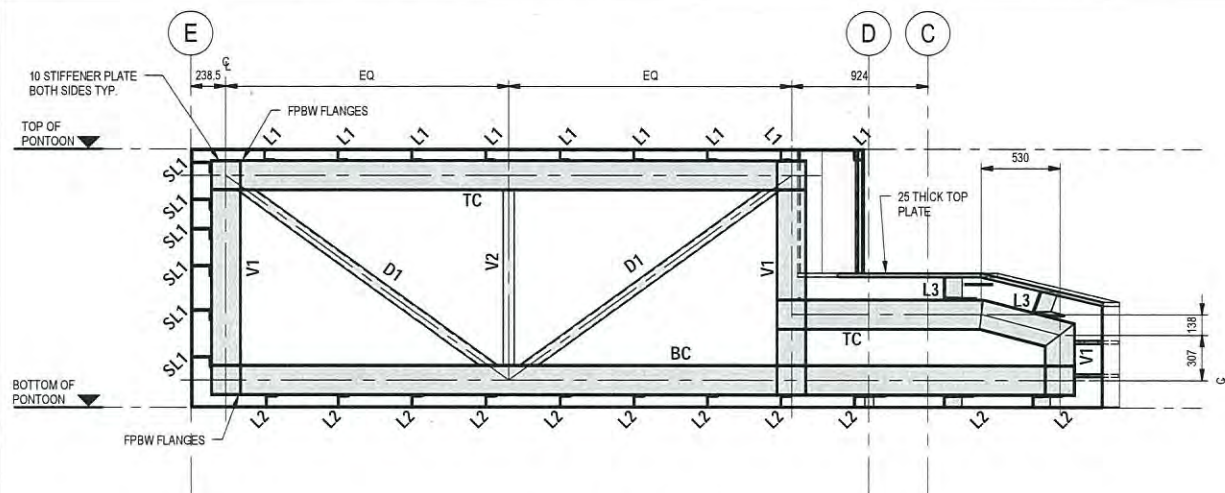
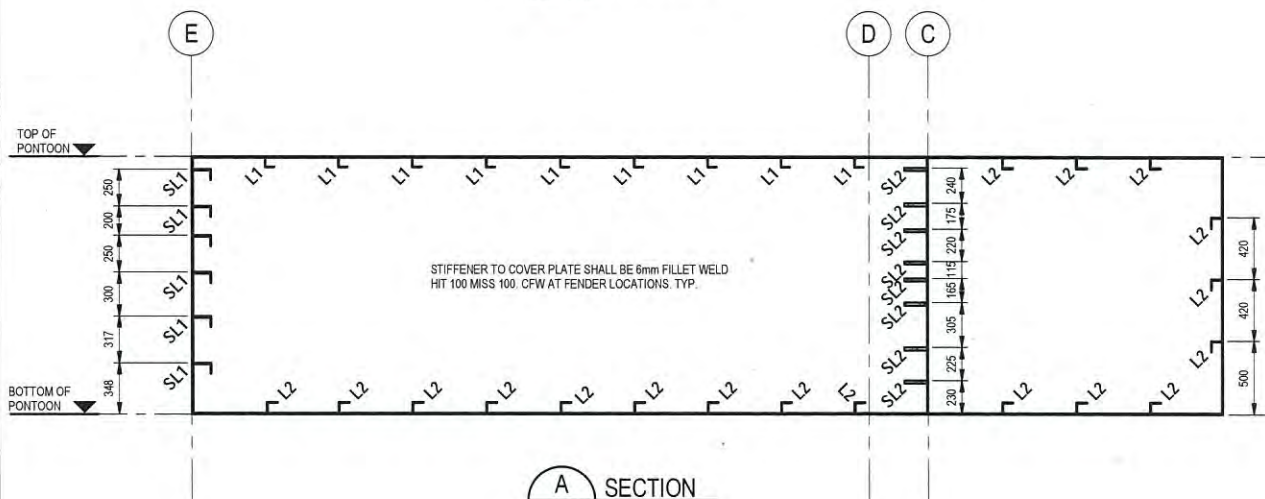
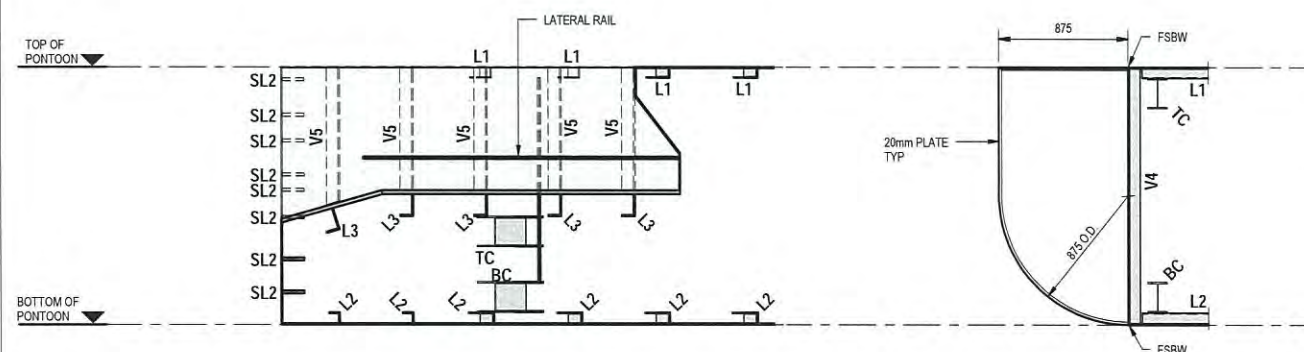




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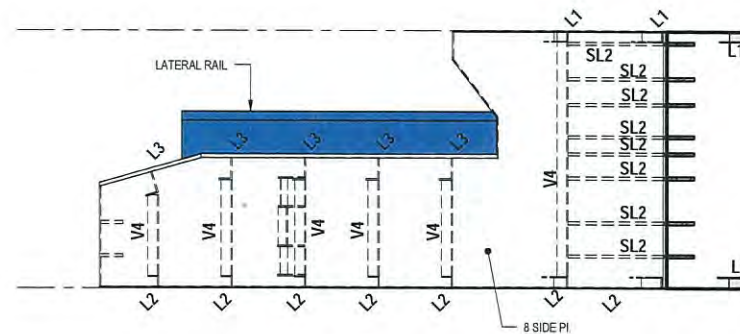


SECTION A
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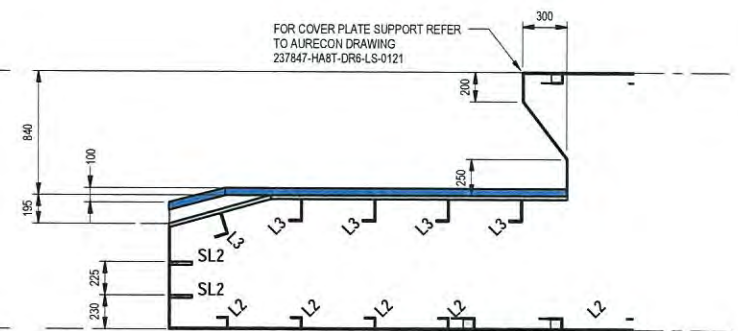


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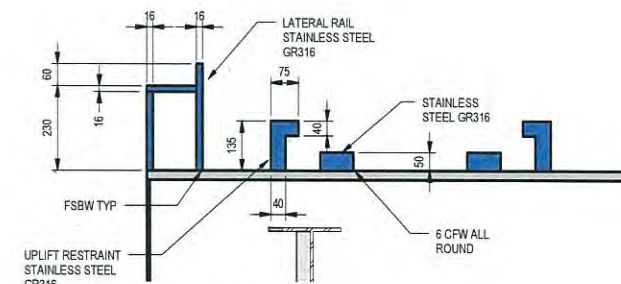
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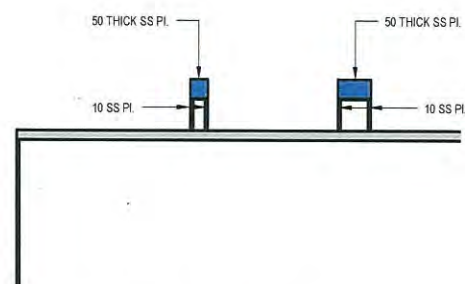
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SECTION C
M402 SCALE 1:25



SECTION F
M400 SCALE 1:10



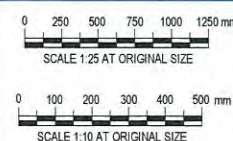
SECTION G
M400 SCALE 1:10

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

MEDQ

0	ISSUED FOR CONSTRUCTION		CEH	MAE*	POK*	30.04.14
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date



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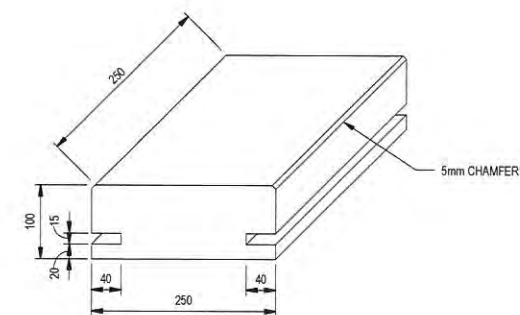
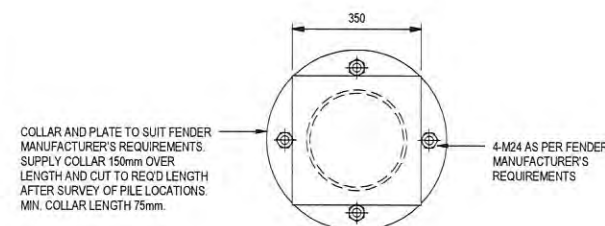
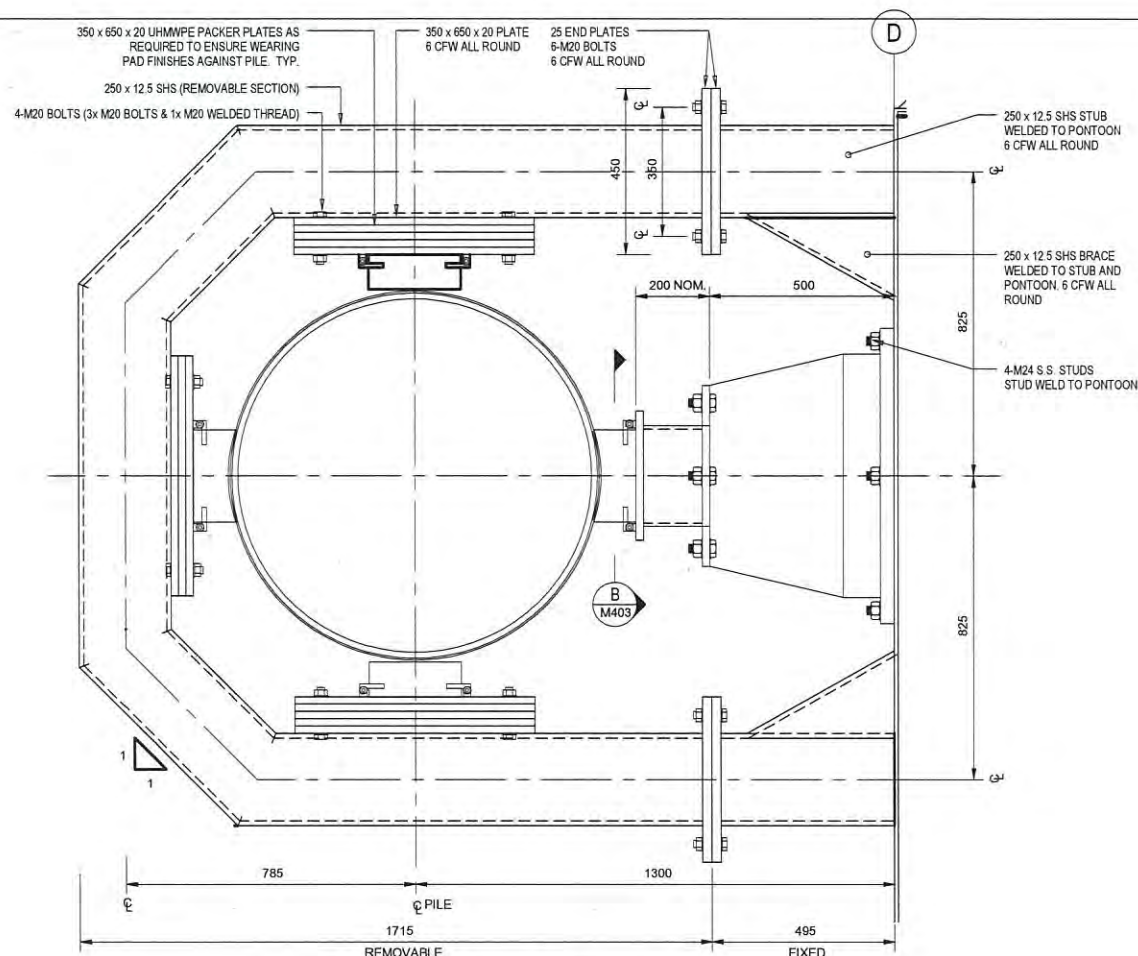
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Drafting Check	N. WATTS*	Design Check	M. EAST*
Approved	P. O'KEEFE*		B. GILES*
Date	01.05.14	RPEQ No.	10749
Scale	As indicated		

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Client	BRISBANE CITY COUNCIL
Project	BRETT'S WHARF CityCat TERMINAL
Title	PONTOON FRAME SECTIONS
Original Size	A1
Drawing No:	41-27289-03-M403
Rev:	0



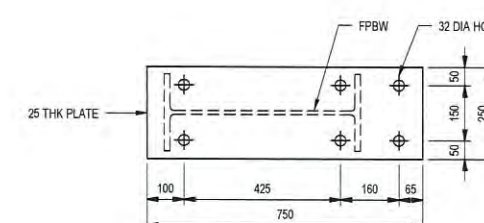
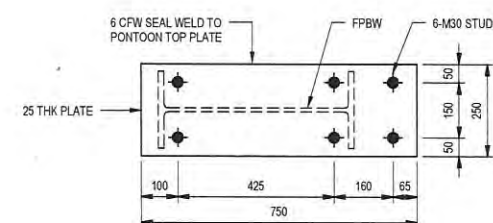
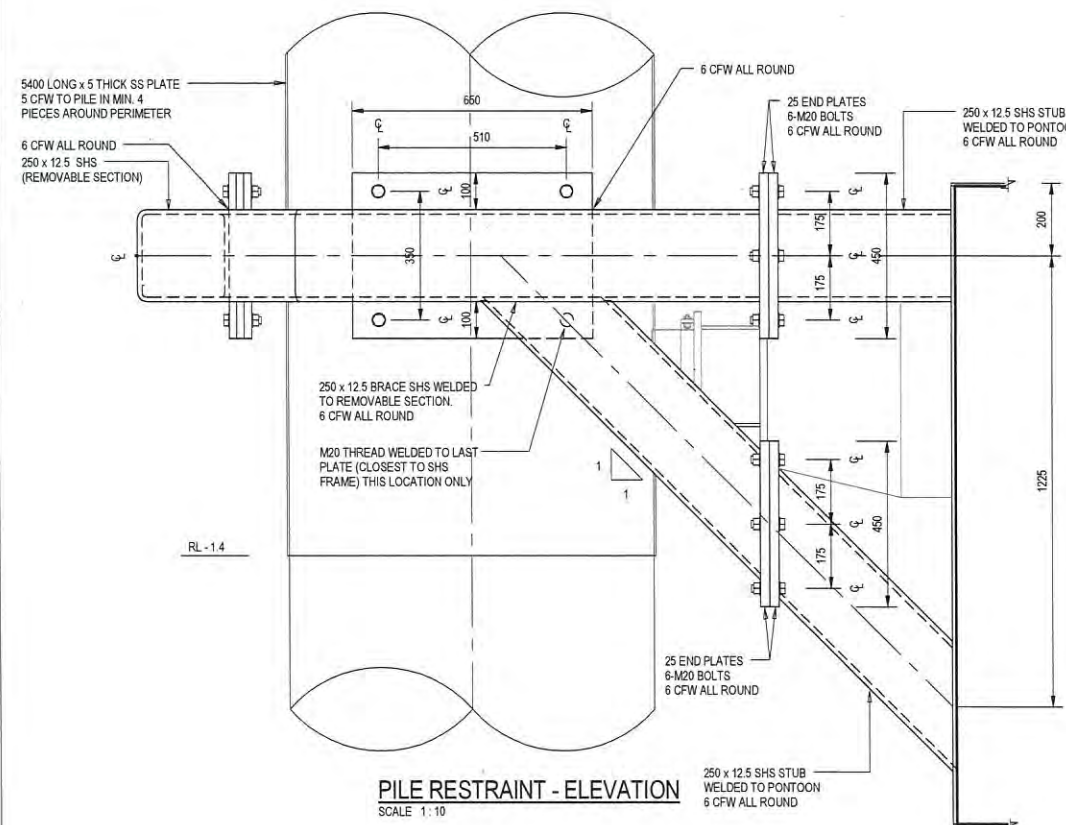
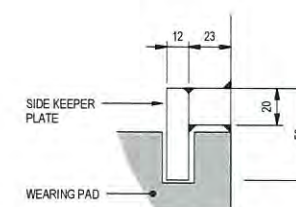
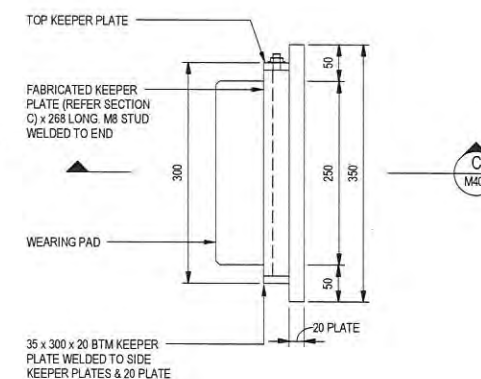
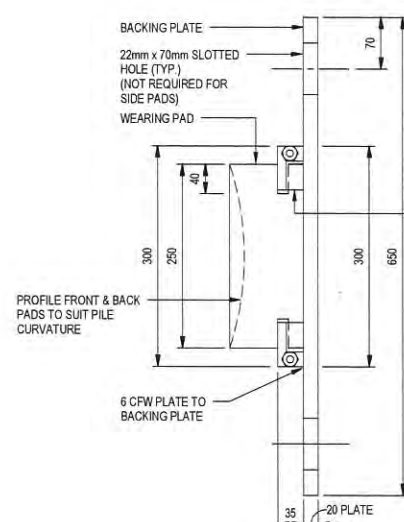
NOTES

1. REFER TO DRG 41-27289-03-M001 FOR MARINE NOTES.
2. ALL MEMBERS & PLATES SHALL BE SS 316 OR 316 L EXCEPT FOR 250 SHS BRACKET ASSEMBLY WHICH SHALL BE GRADE 350 STRUCTURAL STEEL PAINTED AS PER THE PONTOON REQUIREMENTS.
3. ALL BOLTS SHALL BE SS A4 70 IN ACCORDANCE AS 4673.

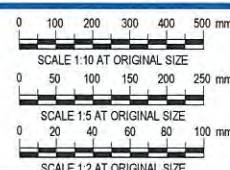
PLANS AND DOCUMENTS
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19 SEP 2014

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ROOF COLUMN CONNECTION DETAIL
SCALE 1:10

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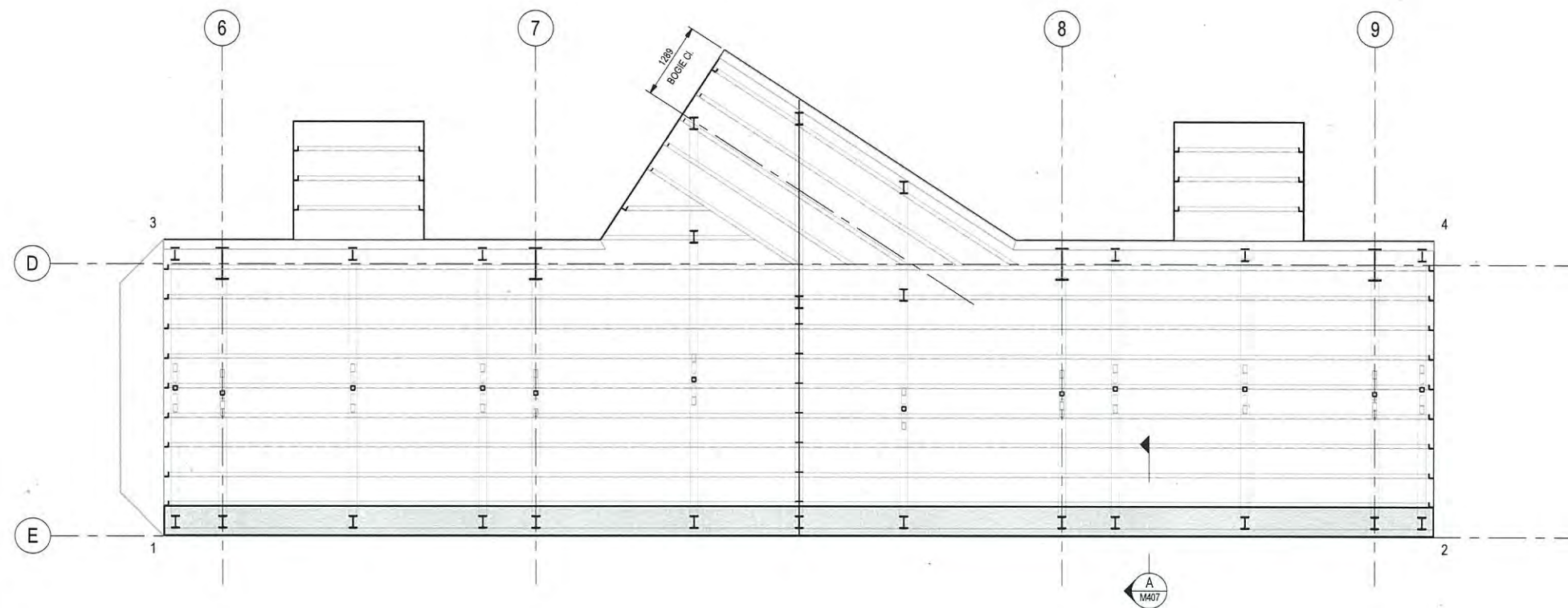
Drawn	A. HUGHES	Designed	A. PIETROBON
Drafting Check	M. MOHR*	Design Check	B. GILES*
Approved	G. RANGER*	R. WALLIS*	
Date	06.07.10	RPEQ No. 049	
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Client	BRISBANE CITY COUNCIL
Project	BRETTS WHARF CityCat TERMINAL
Title	PONTOON TYPICAL DETAILS SHEET 1

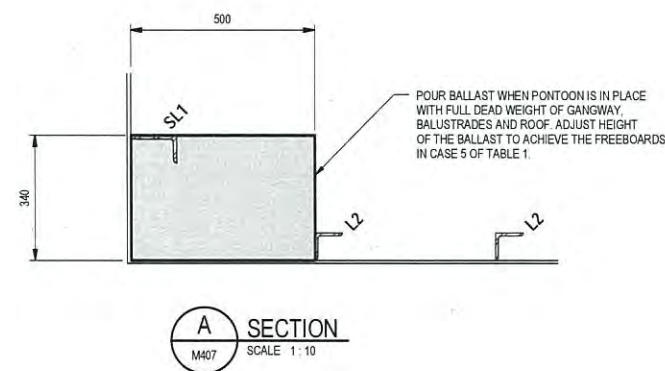
Original Size **A1** Drawing No: **41-27289-03-M404**

Rev: 0

Plot Date: 1/05/2014 3:17:46 PM Cad File No: C:\Users\chughes2\Documents\41-27289-BrettsWharf-Pontoon_chughes2.rvt



BALLAST PLAN
SCALE 1:50



NOTES

1. REFER TO DRG 41-27289-03-M001 FOR MARINE NOTES
2. REFER TO GENERAL NOTES FOR ALL STEEL GRADES

TABLE 1

CASE	ESTIMATED PONTOON FREEBOARD (mm)				APPROX TOTAL MASS (t)
	1	2	3	4	
1 EMPTY STEEL PONTOON	1456	1459	1385	1388	44.3
2 FENDERING AND RESTRAINTS ADDED	1064	1069	1380	1385	64.2
3 ROOF ADDED	933	942	1352	1361	72.6
4 GANGWAY & BALUSTRADES ADDED	1269	1285	842	858	96.9
5 BALLAST ADDED	964	983	928	947	105.3

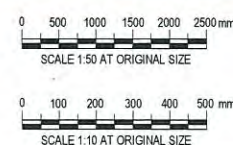
1. VALUES GIVEN ARE ESTIMATES WITH WATER LEVEL AT AHD. EDGE OF PONTOON TO BOGIE PIVOT EQUAL TO 1289mm.
2. FALL OF DECK IS NO STEEPER THAN 1 IN 40 FOR TIDES BETWEEN LAT AND HAT.

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

MEDO

No	Revision	Note	Drawn	Checked	Approved	Date
0	ISSUED FOR CONSTRUCTION		CEH	MAE*	POK*	30.04.14



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Drawn	C. HUGHES	Designed	B. GILES
Drafting Check	N. WATTS*	Design Check	M. EAST*
Approved	P. O'KEEFE*		B. GILES*
Date	01.05.14	RPEQ No.	10749
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client **BRISBANE CITY COUNCIL**
Project **BRETTS WHARF CityCat TERMINAL**
Title **PONTOON BALLAST PLAN & SECTION**
Original Size **A1** Drawing No: **41-27289-03-M407**

Rev: 0

GENERAL

- G1. READ THESE NOTES IN CONJUNCTION WITH ARCHITECTURAL AND OTHER ENGINEERING DRAWINGS AND SPECIFICATIONS, AND WITH OTHER WRITTEN INSTRUCTIONS ISSUED. REFER TO ARCHITECTURAL DRAWINGS FOR SETTING OUT AND DETAIL DIMENSIONS.
- G2. CHECK STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL, MECHANICAL, ELECTRICAL SERVICES AND OTHER DRAWINGS FOR REQUIREMENTS FOR PENETRATIONS, CONDUITS, DUCTS, PIPES, etc.
- G3. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE, BUT INDICATES REQUIRED PROPERTIES OF ITEM. SIMILAR ALTERNATIVES HAVING REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL. APPROVAL DOES NOT AUTHORISE A VARIATION TO THE CONTRACT. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
- G4. NOTIFY RELEVANT SERVICE AUTHORITIES BEFORE COMMENCING WORK ON SITE.
- G5. GIVE TWO WORKING DAYS' (48 HOURS) NOTICE SO THAT INSPECTION MAY BE MADE OF CRITICAL STAGES OF WORK.
- G6. DO NOT OBTAIN DIMENSIONS BY SCALING FROM DRAWINGS.
- G7. DIMENSIONS ARE IN MILLIMETRES, LEVELS ARE IN METRES UNO, CHAINAGES ARE IN METRES UNO.
- G8. DATUM FOR LEVELS IS AHD (AUSTRALIAN HEIGHT DATUM).
- G9. HAVE SURVEY AND SETTING OUT UNDERTAKEN BY A REGISTERED SURVEYOR.
- G10. VERIFY ON SITE SETTING OUT DIMENSIONS AND EXISTING MEMBER SIZES SHOWN ON DRAWINGS BEFORE SHOP DRAWINGS, CONSTRUCTION AND FABRICATION IS COMMENCED.
- G11. TAKE CARE OF HAZARDS ASSOCIATED WITH BURIED, CONCEALED OR OVERHEAD SERVICES. TAKE PRECAUTIONS TO ESTABLISH LOCATION OF AND PROTECT EXISTING SERVICES AT SITE. SERVICES SHOWN ON DRAWINGS ARE IN APPROXIMATE LOCATIONS ONLY. SERVICES OTHER THAN THOSE SHOWN MAY EXIST ON SITE. MARK LOCATIONS OF SERVICES CLEARLY ON SITE, AND ON AS-BUILT DRAWINGS. HAND EXCAVATE WITHIN ONE METRE OF IN-GROUND SERVICES.
- G12. MAINTAIN STRUCTURE IN A STABLE CONDITION DURING CONSTRUCTION AND PROVIDE TEMPORARY BRACING AND/OR SUPPORT AS REQUIRED. PROVIDE SPREADERS AT LOADS AND/OR LIFTING POINTS WHERE REQUIRED. ENSURE NO PART IS OVERSTRESSED. DO NOT PLACE OR STORE BUILDING MATERIALS ON STRUCTURAL MEMBERS WITHOUT SUPERINTENDENT'S APPROVAL. PROVIDE CALCULATIONS TO PROVE ADEQUACY OF STRUCTURE FOR PROPOSED CONSTRUCTION METHODS AND LOADS.
- G13. THESE DRAWINGS DO NOT DETAIL TEMPORARY WORKS. CONSTRUCTION METHODS AND TEMPORARY WORKS ARE RESPONSIBILITY OF THE CONTRACTOR.
- G14. DISPOSE OF SURPLUS MATERIAL OFF SITE.
- G15. IMPLEMENT SOIL AND WATER MANAGEMENT PROCEDURES TO AVOID EROSION, CONTAMINATION AND SEDIMENTATION OF SITE, SURROUNDING AREAS AND DRAINAGE SYSTEMS.
- G16. OBTAIN REQUIREMENTS FOR ADJOINING ELEMENTS TO BE FIXED TO OR SUPPORTED ON WORK AND PROVIDE FOR REQUIRED FIXINGS. DRAWINGS DO NOT SHOW DETAILS OF ALL FIXTURES, INSERTS, SLEEVES, RECESSES OR OPENINGS etc. REQUIRED. PROVIDE FOR TEMPORARY SUPPORT OF ADJOINING ELEMENTS DURING CONSTRUCTION.
- G17. WHERE NEW WORK ABUTS EXISTING, PROVIDE SMOOTH TRANSITION FREE OF ABRUPT CHANGES.
- G18. HAVE TESTING PERFORMED BY AN INDEPENDENT NATA (NATIONAL ASSOCIATION OF TESTING AUTHORITIES) ACCREDITED AUTHORITY, AND PROVIDE TEST REPORTS TO SUPERINTENDENT.
- G19. SEPARATE METALS FROM INCOMPATIBLE MATERIALS (eg GALVANIZED AND UNGALVANIZED STEEL, TREATED TIMBER AND STEEL etc) BY CONCEALED LAYERS OF SUITABLE INERT MATERIALS OF SUITABLE THICKNESSES. USE PLASTIC SLEEVES AND WASHERS FOR BOLTS, etc.
- G20. STRUCTURAL WORK HAS BEEN DESIGNED FOR FOLLOWING LOADS:
- PERMANENT DEAD LOAD OF STRUCTURE AS SHOWN ON DRAWINGS
- LIVE LOADS TO AS/NZS1170.1:
- ROOF (NON-TRAFFICABLE) 0.25 kPa
- BALUSTRADE (HORIZONTAL) TYPICAL 3.0 kN/m
- BALUSTRADE (HORIZONTAL) FIXED SEATING 1.5 kN/m
- SERVICES LOAD 0.10 kPa
- BUILDING DESIGN WORKING LIFE 50 years
- BUILDING IMPORTANCE LEVEL 2
- WIND LOADS TO AS/NZS1170.2:
- REGION B
- AVERAGE RECURRENCE INTERVAL, R 500 years
- ULTIMATE REGIONAL WIND SPEED V₀ (3 sec GUST) 57 m/s
- SERVICEABILITY REGIONAL WIND SPEED V₁₀ (3 sec) 39 m/s
- DIRECTIONAL MULTIPLIER 1.0 CLADDING AND PURLIN, 0.95 MAIN STRUCTURAL MEMBER
- TERRAIN CATEGORY 2
- DESIGN BUILDING HEIGHT AS PER BUILDING ELEVATION, 10 m max.
- TERRAIN/HEIGHT MULTIPLIER (M_{EL, H}) 1.0
- SHIELDING MULTIPLIER (M_s) 1.0
- TOPOGRAPHIC MULTIPLIER (M_t) 1.0
- G21. UNO-UNLESS NOTED OTHERWISE
- G22. KEEP ON SITE A COMPLETE SET OF CONTRACT DOCUMENTS (INCLUDING DRAWINGS AND SPECIFICATIONS) AND SITE INSTRUCTIONS.
- G23. ENTRY PORTAL DESIGNED IN ACCORDANCE WITH AURECON DESIGN BASIS REPORT. REFER TO DOCUMENT, 237847/0000/REP/JJ/002/0 DATE: 19.12.13

STEEL

- S1. WORKMANSHIP AND MATERIALS TO COMPLY WITH AS4100 AND AS/NZS1554
- S2. PROVIDE STEEL IN ACCORDANCE WITH:
- AS1163 GRADE C350 FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS,
- AS1163 GRADE C250 OR C350 FOR CIRCULAR HOLLOW SECTIONS, AS NOTED ON DRAWINGS
- AS/NZS3678 FOR PLATES AND FLOOR PLATE,
- AS/NZS3679 PART 1 GRADE 300 OR BHP GRADE 300 PLUS FOR UNIVERSAL BEAMS, UNIVERSAL COLUMNS, PARALLEL FLANGE CHANNELS AND ANGLES,
- AS1397 GRADE G450 FOR PURLINS AND GIRTS,
- OTHERWISE TO COMPLY WITH AS/NZS3678 OR AS/NZS3679 GRADE 250 UNO.
- S3. MARK STEEL GRADES ON STRUCTURAL MEMBERS IN NON-CRITICAL AREAS. USE IDENTIFICATION MARKS COMPATIBLE WITH AND VISIBLE THROUGH PAINT SYSTEM.
- S4. DEVELOP WELD PROCEDURES TO SUIT JOINT DETAILS AND SHOW ON SHOP DRAWINGS. USE PREQUALIFIED WELD PROCEDURES TO AS/NZS1554.1 CLAUSE 4.3 OR DEVELOP QUALIFICATION OF WELD PROCEDURE BY TESTING TO AS/NZS1554.1 CLAUSE 4.2.
- S5. WELDING TO BE UNDERTAKEN BY SUITABLY QUALIFIED WELDER UNDER SUPERVISION OF QUALIFIED WELDING SUPERVISOR.
- S6. CARRY OUT WELDING TO AS/NZS1554. ALL INTERFACES BETWEEN STEEL SECTIONS TO BE CONNECTED WITH 6 mm CONTINUOUS FILLET WELDS ALL ROUND, BOTH SIDES UNO.
- WELDS TO BE SHOP WELDED UNO
- WELDS TO BE CATEGORY SP
- BUTT WELDS TO BE FULL (COMPLETE) PENETRATION UNO.
- ELECTRODES TO BE LOW CARBON CLASSIFICATION E48XX, PRE-APPROVED TO AS/NZS1554

- S7. EXTENT OF WELD INSPECTION/TESTING TO BE:
- VISUAL SCANNING 100% OF WELDS
- VISUAL EXAMINATION 100% OF BUTT WELDS IN TENSION MEMBERS AND 50% OF OTHER WELDS
- RADIOGRAPHIC OR ULTRASONIC 10% OF BUTT WELDS IN TENSION MEMBERS AND 5% OF OTHER WELDS
- S8. WELDS TO BE INSPECTED BY INDEPENDENT NATA ACCREDITED QUALIFIED WELDING INSPECTOR. PROVIDE WELDING INSPECTOR'S REPORT TO SUPERINTENDENT.
- S9. PROVIDE STEEL MEMBERS MADE FROM WHOLE LENGTHS WHEREVER POSSIBLE. SEEK APPROVAL TO MAKE LENGTHS UP OF SECTIONS JOINED BY COMPLETE PENETRATION FULL STRENGTH BUTT WELDS GROUND FLUSH WHERE REQUIRED. WHERE PROPOSED, SHOW JOINTS ON SHOP DRAWINGS. ENSURE MEMBERS ARE CONCENTRIC AT CONNECTIONS (GRAVITY- OR GAUGE-LINES TO INTERSECT) UNO. ACCURATELY PRE-FORM PARTS TO AVOID FORCE AND/OR RESTRAINT DURING JOINING.
- S10. M16 AND LARGER BOLTS TO BE HIGH STRENGTH STRUCTURAL BOLTS, 8.8/S PROCEDURE AND M12 SIZE BOLTS SHALL BE COMMERCIAL BOLTS, 4.6/S PROCEDURE UNO.
- S11. MAKE BOLTED STRUCTURAL CONNECTIONS WITH 10 mm THICK CLEAT PLATES AND 2 M20 8.8/S BOLTS UNO. USE M12 4.6/S BOLTS FOR PURLINS UP TO 250 DEEP UNO. STIFFENERS, PURLIN AND GIRT CLEATS AND FLY BRACE CLEATS TO BE 8 mm THICK UNO.
- S12. WELDING SYMBOLS ARE TO AS1013. 'CFW' INDICATES CONTINUOUS FILLET WELD. 'FSBW' INDICATES FULL STRENGTH BUTT WELD WHICH IS EQUIVALENT TO CPBW. 'CPBW' INDICATES COMPLETE PENETRATION BUTT WELD.
- S13. USE BOLTS WITH THREADS IN COMPLIANCE WITH AS1275. BOLTS OF STRENGTH GRADE 4.6 TO BE COMMERCIAL GRADE BOLTS TO AS1111 AND 1112. BOLTS OF STRENGTH GRADE 8.8 TO BE HIGH STRENGTH STRUCTURAL BOLTS, NUTS AND WASHERS TO AS/NZS1252. MECHANICAL PROPERTIES OF BOLTS, NUTS, SCREWS AND STUDS TO COMPLY WITH AS/NZS4291.2. WASHERS TO COMPLY WITH AS1237. TIGHTENING PROCEDURES TO COMPLY WITH AS4100.
- S SNUG TIGHT
- TB BEARING MODE JOINT, BOLTS FULLY TENSIONED.
- TF FRICTION MODE JOINT, BOLTS FULLY TENSIONED (CONTACT SURFACES OF CONNECTIONS TO BE UNCOATED.)
- S14. BOLT TYPE AND TIGHTENING PROCEDURE ARE DESIGNATED: NUMBER, SIZE, STRENGTH GRADE/TIGHTENING PROCEDURES.
eg. 4-M24 8.8/TB = 4 OFF 24 DIAMETER METRIC HIGH STRENGTH STRUCTURAL BOLTS FULLY TENSIONED IN BEARING MODE.
- S15. CROP INTERNAL CORNERS OF CLEATS AND STIFFENERS, etc TO FACILITATE DRAINAGE. PROVIDE DRAINAGE HOLES TO PREVENT WATER PONDING ON STRUCTURAL ELEMENTS DURING CONSTRUCTION. SHOW PROPOSED HOLES ON SHOP DRAWINGS.
- S16. HOT DIP GALVANIZE BOLTS, SCREWS, NUTS AND WASHERS TO AS1214. TAP GALVANIZED NUTS 0.4 mm OVERSIZE TO SUIT GALVANIZED THREADS TO AS1214 AND OIL FOR PROTECTION. INSTALL WASHERS UNDER BOLT HEAD AND NUT. PROVIDE TWO WASHERS UNDER BOLT HEAD IF HEAD IS USED FOR TIGHTENING. USE TAPERED WASHERS AS REQUIRED.
- S17. USE BOLT LENGTHS SO THAT PROJECTION BEYOND NUT IS AT LEAST TWO THREADS, AND NOT MORE THAN 10 mm.
- S18. PROVIDE 3 mm CAP PLATES SEAL WELDED TO HOLLOW SECTIONS UNO. PROVIDE DRILLED VENT/DRAIN HOLES AT TOP AND BOTTOM EXTREMITIES FOR HOLLOW SECTIONS TO BE HOT DIPPED GALVANIZED. PROVIDE RUBBER SEALS OR PLUG WELD VENT/DRAIN HOLES THAT REMAIN EXPOSED.
- PROVIDE DRILLED SUSPENSION HOLES IN END PLATES, ETC FOR ITEMS TO BE HOT DIPPED GALVANIZED. PRIOR TO DIPPING ADVISE SUPERINTENDENT OF ANY DESIGN FEATURES THAT MAY LEAD TO DIFFICULTIES DURING GALVANISING.
- S19. PROVIDE STAINLESS STEEL GRADE 316L UNO. WELDS TO BE POLISHED TO MATCH ADJACENT STAINLESS STEEL ROUGHNESS AND APPEARANCE. APPLY PASSIVATION TREATMENT USING NITRIC ACID (HNO₃) SOLUTION TO ALL STAINLESS STEEL SURFACES. WASH THOROUGHLY AFTER PASSIVATION.
- S20. WELDS TO BE CLASS 1A FOR STAINLESS STEEL, SURFACE FINISH GRADE I OR II. ELECTRODES TO BE E316XXL UNO, PRE-APPROVED TO AS/NZS1554.
- S21. DO NOT FLAME CUT STAINLESS STEEL. KEEP STAINLESS STEEL SURFACES CLEAN AND FREE OF BLEMISHES THROUGHOUT FABRICATION.
- S22. FABRICATE STAINLESS STEEL IN WORKSHOP AREAS SEGREGATED FROM CARBON STEEL FABRICATION AREAS. USE TOOLS DEDICATED TO STAINLESS STEEL FABRICATION. WIRE BRUSHES AND WIRE WOOL USED IN FABRICATION OF STAINLESS STEEL TO BE STAINLESS STEEL OR CLEAN INERT MATERIALS.
- S23. PREVENT CONTACT BETWEEN STAINLESS STEEL AND CARBON STEEL, IRON, CHEMICALS, OILS AND/OR GREASE.
- S24. PROVIDE BOLTS TO PURLINS TO SUPPORT ROOF BRACING MIDSPAN.
- S25. HOLES IN PURLINS AND OTHER COLD FORMED SECTIONS TO BE IN ACCORDANCE WITH PURLIN MANUFACTURER'S RECOMMENDATIONS, OR ONLY IN MIDDLE THIRD OF WEB. DO NOT MAKE HOLES IN FLANGES OF PURLINS OR OTHER COLD FORMED SECTIONS.
- S26. HOLDING DOWN BOLTS TO BE GRADE 4.6 UNO. SUPPLY HOLDING DOWN BOLTS WITH TWO CLASS 5 HEXAGONAL HEAD NUTS AND TWO EXTRA LARGE FLAT WASHERS. HOT DIP GALVANIZE HOLDING DOWN BOLTS, NUTS AND WASHERS TO AS1214. TIE HOLDING DOWN BOLT GROUPS RIGIDLY TOGETHER PRIOR TO INSTALLATION (eg. TACK WELD WITH 10 mm DIAMETER REINFORCING BAR TO FORM A RIGID CAGE) TO ENSURE CORRECT BOLT LOCATIONS, AND SET OUT USING A 3 mm MILD STEEL TEMPLATE SUPPLIED BY STEELWORK FABRICATOR. PROVIDE 4 M12 LIGATURES TO FIX HOLDING DOWN BOLT CAGE SECURELY TO SLAB/FOOTING REINFORCEMENT.
- S27. GROUT BASE PLATES, HOLDING-DOWN BOLTS, REBATES etc BEFORE COLUMNS LOADED OR WALLS ERECTED. USE APPROVED HIGH-STRENGTH NON-SHRINK PRE-MIXED RAMMED GROUT.
- S28. DRILL HOLES FULL SIZE OR REAM TO FULL SIZE AFTER SUB-DRILLING OR SUB-PUNCHING. SUB-DRILLED OR SUB-PUNCHED HOLES TO BE AT LEAST 3 mm UNDERSIZE. FLAME CUTTING OF HOLES IS NOT PERMITTED. BOLT HOLE SIZE TO BE:
- BOLT DIAMETER PLUS 2 mm FOR STEEL TO STEEL CONNECTIONS.
- BOLT DIAMETER PLUS 4 mm FOR STEEL TO CONCRETE CONNECTIONS.
- BOLT DIAMETER PLUS 6 mm FOR HOLDING DOWN BOLTS.
- S29. SLOTTED HOLES TO BE 2.5 x BOLT DIAMETER LONG UNO. BOLTS TO BE SET CENTRAL IN SLOT UNO. USE OVERSIZED HARDENED WASHERS AT SLOTTED HOLES.
- S30. INSTALL BEAMS WITH NATURAL CAMBER UPWARD.
- S31. LIGHTWEIGHT STEEL WALL AND FLOOR FRAMING, FIXINGS etc TO BE BY RONDO BUILDING SERVICES PTY LTD UNO.
- S32. LIGHTWEIGHT STEEL WALL AND FLOOR FRAMING (INCLUDING ROOF AND WALL BRACING, TRIMMERS, NOGGINGS, HEADERS, TIE DOWNS TO RESIST UPLIFT, etc) TO BE DESIGNED TO AS/NZS4600 BY A RPEO. CO-ORDINATE ARCHITECTURAL, STRUCTURAL SERVICES AND OTHER ENGINEERING DRAWINGS AND ALLOW FOR NECESSARY CONNECTIONS, SERVICES etc. PROVIDE WORKSHOP DRAWINGS AND DESIGN CALCULATIONS.
- S33. DESIGN CALCULATIONS/SHOP DRAWINGS TO SHOW ARRANGEMENT OF MEMBERS, LOCATION OF MEMBERS IN BUILDING, LOADING PARAMETERS AND BRACING LENGTHS ASSUMED IN DESIGN, DESIGN STRESSES, STRENGTH OF STEEL, SIZE OF EACH MEMBER, TOLERANCES ON MEMBER SIZES, JOINT DETAILS, TRIMMERS, NOGGINGS ETC, LIFTING POINTS, METHOD OF FIXING AND BRACING, SURFACE PROTECTION (IF ANY), DESIGN DEFLECTION, METHOD OF FABRICATION, SIZE AND SPECIFICATION OF CLEATS, BOLTS, SCREWS, BASE PLATE DETAILS, FIXINGS FOR PURLINS, GIRTS AND BRACING, METHOD OF HANDLING AND ERECTION (INCLUDING TEMPORARY BRACING REQUIRED (IF ANY), PRECAMBER, etc.

- S34. PREPARE WORKSHOP DRAWINGS, CALCULATIONS etc AND SUBMIT THREE COPIES OF EACH FOR SUPERINTENDENT'S REVIEW OF GENERAL COMPLIANCE WITH DESIGN CONCEPT. SHOP DRAWINGS TO SHOW RELEVANT DETAILS OF EACH ASSEMBLY, COMPONENT AND CONNECTION, TOGETHER WITH INFORMATION RELATIVE TO FABRICATION, SURFACE TREATMENT AND ERECTION, INCLUDING IDENTIFICATION, STEEL TYPE AND GRADE, DIMENSIONS OF ITEMS, REQUIRED CAMBER (WHERE APPLICABLE), LOCATION, TYPE AND SIZE OF WELDS OR BOLTS, WELD CATEGORIES AND BOLTING CATEGORIES, WELD PROCEDURES, SURFACE PREPARATION METHODS AND COATING SYSTEM, VENT/DRAIN HOLES FOR HOT DIP GALVANISING, PROPOSED JOINTS IN STEEL MEMBERS, etc.
- S35. DO NOT COMMENCE FABRICATION UNTIL SHOP DRAWINGS AND CALCULATIONS HAVE BEEN REVIEWED. ALLOW 14 DAYS FOR SUPERINTENDENT'S REVIEW. SUPERINTENDENT'S REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS, AND DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.
- S36. AFTER COMPLETION OF FABRICATION, PREPARATION FOR SURFACE TREATMENT TO BE: ROUND OFF ROUGH WELDS, SHARP EDGES, BURRS, ARRISSES, WELD SPATTER AND SLAG, etc. REMOVE GREASE, OIL AND OTHER CONTAMINANTS TO AS1627.1. REMOVE RUST, MILLSALE, OXIDE DEPOSITS, OLD PAINT FILMS, etc BY ABRASIVE BLAST CLEANING TO AS1627.4 CLASS 2½ TO 35 MICRONS PROFILE HEIGHT OR BY POWER TOOL CLEANING TO AS1627.2 CLASS 2. REMOVE ALL DUST BY BRUSHING OR VACUUM CLEANING.
- S37. APPLY SURFACE TREATMENT AS SOON AS PRACTICABLE AFTER PREPARATION, WITHIN FOUR HOURS AND BEFORE A RUST BLOOM APPEARS. APPLICATION OF SURFACE TREATMENT TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.
- S38. WHERE NOMINATED AS GALVANIZED ON DRAWINGS, STEELWORK IS TO BE HOT DIPPED GALVANIZED TO AS/NZS4580 AND AS1214.
- S39. PROTECTIVE COATINGS ARE TO BE SHOP APPLIED AND CURED IN WORKSHOP IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS APPROVED OTHERWISE IN WRITING BY SUPERINTENDENT. PROTECTIVE COATINGS ARE TO BE SMOOTH, UNIFORM AND WITHOUT RUNS, BEADS, PINHOLES, SURFACE CRAZING OR OTHER IMPERFECTIONS.
- S40. PROTECT COATINGS FROM DAMAGE AND DETERIORATION DURING HANDLING, TRANSPORT, STORAGE AND ERECTION. REPAIR DAMAGE TO PROTECTIVE COATINGS TO REINSTATE INTEGRITY OF NOMINATED COATING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATION. EDGES OF PATCH REPAIRS TO BE FEATHERED.
- DO NOT PAINT GALVANISED STEELWORK UNLESS SPECIFIED IN THE ENGINEERING DRAWINGS
- PREPARE GALVANISED SURFACES TO BE PAINTED USING AN ETCH PRIMER TO ENSURE ADHESION OR TO MANUFACTURER'S RECOMMENDATIONS AND APPLY PAINT IN THE WORKSHOP
- COATING APPLICATOR TO PROVIDE A 10-YEAR WARRANTY OF COATING SYSTEM
- S41. PROVIDE PURLINS AND GIRTS WITH GALVANIZED COATING OF 450 g/m² = MINIMUM COATING MASS TO AS1397 UNO AND ALSO APPLY PAINT COATING SYSTEM AS SPECIFIED IN THE SCHEDULE OF PROTECTIVE COATINGS IN THE SPECIFICATION.

CONCRETE

- C1. REFER TO MARINE DRAWINGS FOR CONCRETE NOTES.

ALUMINIUM

- P1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 1664.1 AND AS 1665.
- P2. ALUMINIUM EXTRUSIONS SHALL BE MARINE GRADE TYPE 6062 OR 6061, TEMPER T6.
- P3. ALL ALUMINIUM MEMBERS SHALL BE SEPARATED FROM THE CONTACT WITH DISSIMILAR MATERIAL (STEEL, STAINLESS STEEL, CONCRETE). THE FACE OF THE CONTACT WITH THE ALUMINIUM SHALL BE SEPARATED WITH A UHMWPE PAD. THE UHMWPE SHALL BE HEAVY DUTY, MARINE GRADE AND UV STABILIZED.
- P4. ALL BOLTS, NUTS AND WASHERS THROUGH ALUMINIUM SHALL BE STAINLESS STEEL 316 A4 CLASS 70 U.N.O. IN ACCORDANCE WITH AS 4673.
- P5. ALL BOLTS THROUGH ALUMINIUM SHALL BE INSULATED WITH A 1mm THICK UHMWPE SLEEVE ON BOLT SHANK AND 3mm THICK UHMWPE WASHERS UNDER HEAD AND NUT. THE UHMWPE SHALL BE HEAVY DUTY, MARINE GRADE AND UV STABILIZED.
- P6. ALL ALUMINIUM WELDING SHALL BE IN ACCORDANCE WITH AS 1665.
ALL WELDING SHALL BE WELD CATEGORY B
ALL FILLER MATERIAL SHALL BE ALLOY 5556 IN ACCORDANCE WITH AS 2717.2
ALL ALUMINIUM WELDS SHALL BE "FSBW" FULL STRENGTH BUT WELDS WHICH IS EQUIVALENT TO A "CPBW" COMPLETE PENETRATION BUT WELD

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

MEDQ

0	ISSUE FOR CONSTRUCTION	CEH	MAE*	POK*	14.03.14
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director



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Drawn M.JAVIER

Drafting Check M. MOHR*

Approved P. O'KEEFE* (Project Director)

Date 14.03.14

Scale

Designer L.GILLAN

Design Check I.SAUL*

A.WOLSKI* (Project Director)

RPEQ 2676

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Client

Project

Title

Original Size

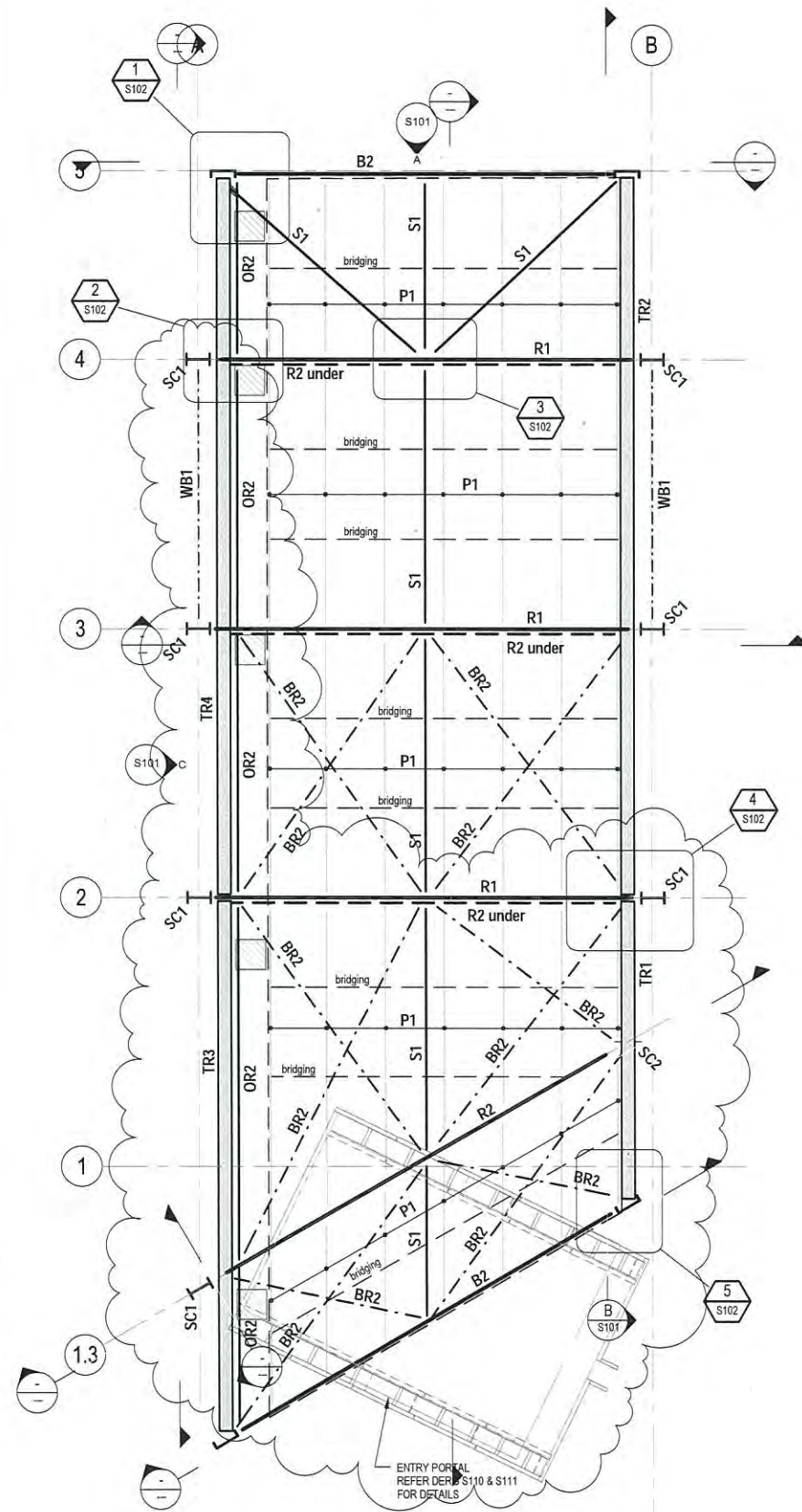
A1

BRISBANE CITY COUNCIL
BRETT'S WHARF CityCat TERMINAL

STRUCTURAL NOTES

Drawing No: 41-27289-03-S001

Rev: 0



ROOF FRAMING PLAN
SCALE 1:50

NOTES:

1. REFER TO DRAWING NUMBER 41-27289-03-S001 FOR STRUCTURAL STEEL NOTES.
2. REFER TO ARCHITECT'S DRAWING FOR SETOUT U.N.O.
3. REFER TO MARINE ENGINEER DRAWINGS FOR CONCRETE DETAILS AND REINFORCEMENT.
4. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS, INSERTS BETWEEN MATING SURFACES ANOTHER METHODS AS APPROVED.
5. SEAL WELDS ALL ROUND ON EXPOSED TRUSS ENDS, GRIND AND FINISH.

STRUCTURAL FRAMING SCHEDULE		
MARK	DESCRIPTION	COMMENTS
B2	380 PFC	TRUSS AT GRID B
BR2	DIA 16 ROD + TURNBUCKLE	
M1		
OR2	65x6.0 EA	BOX GUTTER SUPPORT WELDED TO TOP CHORD OF TRUSS
P1	C15019	AT 900 CRS, 2 ROWS OF BRIDGING UNO
R1	360UB45	
R2	310UB46	
S1	60.3x4.5 CHS (GR 250)	
TR1	TOP CHORD 200 PFC BOTTOM CHORD 200 PFC VERTICAL WEB 65x4.0 SHS DIAGONAL WEB 65x4.0 SHS	
TR2	TOP CHORD 200 PFC BOTTOM CHORD 200 PFC VERTICAL WEB 65x4.0 SHS DIAGONAL WEB 65x4.0 SHS	
TR3	TOP CHORD 200 PFC BOTTOM CHORD 200 PFC VERTICAL WEB 65x4.0 SHS DIAGONAL WEB 65x4.0 SHS	
TR4	TOP CHORD 200 PFC BOTTOM CHORD 200 PFC VERTICAL WEB 65x4.0 SHS DIAGONAL WEB 65x4.0 SHS	
WB1	101.6x3.2 CHS	

STRUCTURAL STEEL COLUMN		
MARK	DESCRIPTION	COMMENTS
M1	100x50x4.0 RHS	SCREEN MULLION
SC1	360UB45	PORTAL COLUMN
SC2	200x100x6.0 RHS	

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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date

0 500 1000 1500 2000 2500mm
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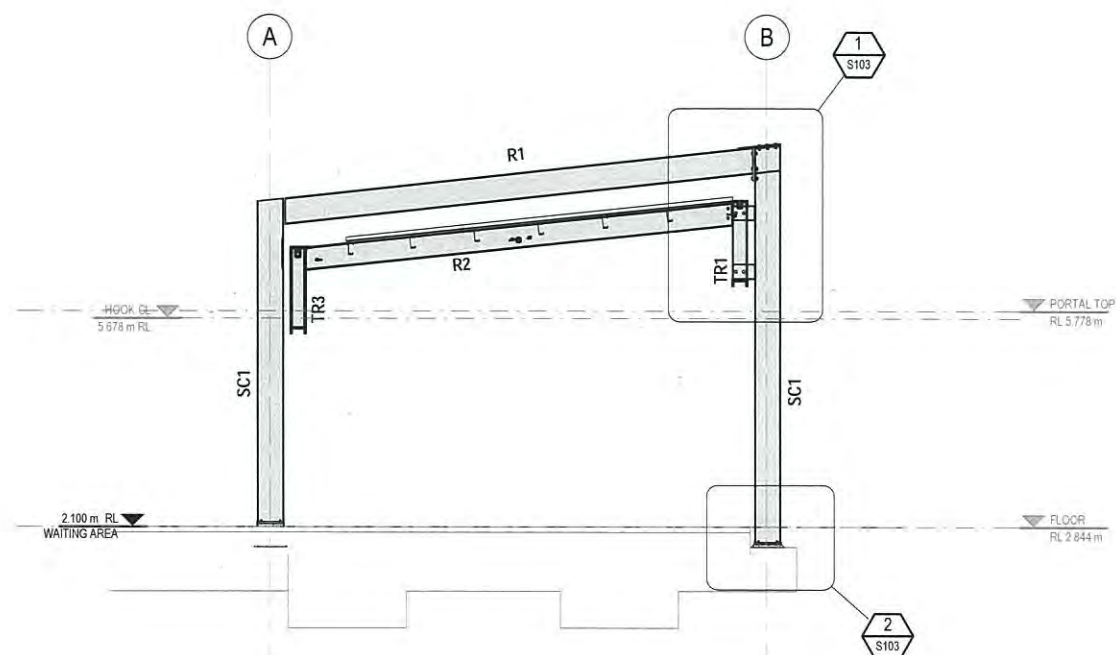
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Drafting Check	N. WATTS*	Design Check	A. WOLSKI*
Approved	P. O'KEEFE		A. WOLSKI
Date	14.03.14	RPEQ	2676
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

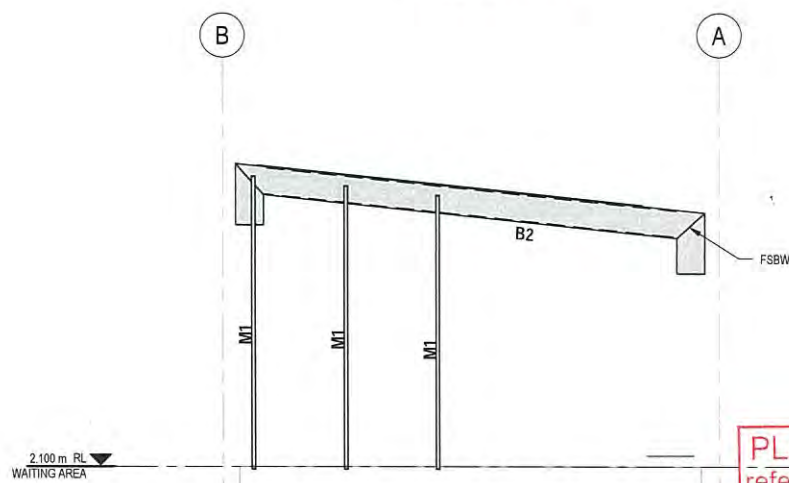
Client **BRISBANE CITY COUNCIL**
Project **BRETT'S WHARF CityCat TERMINAL**
Title **WAITING AREA STRUCTURAL STEEL PLANS**
Original Size **A1**
Drawing No: **41-27289-03-S100**

Rev: 0

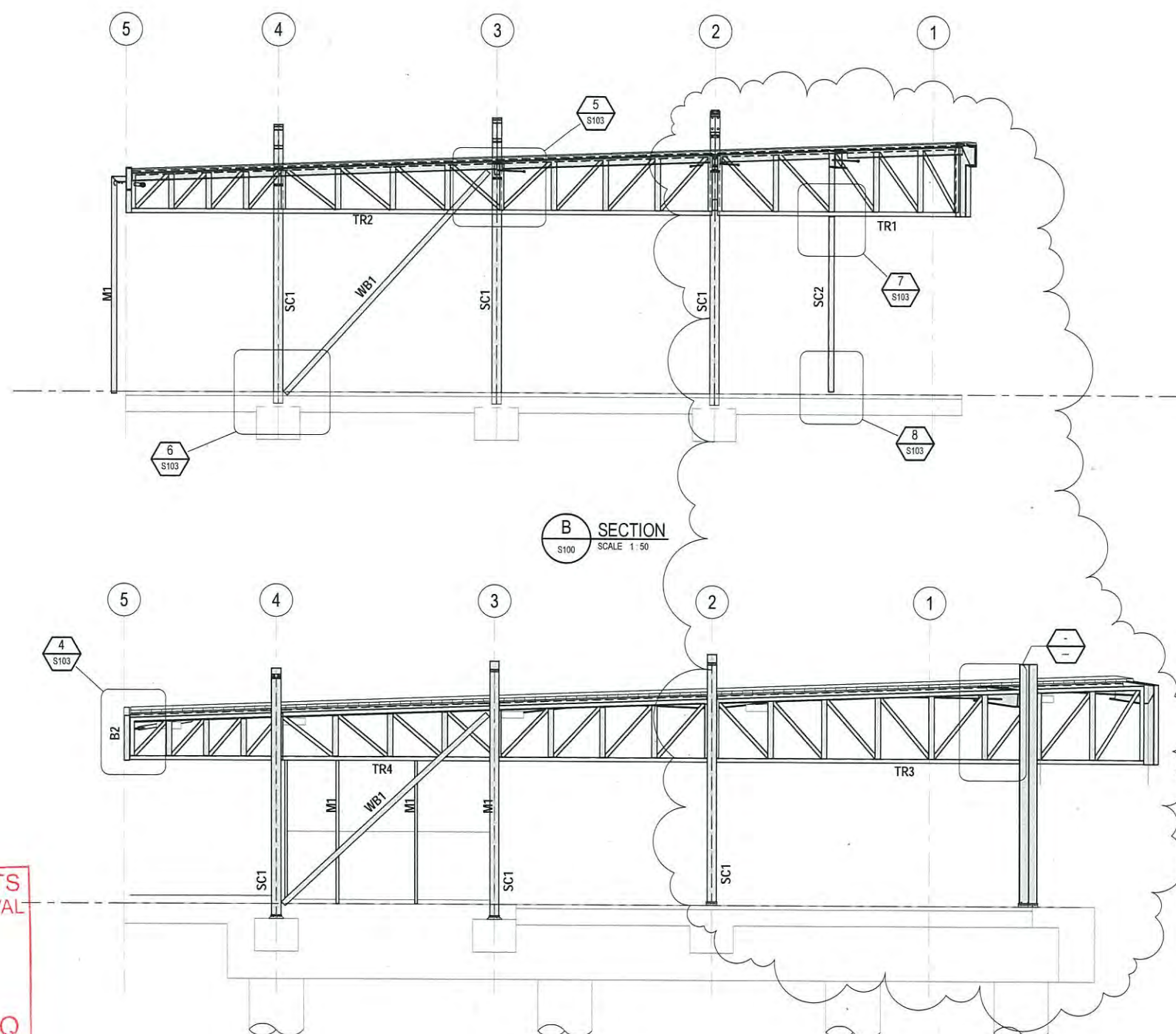
- NOTES:**
1. REFER TO DRAWING NUMBER 41-27289-03-S001 FOR STRUCTURAL STEEL NOTES.
 2. REFER TO ARCHITECT'S DRAWING FOR SETOUT U.N.O.
 3. REFER TO DRAWING NUMBER 41-27289-03-S100 FOR MEMBER SCHEDULE.
 4. REFER TO MARINE ENGINEER DRAWINGS FOR CONCRETE DETAILS AND REINFORCEMENT.
 5. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS, INSERTS BETWEEN MATING SURFACES ANOTHER METHODS AS APPROVED.
 6. CONTRACTOR TO COORDINATE ALL NON STRUCTURAL FLASHING FIN PLATES ATTACHED TO STRUCTURAL ENGINEER STEELWORK BY REFERENCING TO ARCHITECTURAL DRAWINGS.



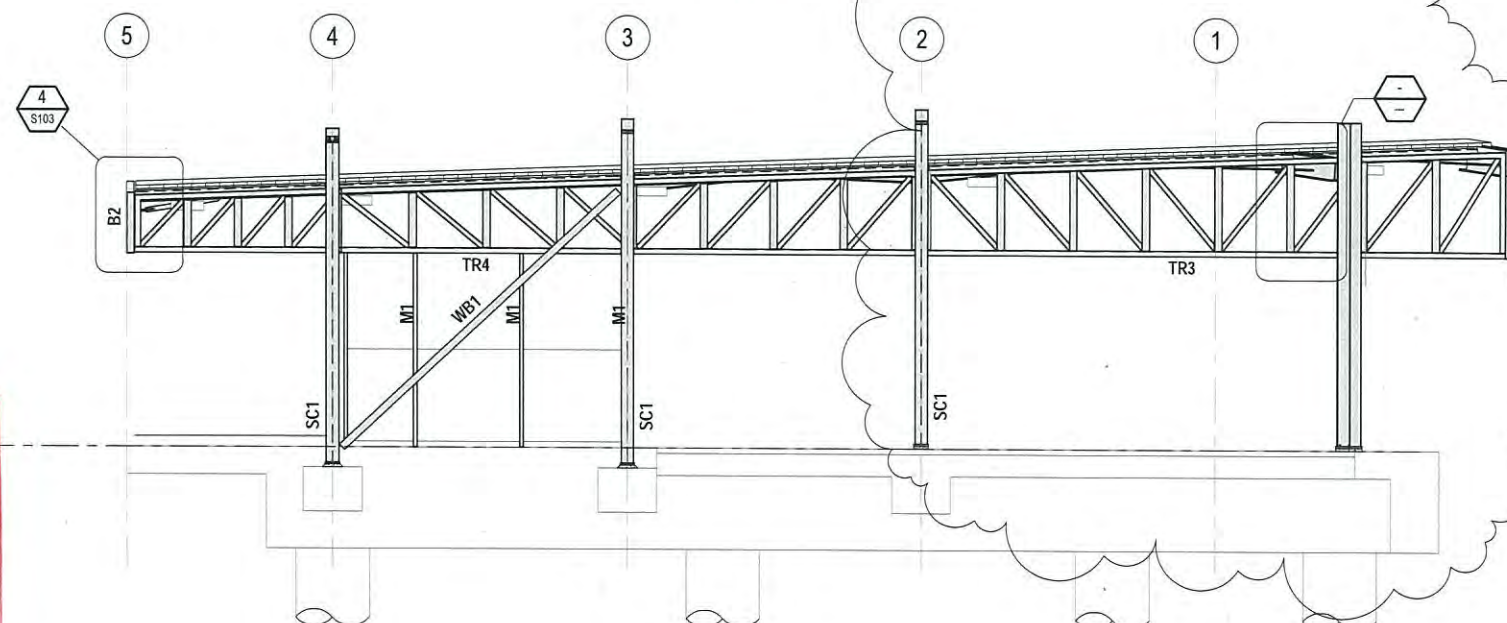
SECTION GRID 2
SCALE 1:50



A ELEVATION
SCALE 1:50



B SECTION
SCALE 1:50



C ELEVATION
SCALE 1:50

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0 500 1000 1500 2000 2500mm
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Drafting Check	N. WATTS*	Design Check	A. WOLSKI*
Approved	P. O'KEEFE		A. WOLSKI
Date	14.03.14	RPEQ	2676
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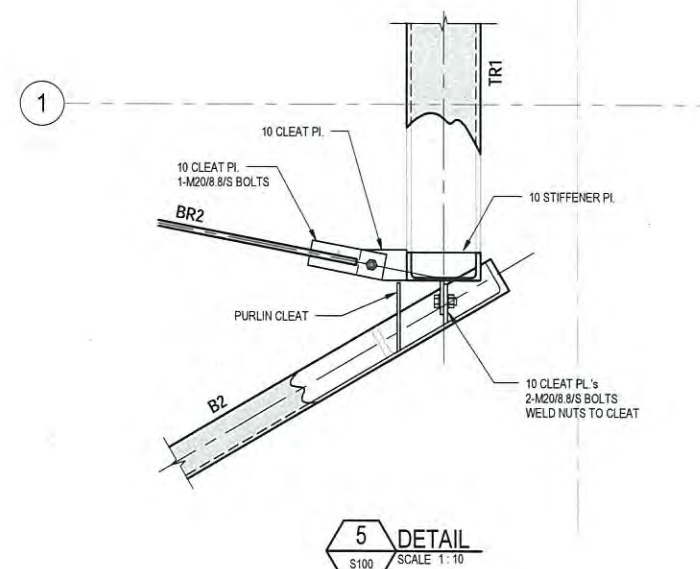
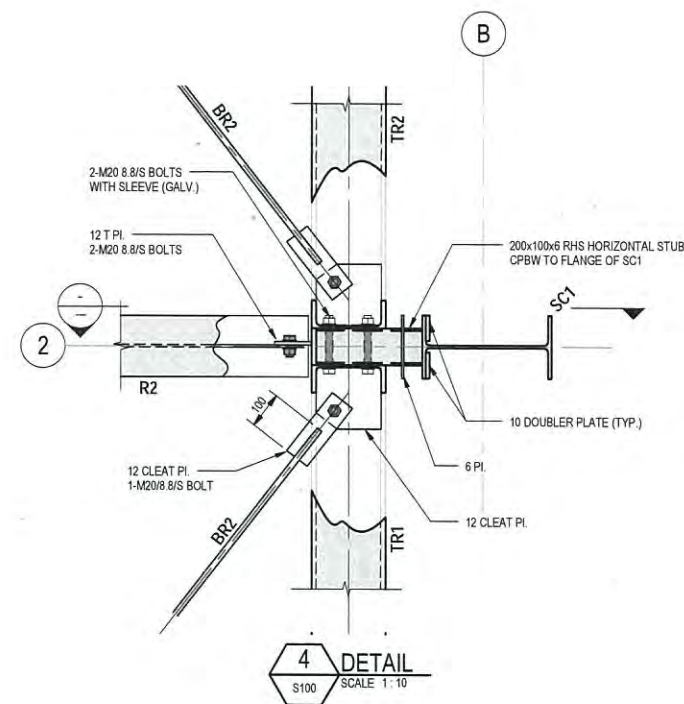
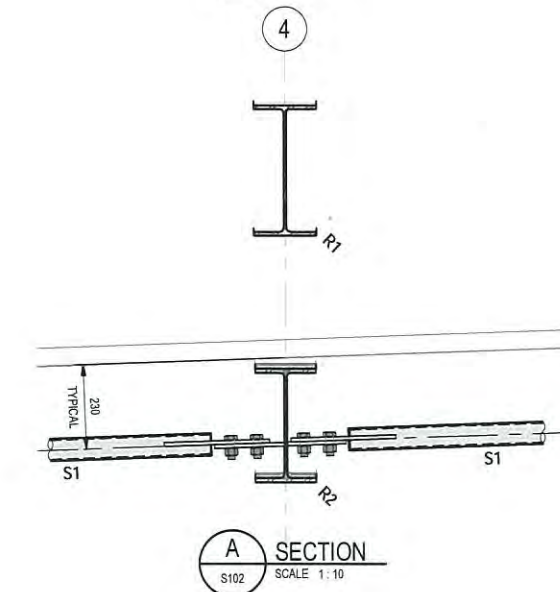
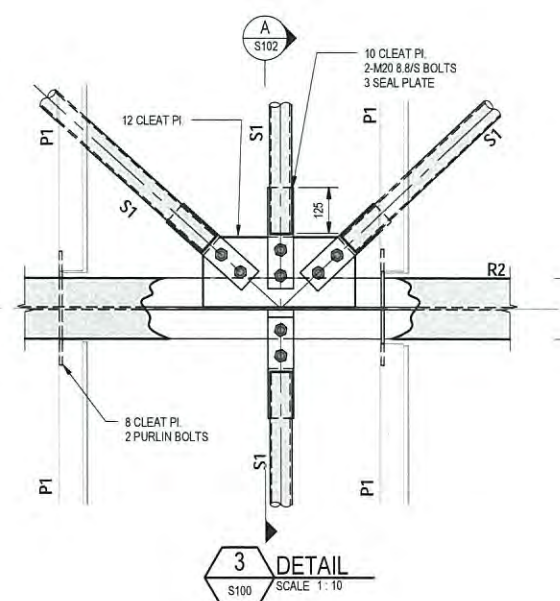
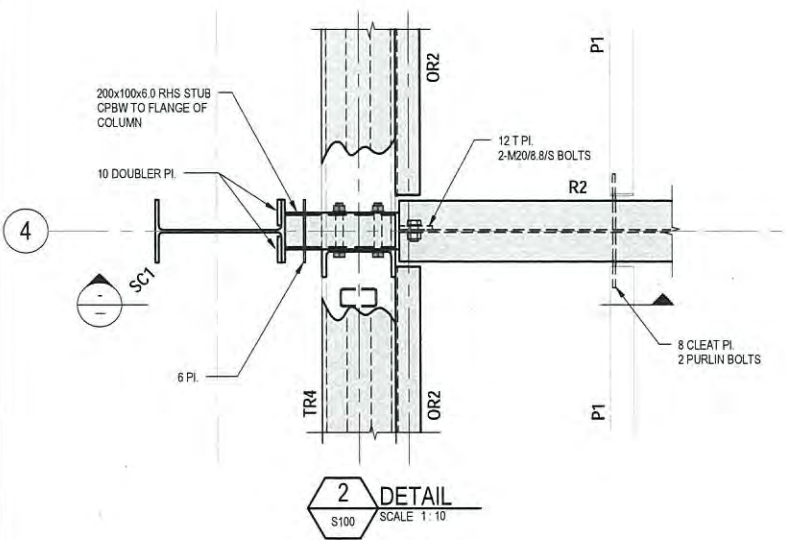
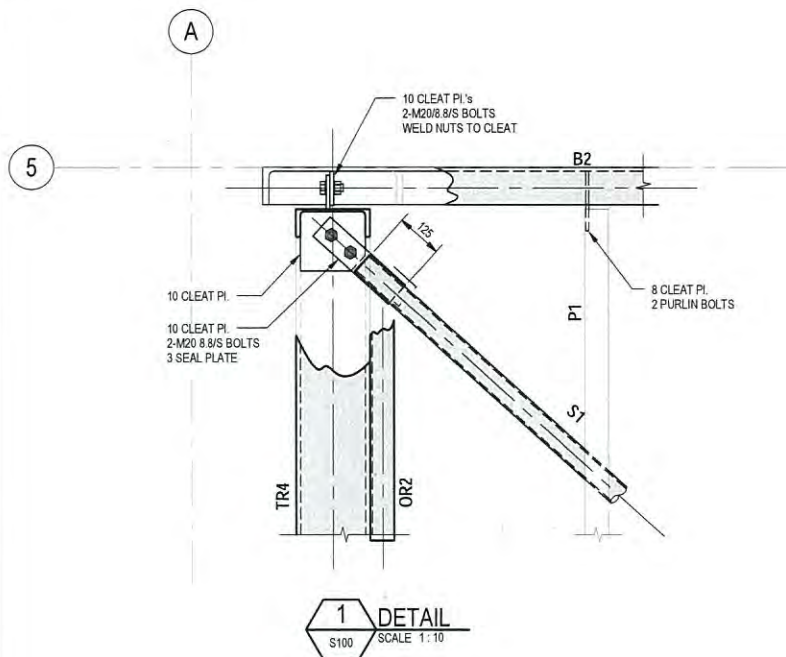
Client **BRISBANE CITY COUNCIL**
Project **BRETT'S WHARF CityCat TERMINAL**
Title **WAITING AREA ELEVATIONS AND SECTIONS**

Original Size **A1** Drawing No: **41-27289-03-S101**

Rev: 0

NOTES:

1. REFER TO DRAWING 41-27289-03-S001 FOR STRUCTURAL STEEL NOTES.
2. REFER TO DRAWING NUMBER 41-27289-03-S100 FOR MEMBER SCHEDULE.
3. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS, INSERTS BETWEEN MATING SURFACES AND OTHER METHODS AS APPROVED.



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19 SEP 2014

MEDQ

No	Revision	Note	Drawn	Checked	Approved	Date
0		ISSUED FOR CONSTRUCTION	CEH	MAE*	POK*	14.03.14

0 100 200 300 400 500 mm
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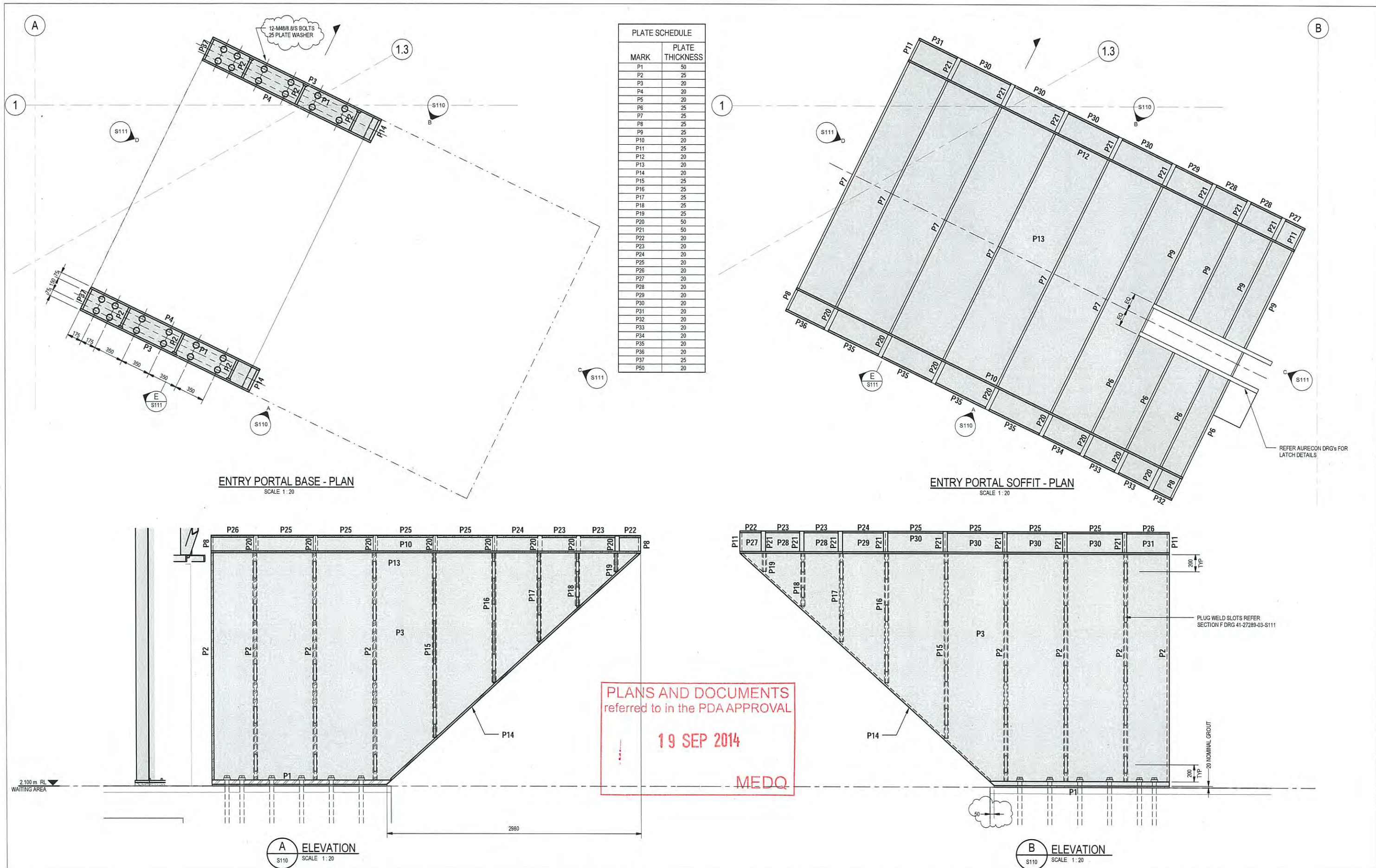
Drawn	C. HUGHES	Designed	J. McGEARY
Drafting Check	N. WATTS*	Design Check	A. WOLSKI*
Approved	P. O'KEEFE		A. WOLSKI
Date	14.03.14	RPEQ	2676
Scale	As indicated	This drawing must not be used for construction unless signed as Approved	

Client **BRISBANE CITY COUNCIL**
Project **BRETT'S WHARF CityCat TERMINAL**
Title **WAITING AREA DETAILS SHEET 1**

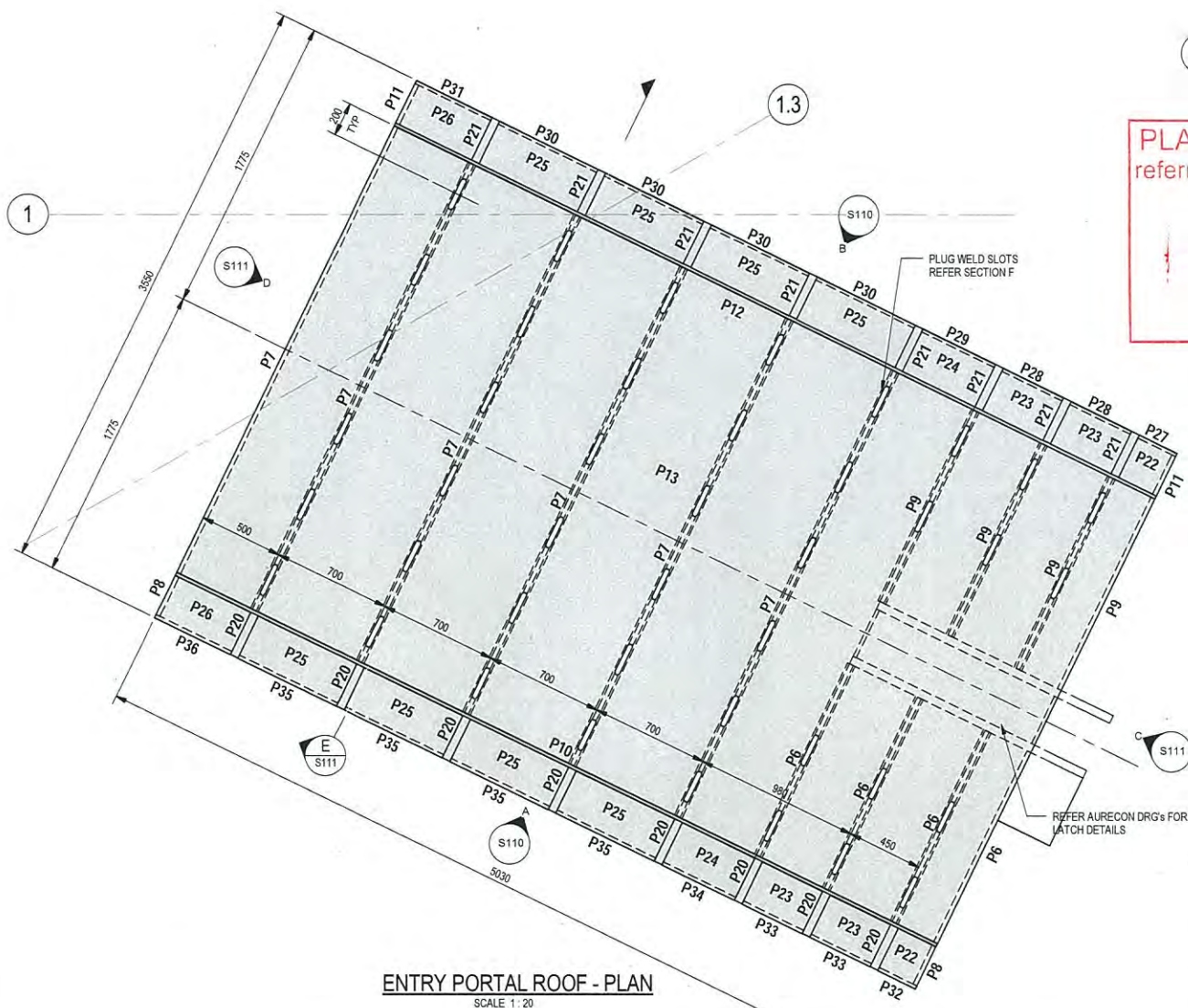
Original Size **A1** Drawing No: **41-27289-03-S102**

Rev: 0

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1		ENTRY PORTAL REVISED				CEH		MAE*		POK*		30.04.14												Client		BRISBANE CITY COUNCIL					
0		ISSUED FOR CONSTRUCTION				CEH		MAE*		POK*		14.03.14												Project		BRETTS WHARF CityCat TERMINAL					
																								Title		WAITING AREA ENTRY PORTAL - SHEET 1					
No		Revision		Note: * indicates signatures on original issue of drawing or last revision of drawing				Drawn		Checked		Approved		Date										Original Size		A1		Drawing No: 41-27289-03-S110		Rev: 1	

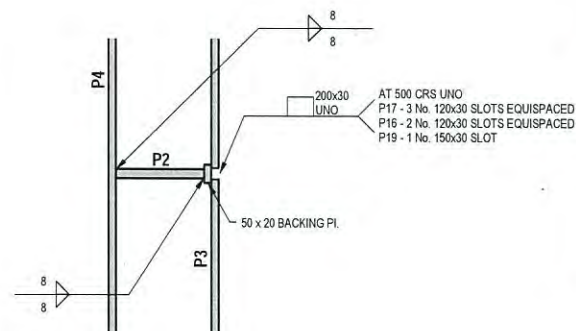


ENTRY PORTAL ROOF - PLAN
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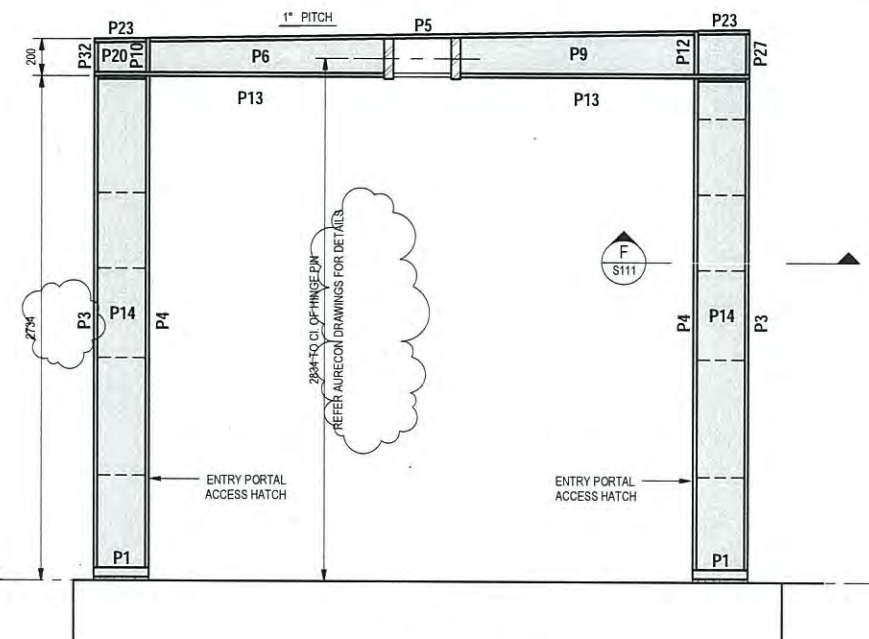
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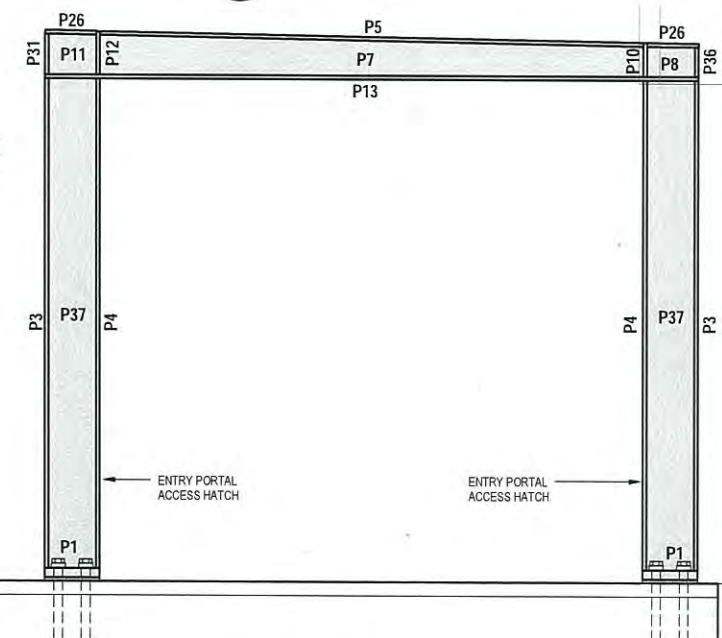
MEDQ



F SECTION
SCALE 1:10

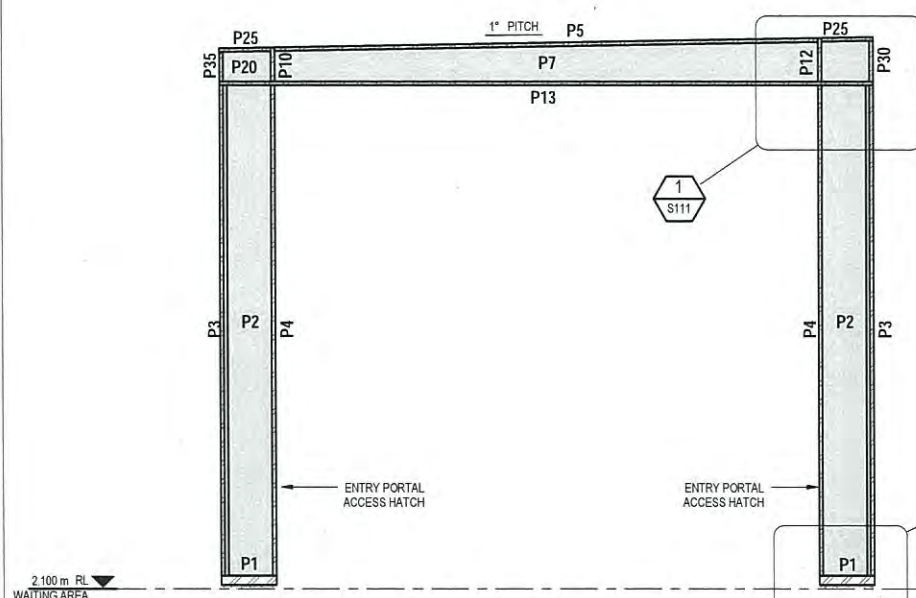


C ELEVATION
SCALE 1:20



D ELEVATION
SCALE 1:20

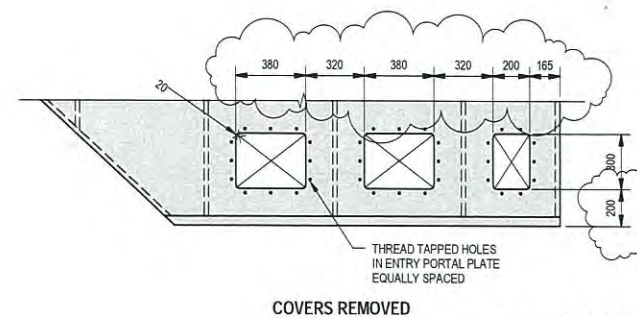
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P3	20
P4	20
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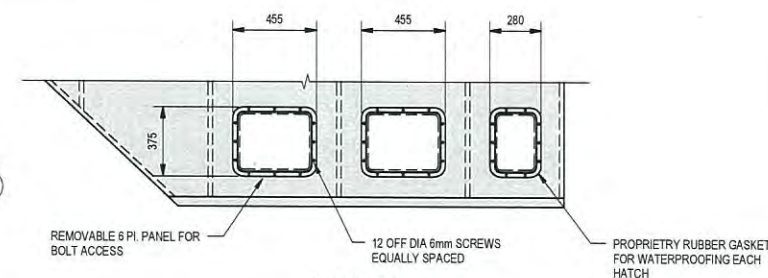
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SCALE 1:20

1 DETAIL
SCALE 1:10

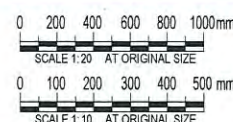
2 DETAIL
SCALE 1:10



ENTRY PORTAL ACCESS PANEL DETAILS
SCALE 1:20



1	ENTRY PORTAL REVISED		CEH	MAE*	POK*		30.04.14
0	ISSUED FOR CONSTRUCTION		CEH	MAE*	POK*		14.03.14
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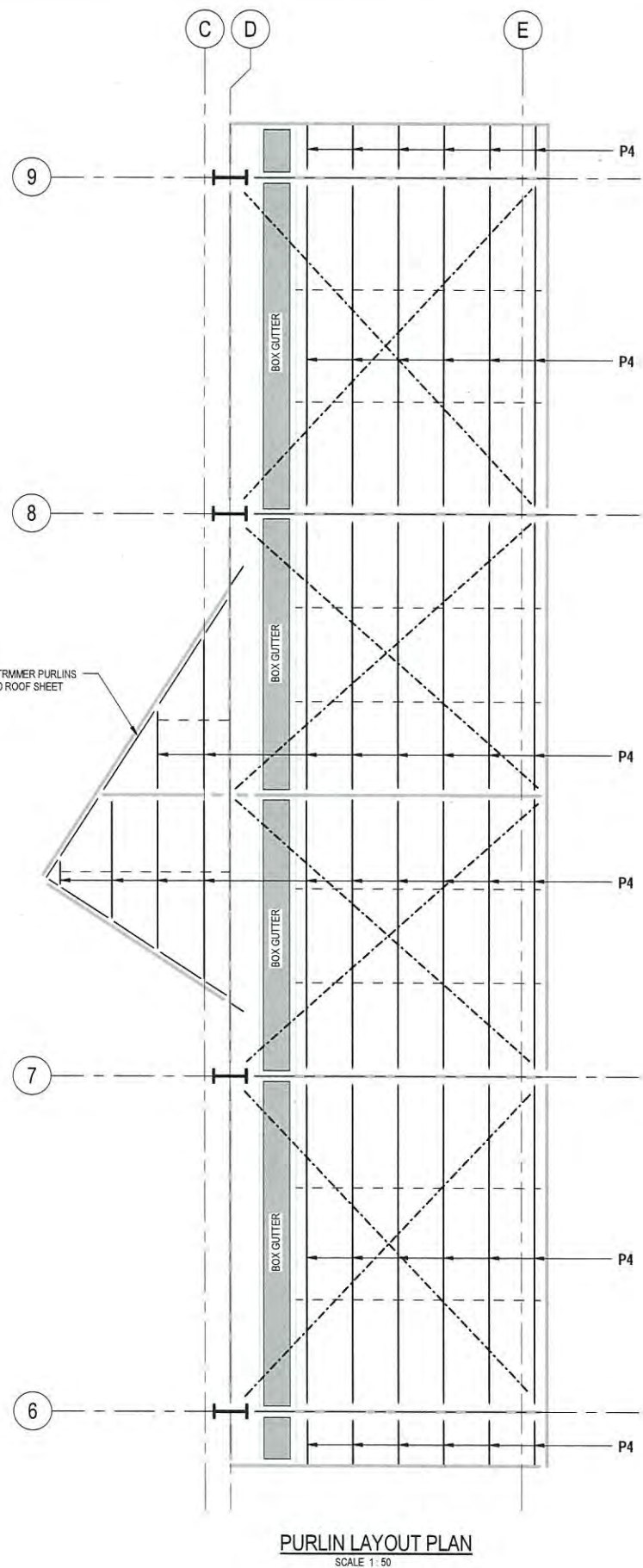
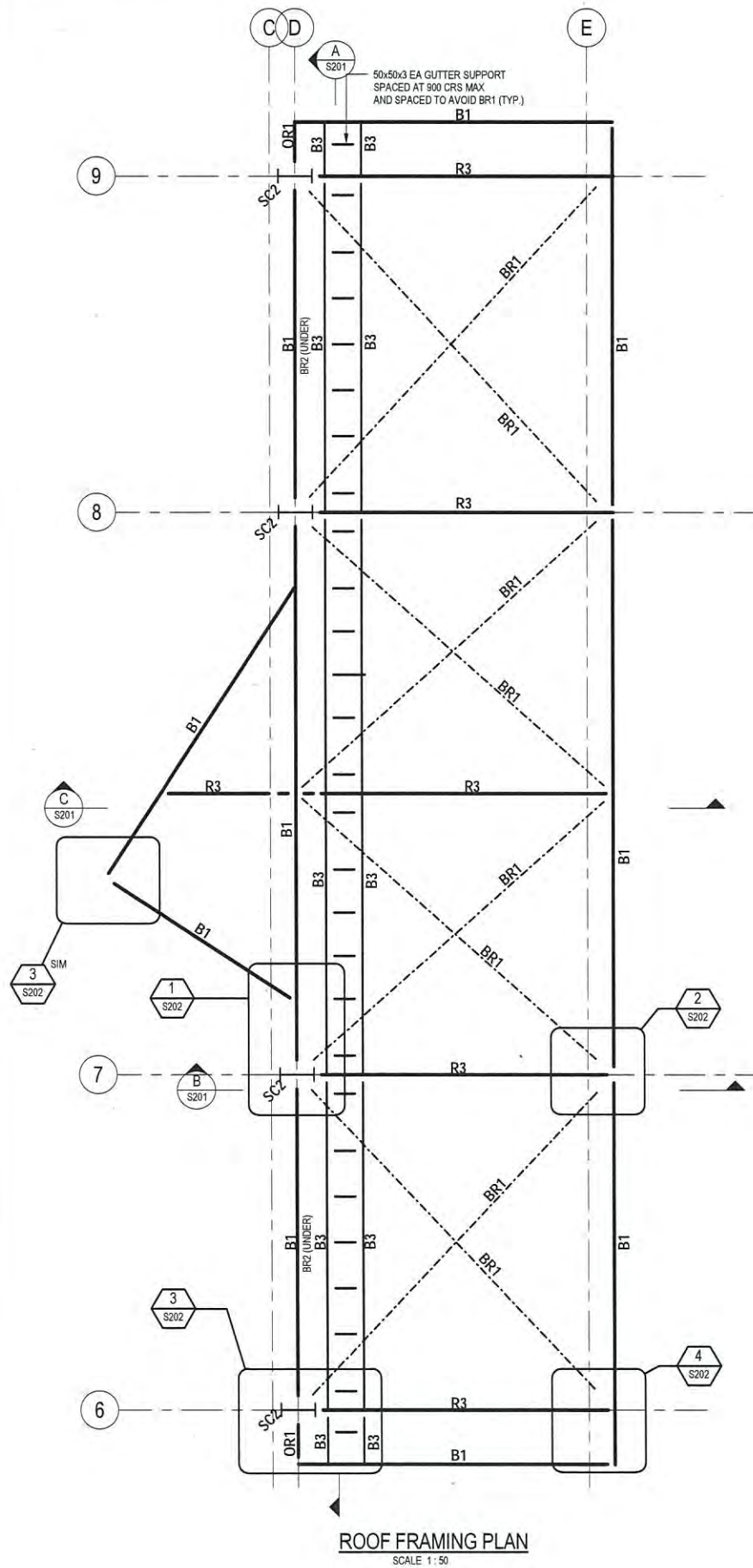
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Drafting Check	N. WATTS*	Design Check	B. GILES*
Approved	P. O'KEEFE		B. GILES
Date	14.03.14	RPEQ	10749
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Client	BRISBANE CITY COUNCIL		
Project	BRETT'S WHARF CityCat TERMINAL		
Title	WAITING AREA		
	ENTRY PORTAL - SHEET 2		
Original Size	A1	Drawing No:	41-27289-03-S111
Rev:	1		



- NOTES:
1. REFER TO DRAWING NUMBERS 41-227289-03-S001 FOR STRUCTURAL STEEL NOTES
 2. REFER TO ARCHITECT'S DRAWING FOR SETOUT U.N.O
 3. B1 AND OR1 ARE BASED ON ARCHITECTURAL REQUIREMENTS
 4. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS. INSERTS BETWEEN MATING SURFACES AND OTHER METHODS AS APPROVED.

STRUCTURAL FRAMING SCHEDULE		
TYPE MARK	TYPE	COMMENTS
B1	410UB 60	
B3	200x100x4.0 SHS	BOX GUTTER SUPPORTS - TO SUIT ARCHITECT REQUIREMENTS
BR1	20 Dia Rod WITH TURNBUCKLE	HORIZONTAL BRACING HUNG FROM PURLINS AT MIDSPAN
BR2	20 Dia Rod WITH TURNBUCKLE	VERTICAL BRACING
OR1	410 UB60	OUTRIGGER
P4	SZ20024	SUPAPURLIN SPACED @ 900 MAX CRS WITH 2 ROWS OF BRIDGING
R3	410UB60	RAFTER

STRUCTURAL COLUMN SCHEDULE		
TYPE MARK	TYPE	COMMENTS
SC2	530UB92	STEEL COLUMN

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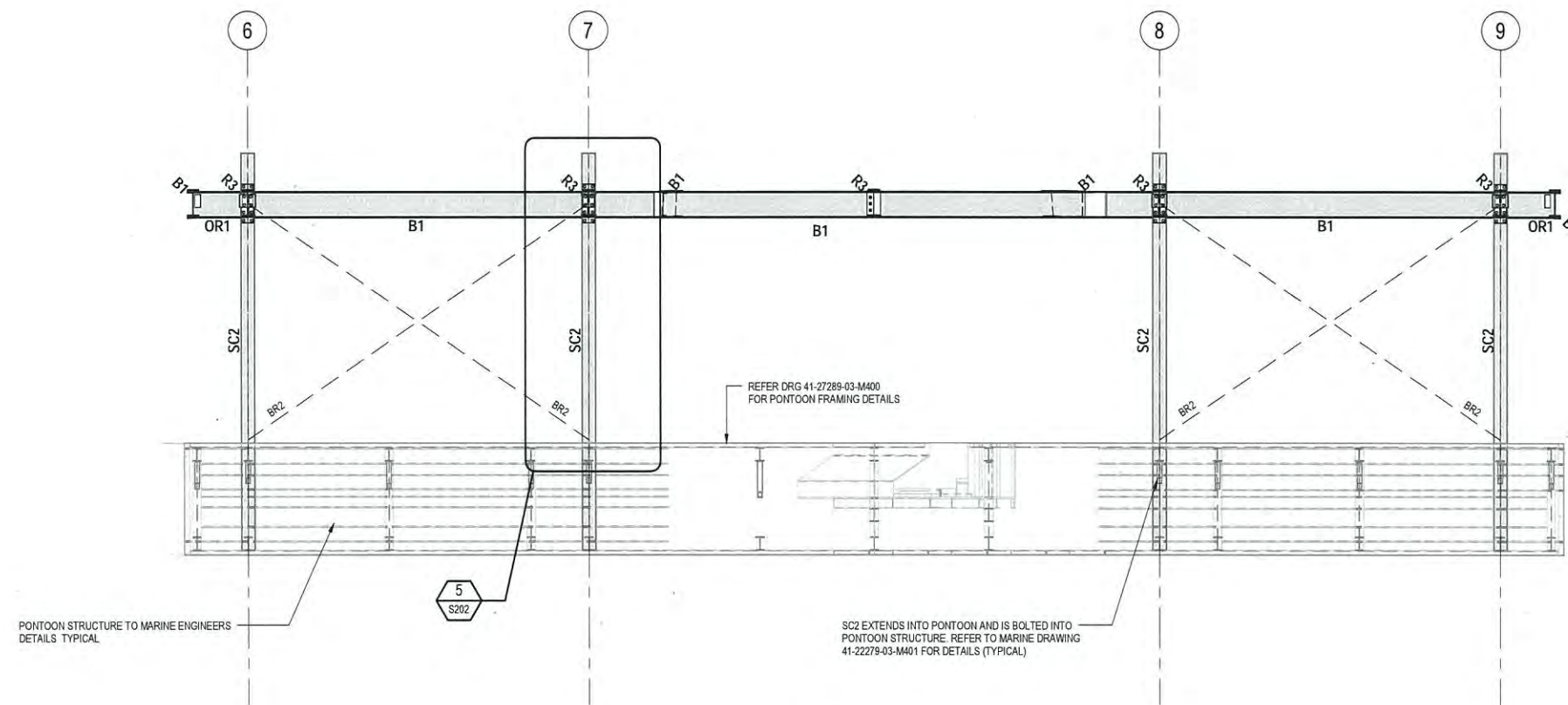
19 SEP 2014

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0 500 1000 1500 2000 2500mm SCALE 1:50 AT ORIGINAL SIZE 145 Ann St Brisbane QLD 4000 Australia GPO Box 668 Brisbane QLD 4001 T 61 7 3316 3000 F 61 7 3316 3333 E bne@mail@ghd.com.au W www.ghd.com.au				DO NOT SCALE GHD Pty Ltd Conditions of Use: This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.		<table border="1"> <tr> <td>Drawn</td> <td>M.JAVIER</td> <td>Designed</td> <td>Y.LU</td> </tr> <tr> <td>Drafting Check</td> <td>M.MOHR*</td> <td>Design Check</td> <td>M.RAHMAN*</td> </tr> <tr> <td>Approved</td> <td>P.O'KEEFE*</td> <td></td> <td>A.WOLSKI*</td> </tr> <tr> <td>Date</td> <td>28.04.14</td> <td>RPEQ</td> <td>2676</td> </tr> <tr> <td>Scale</td> <td>As indicated</td> <td colspan="2">This Drawing must not be used for Construction unless signed as Approved</td> </tr> </table>		Drawn	M.JAVIER	Designed	Y.LU	Drafting Check	M.MOHR*	Design Check	M.RAHMAN*	Approved	P.O'KEEFE*		A.WOLSKI*	Date	28.04.14	RPEQ	2676	Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved		<table border="1"> <tr> <td>Client</td> <td>BRISBANE CITY COUNCIL</td> </tr> <tr> <td>Project</td> <td>BRETT'S WHARF CityCat TERMINAL</td> </tr> <tr> <td>Title</td> <td>PONTOON COVER STRUCTURE PLANS</td> </tr> <tr> <td>Original Size</td> <td>A1</td> </tr> <tr> <td>Drawing No:</td> <td>41-27289-03-S200</td> </tr> <tr> <td>Rev:</td> <td>0</td> </tr> </table>		Client	BRISBANE CITY COUNCIL	Project	BRETT'S WHARF CityCat TERMINAL	Title	PONTOON COVER STRUCTURE PLANS	Original Size	A1	Drawing No:	41-27289-03-S200	Rev:	0
Drawn	M.JAVIER	Designed	Y.LU																																						
Drafting Check	M.MOHR*	Design Check	M.RAHMAN*																																						
Approved	P.O'KEEFE*		A.WOLSKI*																																						
Date	28.04.14	RPEQ	2676																																						
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved																																							
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Original Size	A1																																								
Drawing No:	41-27289-03-S200																																								
Rev:	0																																								
<table border="1"> <tr> <td>0</td> <td>ISSUED FOR CONSTRUCTION</td> <td>CEH</td> <td>MAE*</td> <td>POK*</td> <td>30.04.14</td> </tr> <tr> <td>No</td> <td>Revision</td> <td>Note: * indicates signatures on original issue of drawing or last revision of drawing</td> <td>Drawn</td> <td>Checked</td> <td>Approved</td> </tr> </table>				0	ISSUED FOR CONSTRUCTION	CEH	MAE*	POK*	30.04.14	No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved																										
0	ISSUED FOR CONSTRUCTION	CEH	MAE*	POK*	30.04.14																																				
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved																																				

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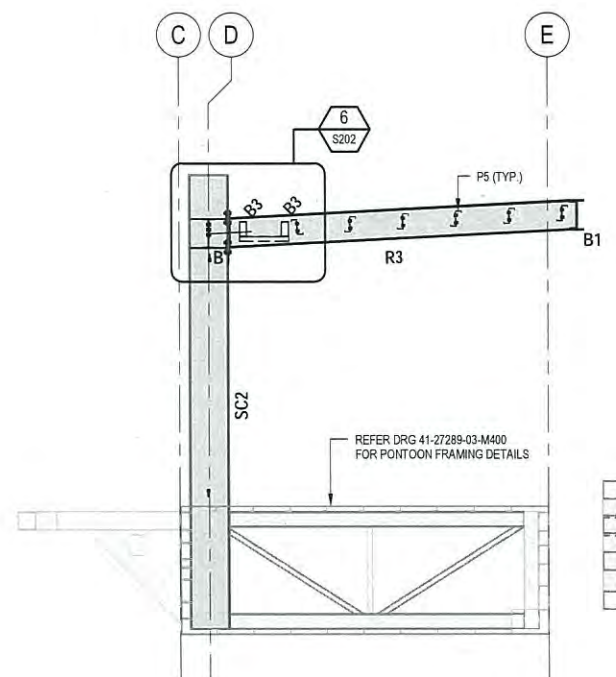
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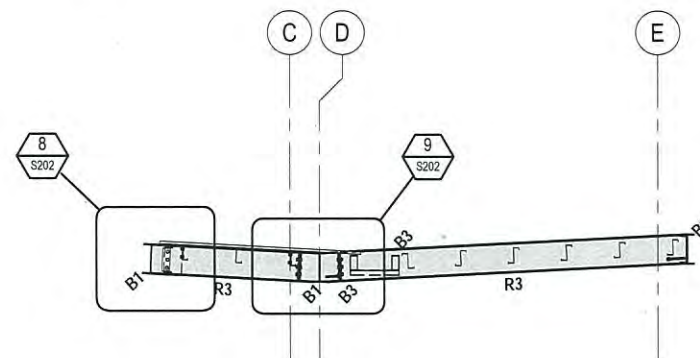
- NOTES:**
1. REFER TO DRAWING NUMBERS 41-22279-03-S001 FOR STRUCTURAL STEEL NOTES.
 2. REFER TO DRAWING NUMBER 41-22279-03-S200 FOR MEMBER SCHEDULES.
 3. REFER TO MARINE ENGINEER DRAWINGS FOR PONTOON DETAILS.
 4. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS, INSERTS BETWEEN MATING SURFACES AND OTHER METHODS AS APPROVED.

PONTOON STRUCTURE TO MARINE ENGINEERS DETAILS TYPICAL

A SECTION
S200 SCALE 1:50



B TYPICAL SECTION
S200 SCALE 1:50



C SECTION
S200 SCALE 1:50

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

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0	ISSUED FOR CONSTRUCTION	CEH	MAE*	POK*	30.04.14
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved

0 500 1000 1500 2000 2500mm
SCALE 1:50 AT ORIGINAL SIZE



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T 61 7 3316 3000 F 61 7 3316 3333
E bneimall@ghd.com.au W www.ghd.com.au

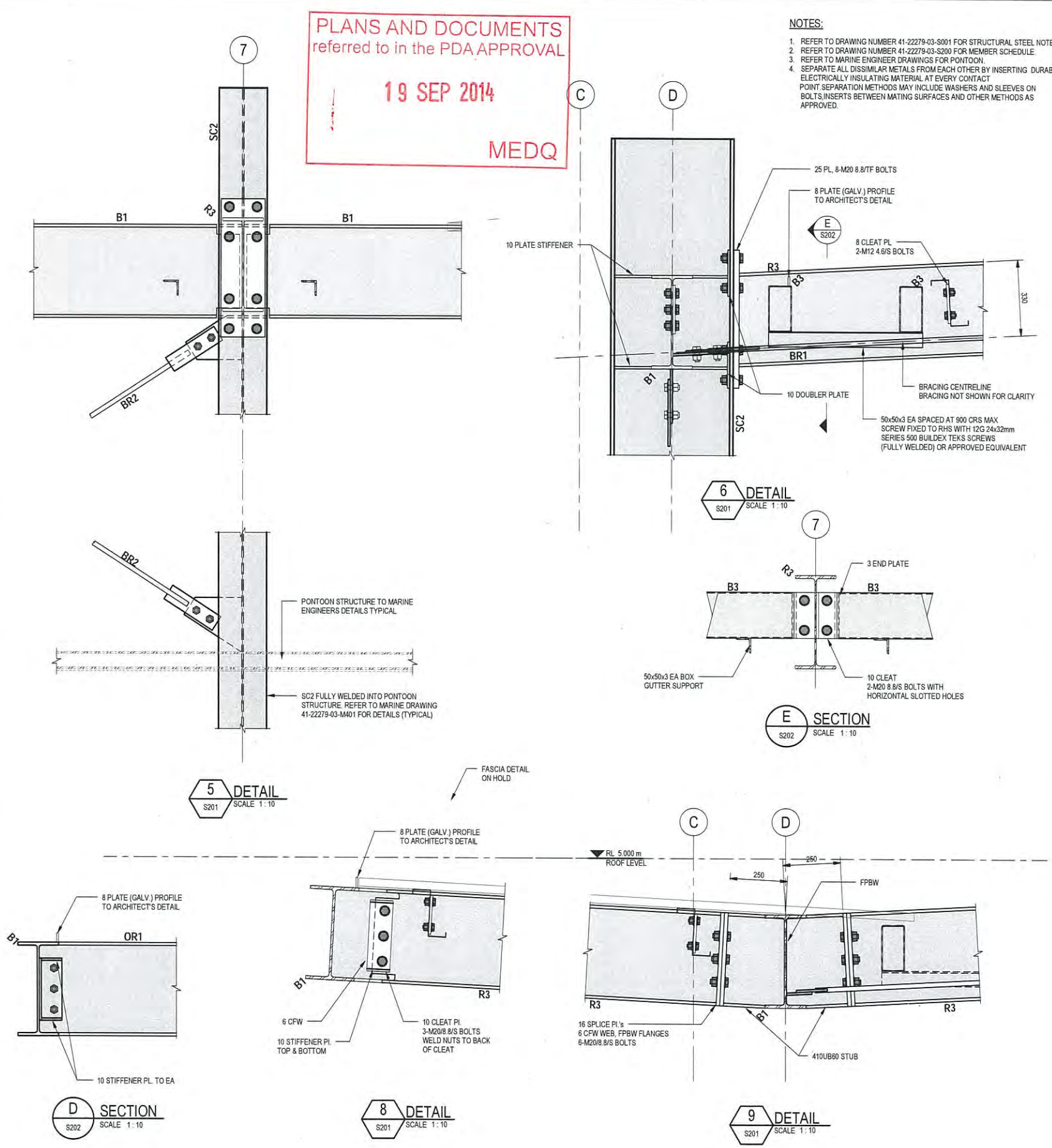
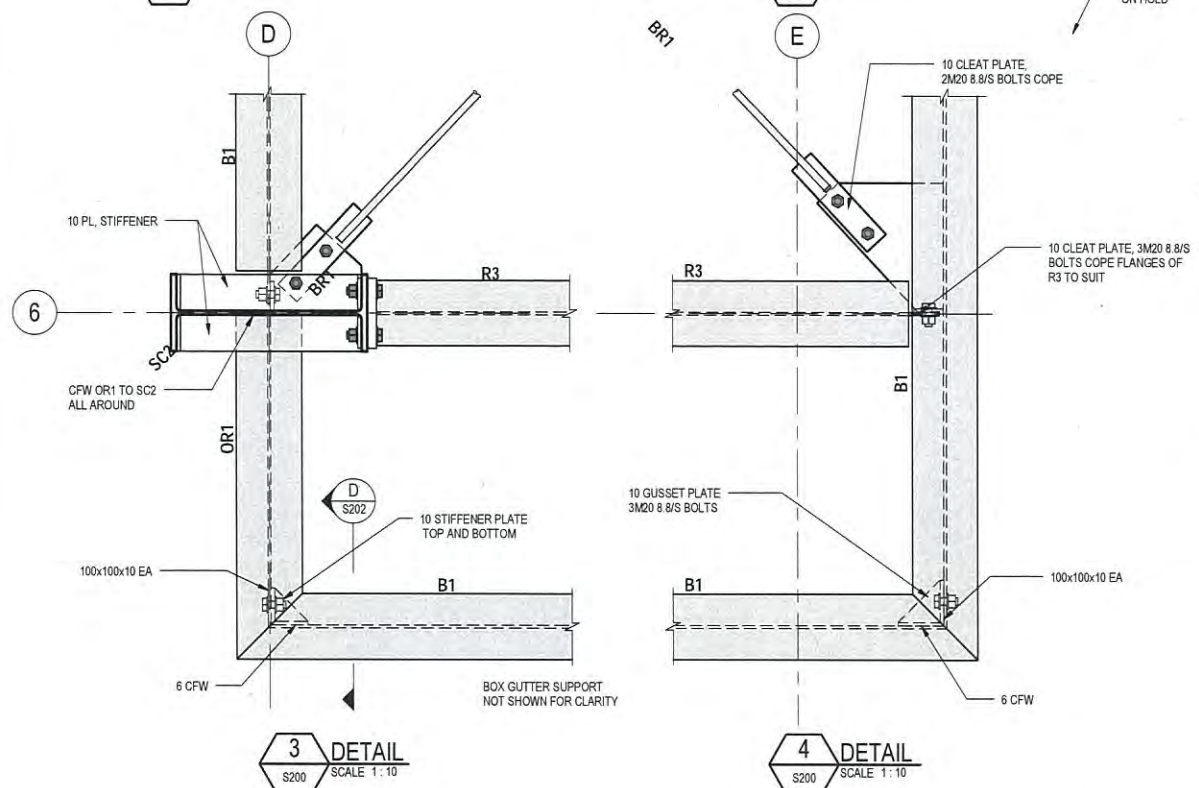
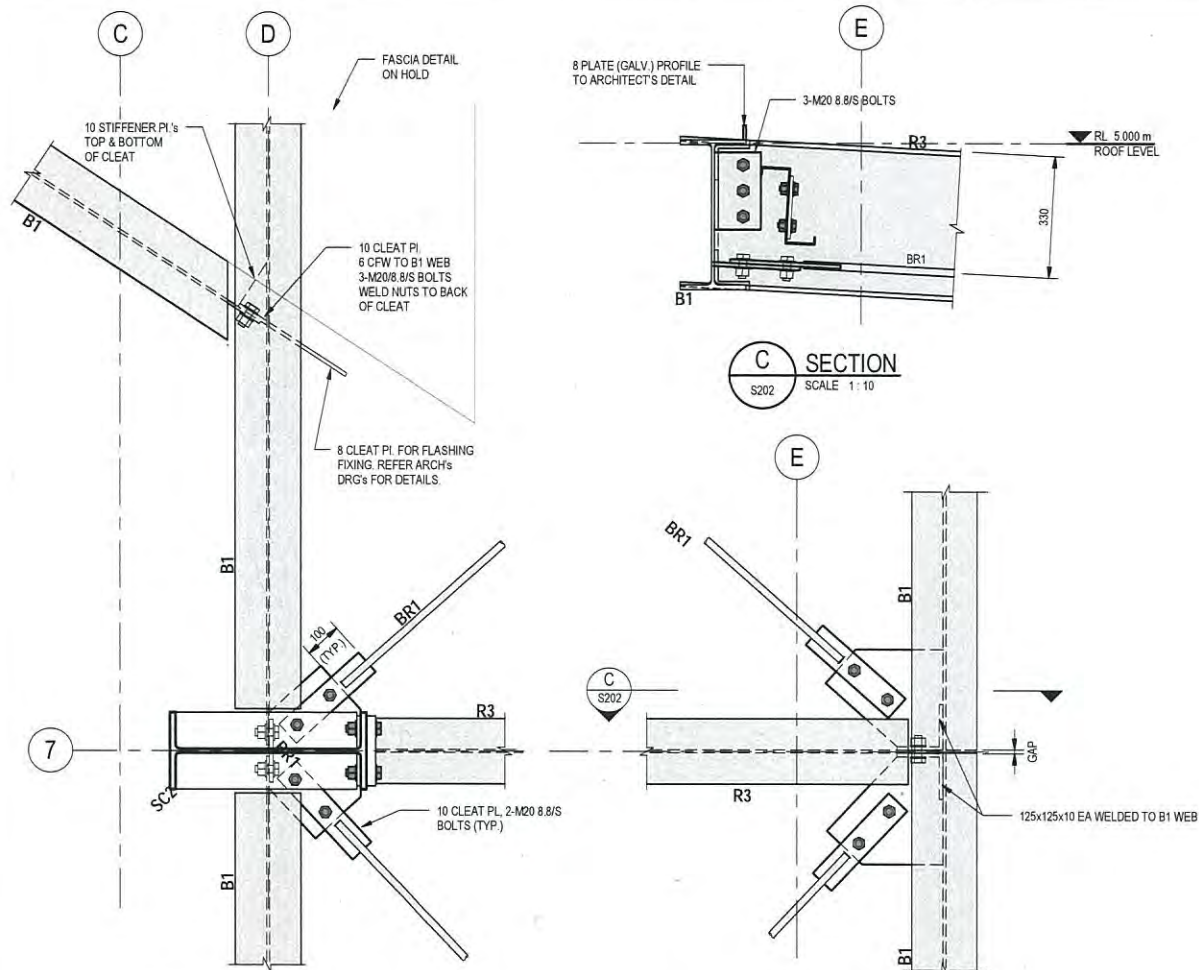
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Drawn	M.JAVIER	Designed	Y.LU
Drafting Check	M.MOHR*	Design Check	M.RAHMAN*
Approved	P.O'KEEFE*		A.WOLSKI*
Date	28.04.14	RPEQ	2676
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client **BRISBANE CITY COUNCIL**
Project **BRETTS WHARF CityCat TERMINAL**
Title **PONTOON COVER STRUCTURE ELEVATIONS AND SECTIONS**

Original Size **A1** Drawing No: **41-27289-03-S201** Rev: **0**



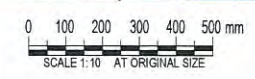
PLANS AND DOCUMENTS referred to in the PDA APPROVAL

19 SEP 2014

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- NOTES:
1. REFER TO DRAWING NUMBER 41-22279-03-S001 FOR STRUCTURAL STEEL NOTES.
 2. REFER TO DRAWING NUMBER 41-22279-03-S200 FOR MEMBER SCHEDULE.
 3. REFER TO MARINE ENGINEER DRAWINGS FOR PONTON.
 4. SEPARATE ALL DISSIMILAR METALS FROM EACH OTHER BY INSERTING DURABLE ELECTRICALLY INSULATING MATERIAL AT EVERY CONTACT POINT. SEPARATION METHODS MAY INCLUDE WASHERS AND SLEEVES ON BOLTS, INSERTS BETWEEN MATING SURFACES AND OTHER METHODS AS APPROVED.

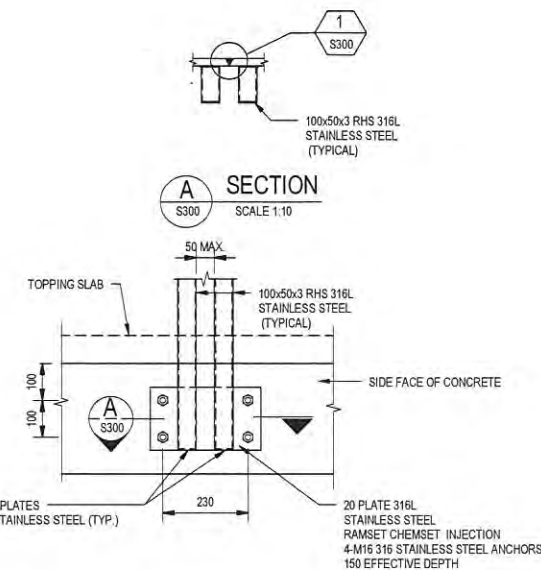
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No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Checked	Approved	Date



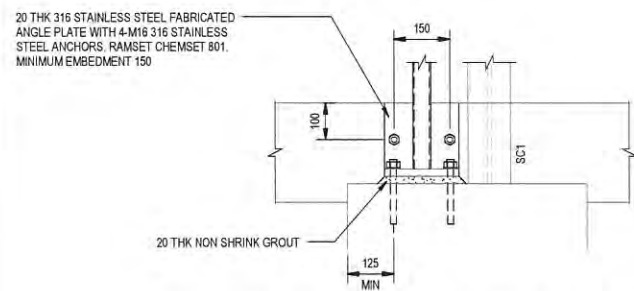
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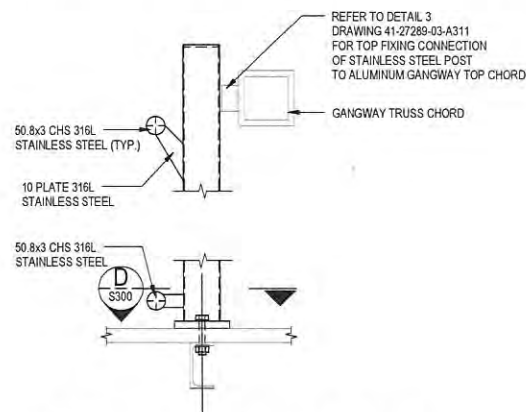
DO NOT SCALE		Drawn	M.JAVIER	Designed	Y.LU	Client	BRISBANE CITY COUNCIL	
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	Approved	P.O'KEEFE*	A.WOLSKI*		Title	PONTON COVER STRUCTURE		
	Date	28.04.14	RPEQ	2676	DETAILS SHEET 1			
	Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved		Original Size	A1	Drawing No:	41-27289-03-S202
								Rev: 0



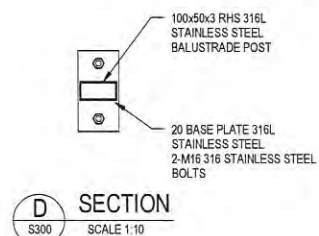
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(BALUSTRADE 3 SIMILAR - REFER TO TYPICAL BALUSTRADE 3 CORNER DETAIL
REFER TO ARCHITECT'S DRAWING FOR GLASS FIXING DETAIL)
SCALE 1:10



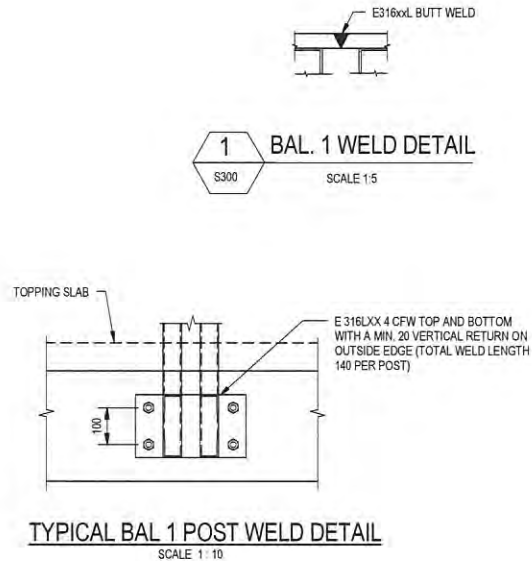
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SCALE 1:10



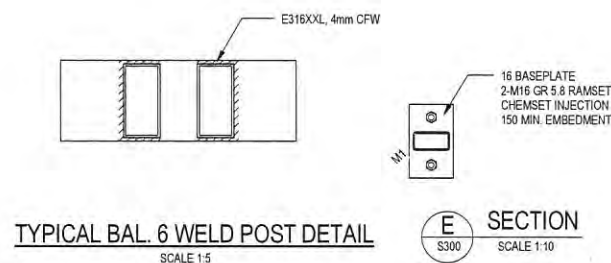
BALUSTRADE 5 POST FIXING DETAIL



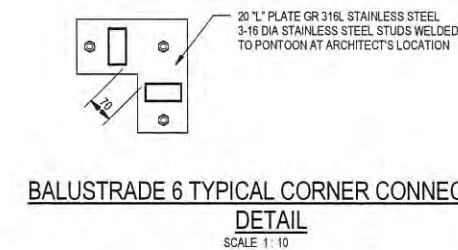
BALUSTRADE 6 (BAL.6) POST FIXING DETAIL
SCALE 1:10



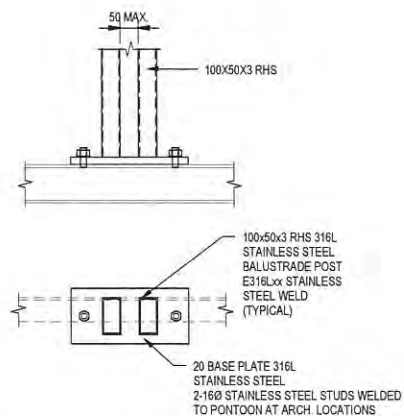
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SCALE 1:10



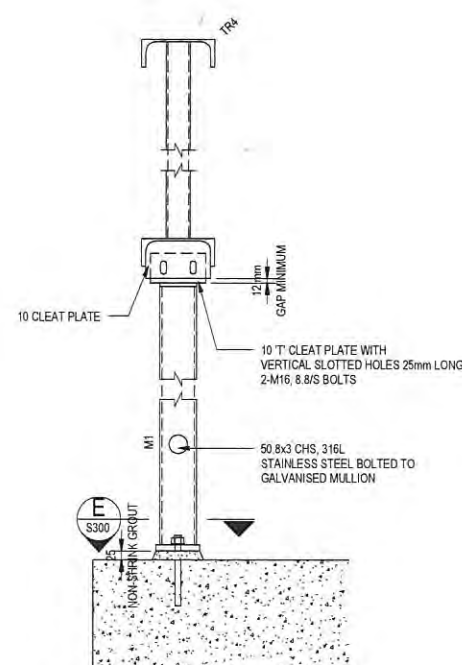
TYPICAL BAL. 6 WELD POST DETAIL
SCALE 1:5



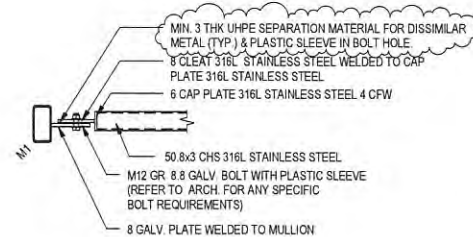
BALUSTRADE 6 TYPICAL CORNER CONNECTION DETAIL
SCALE 1:10



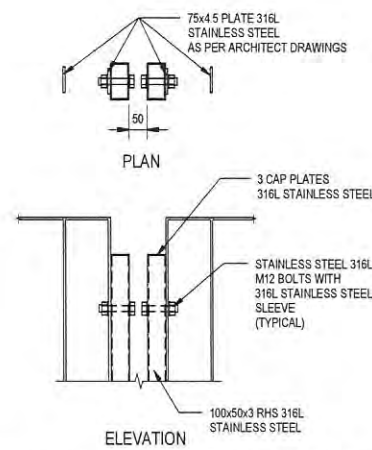
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SCALE 1:10



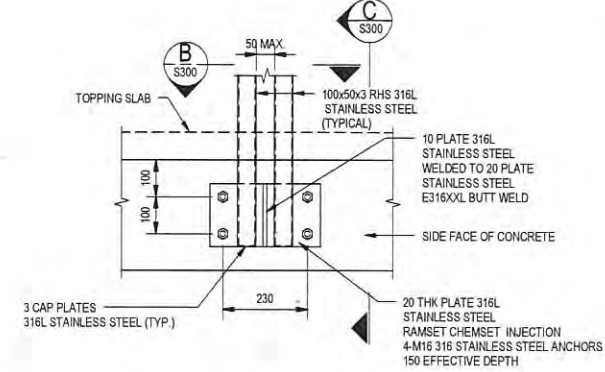
BAL 2 MULLION CONNECTION DETAIL
SCALE 1:10



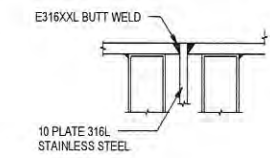
BALUSTRADE 2 (BAL. 2) HANDRAIL TO MULLION CONNECTION DETAIL
SCALE 1:10



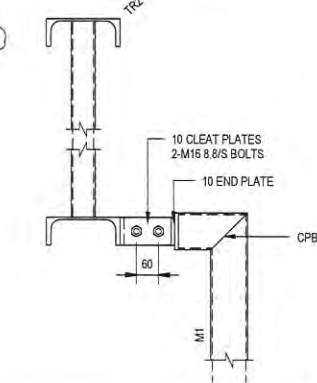
TYPICAL STAINLESS STEEL VERTICAL FLAT INFILL PANEL TO BALUSTRADE POST DETAIL
SCALE 1:10



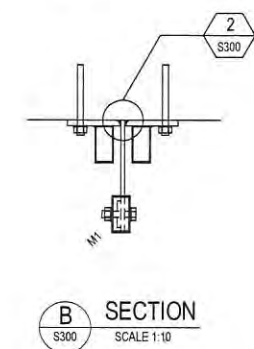
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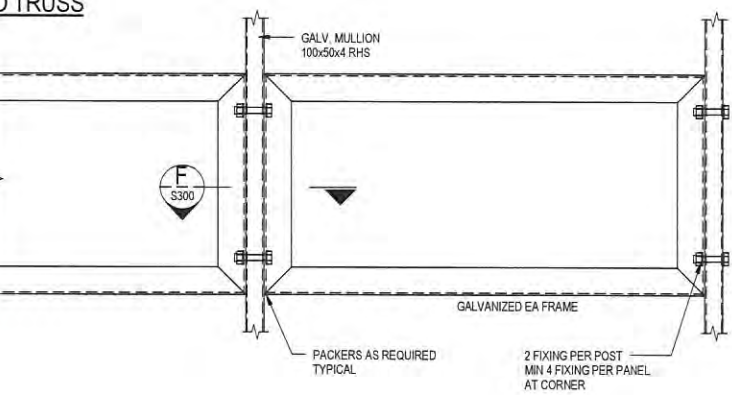
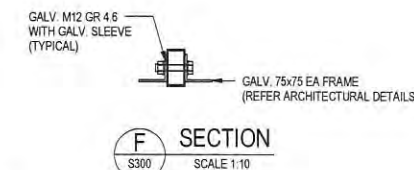
BAL. 4 WELD DETAIL
SCALE 1:10



BAL 4 SCREEN MULLION TOP FIXING TO TRUSS
SCALE 1:10



BALUSTRADE 4 (BAL.4) SCREEN MULLION CONNECTION DETAIL
SCALE 1:10

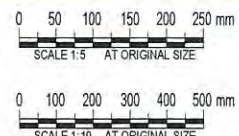


TYPICAL INFILL PANEL FRAME TO INTEGRATED BALUSTRADE 2 FRAME
SCALE 1:10

NOTE: THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL BALUSTRADE DETAIL.

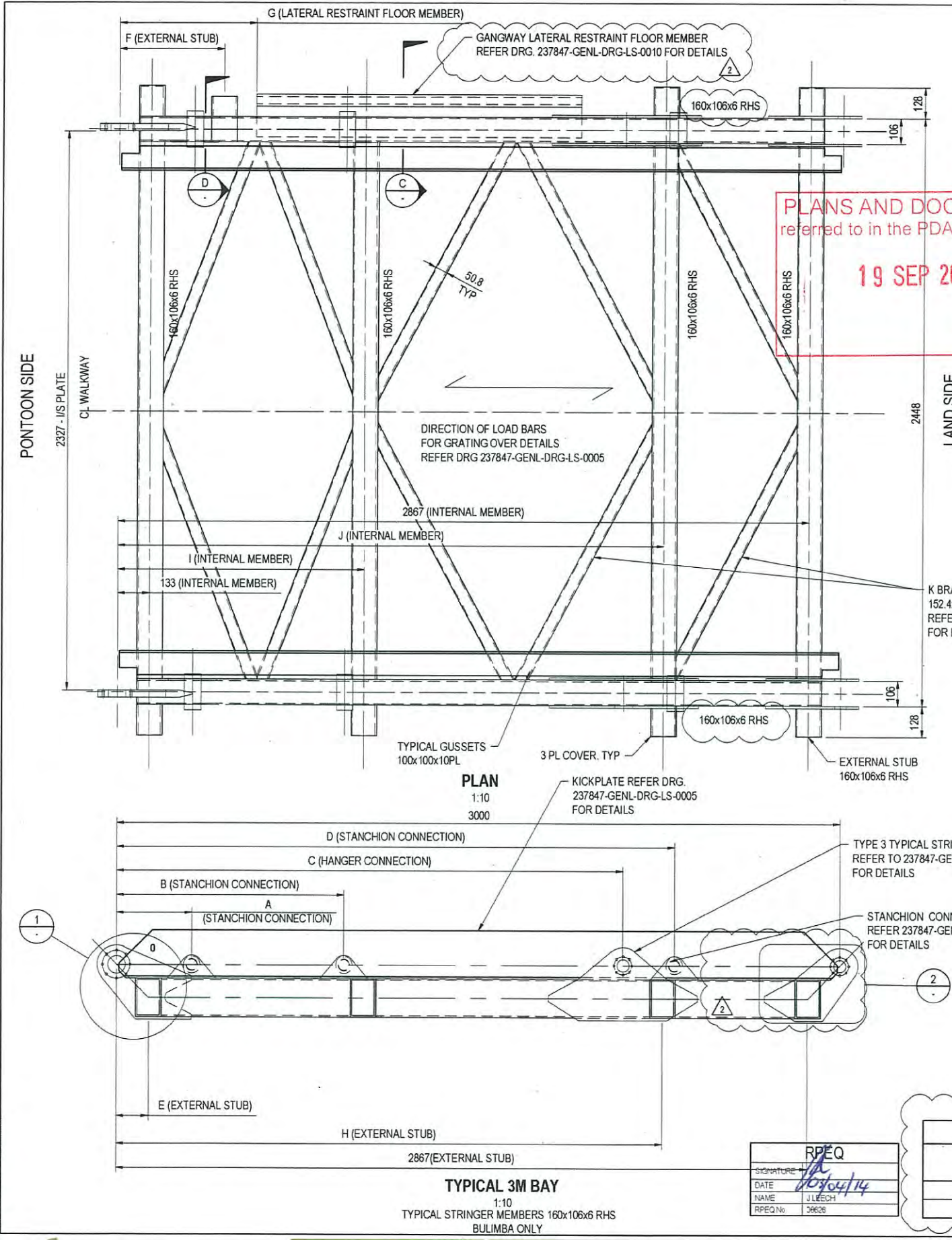
PLANS AND DOCUMENTS referred to in the PDA APPROVAL
19 SEP 2014
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No	Revision	Note	Drawn	Checked	Approved	Date
0	ISSUED FOR CONSTRUCTION		CEH	MAE*	POK*	14.03.14



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	Approved P.OKEEFE*	A.WOLSKI*
	Date 14.03.14	RPEQ 2676
	Scale As indicated	This Drawing must not be used for Construction unless signed as Approved

Client	BRISBANE CITY COUNCIL
Project	BRETT'S WHARF CityCat TERMINAL
Title	WAITING AREA BALUSTRADE AND SCREEN DETAIL
Original Size	A1
Drawing No:	41-27289-03-S300
Rev:	0



PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

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RPEQ

SIGNATURE: [Signature]

DATE: 16/04/14

NAME: J. LEECH

RPEQ No: 28625

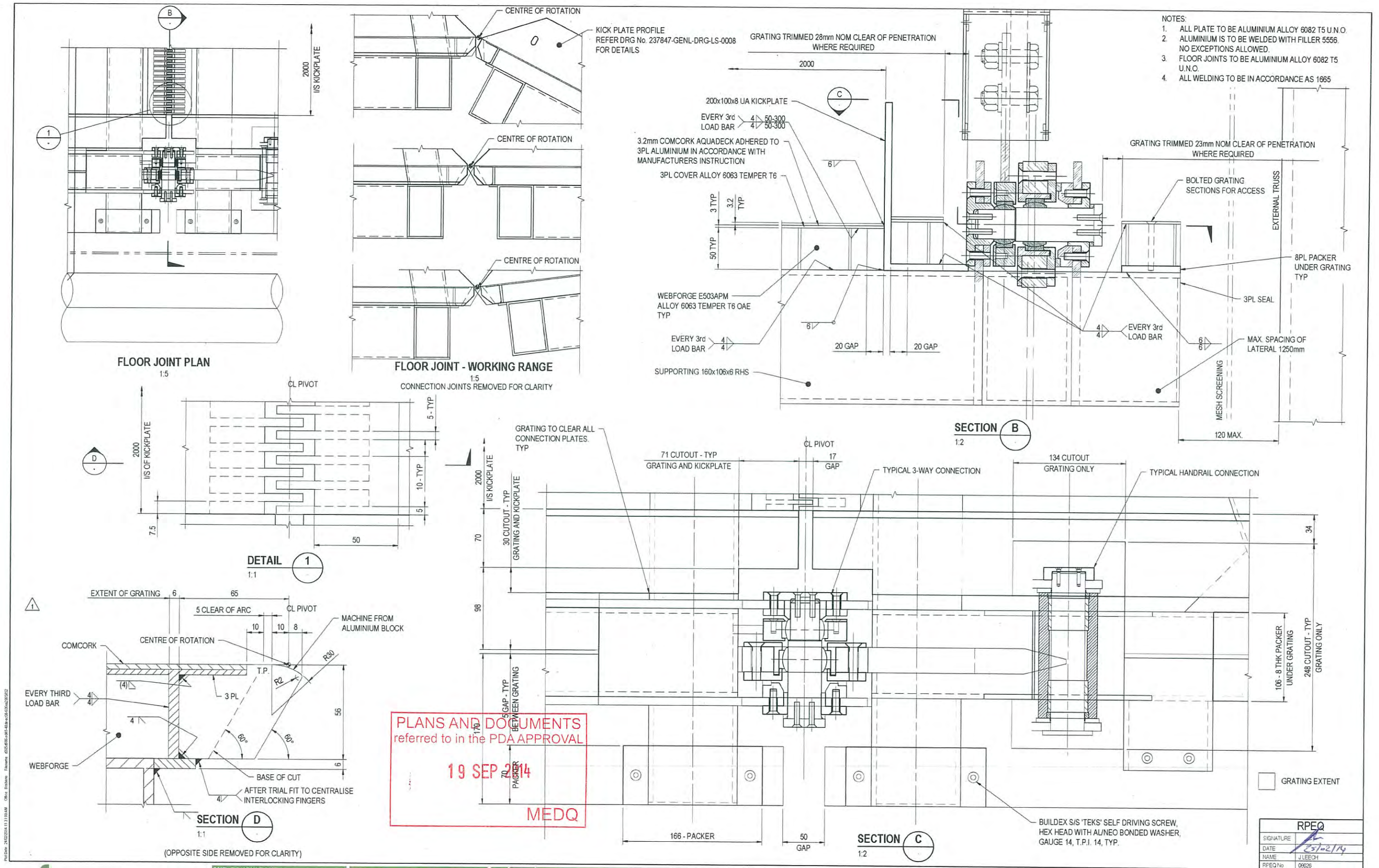
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BAY 6	570	1895	-	-	133	570	-45	1895	570	1895	TYPE 1	TYPE 1

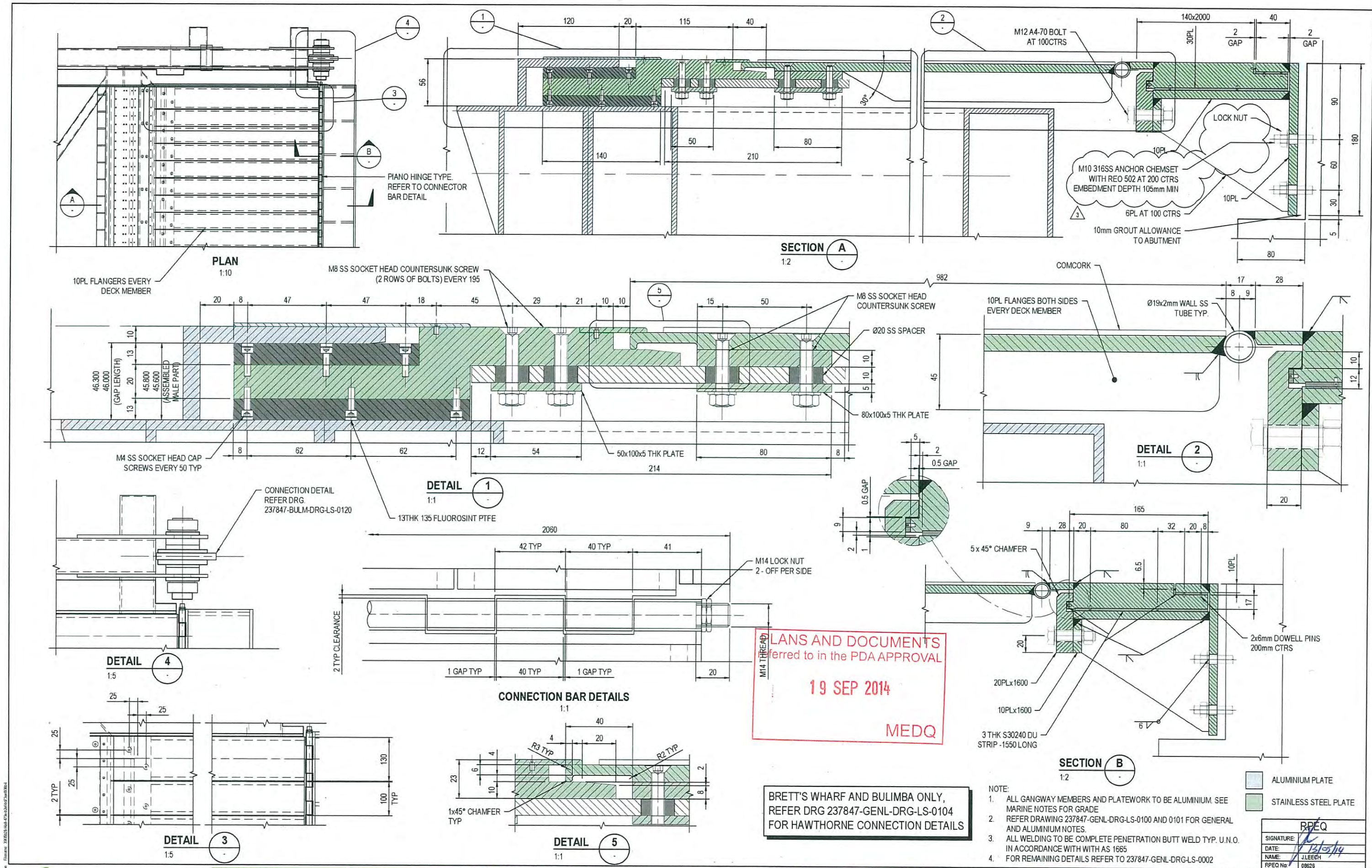
REV	DATE	REVISION DETAILS	APPROVED
2	02.04.14	HOLDS REMOVED	J. LEECH
1	24.02.14	FOR CONSTRUCTION	A. NILSEN

SCALE	SIZE
AS SHOWN	A1
DRAWN	K. CHEONG
DESIGNED	D. HUNDSCHIEDT
VERIFIED	L. WILLIAMS

FOR CONSTRUCTION	APPROVED
PROJECT DIRECTOR	DATE: 24.02.14
A. NILSEN	

PROJECT	TITLE	DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
BRETTS WHARF, BULIMBA AND HAWTHORNE FERRY TERMINAL GANGWAYS - BRISBANE RIVER	DISABLED ACCESS GANGWAY TYPICAL DETAILS 3M WALKWAY BAY DETAILS	237847	GENL	DRG	LS	0002	2	



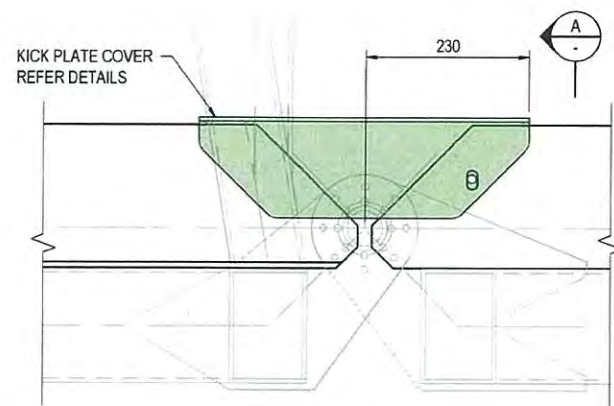


REV	DATE	REVISION DETAILS
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2	02.04.14	HOLDS REMOVED
1	28.03.14	ISSUED FOR CONSTRUCTION

APPROVED	SCALE	SIZE
A.NILSEN	AS SHOWN	A1
A.NILSEN	DRAWN	
A.NILSEN	K.CHEONG	
A.NILSEN	DESIGNED	
A.NILSEN	D.HUNDSCHIEDT	
A.NILSEN	VERIFIED	
A.NILSEN	L.WILLIAMS	

FOR CONSTRUCTION	APPROVED	DATE
	PROJECT DIRECTOR	28.03.14
	A.NILSEN	
	A.NILSEN	

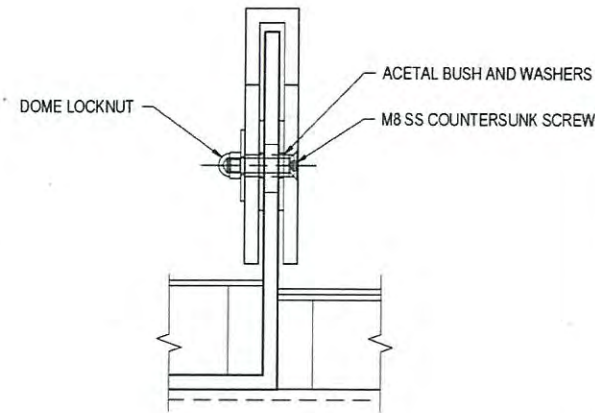
PROJECT	BRETT'S WHARF, BULIMBA AND HAWTHORNE FERRY TERMINAL GANGWAYS - BRISBANE RIVER
TITLE	DISABLED ACCESS GANGWAY TYPICAL DETAILS WALKWAY TO ABUTMENT FLOOR CONNECTION
DRAWING No.	237847 - GENL - DRG - LS - 0006 - 3



KICKPLATE COVER ASSEMBLY

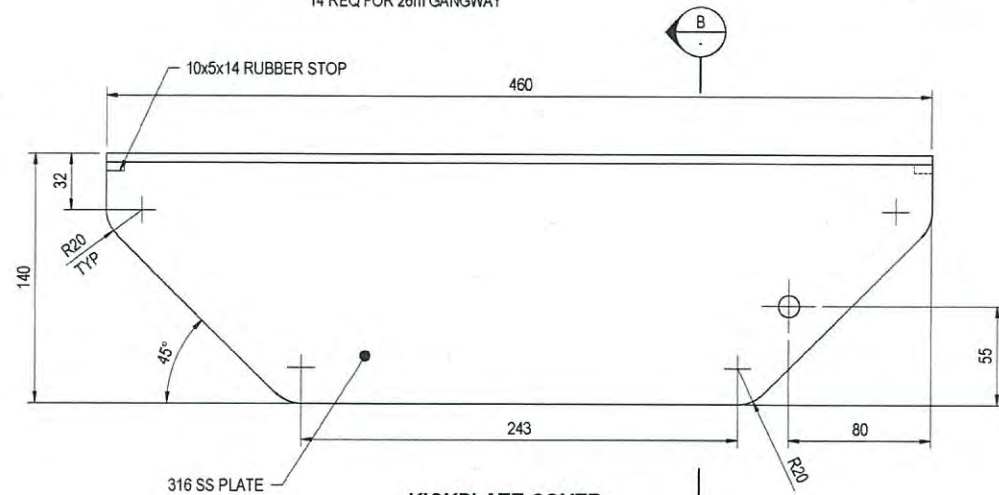
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FOR KICKPLATE DETAILS REFER 237847-GENL-DRG-LS-0005
16 REQ FOR 20.4m GANGWAY
14 REQ FOR 26m GANGWAY



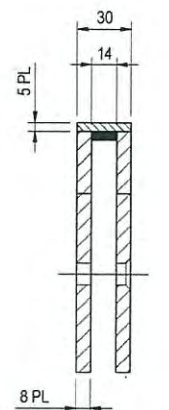
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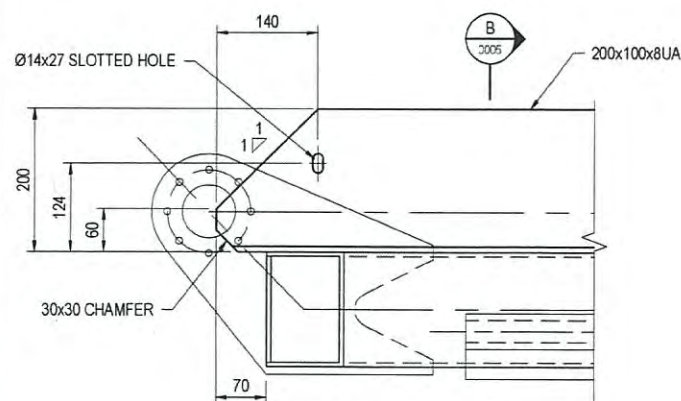
KICKPLATE COVER

1:2



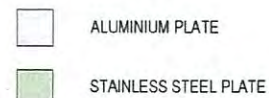
SECTION B

1:2



KICKPLATE DETAIL

1:5



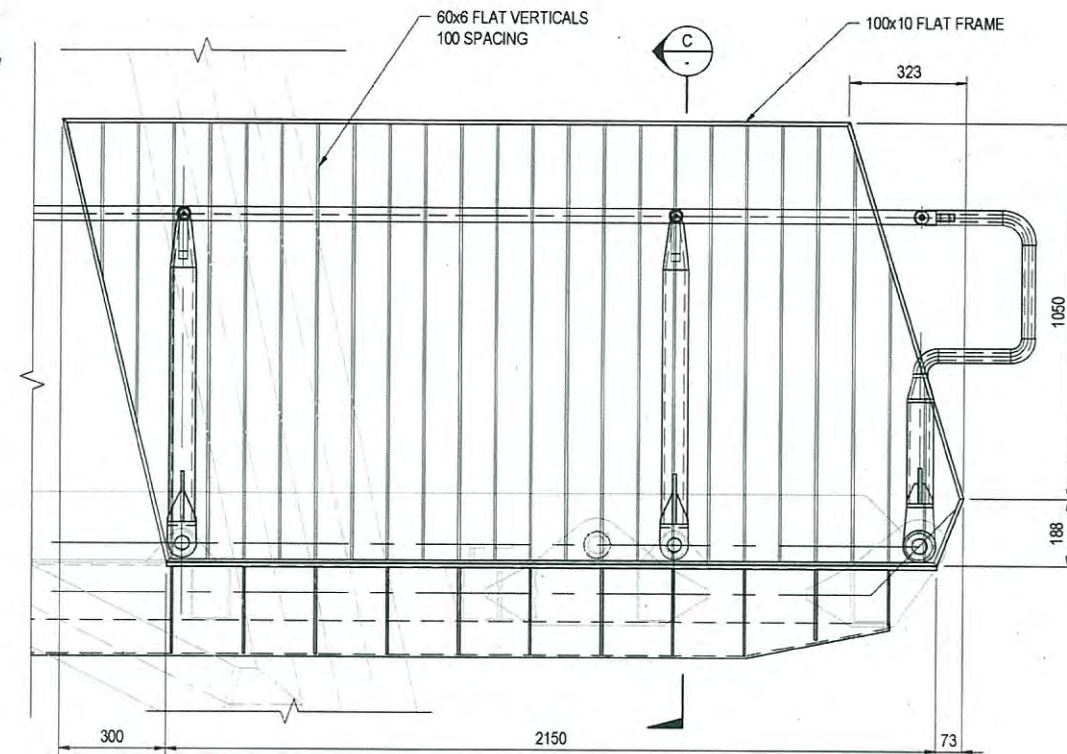
NOTES:

1. ALL GANGWAY MEMBERS AND PLATEWORK TO BE ALUMINIUM. SEE MARINE NOTES FOR GRADE REFER DRAWING 237847-GENL-DRG-LS-0100 AND 0101 FOR GENERAL AND ALUMINIUM NOTES.
- 2.

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

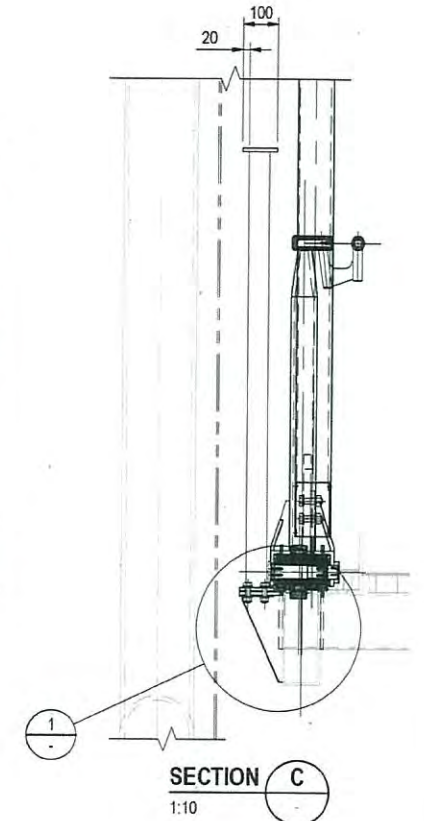
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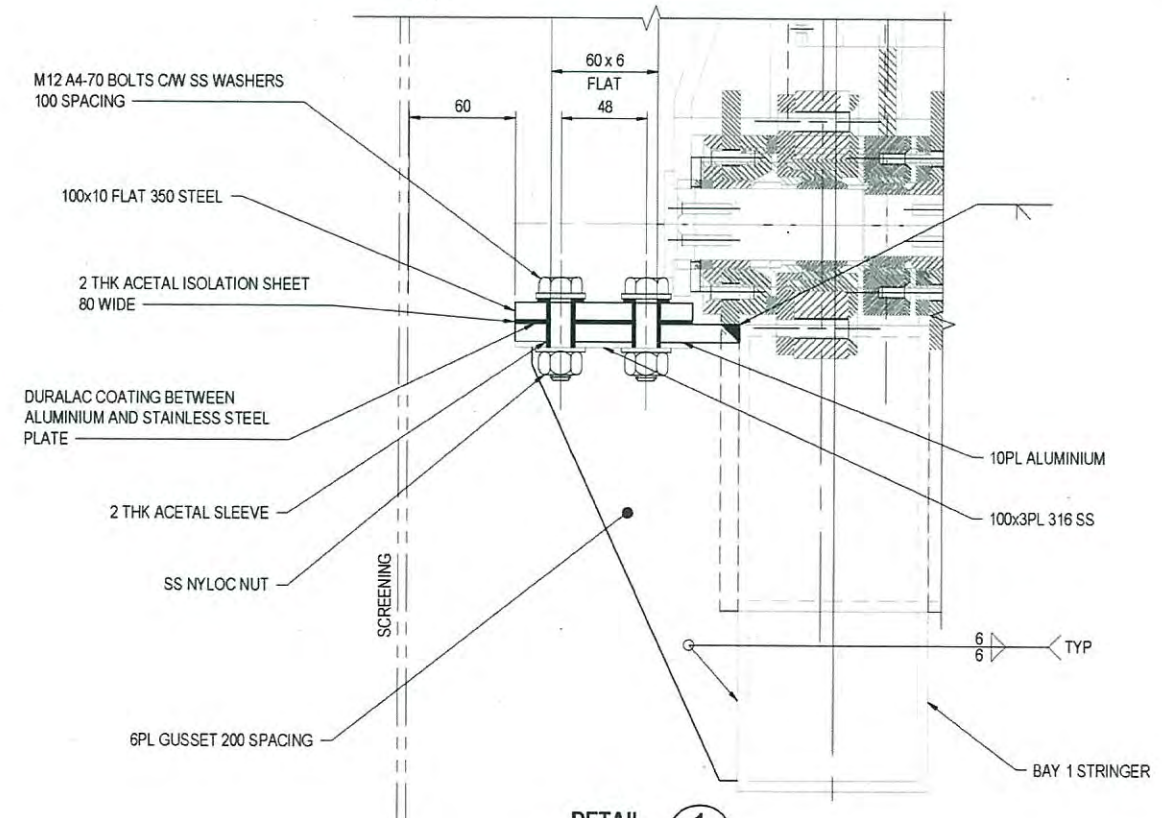
ABUTMENT BALUSTADING

1:10



SECTION C

1:10



DETAIL 1

1:2

RPEQ
SIGNATURE
DATE
NAME
RPEQ No

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1	24.02.14	FOR CONSTRUCTION

JLEECH
A.NILSEN

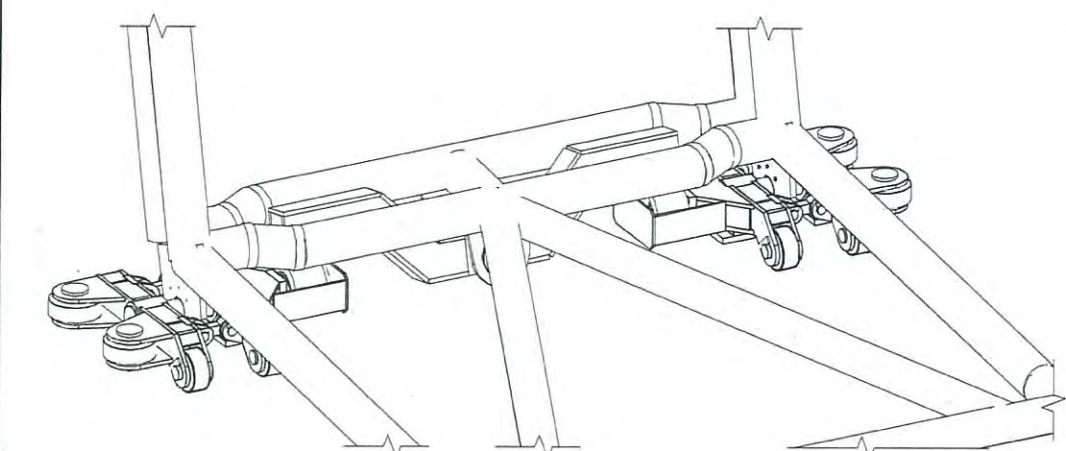
AS SHOWN
DRAWN
K.CHEONG
DESIGNED
D.HUNDSCHIEDT
VERIFIED
L.WILLIAMS

A1

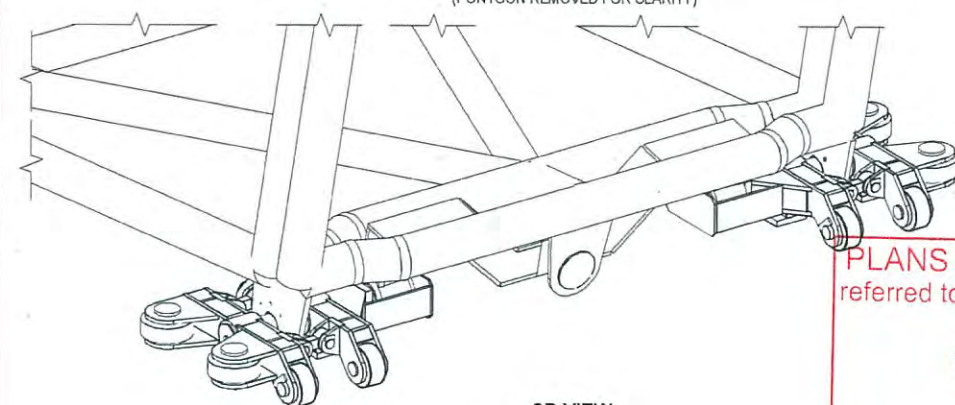
APPROVED
PROJECT DIRECTOR
DATE
24.02.14
A.NILSEN
A.NILSEN

TITLE
DRAWING No

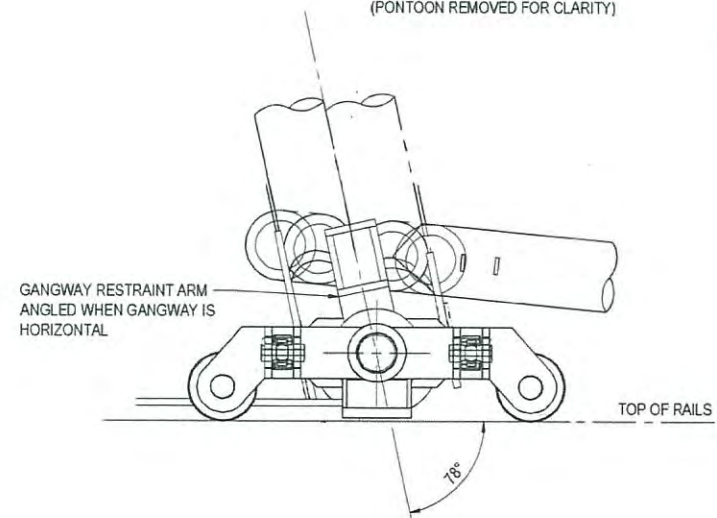
BRETTS WHARF, BULIMBA AND HAWTHORNE FERRY TERMINAL GANGWAYS - BRISBANE RIVER
DISABLED ACCESS GANGWAY TYPICAL DETAILS WALKWAY KICKPLATE DETAILS
PROJECT No
237847
WBS
GENL
TYPE
DRG
DISC
NUMBER
0008
REV
2



3D VIEW
NTS
(PONTOON REMOVED FOR CLARITY)



3D VIEW
NTS
(PONTOON REMOVED FOR CLARITY)

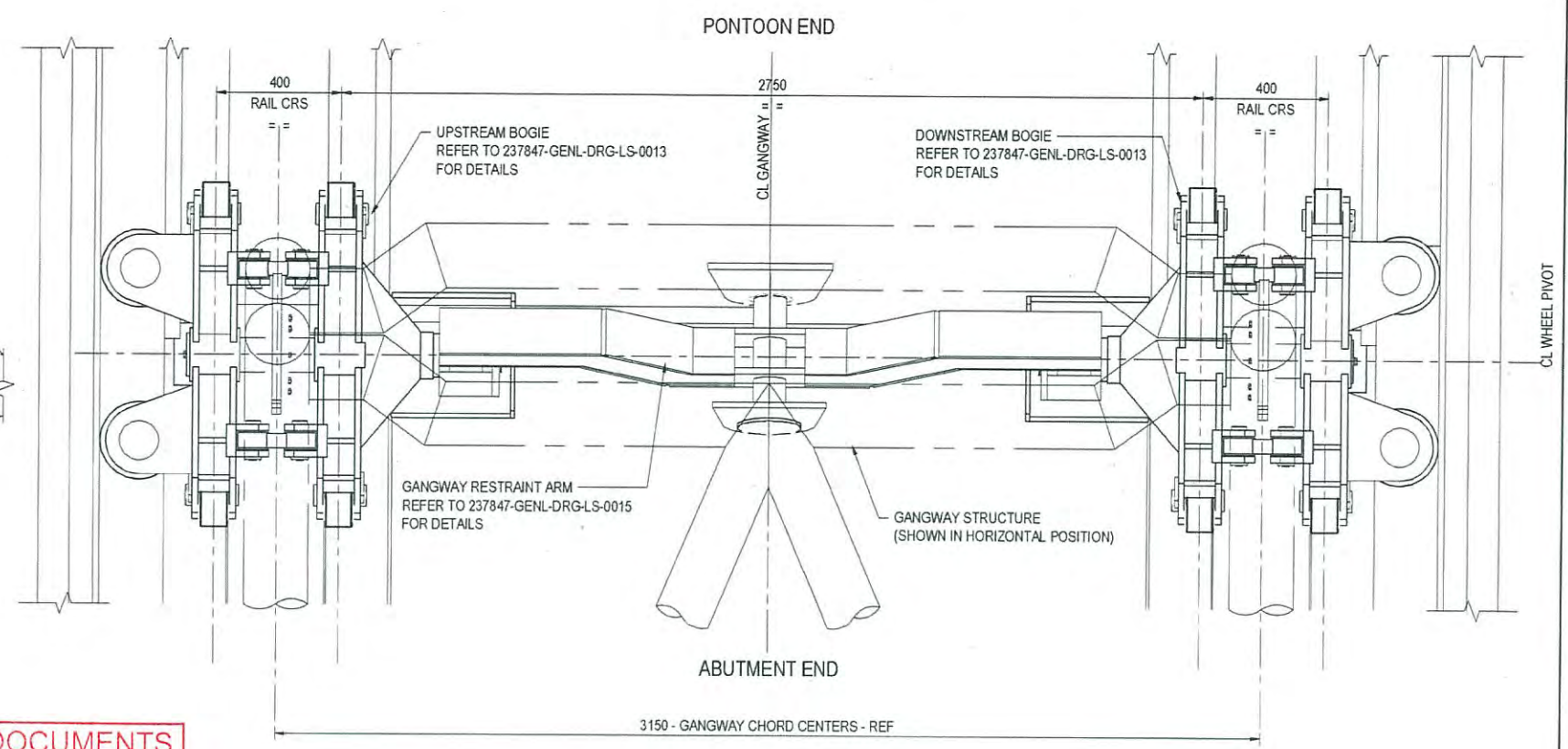


SECTION A
1:10
(GANGWAY SHOWN IN HORIZONTAL POSITION)

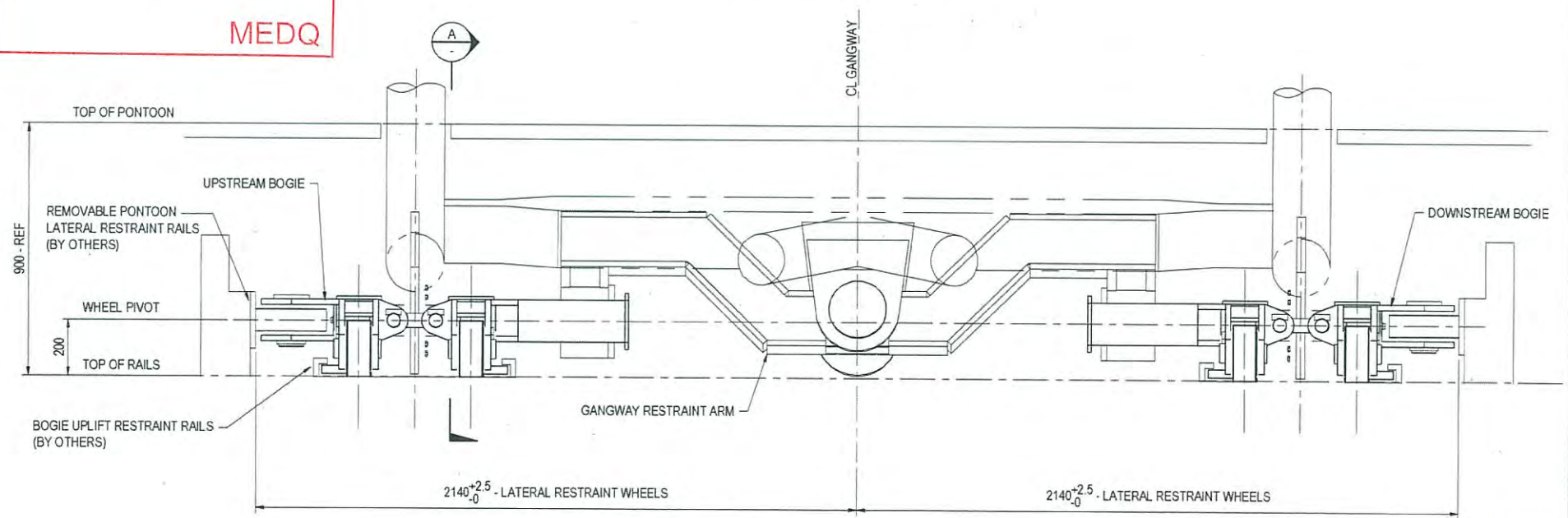
PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

MEDQ

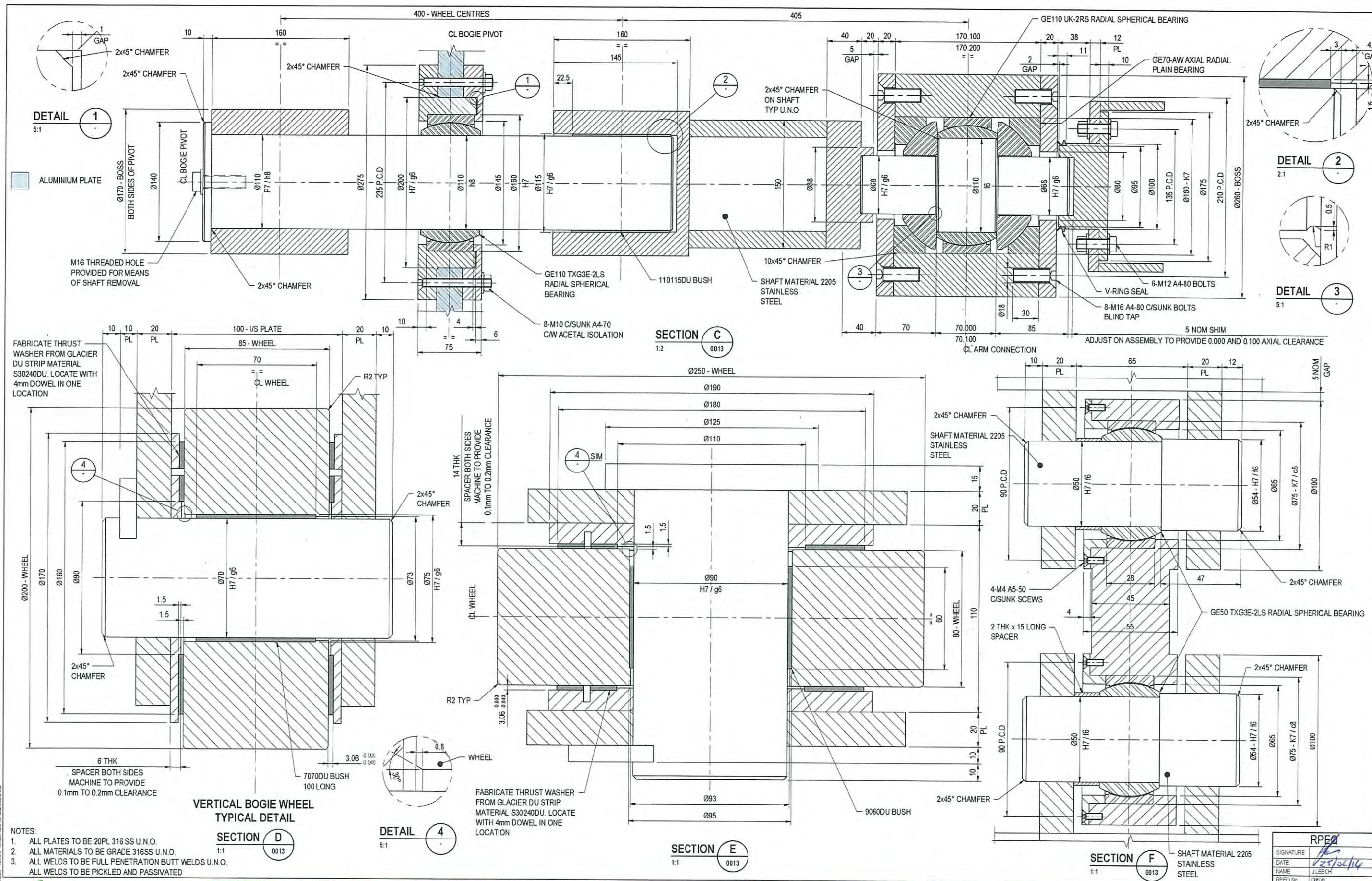


ASSEMBLY PLAN OF GANGWAY BOGIES
1:10
(GANGWAY SHOWN IN HORIZONTAL POSITION)



ELEVATION
1:10

RPEQ
SIGNATURE
DATE
NAME
RPEQ No



aurecon PLANS AND DOCUMENTS referred to in the PDA APPROVAL

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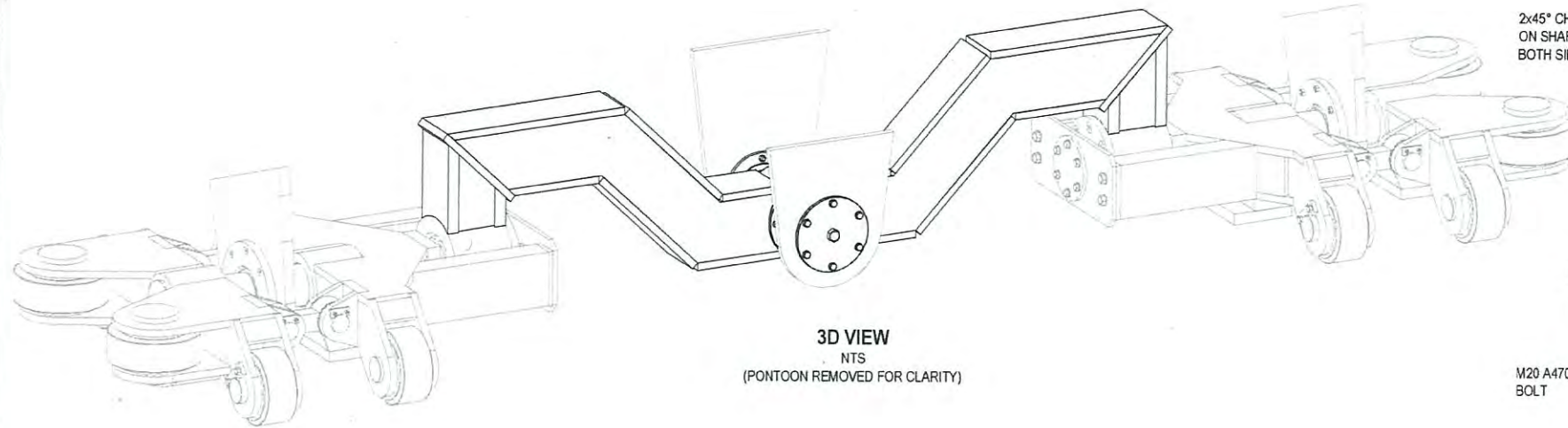


19 SEP 2014

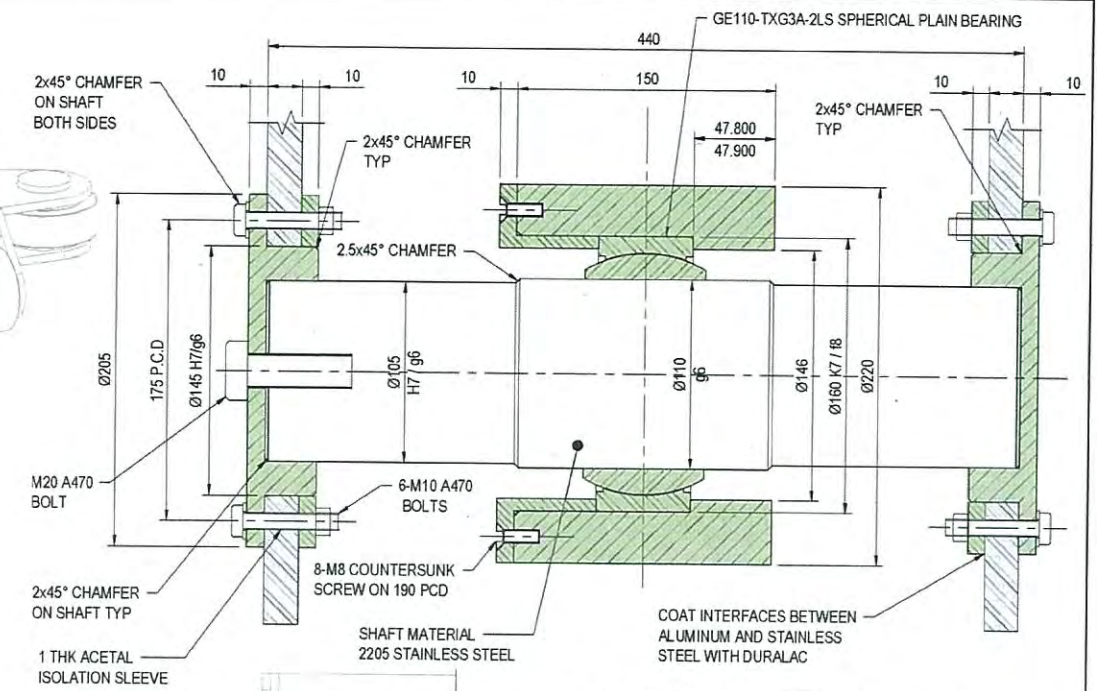
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MEDQ

REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	FOR CONSTRUCTION	PROJECT	BRETT'S WHARF, BULIMBA AND HAWTHORNE FERRY TERMINAL GANGWAYS - BRISBANE RIVER										
				AS SHOWN	A1													
				DRAWN		APPROVED		DISABLED ACCESS GANGWAY										
				L.CHACZKO		PROJECT DIRECTOR	DATE	TYPICAL DETAILS										
				DESIGNED			24/02/14	GANGWAY BOGIE DETAILS - SHEET 2										
				D.HUNDSCHIEDT														
				VERIFIED		A.NILSEN												
				L.WILLIAMS														
1	24.02.14	FOR CONSTRUCTION	A.NILSEN					DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV				
								237847	-	GENL	-	DRG	-	LS	-	0014	-	1



3D VIEW
NTS
(PONTON REMOVED FOR CLARITY)



SECTION A
1:2

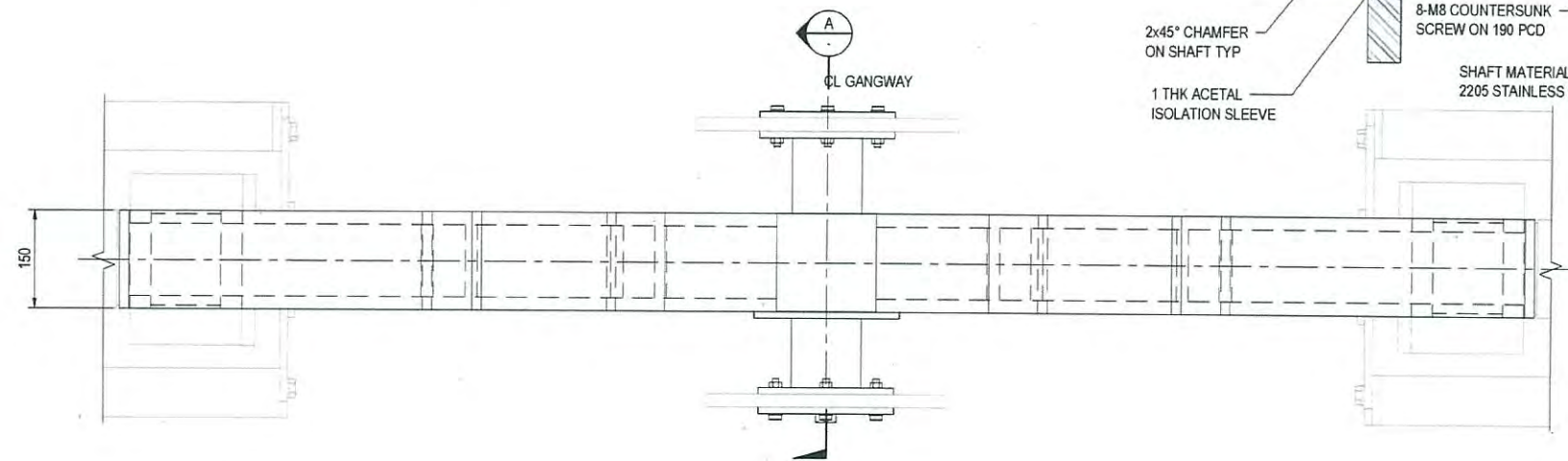
ALUMINIUM PLATE
STAINLESS STEEL PLATE

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

19 SEP 2014

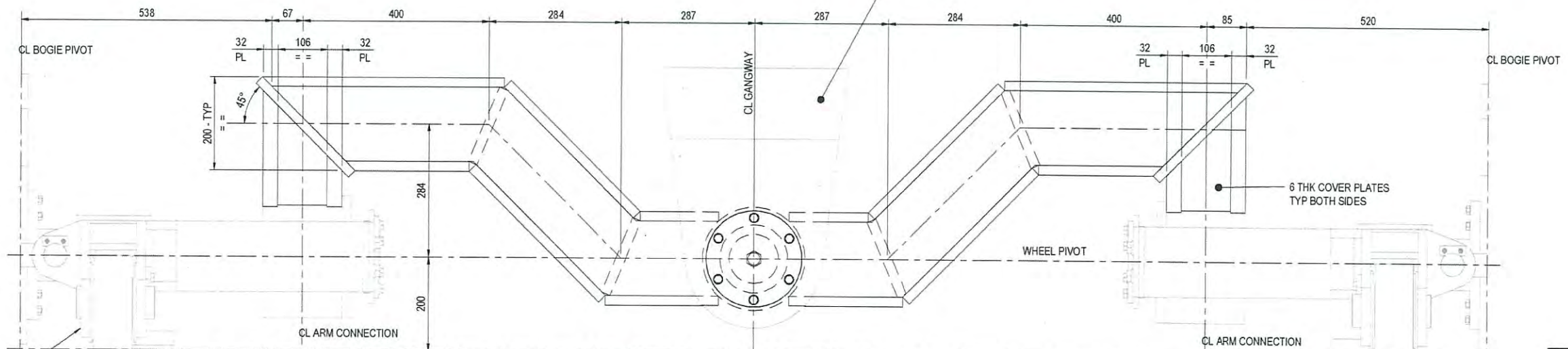
MEDQ

- NOTE:
1. ALL PLATES TO BE 20PL 316 SS U.N.O.
 2. ALL MATERIALS TO BE GRADE 316SS U.N.O.
 3. ALL WELDS TO BE FULL PENETRATION BUTT WELDS U.N.O.
 4. ALL WELDS TO BE PICKLED AND PASSIVATED
 5. STRESS RELIEVED AFTER FABRICATION AND PRIOR TO MACHINING



PLAN OF BOGIE RESTRAINT ARM
1:5

GANGWAY CONNECTION TO ARM
REFER DRG 237847-BULM-DRG-LS-0400 & 237847-HABT-DRG-LS-0401
FOR DETAILS



ELEVATION
1:5

DOWNSTREAM BOGIE
REFER DRG 237847-GENL-DRG-LS-0013
FOR DETAILS

UPSTREAM BOGIE
REFER DRG 237847-GENL-DRG-LS-0013
FOR DETAILS

RPEQ

SIGNATURE
DATE
NAME
RPEQ No.

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SUB-CONSULTANT

CLIENT



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REV DATE REVISION DETAILS

1 24.02.14 FOR CONSTRUCTION

APPROVED

A.NILSEN

SCALE

AS SHOWN

SIZE

A1

FOR CONSTRUCTION

APPROVED
PROJECT DIRECTOR DATE

24.02.14

A.NILSEN

PROJECT

TITLE

DRAWING No.

237847

GENL

DRG

LS

0015

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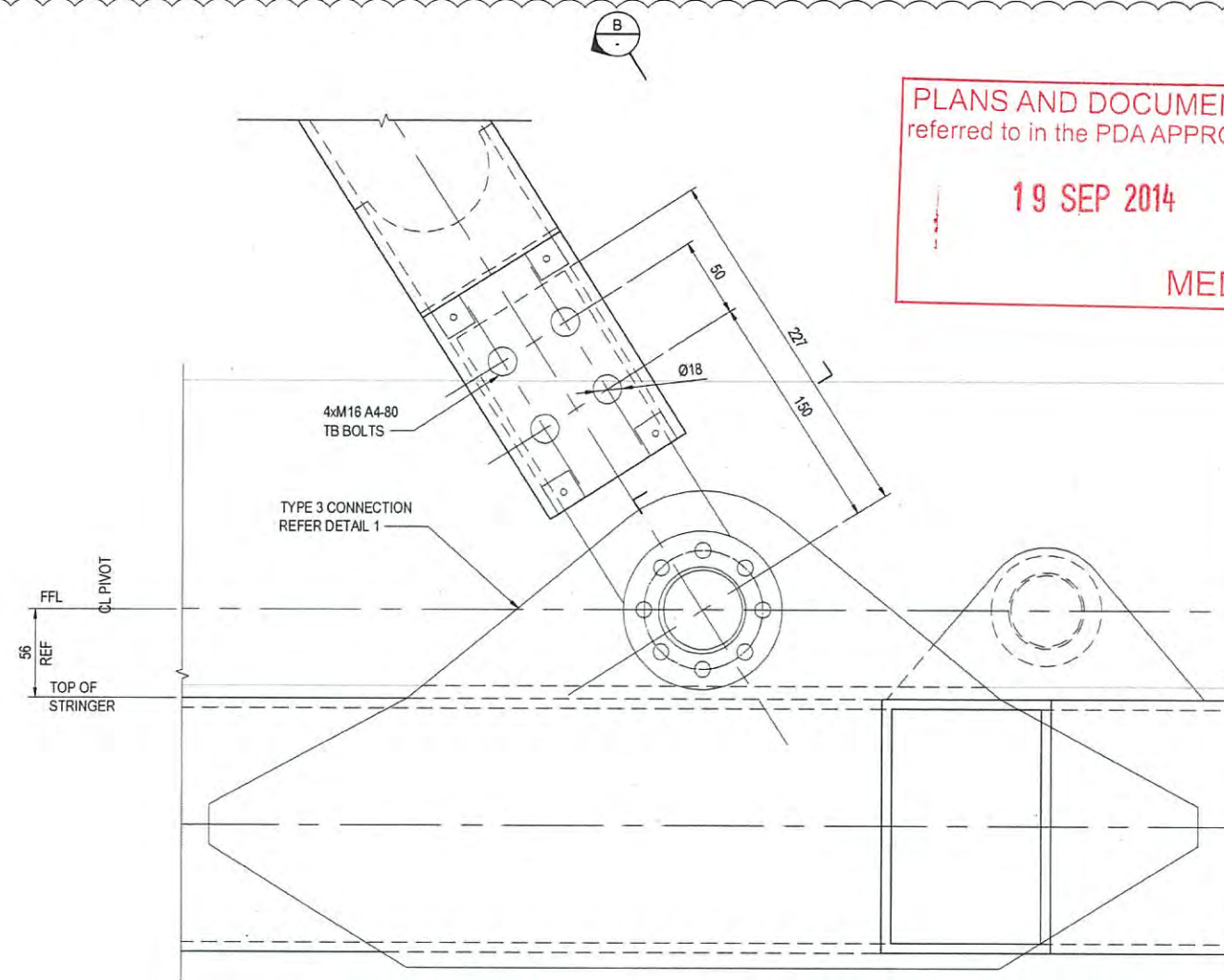
BRETT'S WHARF, BULIMBA AND HAWTHORNE
FERRY TERMINAL GANGWAYS - BRISBANE RIVER

DISABLED ACCESS GANGWAY
TYPICAL DETAILS
GANGWAY BOGIE RESTRAINT ARM DETAILS

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

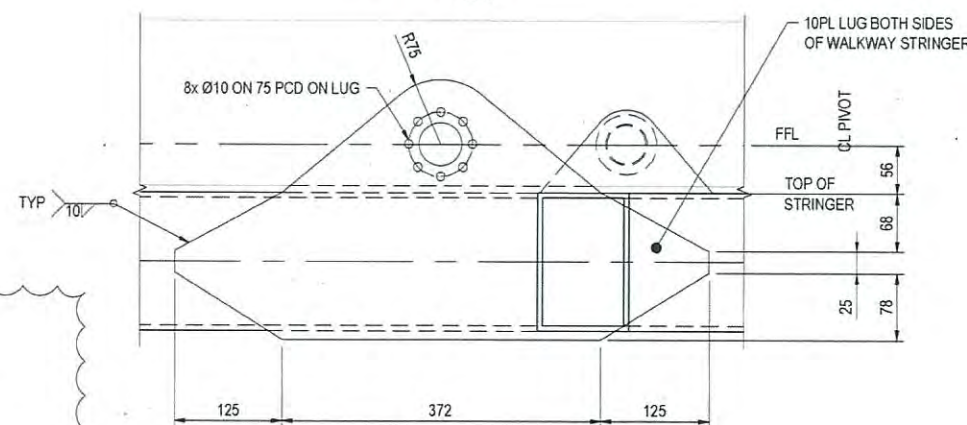
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MEDQ



TYPICAL SINGLE HANGER CONNECTION

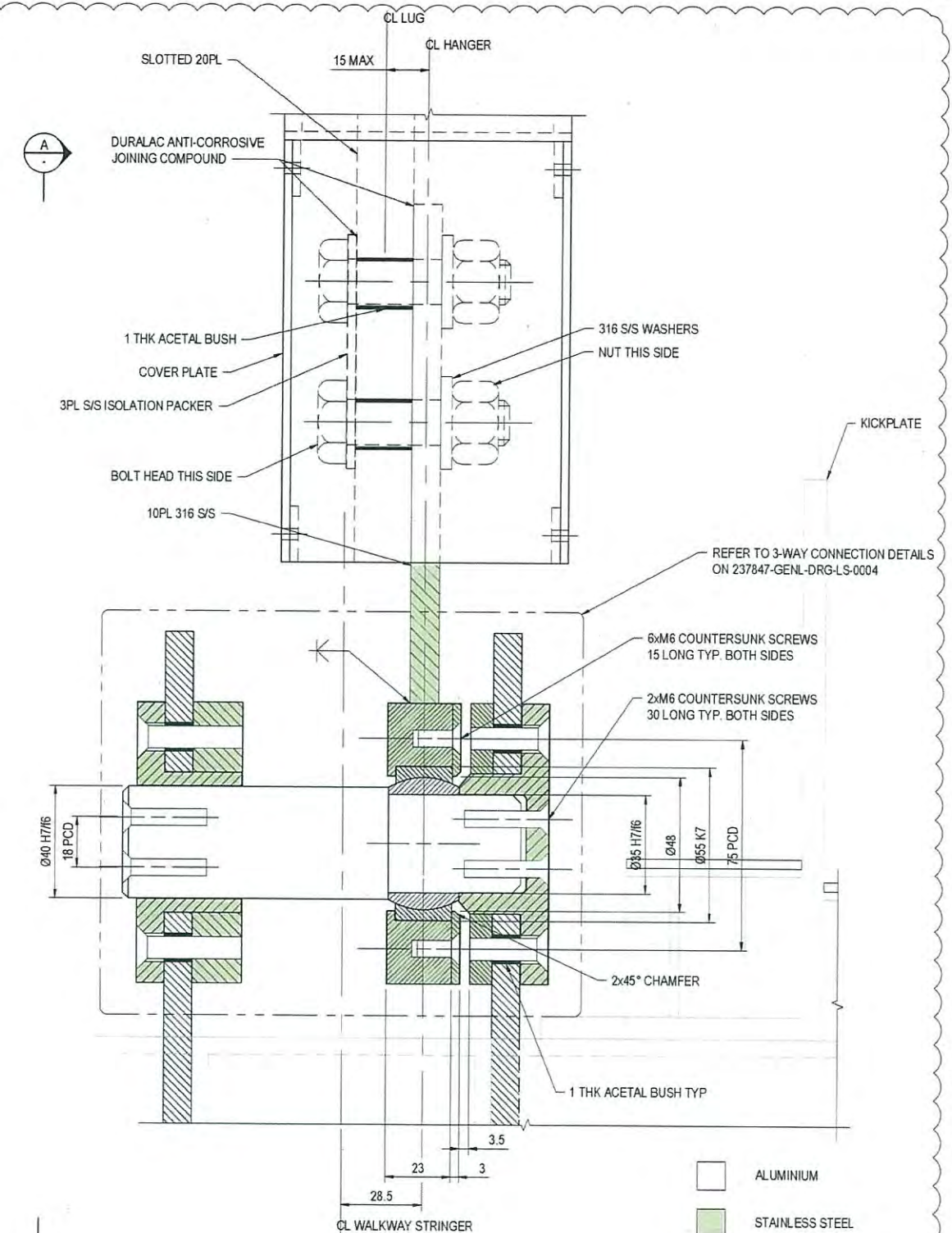
VIEW 1:5
A



TYPICAL TYPE 3 CONNECTION

DETAIL 1:5
1

- NOTE:
1. ALL PINS AND BOLTS TO BE 316 SS U.N.O.
 2. ALL PLATES WELDED TO ALUMINIUM SECTIONS TO BE ALUMINIUM ALLOY 6082 T5 U.N.O.
 3. ALUMINIUM IS TO BE WELDED WITH FILLER 5556. NO EXCEPTIONS ALLOWED.
 4. BOLTED CONNECTIONS BETWEEN STAINLESS STEEL AND ALUMINIUM TO BE FULLY ISOLATED. REFER TO STANDARD NOTES DRAWING FOR DETAILS.
 5. ALL BOLTS TO BE GRADE A4-70 U.N.O.



SECTION B
1:1

(FOR ALL OTHER DETAILS REFER TO 237847-GENL-DRG-LS-0004)

ALUMINIUM
STAINLESS STEEL

RPEQ
SIGNATURE
DATE
NAME
RPEQ No

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REV DATE REVISION DETAILS

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AS SHOWN

SIZE
A1

FOR CONSTRUCTION

PROJECT

BRETT'S WHARF, BULIMBA AND HAWTHORNE
FERRY TERMINAL GANGWAYS - BRISBANE RIVER

DISABLED ACCESS GANGWAY
TYPICAL DETAILS
TYPICAL HANGER DETAILS SHEET 2

TITLE

DRAWING No.

PROJECT No. 237847 - GENL - DRG - LS - 0017 - 1

Dedicated to a better Brisbane 1 24.02.14 ISSUED FOR CONSTRUCTION

ANILSEN

DRAWN
K.CHEONG
DESIGNED
D.HUNDSCHIEDT
VERIFIED
L.WILLIAMS

APPROVED
PROJECT DIRECTOR
DATE
24/02/14
ANILSEN