTURES

AS 1478 AS/NZS 4671 AS/NZS 4680 AS 1554 CONCRETE ADMIXTURES STEEL REINFORCING MATERIALS

HOT DIP GALVANIZING (ZINC) COATINGS

STRUCTURAL STEEL WELDING AS4673 STAINLESS STEEL STRUCTURES

GUIDE TO THE PROTECTION OF IRON & STEEL AGAINST AS2312 EXTERIOR ATMOSPHERIC CORROSION

AS3610 FORMWORK FOR CONCRETE AS2156

WALKING TRACKS DESIGN FOR ACCESS AND MOBILITY AS1428 OFF STREET CAR PARKING

CONCEPT PLANS NOT FOR CONSTRUCTION

20140492

DO NOT SCALE DRAWINGS VERIEVALL DIMENSIONS ON SITE

VISION DESCRIPTION DATE REVISION DESCRIPTION DATE A RE-ISSUF TO QUANTITY SURVEYOR 29 06 15 B 90% ISSUE C COUNCIL APPROVAL 19.08.15

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WINNEY BAY RESERVE COPACABANA N.S.W.

PROJECT

5 LANDS COASTAL WALKWAY - STAGE 5 CAPTAIN COOK LOOKOUT TO WINNEY BAY STRUCTURAL NOTES

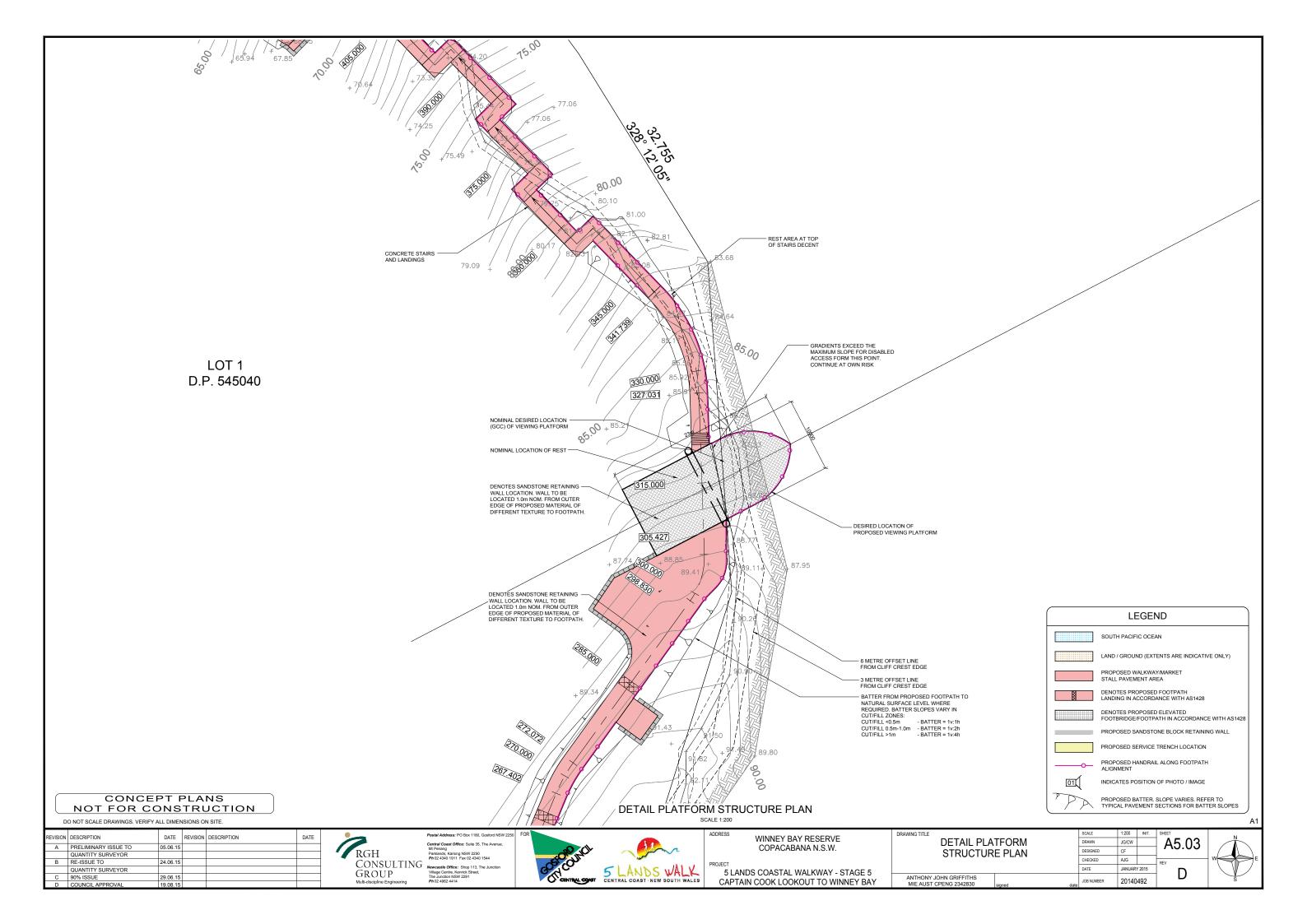
ANTHONY JOHN GRIFFITHS MIE AUST CPENG 2342830

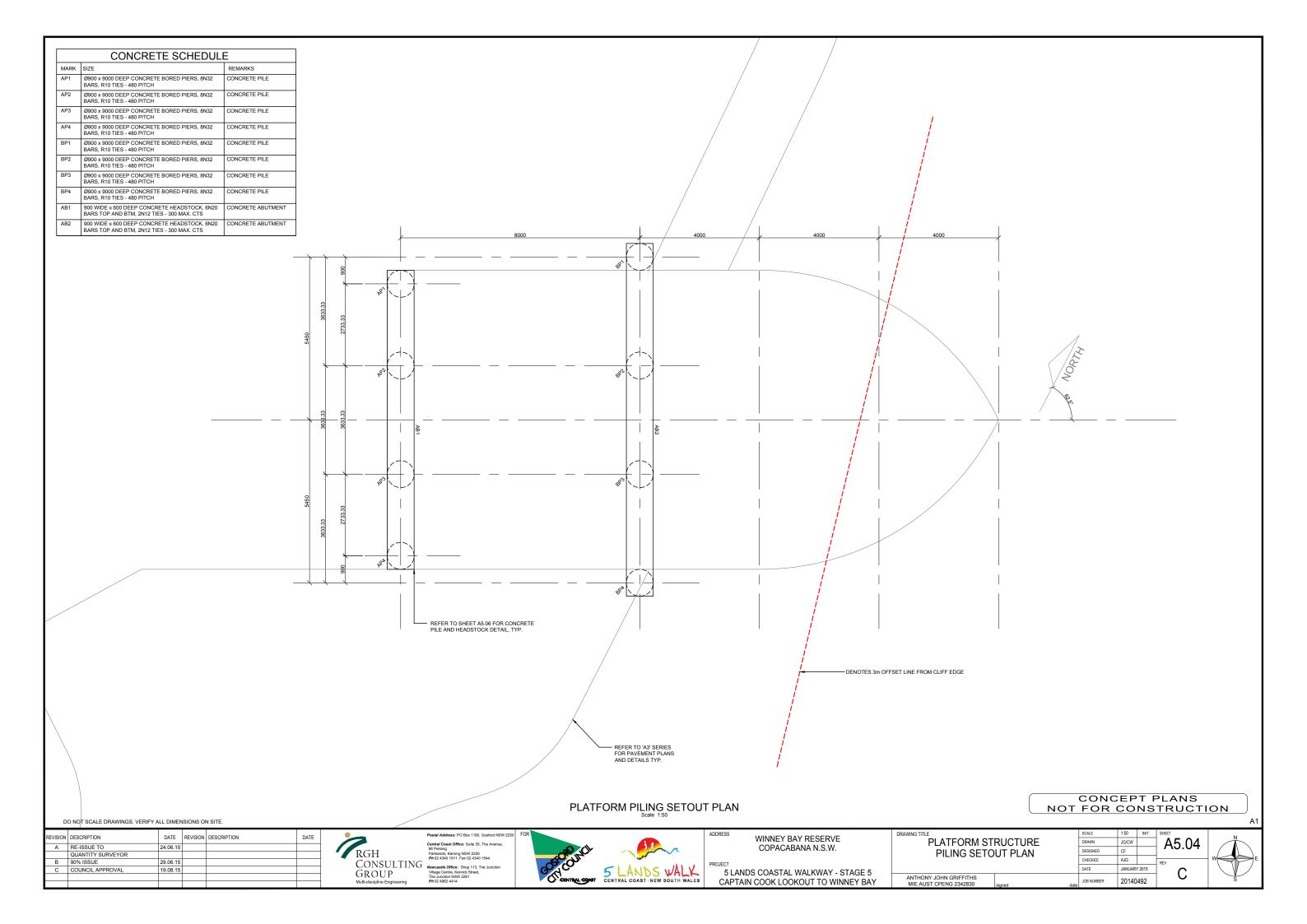
JG/CW DESIGNED AJG CHECKED JANUARY 2015

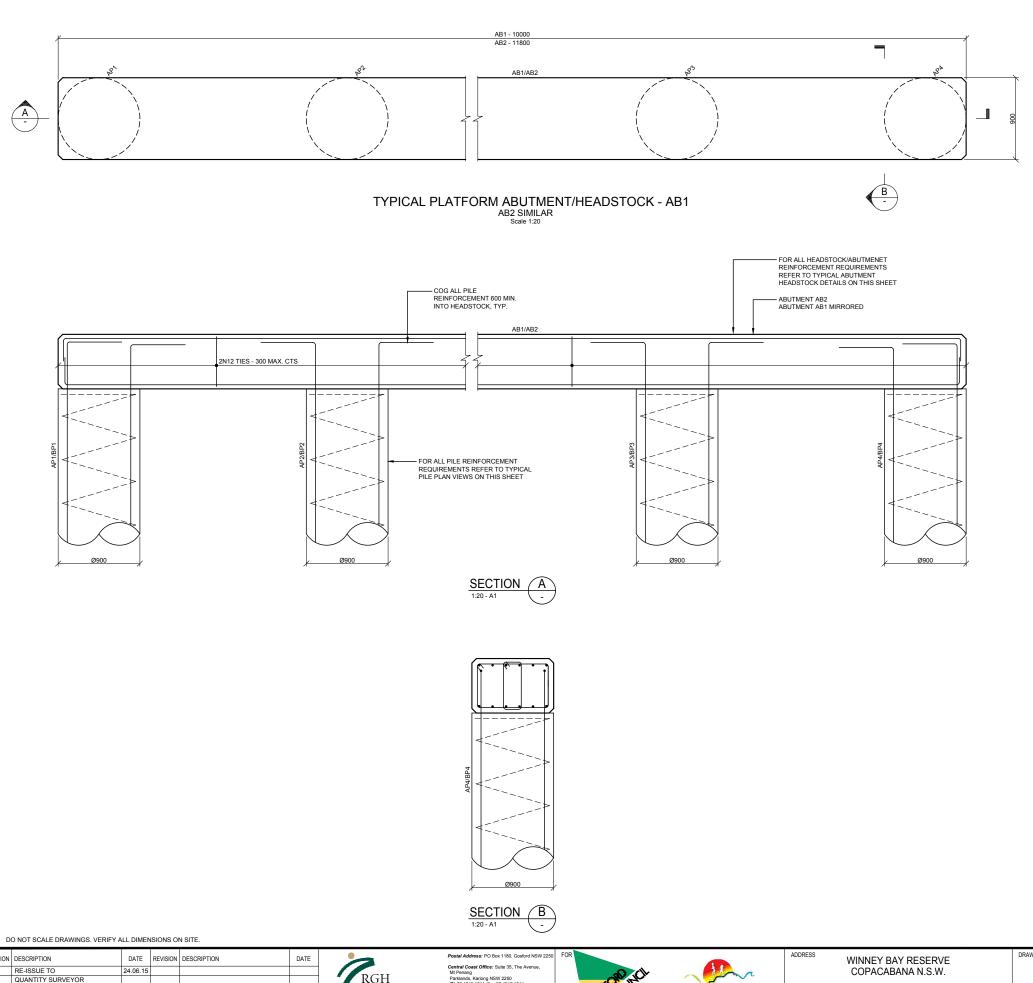
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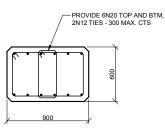
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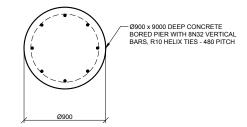








TYPICAL PLATFORM ABUTMENT HEADSTOCK - AB1 AB2 SIMILAR Scale 1:20



TYPICAL PILE - AP1/AP2/AP3/AP4 BP1/BP2/BP3/BP4 SIMILAR

CONCEPT PLANS NOT FOR CONSTRUCTION

EVISION DESCRIPTION A RE-ISSUE TO QUANTITY SURVEYOR
B 90% ISSUE 29.06.15 C COUNCIL APPROVAL 19.08.15

RGH
CONSULTING
GROUP

Reveasile Office: Shop 113, The Junction Village Certic, Kenricky Street,
The Junction NSW 2291

Ph.02 4962 4414





PROJECT 5 LANDS COASTAL WALKWAY - STAGE 5 CAPTAIN COOK LOOKOUT TO WINNEY BAY

| MING TITLE |
|--------------------|
| PLATFORM STRUCTURE |
| MARKING PLAN |
| |

ANTHONY JOHN GRIFFITHS MIE AUST CPENG 2342830

| SCALE | 1:50 | INIT. | SHEET |
|--------------|---------|--------|---------|
| DRAWN | JG/CW | | A5.0 |
| DESIGNED | CF | | / 10.01 |
| CHECKED | AJG | | REV |
| DATE | JANUAR' | Y 2015 | |
| IOD NI IMPED | 20140 | 102 | |



