

Appendix H - As Constructed Drawings

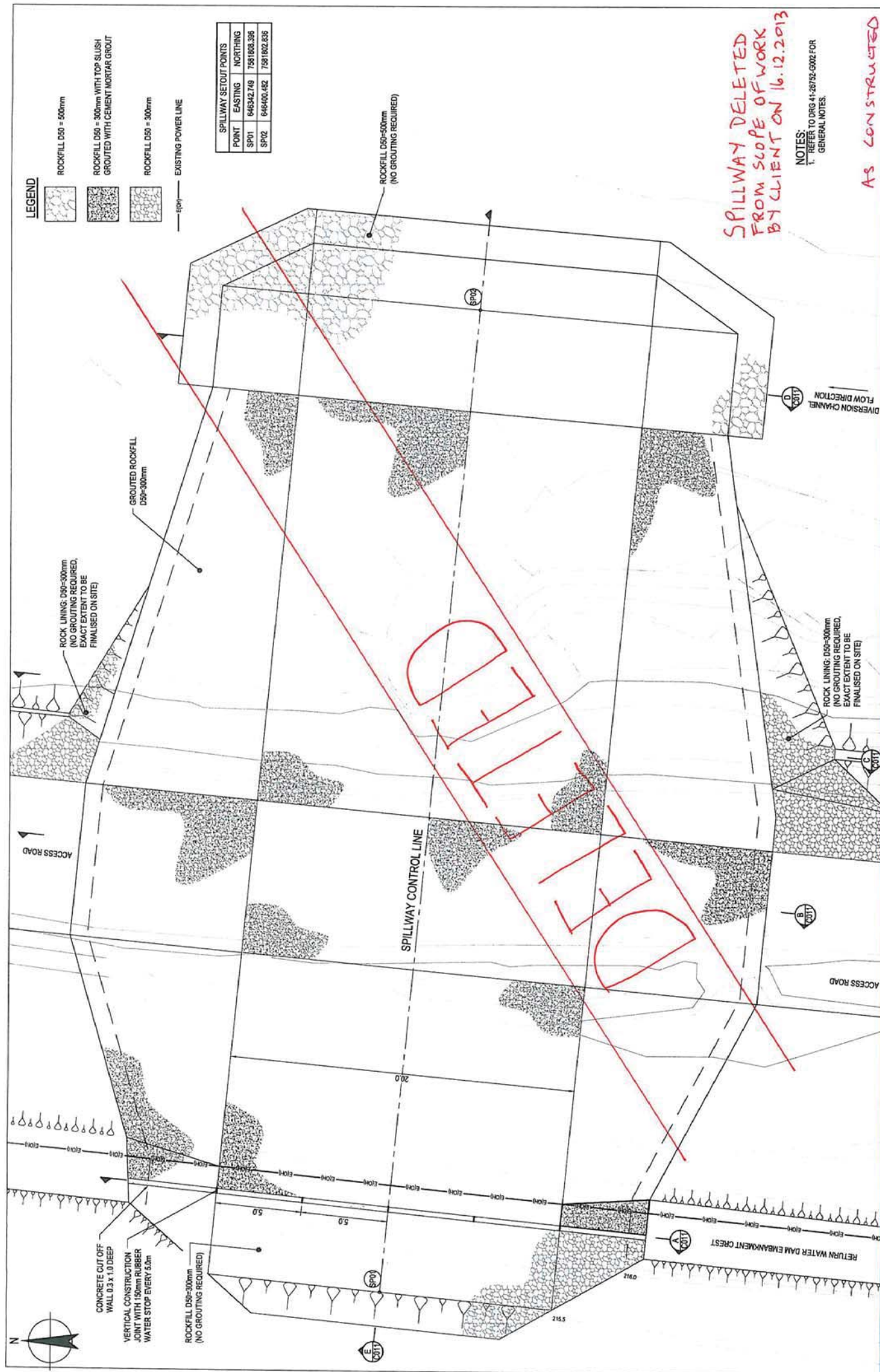


NOTES:
 1. REFER TO DRG 41-26752-0302 FOR GENERAL NOTES
 2. REFER TO DRG 41-26752-0314 FOR DECANT TANK GENERAL ARRANGEMENT
 3. REFER TO DRG 41-26752-0301 FOR STRUCTURAL NOTES

AS CONSTRUCTED

GENERAL ARRANGEMENT PLAN
 SCALE 1:1000

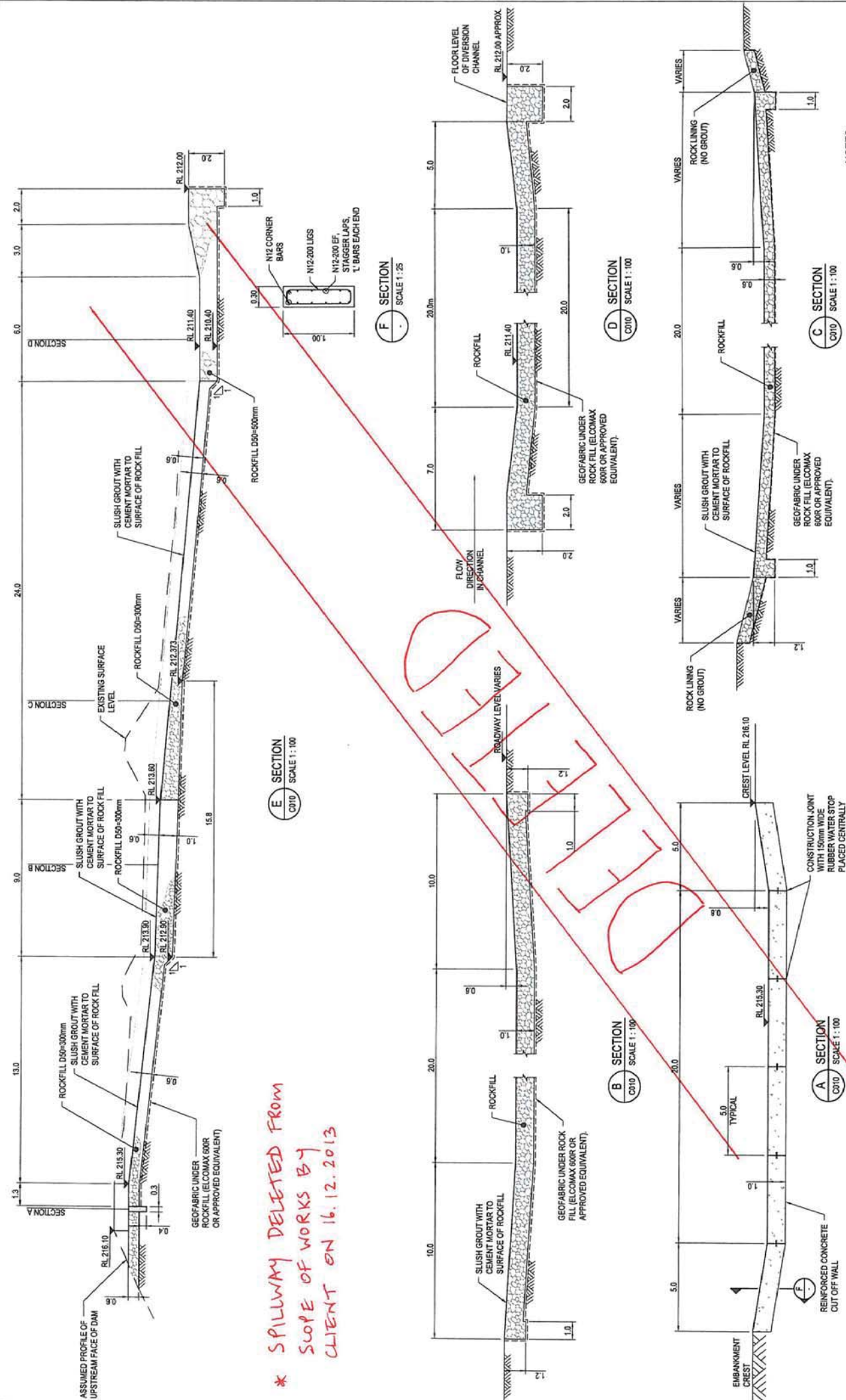
DO NOT SCALE Conditions of Use: This document may only be used for the purpose for which it was prepared. It is not to be used for any other purpose. GHD has no liability for any loss or damage arising from its use for any other purpose.		Client PEABODY ENERGY AUSTRALIA PTY LTD COPPABELLA MINE HAZARDOUS DAMS RETURN WATER DAM DECANT AND SPILLWAY GENERAL ARRANGEMENT
Drawn M. ZAMBELLI Checked M. ZAMBELLI Approved M. ZAMBELLI Project Director Date 14/10/2013	Design N. FORBES Design N. FORBES Checked M. ZAMBELLI Approved M. ZAMBELLI Project Director Date 14/10/2013	Scale AS SHOWN This drawing and site used for Contractor's use only as determined
CONDITIONS OF USE This document may only be used for the purpose for which it was prepared. It is not to be used for any other purpose. GHD has no liability for any loss or damage arising from its use for any other purpose.		Revision 1 AS UNSTRUCTURED 14/10/13 M. ZAMBELLI Project Director
Scale 0 10 20 30 40 50m SCALE 1:1000 AT ORIGINAL SIZE		Project No. 41-26752-0302
Project PEABODY ENERGY AUSTRALIA PTY LTD COPPABELLA MINE HAZARDOUS DAMS RETURN WATER DAM DECANT AND SPILLWAY GENERAL ARRANGEMENT		Drawing No. 41-26752-0301



SPILLWAY DELETED FROM SCOPE OF WORK BY CLIENT ON 16.12.2013

AS CONSTRUCTED

DO NOT SCALE Conditions of Use: This document may only be used for the project and site for which it was prepared. It is not to be used for any other purpose without the prior written consent of GHD.		Client PEABODY ENERGY AUSTRALIA PTY LTD COPPABELLA MINE HAZARDOUS DAMS RETURN WATER DAM DECONTAM AND SPILLWAY EMERGENCY SPILLWAY PLAN
Drawn M. ZAMBELLI Checked M. ZAMBELLI Design M. ZAMBELLI Project 41-26752-0002	Scale AS SHOWN Scale 1:100 AT ORIGINAL SIZE Scale 1:100 AT ORIGINAL SIZE	Project 41-26752-0002 Project 41-26752-0002 Project 41-26752-0002
Issue 0 Revision 1 14 October 2013 - 3:13 PM Prepared by: Malinda Samuels	Issue 0 Revision 1 14 October 2013 - 3:13 PM Prepared by: Malinda Samuels	Issue 0 Revision 1 14 October 2013 - 3:13 PM Prepared by: Malinda Samuels

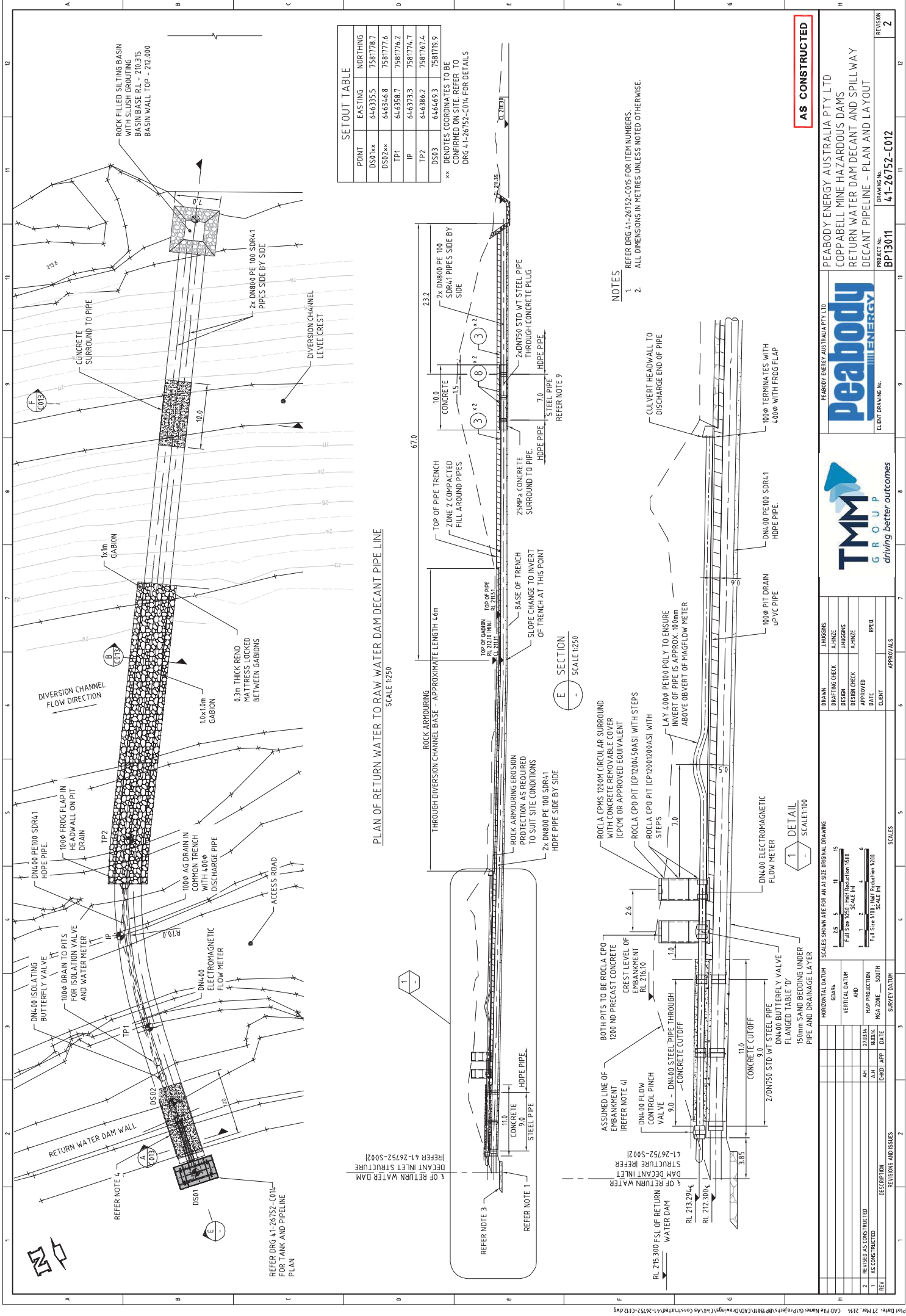


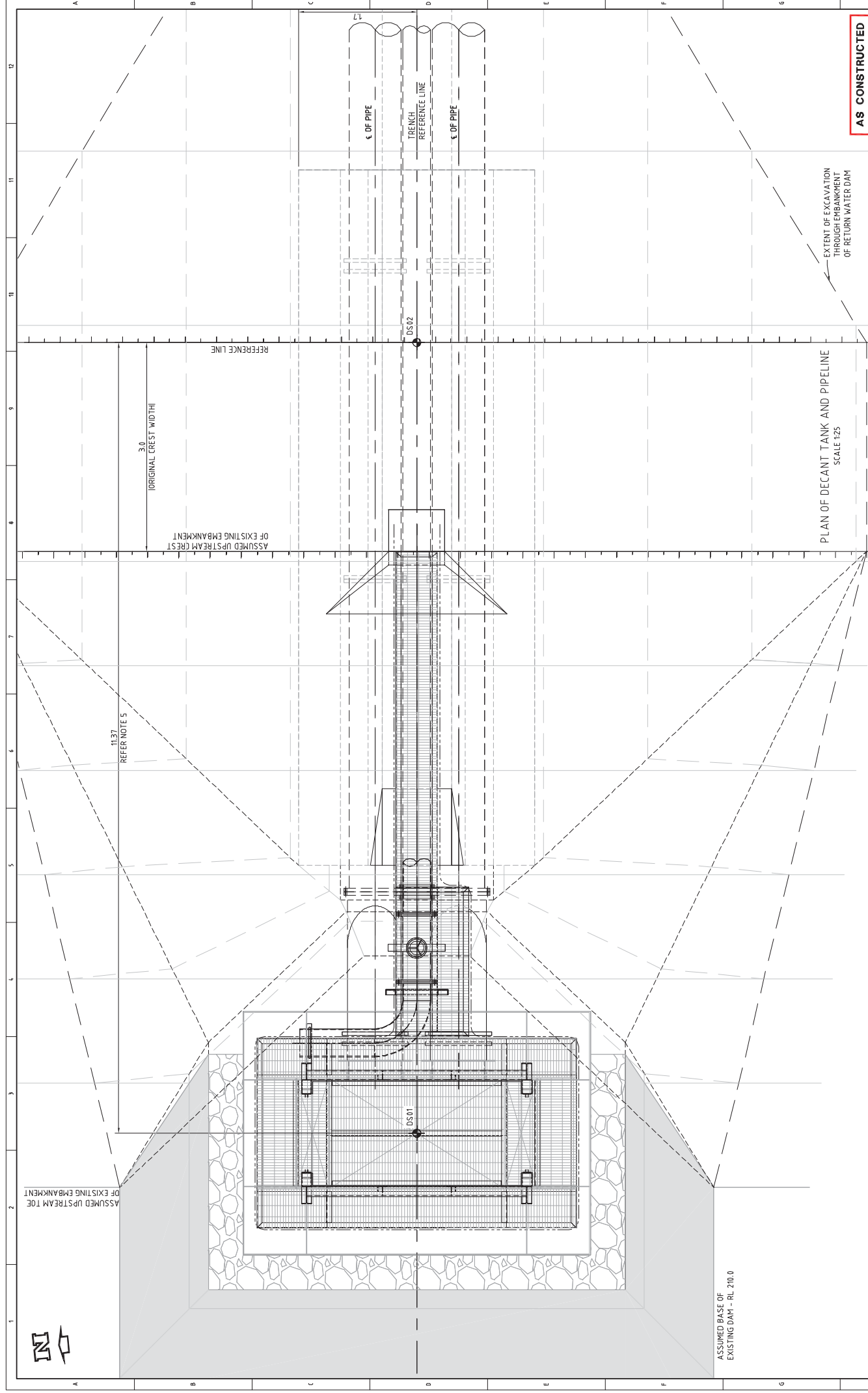
* SPILLWAY DELETED FROM
SLOPE OF WORKS BY
CLIENT ON 16.12.2013

NOTES:
1. REFER TO DRG 41-26752-0002 FOR
GENERAL NOTES.

AS CONSTRUCTED.

ISSUED FOR CONSTRUCTION No. 001 Revision: 1 Date: 14 October 2013 - 2:38 PM Project: Peabody Energy Australia Pty Ltd Drawing No: 41-26752-C011		Drawn: M. ZAMBELLI Checked: M. ZAMBELLI Approved: M. ZAMBELLI Date: 14.10.2013		Client: PEABODY ENERGY AUSTRALIA PTY LTD Project: COPPABELLA MINE HAZARDOUS DAMS Title: RETURN WATER DAM DECANT AND SPILLWAY Emergency Spillway Sections		Rev: 1
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AS CONSTRUCTED

COPPABELLA MINE HAZARDOUS DAMS
RETURN WATER DAM DECANT AND SPILL WAY
DECANT - AS-CONSTRUCTED
OUTLET TANK PLAN

PROJECT No.	DRAWING No.	REVISION
BP13011	41-26752-[014	1

PEABODY ENERGY AUSTRALIA PTY LTD

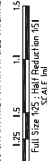


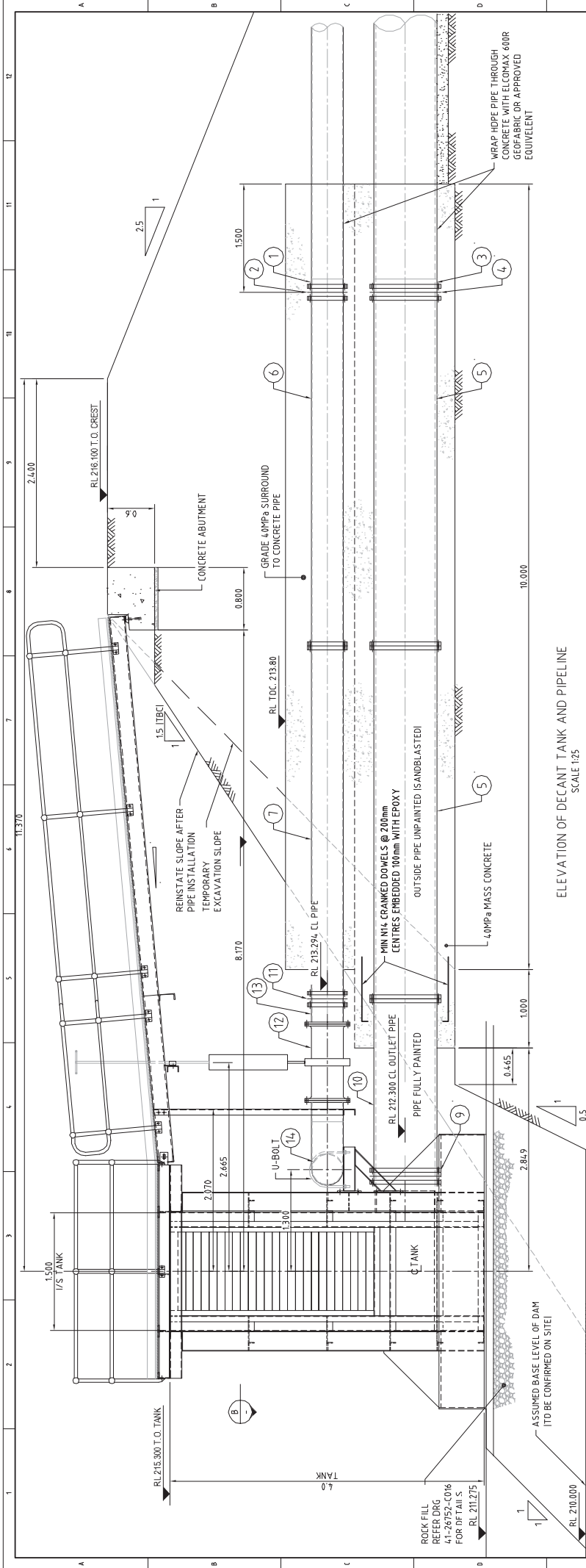
CLIENT DRAWING No.:



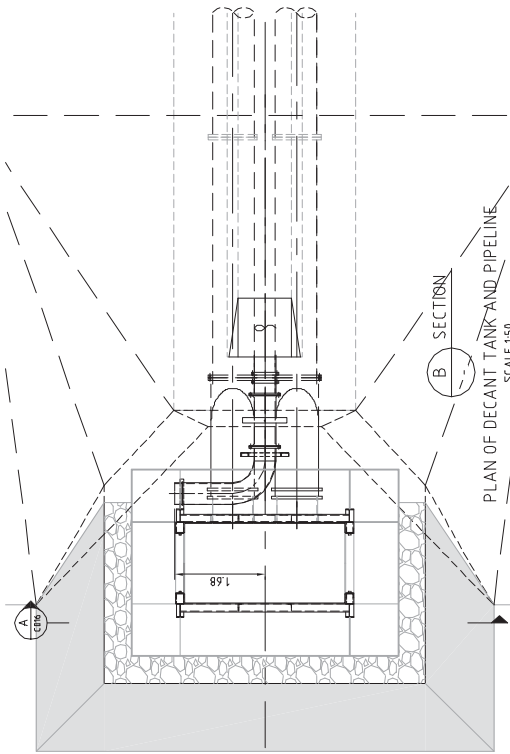
DRAWN	J. HUGGINS
DRAFTING CHECK	A. HINZE
DESIGN	J. HUGGINS
DESIGN CHECK	A. HINZE
APPROVED	
DATE	RPEQ
CLIENT	APPROVAL S.

VALUES SHOWN ARE FOR AN A1 SIZE ORIGINAL DRAWING

[illegible]



ELEVATION OF DECANT TANK AND PIPELINE
SCALE 1:25



PLAN OF DECANT TANK AND PIPELINE
SCALE 1:50

ITEM	QUANTITY	DESCRIPTION
1	1	DN 400 HDPE STUB FLANGE
2	1	BACKING RING TO SUIT TABLE "D" FLANGE
3	6	DN 800 HDPE STUB FLANGE
4	6	BACKING RING TO SUIT TABLE "D" FLANGE
5	4	DN 750 STD WT STEEL PIPE 4.5m C/W TABLE D FLANGES BOTH ENDS
6	1	DN 400 STD WT STEEL PIPE 4.5m C/W TABLE D FLANGES BOTH ENDS
7	1	DN 400 STD WT STEEL PIPE 4.5m C/W TABLE D FLANGED ONE END
8	4	DN 750 STD WT STEEL PIPE 3.5m C/W TABLE D FLANGES BOTH ENDS
9	2	DN 800 LC800W EXTRA WIDE FERRO
10	2	DN 750 STD WT STEEL PIPE, LENGTH TO SUIT, C/W TABLE D FLANGE ONE END
11	1	DN 400 LEWC 400 EXTRA WIDE FERRO
12	1	DN 400 PINCH VALVE C/W TABLE D FLANGES BOTH ENDS
13	1	DN 400 STD WT STEEL PIPE, LENGTH TO SUIT, C/W TABLE D FLANGED ONE END
14	1	DN 400 90° LONG RADIUS BEND, C/W TABLE D FLANGE ONE END, AND DN400 STD WT STEEL PIPE, LENGTH TO SUIT

- NOTES:
- ALL STEEL PIPE WORK HAVE BEEN CORROSION PROTECTED WITH SUITABLE POLYURETHANE PAINT WITH A MINIMUM COATING THICKNESS OF 100 MICRON. SURFACE PREPARATION TO CONFORMS TO EN ISO 8501-2 SA 2.5.
 - ALL STEEL PIPES HAVE BEEN COATED IN CONCRETE AND LEFT TO CURE FOR 28 DAYS. COATING 80mm INTO CONCRETE BEFORE COMMENCEMENT OF UNCOATED FINISH.
 - POLYURETHANE PAINT PROTECTION AND PREPARATION PROPOSED BY THE PIPE MANUFACTURER.

AS CONSTRUCTED

PEABODY ENERGY AUSTRALIA PTY LTD

peabody
ENERGY

CLIENT DRAWING NO.

TMM GROUP
driving better outcomes

DRAWN

DRAFTING CHECK

DESIGN

DESIGN CHECK

APPROVED

DATE

CLIENT

J. HUGHES

A. HINZE

J. HUGHES

A. HINZE

PEQ

APPROVALS

REVISIONS AND ISSUES

3	REVISED AS CONSTRUCTED	27/03/24	APR	DATE
2	AS CONSTRUCTED	19/03/24	MAP PRODUCTION	SCALE 1:50
1	AS CONSTRUCTED	19/03/24	MAP PRODUCTION	SCALE 1:50

PEABODY ENERGY AUSTRALIA PTY LTD

COPPABELLA MINE HAZARDOUS DAMS

RETURN WATER DAM DECANT AND SPILLWAY

DECANT OUTLET TANK DETAILS - SHEET 1

PROJECT NO.

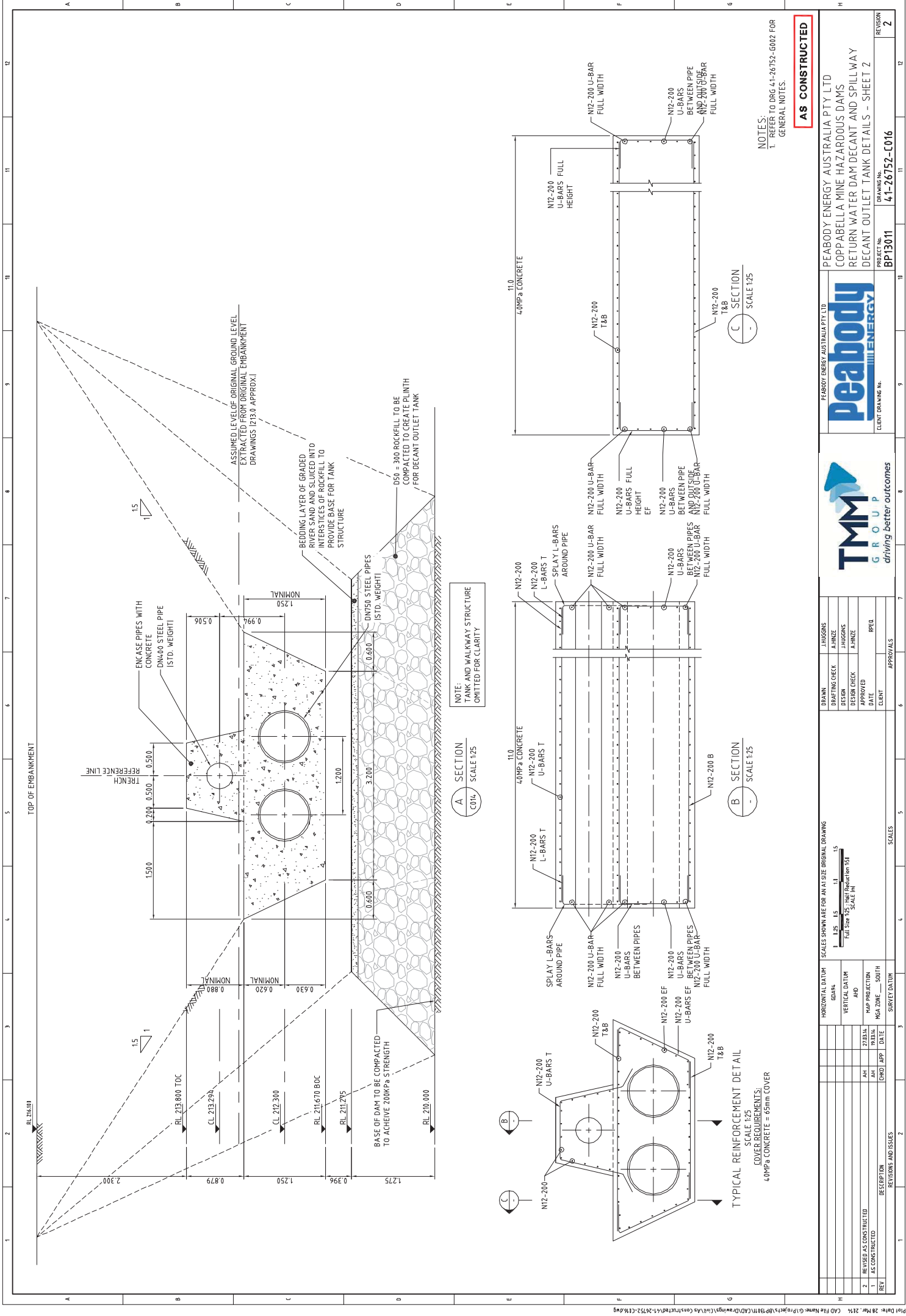
BP13011

DRAWING NO.

41-26752-C015

REVISION

3



NOTES:
1. REFER TO DRG 41-26752-G002 FOR GENERAL NOTES.

AS CONSTRUCTED

PEABODY ENERGY AUSTRALIA PTY LTD		PEABODY ENERGY AUSTRALIA PTY LTD		COPABELLA MINE HAZARDOUS DAMS		RETURN WATER DAM DECANT AND SPILLWAY		DECANT OUTLET TANK DETAILS - SHEET 2	
DRAWING No.		PROJECT No.		DRAWING No.		PROJECT No.		DRAWING No.	
BP13011		41-26752-C016		BP13011		41-26752-C016		BP13011	
CLIENT DRAWING No.		CLIENT DRAWING No.		CLIENT DRAWING No.		CLIENT DRAWING No.		CLIENT DRAWING No.	
JUGUONS		JUGUONS		JUGUONS		JUGUONS		JUGUONS	
DRAWING CHECK		DRAWING CHECK		DRAWING CHECK		DRAWING CHECK		DRAWING CHECK	
DESIGN		DESIGN		DESIGN		DESIGN		DESIGN	
APPROVED		APPROVED		APPROVED		APPROVED		APPROVED	
DATE		DATE		DATE		DATE		DATE	
CLIENT		CLIENT		CLIENT		CLIENT		CLIENT	
APPROVALS		APPROVALS		APPROVALS		APPROVALS		APPROVALS	
Scales		Scales		Scales		Scales		Scales	
Horizontal Datum		Horizontal Datum		Horizontal Datum		Horizontal Datum		Horizontal Datum	
Vertical Datum		Vertical Datum		Vertical Datum		Vertical Datum		Vertical Datum	
Map Projection		Map Projection		Map Projection		Map Projection		Map Projection	
North Zone		North Zone		North Zone		North Zone		North Zone	
Survey Datum		Survey Datum		Survey Datum		Survey Datum		Survey Datum	
Description		Description		Description		Description		Description	
Revisions and Issues		Revisions and Issues		Revisions and Issues		Revisions and Issues		Revisions and Issues	
Revision		Revision		Revision		Revision		Revision	
2		2		2		2		2	

GENERAL

- G1. READ THESE DRAWINGS IN CONJUNCTION WITH ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED. THE CONSTRUCTION NOTES SHALL APPLY UNLESS OTHERWISE VARYED BY THE DRAWINGS OR SPECIFICATIONS.
- G2. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM. SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR APPROVAL.
- G3. REFER ANY DISCREPANCY TO THE DESIGNER BEFORE PROCEEDING WITH THE WORK.
- G4. DO NOT OBTAIN DIMENSIONS BY SCALING FROM THE DRAWINGS. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS IN METRES, UNO.
- G5. CONTRACTOR IS TO COORDINATE AND VERIFY SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ATTENTION OF THE SITE SUPERINTENDENT IMMEDIATELY.
- G6. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SAA CODES, SPECIFICATIONS AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.
- G7. THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF LEVELS AND LOCATIONS OF SERVICES TO FULLY COMPLY WITH LOCAL AUTHORITY AS CONSTRUCTED INFORMATION REQUIREMENTS.
- G8. THE CONTRACTOR SHALL PROVIDE A WORK METHOD STATEMENT FOR APPROVAL TO THE DESIGNER PRIOR TO COMMENCEMENT OF SITE WORKS.
- G9. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE AND STABLE STATE AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD.
- G10. UNO - UNLESS NOTED OTHERWISE.
- G11. THE STABILITY OF ALL EXCAVATION SLOPES SHALL BE CONFIRMED BY CONTRACTORS GEOTECHNICAL (RPE) ENGINEER SO THAT ACCEPTABLE FACTORS OF SAFETY ARE ACHIEVED.

SURVEY

- V1. SITE SURVEY (LIDAR) BY PEABODY ENERGY AUSTRALIA. ADDITIONAL SURVEY SUPPLIED BY JTH SURVEY PTY LTD DATED JULY 2013.
- V3. SURVEY GRID IS COPPABELLA MINE SITE GRID.
- V4. SURVEY DATUM TO AHD.

STRIPPING AND EXCAVATION

- S1. TOPSOIL TO BE STRIPPED AND STOCKPILED ON SITE FOR REUSE.
- S2. FINAL TOPSOIL STRIPPING TO BE APPROVED BY THE SITE SUPERINTENDENT.

CONCRETE

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH QUEENSLAND AND GOVERNMENT DEPARTMENT OF MAIN ROADS STANDARD SPECIFICATION MRS 11.70 (DATED 10/03), AS 3600 AND AS 3610 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARYED BY THE SPECIFICATIONS.

- C2. CONCRETE MIXES SHALL BE APPROVED BY THE SUPERINTENDENT.

STRUCTURAL ELEMENT	EXPOSURE CLASS	COVER TO REIN (mm)	F _{ck} (MPa)	MAX AGG SIZE (mm)	SUMP (mm)	TESTING
CONCRETE CUT OFF AT INLET	MODERATE TO AG 2150 - 2000	65	40	20	80-10	PROJECT
OTHER ELEMENTS	AS TO AS 3600 - 2000	50	25	20	80-10	PROJECT

- C3. ADDITIVES SHALL NOT BE USED WITHOUT PRIOR APPROVAL OF DESIGNER.

- C4. SLUMP SHALL BE MEASURED ON EVERY LOAD OF CONCRETE DELIVERED TO SITE. STRENGTH TESTING SHALL BE PERFORMED ON THE BASIS OF A SET OF 3 CYLINDERS FOR EVERY 25m³ OR PART THEREOF WITH A MINIMUM OF ONE SET FOR EACH DAYS PRODUCTION.

- C5. CONCRETE IS TO BE COMPACTED USING VIBRATORS.

- C6. PROVIDE ALL EXPOSED EDGES WITH 20mm CHAMFERS.

- C7. FORM ALL CONSTRUCTION JOINTS AND USE ONLY WHERE SHOWN OR APPROVED BY THE DESIGNER.

- C8. NO HOLES, CHASES OR EMBEDMENT OF PIPES, OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE MADE WITHOUT THE APPROVAL OF THE DESIGNER.

- C9. CURING OF CONCRETE SHALL BE COMMENCED AS SOON AS POSSIBLE AFTER PLACING OR STRIPPING. REFER CURING IN AS 3600 & THE SPECIFICATION. ACCEPTABLE CURING METHODS ARE AS FOLLOWS:

- WATER IMMERSION
- WATER SPRAY BENEATH APPROVED PLASTIC SHEETING
- APPROVED WAX EMULSION CURING COMPOUND
- APPROVED HYDROCARBON RESIN CURING COMPOUND THAT IS ACCEPTABLE FOR CONTACT WITH POTABLE WATER.

- C10. FORMWORK AND ITS REMOVAL TO BE IN ACCORDANCE WITH AS 3610 OR AS SPECIFIED.

- C11. CONSTRUCTION TOLERANCES TO BE IN ACCORDANCE WITH AS 3610.

CONCRETE CONT'D

- C13. FORMED SURFACE FINISHES TO BE IN ACCORDANCE WITH AS 3610. THE ACCEPTANCE CRITERIA FOR SURFACE FINISHES AS NOTED ON THE DRAWINGS SHALL BE AS FOLLOWS:

FORMED SURFACES

CLASS F1

- * ASS310 - CLASS 1 FINISH
- * ABRUPT IRREGULARITIES LESS THAN 6mm
- * GRADUAL IRREGULARITIES LESS THAN 6mm
- * BLOWHOLES TO APPENDIX B, FIGURES B1 (a) AND (b)
- * BLOWHOLE DEPTH LESS THAN 6mm

CLASS F2

- * ASS310 - CLASS 2 FINISH
- * ABRUPT IRREGULARITIES LESS THAN 6mm
- * GRADUAL IRREGULARITIES LESS THAN 12mm
- * BLOWHOLES TO APPENDIX B, FIGURES B2 (a) AND (b)
- * BLOWHOLE DEPTH LESS THAN 10mm

CLASS F3

- * ASS310 - CLASS 3 FINISH
- * ABRUPT AND GRADUAL IRREGULARITIES LESS THAN 25mm
- * BLOWHOLES TO APPENDIX B, FIGURES B3 (a) AND (b)
- * BLOWHOLE DEPTH LESS THAN 10mm

DEFINITION - OFFSETS RESULTING FROM DISPLACED OR MISPLACED FORM SECTIONS FROM LOOSE KNOTS OR OTHERWISE DEFECTIVE FORMS, TO BE CLASSED AS ABRUPT IRREGULARITIES AND TO BE ASSESSED BY DIRECT MEASUREMENT. GRADUAL IRREGULARITIES TO BE MEASURED FROM A STRAIGHT TEMPLATE 1.5m LONG BAGGED SURFACE FINISH PROHIBITED.

UNFORMED SURFACES

- CLASS U1 - (STEEL TROWELLED FINISH) AND CLASS U/A - (VIBRATING SCREED/PLATE FINISH)

- GRADUAL IRREGULARITIES NOT ACCEPTED
- GRADUAL IRREGULARITIES LESS THAN 5mm

CLASS U2 - (WOOD FLOAT FINISH)

- ABRUPT AND GRADUAL IRREGULARITIES LESS THAN 5mm

CLASS U3 - (SCREED FINISH)

- ABRUPT AND GRADUAL IRREGULARITIES LESS THAN 10mm

DEFINITION - VERTICAL OFFSETS TO BE CLASSED AS ABRUPT IRREGULARITIES AND BE ASSESSED BY DIRECT MEASUREMENT.

GRADUAL IRREGULARITIES TO BE MEASURED FROM A STRAIGHT TEMPLATE 3m LONG.

AN ADDITIONAL SURFACE FINISH (U4) HAS BEEN SPECIFIED ON THE DRAWINGS WHERE RESISTANCE TO EROSION AND CAVITATION UNDER THE ACTION OF WATER AT HIGH FLOW VELOCITIES IS REQUIRED. FOR A CLASS U4 FINISH THE SURFACE IRREGULARITIES SHALL BE AS FOR THE U3 FINISH. HOWEVER, THE FINISH IS TO BE OBTAINED BY USE, IN GENERAL, OF A VIBRATING SCREED AND/OR VIBRATING PLATE, WHICH MAY BE SUPPLEMENTED BY LIMITED HANDWORK WITH WOOD FLOAT (ONLY FOR TOUCH UP AS NECESSITATED BY PRACTICAL CONSIDERATIONS). THE FINISHING OPERATIONS SHALL PRODUCE A DENSELY COMPACTED UNIFORM SURFACE ESSENTIALLY TRUE TO LINE, WITH A DENSE LAYER OF AGGREGATES AND A MINIMUM OF MORTAR. SKIN AND FINE MATERIAL AT THE SURFACE.

- C15. SURFACE FINISH DENOTED THIS Δ 3.

- C16. UNLESS SHOWN OTHERWISE, UNFORMED SURFACES SHALL BE U2 AND FORMED SURFACES SHALL BE F2.

- C17. CVC DENOTES CONVENTIONAL VIBRATED CONCRETE

- C18. IN NO CASE SHALL CONCRETE BE DROPPED FROM A HEIGHT EXCEEDING 1.5m. CONCRETE POUR LIFT HEIGHTS SHALL BE LIMITED AS FOLLOWS - FOR SECTIONS WITH A MINIMUM DIMENSION GREATER THAN 0.5m, THE LIFT HEIGHT SHALL BE LESS THAN 1.5m. SUBSEQUENT POURS SHALL BE UNDERTAKEN NOT LESS THAN 3 DAYS AND NOT GREATER THAN 7 DAYS AFTER COMPLETION OF THE PREVIOUS POUR - FOR SECTIONS WITH A MINIMUM DIMENSION LESS THAN OR EQUAL TO 0.5m, THE POUR HEIGHT SHALL BE LIMITED SUCH THAT THE COMPACTION REQUIREMENTS AND THE RESTRICTION ON CONCRETE DROP HEIGHT CAN BE MET.

REINFORCEMENT

- R1. SYMBOLS ON DRAWINGS FOR GRADE AND TYPE OF REINFORCEMENT ARE AS FOLLOWS: R DENOTES STRUCTURAL GRADE 230 PLAIN ROUND BAR TO ASNZS 4671 S1 DENOTES HARD DRAWN WIRE REINFORCING FABRIC TO ASNZS 4671 N DENOTES NORMAL DUCTILITY BAR TO ASNZS 4671 L DENOTES LOW DUCTILITY BAR TO ASNZS 4671

- R2. DESIGNATION OF REINFORCEMENT BARS IS AS IN EXAMPLE:



- R3. THE FOLLOWING ABBREVIATIONS APPLY TO THE LOCATION OF REINFORCEMENT:
- EW - EACH WAY
 - FF - FAR FACE
 - CP - CENTRALLY PLACED
 - EF - EACH FACE
 - B - BOTTOM
 - BU - BOTTOM UNDER (LAD FIRST)
 - NF - NEAR FACE
 - T - TOP
 - T/O - TOP OVER (LAD LAST)
 - NSOP - NOT SHOWN ON PLAN
 - LV - LENGTHS VARY
 - NSOE - NOT SHOWN ON ELEVATION

- R4. UNO, COSS AND HOOKS TO BE STANDARD IN ACCORDANCE WITH AS 3600.

- R5. EXTENT OF BARS SHOWN THIS:



- R6. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND IS NOT NECESSARILY IN TRUE PROJECTION.

- R7. MAINTAIN NOMINAL CLEAR CONCRETE COVER TO REINFORCEMENT (INCLUDING FITTINGS) BY APPROVED CHAIRS, SPACERS, OR TIES AS REQUIRED TO PROVIDE ADEQUATE SUPPORT. FOR SLABS, SUPPORTS SHALL BE SPACED AT 750 MAXIMUM CROSS CENTRES FOR FABRIC AND BARS UP TO AND INCLUDING 16 DIA. AND 1200 MAXIMUM CROSS CENTRES FOR BARS OVER 16 DIA.

- R8. SPURCE REINFORCEMENT ONLY AT LOCATIONS SHOWN ON DRAWINGS, OR AS APPROVED. LAP LENGTH BARS SHALL BE AS BELOW UNLESS NOTED OTHERWISE:

BAR	LAP
N12	460

- (2) FULL TENSION LAP DESIGNATED (L)

BAR	LAP
N12	510

- (3) ALL OTHER BARS

BAR	LAP
N12	350

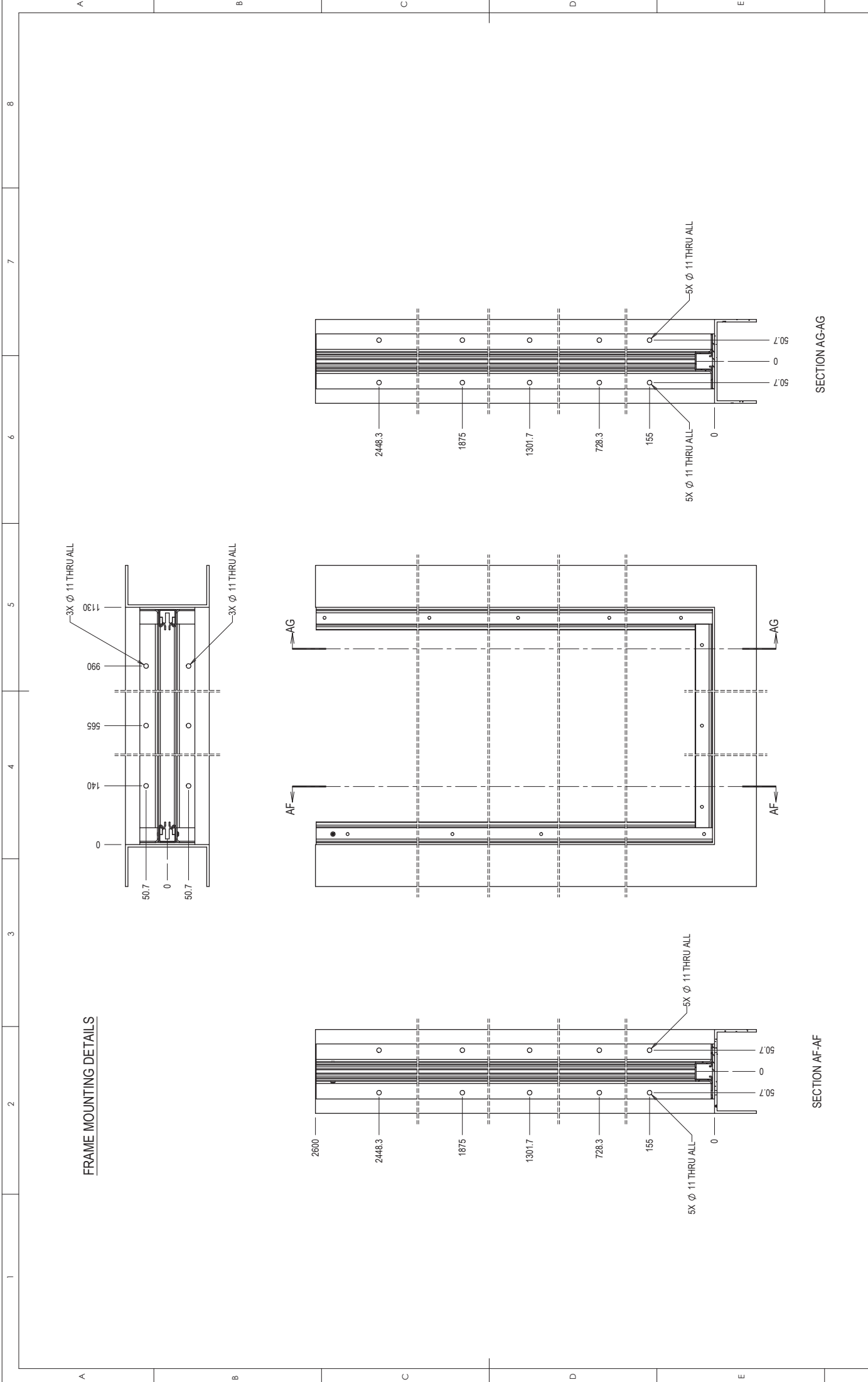
NOTE: STAGGER LAPS WHERE POSSIBLE.

- R9. WELDING OF REINFORCEMENT IS ONLY PERMITTED WHERE SHOWN ON THE DRAWINGS OR OTHERWISE APPROVED BY THE DESIGNER.

- R10. UNLESS NOTED OTHERWISE ON THE DRAWINGS, LAPS ON ADJACENT BARS ON ANY FACE SHALL BE STAGGERED BY NO LESS THAN THE LAP LENGTH. WHERE MORE THAN 50% OF BARS ARE CLAPPED IN ANY CROSS SECTION ON ANY FACE, THE LAPS SHOWN SHALL BE INCREASED BY A FACTOR OF 1.3.

AS CONSTRUCTED

1 AS CONSTRUCTED		10.03.14	14.10.13
0 ISSUED FOR CONSTRUCTION	AW	MW1	14.10.13
No Revision: Note: Issuance signifies an original issue of drawing or full revision of drawing			
Pre Date: 14 October 2013 - 2:28 PM	Prepared by: Mervyn Zambelli	Drawn: Mervyn Zambelli	Checked: Mervyn Zambelli
Client: PEABODY ENERGY AUSTRALIA PTY LTD		Project: COPPABELLA MINE HAZARDOUS DAMS	
Title: RETURN WATER DAM DECANT AND SPILLWAY		Drawing No: 41-26752-G002	
General Notes		Rev: 1	



FRAME MOUNTING DETAILS

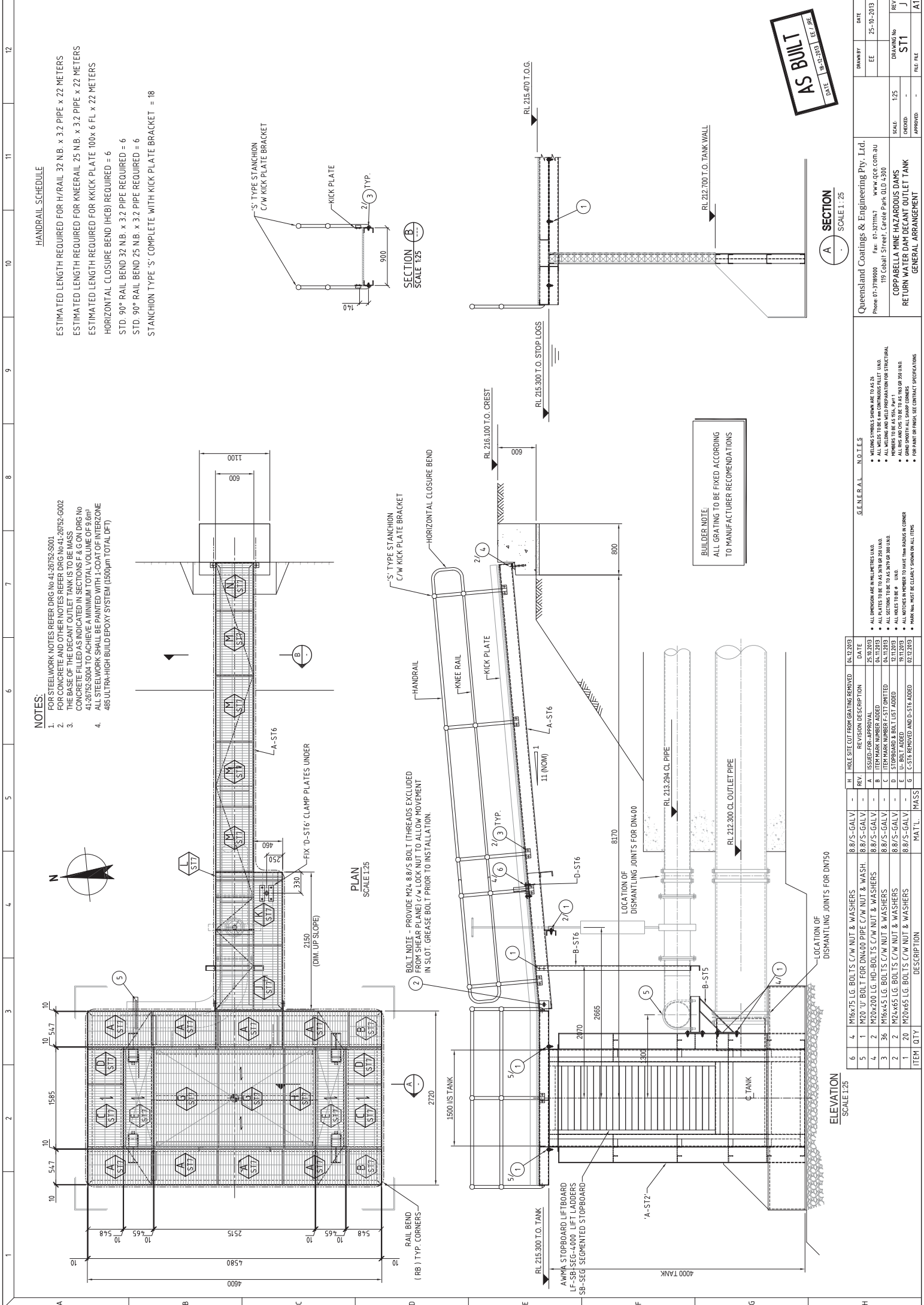
SECTION AG-AG

SECTION AF-AF

APPROVED S. LAKE	REVIEWED SA	DRAWN SVM	12/11/2013	SHEET SIZE - A3 ALL DIMENSIONS ARE IN MM	THIRD ANGLE PROJECTION DO NOT SCALE		This drawing, or any part thereof, remains the property of AWMA. It is provided in confidence and must not be loaned, copied or reproduced in part or in total for manufacturing or any other purpose without the written permission of AWMA and is not to be used in any way detrimental to the interests of AWMA.	COPPABELLA MINE HAZARDOUS DAMS RETURN WATER DAM DECANT OUTLET TANK QEC	JOB No. 026691-92
									QTY: 2
								DRG No. 6350	Rev. 2
								SEGMENTED STOPBOARD OVER VIEW	
								SHEET No. 2 of 2	

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Ph 1800 664 852



NOTES:

- 1. FOR STEELWORK NOTES REFER DRG No 41-26752-S001.
- 2. FOR CONCRETE AND OTHER NOTES REFER DRG No 41-26752-G002
- 3. THE BASE OF THE DECANT OUTLET TANK IS TO BE MASS CONCRETE FILLED AS INDICATED IN SECTIONS F & G ON DRG No 41-26752-S004 TO ACHIEVE A MINIMUM TOTAL VOLUME OF 9.6m³
- 4. ALL STEELWORK SHALL BE PAINTED WITH 1-COAT OF INTERZONE 485 ULTRA-HIGH BUILD EPOXY SYSTEM (1500µm TOTAL DFT)

HANDRAIL SCHEDULE

- ESTIMATED LENGTH REQUIRED FOR H/RAIL 32 N.B. x 32 PIPE x 22 METERS
- ESTIMATED LENGTH REQUIRED FOR KNEERAIL 25 N.B. x 32 PIPE x 22 METERS
- ESTIMATED LENGTH REQUIRED FOR KICK PLATE 100x6 FL x 22 METERS
- HORIZONTAL CLOSURE BEND (HCB) REQUIRED = 6
- STD. 90° RAIL BEND 32 N.B. x 32 PIPE REQUIRED = 6
- STD. 90° RAIL BEND 25 N.B. x 32 PIPE REQUIRED = 6
- STANCHION TYPE 'S' COMPLETE WITH KICK PLATE BRACKET = 18

SECTION B SCALE 1:25

PLAN SCALE 1:25

ELEVATION SCALE 1:25

BUILDER NOTE
ALL GRATING TO BE FIXED ACCORDING
TO MANUFACTURER RECOMMENDATIONS



SECTION A SCALE 1:25

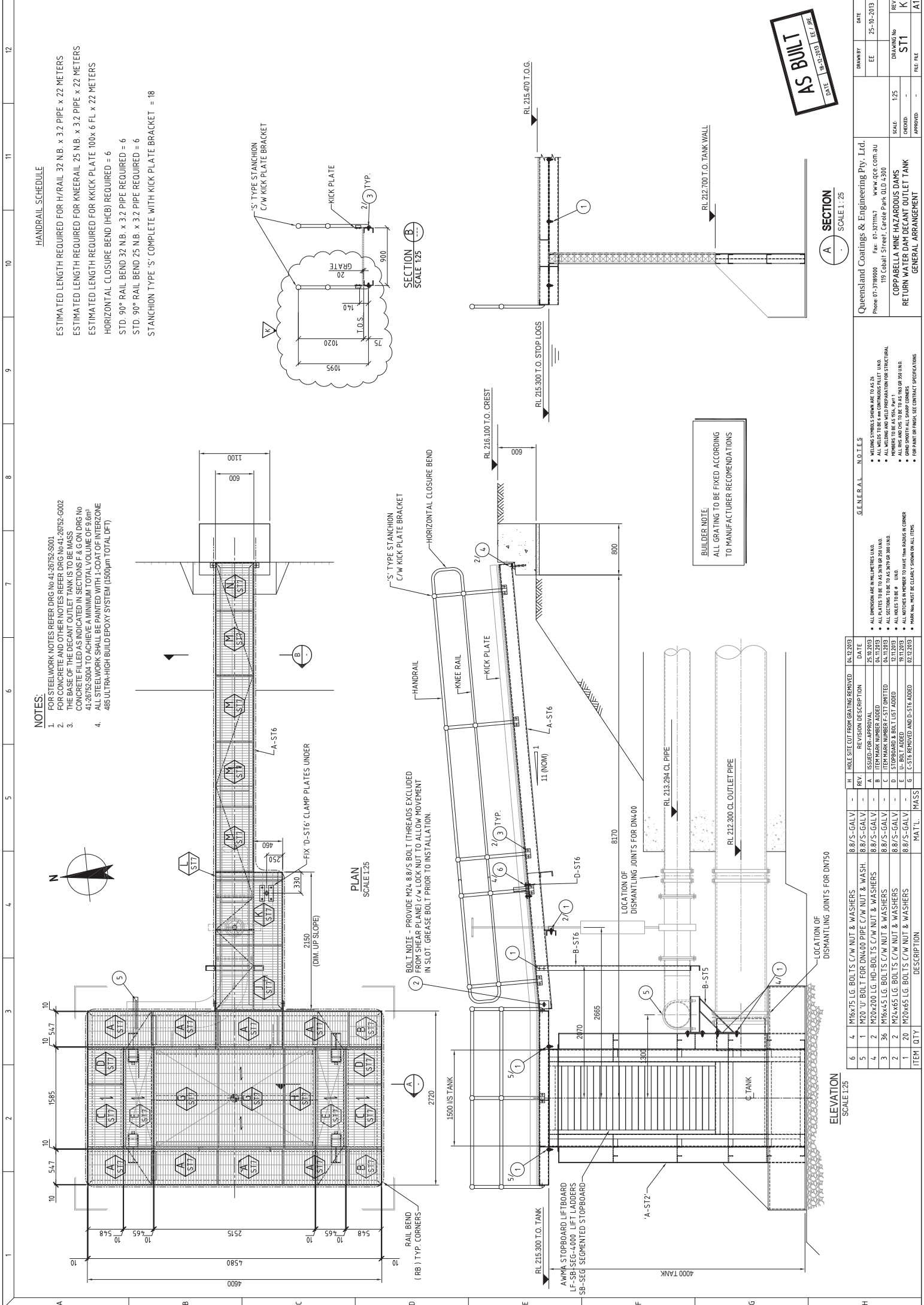
DATE	16-12-2023	EE / JJ
DRAWN BY	EE	25-10-2013
CHECKED		
APPROVED		
SCALE	1:25	
DRAWING No	ST1	
REV	J	
FILE	FILE	A1

GENERAL NOTES
• ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED
• ALL SECTIONS TO BE TO AS 9191 FOR BRU UNDO
• ALL WELDING AND WELD PREPARATION FOR STRUCTURAL MEMBERS TO BE AS 9191-PART 1
• GRIND SMOOTH ALL SHARP CORNERS
• FOR PAINT OR FINISH, SEE CONTRACT SPECIFICATIONS
• MARK NUMBERS MUST BE CLEARLY SHOWN ON ALL ITEMS

ITEM	QTY	DESCRIPTION	MAT'L	MASS	REV	REVISION DESCRIPTION	DATE
6	4	M16x75 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-	H	HOLE SITE CUT FROM GRATING REMOVED	04.12.2013
5	1	M20 U-BOLT FOR DN400 PIPE C/W NUT & WASHER	8.8/S-GALV	-	A	ISSUED FOR APPROVAL	25.10.2013
4	2	M20x200 LG. HD-BOLTS C/W NUT & WASHERS	8.8/S-GALV	-	B	ITEM MARK NUMBER ADDED	04.12.2013
3	36	M16x45 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-	C	ITEM MARK NUMBER F-ST OMITTED	04.12.2013
2	2	M24x65 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-	D	STOPBOARD & BOLT LIST ADDED	12.12.2013
1	20	M20x65 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-	E	U-BOLT ADDED	19.12.2013
					F	C-ST16 REMOVED AND D-ST16 ADDED	02.12.2013

ITEM	QTY	DESCRIPTION	MAT'L	MASS
6	4	M16x75 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-
5	1	M20 U-BOLT FOR DN400 PIPE C/W NUT & WASHER	8.8/S-GALV	-
4	2	M20x200 LG. HD-BOLTS C/W NUT & WASHERS	8.8/S-GALV	-
3	36	M16x45 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-
2	2	M24x65 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-
1	20	M20x65 LG. BOLTS C/W NUT & WASHERS	8.8/S-GALV	-

Queensland Coatings & Engineering Pty. Ltd.	Phone 07-37189000	Fax: 07-3271147	www.qce.com.au
119 Cobham Street, Carle Park QLD 4300			
COPABELLA MINE HAZARDOUS DAMS			
RETURN WATER DAM DECANT OUTLET TANK			
GENERAL ARRANGEMENT			



NOTES:

- FOR STEELWORK NOTES REFER DRG No 41-26752-S001.
 - FOR CONCRETE AND OTHER NOTES REFER DRG No 41-26752-G002
 - THE BASE OF THE DECANT OUTLET TANK IS TO BE MASS CONCRETE FILLED AS INDICATED IN SECTIONS F & G ON DRG No 41-26752-S004 TO ACHIEVE A MINIMUM TOTAL VOLUME OF 9.6m³
 - ALL STEELWORK SHALL BE PAINTED WITH 1-COAT OF INTERZONE 485 ULTRA-HIGH BUILD EPOXY SYSTEM (1500µm TOTAL DFT)
- ESTIMATED LENGTH REQUIRED FOR H/RAIL 32 NB. x 3/2 PIPE x 22 METERS
ESTIMATED LENGTH REQUIRED FOR KNEERAIL 25 NB. x 3/2 PIPE x 22 METERS
ESTIMATED LENGTH REQUIRED FOR KICK PLATE 100x6 FL x 22 METERS
HORIZONTAL CLOSURE BEND (HCB) REQUIRED = 6
STD. 90° RAIL BEND 32 NB. x 3/2 PIPE REQUIRED = 6
STD. 90° RAIL BEND 25 NB. x 3/2 PIPE REQUIRED = 6
STANCHION TYPE 'S' COMPLETE WITH KICK PLATE BRACKET = 18



SECTION A
SCALE 1:25

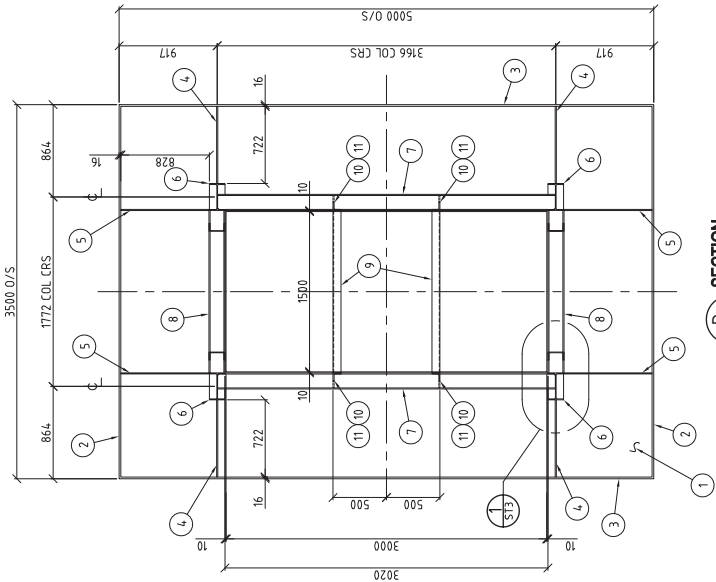
PLAN
SCALE 1:25

ELEVATION
SCALE 1:25

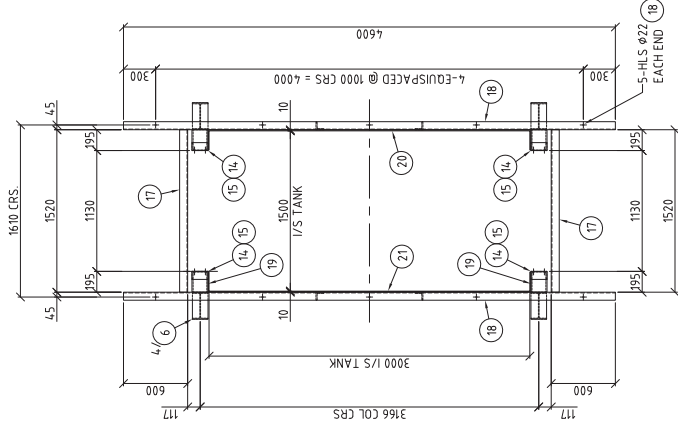
BUILDER NOTE
ALL GRATING TO BE FIXED ACCORDING
TO MANUFACTURER RECOMMENDATIONS

AS BUILT
DATE: 18-12-2023
EE / DRG

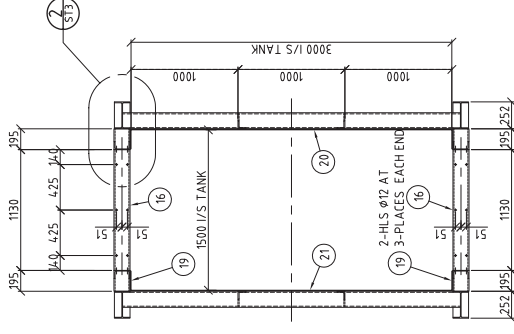
GENERAL NOTES				Queensland Coatings & Engineering Pty. Ltd.			
• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED				Phone 07-37189000 Fax: 07-32711477 www.qce.com.au			
• ALL SECTIONS TO BE TO AS 9191 FOR 300 UNITS				119 Cobham Street, Carle Park QLD 4300			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				COPABELLA MINE HAZARDOUS DAMS			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				RETURN WATER DAM DECANT OUTLET TANK			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				GENERAL ARRANGEMENT			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				SCALE 1:25			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				DRAWING No			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				ST1			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				CHECKED			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				APPROVED			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				FILE			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				REV			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				K			
• ALL DIMENSIONS TO BE TO AS 9191 FOR 300 UNITS				A1			



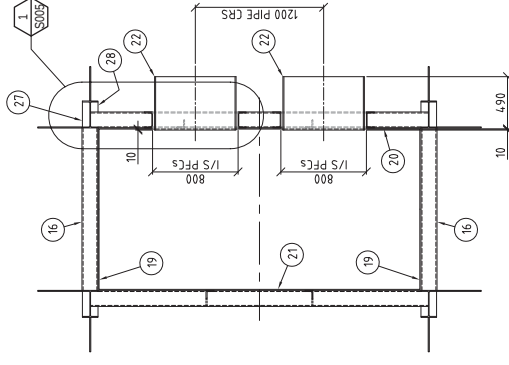
SECTION
SCALE 1:25



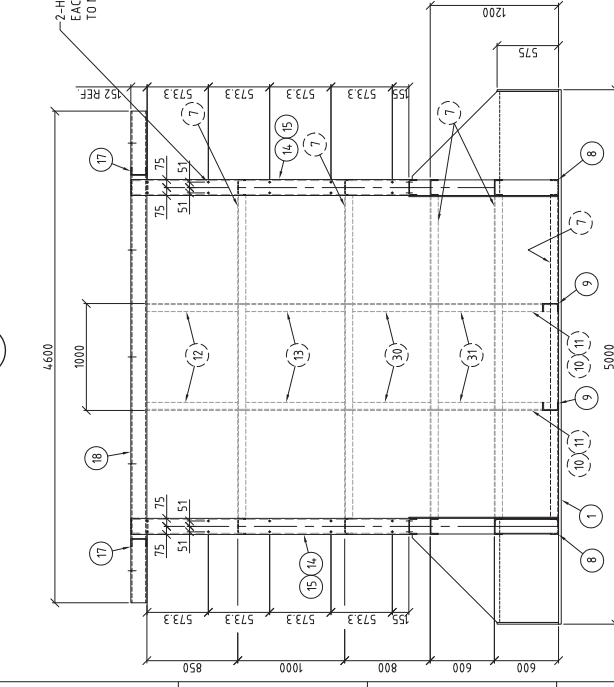
PLAN VIEW - T.O.S. RL 215.300
SCALE 1:25



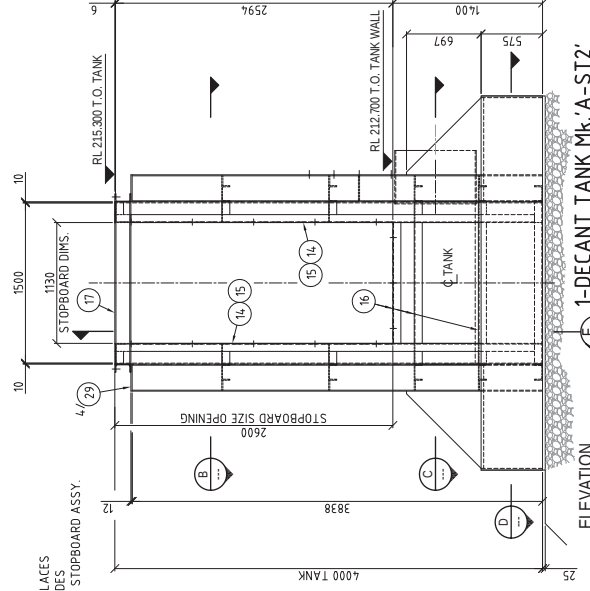
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SCALE 1 : 25



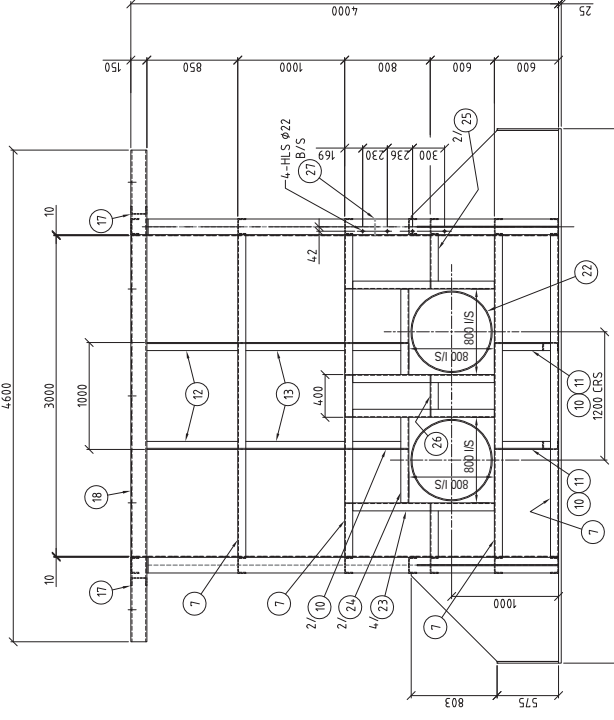
SECTION
SCALE 1 : 25



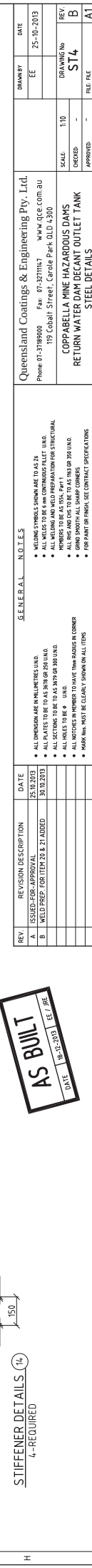
F SECTION
SCALE 1:25

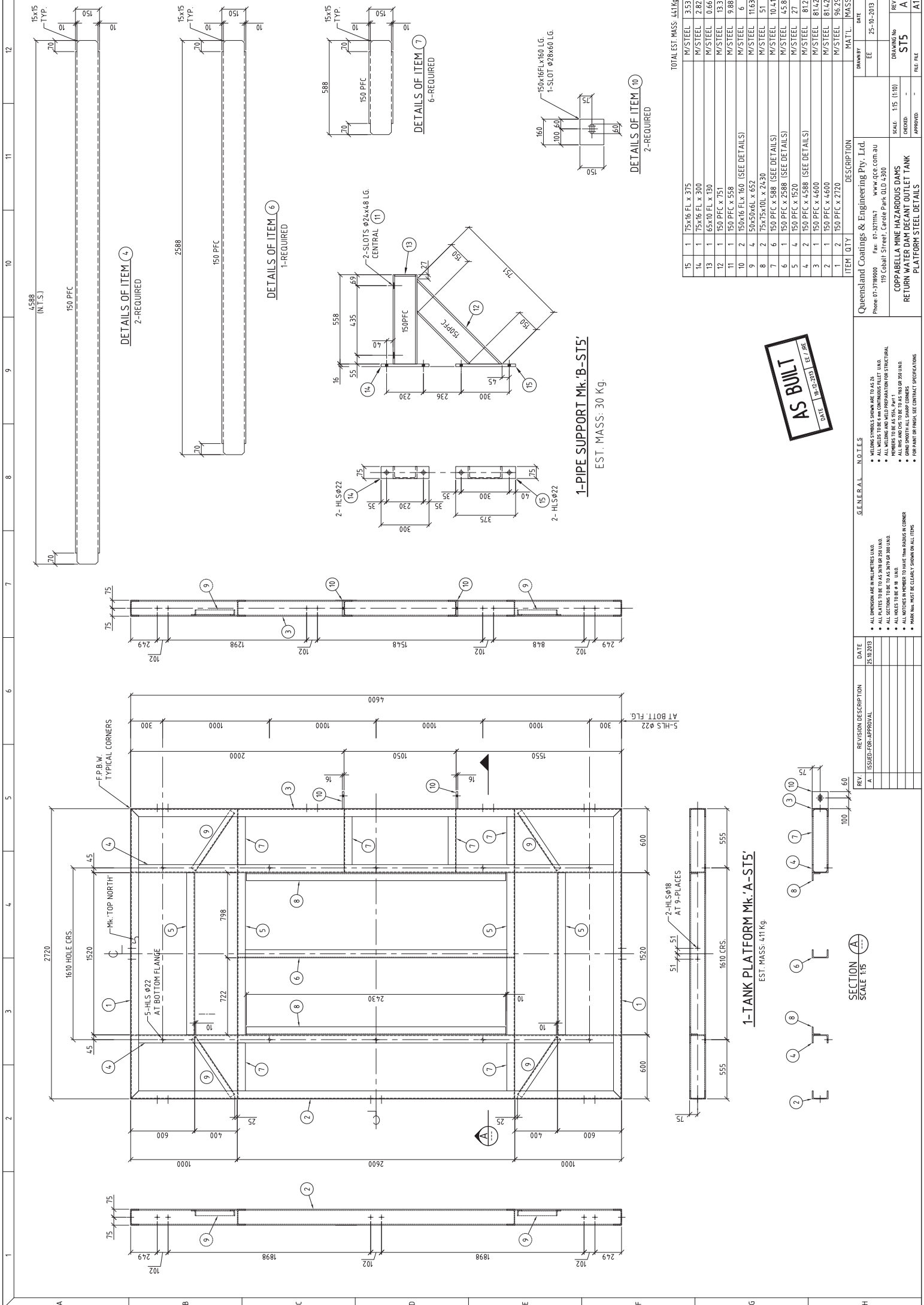


ELEVATION
1-DECANT TANK Mk.'A'-ST2

[illegible]

AS BUILT
DATE 10-12-2013 EE / JRE





AS BUILT
DATE 18-12-2013 REF. 301

TOTAL EST. MASS: 441 Kg		
15	1	75x16 FL x 375
14	1	75x16 FL x 300
13	1	65x10 FL x 150
12	1	150 PFC x 151
11	1	150 PFC x 558
10	2	150x16 FLx 160 (SEE DETAILS)
9	4	50x50x6L x 652
8	2	75x75x10L x 2430
7	6	150 PFC x 588 (SEE DETAILS)
6	1	150 PFC x 2588 (SEE DETAILS)
5	4	150 PFC x 1520 (SEE DETAILS)
4	2	150 PFC x 4588 (SEE DETAILS)
3	1	150 PFC x 4600
2	1	150 PFC x 4600
1	2	150 PFC x 4720

ITEM	QTY	DESCRIPTION	MAT'L	MASS
15	1	75x16 FL x 375	M/STEEL	3.53
14	1	75x16 FL x 300	M/STEEL	2.82
13	1	65x10 FL x 150	M/STEEL	0.66
12	1	150 PFC x 151	M/STEEL	13.3
11	1	150 PFC x 558	M/STEEL	9.88
10	2	150x16 FLx 160 (SEE DETAILS)	M/STEEL	6
9	4	50x50x6L x 652	M/STEEL	11.63
8	2	75x75x10L x 2430	M/STEEL	51
7	6	150 PFC x 588 (SEE DETAILS)	M/STEEL	10.41
6	1	150 PFC x 2588 (SEE DETAILS)	M/STEEL	45.8
5	4	150 PFC x 1520 (SEE DETAILS)	M/STEEL	27
4	2	150 PFC x 4588 (SEE DETAILS)	M/STEEL	81.2
3	1	150 PFC x 4600	M/STEEL	81.42
2	1	150 PFC x 4600	M/STEEL	81.42
1	2	150 PFC x 4720	M/STEEL	96.29

Queensland Coatings & Engineering Pty. Ltd.
Phone 07-37189000 Fax 07-3271147 www.qce.com.au
119 Cobalt Street, Carle Park QLD 4300

GENERAL NOTES
• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
• ALL WELDS TO BE 6MM CONTINUOUS SLOTTED UNLESS OTHERWISE STATED.
• ALL SECTIONS TO BE 4 IN UNLESS OTHERWISE STATED.
• ALL HOLES TO BE 4 IN UNLESS OTHERWISE STATED.
• ALL NOTICES IN MEMBER TO HAVE 10mm RADIUS IN CORNER.
• MARK NUM MUST BE CLEARLY SHOWN ON ALL ITEMS.

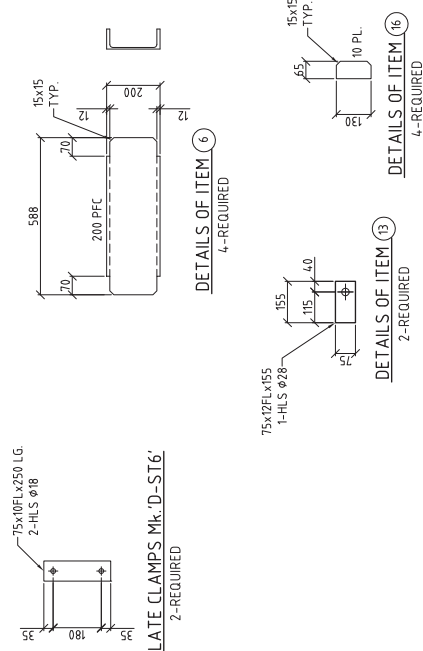
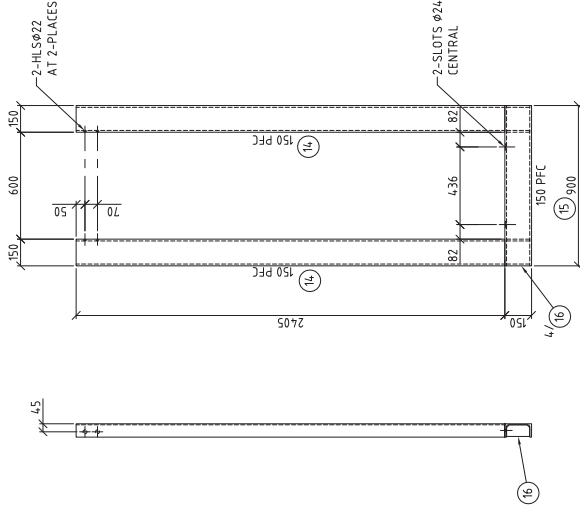
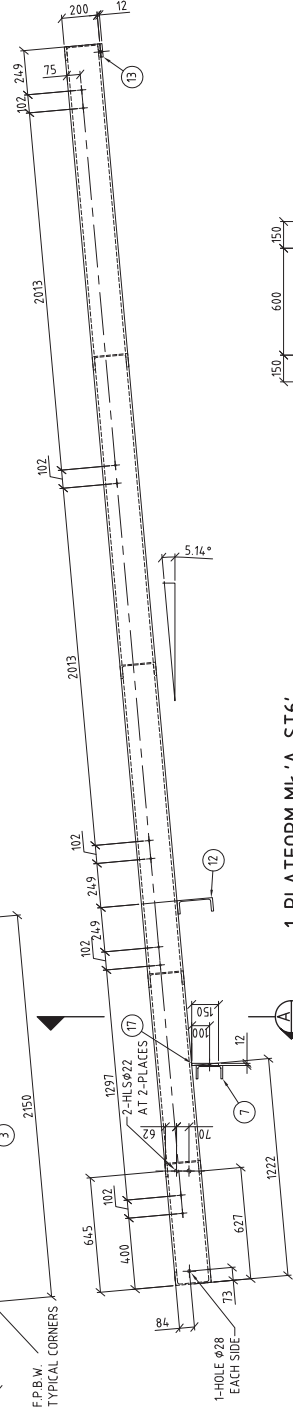
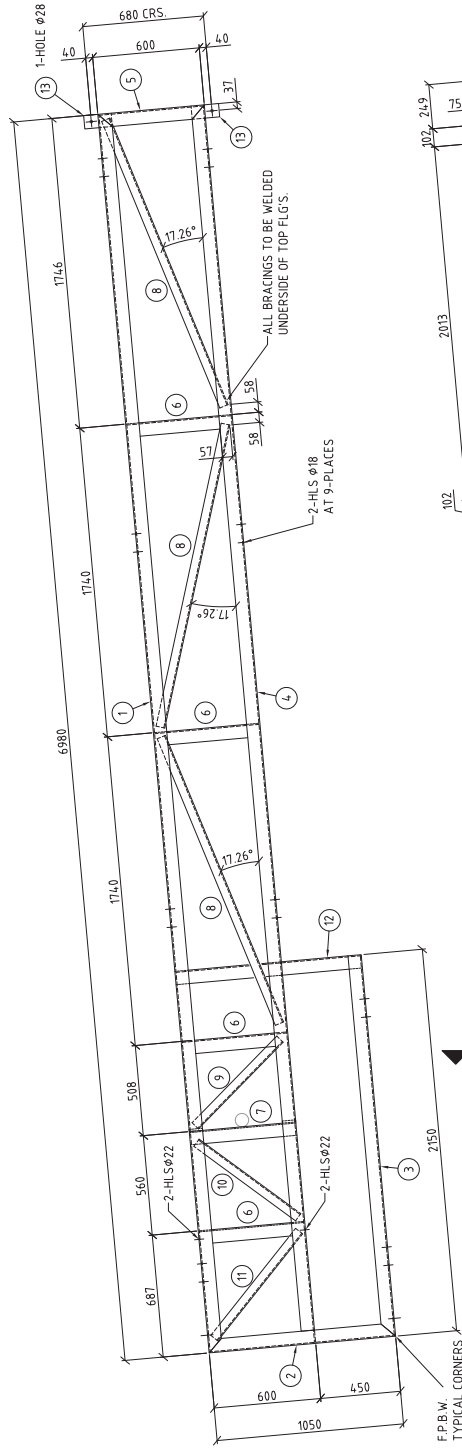
REV	REVISION DESCRIPTION	DATE
A	ISSUED FOR APPROVAL	25/10/2013

SECTION A-A
SCALE 1:15

SECTION B-B
SCALE 1:15

SECTION C-C
SCALE 1:15

SECTION D-D
SCALE 1:15



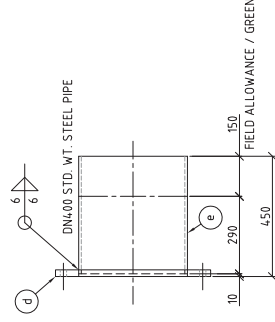
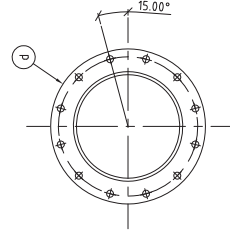
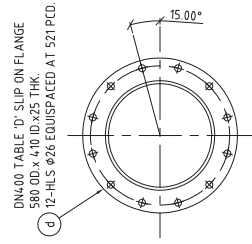
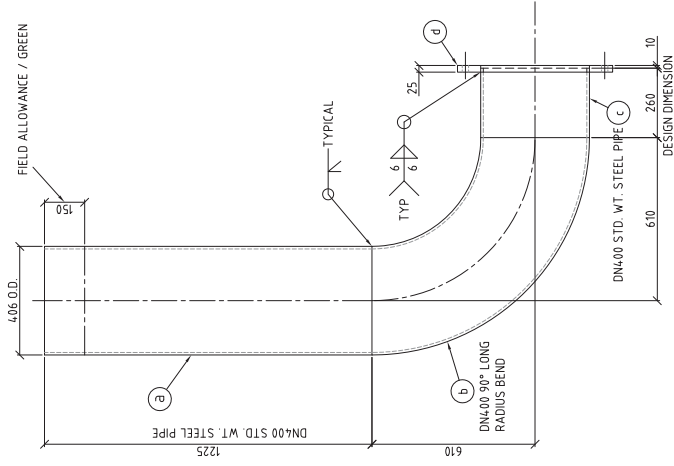
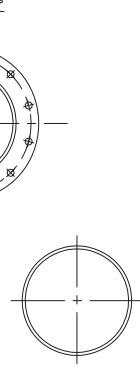
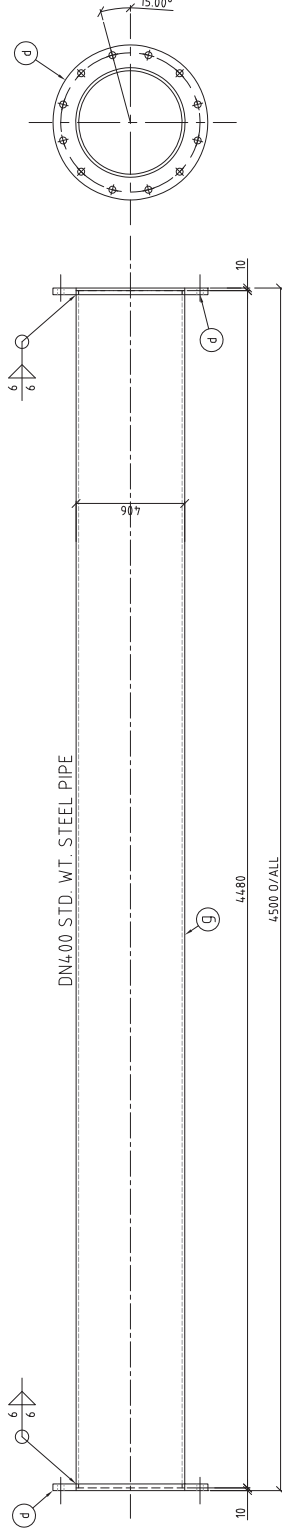
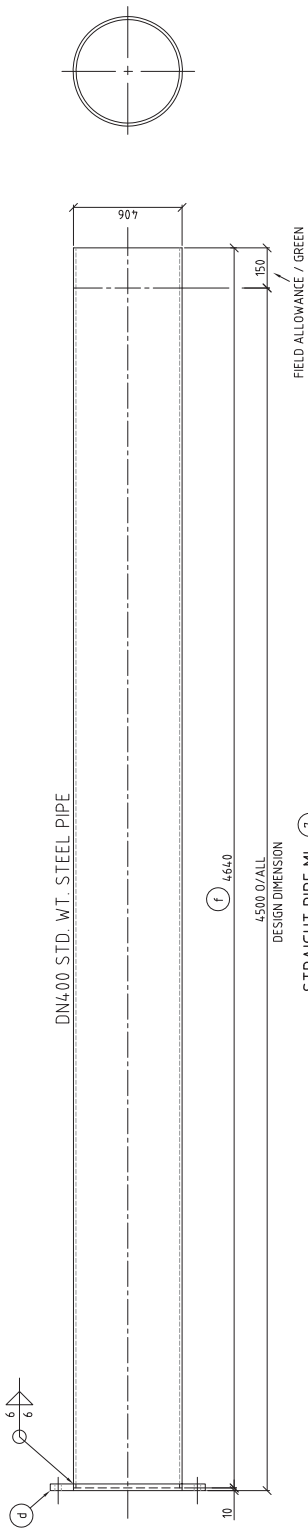
TOTAL EST. MASS: 595 kg		
17	2	75x2FLx150
		M/STEEL 2.65
16	4	65xOFLx130
		M/STEEL 2.65
15	1	150 PFC x 900
		M/STEEL 85.14
14	2	150 PFC x 2405
		M/STEEL 2.65
13	2	75x2FLx155
		M/STEEL 2.4
12	1	200 PFC x 1050
		M/STEEL 3.42
11	1	50x50x6L x 166
		M/STEEL 3.16
10	1	50x50x6L x 708
		M/STEEL 3
9	1	50x50x6L x 680
		M/STEEL 3.38
8	3	50x50x6L x 1740
		M/STEEL 10.62
7	1	150 PFC x 600 (SEE DETAILS)
		M/STEEL 13
6	4	200 PFC x 588
		M/STEEL 13.74
5	1	200 PFC x 600
		M/STEEL 160
4	1	200 PFC x 6974
		M/STEEL 49.2
3	1	200 PFC x 2150
		M/STEEL 2.4
2	1	200 PFC x 1050
		M/STEEL 160
1	1	200 PFC x 6980
		M/STEEL 160



AS BUILT

DATE 18-12-2013 EE / JRE

REV	REVISION DESCRIPTION	DATE	GENERAL NOTES	DESCRIPTION	ITEM ID	DRAWING	DATE
A	ISSUED FOR APPROVAL	25.10.2013	- WELDING SYMBOLS SHOWN ARE TO AS 7.2 - DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED - ALL PAINTS TO BE TO AS 3910 OF 250 UNITS - ALL COPPERS TO BE TO AS 3910 OF 300 UNITS - ALL WELDS TO BE TO AS 3910 OF 300 UNITS - ALL NOTICES IN MEMBERS TO HAVE TEN RADIUS AT CORNER - MARKING MUST BE CLEARLY SHOWN ON ALL ITEMS	Queensland Coatings & Engineering Pty. Ltd Phone 07-3789000 Fax 07-3279143 www.qcc.com.au 179 Cobbold Street, Carole Park QLD 4300	EE	25-10-2013	
B	SECTION DETAILS APPROVED	04.11.2013					
C	SECTION DETAILS APPROVED	19.12.2013					
D	ITEMS 6 & 7 - REVISION TO MATCH HAZT MAT'L	19.12.2013					
E	C-155 6 & 7 - 510 ADVISED TO AS 3910 OF 300 UNITS	02.22.2013					
F	C-155 6 & 7 - 510 ADVISED TO AS 3910 OF 300 UNITS	02.22.2013					
G	WELDS TO SECTION A - 510 ADVISED TO AS 3910 OF 300 UNITS	04.12.2013					
H	WELDS TO SECTION A - 510 ADVISED TO AS 3910 OF 300 UNITS	04.12.2013					



NOTE: FOR ASSEMBLY, REFER TO:
PEABODY ENERGY AUSTRALIA PTY LTD
Drg. No. 41-2652-C015

LONG RADIUS BEND PIPE Mk. 14
1-REQUIRED

STRAIGHT PI
1-REQUIRED

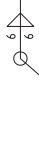
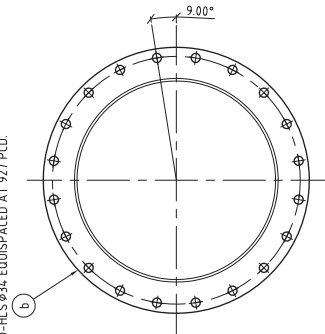
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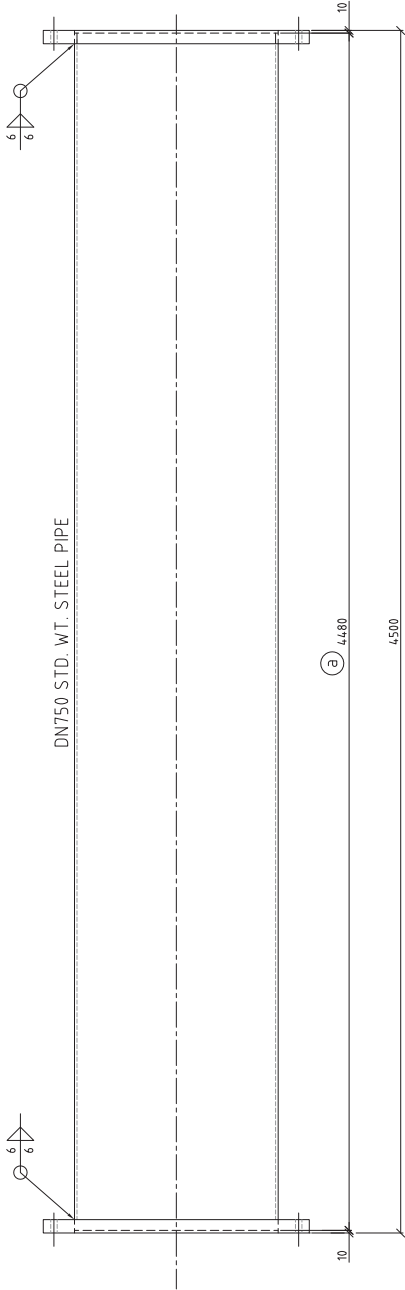
AS BUILT

DATE	18-12-2013	EE / JRE
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DN750 TABLE 'D' SLIP ON FLANGE
995.00 x 766.10 x 50 THK
20-PLS Ø34 EQUISPACED AT 927 PCO.



DN750 STD. WT. STEEL PIPE

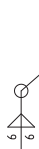
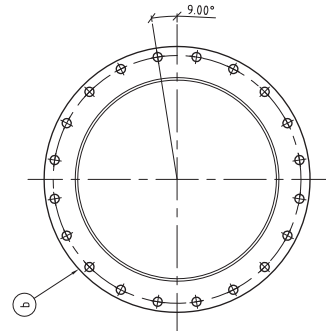


(a) 4480

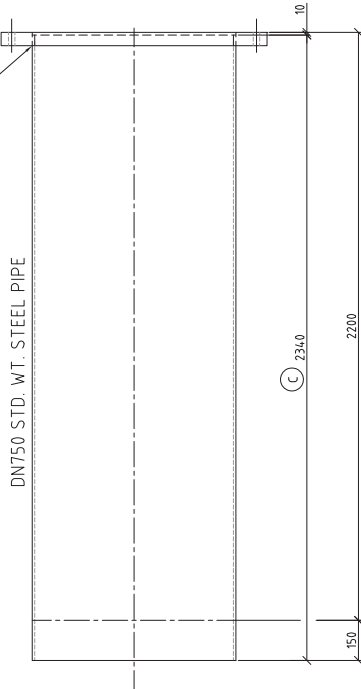
DESIGN DIMENSION

STRAIGHT PIPE Mk. (5)
4-REQUIRED

NOTE: FOR ASSEMBLY, REFER TO:
PEABODY ENERGY AUSTRALIA PTY LTD
Drg. No. 41-2652-C015



DN750 STD. WT. STEEL PIPE



(c) 734.0

DESIGN DIMENSION

STRAIGHT PIPE Mk. (10)
2-REQUIRED

FIELD ALLOWANCE / GREEN

AS BUILT
DATE: 19-12-2013 EE / RE

REV	REVISION DESCRIPTION	DATE	GENERAL NOTES	Queensland Coatings & Engineering Pty. Ltd. Phone 07-37189000 Fax: 07-32711477 www.qce.com.au 119 Cobbold Street, Carle Park QLD 4300	DRAWING No ST9	REV D
A	ISSUED FOR APPROVAL	18.11.2013	• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED			
B	STRAIGHT PIPE 'S' LENGTH REVISED	19.11.2013	• ALL WELDING SHALL BE TO AS 1554			
C	150mm FIELD ALLOWANCE / GREEN ADDED	19.11.2013	• ALL SECTIONS TO BE WET TO AS 1554 FOR 300 UNITS			
D	STRAIGHT PIPE 'S' REVISED	04.12.2013	• ALL HOLES TO BE Ø 34 UNLESS OTHERWISE SPECIFIED			
			• ALL NOTICES IN MEMBER TO HAVE 10mm RADIUS IN CORNER			
			• MARKING MUST BE CLEARLY SHOWN ON ALL ITEMS			
			• FOR PAINT OR FINISH, SEE CONTRACT SPECIFICATIONS			
			• FOR WELDING, SEE CONTRACT SPECIFICATIONS			
			• ALL WELDING SHALL BE TO AS 1554			
			• ALL SECTIONS TO BE WET TO AS 1554 FOR 300 UNITS			
			• ALL HOLES TO BE Ø 34 UNLESS OTHERWISE SPECIFIED			
			• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED			

	1	2	3	4	5	6	7	8	9	10	11	12
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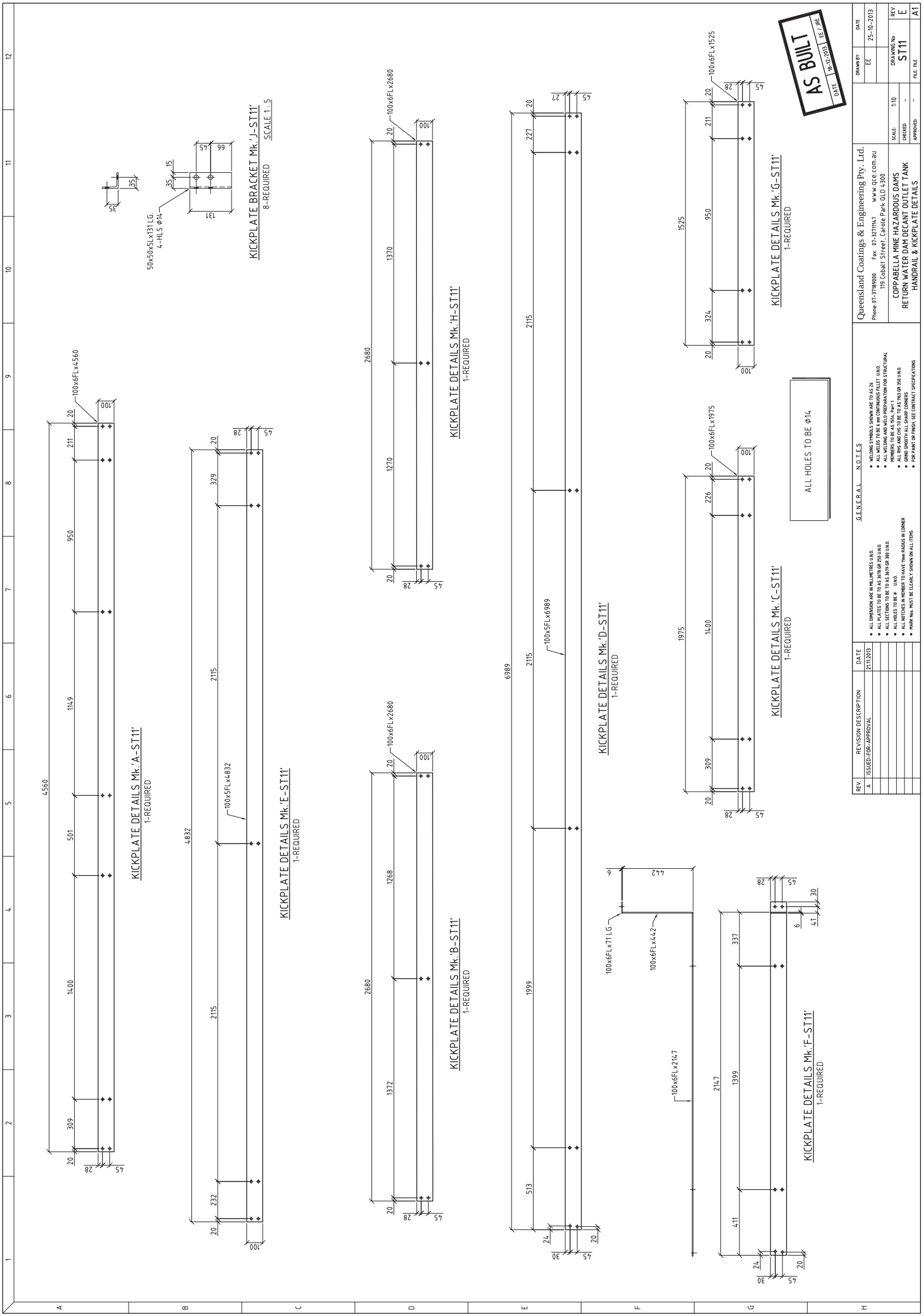
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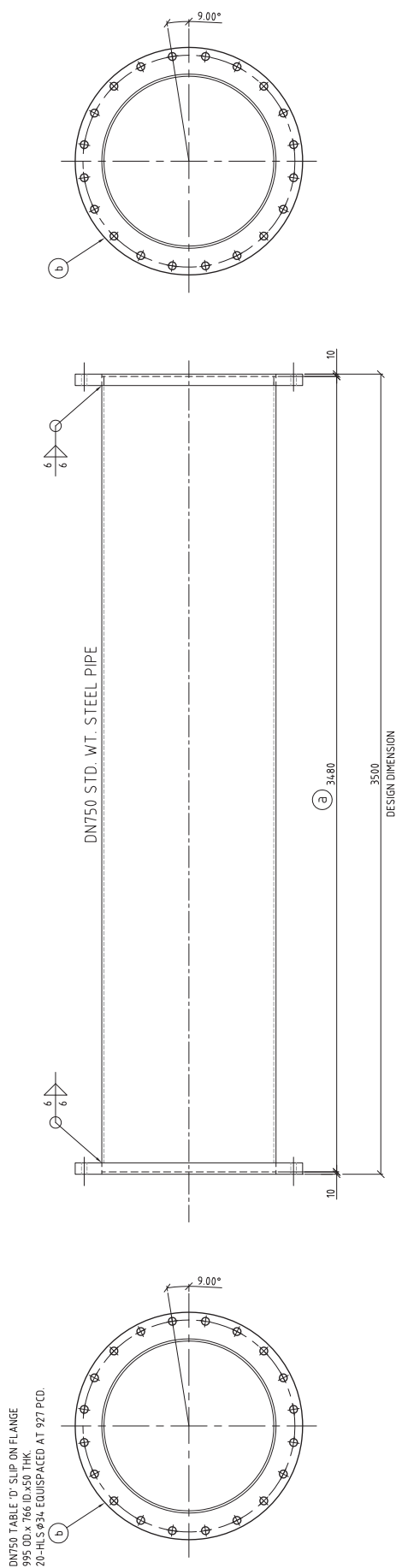


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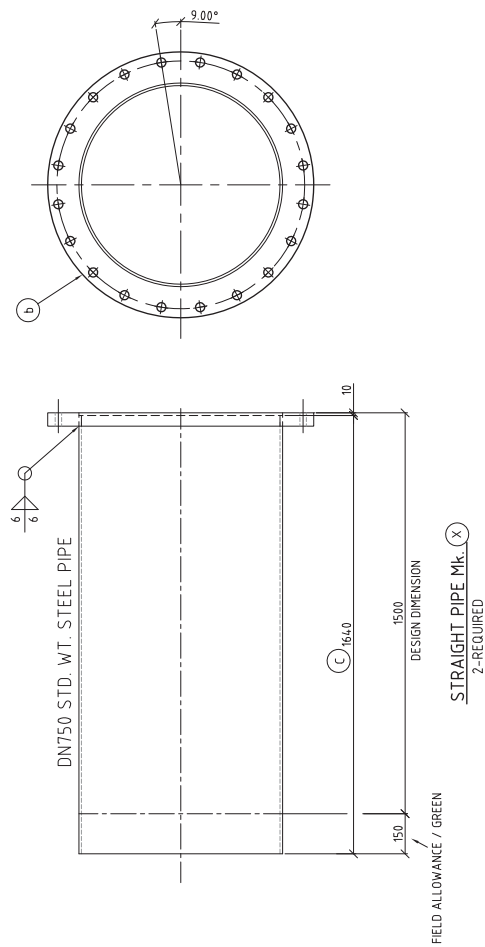
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STRAIGHT PIPE MK. 8
4--REQUIRED

NOTE: FOR ASSEMBLY, REFER TO:
PEABODY ENERGY AUSTRALIA PTY LTD
Drg. No. 41-2652-C015



STRAIGHT PIPE Mk. (X)
2-REQUIRED



AS BUILT

DATE 18-12-2013 EE / JRE

[illegible]