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Signed:

Andrew Barraclough

Date of issue of certificate: 28/10/2022

**SPA WORLD
SPA STRUCTURAL DRAWINGS
FISHER SPAS - FISHER SWIM / SWIM LE**

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**FISHER SPAS
STRUCTURAL DRAWINGS**

**FOR
CONSTRUCTION**

TITLE SHEET

CLIENT: Tony Jones
DRAWING No:
JOB No: 2210264

S000

| REVISION | AMENDED DESCRIPTION | DATE |
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| A | FOR CONSTRUCTION | 28/10/22 |
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GENERAL:

- ALL CONSTRUCTION WORKS AND MATERIALS TO CONFORM WITH THE ENGINEER SPECIFICATION AND AUSTRALIAN STANDARDS AND THE CURRENT BUILDING CODE OF AUSTRALIA.
- ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, AND LEVELS SHOWN ARE A.H.D. (AUSTRALIAN HT. DATUM)
- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS
- DRAWING ARE NOT TO BE SCALED. RELEVANT DIMENSIONS TO BE CONFIRMED ON SITE BY BUILDER BEFORE COMMENCEMENT OF WORKS
- ANY DISCREPANCIES OR QUERIES SHOULD BE REFERRED TO THE BARRASON ENGINEERS FOR CLARIFICATIONS PRIOR TO COMMENCEMENT OF WORKS.
- THE CONTRACTOR SHALL LIAISE WITH ANY BUILDING/ PROPERTY OWNERS AS REQUIRED TO ENSURE MINIMAL DISRUPTIONS TO SERVICES. AND THAT SPECIAL REQUIREMENTS OF THE OWNERS ARE ADHERED TO.

b. ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 0.6m COMPACTED IN LAYERS NOT MORE THAN 0.3m THICK FOR SAND OR 0.3m COMPACTED IN LAYERS NOT MORE THAN 0.15m THICK FOR OTHER MATERIAL

c. THE EXTENT OF CONTROLLED FILL AND ROLLED FILL REQUIRED SHALL BE DETERMINED ON SITE IN ACCORDANCE WITH SECTION 6 OF AS2870 AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR & BUILDER.

F8. WHERE DEPTH OF CONTROLLED FILL IS THICKER THAN THAT SPECIFIED ABOVE, FILL MATERIAL SHALL BE SPREAD AND COMPACTED IN UNIFORM LAYERS NOT EXCEEDING 0.15m THICK. TOP SURFACE LAYER SHALL BE COMPACTED TO MINIMUM 98% STANDARD DRY DENSITY DETERMINED BY METHODS IN ACCORDANCE WITH AS1289. LOWER LAYERS SHALL BE COMPACTED TO 95% STANDARD DRY DENSITY. THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE ADJUSTED TO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT DURING COMPACTION TO ENSURE THAT THE SPECIFIED COMPACTION IS OBTAINED. COMPACTION TESTS SHALL BE CARRIED OUT AT A RATE OF ONE TEST PER LAYER PER 100 SQUARE METRES OF FILL.

TESTS ARE TO BE CARRIED OUT BY INDEPENDENT NATA REGISTERED LABORATORIES. SUBMIT REPORT TO THIS OFFICE FOR APPROVAL.

F9. FOUNDATIONS SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR BUILDING INSPECTOR BEFORE LAYING MEMBRANES AND POURING CONCRETE. IF AN UNUSUAL GROUND CONDITION IS ENCOUNTERED DURING THE SITE EXCAVATION, REPORT TO THIS OFFICE FOR RESOLUTION.

F10. NO EXCAVATION IS TO BE TAKEN BELOW THE BASE OF ADJACENT / EXISTING FOOTINGS. IF IT IS UNAVOIDABLE, FOR THE CASE OF NEW FOOTINGS, BLINDING CONCRETE GRADE 15MPa SHALL BE PROVIDED BENEATH THE NEW FOOTING AND FOUNDING BELOW ANGLE OF REPOSE. FOR THE CASE OF EXISTING FOOTINGS, UNDERPINNING IS REQUIRED. REFER TO THIS OFFICE FOR DETAILS.

F11. ALL FOUNDATIONS ARE TO BE FREE OF WATER AND LOOSE MATERIAL

F12. OVER EXCAVATION IS TO BE FILLED TO THE UNDERSIDE OF FOOTINGS WITH 15MPa BLINDING CONCRETE

F13. TERMITE PROTECTION SHALL BE PROVIDED AS REQUIRED BY AUSTRALIAN STANDARD AND THE LOCAL STATUTORY AUTHORITY.

F14. A 0.2mm POLYTHENE MEMBRANE SHALL BE CONTINUOUS UNDER SLAB AND RIBS LAPPED 200mm MINIMUM WHERE REQUIRED AND TAPED AT ALL SERVICE PENETRATIONS, LAPS AND PUNCTURES. THE MEMBRANE IS TO EXTEND UNDER AND TO THE SIDES OF SLABS, BEAMS AND THICKENINGS.

F15. EXCAVATIONS NEAR THE BUILDING EDGE SHALL BE BACKFILLED IN SUCH A MANNER TO PREVENT READY ACCESS OF WATER TO THE FOUNDATIONS

F16. SYMBOLS ON THE DRAWING FOR REINFORCEMENT ARE AS FOLLOWS :

- Y GRADE 400MPa DEFORMED REINFORCING BARS TO AS 1302.
- N GRADE 500MPa DEFORMED REINFORCING BARS, DUCTILITY CLASS N TO AS 4671
- R GRADE 250MPa PLAIN REINFORCING BARS TO AS 1302
- TM HARD-DRAWN STEEL TRENCH MESH, GRADE 500 DUCTILITY CLASS L TO AS 4671
- RL RECTANGULAR RIB MESH GRADE 500 DUCTILITY CLASS L TO AS 4671
- SL SQUARE RIB MESH GRADE 500 DUCTILITY CLASS L TO AS 4671

F17. FABRIC SHALL BE PLACED NEAR THE TOP OF THE SLAB AND SHALL HAVE A NOMINAL COVER OF 25mm U.N.O.

F18. REINFORCEMENT FABRIC SHALL BE LAPPED SO THAT EACH PAIR OF TRANSVERSE WIRES AT THE EDGE OF ONE SHEET OVERLAPS EACH CORRESPONDING PAIR OF TRANSVERSE WIRES OF THE SHEET BEING LAPPED. REINFORCEMENT SHALL BE SUPPORTED IN POSITION PRIOR TO CONCRETING COMMENCING ON DENSE PRECAST CONCRETE SPACER BLOCKS OR BAR CHAIRS ON GALVANIZED STEEL DISHES (EITHER OF WHICH MUST NOT DAMAGE THE MEMBRANE) AT 900mm MAXIMUM CENTRES EACH WAY TRAMPING IN FABRIC IS NOT PERMITTED

F19. BEAM AND STRIP FOOTING REINFORCEMENT SHALL HAVE A NOMINAL COVER OF 50mm.

F20. TRENCH MESH SHALL BE LAID CONTINUOUSLY AND SHALL BE SPLICED WHERE NECESSARY WITH A MINIMUM LAP OF 500mm

F21. TRENCH MESH SHALL BE OVERLAPPED BY THE WIDTH OF FABRIC AT CORNERS AND INTERSECTIONS. THE ENDS OF TRENCH MESH SHALL TERMINATE WITH A CROSSBAR.

F22. PROVIDE 2N12 x 1200 BARS OR EQUIVALENT TRENCH MESH x 2000 LONG DIAGONALLY ACROSS RE-ENTRANT CORNERS OF SLAB AND TIED TO UNDERSIDE OF TOP FABRIC.

F23. CONCRETE STRENGTH IS TO BE $f_c = 25\text{MPa}$, WITH 65 MAX. SLUMP, COMPACTED USING MECHANICAL VIBRATION. SLAB & RIBS ARE TO BE CAST IN ONE CONTINUOUS POUR AND THE SLAB IS TO BE STEEL-FLOAT FINISHED

F24. ALL CONCRETE IS TO BE CONTINUOUSLY WET-CURED FOR 7 DAYS.

F25. THE GROUND SURROUNDING SLABS SHALL HAVE THE SURFACE AT LEAST 150mm LOWER THAN THE SLAB AND BE SLOPED AWAY FROM THE SLAB EDGE SO THAT WATER WILL DISCHARGE TO SUITABLE DRAINAGE POINTS AND NOT FLOOD THE SLAB SURFACE.

F26. HOT WATER HEATING PIPES MAY BE EMBEDDED IN THE SLAB PROVIDED THAT THE SLAB THICKNESS IS INCREASED BY 25mm AND LAID ON ADDITIONAL SL52 MESH.

C11. MINIMUM COVER TO ALL REINFORCEMENT INCLUDING FITMENTS SHALL BE AS FOLLOWS, U.N.O:

| ELEMENT | FORMED AND NOT EXPOSED TO WEATHER | FORMED ON GROUND & EXPOSED TO WEATHER | NOT FORMED. CAST AGAINST GROUND |
|---------------------------|-----------------------------------|---------------------------------------|---------------------------------|
| INSITU COLUMN & PEDESTALS | 40 | 50 | 75 |
| INSITU BEAMS | 40 | 50 | 65 |
| FOOTINGS | - | 50 | 75 |
| PIERS | - | 50 | 75 |
| SLABS ON GROUND | 20 | 30 | 65 |
| SUSPENDED SLABS | 20 | 30 | 65 |
| INSITU WALLS | 25 | 30 | 65 |
| PRECAST WALLS | 25 | 30 | 65 |
| UNDERPINNING | - | 50 | 75 |

C12. REINFORCEMENT IS SHOWN DIAGRAMMATICALLY AND NOT IN TRUE PROJECTION.

SYMBOLS ON THE DRAWING FOR REINFORCEMENT ARE AS FOLLOWS:

- C13 Y GRADE 400MPa DEFORMED REINFORCING BARS TO AS1302
- N GRADE 500MPa DEFORMED REINFORCING BARS, DUCTILITY CLASS N TO AS 4671
- R GRADE 250MPa PLAIN REINFORCING BARS TO AS1302
- W HARD-DRAWN STEEL REINFORCING WIRE, GRADE 500 DUCTILITY CLASS L TO AS 4671
- TM HARD-DRAWN STEEL TRENCH MESH, GRADE 500 DUCTILITY CLASS L TO AS 4671
- RL RECTANGULAR RIB MESH GRADE 500 DUCTILITY CLASS L TO AS 4671
- SL SQUARE RIB MESH GRADE 500 DUCTILITY CLASS L TO AS 4671

C14. ALL REINFORCEMENT AND INSERTS SHALL BE SUPPORTED AND HELD IN THE DESIGN LOCATION BY APPROVED BAR CHAIRS, SPACERS OR TIES. BAR CHAIRS SHALL BE PLACED AT MINIMUM 1000 CENTRES IN TWO DIRECTIONS U.N.O.

C15. WELDING AND THREADING OF REINFORCEMENT IS NOT PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

C16. REINFORCEMENT SHALL BE EVENLY DISTRIBUTED OVER THE WIDTHS SHOWN U.N.O.

C17. PROVIDE 2-N12 x 1200 BARS DIAGONALLY ACROSS RE-ENTRANT CORNERS OF SLABS, TIED UNDER THE TOP FABRIC. U.N.O.

C18. AT SLAB EDGES INCLUDING CONSTRUCTION AND OTHER JOINTS, AT LEAST ONE REINFORCING BAR OR FABRIC WIRE SHALL BE LOCATED PARALLEL TO AND WITHIN 75mm OF THE SLAB EDGE.

C19. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE APPROVED OR PERMITTED BY THE ENGINEER.

C20. SAWN JOINTS SHALL BE MADE AT A TIME APPROPRIATE TO THE CONCRETE MIX AND CLIMATIC CONDITIONS, GENERALLY BETWEEN 10 AND 20 HOURS OF PLACING THE CONCRETE.

C21. STRIPPING OF FORMS AND REMOVAL OF FORMWORK SHALL TAKE PLACE IN ACCORDANCE WITH A PROCEDURE AGREED TO BY THE ENGINEER.

C22. CONCRETE MUST BE SEPARATED FROM SUPPORTING MASONRY WORK BY TWO LAYERS OF A SUITABLE DE-BONDING MEMBRANE.

C23. SUSPENDED SLABS SHALL BE GIVEN AN UPWARD MID-SPAN CAMBER OF 3mm PER 1000mm U.N.O. BEAMS SHALL BE AS SHOWN ON DRAWINGS.

C24. SPLICES IN REINFORCEMENT SHALL BE MADE IN THE POSITIONS SHOWN ON THE DRAWINGS OR AS OTHERWISE APPROVED BY THE ENGINEER.

C25. HOLDING-DOWN BOLTS SHALL BE SUPPLIED TO THE CONCRETOR FOR CASTING INTO THE CONCRETE AND SHALL BE INSTALLED IN ACCORDANCE WITH THE STEEL HOLDING-DOWN BOLT PLAN.

CONCRETE:

C1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600.

C2. UNLESS OTHERWISE SHOWN THE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE AS FOLLOWS:

| ELEMENT | CONC. STRENGTH (f_c) MPa | SLUMP mm |
|-------------------------|------------------------------|----------|
| FOOTINGS | 25 | 75 |
| SLAB-ON-GROUND | 25 | 65 |
| COLUMNS | 32 | 80 |
| WALLS | 40 | 85 |
| SUSPENDED SLABS & BEAMS | 32 | 80 |
| MASS CONCRETE | 15 | - |

C3. CONCRETE SHALL BE CURED BY AN APPROVED METHOD FOR AT LEAST 7 DAYS AFTER PLACEMENT.

C4. CONCRETE SHALL BE COMPACTED USING MECHANICAL VIBRATION.

C5. VIBRATION OF FORMS IS NOT ACCEPTABLE AND CONCRETE SHALL NOT BE SPREAD BY VIBRATING.

C6. CONCRETE SECTIONS SHOWN ARE MINIMUM SIZES AND DO NOT INCLUDE FINISHES. SIZES SHALL NOT BE REDUCED IN ANY WAY OR HOLES FORMED OR MADE IN

C7. DEPTH OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS

C8. SLABS AND BEAMS ARE TO BE POURED CONCURRENTLY U.N.O. AND FINISHED WITH A STEEL FLOAT.

C9. POOL PAVERS CONCRETE AND MASONRY PAVERS SURROUNDING POOLS TO BE CONSTRUCTED TO REQUIREMENTS OF AS3727.1-2016, PAVEMENTS, PART 1: RESIDENTIAL.

C10. RECOMMENDED CONCRETE SLAB TO BE 150MM THICK, CONCRETE GRADE N32, SL82 REINFORCEMENT WITH 30MM COVER TO THE TOP SURFACE AND 40M SIDE COVER. MINIMUM SOIL ALLOWABLE BEARING CAPACITY TO BE 100KPA.

FOOTINGS AND SLAB ON GROUND

- F1. ALL WORK AND MATERIALS TO COMPLY WITH AS2870.
- F2. ALL FOOTINGS SHALL BE FOUNDED ON FIRME SOIL. PRIOR TO COMENCING WORK, THE BUILDER IS TO FAMILIARISE THE CONTENT OF THE SOIL REPORT PREPARED BY: -- REPORT No.: -- DATED: -- FOOTING DEPTHS SPECIFIED ON THE DRAWINGS ARE MINIMUM DIMENSIONS ONLY. IF NOT SHOWN, REFER TO THE SOIL REPORT FOR THE REQUIRED FOUNDING DEPTH.
- 3. THE SITE HAS BEEN CLASSIFIED AS CLASS '- ' IN ACCORDANCE WITH AS 2870.
- F4. STRIP / PAD FOOTINGS ARE TO BE FOUNDED ON ORIGINAL UNDISTURBED GROUND WITH AN ALLOWABLE BEARING CAPACITY OF -- kPa.
- F5. EDGE BEAMS AND LOAD BEARING RIBS SHALL BE FOUNDED ON UNDISTURBED GROUND WITH AN ALLOWABLE BEARING CAPACITY OF -- kPa. THE INTERNAL SLAB & NON-LOAD BEARING RIBS SHALL BE FOUNDED ON SOIL WITH MINIMUM BEARING CAPACITY OF -- kPa.
- F6. ALL ORGANIC MATERIAL SHALL BE REMOVED FROM THE AREA BENEATH THE SLABS ON GROUND. THE GROUND SHALL BE PROOF ROLLED WITH A 3 TONNE ROLLER PRIOR TO PLACING COMPACTED FILL. ANY SOFT SPOTS SHALL BE DUG OUT AND REPLACED WITH COMPACTED CRUSHED ROCK OR 15MPa BLINDING CONCRETE. IN ACCORDANCE WITH AS2870 AND AS3798.
- F7. UNLESS OTHERWISE SPECIFIED IN THE SOIL REPORT, FILLING USED IN THE CONSTRUCTION OF THE SLAB EXCEPT WHERE THE SLAB IS SUSPENDED SHALL CONSIST OF CONTROLLED FILL OR ROLLED FILL AS FOLLOWS:
 - a. CONTROLLED FILL IS MATERIAL THAT HAS BEEN PLACED AND COMPACTED IN LAYERS BY COMPACTION EQUIPMENT WITHIN DEFINED DENSITY REQUIREMENT. EXCEPT AS PROVIDED BELOW, CONTROLLED FILL SHALL BE PLACED IN ACCORDANCE WITH AS 3798. SAND FILL UP TO 0.8m DEEP, WELL COMPACTED IN NOT MORE THAN 0.3m THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER, SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. A SATISFACTORY TEST FOR SAND FILL NOT CONTAINING GRAVEL SIZED MATERIAL IS THE ACHIEVEMENT OF A BLOW COUNT OF 7 OR MORE PER 0.3m USING THE PENETROMETER TEST DESCRIBED IN AS 1289.6.3.3. NON-SAND FILL UP TO 0.4m DEEP, WELL COMPACTED IN NOT MORE THAN 0.15m LAYERS BY A MECHANICAL ROLLER SHALL BE DEEMED TO COMPLY WITH THIS REQUIREMENT. CLAY FILL SHALL BE MOIST DURING COMPACTION.

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**FISHER SPAS
 STRUCTURAL DRAWINGS**

**FOR
 CONSTRUCTION**

GENERAL NOTES

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|--------------------|------|----------|---------------------|----------|
| CLIENT: Tony Jones | S001 | REVISION | AMENDED DESCRIPTION | DATE |
| DRAWING No: | | A | FOR CONSTRUCTION | 28/10/22 |
| JOB No: 2210264 | | | | |

STRUCTURAL STEELWORK:

- S1 ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.
- S2 ALL STEEL SHALL BE NEW AND FREE FROM WELDS AND BLEMISHES UNLESS APPROVED BY THE ENGINEER.
- S3 FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH AS 4100 AND SAA/SNZ HB62.
- S4 HOT-ROLLED AND WELDED PRODUCTS SHALL BE BHP-300PLUS AND PLATE SHALL BE GRADE 250 U.N.O.
- S5 ALL WELDING SHALL BE IN ACCORDANCE WITH AS 1554.
- S6 WELD TYPES ARE DESIGNATED AS FOLLOWS
CFW - CONTINUOUS FILLET WELD
FPBW - FULL PENETRATION BUTT WELD
PPBW - PARTIAL PENETRATION BUTT WELD
- S7 ALL WELDS SHALL BE 6mm CONTINUOUS FILLET, CATEGORY GP, USING E41XX/W40X CONSUMABLES U.N.O.
- S8 WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554 INSPECTED & CERTIFIED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH AS2214
- S9 ALL HIGH-STRENGTH STRUCTURAL BOLTS SHALL BE M20 GRADE 8.8/S U.N.O. IN ACCORDANCE WITH AS 1252
- S10 HOLDING-DOWN BOLTS SHALL BE M20 GRADE 4.6/S, GALVANISED U.N.O
- S11 BOLTS MUST BE OF SUFFICIENT LENGTH TO HAVE AT LEAST ONE FULL THREAD EXPOSED AFTER TIGHTENING
- S12 BOLTS IN OVERSIZE OR SLOTTED HOLES ARE TO HAVE SUITABLE LARGER SIZE WASHERS
- S13 CONNECTIONS NOT SPECIFICALLY DETAILED SHALL BE IN ACCORDANCE WITH THE APPROPRIATE CONNECTION AS DETAILED IN THE AISC STANDARDISED STRUCTURAL CONNECTIONS MANUAL.
- S14 UNLESS NOTED OTHERWISE CONNECTIONS BETWEEN 2 STRUCTURAL STEEL MEMBERS ARE TO HAVE MINIMUM 2M20 8.8/S BOLTS IN 220mm HOLES
- S15 BOLT TYPES AND BOLTING PROCEDURE ARE DESIGNATED AS FOLLOWS
4.6/S - COMMERCIAL BOLTS TO AS 1111, SNUG TIGHTENED
8.8/S - HIGH STRENGTH STRUCTURAL BOLTS, NUTS AND HARDENED WASHERS TO AS 1252, SNUG TIGHTENED
8.8/TB - HIGH STRENGTH STRUCTURAL BOLTS AS ABOVE, FULLY TENSIONED TO AS 1511 IN A BEARING TYPE JOINT
8.8/TF - HIGH STRENGTH STRUCTURAL BOLTS AS ABOVE, FULLY TENSIONED TO AS 1511 IN A FRICTION TYPE JOINT
- S16 FULLY TENSIONED BOLTS ARE TO BE INITIALLY SNUG TIGHTENED, CONNECTING PLATES ADJUSTED TO FULL CONTACT, THEN TIGHTEN BOLTS TO AN ADDITIONAL HALF TURN IN ACCORDANCE WITH AS 4100
ALTERNATIVELY PROVIDE LOAD INDICATING WASHERS AND INSTALL CONNECTIONS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND AS 4100
- S17 ALL CLEAT PLATES AND STIFFENERS SHALL BE 10mm THICK U.N.O.
- S18 THE ENDS OF ALL TUBULAR MEMBERS SHALL BE SEALED WITH A 3mm PLATE U.N.O.
- S19 TUBULAR MEMBERS TO BE GALVANISED SHALL BE ADEQUATELY VENTED.
- S20 PURLINS AND GIRTS INCLUDING LATERAL AND BUCKLING RESTRAINING MEMBERS SUCH AS BRIDGING, STRUTS AND TIE RODS SHALL BE IN ACCORDANCE WITH AS/NZS 4600, GALVANISED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS
- S21 BEFORE COMMENCING FABRICATION 3 COPIES OF THE SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. THIS REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.
- S22 CAMBER SHALL BE AS NOTED ON THE DRAWINGS.
- S23 STRUCTURAL STEEL TO BE CONCRETE ENCASED SHALL BE WRAPPED WITH F41 MESH. THE GAP BETWEEN THE STRUCTURAL STEEL AND THE MESH AND AND THE THE EXTERNAL COVER TO THE MESH SHALL BE 25mm AND 50mm RESPECTIVELY.
- S24 ALL BOLTS AND STRUCTURAL STEEL EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANISED U.N.O. PAINT SYSTEMS TO GALVANISED STEEL TO BE AS SPECIFIED BY THE ARCHITECT

- S25 ALL STEEL LINTELS SUPPORTING MASONRY EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANISED.
- S26 PROVIDE ALL NECESSARY CLEATS AND HOLES REQUIRED TO FIX TIMBER AND OTHER MATERIALS AND FINISHES TO THE STEELWORK.
- S27 LINTELS SHALL NOT BE PROPPED DURING LOAD APPLICATION U.N.O.
- S28 THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED, SUCH TEMPORARY BRACING AS IS NECESSARY TO ADEQUATELY STABILIZE THE STRUCTURE DURING ERECTION.
- S29 PROVIDE 150mm MINIMUM END BEARING WITH 20mm NOM. LEVELLING GROUT U.N.O. TO STEELWORK SEATED ON MASONRY. CHARACTERISTIC COMPRESSIVE STRENGTH OF GROUT IS 30MPa
- S30 PROTECTIVE COATINGS TO INTERNAL STEELWORK (U.N.O.):
PREPARATION: CLASS 2A ABRASIVE BLAST
COATING:
FIRST COAT INORGANIC ZINC SILICATE
75 DRY FILM THICKNESS
SECOND COAT ACRYLIC PAINT
50 DRY FILM THICKNESS
THIRD COAT ACRYLIC PAINT
50 DRY FILM THICKNESS
CONCRETE ENCASED AND FIRE-SPRAYED MEMBERS, AND FRICTION-GRIP BOLTED CONNECTIONS MUST NOT BE PAINTED. U.N.O.
- S31 COATINGS DAMAGED DURING TRANSPORT AND ERECTION OR BY WELDING SHALL BE MADE GOOD AFTER BEING WIRE-BRUSHED CLEAN, AND RECOATED AS ABOVE.
- S32 REFER TO ARCHITECTURAL DRAWINGS FOR ALL ADDITIONAL PLATES, ANGLES ETC. AS REQUIRED FOR FIXINGS TO INTERNAL PARTITIONS, BLOCKING, WINDOW FRAMES, ARCHITECTURAL FEATURES ETC
- S33 PROVIDE ALL NECESSARY TRIMMING ANGLES AND FIXINGS TO SUPPORT CLADDING AND FLASHINGS AT ROOF OR WALL INTERSECTIONS
- S34 PROVIDE ALL NECESSARY SUBFRAMES AND TRIMMERS FOR MECHANICAL AND ELECTRICAL EQUIPMENT AND ARCHITECTURAL FEATURES
- S35 SUPPORT ROOF BRACING FROM EVERY SECOND PURLIN WITH HOOK BOLTS

SPA MAUFACTURE:

CONSTRUCTION SEQUENCE :

- STEP 1.** VACUUM FORM USING 4.75MM ARISTECH ACRYLIC SHEET
- STEP 2 FIRST COATING 1.5MM - 2MM USING APPROX. 40:60 RATIO (GLASS TO RESIN)
FIBREGLASS PRAY UP ROVING : 110P VINYL ESTER RESIN
CATALYST M50 (1.8% - 2%)
- STEP 3.** OVEN CURE AT 35-40 DEGREES CELSIUS
- STEP 4.** SECOND COATING 4MM - 8MM USING APPROX. 40:60 RATIO (GLASS TO RESIN)
FIBREGLASS PRAY UP ROVING : 279P POLYESTER RESIN
CATALYST 388 (1.8% - 2%)
CALCIUM CARBONATE FILLER ON SECOND LAYER

NOTES

SWIMMING POOL AND SPA SAFETY TO FOLLOW THE GUIDELINES OF PN-05-2018 PUBLISHED BY VBA.
BARRIERS AND LOCATION OF BARRIERS TO BE DESIGNED TO REQUIREMENTS OF AS 1926.1-2012 AND AS 1926.2-2007, SWIMMING POOL SAFETY - SAFETY BARRIERS FOR SWIMMING POOLS.
DESIGN AND INSTALL POOLS AND SPAS MANUFACTURED FROM FIBREINFORCED PLASTIC MATERIALS, WITH VOLUMES EXCEEDING 7500L AND DEPTHS GREATER THAN 750MM, TO REQUIREMENTS OF AS/NZS 1838:1994, SWIMMING POOLS - PREMOULDED FIBRE-REINFORCED PLASTICS - DESIGN AND FABRICATION.



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**FISHER SPAS
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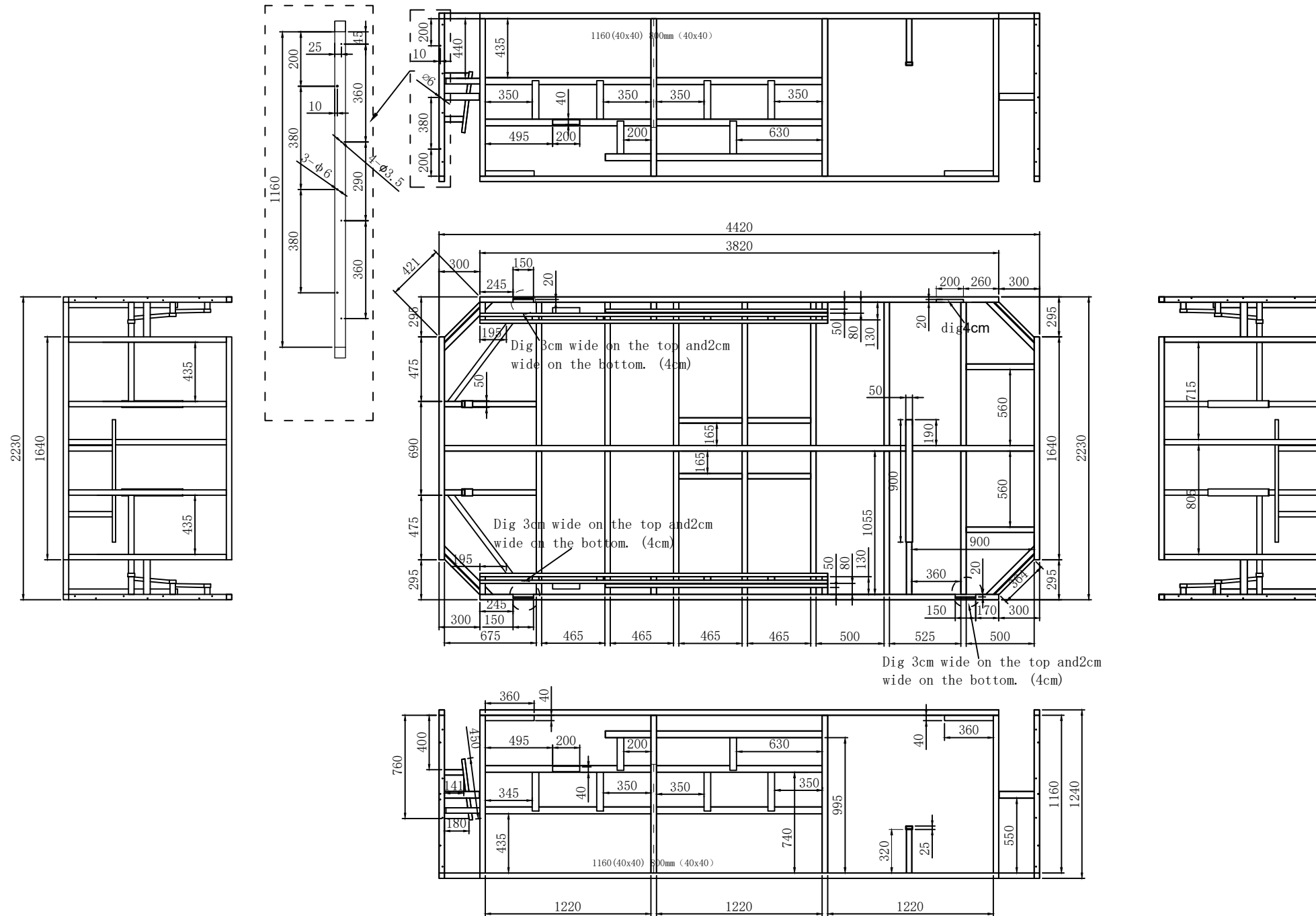
GENERAL NOTES

CLIENT: Tony Jones
DRAWING No:
JOB No: 2210264

S002

| REVISION | AMENDED DESCRIPTION | DATE |
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| A | FOR CONSTRUCTION | 28/10/22 |
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Fisher Swim



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**FISHER SPAS
 STRUCTURAL DRAWINGS**

**FOR
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SPA FRAMING PLAN

CLIENT: Tony Jones

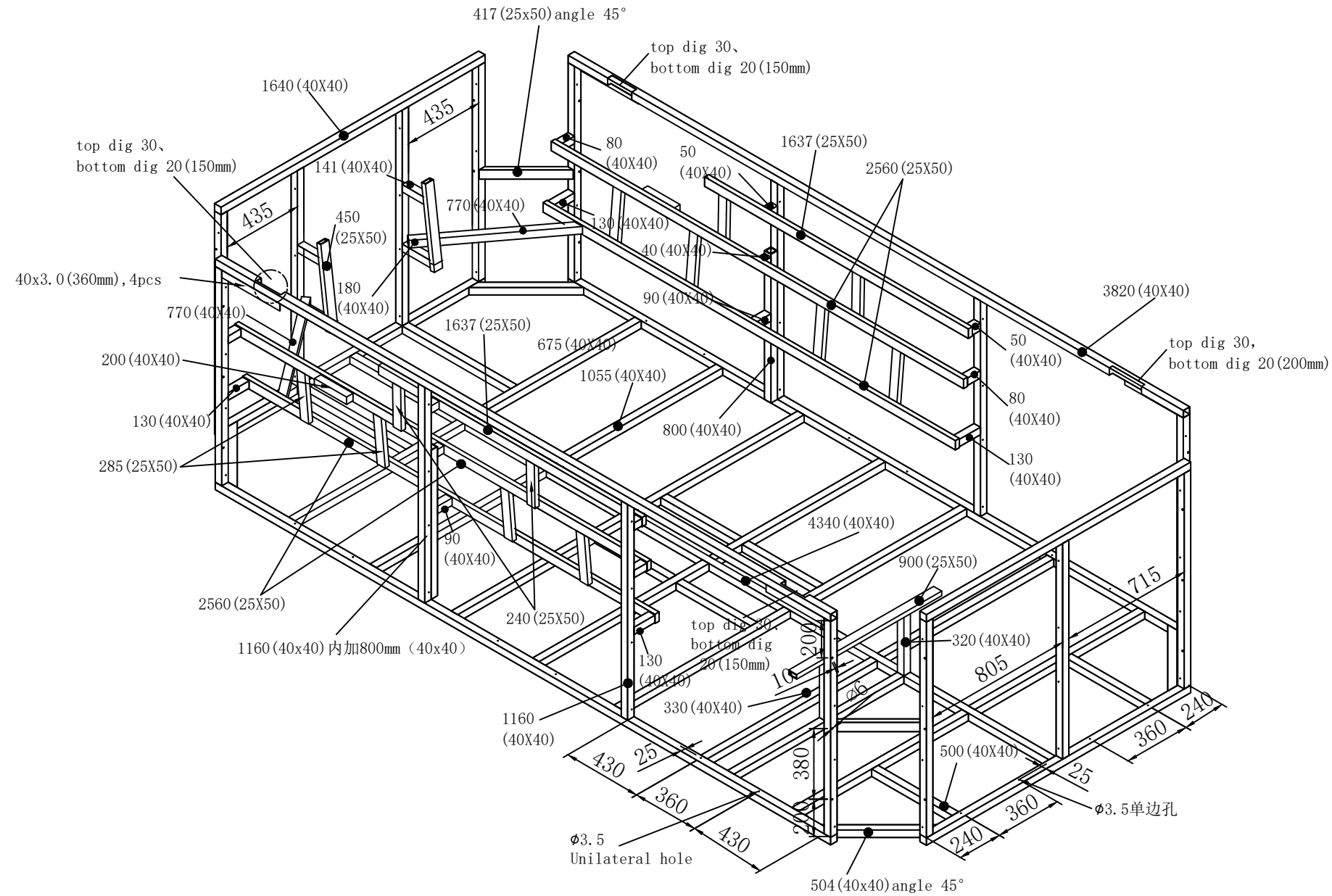
DRAWING No:

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S101

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**FISHER SPAS
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SPA PERSPECTIVE

CLIENT: Tony Jones

DRAWING No:

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S102

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