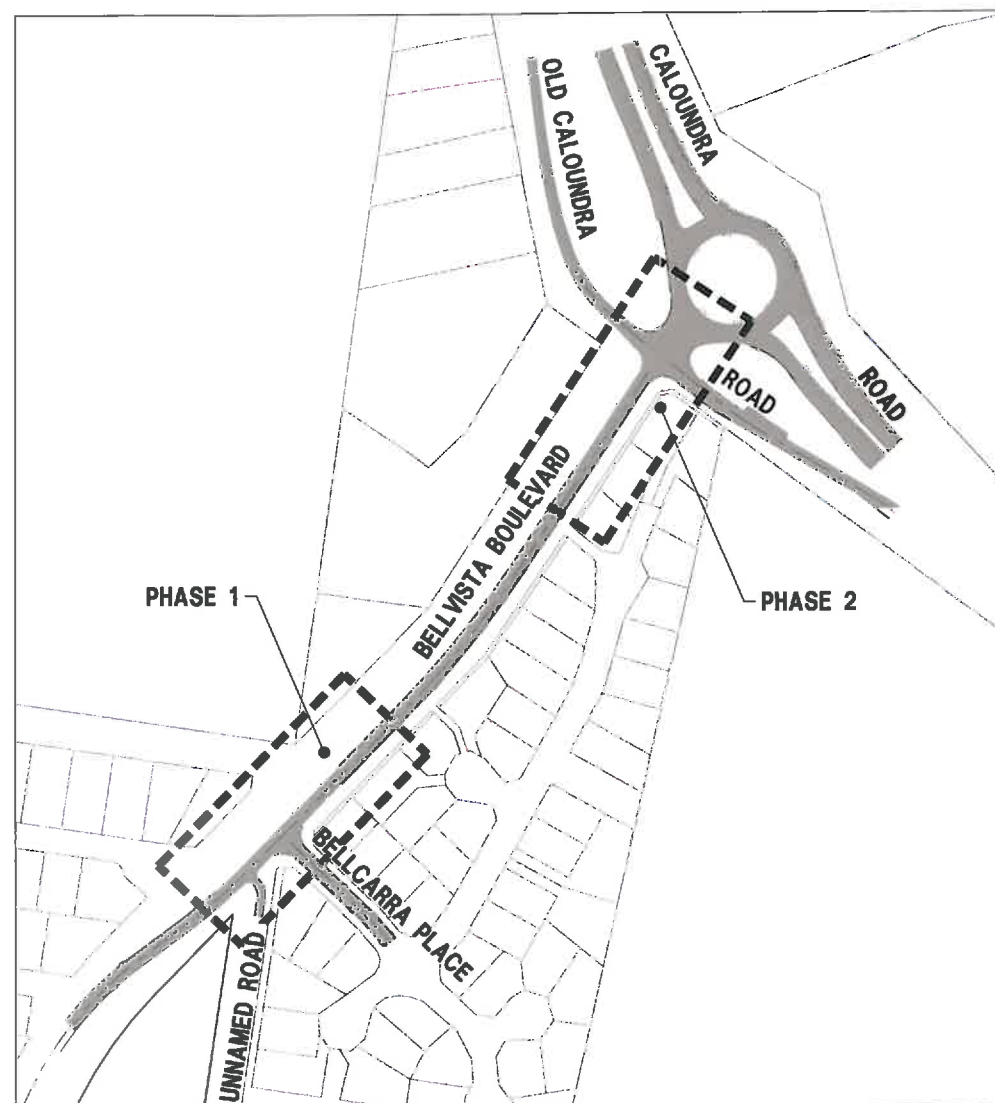


P.S.M. 132061 RL 9.252 AHD



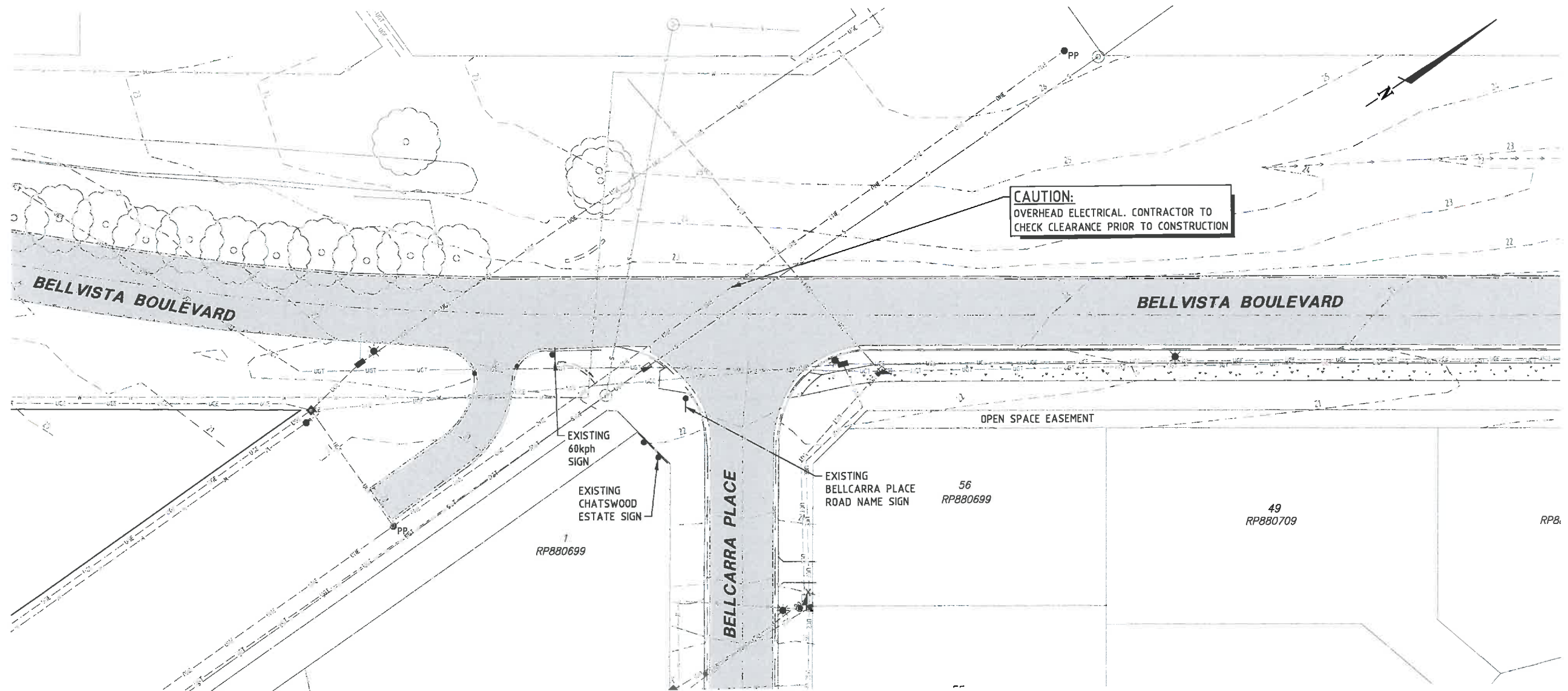
SCALE 1:4000

B11163-201	EXISTING SERVICES LAYOUT PLAN
B11163-202	BULK EARTHWORKS LAYOUT PLAN
B11163-203	ROADWORKS LAYOUT PLAN
B11163-204	ROADWORKS LONGITUDINAL SECTIONS AND CROSS SECTIONS
B11163-205	KERB RETURN SETOUT DETAILS
B11163-206	ISLAND SETOUT DETAILS
B11163-207	RETAINING WALL SETOUT DETAILS
B11163-208	SIGNS AND LINEMARKING LAYOUT PLAN
B11163-209	SEWER, WATER AND CONDUIT PLAN
B11163-220	CONCEPTUAL EROSION AND SEDIMENT CONTROL PLAN
B11163-221	CONCEPTUAL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY LOCATIONS AND LEVELS OF ALL EXISTING CROSSINGS AND CONNECTION POINTS.

NOTE:
THESE DRAWINGS ARE TO BE READ IN CONJUNCTION
WITH THE FOLLOWING:

1. ELECTRICAL ENGINEERING DRAWINGS
2. LANDSCAPE ARCHITECTS DRAWINGS



LEGEND

- EXISTING SURFACE CONTOURS (1.0m INTERVALS)
- EXISTING ROAD CROWN LINE
- EXISTING KERB
- AREA OF EXISTING ROAD SURFACE
- EXISTING CONCRETE FOOTPATH
- EXISTING SEWER MAIN
- EXISTING WATER MAIN AND FITTINGS
- EXISTING OVERHEAD ELECTRICAL POWER POLE AND LIGHT POLE
- EXISTING UNDERGROUND ELECTRICAL AND PIT
- EXISTING UNDERGROUND TELSTRA AND PIT
- EXISTING TREE

DANGER !!

OVERHEAD ELECTRIC CABLES



OVERHEAD ELECTRICITY CABLES
EXIST IN THIS VICINITY. CONTACT
ENERGEN WHERE CABLE
CLEARANCE IS COMPROMISED BY
MACHINERY.

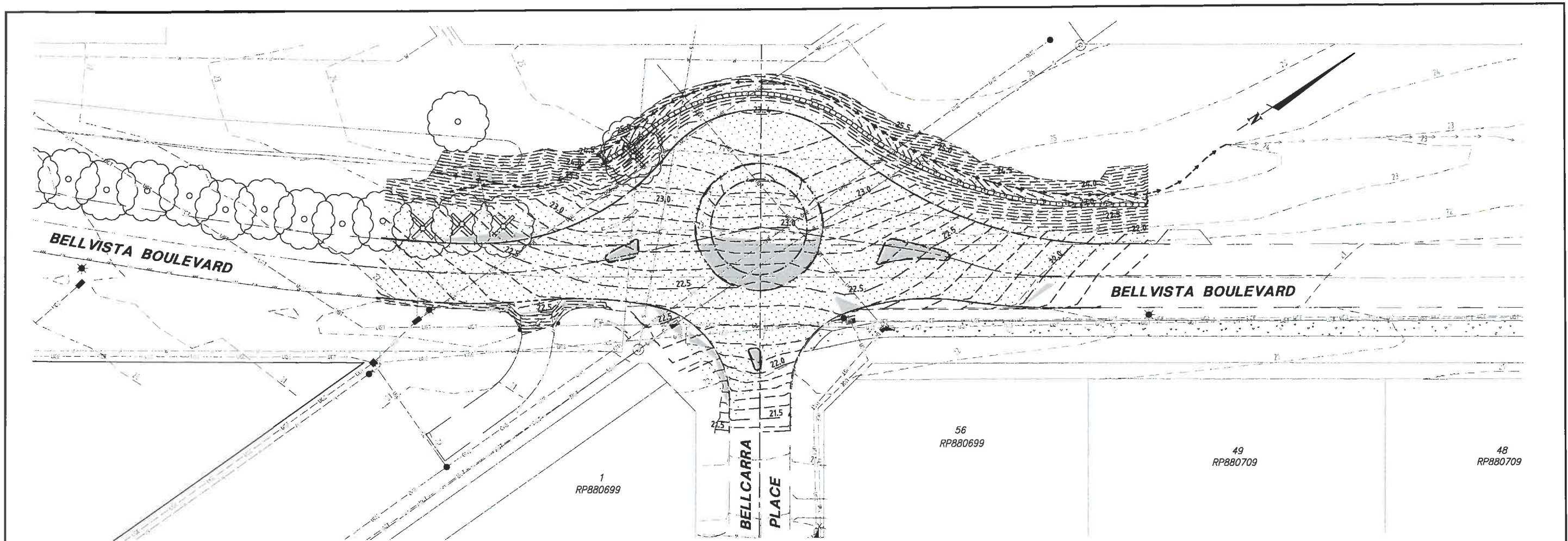
CONSTRUCTION HOLD POINT

PRIOR TO CONSTRUCTION THE CONTRACTOR
SHALL VERIFY LEVELS OF ALL EXISTING
CROSSINGS AND CONNECTION POINTS.

NOTWITHSTANDING THAT EXISTING SERVICES MAY OR MAY NOT BE SHOWN ON
THE JOB DRAWINGS, NO RESPONSIBILITY IS TAKEN BY THE SUPERINTENDENT OR
THE PRINCIPLE FOR THIS INFORMATION WHICH HAS BEEN SUPPLIED BY OTHERS.
THE DETAILS ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL
ASCERTAIN THE POSITION OF ANY UNDERGROUND SERVICES IN THIS AREA AND
SHALL BE RESPONSIBLE FOR MAKING GOOD ANY DAMAGE THERETO.

FILE: B11163-EWKS.dwg DATE: 13-10-2011 TIME: 16:49
Xref's: X_B11163_LEGEND USR: Robert Thompson

REV	DATE	BY	CHKD	DESCRIPTION	DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT	BROWN Smart Consulting	Brown Consulting (Qld) Pty Ltd Level 1, 15 Nicklin Way, Brisbane QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Website Brisbane Melbourne Sydney Singapore London Coast	DRAWING TITLE EXISTING SERVICES LAYOUT PLAN	DRAWING NUMBER B11163-201	ISSUE
A	B	C	D	E	F	1:250 1:500	PROJECT No. B11163	Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD					
								APPROVED BRENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7884	BELLS REACH INTERSECTION WORKS					



LEGEND

- EXISTING SURFACE CONTOURS (1.0m INTERVALS)
- DESIGN SURFACE CONTOURS (0.1m INTERVALS)
- PROPOSED BARRIER KERB AND CHANNEL B1
- PROPOSED BARRIER KERB B2
- PROPOSED SEMI-MOUNTABLE KERB SM3
- PROPOSED BLISTER ISLAND
- AREA OF CUT
- AREA OF FILL
- TREES TO BE RETAINED
- TREES TO BE REMOVED
- PROPOSED RETAINING WALL
- DIVERSION DRAIN

EARTHWORKS NOTES

- CONTRACTOR TO LIAISE WITH ALL THE RELEVANT SERVICE AUTHORITIES TO ASCERTAIN SERVICES PRESENT ON-SITE. ANY ALTERATION WORKS TO SERVICES WILL BE CARRIED OUT BY THAT SERVICE AUTHORITY ONLY.
- THE CONTRACTOR SHALL REMOVE ALL STRUCTURES, DEBRIS AND FENCES FROM THE SITE TO THE SATISFACTION OF THE SUPERINTENDENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO COMMENCEMENT OF DEMOLISHING ANY EXISTING STRUCTURES WITHIN THE SITE AREAS.
- NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, THE FINISHED SURFACE LEVELS MAY BE ADJUSTED BY THE WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION AFTER AMENDED DRAWINGS HAVE BEEN APPROVED BY COUNCIL.
- EXISTING SURFACE IS TO BE CLEAR OF VEGETATION MATTER PRIOR TO THE START OF FILLING.
- FILL IS TO BE OF GOOD QUALITY AND FREE OF UNSUITABLE MATERIAL.
- ALL EXCAVATION AND FILLING SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF AS3798-2007 AND IN ACCORDANCE WITH THE CURRENT COUNCIL SPECIFICATIONS AND STANDARD DRAWINGS.
- ALL ALLOTMENT FILL IS TO BE COMPACTED TO THE REQUIREMENTS OF AS3798-2007 TO LEVEL 1 CERTIFICATION AND IN ACCORDANCE WITH CURRENT S.C.R.C. SPECIFICATIONS.
- ALL DRAINAGE STRUCTURES ARE BE PRESERVED FROM THE EFFECTS OF STRUCTURAL LOADING GENERATED BY THE EARTHWORKS.
- ALL DIMENSIONS & LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

FILE: B11163-202.dwg DATE: 29-11-2011 TIME: 16:28
Xref's: X_B11163_LEGEND X_B11163_BASE USR: Matt Fallah

REV	DATE	BY	CHKD	DESCRIPTION
A	28.11.11	JJW	RT	AMENDMENT DETAILS
B				
C				
D				
E				
F				

DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
	1:250 5 0 5 10 A1		Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD
DRAWN CHECK	1:500	PROJECT No.	APPROVED	PROJECT
		B11163	BRENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7884	BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

BROWN Smart Consulting	CONSULT AUSTRALIA Brown Consulting (QLD) Pty Ltd Level 1, 15 Nicklin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Brisbane Canberra Melbourne Sydney Singapore Hamilton Coast	QUALITY Enforced Company ISO 9001 LIC 40864
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DRAWING TITLE	DRAWING NUMBER	ISSUE
BULK EARTHWORKS LAYOUT PLAN	B11163-202	

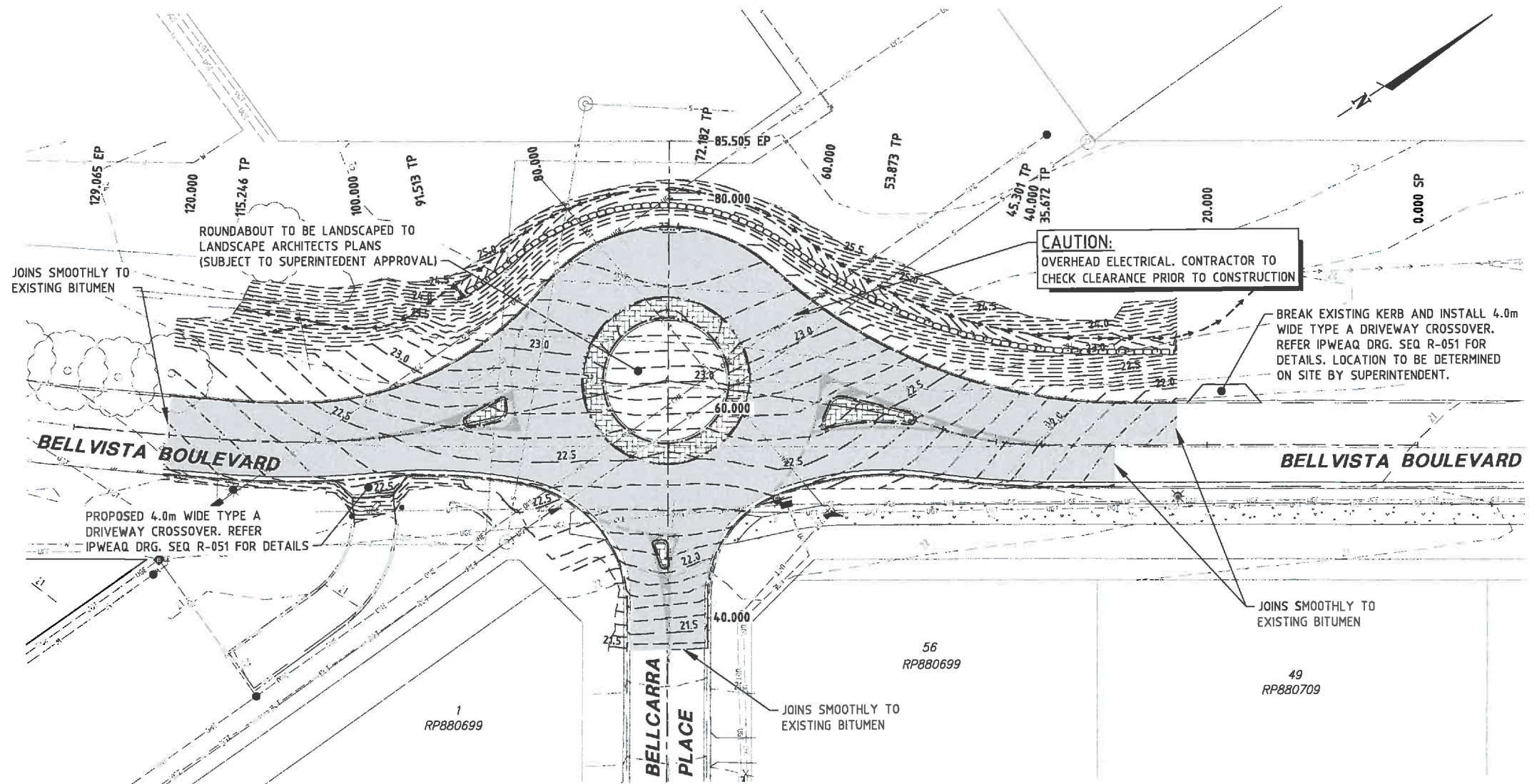
LEGEND

- EXISTING SURFACE CONTOURS (1.0m INTERVALS)
- DESIGN SURFACE CONTOURS (0.1m INTERVALS)
- PROPOSED ROAD CROWN LINE
- PROPOSED BARRIER KERB AND CHANNEL B1
- PROPOSED BARRIER KERB B2
- PROPOSED SEMI-MOUNTABLE KERB SM3
- PROPOSED BLISTER ISLAND
- EXISTING ROAD CROWN LINE
- EXISTING KERB
- AREA OF PROPOSED ROAD SURFACE
- CONCRETE INFILL
- CONCRETE FOOTPATH (2.0m WIDE)
- EXISTING STORMWATER DRAINAGE MANHOLE AND INLET GRATE
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING OVERHEAD ELECTRICAL POWER POLE AND LIGHT POLE
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING UNDERGROUND TELSTRA
- TREES TO BE RETAINED
- DIVERSION DRAIN

CONTROL LINE SETOUT

BELLVISTA BOULEVARD
 CH 0.000 E9787.848 N36416.517
 CH 35.672 E9763.010 N36390.913
 R=30.000
 DEF=18d23'24.92"
 TL=4.856
 ARC=9.629
 CC E9741.477 N36411.801
 IP E9759.629 N36387.427
 CH 45.301 E9755.320 N36385.186
 R=50.000
 DEF=9d47'18.91"
 TL=4.296
 ARC=8.571
 CC E9778.392 N36340.827
 IP E9751.509 N36383.204
 CH 53.873 E9748.091 N36380.600
 CH 72.182 E9733.527 N36369.504
 CH 91.513 E9723.299 N36353.100
 R=80.000
 DEF=16d59'50.40"
 TL=11.954
 ARC=23.733
 CC E9655.414 N36395.428
 IP E9716.974 N36342.956
 CH 115.246 E9707.960 N36335.105
 CH 129.065 E9697.540 N36326.028

BELLCARRA PLACE
 CH 0.000 E9778.641 N36326.080
 CH 62.616 E9733.528 N36369.504
 CH 85.505 E9717.339 N36385.688



ROADWORKS NOTES

- CONTRACTOR TO LIAISE WITH ALL THE RELEVANT SERVICE AUTHORITIES TO ASCERTAIN SERVICES PRESENT ON-SITE. ANY ALTERATION WORKS TO SERVICES WILL BE CARRIED OUT BY THAT SERVICE AUTHORITY ONLY.
- NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, THE FINISHED SURFACE LEVELS MAY BE ADJUSTED BY THE WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION AFTER AMENDED DRAWINGS HAVE BEEN APPROVED BY COUNCIL.
- ALL ALLOTMENT FILL IS TO BE COMPACTED TO THE REQUIREMENTS OF AS3798-2007 AND IN ACCORDANCE WITH CURRENT S.C.R.C. SPECIFICATIONS.
- SUBGRADE TEST RESULTS TO BE FORWARDED TO SUPERVISING ENGINEER FOR DETERMINATION OF BOX DEPTHS PRIOR TO EXCAVATION TESTS SHALL INCLUDE SOAKED CBR AND/OR OTHER TESTS AS REQUESTED BY THE SUPERVISING ENGINEER. THE CONTRACTOR SHALL ALLOW ADEQUATE TIME FOR COUNCIL APPROVAL OF PAVEMENT DESIGN.
- MATCH TO EXISTING PAVEMENT EXTENSION OR WIDENING TO BE IN ACCORDANCE WITH IPWEAQ STD DWG SEQ R-170.
- SIDE DRAINS TO BE CONSTRUCTED UNDER ALL KERBS AND ALL KERB AND CHANNEL AS PER S.C.R.C. STANDARDS. REFER STANDARD DRAWING SEQ R-140 FOR DETAILS.
- FOOTPATHS AND BATTERS TO HAVE A MINIMUM OF 75MM TOPSOIL AND FULL WIDTH TURF IF ORDERED.
- CONCRETE FOOTPATHS TO BE INSTALLED BY THE CIVIL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO SCRC STD DWG SEQ-R-065 FOR CONSTRUCTION DETAILS.
- ALL STORMWATER PIPES UNDER ROADWAYS AND FOOTPATHS SHALL BE CLASS '2' R.C.P UNLESS NOTED OTHERWISE. ALL PIPES CONSTRUCTED LOWER THAN RL 1.5m ARE TO BE SALT WATER COVER CLASS AS NOTED IN STORMWATER LONGSECTIONS.
- THE STORMWATER PIPE CLASSES HAVE BEEN DESIGNED FOR SERVICE LOADS ONLY, AND THE CONTRACTOR SHALL ASSESS ANTICIPATED CONSTRUCTION LOADS AND UPGRADE THE PIPE CLASSES, IF NECESSARY, IN ACCORDANCE WITH A.S 3725-1989. AT THE CONTRACTORS COST.
- ALL EXCAVATION, BEDDING & BACK FILLING TO BE AS PER IPWEAQ STD DWG D-0030.
- ALL DIMENSIONS & LEVELS ARE IN METRES UNLESS OTHERWISE SHOWN.

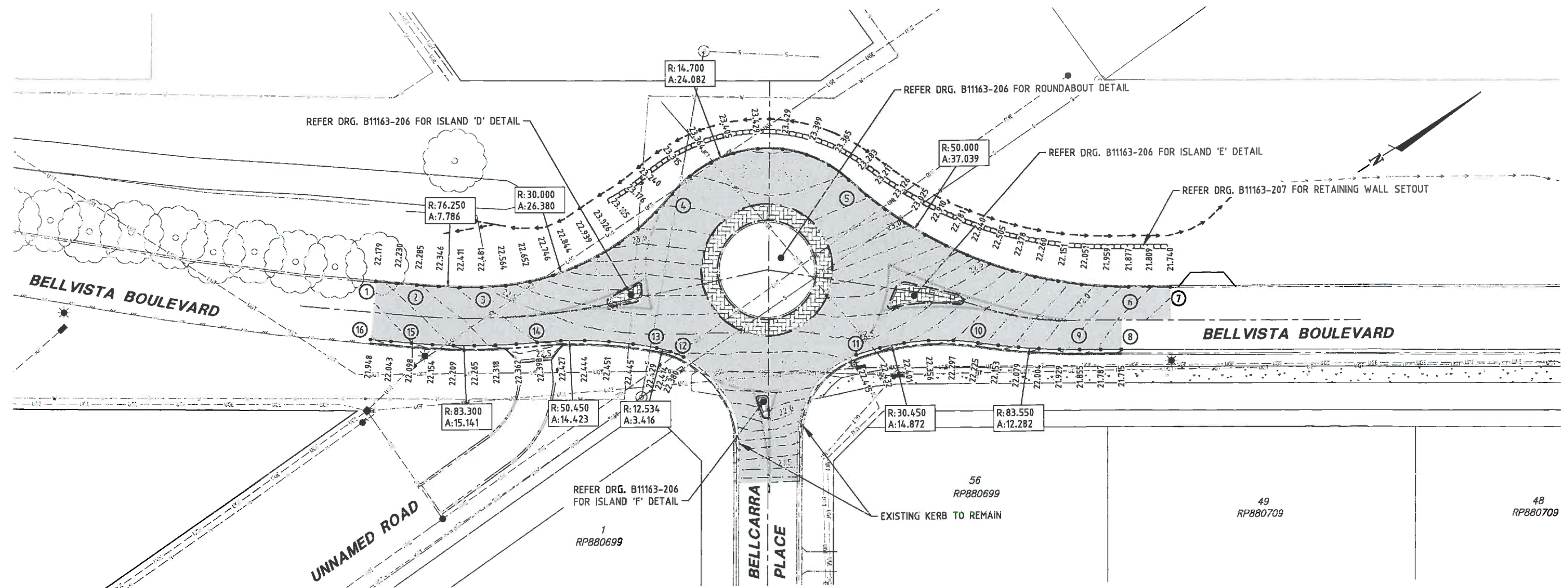
FILE: B11163-203.dwg DATE: 29-11-2011 TIME: 16:32
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REV	DATE	BY	CHKD	DESCRIPTION
A	28.11.11	JJW	RT	AMENDMENT DETAILS
B				
C				
D				
E				
F				

DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
	1:250 5 0 5 10 A1		Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD
DRAWN CHECK	1:500	PROJECT No.	APPROVED	PROJECT
		B11163	BRENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7884	BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

BROWN Smart Consulting	Brown Consulting (QLD) Pty Ltd Level 1, 15 Niddin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Brisbane Canberra Melbourne Sydney Wagga Wagga Sunshine Coast	CONSULT AUSTRALIA Quality Endorsed Company ISO 9001 Lic 4084
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DRAWING TITLE	DRAWING NUMBER	ISSUE
ROADWORKS LAYOUT PLAN	B11163-203	



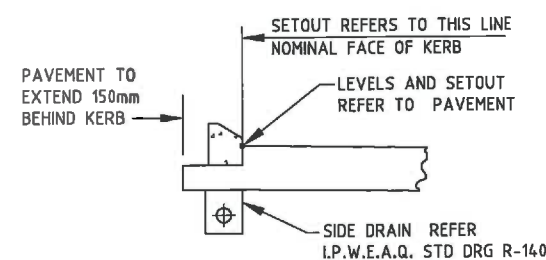
NOTE:
LEVELS FOR KERB AND CHANNEL/EDGE OF PAVEMENT CONSTRUCTION ARE AT EQUAL INTERVALS AT LIP OF CHANNEL UNLESS SHOWN OTHERWISE.

LEGEND

- PAVEMENT SURFACE CONTOURS (0.1m INTERVALS)
- PROPOSED ROAD CROWN LINE
- PROPOSED BARRIER KERB AND CHANNEL B1
- PROPOSED BARRIER KERB B2
- PROPOSED SEMI-MOUNTABLE KERB SM3
- PROPOSED BLISTER ISLAND
- EXISTING KERB
- PROPOSED RETAINING WALL
- AREA OF PROPOSED ROAD SURFACE
- CONCRETE INFILL

KERB SETOUT DATA

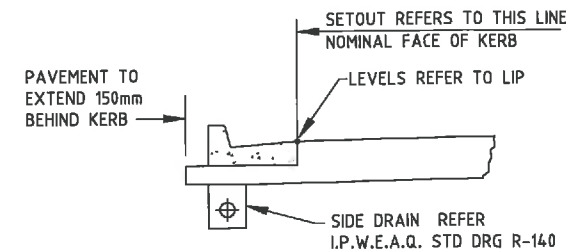
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3	9711.097	36343.337
4	9718.946	36367.639
5	9732.649	36384.178
6	9765.549	36399.275
7	9769.030	36402.863
8	9770.336	36393.366
9	9766.854	36389.777
10	9757.686	36381.620
11	9748.508	36370.107
12	9734.071	36354.957
13	9731.044	36353.396
14	9720.580	36343.541
15	9710.127	36332.616
16	9706.357	36329.332



I.P.W.E.A.Q. SEMI-MOUNTABLE KERB (SM3)

SCALE 1 : 25

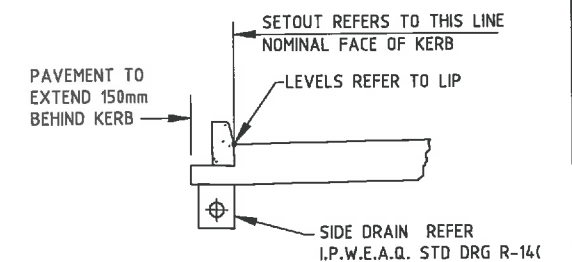
(REFER I.P.W.E.A.Q. STD DRG SEQ R-080)



I.P.W.E.A.Q. BARRIER KERB AND CHANNEL (B1)

SCALE 1 : 25

(REFER I.P.W.E.A.Q. STD DRG SEQ R-080)



I.P.W.E.A.Q. BARRIER KERB (B2)

SCALE 1 : 25

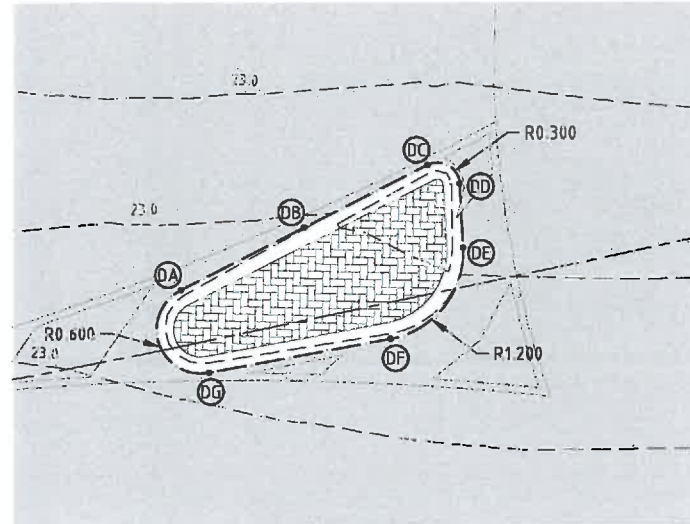
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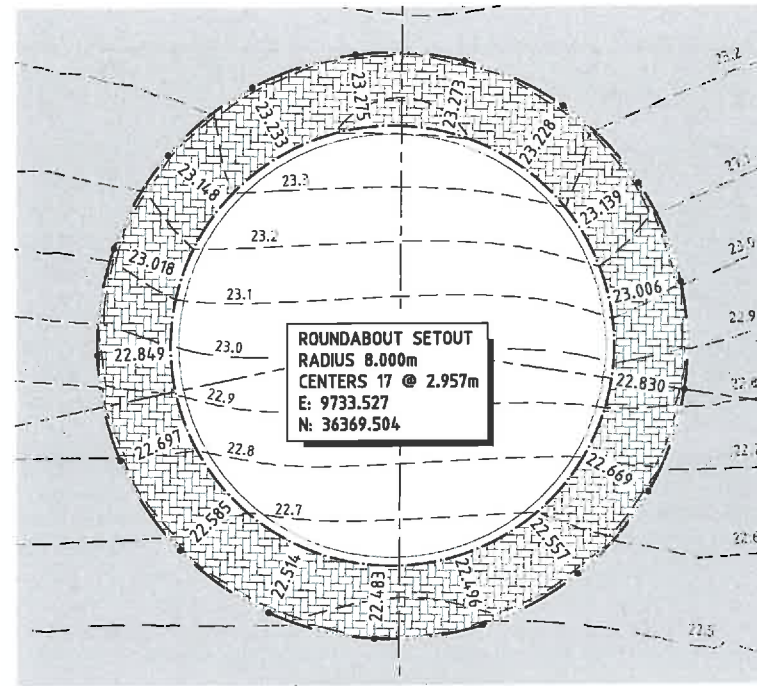
REV	DATE	BY	CHKD	DESCRIPTION
A				
B				
C				
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F				

DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
	1:25 0.25 0 0.25 0.5 0.75 1.0 1.25 A1		Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD
DRAWN CHECK	1:250 5 0 5 10 A1	PROJECT No.	APPROVED	PROJECT
	1:500 A3	B11163	BRENT THOMAS RPEQ 7862 BROOK MITSON RPEQ 7884	BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

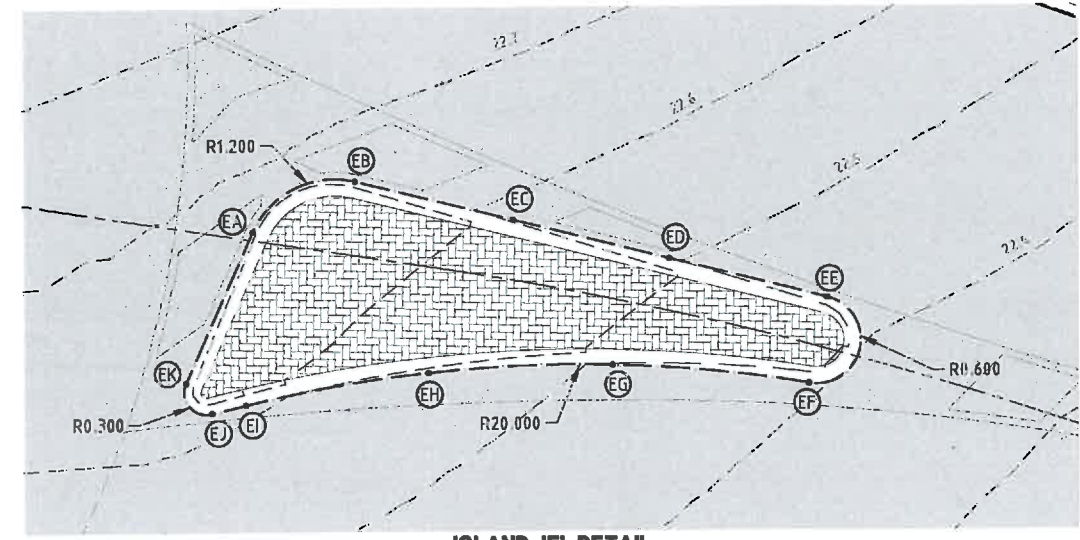
BROWN Smart Consulting	Brown Consulting (QLD) Pty Ltd Level 1, 15 Nicklin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Brisbane Canberra Melbourne Sydney Wagga Wagga Sunshine Coast	QUALITY Endorsed Company ISO 9001 Lic 4084	DRAWING TITLE KERB RETURN SETOUT DETAILS
			DRAWING NUMBER B11163-205



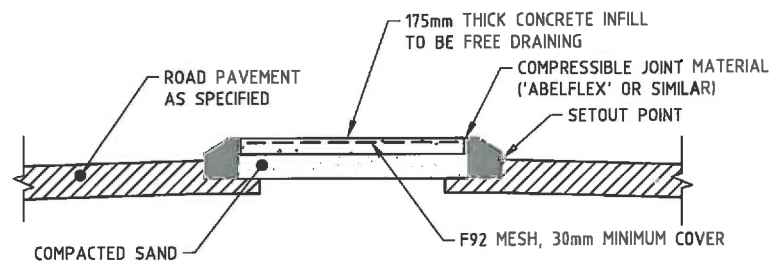
ISLAND 'D' DETAIL
SCALE 1:50 (A1)
SCALE 1:100 (A3)



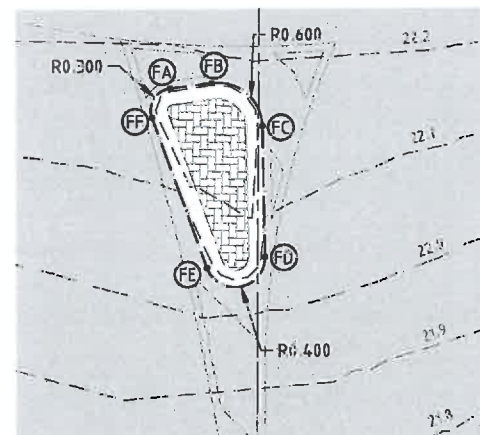
ROUNDAABOUT DETAIL
SCALE 1:100 (A1)
SCALE 1:200 (A3)



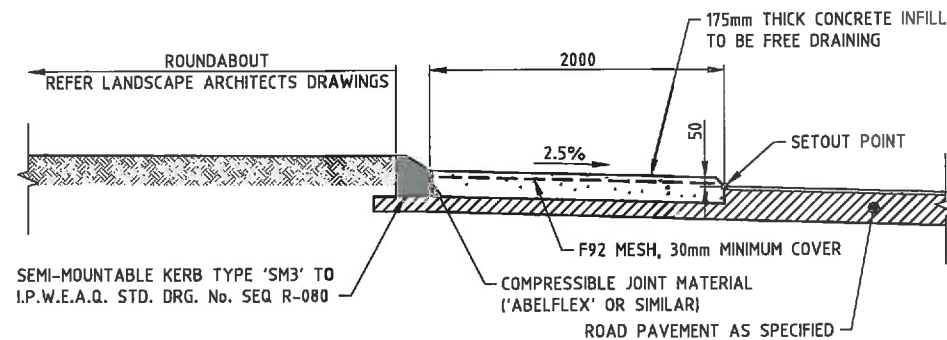
ISLAND 'E' DETAIL
SCALE 1:50 (A1)
SCALE 1:100 (A3)



ISLAND INFILL DETAIL
SCALE 1:25 (A1)
SCALE 1:50 (A3)



ISLAND 'F' DETAIL
SCALE 1:50 (A1)
SCALE 1:100 (A3)



ROUNDAABOUT CENTRAL ISLAND DETAIL - SM3 KERB AND CONCRETE OVER-RUN
SCALE 1:25 (A1)
SCALE 1:50 (A3)

ISLAND SETOUT DATA

POINT	EASTING	NORTHING	RL
DA	9722.742	36353.625	22.649
DB	9723.284	36355.418	22.690
DC	9723.825	36357.210	22.733
DD	9724.308	36357.350	22.732
DE	9724.971	36356.778	22.710
DF	9725.190	36355.210	22.656
DG	9723.818	36353.122	22.617
EA	9745.980	36379.131	22.671
EB	9746.450	36380.605	22.652
EC	9748.312	36381.775	22.582
ED	9750.173	36382.946	22.506
EE	9752.034	36384.116	22.430
EF	9752.716	36383.130	22.407
EG	9750.672	36381.376	22.489
EH	9749.012	36379.502	22.559
EI	9747.613	36377.426	22.610
EJ	9747.375	36377.023	22.618
EK	9746.836	36377.056	22.635
FA	9743.800	36358.158	22.174
FB	9744.140	36358.612	22.183
FC	9745.028	36358.693	22.164
FD	9746.340	36357.479	22.070
FE	9745.905	36356.820	22.046
FF	9743.918	36357.705	22.151

LEGEND

- 10.0 DESIGN SURFACE CONTOURS (0.1m INTERVALS)
- PROPOSED ROAD CROWN LINE
- PROPOSED SEMI-MOUNTABLE KERB SM3
- PROPOSED BLISTER ISLAND
- EXISTING KERB
- AREA OF PROPOSED ROAD SURFACE
- CONCRETE INFILL

FILE: B11163-206.dwg DATE: 29-11-2011 TIME: 16:35
Xref's: X_B11163_TITLE X_B11163_BASE X_B11163_LEGEND USR: Mohd Fatah

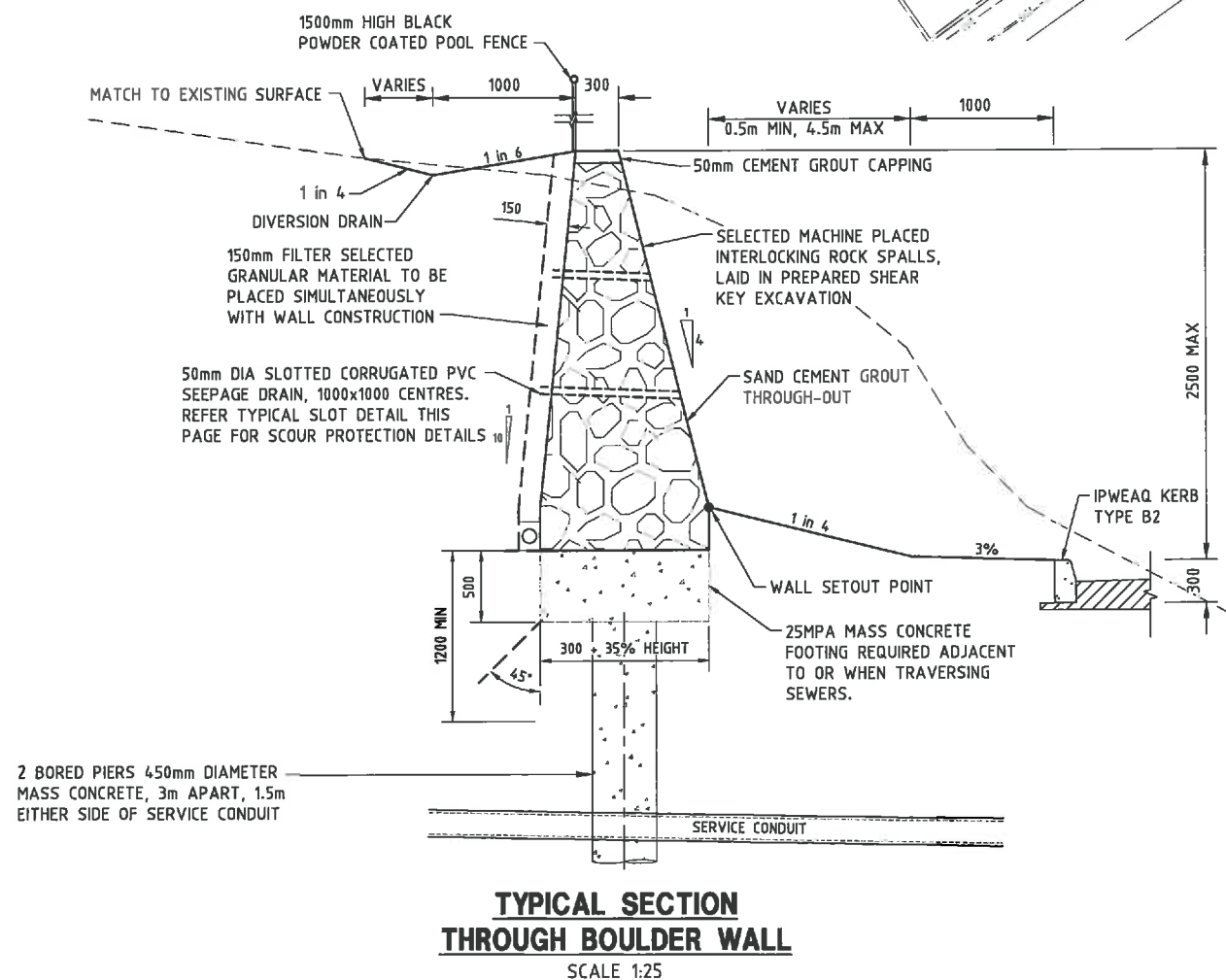
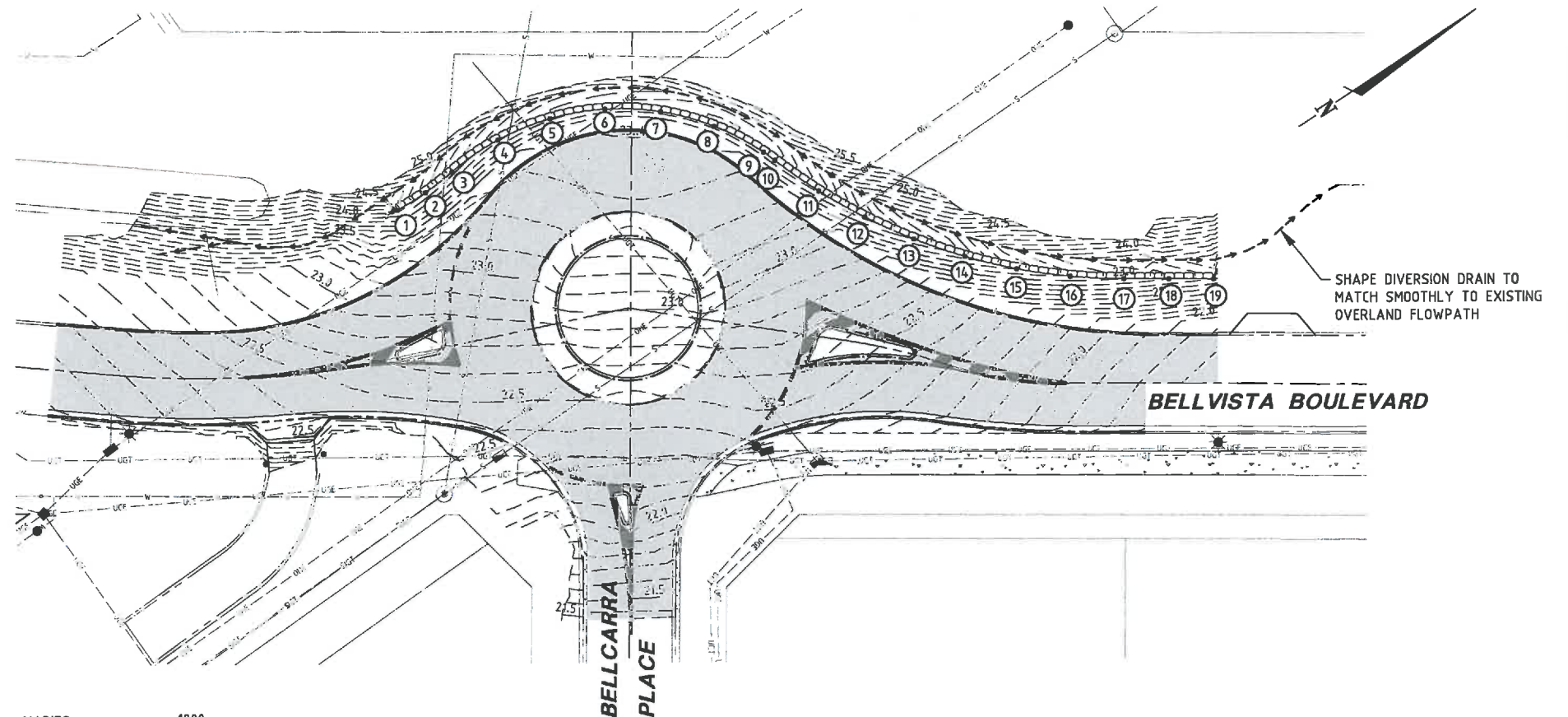
REV	DATE	BY	CHKD	DESCRIPTION
A				
B				
C				
D				
E				
F				

DESIGN CHECK	1:25 0.25 0 0.25 0.5 0.75 1.0 1.25 A1	MICROFILM No.	SURVEYOR: RPS	CLIENT: STOCKLAND CALOUNDRA DOWNS PTY LTD	BROWN Smart Consulting	CONSULT AUSTRALIA Brown Consulting (Qld) Pty Ltd Level 1, 15 Nicklin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Brisbane Cairns Melbourne Sydney Singapore Shanghai-Canton	DRAWING NUMBER B11163-206	ISSUE
DRAWN CHECK	1:50 1 0.5 0 1 2 A1 1:100 1 0 1 2 3 4 5 A1 1:200 1 0 1 2 3 4 5 A3	PROJECT No. B11163	Ph (07) 5436 7888 Fax (07) 5593 6630	PROJECT BELLS REACH INTERSECTION WORKS				

APPROVED	BRENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7884	FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD
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LEGEND

- 10.0 DESIGN SURFACE CONTOURS (0.1m INTERVALS)
- PROPOSED ROAD CROWN LINE
- PROPOSED BARRIER KERB AND CHANNEL B1
- PROPOSED BARRIER KERB B2
- PROPOSED SEMI-MOUNTABLE KERB SM3
- PROPOSED BLISTER ISLAND
- EXISTING KERB
- PROPOSED RETAINING WALL
- AREA OF PROPOSED ROAD SURFACE
- CONCRETE INFILL
- DIVERSION DRAIN



RETAINING WALL SETOUT DATA

POINT	BOTTOM OF WALL			TOP OF WALL
	EASTING	NORTHING	RL	RL
1	9714.425	36361.428	24.139	24.68
2	9715.019	36364.150	24.098	24.92
3	9715.307	36366.921	24.051	25.12
4	9716.031	36371.469	23.955	25.33
5	9717.728	36375.750	23.862	25.49
6	9720.318	36379.558	23.802	25.57
7	9723.675	36382.710	23.767	25.64
8	9727.639	36385.055	23.758	25.71
9	9732.018	36386.479	23.789	25.66
10	9733.173	36386.683	23.777	25.62
11	9737.531	36387.533	23.724	25.33
12	9741.792	36388.787	23.632	24.92
13	9745.916	36390.433	23.499	24.74
14	9749.869	36392.457	23.343	24.52
15	9753.616	36394.842	23.207	24.23
16	9757.123	36397.565	23.091	24.08
17	9760.361	36400.605	22.997	23.96
18	9762.927	36403.250	22.904	23.98
19	9765.493	36405.895	22.803	23.85

BOULDER WALL TO BE DESIGNED AND CERTIFIED BY SUBCONTRACTOR. SUBSTITUTE WALL TYPE (SLEEPER, BLOCK LINK, ETC.) TO BE USED AS APPROVED BY SUPERINTENDENT.

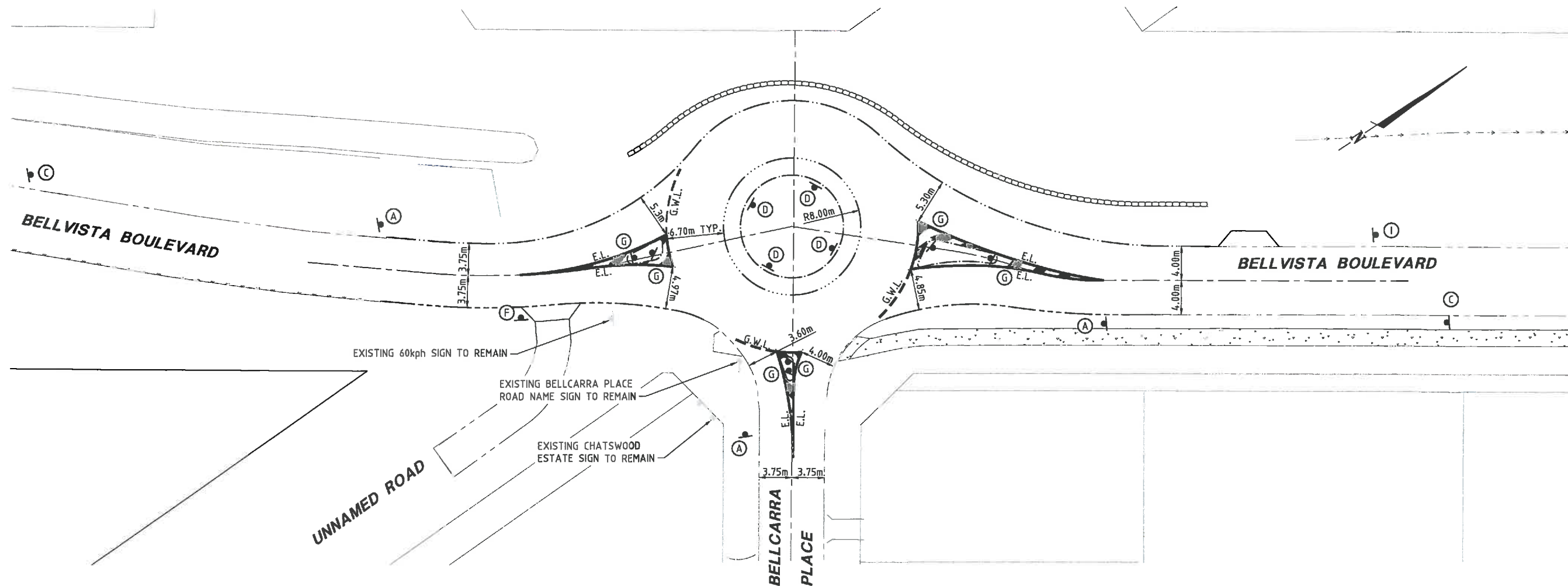
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REV	DATE	BY	CHKD	APPD	DESCRIPTION
A					
B					
C					
D					
E					
F					

DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
	1:25 0 0.25 0.5 0.75 1.0 1.25 A1		Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUDRA DOWNS PTY LTD
DRAWN CHECK	1:250 0 5 10 A1	PROJECT No.	APPROVED	PROJECT
	1:500 0 5 10 A3	B11163	BRENT THOMAS RPEO 7862 BROOK KITSON RPEO 7884	BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

BROWN Smart Consulting	CONSULT AUSTRALIA Brown Consulting (QLD) Pty Ltd Level 1, 15 Nicklin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Info-line Canberra Melbourne Sydney Singapore Auckland Christchurch	Quality Endorsed Company ISO 9001 Lic 4084
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DRAWING TITLE	DRAWING NUMBER	ISSUE
RETAINING WALL SETOUT DETAILS	B11163-207	



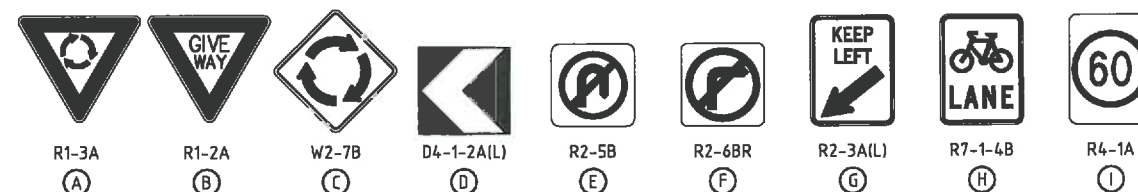
LEGEND

① PROPOSED ROAD SIGN WITH SIGN IDENTIFIER

PAVEMENT MARKING LEGEND

PAVEMENT MARKINGS	LENGTH (m)	GAP (m)	WIDTH (mm)
EDGE LINE (E.L.)	-	-	100
GIVEWAY LINE (G.W.L.)	600	600	300

SIGNS LEGEND



FILE: B11163-208.dwg DATE: 29-11-2011 TIME: 16:43
Xref's: X_B11163_LEGEND USR: Matt Faltch

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SCALE (METRES)	1:250 5 0 5 10 A1	1:500 A3
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DESIGN CHECK	
DRAWN CHECK	

MICROFILM No.	
PROJECT No.	B11163

SURVEYOR: RPS	Ph (07) 5436 7888 Fax (07) 5593 6630
APPROVED	BRENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7864
FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

CLIENT	STOCKLAND CALOUNDRA DOWNS PTY LTD
PROJECT	BELLS REACH INTERSECTION WORKS

BROWN	Smart Consulting
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CONSULT AUSTRALIA	Quality Endorsed Company ISO 9001 Lic 4054
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DRAWING TITLE	SIGNS AND LINEMARKING LAYOUT PLAN
DRAWING NUMBER	B11163-208
ISSUE	

CONNECTION TO EXISTING MAIN

ALL LIVE WORKS TO BE UNDERTAKEN BY UNITY WATER

No.	Ø	DESCRIPTION
1	100	CONTRACTOR TO LAY WATER MAINS UP TO 1m FROM CONNECTION 1. UNITY WATER TO MAKE FINAL CONNECTION.

PROVIDE BRIDGING SLAB OVER EXISTING SEWER. REFER DETAIL THIS PAGE.

POTHOLE EXISTING TELECOMMUNICATIONS MAIN AND IF NECESSARY RELAY AT 700mm COVER. ALL WORKS TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.

CAUTION:
OVERHEAD ELECTRICAL. CONTRACTOR TO CHECK CLEARANCE PRIOR TO CONSTRUCTION

RELAY EXISTING Ø100mm WATER MAIN AT 900mm COVER UNDER ROAD AND 1200mm COVER UNDER WALL. ALL WORKS TO BE CONFIRMED BY SUPERINTENDENT.

RELAY EXISTING UNDERGROUND ELECTRICAL AT 900mm COVER. ALL WORKS TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.

BELLVISTA BOULEVARD

POTHOLE EXISTING TELECOMMUNICATIONS MAIN AND IF NECESSARY RELAY AT 700mm COVER. ALL WORKS TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.

POTHOLE EXISTING TELECOMMUNICATIONS MAIN AND IF NECESSARY RELAY AT 700mm COVER. ALL WORKS TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.

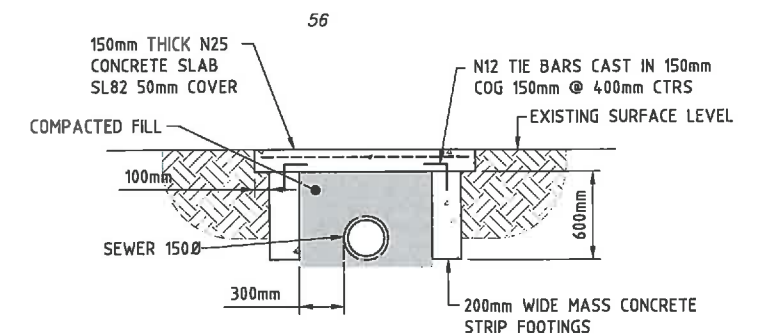
POTHOLE EXISTING UNDERGROUND ELECTRICAL AND IF NECESSARY RELAY AT 900mm COVER. ALL WORKS TO BE CONFIRMED BY ELECTRICAL CONTRACTOR.

BELLCARRA PLACE

LEGEND

EXISTING SURFACE CONTOURS (1.0m INTERVALS)	EXISTING KERB
DESIGN SURFACE CONTOURS (0.1m INTERVALS)	EXISTING SEWER MAIN
PROPOSED ROAD CROWN LINE	EXISTING WATER MAIN
PROPOSED BARRIER KERB AND CHANNEL B1	EXISTING UNDERGROUND ELECTRICAL
PROPOSED BARRIER KERB B2	EXISTING UNDERGROUND TELSTRA
PROPOSED SEMI-MOUNTABLE KERB SM3	PROPOSED BRIDGING SLAB
PROPOSED BLISTER ISLAND	PROPOSED WATER MAIN
EXISTING ROAD CROWN LINE	PROPOSED UNDERGROUND ELECTRICAL

PROPOSED UNDERGROUND TELSTRA
AREA OF PROPOSED ROAD SURFACE
CONCRETE INFILL
CONCRETE FOOTPATH (2.0m WIDE)
DIVERSION DRAIN
EXISTING STORMWATER DRAINAGE MANHOLE AND INLET GRATE
EXISTING OVERHEAD ELECTRICAL POWER POLE AND LIGHT POLE
TREES TO BE RETAINED



**CONCRETE BRIDGING SLAB
TYPICAL DETAIL**

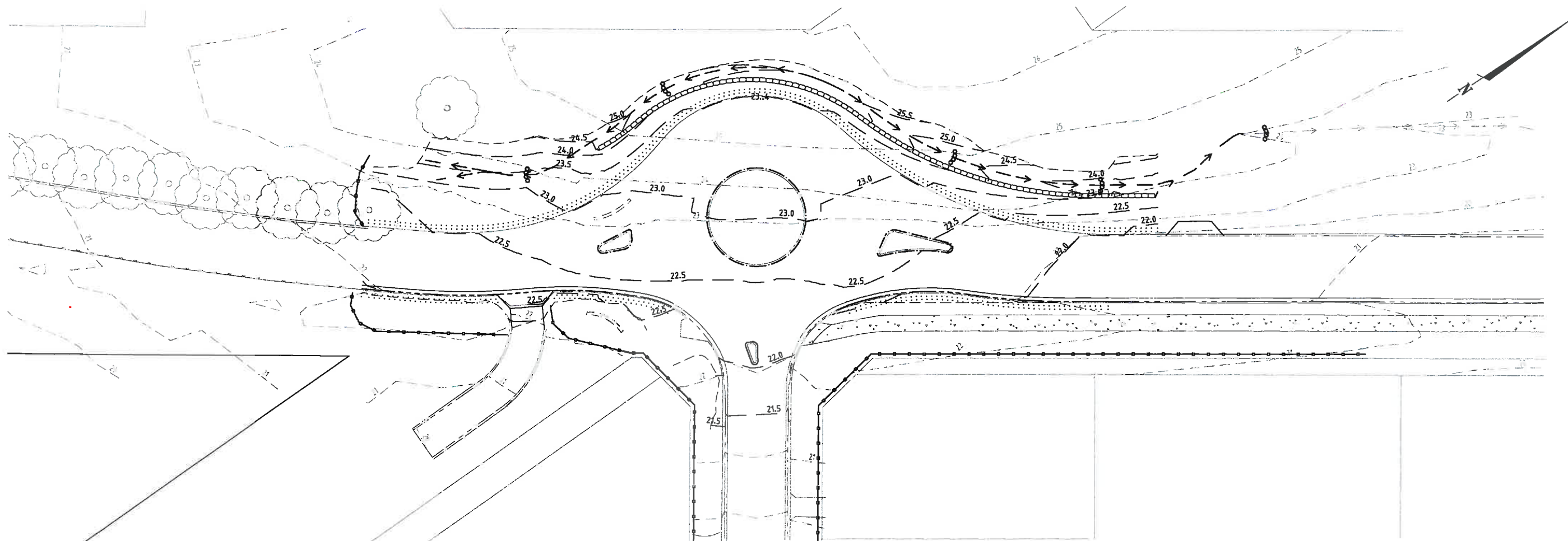
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FILE: B11163-209.dwg DATE: 29-11-2011 TIME: 16:44
Xref: X_B11163_TITLE X_B11163_BASE X_B11163_LEGEND USR: Matt Fallow

REV	DATE	BY	CHKD	DESCRIPTION
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DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
	1:250 5 0 5 10 A1		Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD
DRAWN CHECK	1:500	PROJECT No.	APPROVED	PROJECT
		B11163	BRENT THOMAS RPEQ 7863 BROOK KITSON RPEQ 7864	BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	

BROWN Smart Consulting	CONSULT AUSTRALIA	QUALITY Endorsed Company ISO 9001 Lic 6284	DRAWING TITLE
Brown Consulting (QLD) Pty Ltd Level 1, 15 Nicklin Way, Brisbane QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Melbourne Canberra Melbourne Sydney Singapore Sunshine Coast			SEWER, WATER AND CONDUIT PLAN
			DRAWING NUMBER
			B11163-209



LEGEND

- EXISTING SURFACE CONTOURS (1.0m INTERVALS)
- DESIGN SURFACE CONTOURS (0.5m INTERVALS)
- DOWNSTEAM KERB PROTECTION
- SEDIMENT FENCE (OR AS DIRECTED BY SITE SUPERINTENDENT)
- PROPOSED RETAINING WALL
- TURFING BEHIND KERB AND CHANNEL
- DIVERSION DRAIN
- ROCK CHECK DAM

THE EROSION & SEDIMENT CONTROL PLAN IS A BASIC PLAN DEMONSTRATING AN APPROACH TO EROSION & SEDIMENTATION CONTROL FOR THE SITE. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE AN EROSION & SEDIMENT CONTROL DESIGN AND A COMPLETED DESIGN CERTIFICATE PRIOR TO COMMENCEMENT OF WORK. CERTIFICATION MUST BE UNDERTAKEN BY A SUITABLY QUALIFIED, EXPERIENCED PROFESSIONAL NOT DIRECTLY EMPLOYED BY THE PRINCIPAL.

CONCEPTUAL SEDIMENT MANAGEMENT PROGRAM PHASE 1

DESCRIPTION OF WORKS

- PRIOR TO CONSTRUCTION**
 - SEDIMENT FENCE, SAND BAGS AND EARTH RILLS TO BE ERECTED AS INDICATED OR AS DIRECTED.
 - CONTRACTOR TO DISPLAY APPROPRIATE WORKPLACE HEALTH AND SAFETY SIGNAGE DETAILING THE AREA BEYOND IS A CONSTRUCTION SITE AND ONLY AUTHORISED PERSONAL CAN ENTER.
 - CONSTRUCT VEHICLE WASHDOWN AREA AND ASSOCIATED SEDIMENT MANAGEMENT DEVICES CONSTRUCT SITE OFFICE AND STORAGE COMPOUND AREA.
 - CUTOFF DRAINS (CLEAN AND DIRTY) TO BE CONSTRUCTED.
- CLEARING**
 - EXISTING GRASSED VEGETATED AREAS TO BE RETAINED WHERE POSSIBLE AND EXPOSED DISTURBED AREA MINIMISED.
- EARTHWORKS**
 - SUPERINTENDENT TO CONFIRM EXTENT OF CLEARING/EARTHWORKS TO CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.
 - SEDIMENT FENCES TO BE RE-ERECTED TO ALLOTMENTS WHEN REQUIRED. ANY STOCKPILES, TEMPORARY STOCKPILES AND EARTHWORKS NOT INTENDED TO BE WORKED FOR MORE THAN 10 DAYS ARE TO BE EFFECTIVELY STABILISED.
 - EARTHWORKS & RETAINING WALLS TO BE COMPLETED AND EXPOSED AREAS EFFECTIVELY STABILISED PRIOR TO WORKS PROCEEDING IN OTHER AREAS.
 - CONTRACTOR TO LIMIT AREA EXPOSED AT ANY ONE POINT TO LESS THAN 2.0ha UNO.
- MAINTENANCE**
 - SEDIMENT FENCES AND EARTH RILLS WITHIN ROADS TO BE ERECTED AS INDICATED OR REQUIRED.
 - SEDIMENT FENCES TO BE INSPECTED WEEKLY AND FOLLOWING RAINFALL EVENTS. ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY.
 - SEDIMENT AFTER RAIN IS TO BE CLEANED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND CORRECTIVE ACTION TAKEN TO AVOID A RE-OCCURRENCE OF THE FAILURE.

CONCEPTUAL SEDIMENT MANAGEMENT PROGRAM PHASE 2

DESCRIPTION OF WORKS

- SEWER/ ROOFWATER/ STORMWATER/ SERVICES**
 - EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH AND TO PROTECT PIPE WORK AND DIRECT SURFACE MATERIAL AWAY FROM EXCAVATIONS.
 - DEPRESS GROUND AROUND TEMPORARY FIELD INLETS TO CREATE SEDIMENT POND.
 - PROVIDE 2.0M TURF STRIPS OVER ROOFWATER AND SEWER TRENCHES.
- STOCKPILE**
 - SEDIMENT FENCE TO BE ERECTED 5M FROM TOE OF BATTER ON LOW SIDE OF STOCKPILE.
 - STOCKPILE SITE TO BE CLEAR OF STAGE BOUNDARIES SO AS TO NOT CAUSE A NUISANCE TO ADJOINING PROPERTIES.
 - STOCKPILES NOT INTENDED TO BE WORKED FOR MORE THAN 10 DAYS ARE TO BE EFFECTIVELY STABILISED.
- ROADWORKS**
 - KERB INLET PROTECTION TO BE PROVIDED TO ALL GULLIES.
 - UTILISE UNDERGROUND DRAINAGE SYSTEM AS CONVEYANCE SYSTEM OF DIRTY WATER TO BASINS (WHERE APPROPRIATE) TO AVOID SCOUR OF ROAD BOX PROFILE.
- MAINTENANCE**
 - THE SEDIMENT FENCES ARE TO BE INSPECTED WEEKLY AND FOLLOWING RAIN FALL EVENTS. ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY.
 - SEDIMENT AFTER RAIN OR CONSTRUCTION TRAFFIC IS TO BE CLEANED FROM STREETS AND ALLOTMENTS IMMEDIATELY AND CORRECTIVE ACTION TAKEN.

FILE: B11163-220.dwg DATE: 29-11-2011 TIME: 16:51
Xref's: X_B11163_LEGEND USR: Matt Fallon

REV	DATE	BY	CHKD	DESCRIPTION
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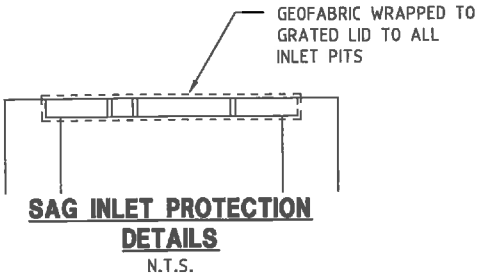
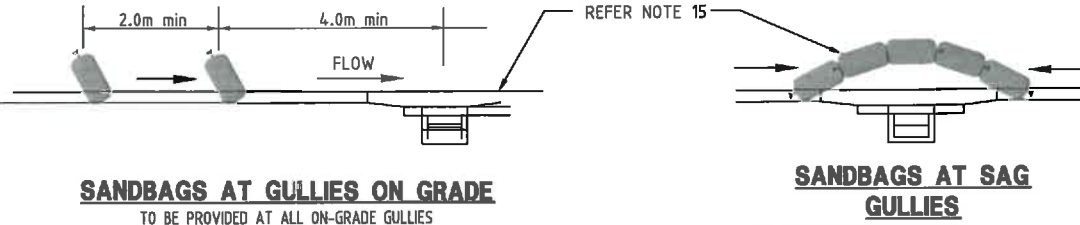
DESIGN CHECK	SCALE (METRES)	MICROFILM No.	SURVEYOR: RPS	CLIENT
DRAWN CHECK	1:250 5 0 5 10 A1 1:500 A3	PROJECT No. B11163	Ph (07) 5436 7888 Fax (07) 5593 6630	STOCKLAND CALOUNDRA DOWNS PTY LTD
			APPROVED BENT THOMAS RPEQ 7862 BROOK KITSON RPEQ 7884	PROJECT BELLS REACH INTERSECTION WORKS
			FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD	BROWN Smart Consulting
				CONSULT AUSTRALIA Brown Consulting (QLD) Pty Ltd Level 1, 15 Nicklin Way, Bundano QLD Australia 4575 Telephone 07 5470 9200 Facsimile 07 5470 9262 Brisbane Canberra Melbourne Sydney Wollongong Perth Adelaide
				QUALITY Endorsed Company ISO 9001 Lic 6084
				DRAWING TITLE CONCEPTUAL EROSION AND SEDIMENT CONTROL PLAN
				DRAWING NUMBER B11163-220
				ISSUE

GENERAL NOTES

- THIS DESIGN FOR EROSION AND SEDIMENT CONTROL IS CONCEPTUAL ONLY. THE CONTRACTOR SHALL MODIFY OR INSTALL ADDITIONAL/ ALTERNATIVE MEASURES DURING THE CONSTRUCTION AND MAINTENANCE PERIOD IN ORDER TO COMPLY WITH BEST PRACTICE STANDARDS IN ACCORDANCE WITH BUT NOT LIMITED TO BROWN CONSULTANT'S SPECIFICATION 17 , THE MANUAL FOR EROSION AND SEDIMENT CONTROL (V1.2) AND ALL STATUTORY REQUIREMENTS .
2. PRESCRIBED WATER CONTAMINANTS (AS DEFINED IN THE ENVIRONMENTAL PROTECTION ACT 1994) MUST NOT BE RELEASED FROM THE SITE, OR BE LIKELY TO BE RELEASED SHOULD RAINFALL OCCUR, UNLESS ALL REASONABLE AND PRACTICABLE MEASURES ARE TAKEN TO PREVENT OR MINIMISE THE RELEASE AND CONCENTRATION OF CONTAMINATION. THESE MEASURES MUST INCLUDE AS A MINIMUM, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- A. ENSURE NON ESSENTIAL EXPOSURE OF SOIL IS PREVENTED BY: RESTRICTING THE EXTENT OF CLEARING TO THAT NECESSARY FOR ACCESS TO, AND SAFE CONSTRUCTION OF, THE APPROVED WORKS; PROTECTING VEGETATION IN ALL OTHER AREAS OF THE SITE; AND BY MINIMISING THE DURATION OF SOIL EXPOSURE BY:
 - STAGING THE WORKS TO MINIMISE THE AREA OF SOIL EXPOSED AT ANY ONE TIME;
 - EFFECTIVELY STABILISING CLEARED AREAS PRIOR TO RAINFALL IF WORKS ARE DELAYED OR WORKS ARE NOT INTENDED TO OCCUR IMMEDIATELY. SEE E&S ADVISE NOTE 1;
 - EFFECTIVELY STABILISING AREAS AT FINISHED LEVEL WITHOUT DELAY AND PRIOR TO RAINFALL; AND
 - EFFECTIVELY STABILISING STEEP AREAS, SUCH AS STOCKPILES, BATTERS AND EMBANKMENTS, WHICH ARE NOT BEING ACTIVELY WORKED AND PRIOR TO RAINFALL.
 - B. WHERE IT IS NOT FEASIBLE TO EFFECTIVELY STABILISE CLEARED AREAS OF EXPOSED SOIL, SUCH AS AREAS BEING ACTIVELY WORKED, IMPLEMENT A FULL SUITE OF EROSION AND SEDIMENT CONTROLS TO MAXIMISE SEDIMENT CAPTURE IN THOSE AREAS AND TO MINIMISE EROSION SUCH THAT EROSION BY ALL FORMS OTHER THAN SPLASH (RAINDROP IMPACT) EROSION AND SHEET EROSION DOES NOT OCCUR; AND
 - C. IN AREAS OF EXPOSED SOIL WHERE IT IS NOT FEASIBLE TO EITHER EFFECTIVELY STABILISE THE SURFACE OR IMPLEMENT A FULL SUITE OF EROSION AND SEDIMENT CONTROLS, FOR EXAMPLE IN THE AREAS BEING ACTIVELY WORKED AND WHERE THE IMPLEMENTATION OF SOME EROSION AND SEDIMENT CONTROLS WOULD IMPEDE CONSTRUCTION ACTIVITIES, ENSURE CONTINGENCY MEASURES ARE AVAILABLE ON SITE AND ARE IMPLEMENTED, PRIOR TO RAIN, TO MAXIMISE SEDIMENT CAPTURE AND TO MINIMISE EROSION SUCH THAT EROSION BY ALL FORMS OTHER THAN SPLASH (RAINDROP IMPACT) EROSION AND SHEET EROSION DOES NOT OCCUR
 - D. EFFECTIVELY STABILISE ALL STOCKPILES, BATTERS AND EMBANKMENTS WITHOUT DELAY. WHERE IT IS NOT FEASIBLE TO EFFECTIVELY STABILISE A STOCKPILE, BATTER OR EMBANKMENT, SUCH AS AREAS BEING ACTIVELY WORKED, ENSURE THAT SEDIMENT CONTROLS ARE INSTALLED AND SURFACE STORMWATER FLOWS ARE MANAGED SUCH THAT EROSION OF STOCKPILES, BATTERS OR EMBANKMENTS IS NOT CAUSED BY CONCENTRATED STORMWATER FLOWS.
 - E. ENSURE CLEAN STORMWATER IS DIVERTED OR MANAGED AROUND OR THROUGH THE SITE WITHOUT INCREASING THE CONCENTRATION OF TOTAL SUSPENDED SOLIDS OR OTHER CONTAMINANTS IN THE FLOW AND WITHOUT CAUSING EROSION (ON SITE OR OFF SITE). IF IT IS NOT FEASIBLE TO DIVERT ALL AREAS DISCHARGING CLEAN STORMWATER AROUND OR THROUGH THE SITE, MANAGE THE CLEAN STORMWATER RUNOFF AS FOR CONTAMINATED STORMWATER RUNOFF, AND ENSURE THAT SEDIMENT BASINS ARE SIZED TO ACCOMMODATE THE ADDITIONAL VOLUME OF RUNOFF (SEE E&S ADVISE NOTE 2).
 - F. ENSURE SHEET FLOWS OF STORMWATER ARE MANAGED SUCH THAT SHEET AND RILL EROSION IS PREVENTED OR MINIMISED.
 - G. ENSURE THAT ALL CONCENTRATED STORMWATER FLOWS INCLUDING DRAINAGE LINES, DIVERSION DRAINS, CHANNELS AND BATTER CHUTES ARE MANAGED ONTO, THROUGH, AND AT RELEASE POINTS FROM THE SITE IN ALL RAIN EVENTS UP TO AND INCLUDING THE AVERAGE RECURRENCE INTERVAL (ARI) EVENT OF 1 IN 2 YEAR ARI WITHOUT CAUSING WATER CONTAMINATION, SHEET, RILL OR GULLY EROSION, SEDIMENTATION, OR DAMAGE TO STRUCTURES OR PROPERTY

3. THE ENVIRONMENTAL PROTECTION ACT 1994 STATES THAT A PERSON MUST NOT CARRY OUT ANY ACTIVITY THAT CAUSES, OR IS LIKELY TO CAUSE, ENVIRONMENTAL HARM UNLESS THAT PERSON TAKES ALL REASONABLE AND PRACTICAL MEASURES TO PREVENT OR MINIMISE THE HARM. ENVIRONMENTAL HARM INCLUDES ENVIRONMENTAL NUISANCE. IN REGARD PERSONS AND ENTITIES, INVOLVED IN THE CIVIL, EARTHWORKS AND CONSTRUCTION PHASES OF THIS DEVELOPMENT, ARE TO ADHERE TO THEIR 'GENERAL ENVIRONMENTAL DUTY' TO MINIMISE THE RISK OF CAUSING ENVIRONMENTAL HARM.
4. ENVIRONMENTAL; HARM IS DEFINED BY THE ACT AS ANY ADVERSE AFFECT, OR POTENTIAL ADVERSE AFFECT WHETHER TEMPORARY OR PERMANENT AND OF WHATEVER MAGNITUDE, DURATION OR FREQUENCY ON AN ENVIRONMENTAL VALUE AND INCLUDES ENVIRONMENTAL NUISANCE. THEREFORE, NO PERSON SHOULD CAUSE ANY INTERFERENCE WITH THE ENVIRONMENT OR AMENITY OF THE AREA BY REASON OF THE EMISSION OF NOISE, VIBRATION, SMELL, FUMES, SMOKE, VAPOR, STEAM, SOOT, ASH, DUST, WASTE WATER, WASTE PRODUCTS, GRIT, SEDIMENT, OIL OR OTHERWISE, OR CAUSE HAZARDS LIKELY IN THE OPINION OF THE ADMINISTERING AUTHORITY TO CAUSE UNDUE DISTURBANCE OR ANNOYANCE TO PERSONS OR AFFECT PROPERTY NOT CONNECTED WITH THE USE.
5. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION INCLUDING THE MAINTENANCE PERIOD.
6. WHERE IT IS REQUIRED TO SLASH EXISTING VEGETATION EITHER PRIOR TO THE COMMENCEMENT OF WORKS, DURING THE CONSTRUCTION WORKS AND / OR DURING THE MAINTENANCE PERIOD, SAID VEGETATION SHALL BE SLASHED TO A MINIMUM HEIGHT OF 75mm TO ASSIST WITH THE RETENTION OF SOILS ON SITE (I.E. ASSIST IN THE PREVENTION OF EROSION).
7. WHERE THE EXISTING VEGETATION WITHIN THE PROPOSED LOTS AND / OR PARKLAND IS DISTURBED AS A RESULT OF THE CONSTRUCTION WORKS, SAID EARTHWORKS ARE TO BE TOPSOILED AND EFFECTIVELY STABILISED WITHIN FIVE (5) DAYS, (EARLIER IF RAIN EXPECTED) OF FINAL ALLOTMENT EARTHWORKS. AN EFFECTIVELY STABILISED SURFACE IS DEFINED AS ONE THAT DOES NOT HAVE
 - VISIBLE EVIDENCE OF SOIL LOSS CAUSED BY SHEET, RILL OR GULLY EROSION OR
 - LEAD TO SEDIMENTATION, OR
 - LEAD TO WATER CONTAMINATION.
8. ALL CONSTRUCTION VEHICLES ARE TO ACCESS THE SITE VIA A SINGLE POINT OF ACCESS; THE POINT OF ACCESS, TOGETHER WITH THE MEASURES TO BE IMPLEMENTED, ARE TO BE AGREED WITH COUNCIL'S DESIGNATED REPRESENTATIVE ON SITE. THE PRINCIPLE AIM OF THE MEASURE(S) TO BE IMPLEMENTED IS / ARE TO LIMIT THE TRACKING OF DELETERIOUS MATERIALS ONTO THE SURROUNDING ROAD NETWORK.
9. THE CONTRACTOR SHALL PROVIDE GULLY INLET PROTECTION TO ALL GULLY INLET STRUCTURES LOCATED, DIRECTLY DOWNSTREAM OF THE PROPOSED DEVELOPMENT WORKS.
10. APPROPRIATE PROVISIONS ARE TO BE PROVIDED TO THE INTERFACE BETWEEN THE EXISTING ROADWAY PAVEMENTS AND THE NEW ROADWORK'S CONSTRUCTION. THE PROVISIONS SHALL ADDRESS WORKPLACE HEALTH AND SAFETY CONCERNS (I.E. RESTRICTING ACCESS BY THE GENERAL PUBLIC TO THE SITE).
11. THE LOCATION OF THE CONSTRUCTION VEHICLE COMPOUND, SITE OFFICE AND THE VEHICLE SERVICING AREA SHALL BE AGREED WITH COUNCIL'S DESIGNATED REPRESENTATIVE ON SITE, PRIOR TO THE COMMENCEMENT OF WORKS.
12. CLEARED VEGETATION IS TO NOT BE BURNED ON SITE, ALL VEGETATIVE WASTE(S) SHALL BE MULCHED AND THEREAFTER RETAINED ON SITE FOR USE AS PART OF THE EROSION AND SEDIMENTATION CONTROL STRATEGY OR THE LANDSCAPING / REVEGETATION WORKS. ALL STUMPS AND / OR OTHER ORGANIC MATTER NOT SUITABLE FOR MULCHING SHALL BE DISPOSED OF AT AN APPROVED WASTE DISPOSAL FACILITY.

12. SEDIMENT FENCE AND TURFING RUNNING DOWNSLOPES SHALL HAVE REGULAR FLOW DISSIPATORS AT 45° TO SLOPE AS DIRECTED CONSISTING OF SAND BAGS OR SIMILAR AS REQUIRED.
13. DURING THE CONSTRUCTION PROCESS INCLUDING THAT PERIOD DURING WHICH THE WORKS ARE "ON MAINTENANCE" SHOULD COUNCIL'S DESIGNATED REPRESENTATIVE REQUEST ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES BE IMPLEMENTED, SAID MEASURES SHALL BE IMPLEMENTED AT THE EARLIEST TIME POSSIBLE. NOTWITHSTANDING THE ABOVE REQUIREMENT ANY MEASURES REQUESTED TO BE IMPLEMENTED BY COUNCIL'S DESIGNATED REPRESENTATIVE SHALL BE IMPLEMENTED WITHIN 24 HOURS OF THE TIME OF THE REQUEST.
14. ALL ROOFWATER / SEWER RETICULATION TRENCHES EITHER ADJACENT TO EXISTING DEVELOPMENT OR PERPENDICULAR TO THE CROSSFALL OF THE LAND ARE TO BE TOPSOILED (75mm MINIMUM) AND TURFED. FOR A MINIMUM 900mm WIDTH.
15. THE CONTRACTOR SHALL CONSTRUCT LINED CUTOFF DRAINS IN WORK AREAS SO AS TO LIMIT SLOPE LENGTHS TO A MAXIMUM OF 80M.
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO RELEASE OR FLOW IS PERMITTED FROM THE SITE, THROUGHOUT THE EARTHWORKS AND CONSTRUCTION PERIOD TO ANY WATERWAYS OR STORMWATER DRAINLINES LEADING TO A WATERWAY OR AREA OF NATIVE VEGETATION UNLESS THE LEVELS OF TOTAL SUSPENDED SOLIDS DOES NOT EXCEED A CONCENTRATION OF 50 MGL.
17. ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED, CLEANED AND/OR REPAIRED WHENEVER THE ACCUMULATED SEDIMENT REDUCES THE CAPACITY BY 50%.
18. ALL PERIMETER BANK/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
19. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT OR STABILISE ANY DOWNSTREAM CONSTRUCTION AND GULLY INLETS.
20. CLEARING OF SITE AND STOCK PILE AREAS TO BE AS DIRECTED BY THE SUPERVISING ENGINEER.
21. WHERE PRACTICAL THE CONTRACTOR SHALL DIVERT CLEAN WATER ENTERING THE SITE FROM EXTERNAL CATCHMENT(S) AND DIRECTED TO THE STORMWATER SYSTEM. THIS DISCHARGE POINT SHOULD BE ROCK LINED. REGULAR ROCK CHECK DAMS SHOULD BE POSITIONED ALONG THE VEGETATED DRAINAGE LINE LEADING TO THIS DISCHARGE POINT.
22. REGULAR INSPECTIONS AND MAINTENANCE OF VEHICLE WASHDOWN AREA, SITE AND STORAGE COMPOUND TO BE CARRIED OUT BY CONTRACTOR.
23. AREAS USED FOR STORAGE OF CHEMICALS USED FOR CONSTRUCTION PURPOSES SHALL HAVE STORMWATER CONTROL DEVICES ERECTED ADJACENT TO THEM (I.E. EARTH BUND AND SEDIMENT FENCES). UPON COMPLETION OF ROADWORKS WASTE PRODUCTS ARE TO BE DISPOSED OF AS PER LOCAL AUTHORITY GUIDELINES AND TEMPORARY DEVICES ARE TO BE REMOVED AND AREA REHABILITATED.



FIRST ISSUE		CALCS J/N	DRAWN M/F	DATE 28.11.11	AMENDMENT DETAILS		DESIGN CHECK	SCALE (METRES)		MICROFILM No.	CLIENT STOCKLAND CALOUNDRA DOWNS PTY LTD		 BROWN <i>Smart Consulting</i> Brown Consulting (Qld) Pty Ltd Level 1, 15 Nicklin Way, Buddina QLD Australia 4575 Telephone 07 5470 9260 Facsimile 07 5470 9262 Brisbane Coolums Melbourne Sydney Singapore Sunshine Coast
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DRAWN CHECK							APPROVED 		BRENT THOMAS RPEQ 7862 BROOK THOMAS RPEQ 7884		BELLS REACH INTERSECTION WORKS		
FOR & ON BEHALF OF BROWN CONSULTING (QLD) PTY LTD											DRAWING NUMBER B11163-221		ISBULE