

LOCALITY PLAN
1:5000

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SERVICES OFFSETS AND LOCATIONS

STREET NAME	Rd/RESERVE	WATER		SEWER RISING MAIN	GAS	ELECTRICITY		FIBRE TO THE HOME		Bk. of KERB	JOINT TRENCHING
		DW	NDW			CABLES	POLES	FTTH CABLES	FTTH PITS		
SPRINGLANDS STREET	18.00	3.20 N	2.70 N	1.55 N	2.25 N	3.30 S	1.00 BOK	1.80 S	1.80 N	5.05	G/DW/NDW & FTTH/E
WATERGARDEN CIRCUIT (LOTS 601-610)	16.00	2.95 W	2.50 W	1.55 W	2.10 W	2.00 E	1.00 BOK	TBC	1.80 W	4.20 W 3.90 E	G/DW/NDW & FTTH/E
WATERGARDEN CIRCUIT (LOTS 631-632, 647-657)	13.50	2.90 N&W	2.45 N&W	1.55 N&W	2.00 N&W	4.30 N&W	1.00 BOK	3.50 N&W	3.50 N&W	1.20 S&E 6.35 N&W	G/DW/NDW & FTTH/E

WARNING
BEWARE OF UNDERGROUND SERVICES
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- ATTENTION TO CONTRACTOR**
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
 - CONTRACTOR TO ENSURE THAT THE SITE IS PEGGED AND OR SET OUT CHECKED BY THE LICENCED SURVEYOR RESPONSIBLE FOR CERTIFYING THE PLAN OF SUBDIVISION PRIOR TO UNDERGROUND INFRASTRUCTURE BEING INSTALLED.
 - WHERE CONCRETE WORKS ABOUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVED MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.



LEGEND	
PROP DRAINAGE	LOT FALL
EXIST DRAINAGE	LOT LEVEL - F.S. / EXIST
DRAINAGE PIT/DIA./FLOW	F.S. AT BUILDING LINE
PROPERTY INLET	TOP / TOE OF BATTER
HOUSE DRAIN	LOT BDY CHAINAGE
RETAINING WALL DRAIN	LOTS EASEMENT
PROP/EX/FUT SEWER	STREET SIGN
PROP/EX/FUT WATER	LINEMARKING
PROP/EX/FUT 100mm CONDUIT	DRIVEWAY
PROP RETAINING WALL	PSM
EXIST RETAINING WALL	REMOVE EXIST TREE
EXIST HP OIL	
EXIST TELECOMS	
100Ø IRRIGATION CONDUIT	
FILL - PROP / EXIST	
CUT - PROP / EXIST	

AMENDMENTS	DATE	REMARKS	CHECKED
E	03/03/21	FILL HATCH UPDATED	
D	22/10/19	KERB BREAK ADJACENT LOT 649 ADDED FOR LANDSCAPING	
C	14/10/19	DW TAPPING ADDED TO RESERVE ADJACENT LOT 649	
B	22/08/19	SPRINGLANDS/WATERGARDENS ELEC OFFSETS REVISED	
A	15/08/19	ISSUED FOR CONSTRUCTION	

breese pitt dixon pty. ltd.
land surveyors civil engineers

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hawthorn east, 3123
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AQUAREVO ESTATE
STAGE 6
LAYOUT PLAN AND DETAILS

MUNICIPALITY: **CASEY**
REFERENCE: **8766 E/06**

SCALE: As Shown DATUM: AHD DATE: Jun'19 SHEET: 1 OF 13

NOTES

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT AND THE CITY OF CASEY CURRENT SPECIFICATION AND STANDARD DRAWINGS AND TO THE SATISFACTION OF THE CITY OF CASEY WORKS SUPERVISOR.
- COUNCIL TO BE NOTIFIED TWO (2) CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
- DRAINAGE AND PITS TO BE SET OUT FROM OFFSETS SHOWN RATHER THAN FROM CENTRELINE PIPE CHAINAGES. CENTRELINE OF PITS AT TP'S TO BE OFFSET 1.00 METRE.
- ALL DRAINAGE PIPES TO BE RCP(IPRR).
- R.C. PIPES TO BE CLASS 2 & P.V.C PIPES TO BE CLASS SH UNLESS OTHERWISE SPECIFIED.
- WHERE DRAINAGE PIPES ARE LOCATED WITHIN NATURE STRIPS, THE TRENCH SHALL BE BACKFILLED WITH COMPACTED CLASS 3 F.C.R. UP TO A LEVEL WHERE THE 45deg. INFLUENCE LINE FROM THE B.O.K. INTERSECTS WITH THE NEAREST TRENCH SIDE. PROVIDE CRUSHED ROCK BACKFILL WHERE DRAINAGE CROSSES BELOW FOOTPATHS.
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm CLASS 3 CRUSHED ROCK TO A RELATIVE COMPACTION OF 97% OF THE MAXIMUM FOUND IN THE STANDARD COMPACTION TEST FOR THE FOLLOWING:
 - BENEATH THE ROAD OR DRIVEWAY PAVEMENT TO THE UNDERSIDE OF THE PAVEMENT.
 - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM THE NEAR LOWER EDGE. (TRENCHES TO BE BACKFILLED IN LAYERS NOT EXCEEDING 200mm LOOSE.)
- PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING ALL RELEVANT REGULATIONS, HAVE BEEN ADDRESSED. IN PARTICULAR, THE REQUIRED NOTIFICATIONS MUST BE CONVEYED TO THE VICTORIAN WORKCOVER AUTHORITY - HEALTH & SAFETY DIVISION WITH RESPECT TO TRENCHING OPERATIONS. DETAILS OF THE CONTRACTORS OCCUPATIONAL HEALTH & SAFETY PROCEDURES MUST BE LODGED WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS.
- PROPERTY INLETS ARE TO BE PLACED 1.0m FROM THE LOW CORNER OF LOT UNLESS OTHERWISE SHOWN. MINIMUM COVER TO BE 500mm. REFER GAA STD DWGS FIG016, FIG017 & FIG018.
- AGRICULTURAL PIPE DRAINS, AS PER GAA STD DWG FIG020, TO BE PLACED BEHIND ALL KERB AND CHANNEL AND BUFFER PITCHERS AND WHERE DIRECTED BY THE ENGINEER.
- ALL PROPOSED DRAINAGE STUBS TO BE BLANKED OFF AT END OF PIPE WITH TIMBER PLANKS TO THE SATISFACTION OF THE SUPERVISING ENGINEER.
- LOTS TO BE GRADED (1 in 150 MIN SLOPE) & LEFT CLEAN TO THE SATISFACTION OF THE ENGINEER. FINISHED LEVELS TO BE COMPATIBLE WITH LOTS ADJOINING THIS STAGE.
- ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL RUBBISH AND SPOIL FROM SITE. NO SURPLUS TREES, VEGETATION OR OTHER MATERIAL IS TO BE BURNT ON SITE.
- RESERVES TO BE FREE DRAINING AND TO BE LEFT IN A CONDITION SATISFACTORY TO THE CITY ENGINEER.
- FILL AREAS IN ALL PROPERTIES AND ROAD RESERVES TO BE STRIPPED OF TOPSOIL & VEGETABLE MATTER, FILLED USING APPROVED CLAY FILL, AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLANS. ALL FILLING TO BE CARRIED OUT IN 150mm LAYERS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS3798-2007, SECTION 8.2, LEVEL 1 ("GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS"). ON COMPLETION THE CONTRACTOR SHALL PRESENT A "LEVEL 1" TYPED REPORT, FROM A NATA REGISTERED SOIL TESTING LABORATORY, NOMINATING THE EXTENT OF FILL PLACED, ITS CONFORMANCE WITH THE SPECIFICATION AND ITS CLASSIFICATION AS "CONTROLLED FILL" IF ANY SUBSTANDARD FILLING IS ENCOUNTERED ON THE SITE IT MUST BE REMOVED AND REPLACED WITH APPROVED FILL MATERIAL PROPERLY COMPACTED TO COUNCIL REQUIREMENTS. A GEO-TECHNICAL REPORT MUST BE SUBMITTED SHOWING DETAILS OF DEPTH, TYPE OF MATERIAL AND DENSITY OF THE FILL AREAS CONCERNED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION No. 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE SUPERVISING ENGINEER.
- BATTERS TO BE 1 IN 5 FOR FILL AND 1 IN 3 FOR CUT UNLESS NOTED OTHERWISE.
- CUT BATTERS ARE TO BE GRASSED AND MULCHED WITH A MIXTURE OF CHOPPED GRASS, STRAW AND BITUMEN EMULSION.
- WHERE CUT BATTERS EXCEED 700mm AN ADDITIONAL 300mm BERM SHALL BE FORMED BEHIND FOOTPATH.
- ACCESS RAMPS ARE TO BE CONSTRUCTED WHERE CUT BATTERS EXCEED 1.0m. THEY ARE TO BE GRADED 1 IN 10 FOR THE FIRST 2.5m FROM THE BACK OF PATH AND THEN AT A MAXIMUM OF 1 IN 4 TO NATURAL SURFACE.
- ALL RESIDENTIAL FOOTPATHS SHALL BE 1.5m WIDE (MIN.) AND SHARED PEDESTRIAN/CYCLE PATHS SHALL BE 2.5m (MIN.). CONCRETE PATHS ARE TO BE 125mm THICK REINFORCED WITH SL72 PLACED CENTRALLY AND UNDERLAIN BY 50mm OF CLASS 3 CR. REFER GAA STD DWG FIG006.
- PRAM CROSSINGS ARE TO BE CONSTRUCTED WHERE FOOTPATHS CONNECT TO THE BACK OF KERB & CHANNEL. REFER GAA STD DWG FIG009.
- ALL NATIVE TREES AND SHRUBS TO BE RETAINED UNLESS ROAD CONSTRUCTION NECESSITATES THEIR REMOVAL OR REMOVAL IS DIRECTED BY THE ENGINEER. A TOWN PLANNING PERMIT IS REQUIRED FOR THE REMOVAL OF NATIVE TREES AND OR VEGETATION. THE REMOVAL OR RETENTION OF ANY EXISTING TREES MUST BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN, OR ELSE APPROVAL WILL BE REQUIRED FROM THE CASEY LANDSCAPE APPROVALS OFFICER.

- WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES THESE SERVICES ARE TO BE LOCATED AND THE VARIOUS AUTHORITIES NOTIFIED PRIOR TO THE COMMENCEMENT OF WORKS.
- THE WATER CONDUIT OFFSET FROM THE LOT BOUNDARY IS GIVEN ON THE WATER RETICULATION PLAN. THE CONTRACTOR MUST CONSTRUCT CONDUITS TO ACCORD WITH THE GIVEN OFFSET AND ENSURE THAT THE CONCRETE MARKS THE KERB AND FOOTPATH EXACTLY ABOVE THE CONDUIT.
- TELSTRA/NBN Co TO BE NOTIFIED SEVEN (7) DAYS PRIOR TO CONCRETE WORKS BEING PLACED.
- ELECTRICAL DISTRIBUTION PITS WITHIN FOOTPATHS ARE TO BE A MINIMUM OF 300mm WITHIN THE EDGE OF THE PATH. CONCRETE IS TO BE PLACED AROUND DISTRIBUTION PITS TO A MINIMUM DEPTH OF 200mm.
- ALL STREET SIGNS TO BE CONSTRUCTED AND ERECTED TO CURRENT CITY OF CASEY STANDARDS INCLUDING LOGO. COURT STREET NAMES ARE TO SHOW COURT NAME ONLY.
- TRAFFIC CONTROL SIGNS, MARKINGS & DELINEATORS TO BE INSTALLED IN ACCORDANCE WITH AS1742.2. ALL LINE MARKING IS TO BE LONG LIFE ROAD MARKING, WITH LONGITUDINAL LINES IN THERMOPLASTIC & TRANSVERSE MARKINGS IN COLD APPLIED.
- ALL DRIVEWAYS ARE TO BE OFFSET 0.75m FROM SIDE BOUNDARIES AND EASEMENTS UNLESS OTHERWISE SHOWN, AND CONSTRUCTED AS PER GAA STD. DWG. FIG010 & FIG011.
- ALL ROADS TO BE CONSTRUCTED WITH KERB & CHANNEL. REFER GAA STD DWGS EDM301, 302 AND CASEY STD DWGS.
- KERB TRANSITION TO TAKE PLACE IN THE MINOR STREET OVER A 2.0m LENGTH FROM EITHER THE TANGENT POINT OR TP PIT.
- EXISTING ROAD WORKS TO BE RECONSTRUCTED AS REQUIRED TO PROVIDE, WITHOUT DISCONTINUITY, A CONNECTION IN ACCORDANCE WITH DESIGN LEVELS AND GRADES.
- PAVEMENT TO BE AS PER TYPICAL DETAIL.
- MODIFICATION OF THE PAVEMENT REQUIRES APPROVAL BY THE CITY OF CASEY WORKS SUPERVISOR.
- PATTERNED CONCRETE TO CONSIST OF:
 - 32MPa CHARCOAL COLOURED COBBLESTONE PATTERNED CONCRETE, REINFORCED WITH F72 MESH. (REFER DETAIL FOR DEPTH)
 - 50mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 C.R.

- PATTERNED CONCRETE TO BE DOWELLED INTO ADJACENT KERB AND CHANNEL AT 300mm CTS USING 450mm LONG S12 BARS. ONE END OF DOWEL TO BE SLEEVED OR GREASED.
- EXISTING DAM OR WATERCOURSES TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED AS SPECIFIED. DEVELOPER'S CONSULTANT TO BE NOTIFIED WHEN THE DAM OR WATERCOURSES ARE EXCAVATED TO A FIRM BASE. NO FILLING IS TO BE PLACED PRIOR TO DAMS BEING INSPECTED AND LEVELS TAKEN. BACKFILLING IS TO BE CARRIED OUT TO THE SATISFACTION OF THE COUNCIL SUPERVISING ENGINEER.
- PROVIDE 2.5m WIDE SHARED FOOTPATH THROUGH RESERVES AS SHOWN ON A CURVILINEAR ALIGNMENT TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES BEFORE COMMENCEMENT OF WORKS. ALL TBM'S AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE DEVELOPER'S CONSULTANT TO ARRANGE RE-INSTALLMENT AT THE CONTRACTORS EXPENSE.
- PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR MUST SUBMIT A SMP TO THE DEVELOPER'S CONSULTANT FOR APPROVAL. THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENT PROTECTION AUTHORITY PUBLICATION No.275 "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL" AND MW SITE ENVIRONMENTAL MANAGEMENT POLICY 3.8.2. APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS.
- PROVIDE PAINTED PALING FENCE ALONG ANY BOUNDARY COMMON TO LOTS & MUNICIPAL RESERVES AS PER COUNCIL STD. DWG. 5-706. PALINGS TO BE ON THE RESERVE SIDE.
- PROVIDE TEMPORARY SAFETY BARRIER FENCE (FARM FENCE AS PER MW STD DWG 7251/4/203) ALONG EXTENT OF OUTFALL DRAIN WHERE THE DRAIN IS GREATER THAN 15m IN DEPTH AND SIDE SLOPES ARE STEEPER THAN 1 IN 3. SAFETY FENCE TO REMAIN UNTIL PERMANENT UNDERGROUND DRAINAGE IS INSTALLED.
- A TEMPORARY FENCE SHALL BE ERECTED AND MAINTAINED AROUND EXISTING TREES, NOMINATED TO BE RETAINED, AT ALL TIMES DURING CONSTRUCTION. FOR FENCING DETAILS AND CONSTRUCTION WORKS WITHIN THE "TREE PROTECTION ZONE" REFER TO THE ARBORICULTURAL INSPECTION REPORT BY A & R TREE SURGEONS (18th MARCH 2003).
- CONTRACTOR TO REMOVE EXISTING IRRIGATION AND DRAINAGE PIPES AND PITS ENCOUNTERED ON SITE. TRENCHES TO BE BACKFILLED IN ACCORDANCE WITH NOTES 16 & 17.
- TACTILE GROUND SURFACE INDICATORS (TGS) ARE TO BE INSTALLED AT ALL PRAM CROSSINGS AND PEDESTRIAN CROSS POINTS, REFER GAA STD DWGS EDM403.
- SAW CUT EXISTING KERBS AND FOOTPATH AND CONNECT TO NEW KERB/FOOTPATH.
- DOWELL ALL INTERFACES BETWEEN PROPOSED CONCRETE WORKS AND EXISTING CONCRETE. CENTRALLY INSERT N12 DEFORMED BARS (2 MIN. AT KERB INTERFACE), 450mm LONG AT 300mm CENTRES. ONE END OF DOWELL TO BE SLEEVED OR GREASED.
- SITE INSPECTIONS AND TESTING ON SUBGRADE MATERIAL (INSITU AND FILL) MUST BE CARRIED OUT BY THE COUNCIL SUPERVISOR AND STABILISATION CONTRACTOR TO DETERMINE THE EXACT DEPTH AND PROPORTIONS OF CEMENT/LIME STABILISATION REQUIRED.
- SUITABLE CLAY MUST BE IMPORTED OR SOURCED FROM SITE FOR USE AS FILL UNDER ROAD PAVEMENTS. THE FILL MATERIAL MUST ALSO BE INSPECTED, TESTED AND STABILISED TO A MINIMUM DEPTH OF 300mm AS PER ABOVE. THE BLACK SILTY CLAY FOUND ON SITE IS NOT SUITABLE FOR USE AS FILL UNDER PAVEMENTS.
- 1000 CLASS 12 PVC IRRIGATION CONDUIT TO BE PLACED UNDER ALL CROSSOVERS AND ROAD PAVEMENTS IN LOCATIONS SHOWN.

PAVEMENT COMPOSITION

TYPE A - WATERGARDENS CIRCUIT

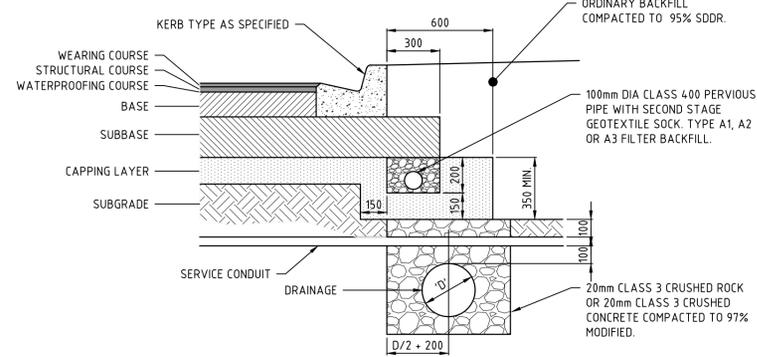
WEARING COURSE	20mm	SIZE 7mm TYPE L ASPHALT WITH A C170 BINDER.
STRUCTURAL COURSE	35mm	SIZE 14mm TYPE N ASPHALT WITH A C170 BINDER.
WATERPROOFING COURSE	35mm	SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINOUS PRIME.
BASE COURSE	135mm	20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
SUB-BASE	100mm	20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CRUSHED ROCK, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
SELECT SUB-BASE	150mm	SELECT GRANULAR MATERIAL WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 15%.
LIME STABILISED SUBGRADE IMPROVEMENT	300mm (MIN.)	IN-SITU LIME STABILISATION OF THE EXISTING SUBGRADE AS PER GUIDELINES PROVIDED BELOW, TO ACHIEVE A MINIMUM DESIGN CBR OF 10% IN THE FIELD.
TOTAL	740mm	

DESA

TYPE C - SPRINGLANDS STREET

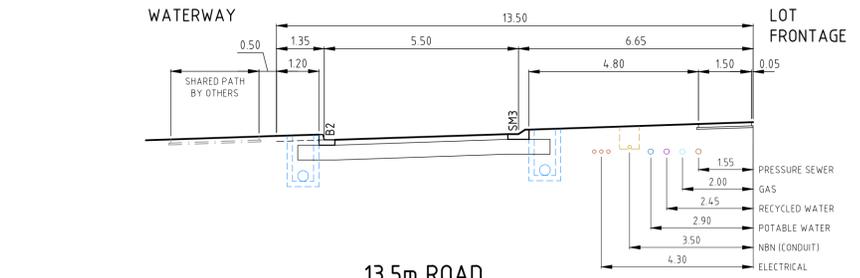
WEARING COURSE	30mm	SIZE 10 TYPE N ASPHALT WITH A C170 BINDER.
STRUCTURAL COURSE	35mm	SIZE 14 TYPE N ASPHALT WITH A C170 BINDER.
WATERPROOFING COURSE	35mm	SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINOUS PRIME.
BASE COURSE	125mm	20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
UPPER SUB-BASE	100mm	20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CRUSHED ROCK, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
LOWER SUB-BASE	100mm	40mm NOMINAL SIZE CLASS 3 FCR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
SELECT SUB-BASE	150mm	SELECT GRANULAR MATERIAL WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 15%.
LIME STABILISED SUBGRADE IMPROVEMENT	300mm (MIN.)	IN-SITU LIME STABILISATION OF THE EXISTING SUBGRADE AS PER GUIDELINES PROVIDED BELOW, TO ACHIEVE A MINIMUM DESIGN CBR OF 10% IN THE FIELD.
TOTAL	840mm	

DESA



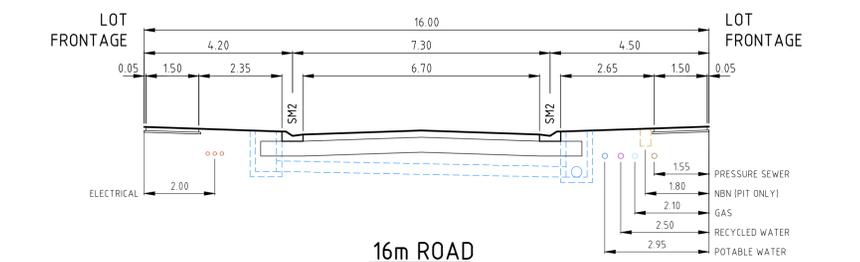
PAVEMENT COMPOSITION

SCALE 1:20



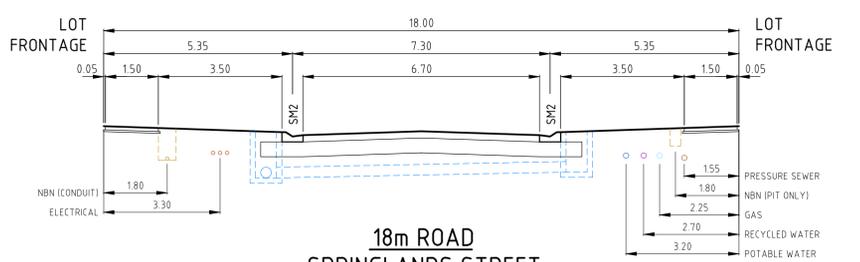
13.5m ROAD WATERGARDENS CIRCUIT (LOTS 631-632, 647-657)

ACCESS PLACE (ADJACENT WATERWAY)

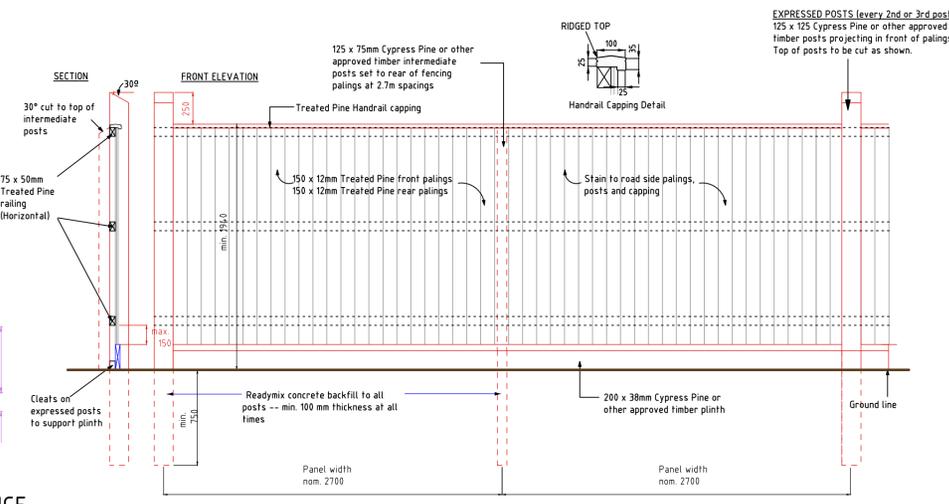


16m ROAD WATERGARDENS CIRCUIT (LOTS 601-610)

ACCESS STREET - LEVEL ONE



18m ROAD SPRINGLANDS STREET



PALING FENCE CONNECTION DETAIL

NOT TO SCALE

TIMBER PALING FENCE

NOT TO SCALE

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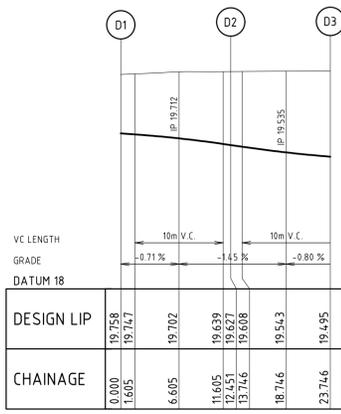
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MELWAY REF 129-C6		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 c/o street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
SURVEY BPD		AQUAREVO ESTATE STAGE 6		MUNICIPALITY CASEY
DESIGN TBC		NOTES AND TYPICAL CROSS SECTIONS		REFERENCE 8766 E/06
DRAWN TBC		SCALE As Shown	DATUM AHD	DATE Jun'19
VER	DATE	REMARKS	CHECKED	SHEET 2 OF 13
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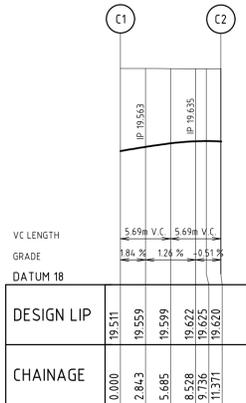


Alignment D

Point no	Easting	Northing	RL
kg 06 D 1	14.78.951	1313.240	19.758
kg 06 D 2	14.87.176	1321.251	19.627
kg 06 D 3	14.87.325	1322.528	19.495
kg 06 D 4	14.81.94.9	1324.017	19.735
kg 06 D 5	14.84.507	1315.764	19.706
kg 06 D 6	14.88.321	1318.274	19.670
kg 06 D 7	14.87.111	1324.065	19.580
kg 06 D 8	14.87.514	1326.886	19.551
kg 06 D 9	14.87.486	1329.709	19.520

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 D 1 2	-79.269	-9.000	12.451	2.069	15.36	2.690	3.051	3.113	19.706
kg 06 D 2 3	-10.731	-60.300	11.294	0.264	0.198	2.816	2.822	2.824	19.551

LIP LINE D
H 1:4.00 V 1:4.0

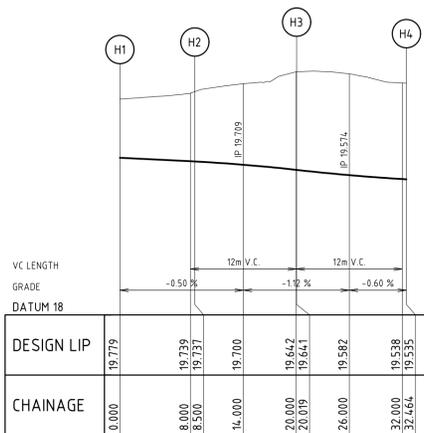


Alignment C

Point no	Easting	Northing	RL
kg 06 C 1	14.93.212	1320.487	19.511
kg 06 C 2	15.00.158	1312.441	19.620
kg 06 C 3	14.93.880	1317.736	19.559
kg 06 C 4	14.95.378	1325.329	19.599
kg 06 C 5	14.97.534	1313.504	19.622

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 C 1 2	-72.387	-9.000	11.371	1.737	1.292	2.519	2.796	2.843	19.599

LIP LINE C
H 1:4.00 V 1:4.0

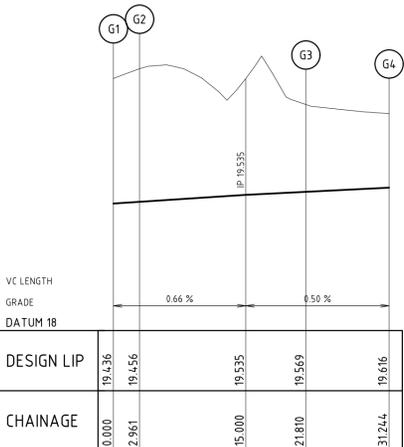


Alignment H

Point no	Easting	Northing	RL
kg 06 H 1	14.96.749	1321.105	19.779
kg 06 H 2	15.05.122	1322.523	19.737
kg 06 H 3	15.12.502	1324.515	19.641
kg 06 H 4	15.13.048	1325.916	19.535
kg 06 H 5	14.98.863	1321.321	19.768
kg 06 H 6	15.00.865	1321.626	19.758
kg 06 H 7	15.03.053	1322.021	19.747
kg 06 H 8	15.07.772	1323.606	19.719
kg 06 H 9	15.09.999	1325.416	19.698
kg 06 H 10	15.11.620	1327.784	19.672
kg 06 H 11	15.12.928	1324.597	19.609
kg 06 H 12	15.13.161	1324.699	19.580
kg 06 H 13	15.13.291	1324.809	19.556

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 H 1 2	-9.740	-50.000	8.500	0.181	0.135	2.120	2.124	2.125	19.758
kg 06 H 2 3	-65.999	-10.000	11.519	1.613	1.201	2.606	2.840	2.880	19.698
kg 06 H 3 4	-16.261	-50.000	12.445	0.387	0.290	3.097	3.109	3.111	19.580

LIP LINE H
H 1:4.00 V 1:4.0

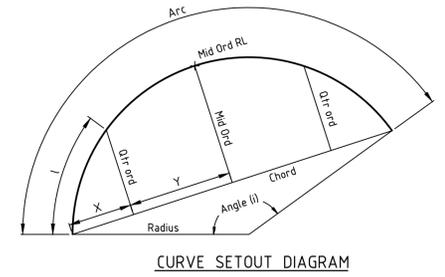
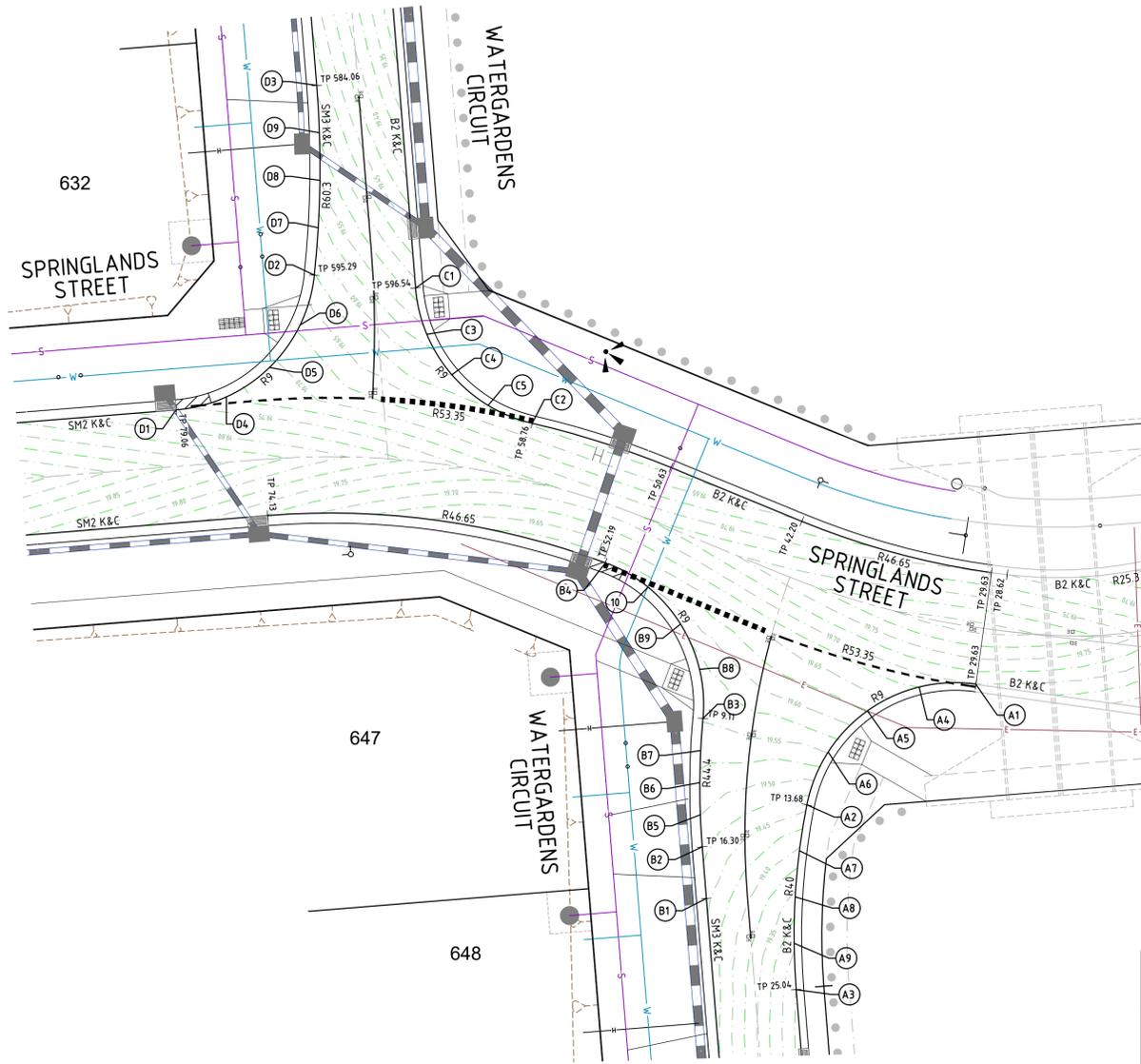


Alignment G

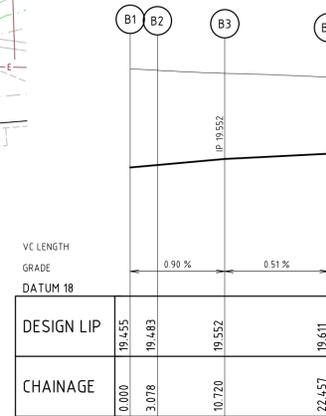
Point no	Easting	Northing	RL
kg 06 G 1	15.18.766	1242.974	19.436
kg 06 G 2	15.19.004	1240.023	19.456
kg 06 G 3	15.08.077	1227.097	19.569
kg 06 G 4	14.98.604	1226.339	19.616
kg 06 G 5	15.18.462	1235.372	19.487
kg 06 G 6	15.16.383	1231.283	19.518
kg 06 G 7	15.12.511	1228.377	19.546

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 G 2 3	90.000	12.000	18.850	3.515	2.601	3.893	4.592	4.712	19.518

LIP LINE G
H 1:4.00 V 1:4.0



NOTE:
ALL SETOUT DETAILS ARE
AT LIP OF KERB

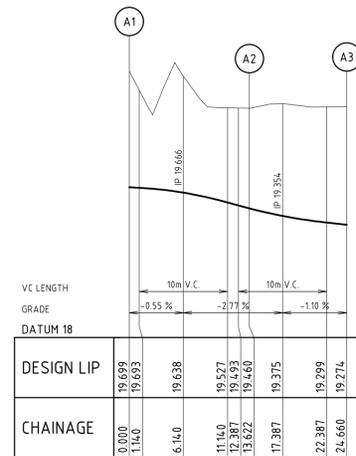


Alignment B

Point no	Easting	Northing	RL
kg 06 B 1	15.10.525	1284.194	19.455
kg 06 B 2	15.10.278	1287.262	19.483
kg 06 B 3	15.10.320	1294.895	19.552
kg 06 B 4	15.04.514	1304.147	19.611
kg 06 B 5	15.10.165	1289.169	19.500
kg 06 B 6	15.10.135	1291.079	19.517
kg 06 B 7	15.10.187	1291.989	19.535
kg 06 B 8	15.10.112	1297.808	19.567
kg 06 B 9	15.08.981	1300.502	19.582
kg 06 B 10	15.07.048	1302.692	19.596

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 B 2 3	9.862	64.400	7.642	0.164	0.123	1.906	1.910	1.911	19.517
kg 06 B 3 4	-74.721	-9.000	11.737	1.847	1.372	2.579	2.883	2.934	19.582

LIP LINE B
H 1:4.00 V 1:4.0

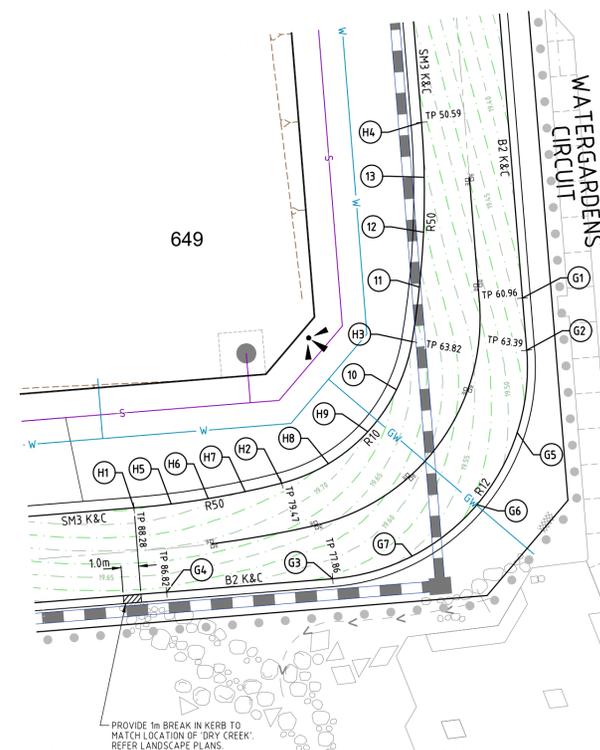


Alignment A

Point no	Easting	Northing	RL
kg 06 A 1	15.26.579	1296.925	19.699
kg 06 A 2	15.16.511	1289.760	19.460
kg 06 A 3	15.15.818	1278.774	19.274
kg 06 A 4	15.23.198	1296.753	19.675
kg 06 A 5	15.20.121	1295.344	19.626
kg 06 A 6	15.17.781	1292.897	19.552
kg 06 A 7	15.16.068	1287.036	19.395
kg 06 A 8	15.15.815	1284.289	19.344
kg 06 A 9	15.15.751	1281.530	19.305

Curve no	l	Radius	Arc	Mid Ord	Qtr Ord	X	Y	l	Mid Ord RL
kg 06 A 1 2	-86.718	-9.000	13.622	2.456	1.820	2.854	3.325	3.405	19.626
kg 06 A 2 3	-15.812	-40.000	11.039	0.380	0.285	2.744	2.758	2.760	19.344

LIP LINE A
H 1:4.00 V 1:4.0

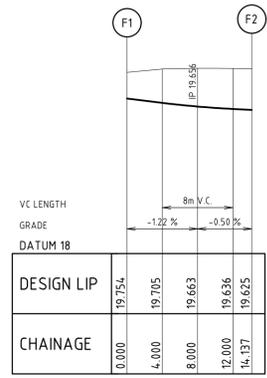
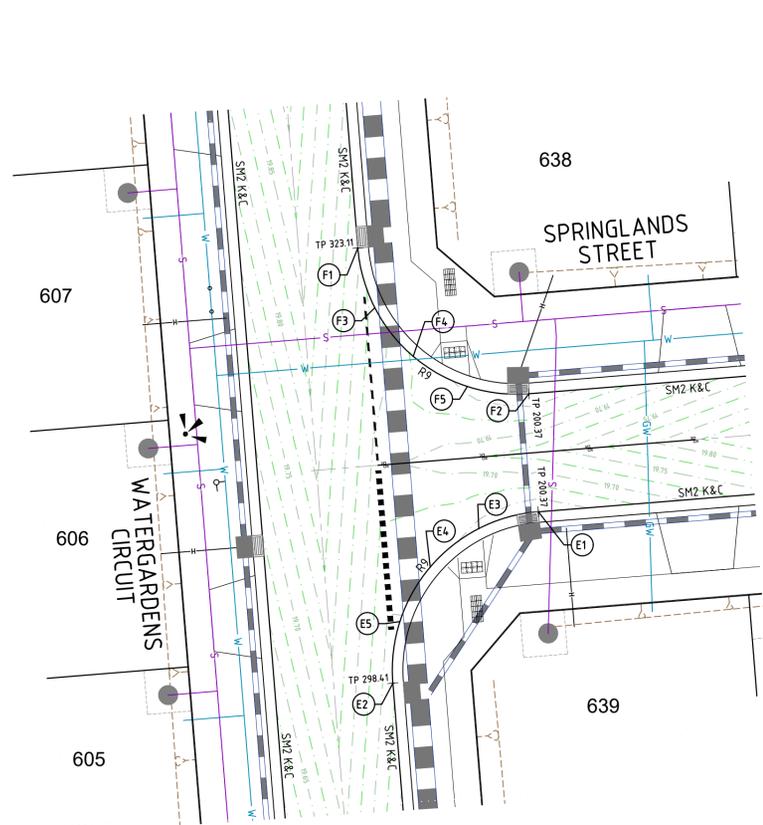


PROVIDE 1m BREAK IN KERB TO
MATCH LOCATION OF DRY CREEK.
REFER LANDSCAPE PLANS.

		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF 129-C6		AQUAREVO ESTATE STAGE 6 INTERSECTION DETAILS		MUNICIPALITY CASEY	
DATE 22/10/19		ISSUED FOR CONSTRUCTION		REFERENCE 8766 E/06	
DATE 14/10/19		ISSUED FOR CONSTRUCTION		SHEET 3 OF 13	
DATE 15/08/19		ISSUED FOR CONSTRUCTION		C	

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Printed: 01/22/2019 10:03:00



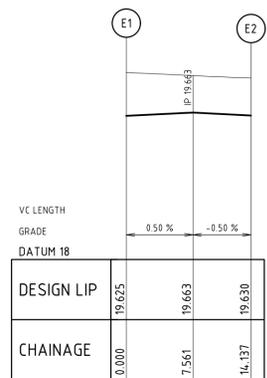
Alignment F

Point no	Easting	Northing	RL
kg 06 F 1	1348.336	1311.735	19.754
kg 06 F 2	1358.031	1303.488	19.625
kg 06 F 3	1349.296	1308.357	19.711
kg 06 F 4	1351.475	1305.683	19.672
kg 06 F 5	1354.543	1303.893	19.644

Curve no | Radius | Arc | Mid Ord | Qtr Ord | X | Y | I | Mid Ord RL

kg 06 F 1 2	-90.000	-9.000	14.137	2.636	1.951	2.920	3.444	3.534	19.672
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LIP LINE F
H 1:4.00 V 1:4.0



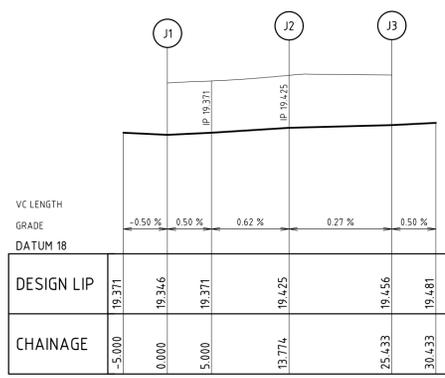
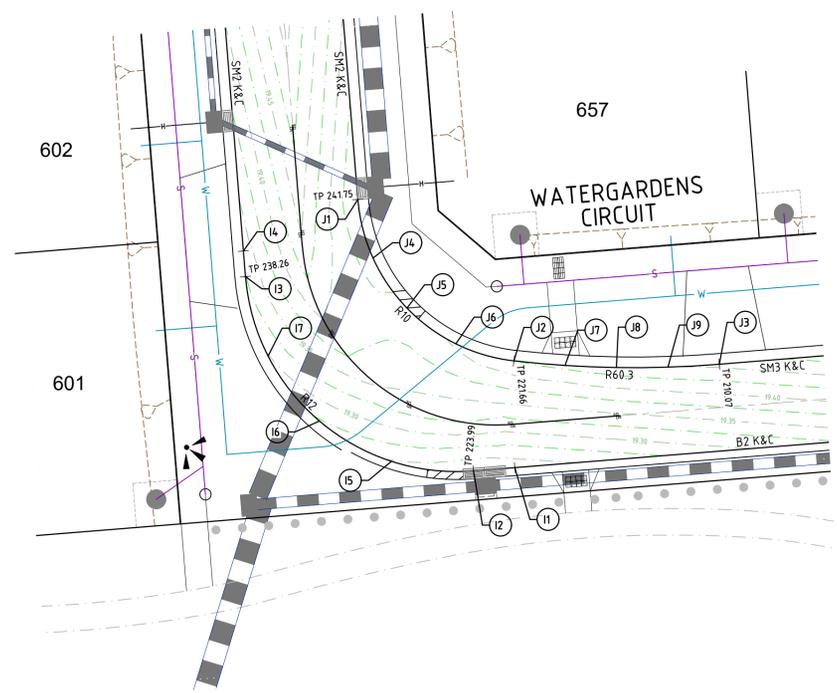
Alignment E

Point no	Easting	Northing	RL
kg 06 E 1	1358.569	1296.809	19.625
kg 06 E 2	1350.322	1287.115	19.630
kg 06 E 3	1355.191	1295.849	19.643
kg 06 E 4	1352.438	1293.670	19.661
kg 06 E 5	1355.728	1290.603	19.648

Curve no | Radius | Arc | Mid Ord | Qtr Ord | X | Y | I | Mid Ord RL

kg 06 E 1 2	-90.000	-9.000	14.137	2.636	1.951	2.920	3.444	3.534	19.661
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LIP LINE E
H 1:4.00 V 1:4.0



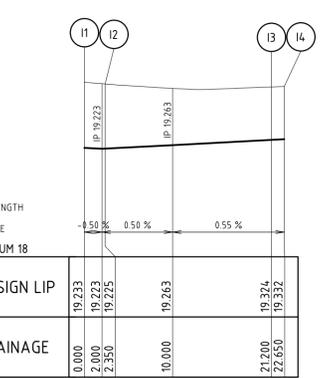
Alignment J

Point no	Easting	Northing	RL
kg 06 J 1	1354.877	1230.635	19.346
kg 06 J 2	1363.719	1221.503	19.425
kg 06 J 3	1375.358	1221.914	19.456
kg 06 J 4	1355.734	1227.318	19.363
kg 06 J 5	1357.660	1224.484	19.382
kg 06 J 6	1360.430	1222.467	19.404
kg 06 J 7	1366.622	1221.245	19.433
kg 06 J 8	1360.524	1221.127	19.440
kg 06 J 9	1372.448	1221.150	19.448

Curve no | Radius | Arc | Mid Ord | Qtr Ord | X | Y | I | Mid Ord RL

kg 06 J 1 2	-78.922	-10.000	13.774	2.279	1.692	2.980	3.376	3.444	19.382
kg 06 J 2 3	-11.078	-60.300	11.659	0.282	0.211	2.907	2.914	2.915	19.440

LIP LINE J
H 1:4.00 V 1:4.0



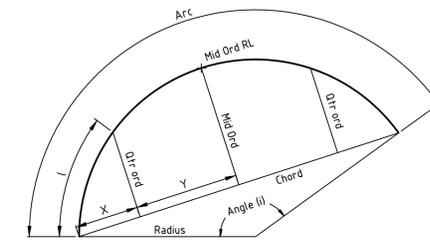
Alignment I

Point no	Easting	Northing	RL
kg 06 I 1	1363.776	1215.664	19.233
kg 06 I 2	1361.433	1215.275	19.225
kg 06 I 3	1348.507	1226.272	19.324
kg 06 I 4	1348.391	1227.707	19.322
kg 06 I 5	1356.782	1215.817	19.248
kg 06 I 6	1352.693	1218.097	19.273
kg 06 I 7	1349.787	1221.768	19.298

Curve no | Radius | Arc | Mid Ord | Qtr Ord | X | Y | I | Mid Ord RL

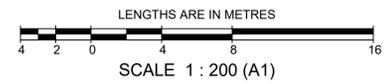
kg 06 I 2 3	90.000	12.000	18.850	3.515	2.601	3.893	4.592	4.712	19.273
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LIP LINE I
H 1:4.00 V 1:4.0



CURVE SETOUT DIAGRAM

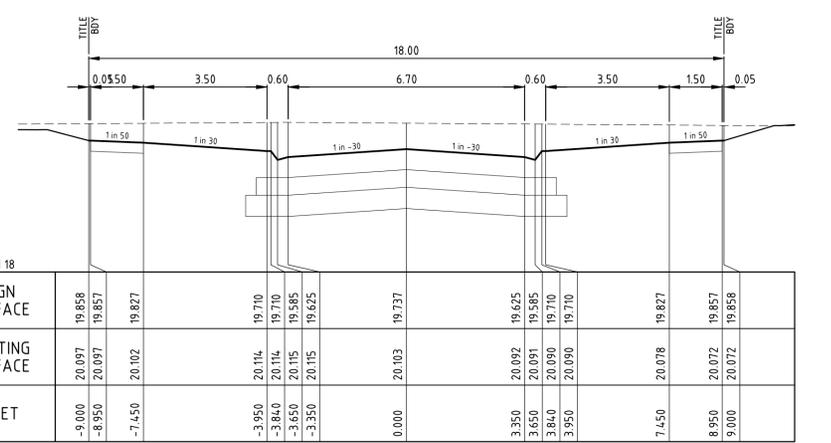
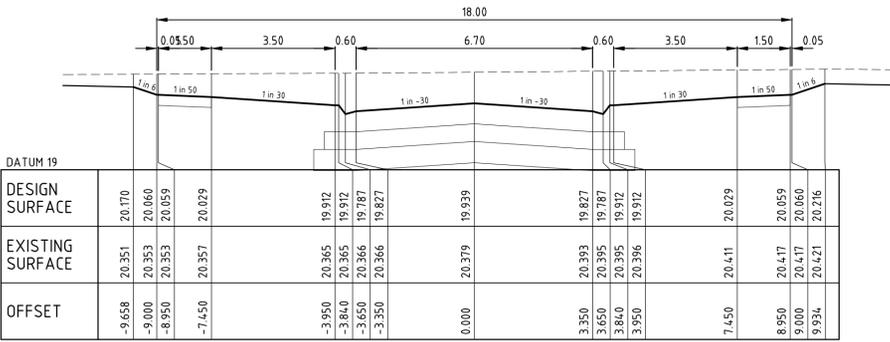
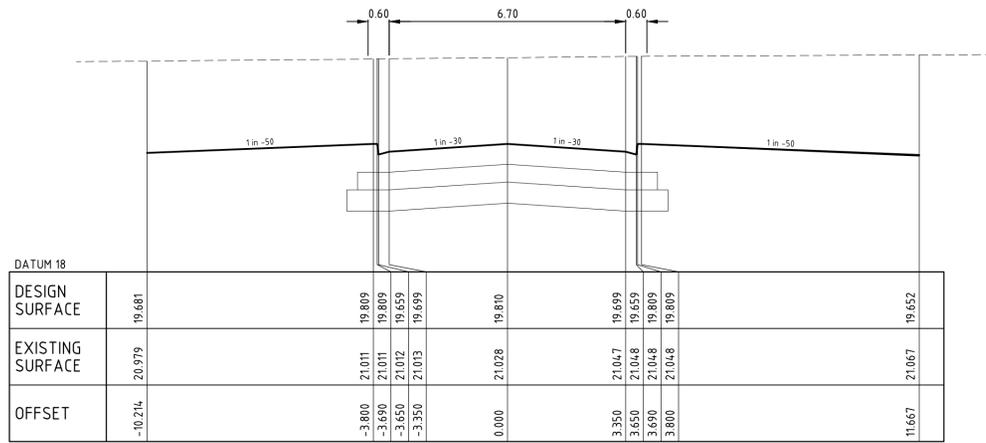
NOTE:
ALL SETOUT DETAILS ARE
AT LIP OF KERB



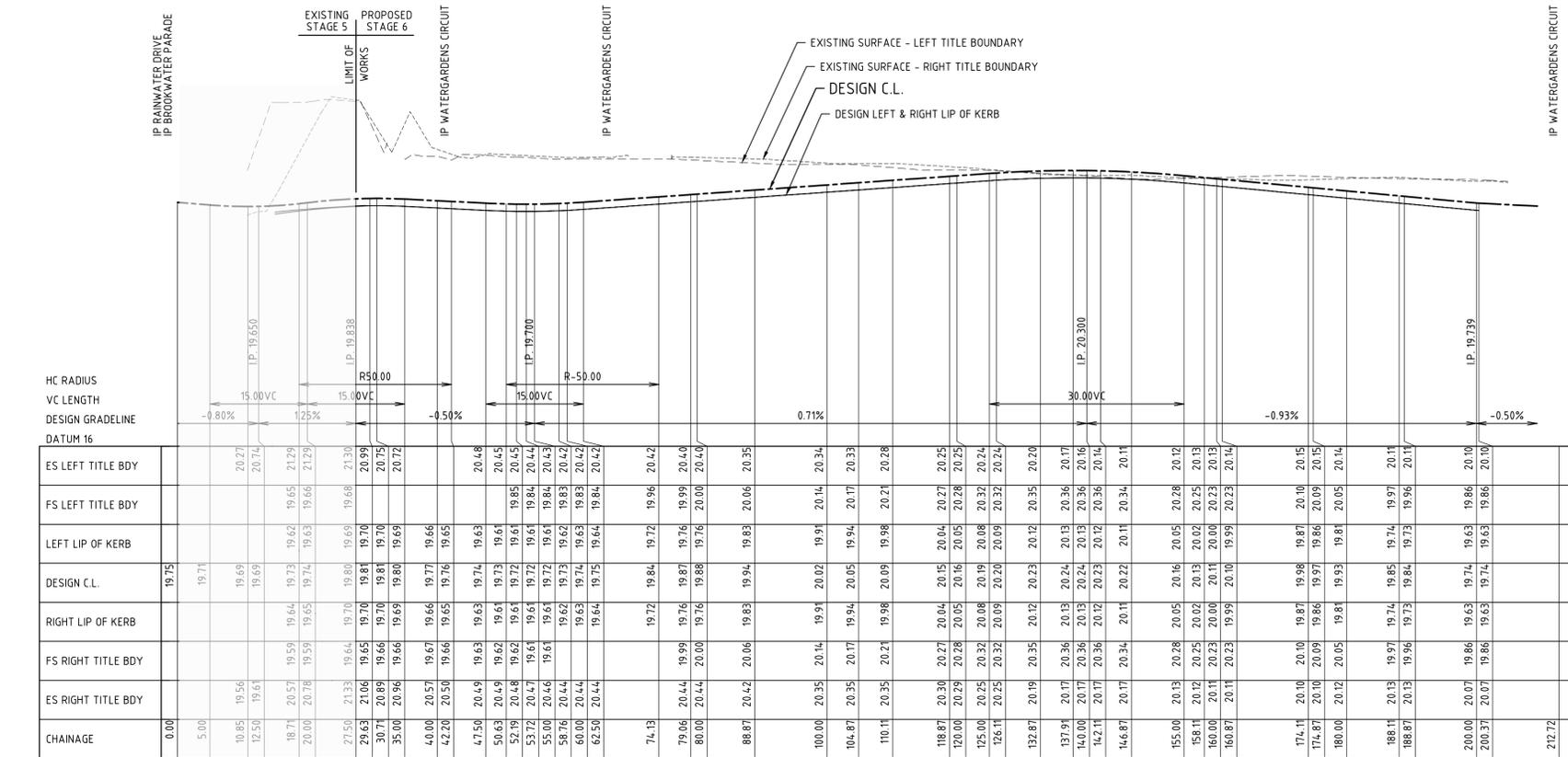
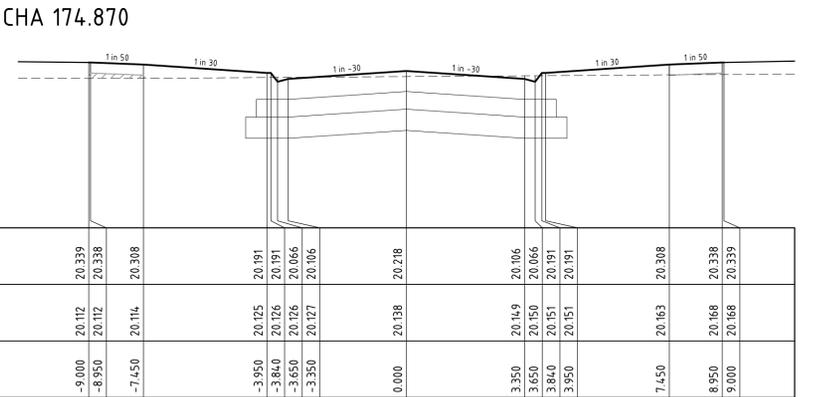
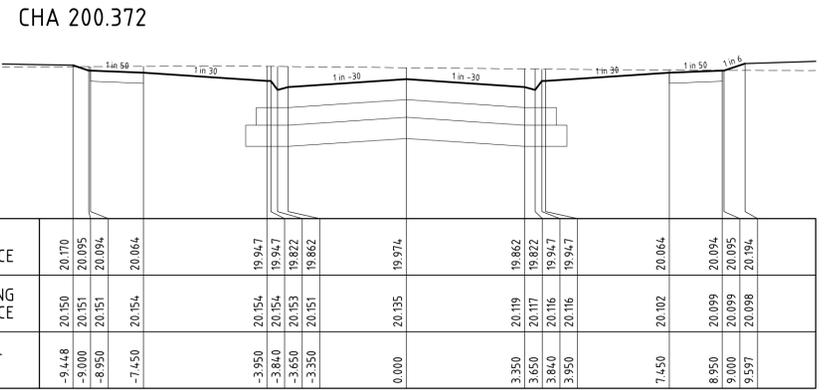
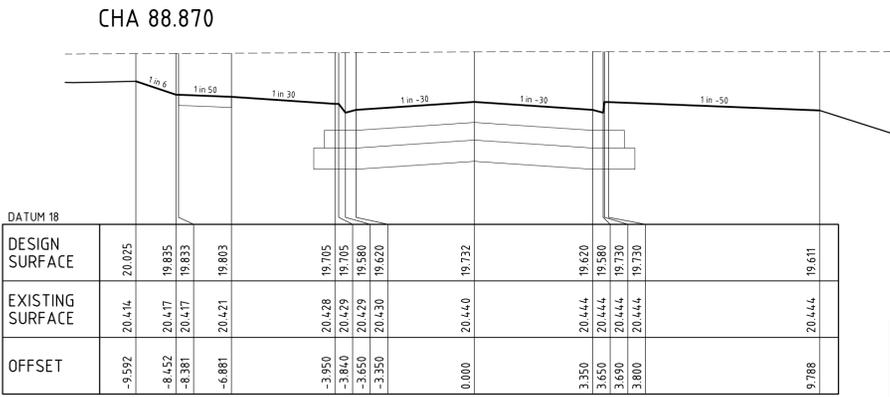
		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF: 129-C6		AQUAREVO ESTATE STAGE 6 INTERSECTION DETAILS		MUNICIPALITY: CASEY REFERENCE: 8766 E/06	
SURVEY: BPD	DESIGN: TBC	DRAWN: TBC	SCALE: As Shown	DATUM: AHD	DATE: Jun'19
AMENDMENTS:	VER: A	DATE: 15/08/19	REMARKS: ISSUED FOR CONSTRUCTION	CHECKED:	SHEET: 4 OF 13

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Printed: Aug 15, 2019 - 1:26pm

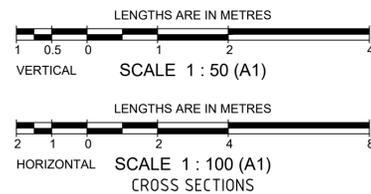
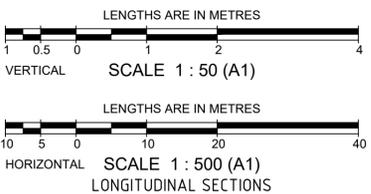


CHA 29.631
CROSS SECTIONS
H 1:100 V 1:50
SPRINGLANDS STREET



LONGITUDINAL SECTION (Rd30)
H 1:500 V 1:50

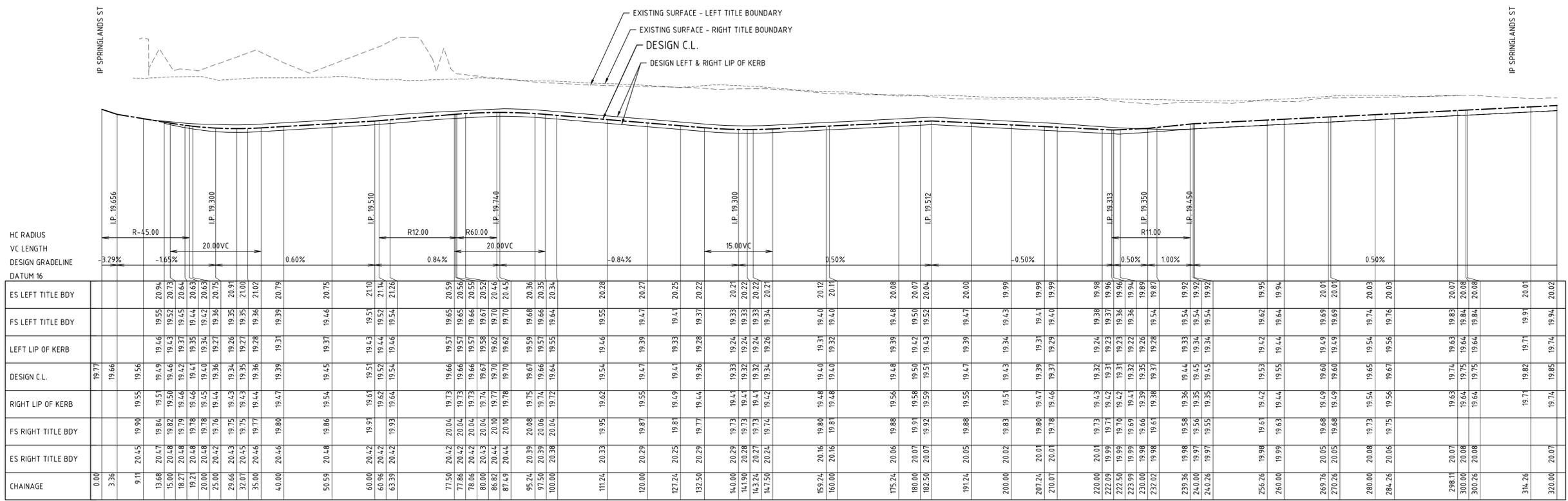
SPRINGLANDS STREET



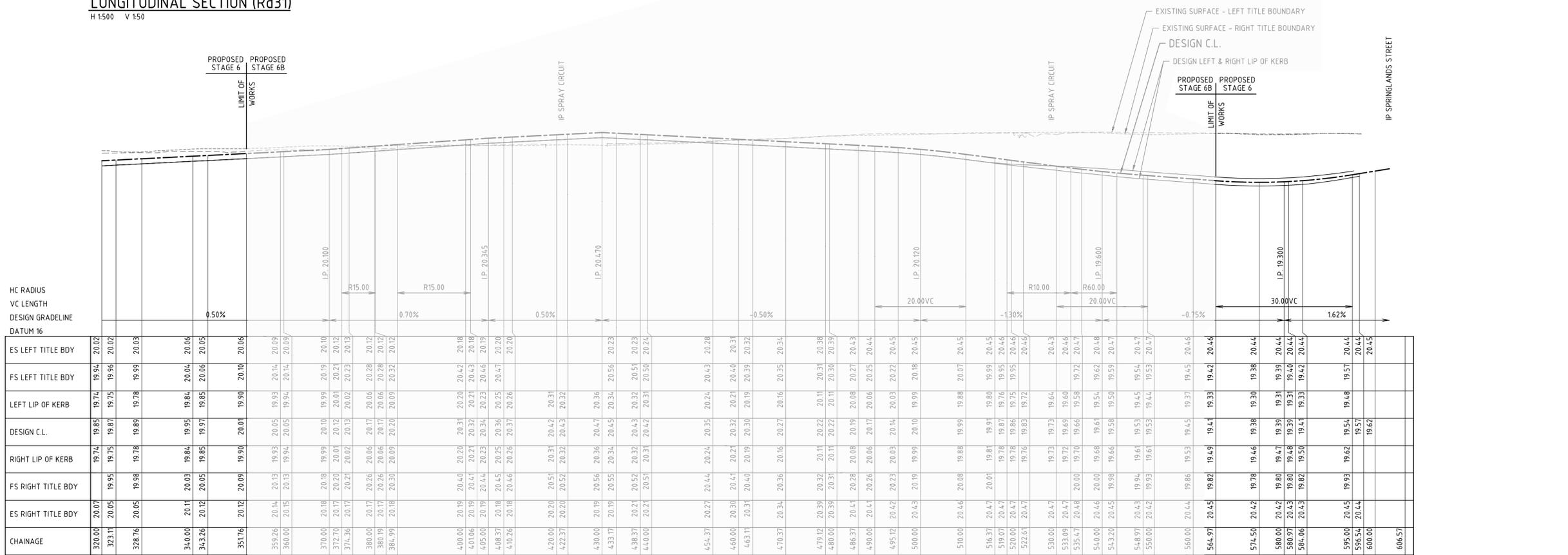
FILL AREAS TO BE COMPACTED TO 98% SDDR TO ACHIEVE MIN CBR OF 2%

breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
MELWAY REF 129-C6 SURVEY BPD DESIGN TBC DRAWN TBC		AQUAREVO ESTATE STAGE 6 SPRINGLANDS STREET
15/08/19 ISSUED FOR CONSTRUCTION		MUNICIPALITY CASEY REFERENCE 8766 E/06
CHECKED SCALE As Shown DATUM AHD DATE Jun'19	SHEET 5 OF 13	A

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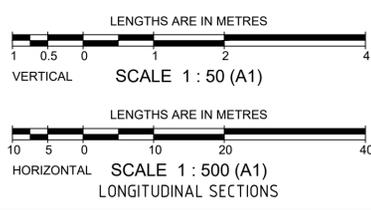
LONGITUDINAL SECTION (Rd31)
H 1:500 V 1:50



LONGITUDINAL SECTION (Rd31)
H 1:500 V 1:50

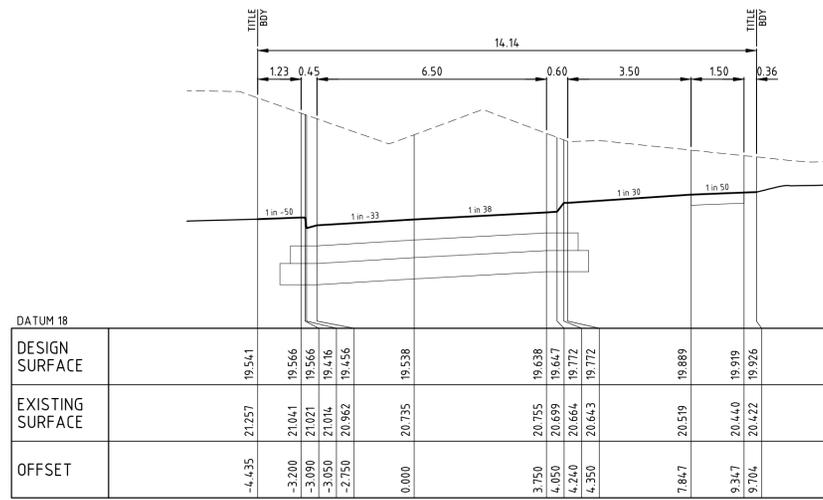
WATERGARDENS CIRCUIT

FILL AREAS TO BE
COMPACTED TO 98% SDDR
TO ACHIEVE MIN CBR OF 2%

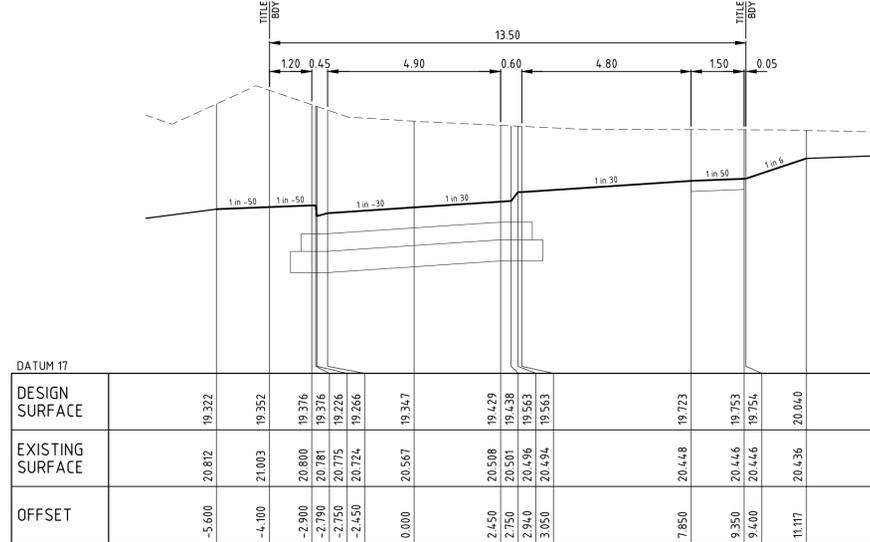


NO.	DATE	REMARKS	CHECKED	SCALE	DATUM	DATE	SHEET
A	15/08/19	ISSUED FOR CONSTRUCTION		As Shown	AHD	Jun'19	6 OF 13

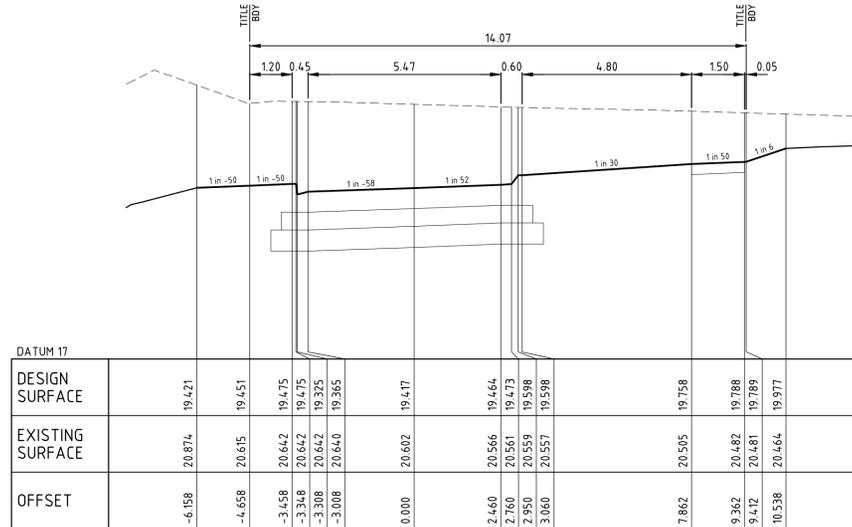
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	SURVEY BPD	
DESIGN TBC	REFERENCE 8766 E/06	
DRAWN TBC	SCALE As Shown	
CHECKED	DATUM AHD	DATE Jun'19



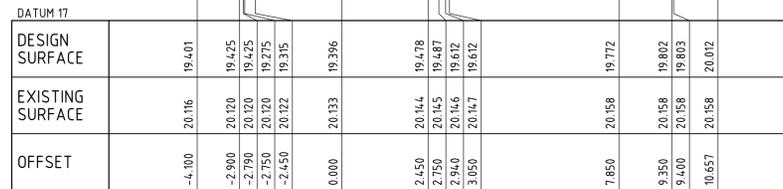
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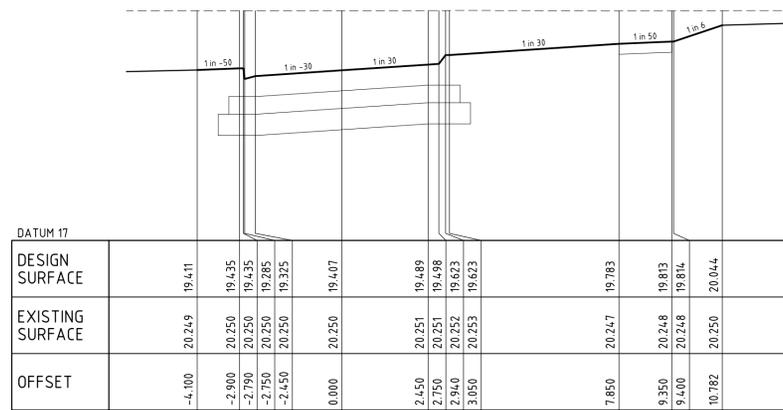
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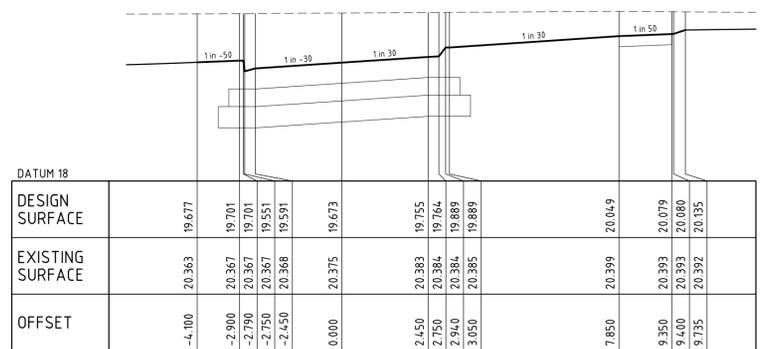
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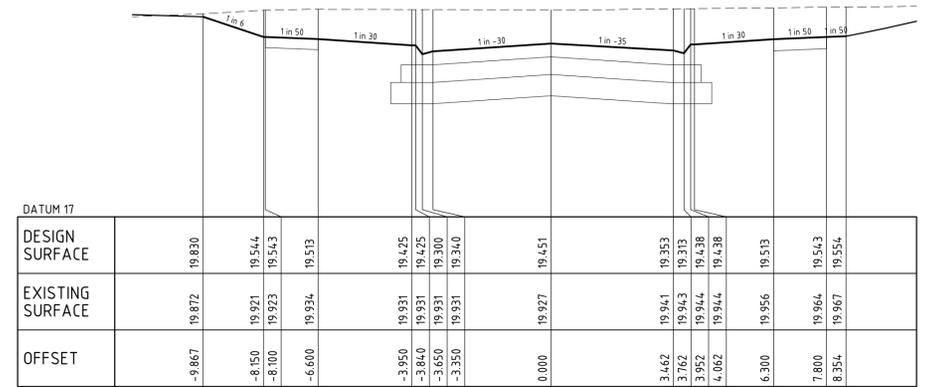
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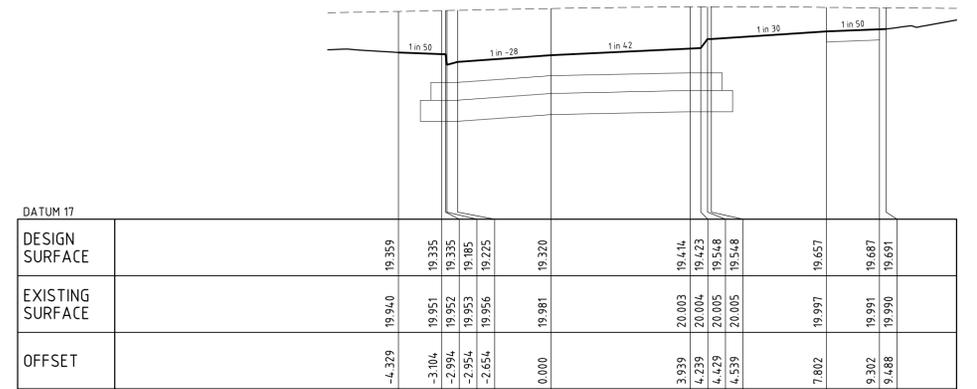
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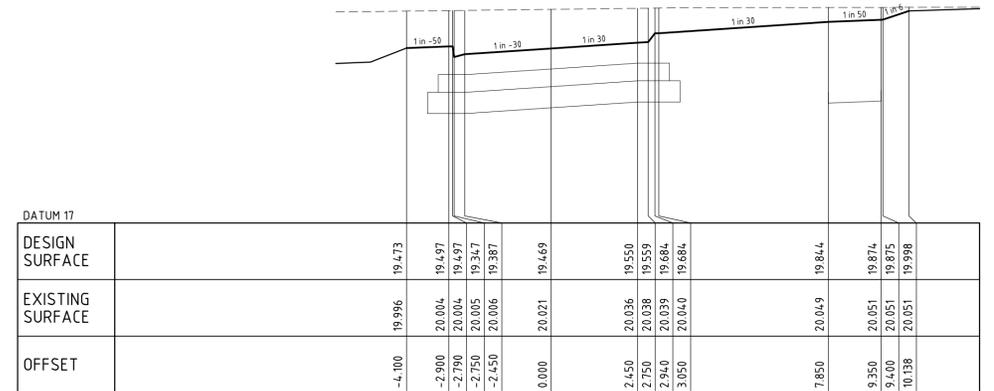
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CHA 240.260

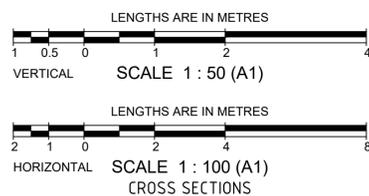


CHA 223.988



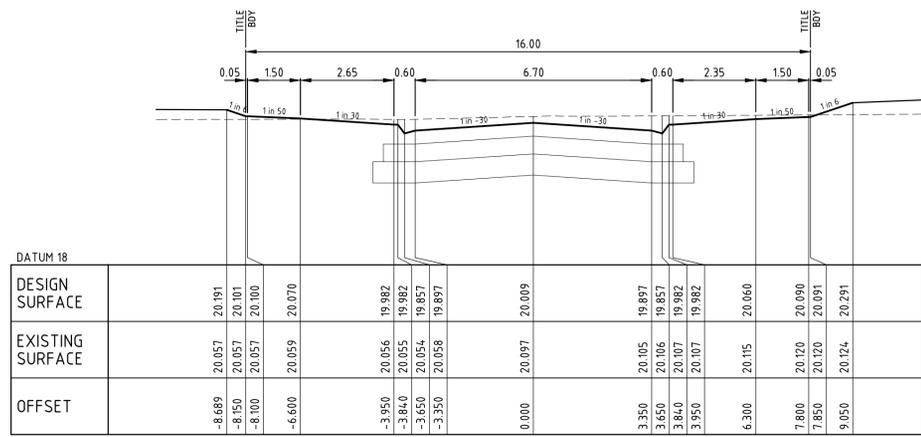
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CROSS SECTIONS
H 1:100 V 1:50
WATERGARDENS CIRCUIT

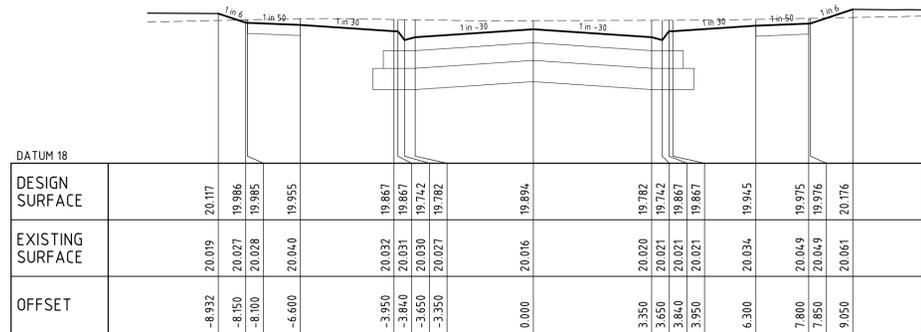


FILL AREAS TO BE COMPACTED TO 98% SDDR TO ACHIEVE MIN CBR OF 2%

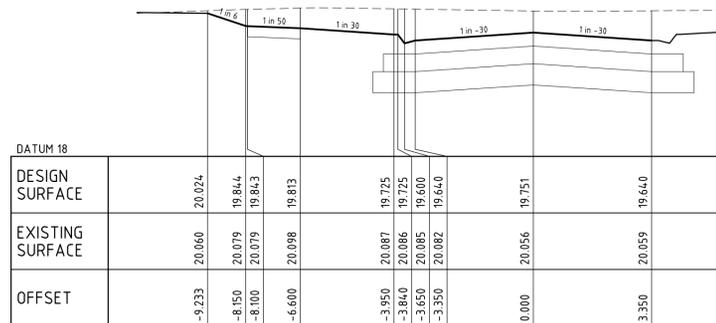
MELWAY REF 129-C6		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
SURVEY BPD		AQUAREVO ESTATE STAGE 6		MUNICIPALITY CASEY	
DESIGN TBC		WATERGARDENS CIRCUIT		REFERENCE 8766 E/06	
DRAWN TBC		SCALE As Shown		DATE Jun'19	
CHECKED		D.A.H.		SHEET 7 OF 13	
DATE 15/08/19		ISSUED FOR CONSTRUCTION		A	



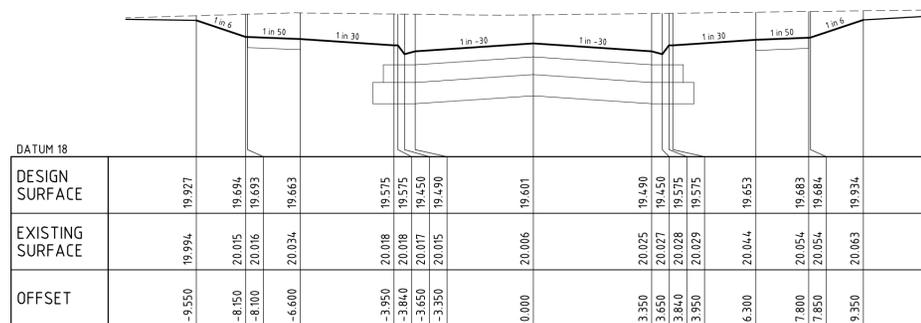
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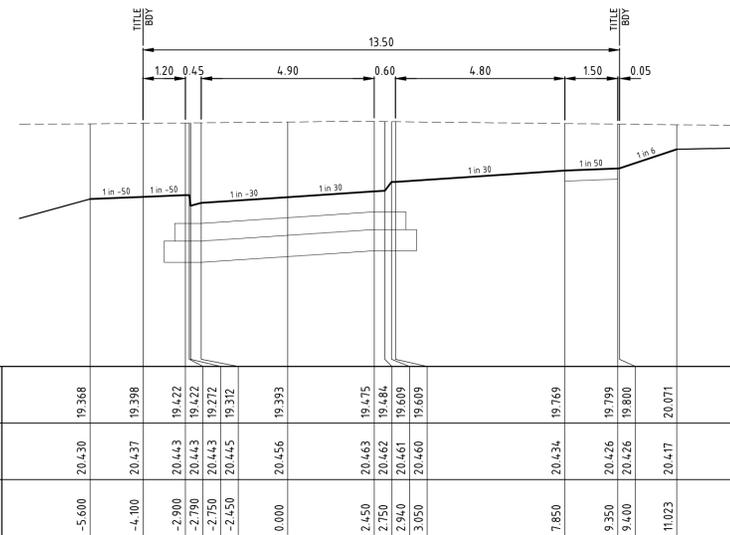
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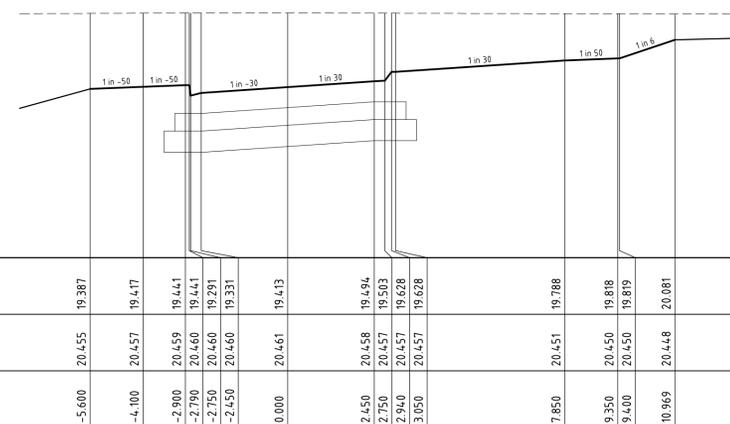
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CHA 270.260



CHA 580.970



CHA 564.970

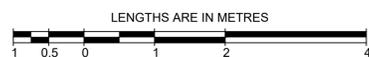
CROSS SECTIONS

H 1:100 V 1:50

WATERGARDENS CIRCUIT

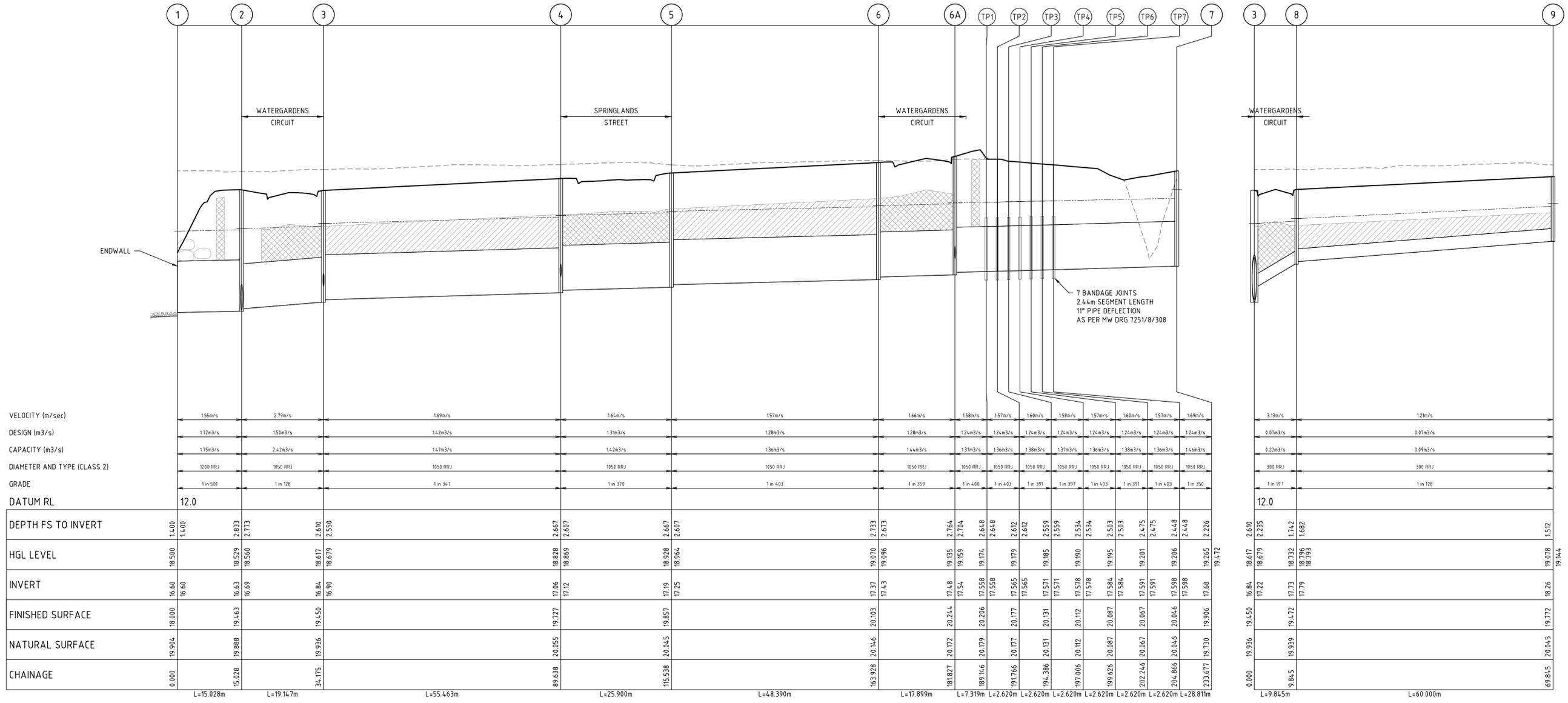


FILL AREAS TO BE COMPACTED TO 98% SDDR TO ACHIEVE MIN CBR OF 2%

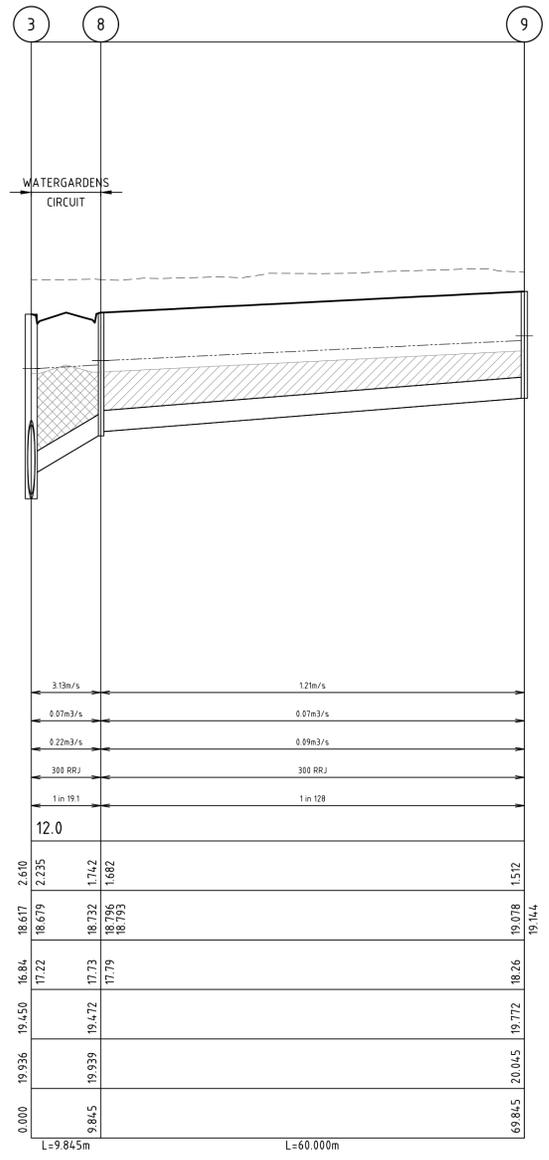


CROSS SECTIONS

		breese pitt dixon Pty. Ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF 129-C6 SURVEY BPD DESIGN TBC DRAWN TBC		AQUAREVO ESTATE STAGE 6 WATERGARDENS CIRCUIT		MUNICIPALITY CASEY REFERENCE 8766 E/06	
A 15/08/19 ISSUED FOR CONSTRUCTION	CHECKED SCALE As Shown	DATUM AHD	DATE Jun'19	SHEET 8 OF 13	A

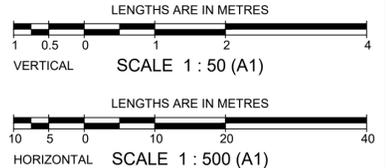


VELOCITY (m/sec)	155m/s	279m/s	169m/s	164m/s	157m/s	166m/s	158m/s	157m/s	160m/s	158m/s	157m/s	160m/s	157m/s	169m/s														
DESIGN (m³/s)	172m³/s	150m³/s	142m³/s	131m³/s	128m³/s	128m³/s	124m³/s	124m³/s	124m³/s	124m³/s	124m³/s	124m³/s	124m³/s	124m³/s														
CAPACITY (m³/s)	175m³/s	242m³/s	147m³/s	142m³/s	136m³/s	144m³/s	137m³/s	136m³/s	138m³/s	137m³/s	136m³/s	138m³/s	136m³/s	146m³/s														
DIAMETER AND TYPE (CLASS 2)	1200 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ	1050 RRJ														
GRADE	1 in 501	1 in 128	1 in 347	1 in 370	1 in 403	1 in 359	1 in 400	1 in 403	1 in 391	1 in 397	1 in 403	1 in 391	1 in 403	1 in 350														
DATUM RL	12.0																											
DEPTH FS TO INVERT	14.00	14.00	2.833	2.773	2.610	2.550	2.667	2.607	2.733	2.673	2.764	2.704	2.648	2.612	2.559	2.559	2.534	2.534	2.503	2.503	2.475	2.475	2.448	2.448	2.226			
HGL LEVEL	18.500	18.500	18.529	18.560	18.617	18.679	18.828	18.869	19.070	19.096	19.135	19.159	19.174	19.179	19.185	19.185	19.190	19.195	19.195	19.201	19.201	19.201	19.201	19.206	19.206	19.265		
INVERT	16.60	16.60	16.63	16.69	16.84	16.90	17.06	17.12	17.37	17.43	17.48	17.54	17.558	17.565	17.571	17.571	17.578	17.584	17.584	17.591	17.591	17.591	17.598	17.598	17.68			
FINISHED SURFACE	18.000	18.000	19.463	19.450	19.727	19.857	20.103	20.103	20.244	20.206	20.177	20.131	20.112	20.112	20.087	20.087	20.067	20.067	20.067	20.046	20.046	20.046	20.046	20.046	20.046	19.972		
NATURAL SURFACE	19.904	19.888	19.936	20.055	20.146	20.146	20.146	20.146	20.172	20.179	20.177	20.131	20.112	20.112	20.087	20.087	20.067	20.067	20.067	20.046	20.046	20.046	20.046	20.046	20.046	19.972		
CHAINAGE	0.000	15.028	34.175	89.638	115.538	163.928	181.827	189.146	197.766	194.386	197.006	199.626	202.246	204.866	223.671	231.171	233.671	236.171	238.671	241.171	243.671	246.171	248.671	251.171	253.671	256.171		
	L=15.028m		L=19.147m		L=55.463m			L=25.900m		L=48.390m			L=17.899m		L=7.319m		L=2.620m		L=28.811m									



VELOCITY (m/sec)	313m/s	121m/s
DESIGN (m³/s)	0.07m³/s	0.07m³/s
CAPACITY (m³/s)	0.22m³/s	0.09m³/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 191	1 in 128
DATUM RL	12.0	
DEPTH FS TO INVERT	2.610	2.235
HGL LEVEL	18.617	18.732
INVERT	16.84	16.84
FINISHED SURFACE	19.450	19.472
NATURAL SURFACE	19.936	19.939
CHAINAGE	0.000	69.845
	L=9.845m	L=60.000m

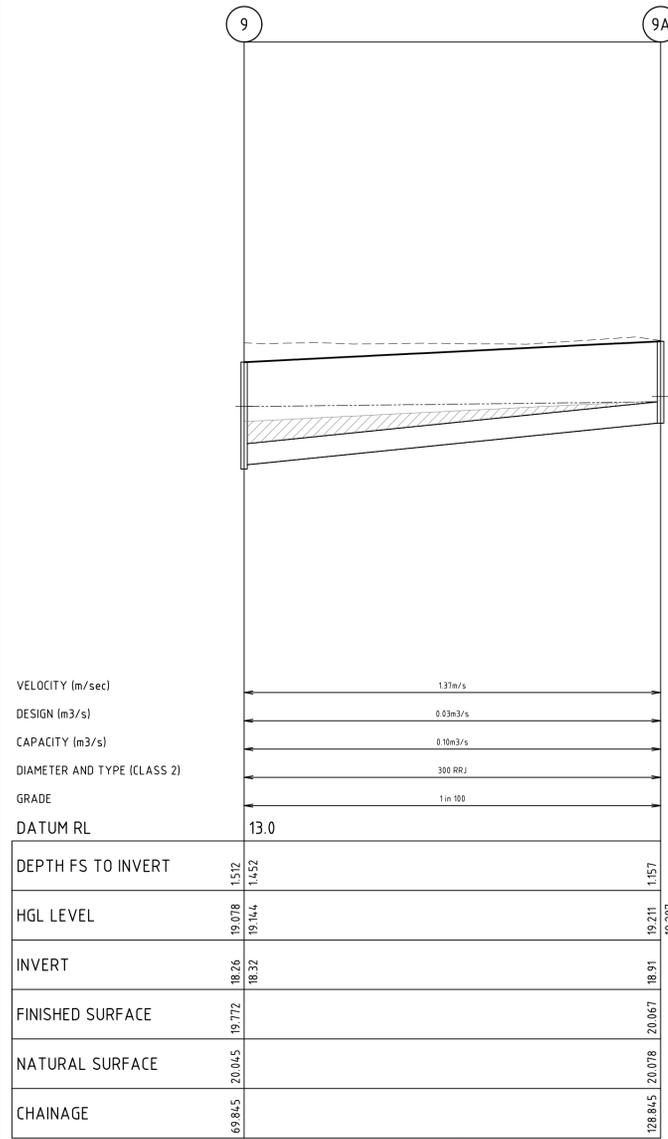
- LEGEND**
- EXISTING SURFACE
 - FINISHED SURFACE
 - - - - - HYDRAULIC GRADE LINE (5yr)
 - ▨ DENOTES CLASS 3 CRUSHED ROCK BACKFILL - IN ROAD RESERVES (PAVEMENT NOT SHOWN)
 - ▩ DENOTES CLASS 2 CRUSHED ROCK BACKFILL - UNDER ROAD CROSSINGS (PAVEMENT NOT SHOWN)



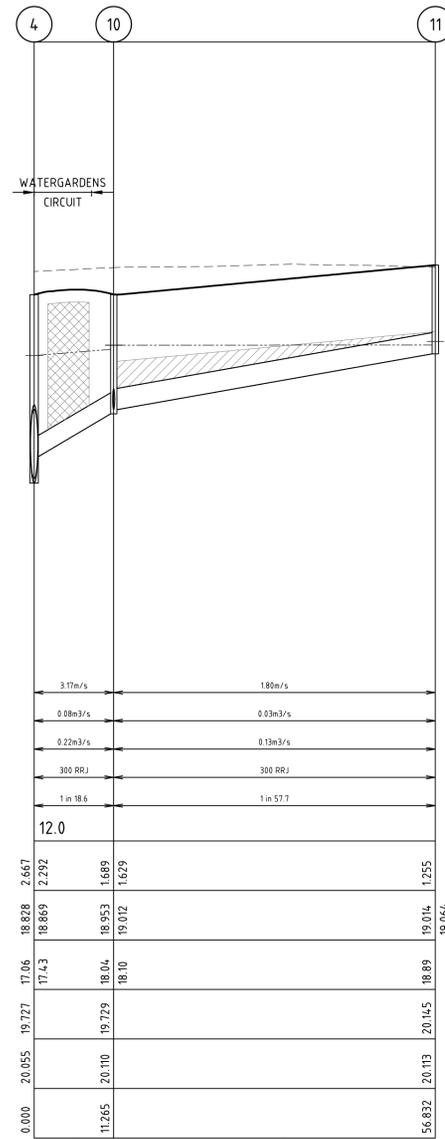
breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
MELWAY REF: 129-C6 SURVEY: BPD DESIGN: TBC DRAWN: TBC		AQUAREVO ESTATE STAGE 6 DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
MUNICIPALITY: CASEY REFERENCE: 8766 E/06		SHEET: 9 OF 13 A
SCALE: As Shown DATUM: AHD DATE: Jun'19		CHECKED: _____ DATE: _____

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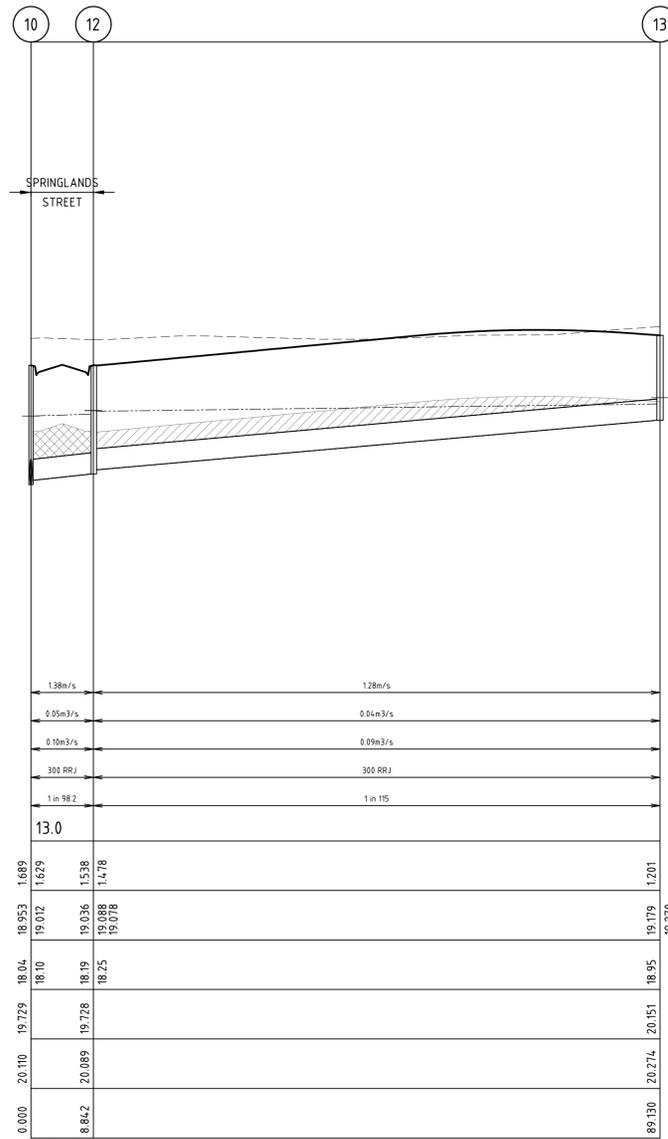
Printed: Aug 15, 2019 - 13:40pm



VELOCITY (m/sec)	137m/s
DESIGN (m3/s)	0.03m3/s
CAPACITY (m3/s)	0.10m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ
GRADE	1 in 100
DATUM RL	13.0
DEPTH FS TO INVERT	1512 1452 1157
HGL LEVEL	19.078 19.144 19.211 19.287
INVERT	18.26 18.32 18.91
FINISHED SURFACE	19.772 20.067
NATURAL SURFACE	20.045 20.078
CHAINAGE	69.845 128.845 20.078



VELOCITY (m/sec)	317m/s	180m/s
DESIGN (m3/s)	0.08m3/s	0.03m3/s
CAPACITY (m3/s)	0.22m3/s	0.13m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 18.6	1 in 57.7
DATUM RL	12.0	
DEPTH FS TO INVERT	1629 1629 1255	
HGL LEVEL	18.628 18.689 18.914 19.064	
INVERT	17.06 18.04 18.89	
FINISHED SURFACE	19.727 20.145	
NATURAL SURFACE	20.055 20.110 20.113	
CHAINAGE	0.000 11.265 20.110 56.832	



VELOCITY (m/sec)	138m/s	128m/s
DESIGN (m3/s)	0.05m3/s	0.04m3/s
CAPACITY (m3/s)	0.10m3/s	0.09m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 98.2	1 in 115
DATUM RL	13.0	
DEPTH FS TO INVERT	1629 1629 1201	
HGL LEVEL	18.553 18.553 19.179 19.270	
INVERT	18.10 18.19 18.95	
FINISHED SURFACE	19.729 20.151	
NATURAL SURFACE	20.110 20.089 20.274	
CHAINAGE	0.000 8.842 20.089 89.130	

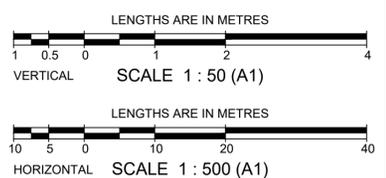
DRAINAGE PIT SCHEDULE										
Aquarevo Estate - Stage 6										
PIT No	PIT TYPE	INTERNAL WD	INTERNAL LEN	INLET DIA	INLET INV LEV	OUTLET DIA	OUTLET INV LEV	FINISHED COVER RL	PIT DEPTH	REMARKS
1	End Wall	-	-	1200	16.60	-	-	17.800	1.200	OUTLET
2	Junction Pit	1650	900	1050	16.69	1200	16.63	19.463	2.833	MPA EDM STD DWG 607 (HAUNCHED)
3	Channel Grating Pit	1500	900	1050	16.90	1050	16.84	19.450	2.610	MPA EDM STD DWG 603 & 607 (HAUNCHED)
4	Junction Pit	1350	900	1050	17.12	1050	17.06	19.727	2.667	MPA EDM STD DWG 607 (HAUNCHED)
5	Channel Grating Pit	1350	900	1050	17.25	1050	17.19	19.857	2.667	MPA EDM STD DWG 603 & 607 (HAUNCHED)
6	Existing Channel Grating Pit	1350	900	1050	17.43	1050	17.37	20.103	2.733	REMOVE TEMPORARY UID, INSTALL CHANNEL GRATED PIT LID
6A	Junction Pit	900	1800	1050	17.54	1050	17.48	20.244	2.764	MPA EDM STD DWG 607 (HAUNCHED)
TP1	Bend	-	-	1050	17.56	1050	17.56	20.206	2.648	BANDAGE JOINT
TP2	Bend	-	-	1050	17.56	1050	17.56	20.177	2.612	BANDAGE JOINT
TP3	Bend	-	-	1050	17.57	1050	17.57	20.131	2.559	BANDAGE JOINT
TP4	Bend	-	-	1050	17.58	1050	17.58	20.112	2.534	BANDAGE JOINT
TP5	Bend	-	-	1050	17.58	1050	17.58	20.087	2.503	BANDAGE JOINT
TP6	Bend	-	-	1050	17.59	1050	17.59	20.067	2.475	BANDAGE JOINT
TP7	Bend	-	-	1050	17.60	1050	17.60	20.046	2.448	BANDAGE JOINT
7	Existing Junction Pit	1500	900	1050	17.68	1900	19.06	2.236	EXISTING PIT, REMOVE EXISTING DOWNSTREAM OUTLET	
8	Channel Grating Pit	600	900	300	17.79	300	17.73	19.472	1.742	MPA EDM STD DWG 603 & 605
9	Channel Grating Pit	600	900	300	18.32	300	18.26	19.772	1.512	MPA EDM STD DWG 603 & 605
9A	Existing Channel Grating Pit	600	900	300	18.10	300	18.10	20.067	1.157	REMOVE TEMPORARY UID, INSTALL CHANNEL GRATED PIT LID
10	Channel Grating Pit	600	900	300	18.10	300	18.10	19.729	1.689	MPA EDM STD DWG 603 & 605
11	Junction Pit	600	900	300	18.89	300	18.89	20.145	1.255	MPA EDM STD DWG 605
12	Channel Grating Pit	600	900	300	18.25	300	18.19	19.728	1.538	MPA EDM STD DWG 603 & 605
13	Junction Pit	600	900	300	18.95	300	18.95	20.151	1.201	MPA EDM STD DWG 605
21	Double Channel Grated Pit	750	900	600	16.73	600	16.70	19.344	2.644	MPA EDM STD DWG 602 & 607 (HAUNCHED)
22	Double Channel Grated Pit	750	900	600	16.98	600	16.95	19.343	2.393	MPA EDM STD DWG 602 & 607 (HAUNCHED)
23	Junction Pit	750	900	525	17.19	600	17.16	19.450	2.290	MPA EDM STD DWG 607 (HAUNCHED)
24	Junction Pit	750	900	525	17.32	525	17.29	19.586	2.296	MPA EDM STD DWG 607 (HAUNCHED)
25	Junction Pit	750	900	525	17.42	525	17.39	19.718	2.328	MPA EDM STD DWG 607 (HAUNCHED)
26	Channel Grating Pit	750	900	525	17.48	525	17.45	19.710	2.260	MPA EDM STD DWG 603 & 607 (HAUNCHED), REFER NOTE 4.
27	Channel Grating Pit	750	900	525	17.55	525	17.52	19.711	2.191	MPA EDM STD DWG 601 & 607 (HAUNCHED), REFER NOTE 4.
28	Channel Grating Pit	750	900	525	17.62	525	17.59	19.549	1.959	MPA EDM STD DWG 601 & 607 (HAUNCHED)
29	Double Channel Grated Pit	750	900	375	17.74	525	17.68	19.396	1.716	MPA EDM STD DWG 602 & 607 (HAUNCHED)
30	Junction Pit	600	900	300	17.93	375	17.87	19.694	1.824	INSTALL PIT AT END OF EXISTING PIPE
33	Junction Pit	600	900	300	17.94	300	17.88	19.554	1.674	MPA EDM STD DWG 605
34	Junction Pit	600	900	300	17.94	300	17.94	19.554	1.674	
34	Junction Pit	600	900	300	18.46	300	18.46	19.667	1.207	MPA EDM STD DWG 605, CLASS 'D' COVER
35	Junction Pit	600	900	300	18.56	300	18.56	19.801	1.241	MPA EDM STD DWG 605
36	Double Channel Grated Pit	600	900	300	17.87	300	17.87	19.363	1.493	MPA EDM STD DWG 602 & 605
37	Channel Grating Pit	600	900	300	18.32	300	18.26	19.828	1.568	MPA EDM STD DWG 603 & 605
38	Junction Pit	600	900	300	18.32	300	18.32	19.828	1.568	
38	Junction Pit	600	900	300	19.00	300	19.00	20.227	1.227	MPA EDM STD DWG 605
39	Channel Grating Pit	600	900	300	18.37	300	18.37	19.862	1.492	MPA EDM STD DWG 603 & 605
40	Junction Pit	600	900	300	18.21	300	18.15	19.675	1.525	MPA EDM STD DWG 605
41	Junction Pit	600	900	300	18.41	300	18.41	19.692	1.282	MPA EDM STD DWG 605, CLASS 'D' COVER

LEGEND

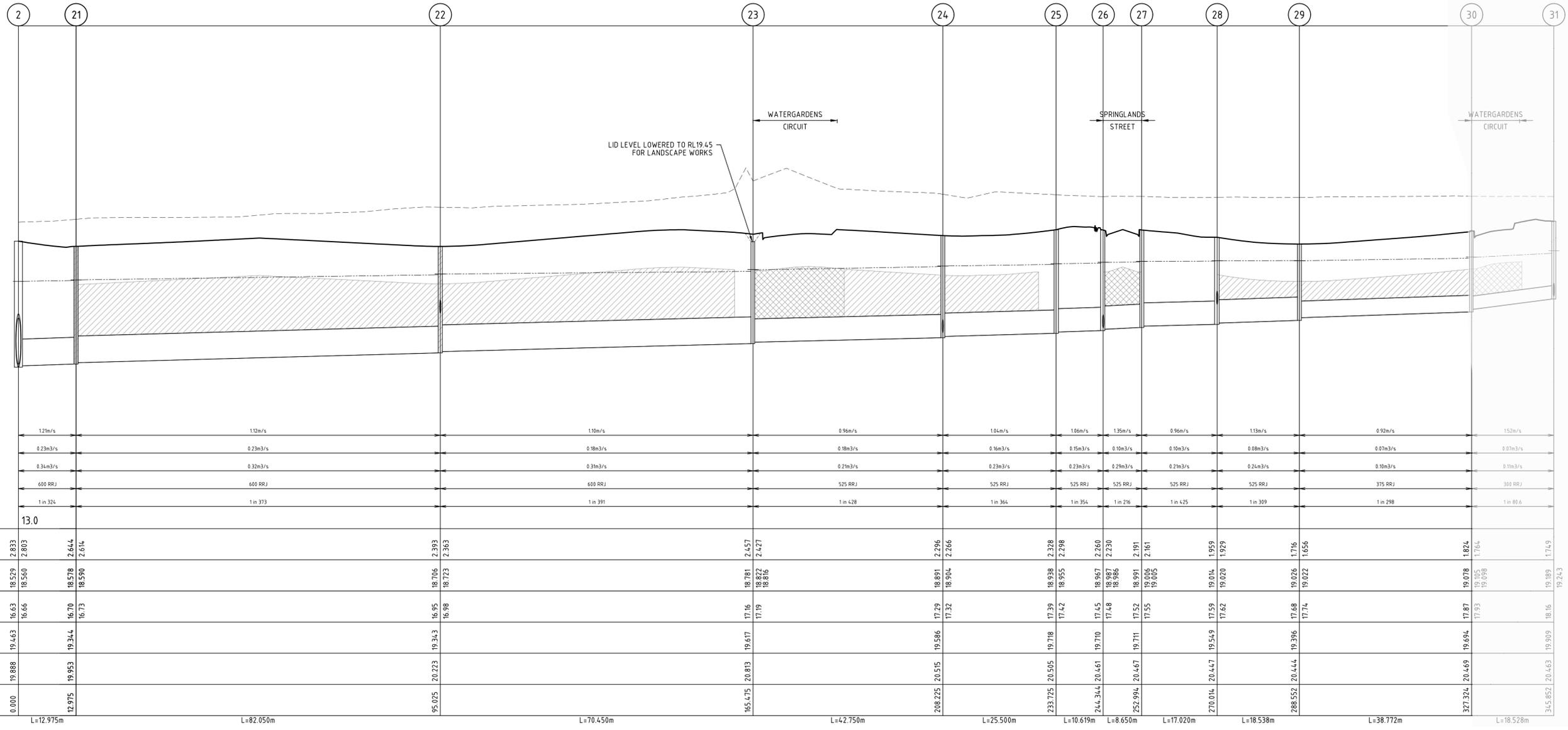
- EXISTING SURFACE
- FINISHED SURFACE
- HYDRAULIC GRADE LINE (5yr)
- ▨ DENOTES CLASS 3 CRUSHED ROCK BACKFILL
- IN ROAD RESERVES (PAVEMENT NOT SHOWN)
- ▩ DENOTES CLASS 2 CRUSHED ROCK BACKFILL
- UNDER ROAD CROSSINGS (PAVEMENT NOT SHOWN)

PIT SCHEDULE NOTES

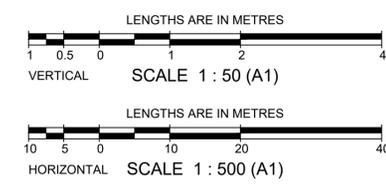
1. WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
2. PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
3. ALL PITS LOCATED WITHIN THE ROAD RESERVE SHALL BE PROVIDED WITH TERRA FIRMA OR APPROVED EQUIVALENT PIT LID WITH A LOCKABLE COVER.
4. HAUNCH PIT IN DIRECTION OF ROAD PAVEMENT.
5. INSTALL TEMPORARY TRAFFICABLE JUNCTION PIT LID



		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF 129-C6		AQUAREVO ESTATE STAGE 6		MUNICIPALITY CASEY	
SURVEY BPD		DESIGN TBC		REFERENCE 8766 E/06	
DRAWN TBC		DRAWING TITLE DRAINAGE LONGITUDINAL SECTIONS - SHEET 2		SHEET 10 OF 13	
VER	DATE	REMARKS	CHECKED	SCALE As Shown	DATUM AHD
	23/10/19	LID LEVEL PIT 23 REVISED FOR LANDSCAPE WORKS		DATE Jun'19	SHEET 10 OF 13
	15/08/19	ISSUED FOR CONSTRUCTION			



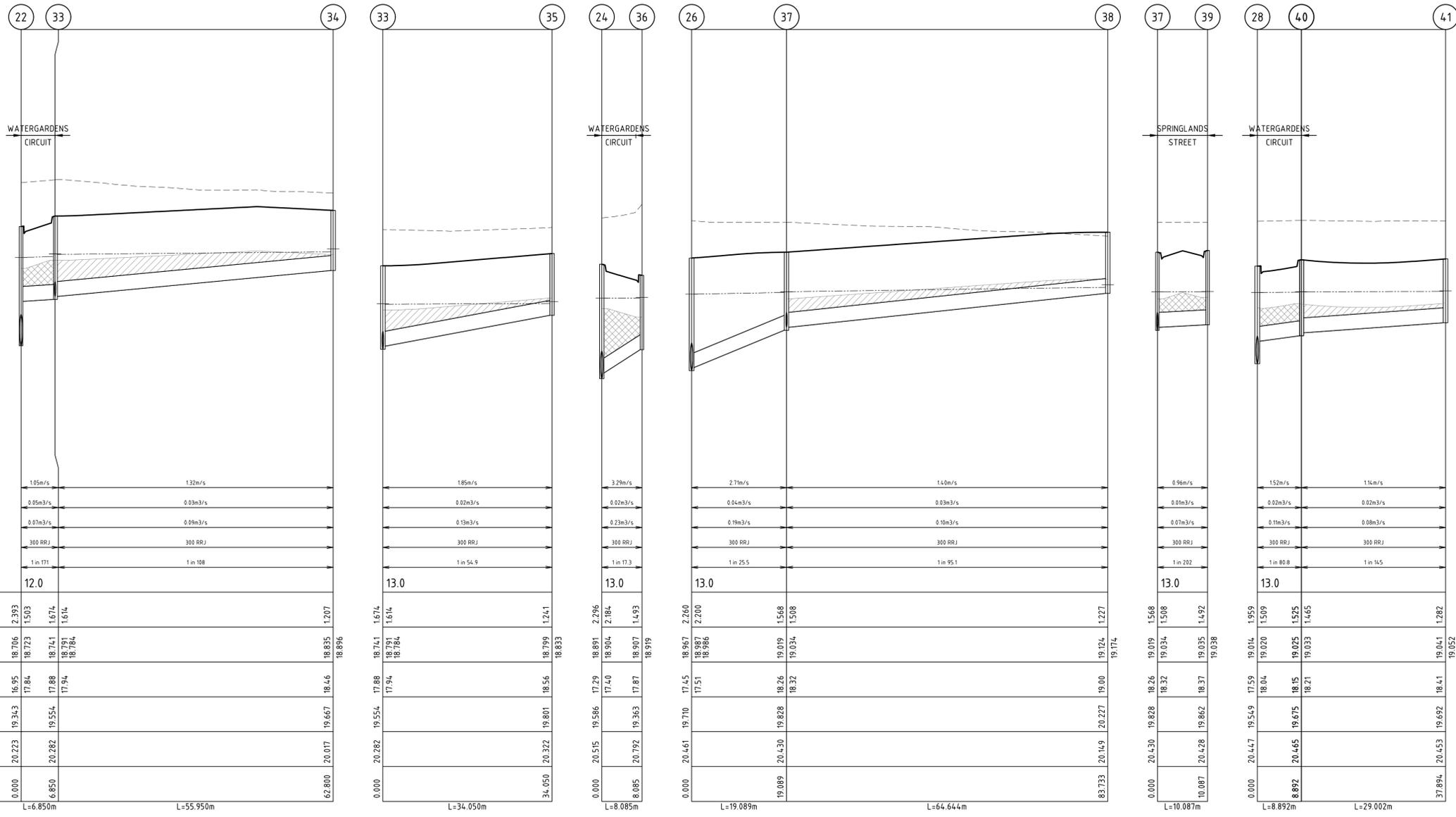
- LEGEND**
- EXISTING SURFACE
 - FINISHED SURFACE
 - HYDRAULIC GRADE LINE (5yr)
 - ▨ DENOTES CLASS 3 CRUSHED ROCK BACKFILL
- IN ROAD RESERVES (PAVEMENT NOT SHOWN)
 - ▩ DENOTES CLASS 2 CRUSHED ROCK BACKFILL
- UNDER ROAD CROSSINGS (PAVEMENT NOT SHOWN)



		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF: 129-C6 SURVEY: BPD		AQUAREVO ESTATE STAGE 6 DRAINAGE LONGITUDINAL SECTIONS - SHEET 3		MUNICIPALITY: CASEY	
DESIGN: TBC DRAWN: TBC				REFERENCE: 8766 E/06	
VER: B DATE: 23/10/19 REMARKS: LID LEVEL PIT 23 REVISED FOR LANDSCAPE WORKS	VER: A DATE: 15/08/19 REMARKS: ISSUED FOR CONSTRUCTION	CHECKED:	SCALE: As Shown	DATUM: AHD	DATE: Jun'19
		SHEET: 11 OF 13			

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VELOCITY (m/sec)	1.95m/s	1.32m/s
DESIGN (m3/s)	0.05m3/s	0.03m3/s
CAPACITY (m3/s)	0.07m3/s	0.09m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 171	1 in 108
DATUM RL	12.0	
DEPTH FS TO INVERT	2.393	1.207
HGL LEVEL	18.706 18.723 17.84	18.535 18.596 18.784
INVERT	16.95 17.84 17.88	18.46 18.784 18.784
FINISHED SURFACE	19.343	19.667
NATURAL SURFACE	20.223	20.017
CHAINAGE	0.000	62.800

VELOCITY (m/sec)	1.85m/s	
DESIGN (m3/s)	0.02m3/s	
CAPACITY (m3/s)	0.13m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 54.9	
DATUM RL	13.0	
DEPTH FS TO INVERT	1.674	1.241
HGL LEVEL	18.741 18.791 18.784	18.633 18.799 18.56
INVERT	17.94	18.56
FINISHED SURFACE	19.554	19.881
NATURAL SURFACE	20.282	20.322
CHAINAGE	0.000	34.050

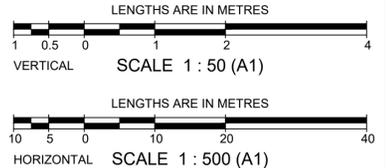
VELOCITY (m/sec)	3.29m/s	
DESIGN (m3/s)	0.02m3/s	
CAPACITY (m3/s)	0.23m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 17.3	
DATUM RL	13.0	
DEPTH FS TO INVERT	2.286	1.493
HGL LEVEL	18.891 18.904 2.184	18.919 18.907 14.93
INVERT	17.29 17.40	18.919 18.919
FINISHED SURFACE	19.586	19.363
NATURAL SURFACE	20.515	20.792
CHAINAGE	0.000	8.085

VELOCITY (m/sec)	2.71m/s	1.40m/s
DESIGN (m3/s)	0.04m3/s	0.03m3/s
CAPACITY (m3/s)	0.19m3/s	0.10m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 25.5	1 in 95.1
DATUM RL	13.0	
DEPTH FS TO INVERT	2.260	1.227
HGL LEVEL	18.987 18.986	19.24 19.174
INVERT	17.45 17.51	19.00 19.00
FINISHED SURFACE	19.710	20.227
NATURAL SURFACE	20.461	20.149
CHAINAGE	0.000	82.733

VELOCITY (m/sec)	0.96m/s	
DESIGN (m3/s)	0.08m3/s	
CAPACITY (m3/s)	0.07m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 202	
DATUM RL	13.0	
DEPTH FS TO INVERT	1.568	1.492
HGL LEVEL	19.019 19.034 15.08	19.035 19.038
INVERT	18.26 18.32	18.37 18.37
FINISHED SURFACE	19.828	19.862
NATURAL SURFACE	20.430	20.428
CHAINAGE	0.000	10.087

VELOCITY (m/sec)	1.52m/s	1.16m/s
DESIGN (m3/s)	0.02m3/s	0.02m3/s
CAPACITY (m3/s)	0.11m3/s	0.08m3/s
DIAMETER AND TYPE (CLASS 2)	300 RRJ	300 RRJ
GRADE	1 in 80.8	1 in 145
DATUM RL	13.0	
DEPTH FS TO INVERT	1.959	1.282
HGL LEVEL	19.014 19.020 15.09	19.041 19.052 14.65
INVERT	18.04 18.04	18.21 18.21
FINISHED SURFACE	19.549	19.692
NATURAL SURFACE	20.447	20.453
CHAINAGE	0.000	37.894

- LEGEND**
- EXISTING SURFACE
 - FINISHED SURFACE
 - - - - - HYDRAULIC GRADE LINE (5yr)
 - ▨ DENOTES CLASS 3 CRUSHED ROCK BACKFILL - IN ROAD RESERVES (PAVEMENT NOT SHOWN)
 - ▩ DENOTES CLASS 2 CRUSHED ROCK BACKFILL - UNDER ROAD CROSSINGS (PAVEMENT NOT SHOWN)



		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafo street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF 129-C6 SURVEY BPD DESIGN TBC DRAWN TBC		AQUAREVO ESTATE STAGE 6		MUNICIPALITY CASEY	
A 15/08/19 ISSUED FOR CONSTRUCTION		DRAINAGE LONGITUDINAL SECTIONS - SHEET 4		REFERENCE 8766 E/06	
VER DATE A 15/08/19	REMARKS ISSUED FOR CONSTRUCTION	CHECKED As Shown	SCALE As Shown	DATUM AHD	DATE Jun'19
				SHEET 12 OF 13	A

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Printed: Aug 15, 2019 - 1:35pm



SIGNAGE & LINEMARKING LEGEND

- "SWLM" - SOLID WHITE LONGLIFE LINE MARKING
- - - "BWL" - BROKEN WHITE LONGLIFE LINE MARKING
- "PIANO KEY" MARKINGS
- "UNIDIRECTIONAL" & "BIDIRECTIONAL" RRPM'S PLACED AT 6.0m CTRS
- "STREET" SIGN
- "KEEP LEFT" SIGN (R2-3 (L))
- "ROUNDAABOUT" SIGN (R1-3A)
- "UNI-DIRECTIONAL CHEVRON" SIGN (D4-1-3)
- "GIVE WAY" SIGN (R1-2A)
- "ROUNDAABOUT AHEAD" SIGN (W2-7A)



LENGTHS ARE IN METRES
 10 5 0 10 20 30 40
 SCALE 1 : 500 (A1)

PLAN
1:500

						breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cafe street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
				MELWAY REF: 129-C6 SURVEY: BPD DESIGN: TBC DRAWN: TBC		AQUAREVO ESTATE STAGE 6 SIGNAGE & LINEMARKING PLAN		MUNICIPALITY CASEY REFERENCE 8766 E/06	
A	15/08/19	ISSUED FOR CONSTRUCTION		CHECKED	SCALE	DATUM	DATE	SHEET	A
					As Shown	AHD	Jun'19	13 OF 13	A

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