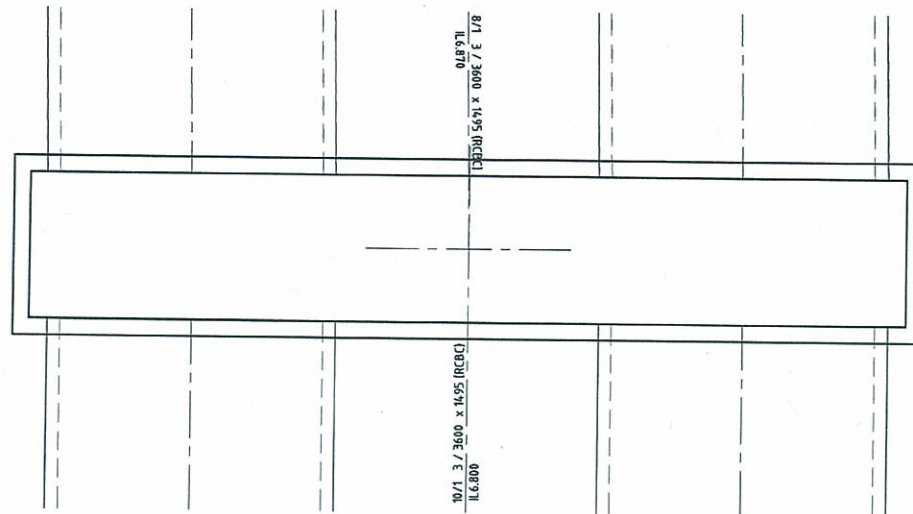
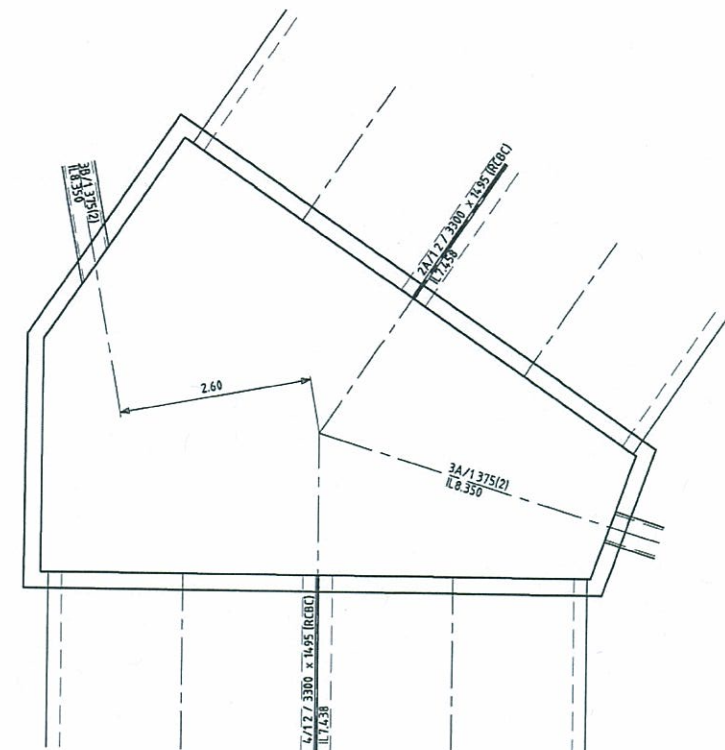


FOR TYPICAL CHAMBER STRUCTURAL
DETAILS REFER DWG C2326



9/1 - 2000 x 12000SL 9.000

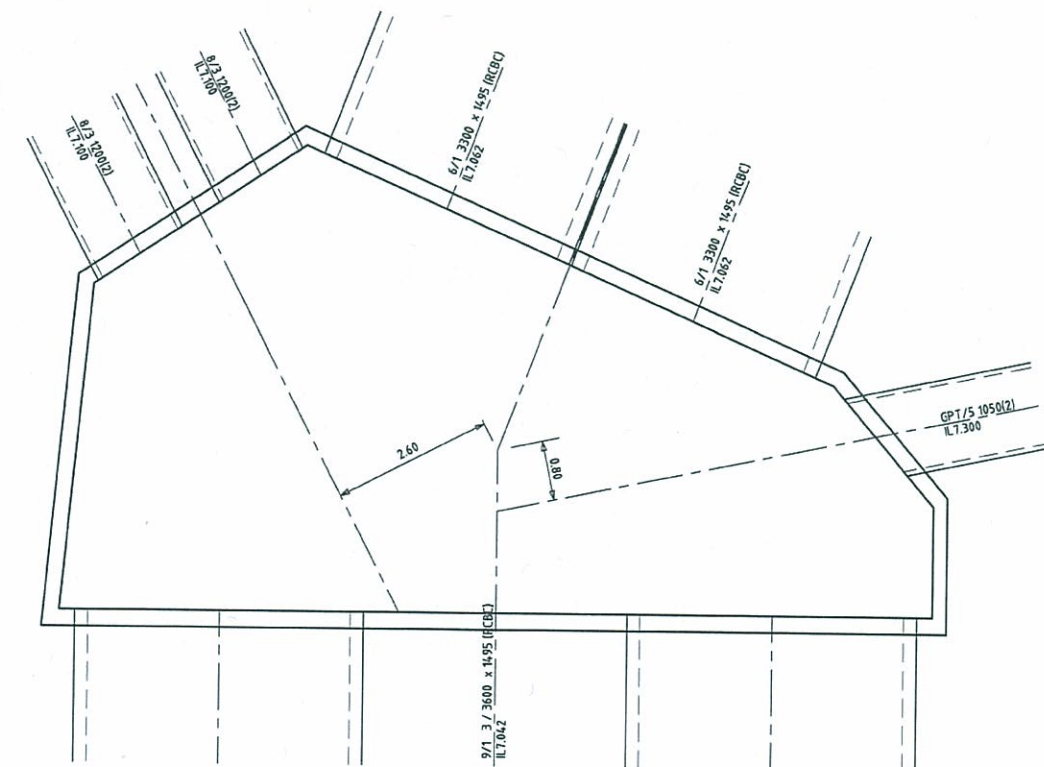


3/1 - 3000 x 8000SL 9.881

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL
23 DEC 2013
MEDQ



10/1 - 4000 x 12500SL 9.000



8/1 - 3000 x 12000SL 9.354

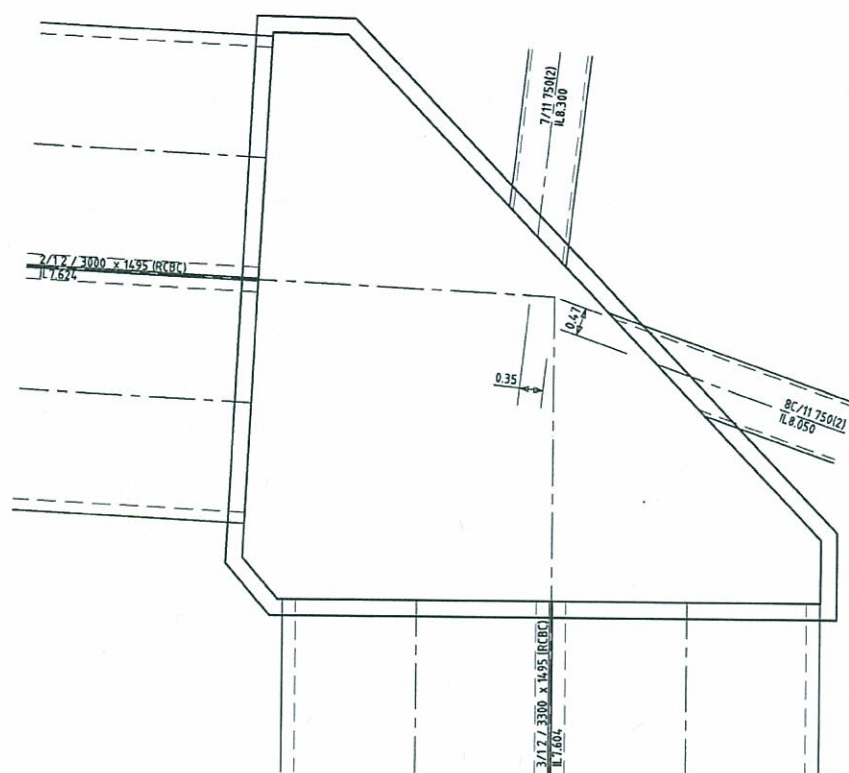
01 ISSUE FOR OPW APPROVAL		BD	14/10/13	Scale 0 0.5 1 2 3 4 5m 1:50		Surveyor BENNETT • BENNETT Property Consultants, Surveyors & Town Planners All mail to: P.O. Box 5021, GCMC, Qld. 9720 mail@bennettandbennett.com.au BEN Pty. Ltd. A.C.N. 610 427 631 COOMERA OFFICE 8 Jewell Street, COOMERA, 4223 Ph (07) 5573 6177 Fax (07) 5529 4242		Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		Status FOR APPROVAL CONSTRUCTION SUBJECT TO COUNCIL APPROVAL Approved <i>[Signature]</i> R.E.P.G. No: 8677 Scales 1:50 Original Size A1 Height Datum AHD Grid MGA		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE Title STORMWATER MANHOLE DETAILS - SHEET 4 OF 5		 HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P.O. Box 1053 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
Issue Description				Author	Date	Filename: C2318-C2325-AA005621-SWD MANHOLE.DWG		Copyright reserved 14/Oct/2013 1:37 PM		Drawing No. C2321		Project No. AA005621		Issue 01	

FOR TYPICAL CHAMBER STRUCTURAL
DETAILS REFER DWG C2326

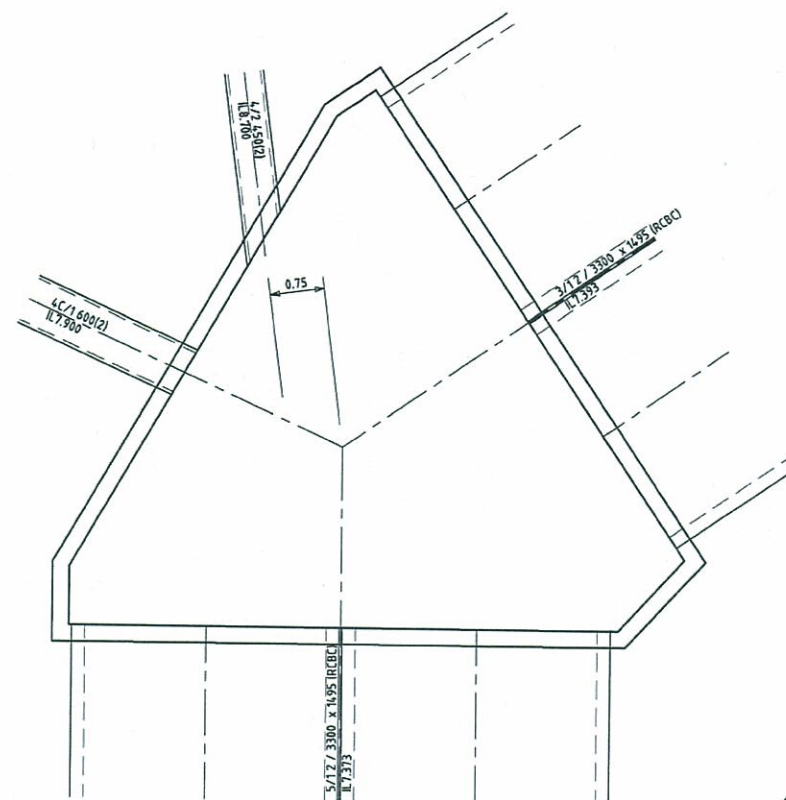
PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

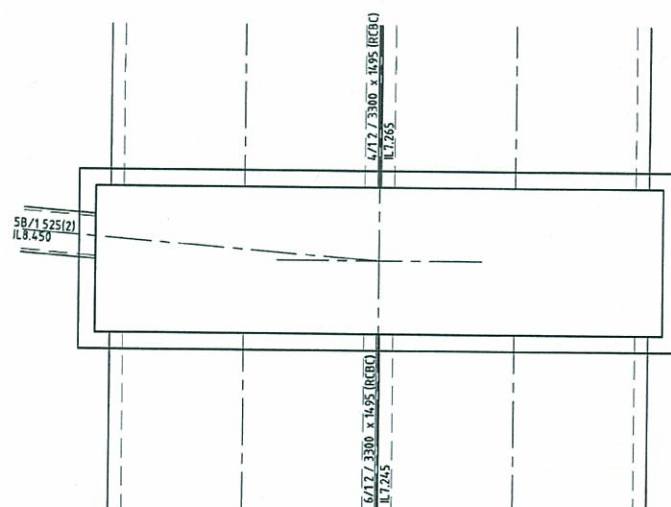
MEDQ



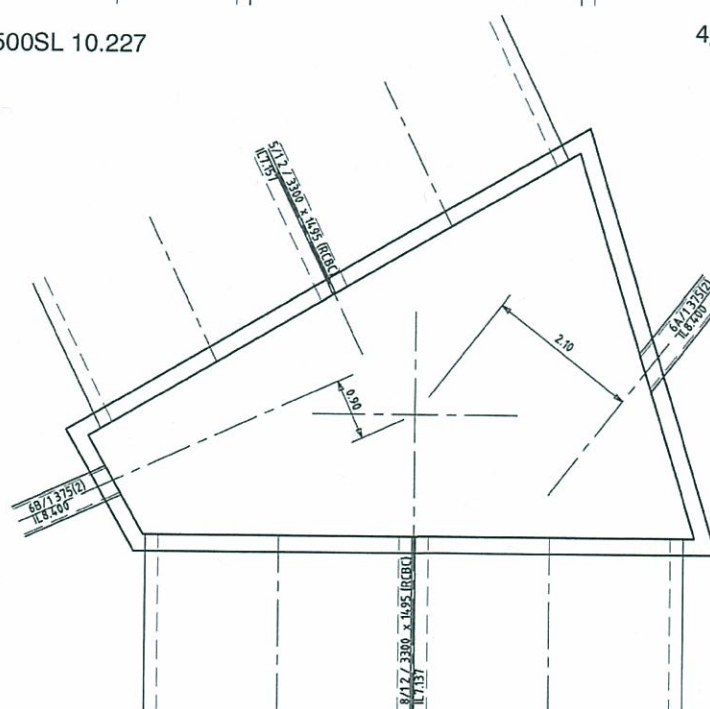
2A/1 - 2000 x 8500SL 10.227



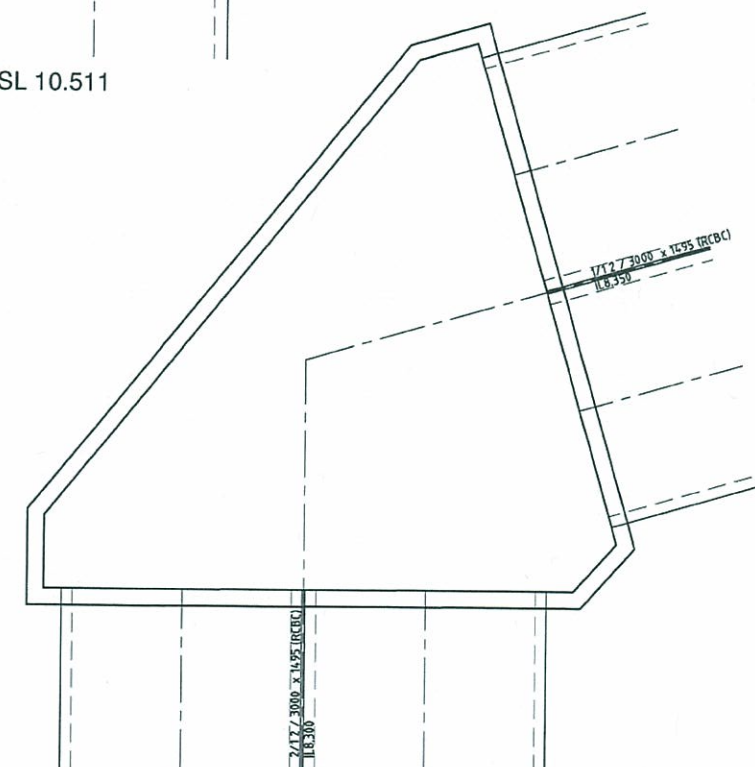
4/1 - 2100 x 8000SL 10.511



5/1 - 2000 x 7750SL 10.235



6/1 - 3000 x 8000SL 10.016



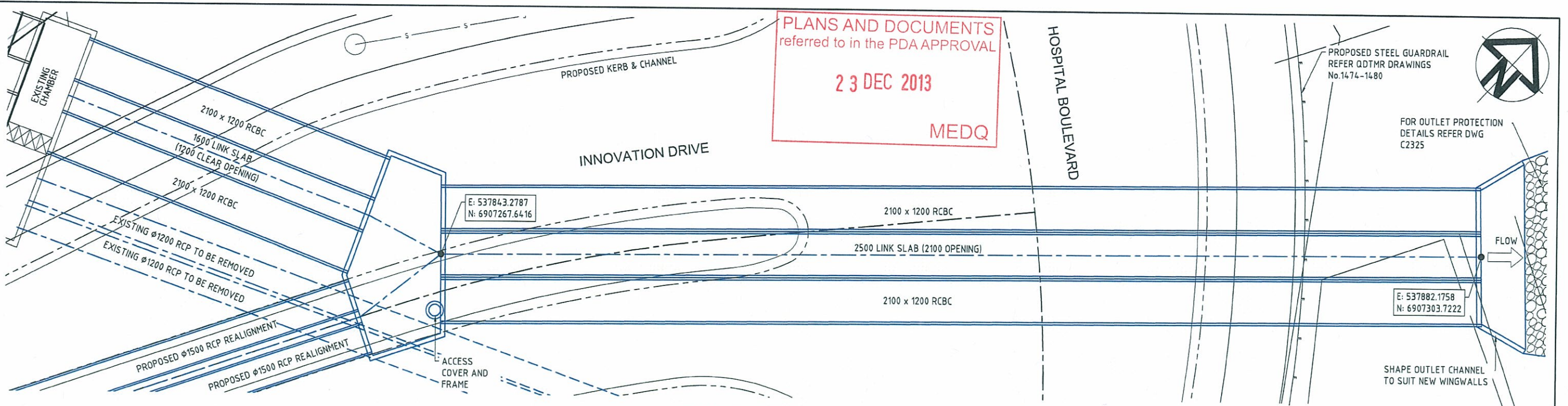
1A/1 - 2100 x 7000SL 10.771

01 ISSUE FOR DPW APPROVAL		BD	14/10/13
Issue	Description	Author	Date
100mm on Original			
Scale 0 0.5 1 2 3 4 5m 1:50		Surveyor BENNETT • BENNETT Property Consultants, Surveyors & Town Planners All mail to: PO Box 5021, GCMC, QLD 9726 mail@benbennettandbenbennett.com.au 88th Flr, Lmk A/CN 650 427 521	
Architect ARCHIPELAGO Filename: C2318-C2325-AA005621-SWD MANHOLE.DWG		Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING	
Status FOR APPROVAL CONSTRUCTION SUBJECT TO COUNCIL APPROVAL Approved <i>[Signature]</i> R.E.P.Q No: 8677		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE	
Scales 1:50 Original Size A1 Height Datum AHD Grid MGA		Current Issue Signatures Author B DAVEY Designer T DINGLE Reviewer B THOMPSON	
Title STORMWATER MANHOLE DETAILS - SHEET 5 OF 5		Drawing No. C2322	
Project No. AA005621		Issue 01	
HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com			

14/Oct/2013 1:37 PM

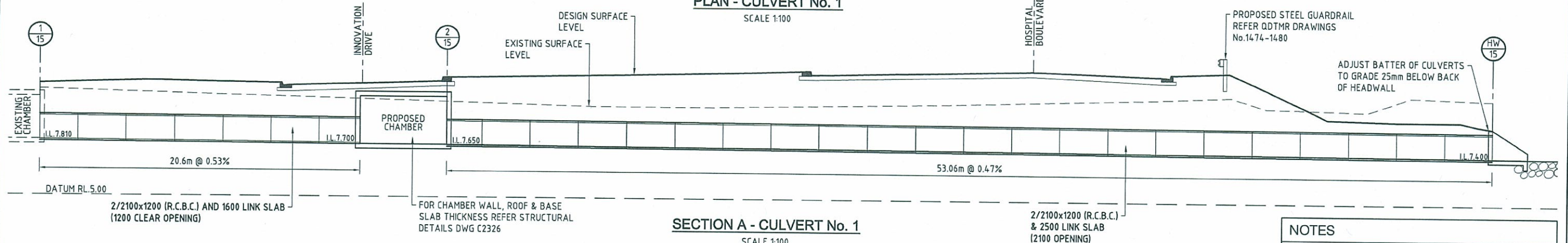
\\hrc-aus-gc-fs-01\jobs\AA005621\VE-CAD\VC-Civil\0-Final\C2318-C2325-AA005621-SWD MANHOLE.dwg

V1



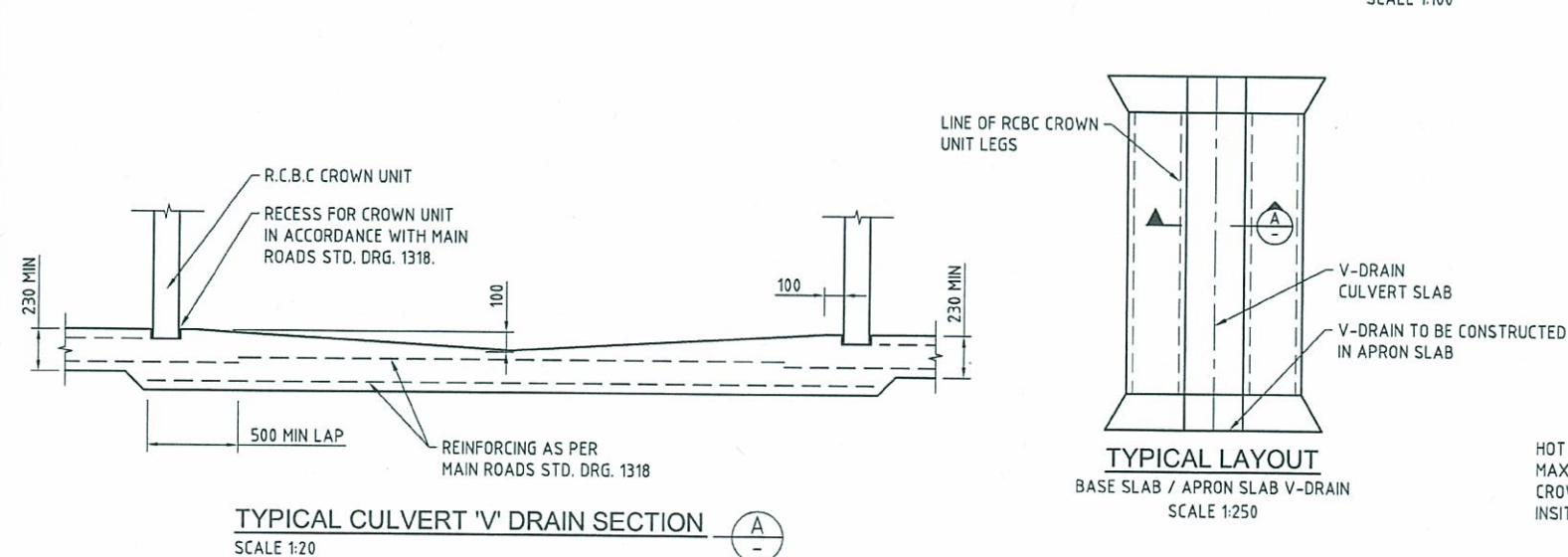
PLAN - CULVERT No. 1

SCALE 1:100



SECTION A - CULVERT No. 1

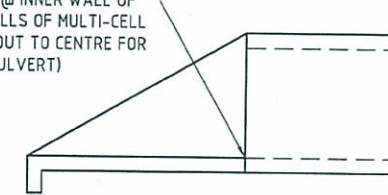
SCALE 1:100



TYPICAL CULVERT 'V' DRAIN SECTION

SCALE 1:20

SETOUT POINT @ INNER WALL OF OUTERMOST CELLS OF MULTI-CELL CULVERT (SETOUT TO CENTRE FOR SINGLE-CELL CULVERT)



SETOUT DETAIL

SCALE N.T.S.

FOR SPANNING SLAB DETAILS REFER MAIN ROADS STD DWG 1172

APPROVED 10mm BITUMEN IMPREGNATED COMPRESSIBLE FILLER

R.C.B.C. CROWN UNIT

HOT DIP GALV N12 LOCATING BARS AT MAX 1500 CTS EPOXY BAR 150 INTO CROWN UNIT COG 300 INTO CAST INSITU RELIEVING SLAB.

SPANNING SLAB CONNECTION DETAIL

SCALE N.T.S.

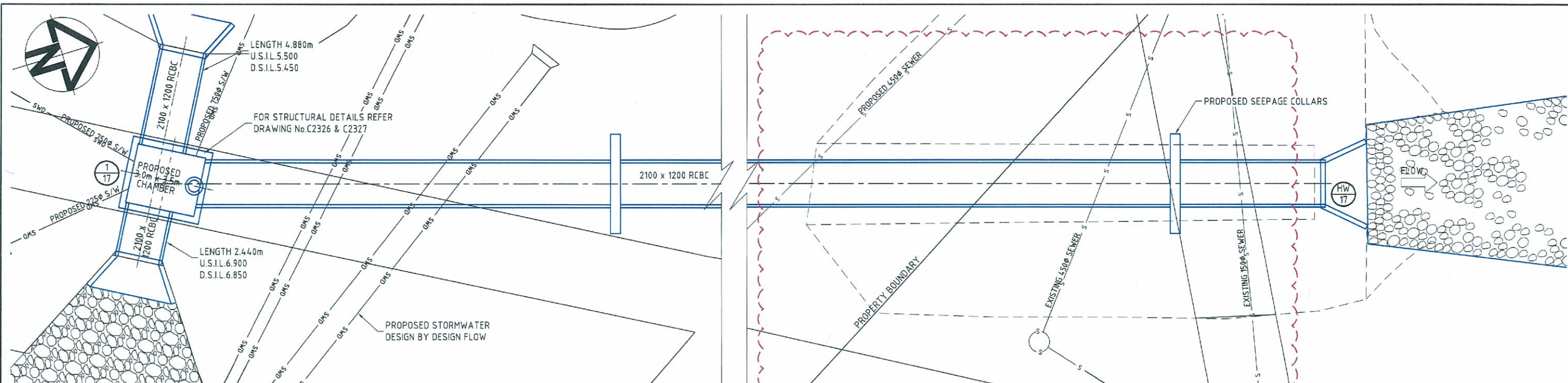
NOTES

- CULVERT & HEADWALLS TO BE CONSTRUCTED IN ACCORDANCE WITH GCCC STD DRG. 05-03-202 & QDTMR STD DRG'S: 1174, 1303, 1304, 1305, 1316, 1318, 1319 & 1320.
- STANDARD SINGLE CELL BOX CULVERT DETAILS ARE: 2.40m LONG x 2.10m WIDE x 1.20m HIGH HUMES PRECAST REINFORCED BOX CULVERT (OR EQUAL).
- PROVIDE HIGH FLOW SCOUR RIP RAP PROTECTION TO BOTH INLET & OUTLET. NOMINAL Ø400 STONE AND MINIMUM LAYER THICKNESS 800mm ON APPROVED GEOFABRIC. EXTENT AS SHOWN ON PLAN.
- LOCALISED EARTHWORKS AROUND CULVERT HEADWALLS TO BE NO STEEPER THAN 1 in 2.
- PROVIDE 'B' GRADE TURF TO BATTERS AROUND CULVERT HEADWALLS. EXTENT AS SHOWN ON PLAN.
- SPANNING SLABS TO BE HUMES PRE-CAST SPANNING SLABS (OR EQUAL).
- APRON TO GRADE DOWN TO 'V' DRAIN BUILT IN. REFER TYPICAL DETAILS.

WARNING - BEWARE OF UNDERGROUND SERVICES

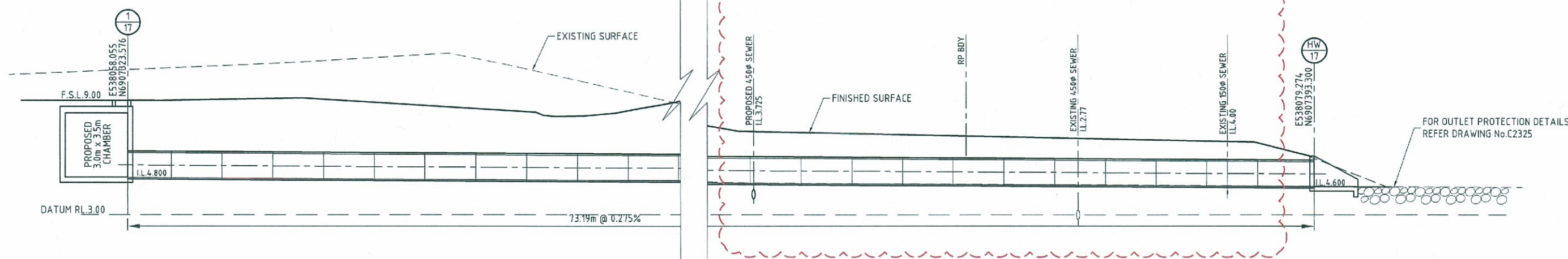
THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM KNOWN POSITIONS OF VALVES, MANHOLES ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

						Surveyor BENNETT + BENNETT Property Consultants, Surveyors + Town Planners All mail to: PO Box 5021, GCMC, Qld 9726 ma@bennettandbennett.com.au BDH Pty Ltd A.C.N. 618 427 831 COOMERA OFFICE 9 Jewett Street Coomera, 4209 Ph (07) 5573 6177 Fax (07) 5523 4542		Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		Status FOR APPROVAL CONSTRUCTION SUBJECT TO COUNCIL APPROVAL Approved  R.E.P.G. No: 8677 Scales AS SHOWN Current Issue Signatures Author B.DAVEY Designer T.DINGLE Reviewer B.THOMPSON Grid MGA Copyright reserved		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE STORMWATER CULVERT DETAILS - SHEET 1 OF 2		Hyder HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
01 ISSUE FOR OPW APPROVAL		BD 14/10/13		AS SHOWN		ARCHIPELAGO		DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		R.E.P.G. No: 8677		TRUNK INFRASTRUCTURE		HYDER CONSULTING PTY. LTD	
Issue Description		Author Date		Scale		Architect		DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		R.E.P.G. No: 8677		STORMWATER CULVERT DETAILS - SHEET 1 OF 2		HYDER CONSULTING PTY. LTD	
						Filename: C2318-C2325-AA005621-SWD MANHOLE.DWG				R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	
										R.E.P.G. No: 8677				HYDER CONSULTING PTY. LTD	



PLAN - CULVERT No. 2 - LINE 17

SCALE 1:100



SECTION B - CULVERT No. 2 - LINE 17

SCALE 1:100

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

MEDQ

NOTES

1. CULVERT & HEADWALLS TO BE CONSTRUCTED IN ACCORDANCE WITH GCCC STD DRG. 05-03-202 & QDTMR STD DRG'S: 1174, 1303, 1304, 1305, 1316, 1318, 1319 & 1320.
2. STANDARD SINGLE CELL BOX CULVERT DETAILS ARE: 2.40m LONG x 2.10m WIDE x 1.20m HIGH HUMES PRECAST REINFORCED BOX CULVERT (OR EQUAL).
3. PROVIDE HIGH FLOW SCOUR RIP RAP PROTECTION TO BOTH INLET & OUTLET. NOMINAL Ø400 STONE AND MINIMUM LAYER THICKNESS 800mm ON APPROVED GEOFABRIC. EXTENT AS SHOWN ON PLAN.
4. LOCALISED EARTHWORKS AROUND CULVERT HEADWALLS TO BE NO STEEPER THAN 1 in 2.
5. PROVIDE 'B' GRADE TURF TO BATTERS AROUND CULVERT HEADWALLS. EXTENT AS SHOWN ON PLAN.
6. SPANNING SLABS TO BE HUMES PRE-CAST SPANNING SLABS (OR EQUAL).
7. APRON TO GRADE DOWN TO 'V' DRAIN BUILT IN. REFER TYPICAL DETAILS.

WARNING - BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN INTERPOLATED FROM KNOWN POSITIONS OF VALVES, MANHOLES ETC. OR INFORMATION SUPPLIED BY SERVICE AUTHORITIES. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF THE INTERPOLATED INFORMATION SUPPLIED. ENSURE ALL SERVICES ARE ACCURATELY LOCATED PRIOR TO COMMENCEMENT OF WORK.

						BENNETT • BENNETT Property Consultants, Surveyors + Town Planners All mail to: PO Box 5021 GCMC, Qld 9726 tel: (07) 5521 4177 mal@bennettandbennett.com.au 800-Top-Map, US: 1-800-252-4281 COOMERA OFFICE 9 Janet Street Coomera 4259 Ph (07) 5521 4177 Fax (07) 5521 4342		Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		Status FOR APPROVAL NOT FOR CONSTRUCTION Approved REP ID No: 8677 Scales 1:100 Original Size A1 Height Datum AHD Grid MGA Current Issue Signatures Author B.DAVEY Designer T.DINGLE Reviewer B.THOMPSON © Copyright reserved		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE Title STORMWATER CULVERT DETAILS - SHEET 2 OF 2		Hyder HYDER CONSULTING PTY. LTD. ABN 78 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com Drawing No. C2324 Project No. AA005621 Issue 02	
02 SEWER CROSSINGS ADDED BD 20/11/13 01 ISSUE FOR OPW APPROVAL BD 14/10/13		Scale 0 1 2 4 6 8 10m 1 : 100		Architect ARCHIPELAGO Filename: C2318-C2325-AA005621-SWD MANHOLE.DWG											
Issue Description Author Date															



EXISTING OPEN CHANNEL

PLAN - INLET 1/1

SCALE 1:100

PROPOSED INLET POND

PLAN - OUTLET HW/1

SCALE 1:100

ROCK GRADATION TABLE

SMALLEST DIMENSIONS IN (mm)					% OF ROCK SMALLER THAN SIZE SHOWN
200d ₅₀	300d ₅₀	400d ₅₀	500d ₅₀	600d ₅₀	
380	525	630	750	850	100
300	450	550	650	750	50-70
200	300	400	500	600	35-50
75	100	130	150	175	2-10

PLANS AND DOCUMENTS referred to in the PDA APPROVAL

23 DEC 2013

MEDQ

PLAN - OUTLET HW/17

SCALE 1:250

OUTLET / INLET PROTECTION TABLE

HEADWALL No.	PIPE SIZE	VELOCITY	LENGTH OF PROTECTION	WIDTH OF PROTECTION	NOMINAL ROCK SIZE	THICKNESS OF PROTECTION
	D	V	L	W	d ₅₀	T
HW/1	3/3600x1500 RCBC	1.82	-	-	300	600
HW/15	3/2100x1200 RCBC	3.10	-	-	400	800
1/1	2/3000x1500 RCBC	1.41	-	-	300	600
HW/17	2400x1200 RCBC	4.30	29.0	6.0/13.50	600	1200

PLAN - OUTLET HW/15

SCALE 1:100

NOTE: STORMWATER OUTLETS TO BLEND NEATLY WITH EXISTING TOPOGRAPHY AND TO BE LANDSCAPED TO BLEND WITH NATURAL ENVIRONMENT.

STONE PITCHING Ø200 STONE (NOM)

TYPICAL STORMWATER OUTLET SECTION

N.T.S

TYPICAL STORMWATER OUTLET PLAN

N.T.S

OUTLET SETOUT TABLE

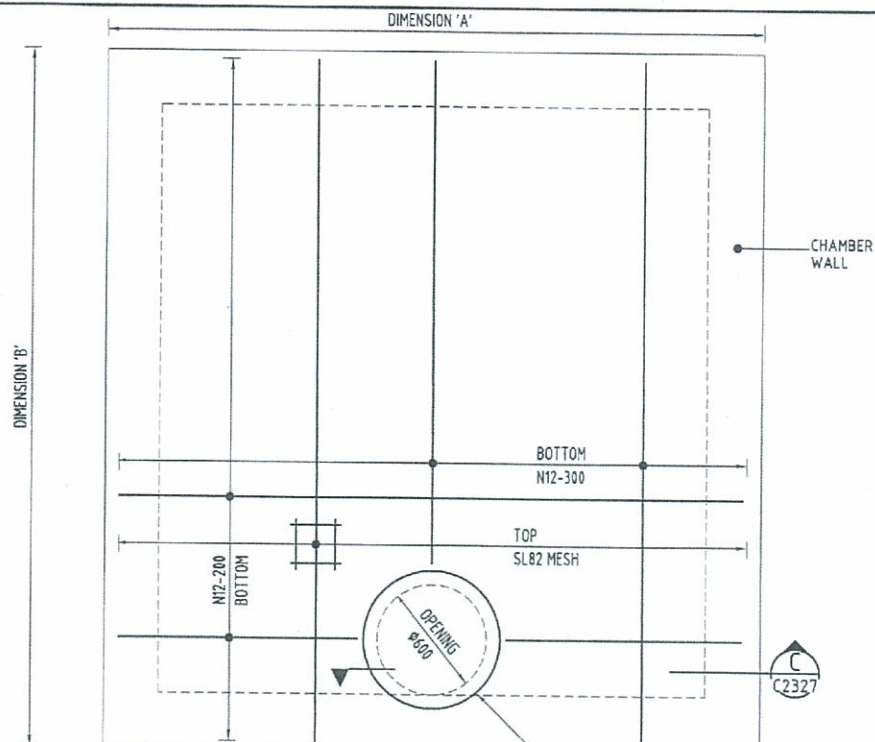
POINT	EASTING	NORTHING
1	538115.223	6906757.616
2	538118.197	6906757.222
3	538127.686	6906748.890
4	538127.454	6906747.142
5	538117.674	6906736.309
6	538109.247	6906743.886
7	538114.787	6906754.322
8	538057.718	6907279.664
9	538060.663	6907287.715
10	538062.700	6907285.099
11	538071.745	6907277.102
12	538071.441	6907292.634
13	537883.934	6907320.785
14	537889.038	6907319.484
15	537898.179	6907311.256
16	537894.123	6907303.155
17	538077.028	6907396.139
18	538081.480	6907424.976
19	538094.447	6907421.218
20	538082.791	6907394.469
21	538056.132	6907284.691
22	538078.969	6907284.890

02 EXTENT OF ROCKS & DETAILS AMENDED BD 20/11/13 01 ISSUE FOR DPW APPROVAL BD 14/10/13 Issue Description Author Date		Scale 1:100 0 1 2 4 6 8 10m	Surveyor BENNETT • BENNETT Property Consultants, Surveyors • Town Planners All mail to: PO Box 5021, GCMC, Qld. 9726 mail@bennebbennett.com.au BBN Pty. Ltd. A/CN 055 427 531	Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING	Status FOR APPROVAL NOT FOR CONSTRUCTION Approved <i>[Signature]</i> R.E.P.D. No. 8577 Scales 1:100 Original Size A1 Height Datum AHD Grid MGA Copyright reserved	Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE STORMWATER OUTLET & INLET PROTECTION DETAILS	Hyder HYDER CONSULTING PTY. LTD ABN 76 104 485 288 P.O. Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 9933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com
Filename: C2318-C2325-AA005621-SWD MANHOLE.DWG			Architect ARCHIPELAGO		Drawing No. C2325 Project No. AA005621 Issue 02		

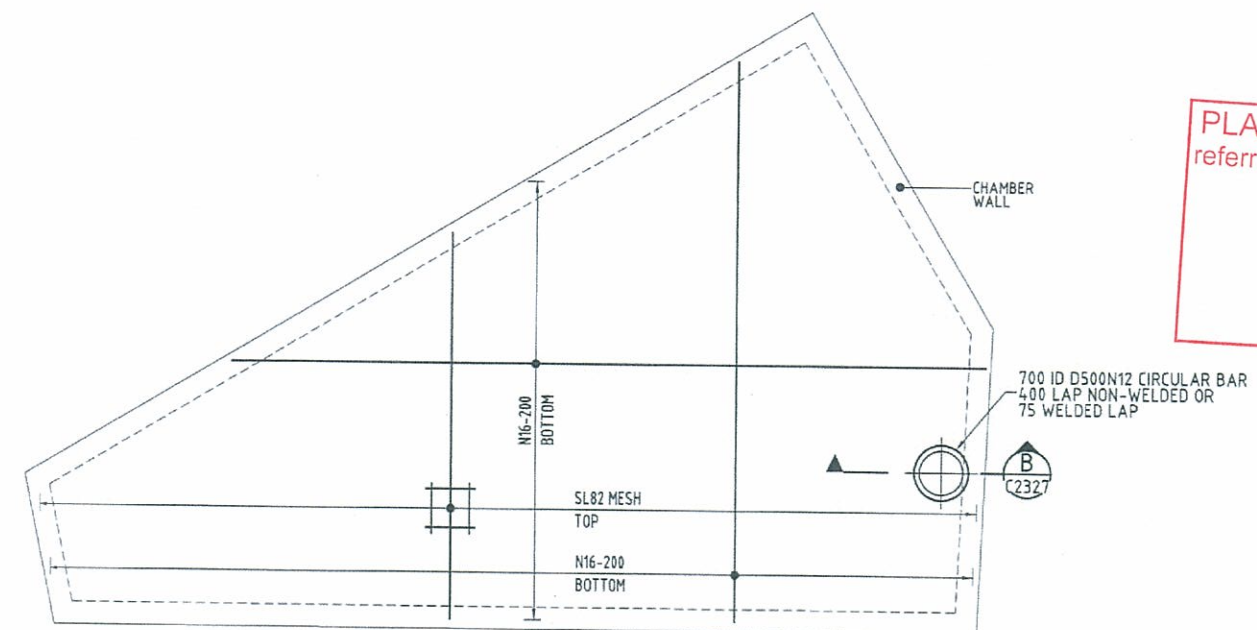
PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

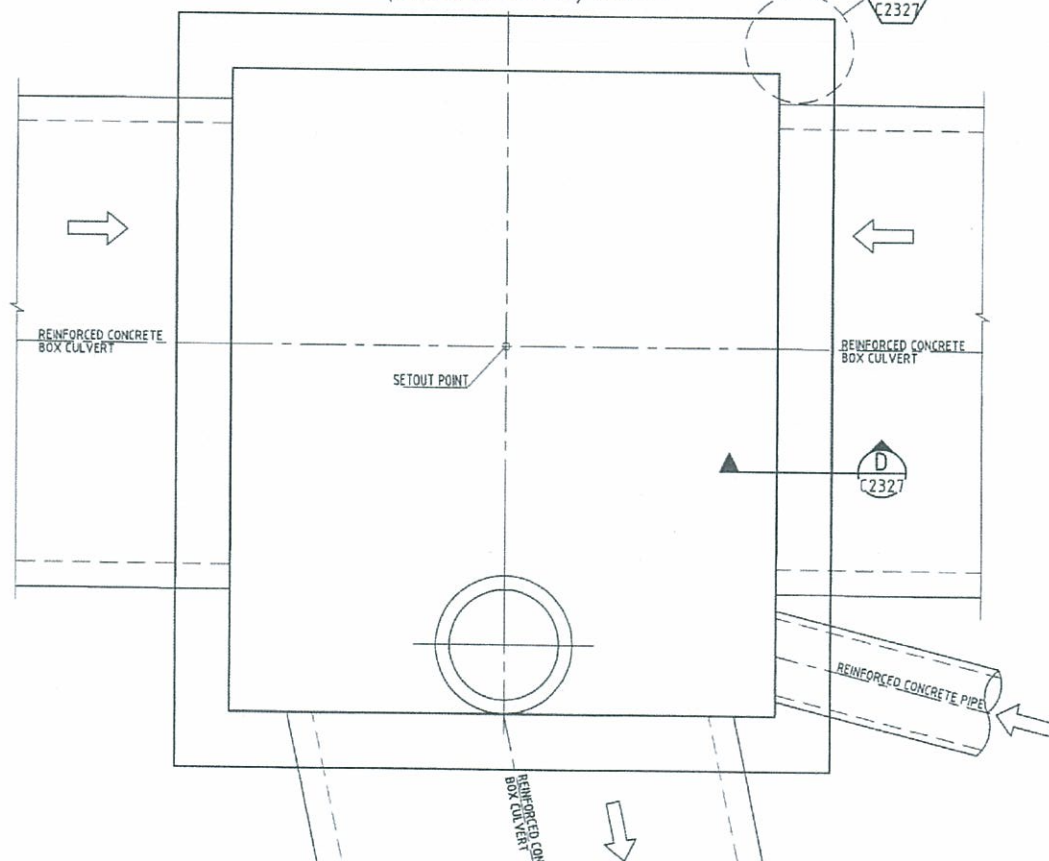
MEDQ



**TYPICAL ROOF SLAB
REINFORCEMENT DETAILS
(RECTANGULAR)**
SCALE 1:20

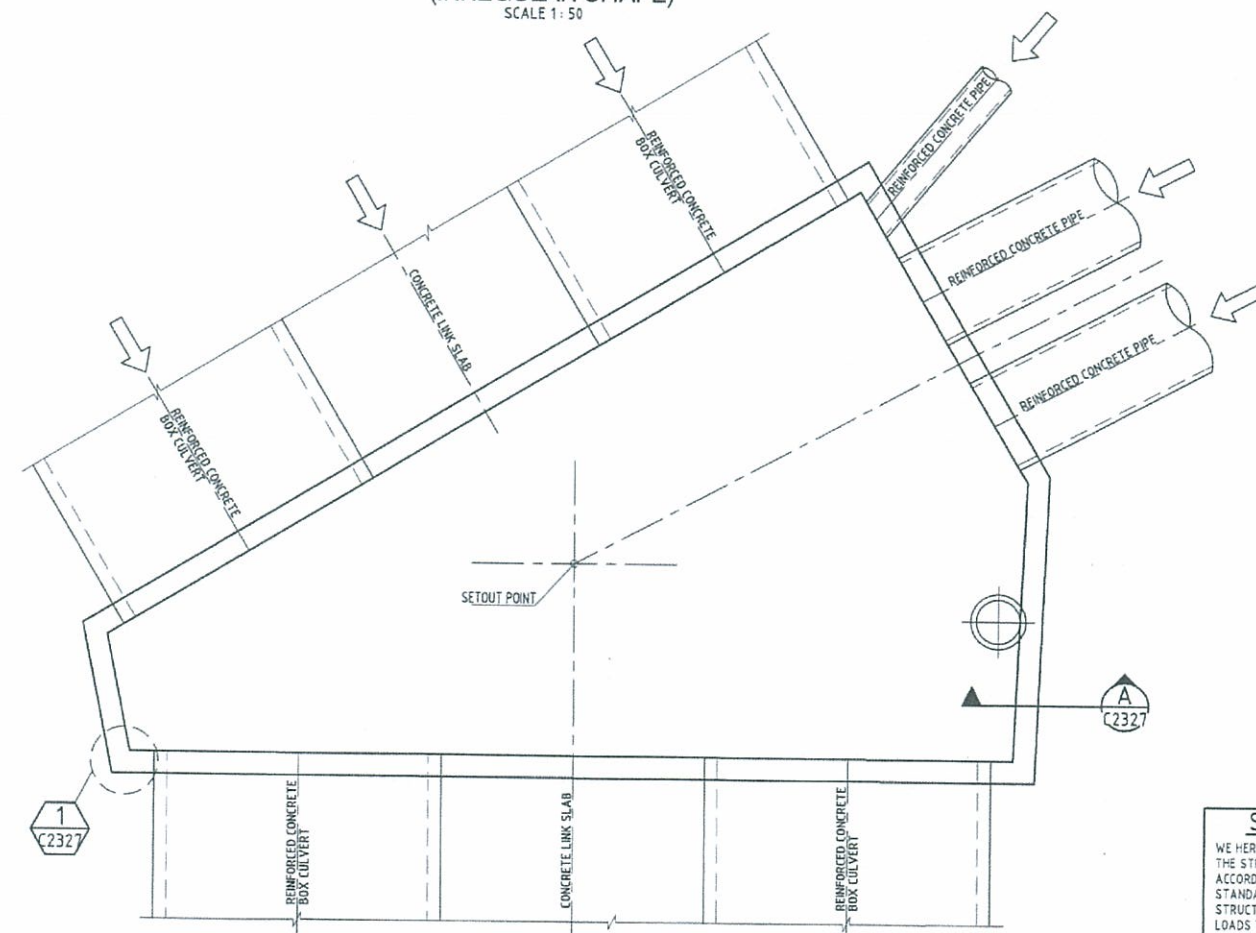


**TYPICAL ROOF SLAB
REINFORCEMENT DETAILS
(IRREGULAR SHAPE)**
SCALE 1:50



**TYPICAL STORMWATER CHAMBER - 1/17
(RECTANGULAR)**
SCALE 1:20

FOR RECTANGULAR STORMWATER CHAMBERS
DIMENSION 'A' = DIMENSION 'B'
5/1, 9/1, 7/3, 6C/9, 7/9
6/9 AND 1/14 SIMILAR
REFER DWG. NO. C2318-C2322 FOR CHAMBER DIMENSIONS



**TYPICAL STORMWATER CHAMBER - 10/1
(IRREGULAR SHAPE)**
SCALE 1:50

FOR IRREGULAR STORMWATER CHAMBERS
2A/1, 4/1, 6/1, 1A/1, 9/1
3/1, 8/1, 8/3 AND 2/15 SIMILAR
REFER DWG. NO. C2318-C2322 FOR
CHAMBER DIMENSIONS

STRUCTURAL DESIGN CERTIFICATE

WE HEREBY CERTIFY THAT HYDER CONSULTING PTY LTD IS RESPONSIBLE FOR THE STRUCTURAL DESIGN AND THAT THE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH ALL RELEVANT PROVISIONS OF THE AUSTRALIAN STANDARDS WHEN ERECTED IN ACCORDANCE WITH THIS DESIGN, THE STRUCTURE WILL BE ADEQUATE TO SUSTAIN THE WORST COMBINATION OF LOADS TO WHICH IT WILL BE SUBJECTED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS. THE BASIC DESIGN CODE USED IN THIS DESIGN WAS AS1170 FOR LOADS AND GENERALLY ACCEPTED ENGINEERING PRINCIPLES.

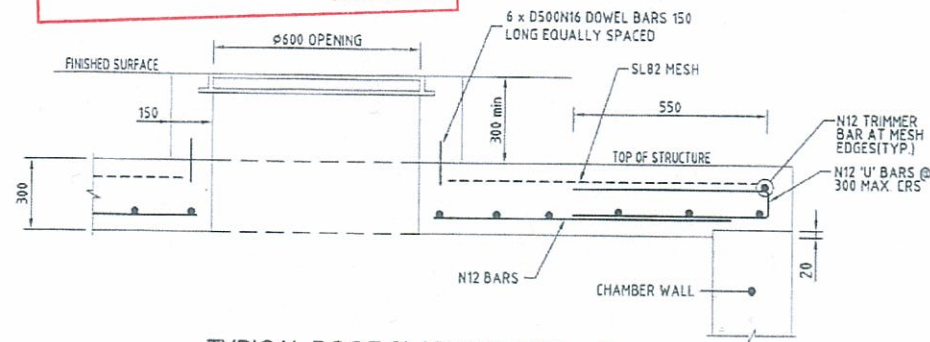
NAME: Ross McDermott RPEQ 4701
SIGNATURE: [Signature] DATE: 28/11/13

01 ISSUE FOR OPW APPROVAL Issue Description: BD 14/10/13 Author: [Blank] Date: [Blank]		Scale: 0 0.5 1 1.5 2m 1:20		BENNETT • BENNETT Property Consultants, Surveyors & Town Planners All mail to: P.O. Box 5021, GCMC, Qld 9726 Phone: (07) 5573 8177 Fax: (07) 5529 4242 Email: info@bennettbennett.com.au Website: www.bennettbennett.com.au		Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		FOR APPROVAL NOT FOR CONSTRUCTION Approved: [Signature] R.E.P. No: 8677 Scales: 1:10000 Original Size: A1 Height Datum: AHD Grid: MGA		GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE IRREGULAR & RECTANGULAR STORMWATER MANHOLE STRUCTURAL DETAILS - SHEET 1 OF 2		HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P.O. Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
Filename: C2326-C2327-AA005621-SWD MH STRUCTURAL DETS.DWG		Drawing No: C2326 Project No: AA005621 Issue: 01		Date: 28/Nov/2013 4:54 PM		File: AA005621-2-CAD/Civil/D-Final/C2326-C2327-AA005621-SWD MH STRUCTURAL DETS.DWG		V1					

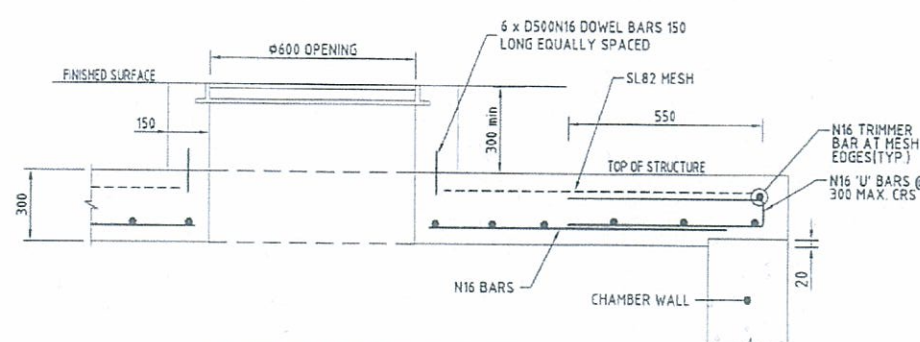
PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

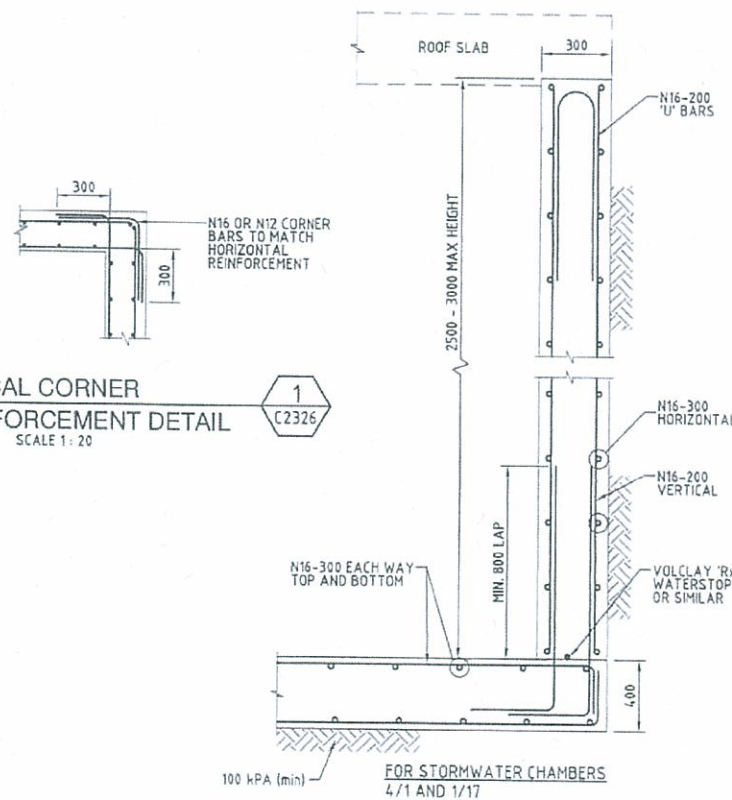
MEDQ



TYPICAL ROOF SLAB SECTION C
SCALE 1:10
FOR STORMWATER CHAMBERS
5/1, 9/1, 7/3, 6C/9, 7/9
6/9 AND 1/14 SIMILAR

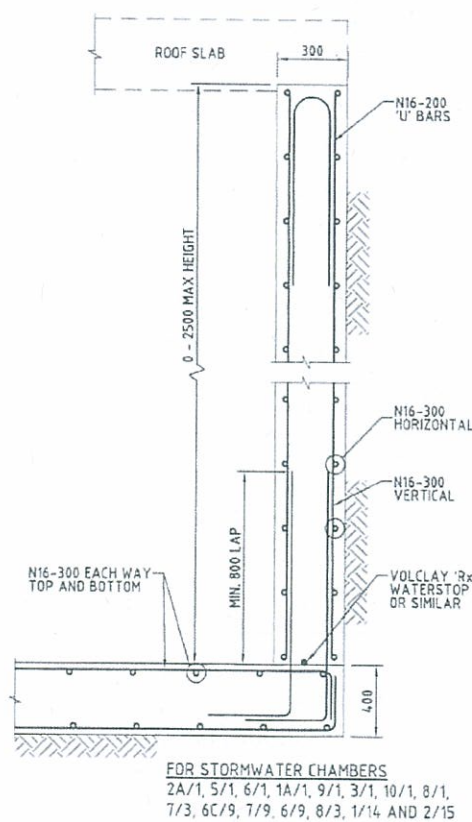


TYPICAL ROOF SLAB SECTION B
SCALE 1:10
FOR STORMWATER CHAMBERS
2A/1, 4/1, 6/1, 1A/1, 9/1
3/1, 8/1, 8/3 AND 2/15
SIMILAR



TYPICAL CORNER REINFORCEMENT DETAIL
SCALE 1:20

FOR STORMWATER CHAMBERS
4/1 AND 1/17



TYPICAL WALL SECTION A
SCALE 1:10

TYPICAL WALL SECTION D
SCALE 1:10

STRUCTURAL DESIGN CERTIFICATE

WE HEREBY CERTIFY THAT HYDER CONSULTING PTY LTD IS RESPONSIBLE FOR THE STRUCTURAL DESIGN AND THAT THE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH ALL RELEVANT PROVISIONS OF THE AUSTRALIAN STANDARDS WHEN ERECTED IN ACCORDANCE WITH THIS DESIGN, THE STRUCTURE WILL BE ADEQUATE TO SUSTAIN THE WORST COMBINATION OF LOADS TO WHICH IT WILL BE SUBJECTED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS. THE BASIC DESIGN CODE USED IN THIS DESIGN WAS AS1170 FOR LOADS AND GENERALLY ACCEPTED ENGINEERING PRINCIPLES

NAME: *[Signature]* RPEQ: 4761
SIGNATURE: *[Signature]* DATE: 28/11/13

REINFORCEMENT NOTES

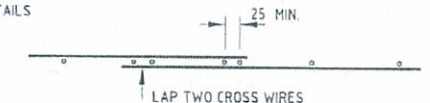
- REINFORCEMENT SYMBOLS:
"S" DENOTES GRADE 250S HOT ROLLED DEFORMED BAR TO AS 1302
"Y" DENOTES GRADE 400Y HOT ROLLED DEFORMED BAR TO AS 1302
"R" DENOTES GRADE 250R HOT ROLLED PLAIN BAR TO AS 1302
"W" DENOTES HARD-DRAWN PLAIN WIRE TO AS 1303
"RF" DENOTES HARD-DRAWN RIBBED WIRE FABRIC TO AS 1304
"N" DENOTES GRADE 500N HOT ROLLED DEFORMED BAR TO AS/NZS 4671
"RL" DENOTES GRADE 500L RECTANGULAR MESH TO AS/NZS 4671
"SL" DENOTES GRADE 500L SQUARE MESH TO AS/NZS 4671

BAR NOTATION
THE NUMBER PRECEDING A BAR SYMBOL DENOTES THE NUMBER OF BARS IN THE GROUP AND THE NUMBER FOLLOWING THE BAR SYMBOL DENOTES THE BAR DIAMETER i.e. 4-N16 ALTERNATIVELY, THE NUMBER FOLLOWING THE BAR DIAMETER DENOTES THE MAXIMUM CENTRE TO CENTRE SPACING i.e. N16-200.

2. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN. THE WRITTEN APPROVAL OF THE SUPERVISING OFFICER SHALL BE OBTAINED FOR ANY OTHER SPLICES. WHERE THE LAP LENGTH IS NOT SHOWN, IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT TO AS3600 REQUIREMENTS OR IN ACCORDANCE WITH THE FOLLOWING LAP SCHEDULE:

BAR SIZE	LAP LENGTH	BAR SIZE	LAP LENGTH
N12	550	N24	1100
N16	750	N28	1300
N20	950	N32	1500

- WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
- MESH/FABRIC LAP DETAILS



- CLEAR CONCRETE COVER TO REINFORCEMENT INCLUDING TIES SHALL BE TO AS 3600 REQUIREMENTS OR AS STATED BELOW OR OTHERWISE NOTED ON STRUCTURAL DRAWINGS. COVER TO REINFORCEMENT SHALL BE OBTAINED BY THE USE OF APPROVED METAL, CONCRETE OR PLASTIC BAR CHAIRS FOR REINFORCEMENT CHAIRS TO BE SPACED AT 1500 MAXIMUM CENTRES FOR BARS, 1000 MAXIMUM CENTRES FOR FABRIC.

ELEMENT	COVER TO REINFORCEMENT		
	BOTTOM	TOP	SIDES
FOOTING	50	50	50
WALL	50	50	50
LIDS	30/50	50	50

- REINFORCEMENT IS REPRESENTED DIAGMATICALLY AND IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
- SLAB REINFORCEMENT SHALL EXTEND AT LEAST 12 BAR DIAMETERS ONTO MASONRY SUPPORT WALLS UNLESS NOTED OTHERWISE.
- TRIM ALL PENETRATIONS LESS THAN 300 mm WITH 2-N16 BARS EACH SIDE, EACH FACE AND DISPLACE REINFORCEMENT EITHER SIDE.

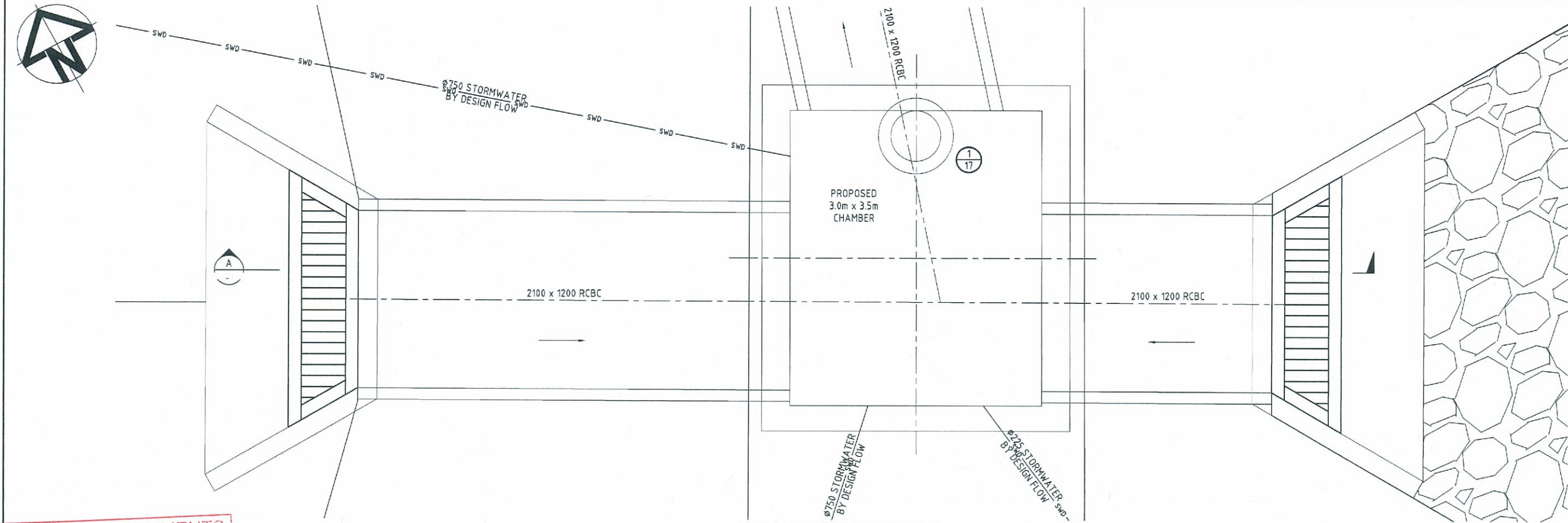
CONCRETE NOTES

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AS 3600.
- CONCRETE QUALITY:
ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE SUPERVISING OFFICER.
CEMENT SHALL BE TYPE 'A' NORMAL-CLASS PORTLAND CEMENT UNLESS NOTED OTHERWISE.
MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 20 mm.
CONCRETE SHALL HAVE THE FOLLOWING SLUMP DURING PLACEMENT:
BEAMS, SLABS, FOOTINGS 80 mm
COLUMNS, WALLS 80 mm

ELEMENT	CHARACTERISTIC CONCRETE STRENGTH (f'c) AT 28 DAYS	SPECIAL REQUIREMENTS
ALL	N40	-

- ELEMENT CHARACTERISTIC CONCRETE STRENGTH (f'c) AT 28 DAYS SHALL BE VERIFIED BY PROJECT ASSESSMENT TESTING, WITH SITE CURED SAMPLES TAKEN TO VERIFY STRENGTH AT EARLY LOADING IF REQUIRED PRIOR TO 28 DAYS.
- COMPACTION OF CONCRETE SHALL BE BY MEANS OF HIGH FREQUENCY VIBRATORS.
- ALL SLABS SHALL BE PLACED AT THE SAME TIME AS BEAMS OF WHICH THEY FORM PART.
- CONCRETE SIZES SHOWN ARE MINIMUM AND NO REDUCTIONS BY DUCTS, PIPES, ETC. SHALL BE MADE WITHOUT THE APPROVAL OF THE SUPERVISING OFFICER. SIZES DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE SUPERVISING OFFICER.
- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF THE SUPERVISING OFFICER.
- CONSTRUCTION JOINTS, WHERE NOT SHOWN, SHALL BE LOCATED TO THE APPROVAL OF THE SUPERVISING OFFICER.
- PRE-CURING EVAPORATION CONTROL- ALL FLATWORK IS TO BE SPRAYED WITH ALIPHATIC ALCOHOL IMMEDIATELY AFTER SCREEDING AND BULLFLOATED AND REAPPLIED AFTER EACH SUBSEQUENT WORKING OF THE SURFACE.
- CURING OF ALL CONCRETE SURFACES SHALL COMMENCE IMMEDIATELY AFTER SURFACES ARE FINISHED AS SPECIFIED AND SHALL CONTINUE FOR A MINIMUM OF 7 DAYS. CLEAN PLASTIC SHEETING IS PREFERRED AND RECOMMENDED.
- SLABS WITH SPECIFIED ROUGH FINISH SHALL BE KEPT FREE OF BLEED WATER AND FLOATED TO PREVENT THE FORMATION OF PLASTIC SHRINKAGE CRACKS UNTIL INITIAL SET TAKES PLACE.

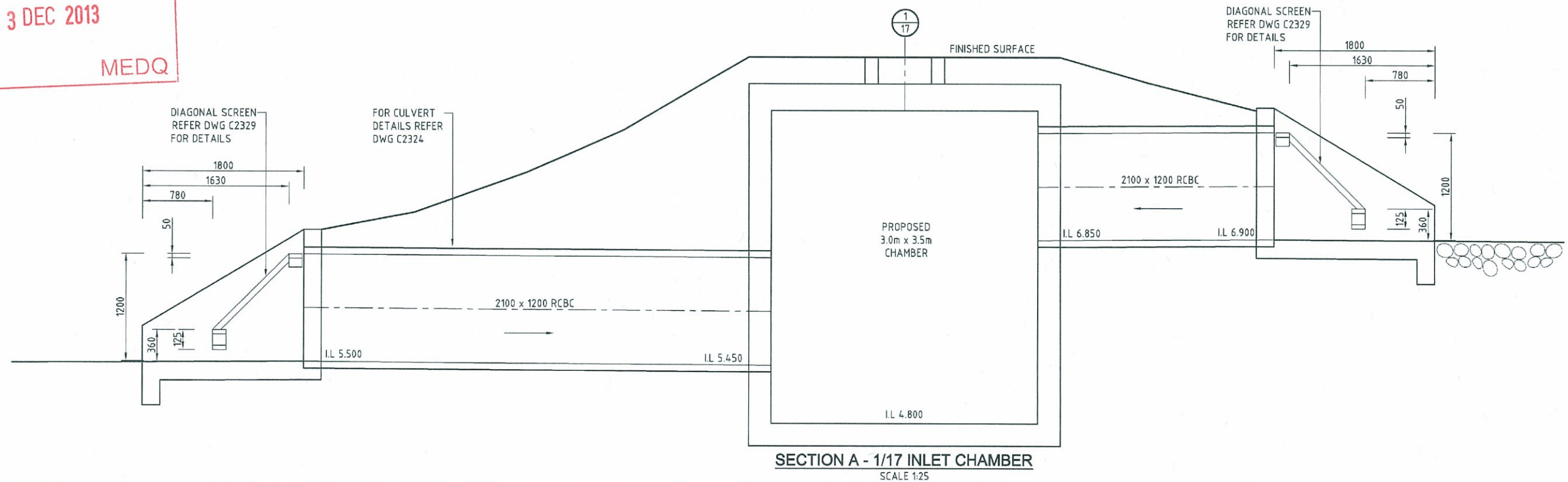
BENNETT • BENNETT Property Consultants, Surveyors • Town Planners AS 1616 to: PO Box 5021, GOVARD, QLD 4011 Tel: (07) 5593 4177 Fax: (07) 5593 4177 Email: info@bennett-bennett.com.au		Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		FOR APPROVAL NOT FOR CONSTRUCTION Approved: <i>[Signature]</i> REP Q No: 8677 Scales: 1:10000 Original Size: A1 Height Datum: AHD Grid: MGA		GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE IRREGULAR & RECTANGULAR STORMWATER MANHOLE STRUCTURAL DETAILS - SHEET 2 OF 2		Hyder HYDER CONSULTING PTY. LTD. ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
Scale: 0 0.5 1 1.5 2m 1:20		Architect: ARCHIPELAGO Filename: C2326-C2327-AA005621-SWD MH STRUCTURAL DETS DWG		Status: FOR APPROVAL NOT FOR CONSTRUCTION Approved: <i>[Signature]</i> REP Q No: 8677 Scales: 1:10000 Original Size: A1 Height Datum: AHD Grid: MGA		Project: GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE IRREGULAR & RECTANGULAR STORMWATER MANHOLE STRUCTURAL DETAILS - SHEET 2 OF 2		Drawing No: C2327 - AA005621 - 01	



PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

MEDQ



01 ISSUE FOR DPW APPROVAL BD 20/11/13 Author Date	Scale 0 0.5 1 1.5 2 2.5m 1:25	Surveyor BENNETT • BENNETT Property Consultants, Surveyors & Town Planners COOMERA OFFICE 9 Jem-Hill Street Coomera 4209 Ph (07) 5573 6177 Fax (07) 5520 4342 Architect ARCHIPELAGO Filename: C2328-C2329-AA005621-SWD CULVERT PROTECTION.DWG	Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING	Status FOR APPROVAL NOT FOR CONSTRUCTION Approved <i>[Signature]</i> REP. Q No. 8677 Scales 1:25 Original Size A1 Height AHD Grid MGA Current Issue Signatures Author B DAVEY Designer T DINGLE Reviewer B THOMPSON Copyright reserved	Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE STORMWATER CULVERT PROTECTION LAYOUT PLAN	Hyder HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com Drawing No. C2328 Project No. AA005621 Issue 01
--	--	--	---	---	--	---

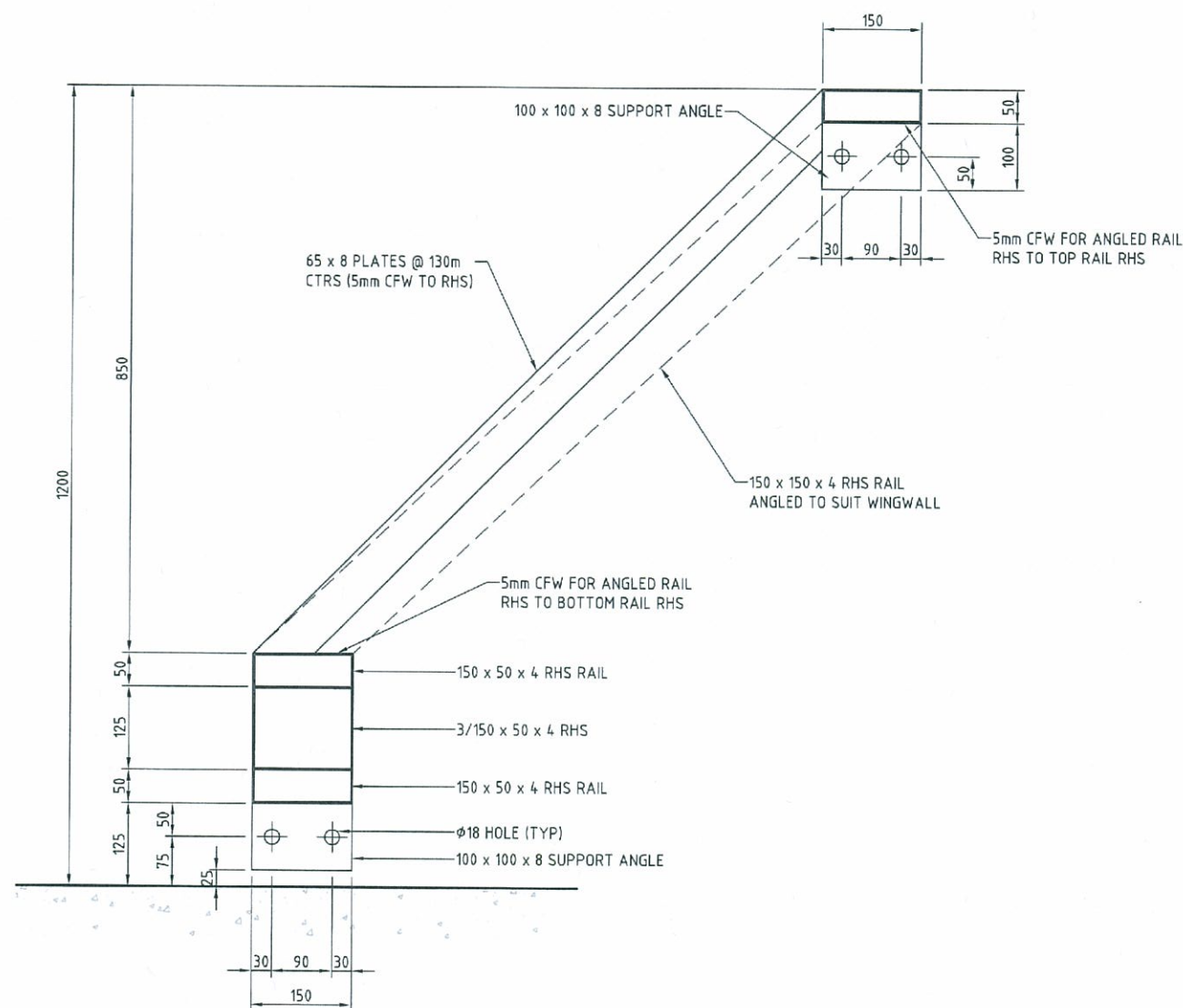
STEELWORK NOTES

1. ALL MATERIALS & WORKMANSHIP TO AS4100 & AS1554
2. ALL WELDS 5mm EQUAL LEG CONTINUOUS FILLET, CATEGORY SP, E41XX/W40X ELECTRODE UNO
3. FULLY WELD ALL CONNECTIONS
4. DO NOT WELD ON SITE
5. HOT DIP GALVANISE ALL STEELWORK AFTER FABRICATION
6. HOT DIP GALVANISE ALL BOLTS, WASHERS & FITMENTS
7. STEEL COMPONENTS GRADE C250 POP FLATS & GRADE C350 FOR RHS SECTIONS
8. PROVIDE VENT HOLES FOR GALVANISING IN ACCORDANCE WITH SPECIALIST GALVANISING CONTRACTORS SPECIFICATIONS

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

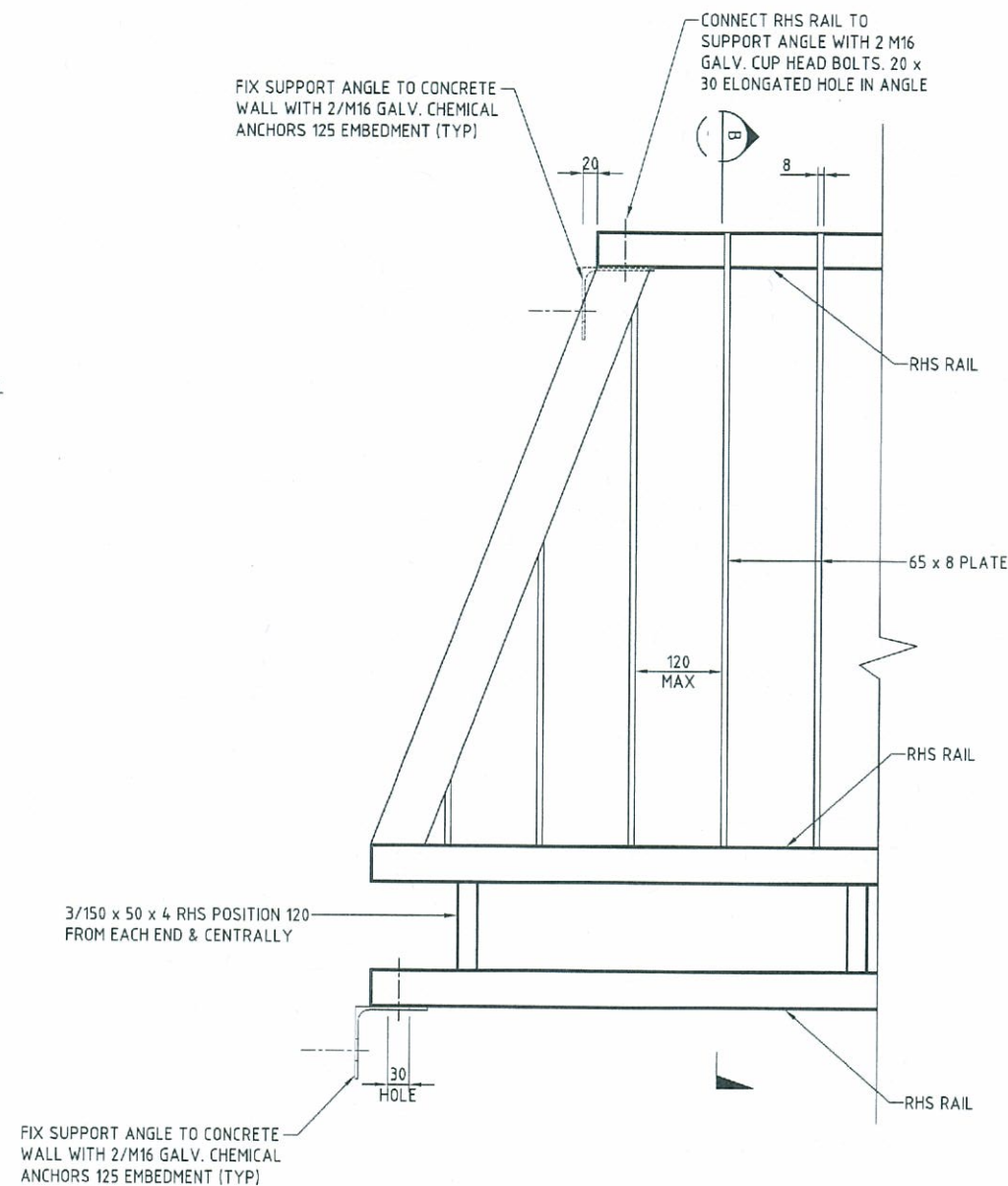
23 DEC 2013

MEDQ



SECTIONAL ELEVATION B

DIAGONAL SCREEN DETAILS
SCALE 1:5



ELEVATION
SHOWING CONNECTION TO CONCRETE WALL &
POSITIONING OF PLATES RELATIVE TO WALL

01 ISSUE FOR OPW APPROVAL BD 20/11/13 Author Date		Surveyor BENNETT + BENNETT Property Consultants, Surveyors & Town Planners All mail to: PO Box 5021, GCMC, QLD 4020 Tel: (07) 5522 4177 Fax: (07) 5522 4342 COOMERA OFFICE 10 Avenue Street Coomera, QLD 4009 Tel: (07) 5522 4177 Fax: (07) 5522 4342		Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		Status FOR APPROVAL NOT FOR CONSTRUCTION Approved <i>[Signature]</i> REP Q No: 8677 Scales 1:5 Original Size A1 Height Datum AHD Grid MGA Current Issue Signatures Author B.DAVEY Designer T.DINGLE Reviewer B.THOMPSON Copyright reserved		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE STORMWATER CULVERT PROTECTION DETAILS Drawing No. 2329 - AA005621 - 01 Project No. Issue		HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
--	--	--	--	--	--	---	--	---	--	--	--

28/Nov/2013 4:27 PM

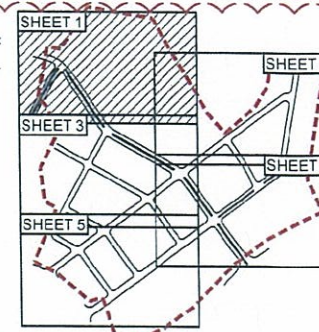
\\hc-aus-gc-fs-01\jobs\AA005621\E-CAD\Civil\0-Final\2328-C2329-AA005621-SWD CULVERT PROTECTION.dwg

V1

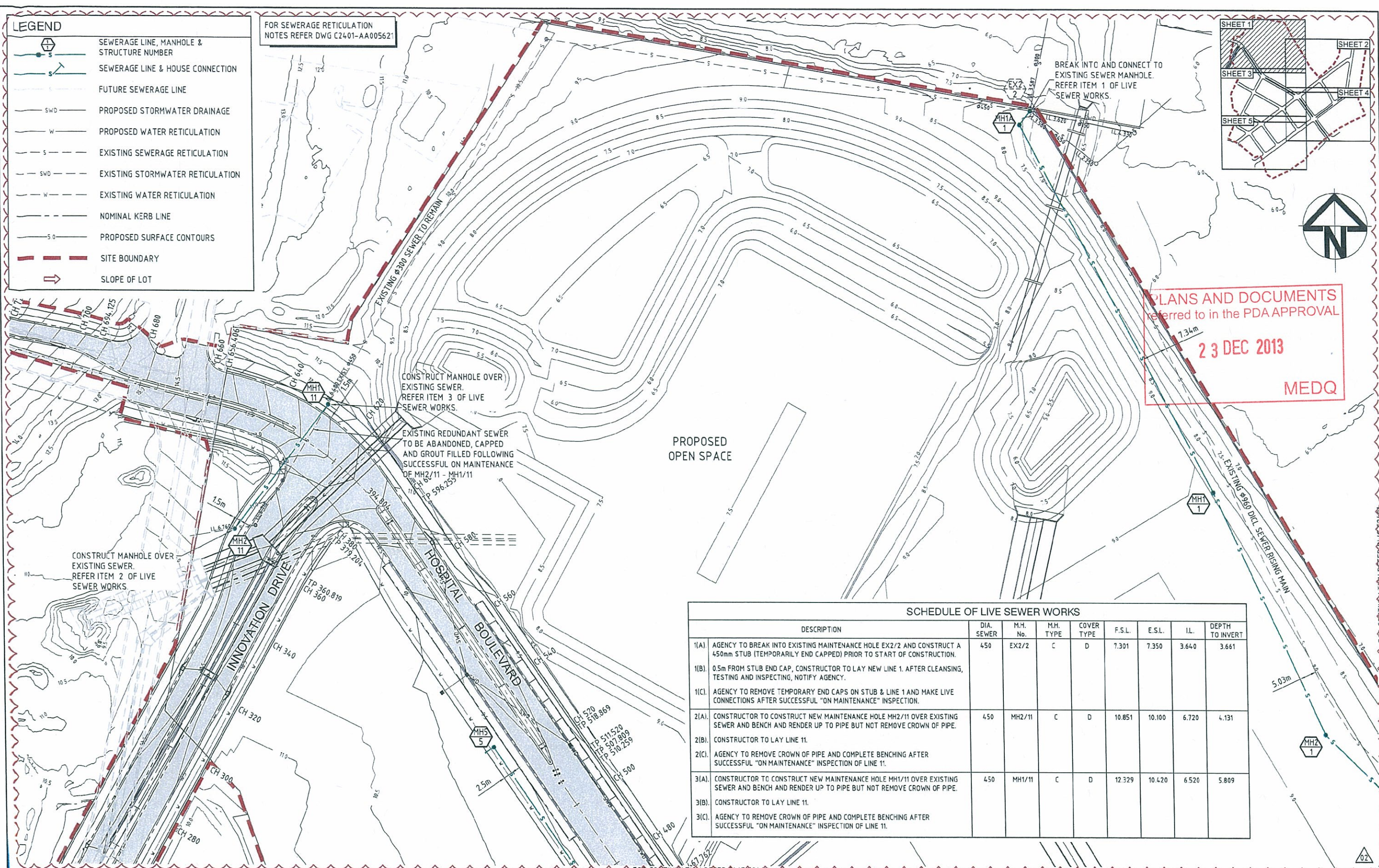
LEGEND

- SEWERAGE LINE, MANHOLE & STRUCTURE NUMBER
- SEWERAGE LINE & HOUSE CONNECTION
- FUTURE SEWERAGE LINE
- PROPOSED STORMWATER DRAINAGE
- PROPOSED WATER RETICULATION
- EXISTING SEWERAGE RETICULATION
- EXISTING STORMWATER RETICULATION
- EXISTING WATER RETICULATION
- NOMINAL KERB LINE
- PROPOSED SURFACE CONTOURS
- SITE BOUNDARY
- SLOPE OF LOT

FOR SEWERAGE RETICULATION
NOTES REFER DWG C2401-AA005621



PLANS AND DOCUMENTS
referred to in the PDA APPROVAL
23 DEC 2013
MEDQ



SCHEDULE OF LIVE SEWER WORKS								
	DESCRIPTION	DIA. SEWER	M.H. No.	M.H. TYPE	COVER TYPE	F.S.L.	E.S.L.	IL. DEPTH TO INVERT
1(A)	AGENCY TO BREAK INTO EXISTING MAINTENANCE HOLE EX2/2 AND CONSTRUCT A 450mm STUB (TEMPORARILY END CAPPED) PRIOR TO START OF CONSTRUCTION.	450	EX2/2	C	D	7.301	7.350	3.640 3.661
1(B)	0.5m FROM STUB END CAP, CONSTRUCTOR TO LAY NEW LINE 1. AFTER CLEANSING, TESTING AND INSPECTING, NOTIFY AGENCY.							
1(C)	AGENCY TO REMOVE TEMPORARY END CAPS ON STUB & LINE 1 AND MAKE LIVE CONNECTIONS AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION.							
2(A)	CONSTRUCTOR TO CONSTRUCT NEW MAINTENANCE HOLE MH2/11 OVER EXISTING SEWER AND BENCH AND RENDER UP TO PIPE BUT NOT REMOVE CROWN OF PIPE.	450	MH2/11	C	D	10.851	10.100	6.720 4.131
2(B)	CONSTRUCTOR TO LAY LINE 11.							
2(C)	AGENCY TO REMOVE CROWN OF PIPE AND COMPLETE BENCHING AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION OF LINE 11.							
3(A)	CONSTRUCTOR TO CONSTRUCT NEW MAINTENANCE HOLE MH1/11 OVER EXISTING SEWER AND BENCH AND RENDER UP TO PIPE BUT NOT REMOVE CROWN OF PIPE.	450	MH1/11	C	D	12.329	10.420	6.520 5.809
3(B)	CONSTRUCTOR TO LAY LINE 11.							
3(C)	AGENCY TO REMOVE CROWN OF PIPE AND COMPLETE BENCHING AFTER SUCCESSFUL "ON MAINTENANCE" INSPECTION OF LINE 11.							

12 GC.CC.R.F.I.

11 ISSUE FOR OPW APPROVAL

10 ISSUE FOR COMMENT

9 REVISED ISSUE

8 PRELIMINARY ISSUE

7 Description

BD 12/11/13

BD 14/10/13

BD 23/08/13

BD 02/08/13

BD 04/07/13

Author Date

Scale

0 5 10 20 30 40 50m

1:500

Surveyor

BENNETT • BENNETT

Property Consultants, Surveyors • Town Planners

All mail to: PO Box 5021, DUNDAS, Qld 4720

ma@bennett-bennett.com.au

8888 Pty Ltd • C/N 016 021 521

COOMERA OFFICE

9 Javelin Street

Coomera 4209

Ph (07) 5573 6177

Fax (07) 5528 4342

Client

Queensland Government

DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING

Status

FOR APPROVAL

NOT FOR CONSTRUCTION

Approved *[Signature]* R.E.P.Q. No. 7818

Scales 1:500

Original Size A1

Height Datum AHD

Grid MGA

Author B DAVEY

Designer T DINGLE

Reviewer B THOMPSON

© Copyright reserved

Project

GOLD COAST PARKLANDS REDEVELOPMENT

TRUNK INFRASTRUCTURE

Title

SEWER RETICULATION LAYOUT PLAN - SHEET 1 OF 5

Hyder

HYDER CONSULTING PTY. LTD

ABN 76 104 435 289

P O Box 1053

Southport, QLD 4215

Australia

Tel: +61 (07) 5532 3933

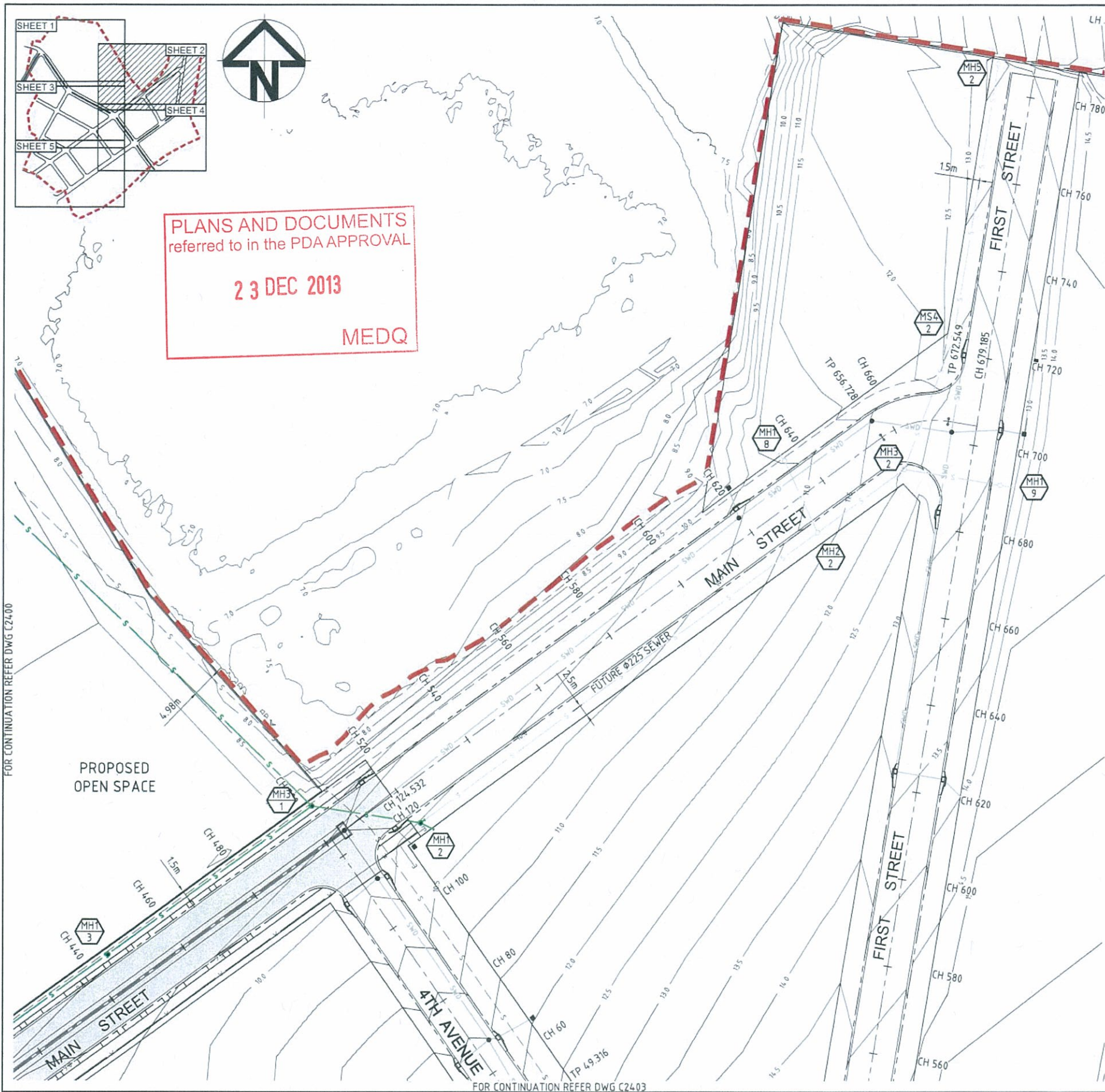
Fax: +61 (07) 5591 4778

www.hyderconsulting.com

Drawing No. C2400 - AA005621 - 02

Project No.

Issue



LEGEND	
	SEWERAGE LINE, MANHOLE & STRUCTURE NUMBER
	SEWERAGE LINE & HOUSE CONNECTION
	FUTURE SEWERAGE LINE
	PROPOSED STORMWATER DRAINAGE
	PROPOSED WATER RETICULATION
	EXISTING SEWERAGE RETICULATION
	EXISTING STORMWATER RETICULATION
	EXISTING WATER RETICULATION
	NOMINAL KERB LINE
	PROPOSED SURFACE CONTOURS
	SITE BOUNDARY
	SLOPE OF LOT

ALL ENVIRONMENT PROTECTION MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING COMMENCING.

SOIL TREATMENT	
1.	TOPSOIL & SUBSOIL SHALL BE STOCKPILED SEPARATELY.
2.	CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

VEGETATION PROTECTION	
1.	TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED.
2.	WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED & ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION & REMAIN UNTIL COMPLETION.
3.	TREE ROOTS SHALL BE TUNNELED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGES AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORISTS FOR FURTHER ADVICE.
4.	ANY LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

REHABILITATION	
1.	PRE DISTURBANCE SOIL PROFILES & COMPACTION LEVELS SHALL BE REINSTATED.
2.	PRE DISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED.

SAFETY	
1.	THE DESIGN & CONSTRUCTION OF THE WORKS SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION.

- ### GENERAL NOTES
1. CONTRACTOR SHALL VERIFY FINISHED SURFACE LEVELS ON SITE BEFORE CONSTRUCTION OF SEWERS AND HOUSE CONNECTION BRANCHES.
 2. THE CONTRACTOR SHALL HAVE PROPERTY BOUNDARIES PEGGED AND THE LOCATION OF HOUSE CONNECTIONS CONFIRMED PRIOR TO COMMENCING CONSTRUCTION OF HOUSE CONNECTION BRANCHES.
 3. FINISHED SURFACE LEVELS SHOWN ON LONGITUDINAL SECTIONS ARE INDICATIVE ONLY AND MANHOLE LIDS SHALL FINISH TO THE GRADE OF THE FOOTPATH IN ROADWAYS AND 75mm ABOVE THE SURROUNDING LEVELS IN THE ALLOTMENTS.
 4. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF ALL SERVICES AND PROTECT THESE SERVICES PRIOR TO WORKING IN THE VICINITY. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 5. THE CONTRACTOR SHALL ADVISE THE SUPERINTENDENT IMMEDIATELY IF MIN. & MAX. DEPTHS AS DEFINED BY SEQ WATER ARE EXCEEDED DURING CONSTRUCTION.
 6. ALL TRENCH BACK FILL MATERIAL UNDER ROAD PAVEMENT SHALL BE CBR 15 OR APPROVED EQUIVALENT.
 7. ALL WORK & MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT SEQ SEWERAGE CODE SPECIFICATIONS & STANDARDS.
 8. UNLESS SPECIFIED OTHERWISE ALL MATERIALS & WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
 9. THE CONSTRUCTION ON THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THE REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
 10. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY THE SEQ SERVICE PROVIDER AT THE DEVELOPER'S COST.
 11. ALL PIPES & MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS & MATERIALS" LIST.
 12. EACH ALLOTMENT SHALL BE SERVED BY A DN150 PVC PROPERTY CONNECTION.
 13. PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS.
 14. PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm & A MAXIMUM OF 750mm.
 15. WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300mm (LOOSE) IN DEPTH & SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S 1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
 16. WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SEQ SEWER CODE.
 17. THE CONTRACTOR SHALL VERIFY THE LOCATION & DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORKS.
 18. SEWERS SHALL BE DISUSED / ABANDONED IN ACCORDANCE WITH PROCEDURES SET OUT IN THE SEQ SEWER CODE.
 19. BENCH MARK & LEVELS TO AHD
 20. A CONSTRUCTION METHODOLOGY REPORT FOR SEWER CONSTRUCTION NEAR COUNCILS EXISTING 960mm WESTERN FORCE MAIN IS TO BE PROVIDED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS AND PREPARED IN CONJUNCTION WITH GOLD COAST WATER.

				Surveyor		Client		Status		Project			
				BENNETT • BENNETT Property Consultants, Surveyors & Town Planners All mail to: PO Box 5021, GOV. QLD 4026 mail@bennettbennett.com.au 07 5521 4342		Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		FOR APPROVAL NOT FOR CONSTRUCTION		GOLD COAST PARKLANDS REDEVELOPMENT		HYDER CONSULTING PTY. LTD ABN 76 104 485 289 P O Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
				Architect				Approved		TRUNK INFRASTRUCTURE			
				ARCHIPELAGO				Scales		SEWER RETICULATION LAYOUT PLAN - SHEET 2 OF 5			
				1: 500				1:500		Current Issue Signatures			
				0 5 10 20 30 40 50m				Original Size		Author			
								A1		B.DAVEY			
								Height Datum		Designer			
								AHD		T.DINGLE			
								Grid		Reviewer			
								MGA		B.THOMPSON			
										Copyright reserved			

LEGEND

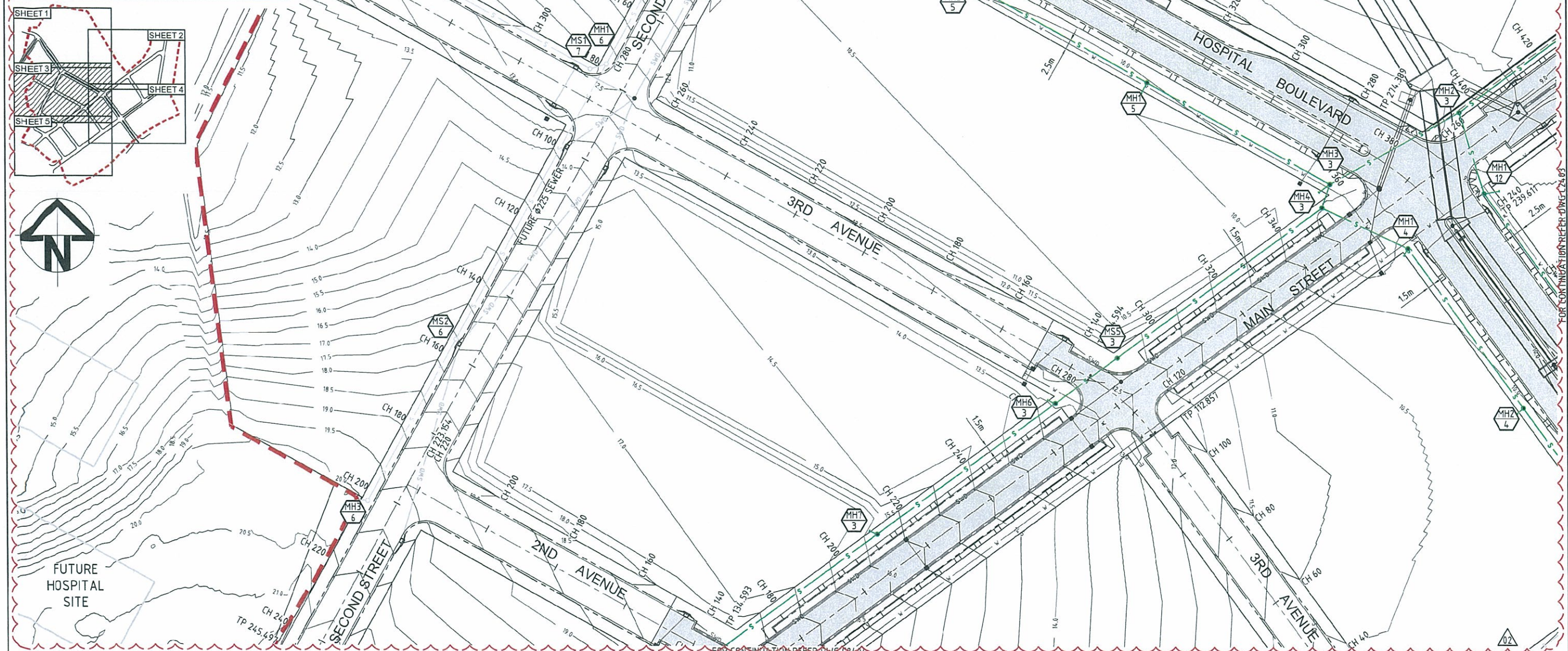
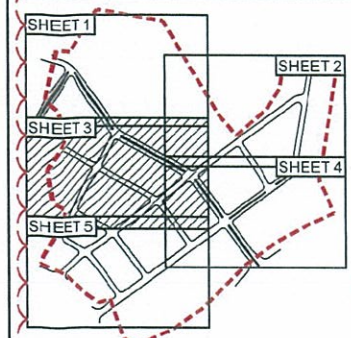
- SEWERAGE LINE, MANHOLE & STRUCTURE NUMBER
- SEWERAGE LINE & HOUSE CONNECTION
- FUTURE SEWERAGE LINE
- PROPOSED STORMWATER DRAINAGE
- PROPOSED WATER RETICULATION
- EXISTING SEWERAGE RETICULATION
- EXISTING STORMWATER RETICULATION
- EXISTING WATER RETICULATION
- NOMINAL KERB LINE
- PROPOSED SURFACE CONTOURS
- SITE BOUNDARY
- SLOPE OF LOT

FOR SEWERAGE RETICULATION
NOTES REFER DWG C2401-AA005621

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

23 DEC 2013

MEDQ



02 G.C.C.R.F.I. 01 ISSUE FOR OPW APPROVAL P3 ISSUE FOR COMMENT P2 REVISED ISSUE P1 PRELIMINARY ISSUE Issue Description Author Date		Surveyor BENNETT • BENNETT Property Consultants, Surveyors + Town Planners COOMERA OFFICE 9 Jurek Street, Coomera, QLD 4209 Ph (07) 5593 6117 Fax (07) 5593 4342 Email: info@bennettandbennett.com.au Architect ARCHIPELAGO Filename: C2400-C2404-AA005621-SEW LAYOUT.DWG		Client Queensland Government DEPARTMENT OF STATE DEVELOPMENT, INFRASTRUCTURE & PLANNING		Status FOR APPROVAL NOT FOR CONSTRUCTION Approved: [Signature] R.E.P. No: 7818 Scales: 1:500 Original Size: A1 Height Datum: AHD Grid: MGA Current Issue Signatures Author: B.DAVEY Designer: T.DINGLE Reviewer: B.THOMPSON Copyright reserved		Project GOLD COAST PARKLANDS REDEVELOPMENT TRUNK INFRASTRUCTURE SEWER RETICULATION LAYOUT PLAN - SHEET 3 OF 5 Drawing No: C2402 Project No: AA005621 Issue: 02		 HYDER CONSULTING PTY. LTD. ABN 76 104 485 289 P.O. Box 1653 Southport, QLD 4215 Australia Tel: +61 (07) 5532 3933 Fax: +61 (07) 5591 4778 www.hyderconsulting.com	
--	--	--	--	--	--	---	--	---	--	---	--

