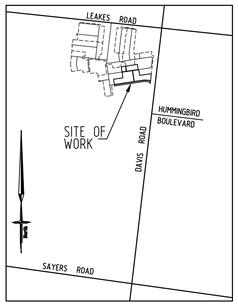
WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

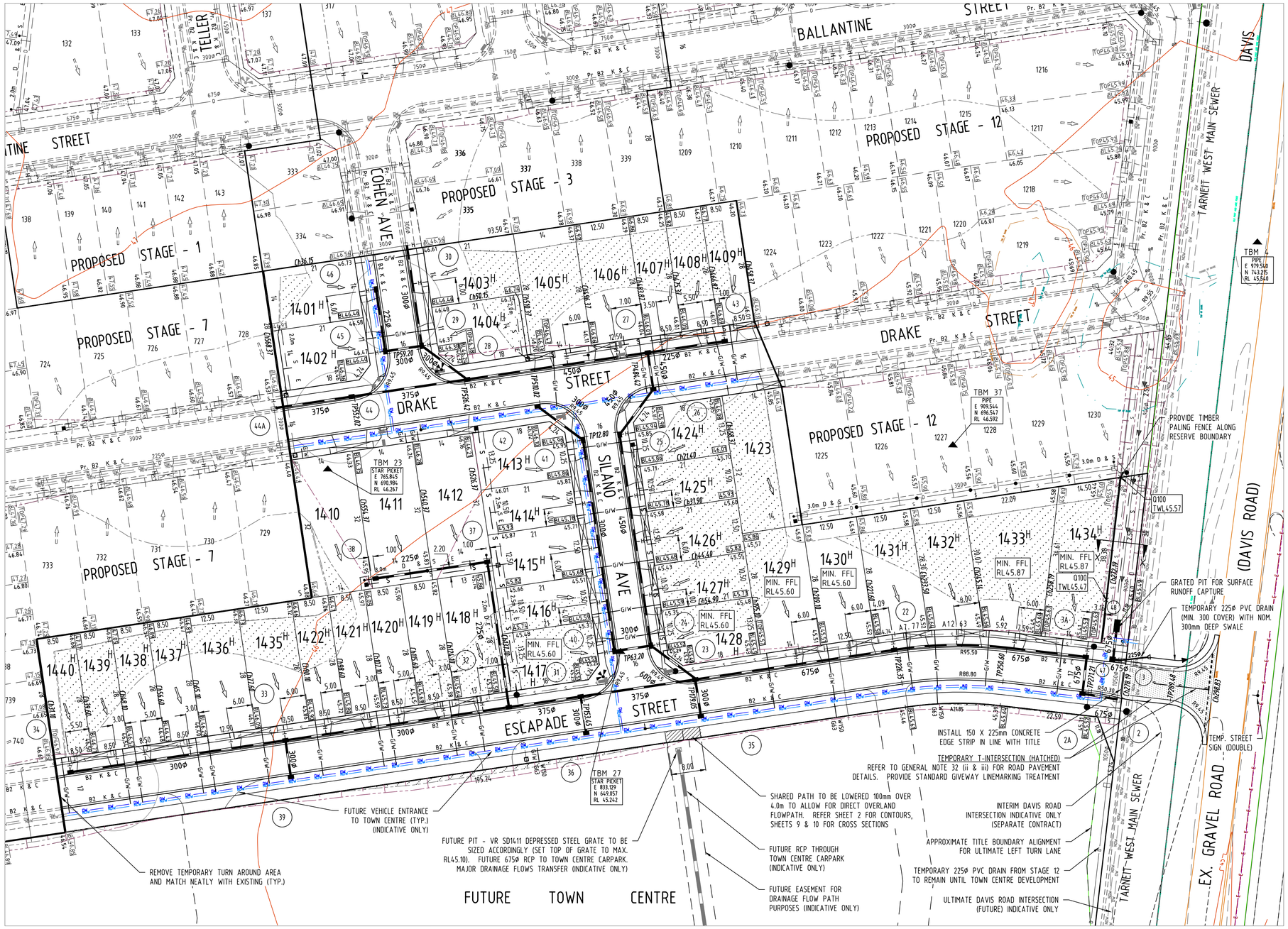


LOCALITY PLAN

NOT TO SCALE

North

SHT. No.	VER	DRAWING INDEX DESCRIPTION
1	A	LAYOUT PLAN, LOCALITY PLAN AND SERVICE OFFSETS
2	A	INTERSECTION DETAILS, GENERAL NOTES
3	A	KERB LIP PROFILES
4	A	SETOUT INFORMATION
5	A	ROAD LONGITUDINAL SECTIONS - 1
6	A	ROAD LONGITUDINAL SECTIONS - 2
7	A	ROAD CROSS SECTIONS DRAKE STREET
8	A	ROAD CROSS SECTIONS SILANO AVENUE & COHEN AVENUE
9	A	ROAD CROSS SECTIONS ESCAPADE STREET - 1
10	A	ROAD CROSS SECTIONS ESCAPADE STREET - 2
11	A	DRAINAGE LONGITUDINAL SECTIONS - 1
12	A	DRAINAGE LONGITUDINAL SECTIONS - 2 AND PIT SCHEDULE

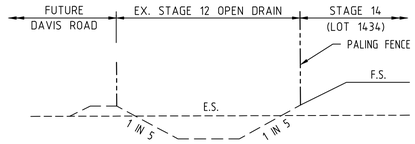


LAYOUT PLAN

SCALE: 1:500

10 0 10 1:500 @ A1

ALL LENGTHS ARE IN METRES



SECTION X-X

RESERVE EX. OPEN DRAIN

N.T.S.

AS CONSTRUCTED

COUNCIL REF. No. 2051/16 - 6215/12

SERVICES OFFSETS AND LOCATIONS

STREET NAME	ROAD RESERVE	WATER (NDW)	WATER (DW)	GAS	ELECTRICITY CABLES	ELECTRICITY POLES	TELECOM. NBN	STREET TREES	BACK OF KERB	JOINT TRENCHING
DRAKE STREET	16.00	2.70 S	3.20 S	2.20 S	2.45 N	1.00 BOK	1.80 N	2.95 S 2.95 N	4.35 S 4.05 N	W,G & E,T
COHEN AVENUE	16.00	2.70 W	3.20 W	2.20 W	2.45 E	1.00 BOK	1.85 E	2.95 W 2.95 E	4.35 W 4.05 E	W,G & E,T
SILANO AVENUE	16.00	2.70 W	3.20 W	2.20 W	2.45 E	1.00 BOK	1.85 E	2.95 W 2.95 E	4.35 W 4.05 E	W,G & E,T
ESCAPADE STREET	17.00	3.70 S	4.20 S	3.20 S	2.45 N	1.00 BOK	1.85 N	2.95 S 2.95 N	5.35 S 4.05 N	W,G & E,T

SYMBOL LEGEND

Prop Drains
Exist Drains < 600
Exist Drains > 600
Prop Sewers < 300
Prop Sewers > 300
Exist Sewers < 300
Exist Sewers > 300
Prop Water
Prop Gas Conduit
Exist Water
Exist Gas
Exist Telstra/Optus
Exist Electricity
Prop 100mm Water Conduit
House drain
Property Inlet
Street Sign
PSM
Existing Surface Level
F.S. Level at Building Line
F.S. Level at Top of Batter
F.S. Level at Back of Lots
Top of Retaining Wall Level
F.S. Level Previous Stage
Coloured Concrete Pavement
Fill > 200mm

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

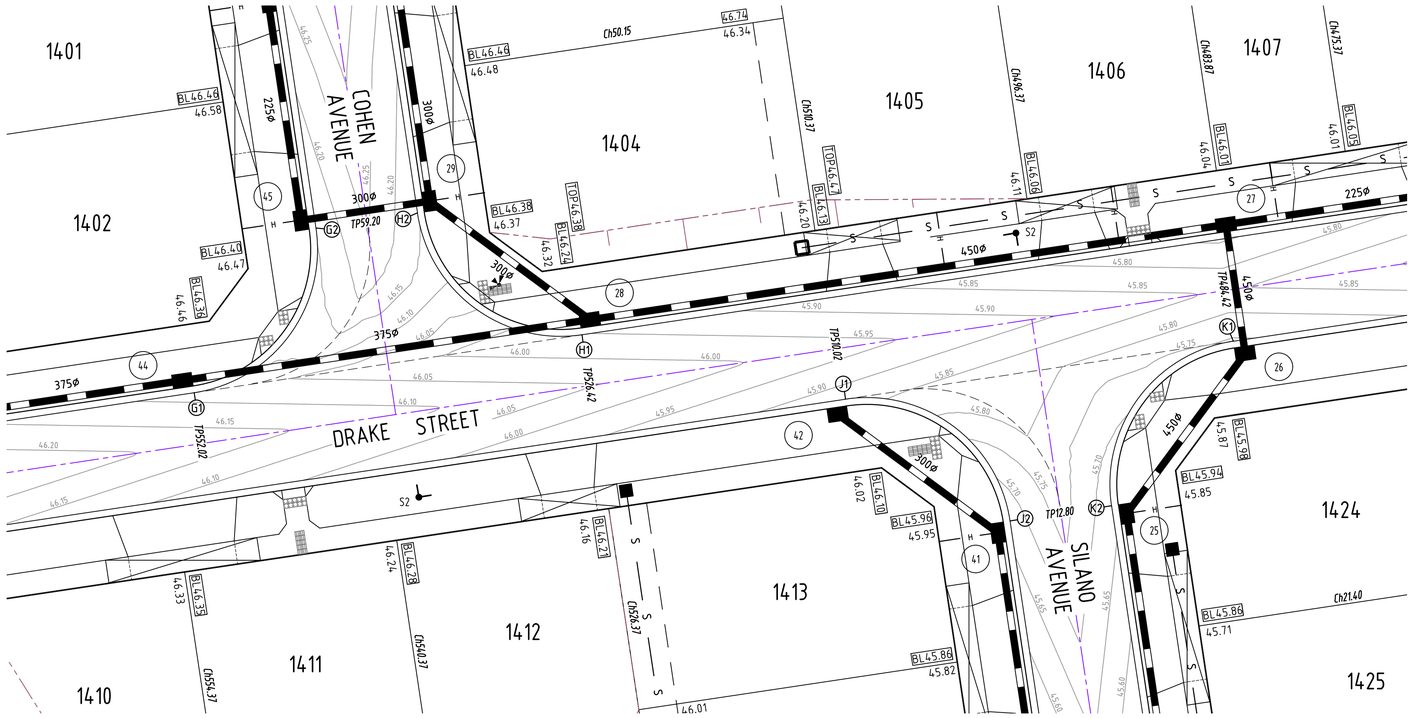
RIVERDALE VILLAGE STAGE 14

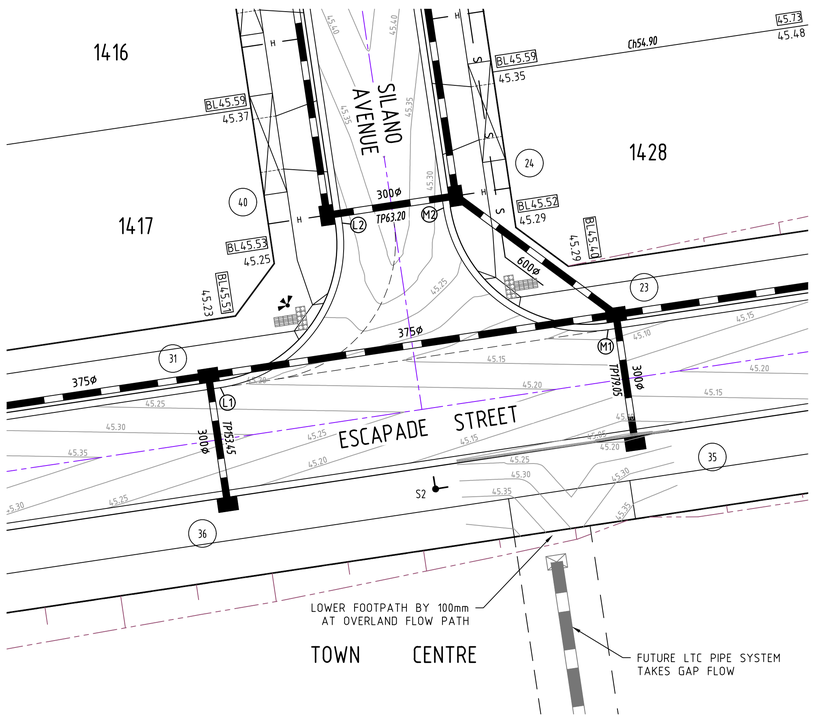
MUNICIPALITY WYNDHAM

REFERENCE 8554 E/14

SCALE AS SHOWN | DATUM AHD | DATE NOV' 16

SHEET 1 OF 10 | A





INTERSECTION DETAILS

4 0 4 1:200 @ A1

ALL LENGTHS ARE IN METRES

AS CONSTRUCTED

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North

TRAFFIC MANAGEMENT LEGEND

S1 STREET SIGNS (SINGLE SIGN)
S2 STREET SIGNS (DOUBLE SIGN)
S3 STREET SIGNS (TRIPLE SIGN)

NOTE: ALL SIGNAGE SHALL BE IN ACCORDANCE WITH AUSTRALIAN STANDARD (AS 1742.2-2009)

COUNCIL REF. No. 2051/16 - 6215/12

GENERAL NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH GROWTH AREAS AUTHORITY (GAA) ENGINEERING DESIGN AND CONSTRUCTION MANUAL FOR SUBDIVISION AND WYNDHAM CITY COUNCIL (WCC) PLANS AND SPECIFICATIONS APPROVED BY COUNCIL AND TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.
2. COUNCIL AND ALL SERVICE AUTHORITIES TO BE NOTIFIED 7 CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
3. DRAINAGE AND PITS TO BE SET OUT FROM OFFSETS SHOWN RATHER THAN FROM PIPE CHAINAGES.
4. PROPERTY INLETS ARE TO BE PLACED 1.0M FROM THE LOW CORNER OF LOT UNLESS OTHERWISE SHOWN.
5. LOTS DENOTED WITH 'H' ARE TO BE PROVIDED WITH A 100mm. DIA. HOUSE DRAIN PLACED 6.0m FROM LOW CORNER OF LOT UNLESS SHOWN OTHERWISE. HOUSE DRAIN TO BE CONNECTED TO STORMWATER DRAINS IF PRESENT. COVER AT THE BUILDING LINE TO BE MINIMUM OF 600mm.
6. ALL PIPES UNDER ROAD PAVEMENTS TO BE RRJ RCP (CLASS 4) UNLESS OTHERWISE SPECIFIED. ALL OTHER PIPES TO BE RRJ RCP CLASS 2 UNLESS OTHERWISE SPECIFIED.
7. DRAINAGE PIPES LAID ON A CURVE MUST BE RRJ AND THE RADIUS OF CURVATURE COMPLY WITH THE MANUFACTURERS SPECIFICATIONS.
   DRAINAGE PIPES LAID ON A CURVE SHALL HAVE THE BUILDING LINE PEGGED AT MINIMUM 15m INTERVALS.
8. ALL SEWER MAINS, CONDUITS & PIPES UNDER ROAD PAVEMENT, CONCRETE DRIVEWAYS, FOOTPATHS AND PARKING BAYS ARE TO BE BACKFILLED WITH 20mm CLASS 2 BASALTIC FCR COMPACTED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE. WHERE SEWER MAINS ARE ADJACENT TO STORMWATER PIPELINES THE BACKFILL OF THE DEEPER TRENCH SHALL BE IN ACCORDANCE WITH COUNCILS STANDARD DRAWING SD 6-10 (1996)
9. DRAINAGE PIPES BEHIND BACK OF KERB TO BE BACKFILLED WITH 20mm. CLASS 3 BASALTIC ROCK COMPACTED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING
10. AGRICULTURAL PIPE DRAINS TO BE PLACED BEHIND ALL KERB AND CHANNEL, KERB ONLY AND EDGE STRIPS. REFER TO GAA STANDARD DGN. EDCM 202.
11. 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 DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE
12. BATTERS SHALL BE IN 1 IN 6 FOR CUT AND FILL UNLESS OTHERWISE SHOWN.
14. PRIOR TO COMMENCEMENT OF WORKS,THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
    a) SOURCE OF QUARRY MATERIAL.
    b) OPTIMUM MOISTURE CONTENT AND MAXIMUM MODIFIED DRY DENSITY OF THE F.C.R. TO BE USED (FROM NATA APPROVED LABORATORY).
    c) IF THE SOURCE OF THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF WORKS, NEW TEST RESULTS SHALL BE PROVIDED.
15. NO TOP SOIL SHALL BE REMOVED FROM LAND COVERED BY THE SUBDIVISION WITHOUT THE WRITTEN CONSENT OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE. THE TRUCK ROUTE FOR REMOVAL OF SPOIL FROM SITE IS TO BE SUBMITTED TO AND APPROVED BY THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE IN WRITING PRIOR TO COMMENCEMENT OF ANY WORK.
16. ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL RUBBISH AND SPOIL FROM THE SITE.
17. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL NECESSARY SHORING AND PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS ETC. NECESSARY TO KEEP THE WORKS IN A SAFE AND STABLE CONDITION AND PROTECT THE PUBLIC FROM THE WORK AS PER AUSTRALIAN STANDARD AS1742.1.2.3 -1986.
18. REMOVAL OR RETENTION OF EXISTING TREES OR VEGETATION MUST BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLANS. NO MATERIAL IS TO BE BURNT ON SITE.
19. ANY FOOTPATH OR KERB AND CHANNEL DAMAGED DURING CONSTRUCTION AND MAINTENANCE PERIOD TO BE REINSTATED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.
20. LOTS TO BE GRADED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE. ALL LOTS TO BE 1 IN 150 MINIMUM SLOPE.
21. FILL AREAS TO BE STRIPPED OF TOPSOIL, 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% 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.
22. 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 DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.
23. 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.
24. 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 CONCRETER MARKS THE KERB AND FOOTPATH EXACTLY ABOVE THE CONDUIT.
25. TELSTRA/NBN CO TO BE NOTIFIED 7 DAYS PRIOR TO CONCRETE WORKS BEING PLACED.
26. ALL DRIVEWAYS TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN. REFER TO WCC STD. DRG. SD 4-1.
27. THE CONTRACTOR IS TO ARRANGE CCTV OF DRAINAGE AND ACCEPTANCE FROM COUNCIL PRIOR TO INSTALLATION OF THE KERB & CHANNEL AND ASPHALT PLACEMENT.
28. B2 PROFILE KERB AND CHANNEL TO BE CONSTRUCTED IN ALL STREETS UNLESS OTHERWISE SHOWN.
29. PSM'S TO BE LANDS DEPT. HIGH STABILITY TYPE. REFER TO COUNCIL STANDARD DRAWING SD11-10. AMG CO-ORDINATES AND AHD LEVEL TO BE SUPPLIED TO COUNCIL. (TO BE INSTALLED BY OTHERS)
30. LEVELS SHOWN THUS:
    - 28.57 DENOTES EXISTING SURFACE LEVEL
    - BL28.57 DENOTES F.S. LEVEL AT BUILDING LINE
    - TOP28.57 DENOTES F.S. LEVEL AT TOP OF BATTER
    - TOE28.57 DENOTES F.S. LEVEL AT TOE OF BATTER
    - 28.57 DENOTES F.S. LEVEL AT BACK OF LOTS
    - TW28.57 DENOTES TOP OF RETAINING WALL LEVEL
31. ALL SERVICE TRENCHES UNDER CONCRETE FOOTPATHS AND VEHICLE CROSSINGS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK MATERIAL.
32. i - ALL ROAD PAVEMENT TO CONSIST OF:
    a) 30mm COMPACTED DEPTH 10mm NOMINAL SIZE TYPE 'N' ASPHALT WITH C170 BINDER. (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
    b) 30mm COMPACTED DEPTH 10mm NOMINAL SIZE TYPE 'N' ASPHALT WITH C170 BINDER.
    c) 10mm SAMI SEAL.
    d) 125mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 2 F.C.R. COMPACTED TO AT LEAST 100% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT AND TO ACHIEVE A MINIMUM YOUNG'S MODULUS OF 500 MPa.
    e) 100mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 3 CEMENT TREATED CRUSHED ROCK COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500 MPa.
    f) 235mm COMPACTED DEPTH 40mm RIPPED ROCK. PERMEABILITY SHALL BE LESS THAN $1x10^{-9}$ m/s.

    TOTAL PAVEMENT DEPTH 530mm

    ii - TEMPORARY INTERSECTION DAVIS ROAD/ ESCAPADE STREET PAVEMENT TO CONSIST OF:
    a) 30mm COMPACTED DEPTH 10mm NOMINAL SIZE TYPE 'N' ASPHALT WITH C170 BINDER.
    b) 10mm SAMI SEAL.
    c) 100mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 2 F.C.R. COMPACTED TO AT LEAST 100% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT AND TO ACHIEVE A MINIMUM YOUNG'S MODULUS OF 500 MPa.
    d) 160mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 3 CEMENT TREATED CRUSHED ROCK COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500 MPa.

    TOTAL PAVEMENT DEPTH 300mm

    iii - TEMPORARY INTERSECTION DAVIS ROAD/ ESCAPADE STREET SHOULDERS ONLY:
    c) 140mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 2 F.C.R. COMPACTED TO AT LEAST 100% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT AND TO ACHIEVE A MINIMUM YOUNG'S MODULUS OF 500 MPa.
    d) 160mm COMPACTED DEPTH 20mm NOMINAL SIZE CLASS 3 CEMENT TREATED CRUSHED ROCK COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500 MPa.

    TOTAL PAVEMENT DEPTH 300mm
33. ALL PAVEMENTS TO BE COMPACTED TO 98% AUSTRALIAN DRY DENSITY. PAVEMENT DEPTH MAY NOT BE MODIFIED UNLESS APPROVED BY COUNCIL TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.
34. ALL 125mm THICK FOOTPATH CONCRETE PAVING TO BE REINFORCED WITH SL72 MESH AND MUST BE CONSTRUCTED WITH A 50MM UNDERLAYER OF 20MM COMPACTED CLASS 3 FCR IN ACCORDANCE WITH GAA STANDARD DRAWING EDCM 401.
35. 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-INSTATEMENT AT THE CONTRACTORS EXPENSE.
36. ALL SIGNS AND TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH AS 1742-1,2,3 -1986. LINE MARKING SHALL BE IN ACCORDANCE WITH VICROADS REQUIREMENT WITH LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGADUR OR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL (VICROADS SPECIFICATION SEE SECTION 710 & 722).
37. 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". APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS.
38. PRIOR TO START OF WORKS ON SITE, A PRE-COMMENCEMENT MEETING MUST BE HELD BETWEEN DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE, THE DEVELOPER'S CONSULTANT AND THE CONTRACTOR.
39. PRIOR TO COMMENCING WORKS ON SITE, THE CONTRACTOR MUST OBTAIN ROAD OPENING/WORKS PERMITS FROM COUNCIL FOR ANY WORKS WITHIN EXISTING ROAD RESERVES OR WORKS ON ANY EXISTING INFRASTRUCTURE.
40. STREET NAMES TO BE INSTALLED ON PUBLIC LIGHTING POLES AT INTERSECTIONS WHERE POSSIBLE. ALL SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD11-1.
41. LOCATION OF ALL UNDERGROUND SERVICE CONDUITS TO BE MARKED ON BOTH SIDES OF THE KERB AND CHANNEL WITH W FOR WATER, RW FOR RECYCLED WATER, G FOR GAS, T FOR TELECOMMUNICATIONS & E FOR ELECTRICITY (REFER TO STANDARD DRAWING SD11-8).
42. THE CONTRACTOR IS TO INSTALL BLUE RRPM'S ON THE ROAD CENTRLINE AND MARKER POSTS TO INDICATE THE LOCATION OF FIRE PLUGS OR HYDRANTS.
43. GAS AND WATER CONDUITS TO BE 50mm DIAMETER.
44. DEMOLITION WORKS TO INCLUDE BUT IS NOT LIMITED TO THE REMOVAL OF UNDERGROUND SERVICES, DRAINAGE & PITS, DISPOSAL OF MATERIAL FROM SITE, ALL TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE. EXCAVATIONS FROM TRENCHES OF REMOVED DRAINAGE AND SERVICES TO BE EXCAVATED TO A FIRM BASE, INSPECTED BY THE DEVELOPER'S CONSULTANT AND LEVELS TAKEN. APPROVED FILL MATERIAL SHALL BE PLACED AND COMPACTED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.

SYMBOL LEGEND

Prop Drains		Prop 100mm Water Conduit	W100
Exist Drains < 600	150	House drain	H
Exist Drains > 600	900	Property Inlet	
Prop Sewers < 300	S	Street Sign	
Prop Sewers > 300	S	PSM	
Exist Sewers < 300	150 S	Existing Surface Level	+ 28.57
Exist Sewers > 300	300 S	F.S. Level at Building Line	+ BL28.57
Prop Water	W	F.S. Level at Top of Batter	+ TOP28.57
Prop Gas Conduit	G	F.S. Level at Back of Lots	+ 28.57
Exist Water	100 W	Top of Retaining Wall Level	+ TW28.57
Exist Gas	100 G	F.S. Level Previous Stage	+ 28.57
Exist Telstra/Optus	T/O	Coloured Concrete Pavement	
Exist Electricity	E	Fill > 200mm	

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

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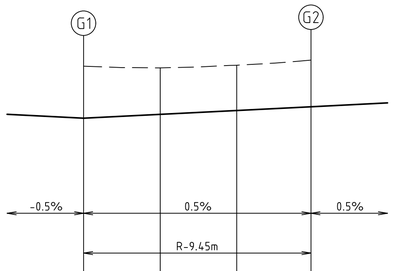
MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

RIVERDALE VILLAGE STAGE 14

MUNICIPALITY: WYNDHAM
REFERENCE: 8554 E/14

SCALE AS SHOWN | DATUM AHD | DATE NOV' 16 | SHEET 2 OF 12 | A

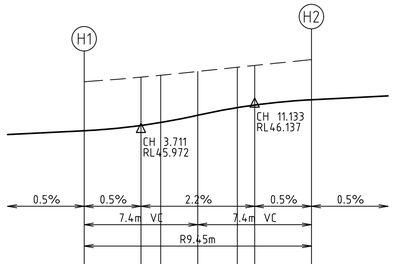


VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 45

DESIGN SURFACE LEVEL	46.081	46.106	46.131	46.155
EXISTING SURFACE LEVEL	46.420	46.409	46.427	46.460
CHAINAGE	0.000	5.000	10.000	14.844

LIP LINE G

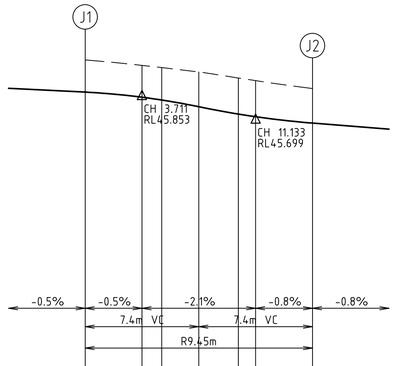


VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 45

DESIGN SURFACE LEVEL	45.953	45.988	46.007	46.054	46.104	46.121	46.155
EXISTING SURFACE LEVEL	46.273	46.303	46.315	46.340	46.368	46.380	46.418
CHAINAGE	0.000	3.711	5.000	7.422	10.000	11.133	14.844

LIP LINE H

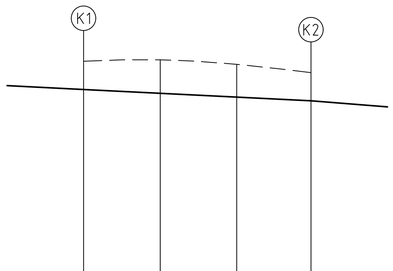


VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 44

DESIGN SURFACE LEVEL	45.871	45.838	45.820	45.776	45.728	45.711	45.669
EXISTING SURFACE LEVEL	46.082	46.046	46.032	46.003	45.963	45.946	45.894
CHAINAGE	0.000	3.711	5.000	7.422	10.000	11.133	14.844

LIP LINE J

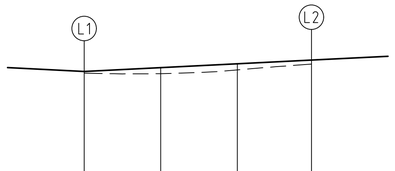


VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 44

DESIGN SURFACE LEVEL	45.743	45.718	45.693	45.669
EXISTING SURFACE LEVEL	45.928	45.937	45.907	45.853
CHAINAGE	0.000	5.000	10.000	14.844

LIP LINE K

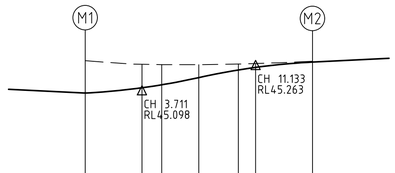


VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 44

DESIGN SURFACE LEVEL	45.208	45.233	45.258	45.282
EXISTING SURFACE LEVEL	45.196	45.193	45.218	45.256
CHAINAGE	0.000	5.000	10.000	14.844

LIP LINE L



VERTICAL CURVE
DESIGN GRADELINE
HORIZONTAL GEOMETRY

DATUM 44

DESIGN SURFACE LEVEL	45.080	45.114	45.134	45.181	45.230	45.247	45.282
EXISTING SURFACE LEVEL	45.291	45.267	45.266	45.265	45.269	45.272	45.287
CHAINAGE	0.000	3.711	5.000	7.422	10.000	11.133	14.844

LIP LINE M

AS CONSTRUCTED

NOTES
1. CHAINAGES REFER TO LIP OF KERB
2. REFER TO SHEET No. 4 FOR SETOUT INFORMATION.

COUNCIL REF. No. 2051/16 - 6215/12

0.4 0 0.4 0.8 1.2 1.6 2 V 1:20
4 0 4 8 12 16 20 H 1:200
ALL LENGTHS ARE IN METRES A1

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

RIVERDALE VILLAGE
STAGE 14

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14

SCALE AS SHOWN DATUM AHD DATE NOV' 16
SHEET 3 OF 12 A

DESIGN CENTRELINE SETOUT:

DRAKE STREET

	Chainage	Easting	Northing	Bearing	Radius
Curve-Tangent	309. 362	960. 673	791. 701	186°34'50. 69"	10. 000
Tangent-Curve	363. 217	954. 502	738. 202	186°34'50. 69"	10. 000
Curve-Tangent	376. 293	946. 046	729. 458	261°30'00. 29"	10. 000
Straight	400. 000	922. 599	725. 954	261°30'00. 29"	
Straight	500. 000	823. 697	711. 173	261°30'00. 29"	
Straight	600. 000	724. 795	696. 392	261°30'00. 29"	
Intersection Point	663. 468	662. 024	687. 011	261°30'00. 29"	

IP 1

coordinate = 761. 1135 774. 6195
chainage = 100. 7850

IP 2

coordinate = 962. 1692 804. 6667
centre = 950. 7394 792. 8474
radius = 10. 0000
length = 18. 3400
intersect angle = 105°04'50"

start tangent

coordinate = 949. 2613 802. 7376
length = 13. 0512
chainage = 291. 0223
bearing = 81°30'01"

end tangent

coordinate = 960. 6735 791. 7014
length = 13. 0512
chainage = 309. 3623
bearing = 186°34'51"

IP 3

coordinate = 953. 6235 730. 5902
centre = 944. 5675 739. 3478
radius = 10. 0000
length = 13. 0759
intersect angle = 74°55'10"

start tangent

coordinate = 954. 5016 738. 2018
length = 7. 6621
chainage = 363. 2168
bearing = 186°34'51"

end tangent

coordinate = 946. 0456 729. 4577
length = 7. 6621
chainage = 376. 2927
bearing = 261°30'00"

IP 4

coordinate = 662. 0244 687. 0108
chainage = 663. 4681

COHEN AVENUE

	Chainage	Easting	Northing	Bearing
Intersection Point	0. 000	774. 267	776. 585	171°30'00. 14"
Intersection Point	72. 000	784. 910	705. 376	171°30'00. 14"

IP 1
coordinate = 774. 2674 776. 5853
chainage = 0. 0000

IP 2
coordinate = 784. 9096 705. 3760
chainage = 72. 0002

SILANO AVENUE

	Chainage	Easting	Northing	Bearing
Intersection Point	0. 000	826. 448	711. 584	171°30'00. 19"
Intersection Point	76. 000	837. 682	636. 419	171°30'00. 19"

IP 1

coordinate = 826. 4483 711. 5839
chainage = 0. 0000

IP 2

coordinate = 837. 6817 636. 4187
chainage = 76. 0000

ESCAPADE STREET

	Chainage	Easting	Northing	Bearing
Intersection Point	0. 000	673. 258	611. 846	81°30'01. 79"
Tangent-Curve	226. 346	897. 118	645. 300	81°30'01. 79"
Curve-Tangent	250. 600	921. 298	645. 705	96°34'50. 10"
Intersection Point	301. 409	971. 773	639. 882	96°34'50. 10"

IP 1

coordinate = 673. 2579 611. 8459
chainage = 0. 0000

IP 2

coordinate = 909. 1812 647. 1028
centre = 910. 7377 554. 1621
radius = 92. 1500
length = 24. 2536
intersect angle = 15°04'48"

start tangent

coordinate = 897. 1179 645. 3000
length = 12. 1973
chainage = 226. 3459
bearing = 81°30'02"

end tangent

coordinate = 921. 2982 645. 7050
length = 12. 1973
chainage = 250. 5995
bearing = 96°34'50"

IP 3

coordinate = 971. 7733 639. 8821
chainage = 301. 4094

KERB RETURN SETOUT:

RETURN G

Point no	Easting	Northing	RL
G1	771. 755	706. 797	46. 081
G2	779. 704	717. 540	46. 155

Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
G1 - G2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	46. 118

RETURN H

Point no	Easting	Northing	RL
H1	797. 074	710. 581	45. 953
H2	786. 331	718. 531	46. 155

Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
H1 - H2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	46. 054

RETURN J

Point no	Easting	Northing	RL
J1	814. 284	706. 379	45. 871
J2	825. 027	698. 429	45. 669

Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
J1 - J2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	45. 776

RETURN K

Point no	Easting	Northing	RL
K1	839. 603	710. 163	45. 743
K2	831. 653	699. 420	45. 669

Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
K1 - K2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	45. 706

RETURN L

Point no	Easting	Northing	RL
L1	824. 527	637. 840	45. 208
L2	832. 477	648. 583	45. 282

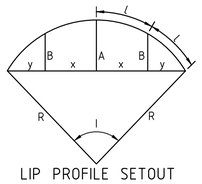
Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
L1 - L2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	45. 245

RETURN M

Point no	Easting	Northing	RL
M1	849. 846	641. 624	45. 080
M2	839. 103	649. 573	45. 282

Curve no	l	Radius	Arc	A	B	X	Y	l	Mid point RL
M1 - M2	90. 000	9. 450	14. 844	2. 768	2. 049	3. 616	3. 066	3. 711	45. 181

AS CONSTRUCTED



LIP PROFILE SETOUT

NOTES
1. REFER TO SHEET No. 3 FOR KERB LIP PROFILES.

COUNCIL REF. No. 2051/16 - 6215/12

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

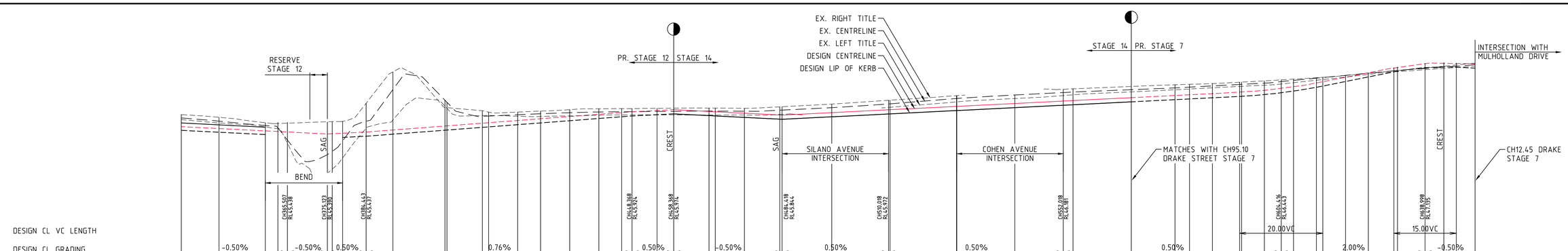
MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

RIVERDALE VILLAGE
STAGE 14

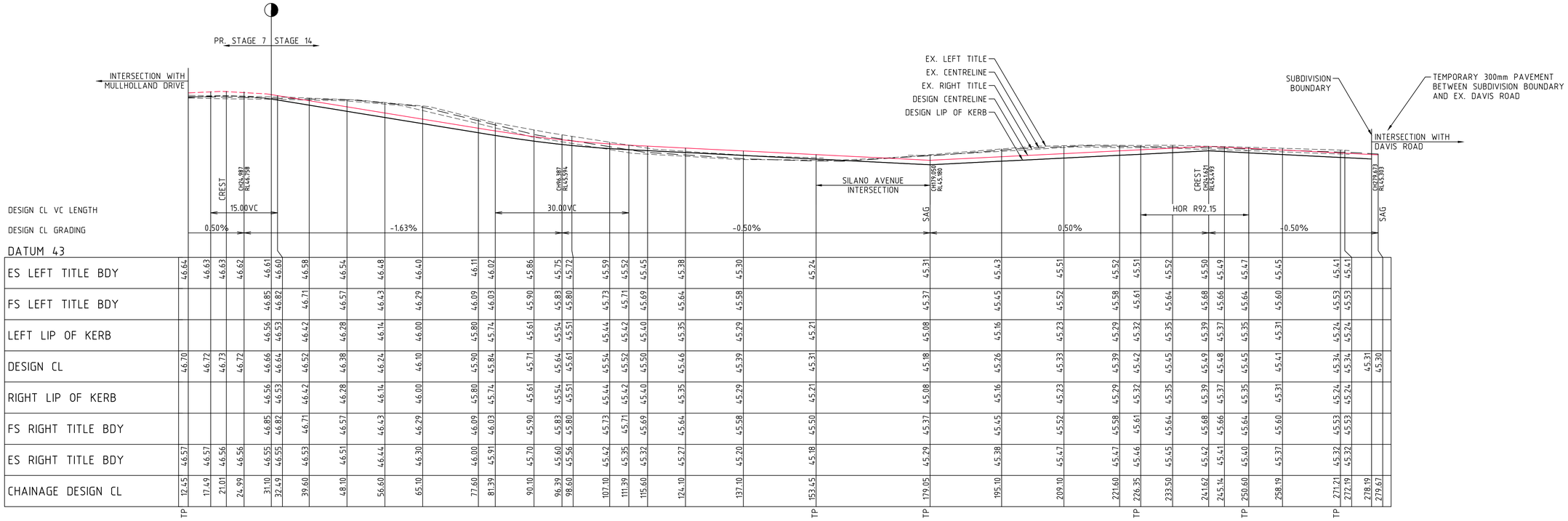
MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14

SCALE NOT TO SCALE DATUM AHD DATE NOV' 16 SHEET 4 OF 12 A


EX. RIGHT TITLE
EX. CENTRELINE
EX. LEFT TITLE
DESIGN CENTRELINE
DESIGN LIP OF KERB
RESERVE STAGE 12
PR. STAGE 12 STAGE 14
STAGE 14 PR. STAGE 7
INTERSECTION WITH MULHOLLAND DRIVE
SAG
BEND
CREST
SAG
SILANO AVENUE INTERSECTION
COHEN AVENUE INTERSECTION
MATCHES WITH CH95.10 DRAKE STREET STAGE 7
CREST
CH12.45 DRAKE STAGE 7
CH395.507 RL45.438
CH375.123 RL45.380
CH386.443 RL45.537
CH448.348 RL45.924
CH458.268 RL45.974
CH484.418 RL45.844
CH510.018 RL45.972
CH552.018 RL46.181
CH604.496 RL46.445
CH638.998 RL47.135
DESIGN CL VC LENGTH
20.00VC
15.00VC
DESIGN CL GRADING
-0.50%
-0.50%
0.50%
0.76%
0.50%
-0.50%
0.50%
0.50%
0.50%
2.00%
-0.50%

DATUM 42

| |
|---|---|---



ESCAPADE STREET LONGITUDINAL SECTION

AS CONSTRUCTED

COUNCIL REF. No. 2051/16 - 6215/12

V 1:50
H 1:500
ALL LENGTHS ARE IN METRES A1

AMENDMENTS			
A	14-10-2016	ISSUED FOR CONSTRUCTION	
VER.	DATE	REMARKS	

breese pitt dixon pty. ltd.
land surveyors civil engineers

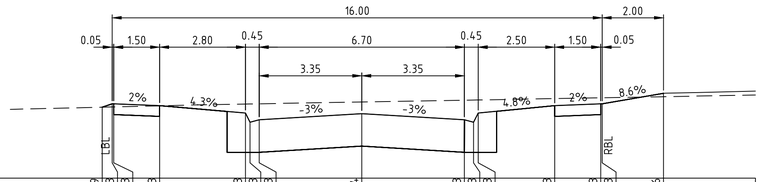
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

RIVERDALE VILLAGE
STAGE 14

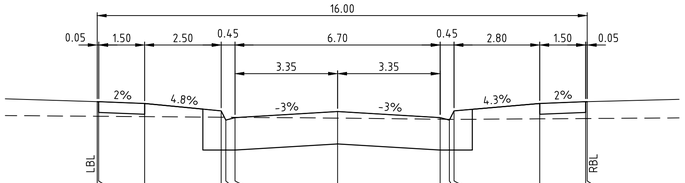
MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14

SCALE AS SHOWN | DATUM AHD | DATE NOV' 16 | SHEET 6 OF 12 | A


16.00
2.00
0.05
1.50
2.80
0.45
6.70
0.45
2.50
1.50
0.05
3.35
3.35
2%
4.3%
-3%
-3%
4.8%
2%
8.6%
LBL
RBL

DATUM 45

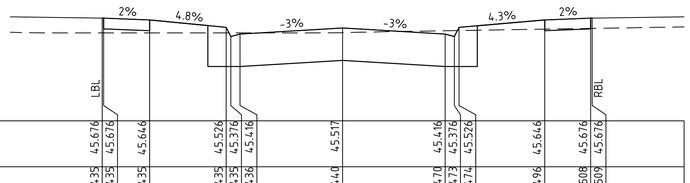
| | | |



DATUM 44

DESIGN SURFACE LEVEL		45.542	45.542	45.512		45.392	45.242	45.282		45.382		45.282	45.242	45.392		45.512		45.542	45.542										
EXISTING SURFACE LEVEL		45.304	45.304	45.298		45.289	45.288	45.287		45.274		45.256	45.254	45.253		45.262		45.267	45.267										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

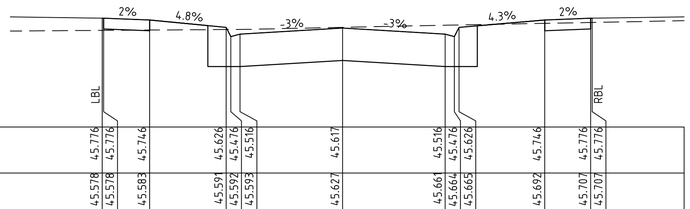
CH 63.200



DATUM 44

DESIGN SURFACE LEVEL		45.676	45.676	45.646		45.526	45.376	45.416		45.517		45.416	45.376	45.526		45.646		45.676	45.676										
EXISTING SURFACE LEVEL		45.435	45.435	45.435		45.435	45.435	45.436		45.440		45.470	45.473	45.474		45.496		45.508	45.509										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

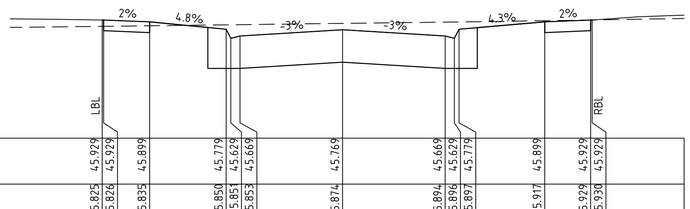
CH 44.400



DATUM 44

DESIGN SURFACE LEVEL		45.776	45.776	45.746		45.626	45.476	45.516		45.617		45.516	45.476	45.626		45.746		45.776	45.776										
EXISTING SURFACE LEVEL		45.578	45.578	45.583		45.599	45.592	45.593		45.627		45.661	45.664	45.665		45.692		45.707	45.707										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

CH 31.900

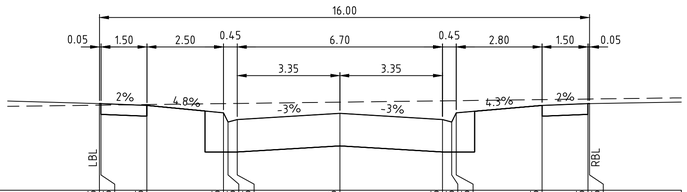


DATUM 44

DESIGN SURFACE LEVEL		45.929	45.929	45.899		45.779	45.629	45.669		45.769		45.669	45.629	45.779		45.899		45.929	45.929										
EXISTING SURFACE LEVEL		45.825	45.826	45.835		45.850	45.851	45.853		45.874		45.894	45.896	45.897		45.917		45.929	45.930										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

CH 12.800

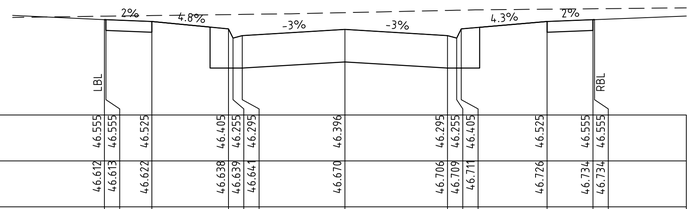
SILANO AVENUE CROSS SECTIONS



DATUM 45

DESIGN SURFACE LEVEL		46.415	46.415	46.385		46.265	46.115	46.155		46.256		46.155	46.115	46.265		46.385		46.415	46.415										
EXISTING SURFACE LEVEL		46.389	46.390	46.399		46.415	46.416	46.418		46.439		46.460	46.462	46.463		46.480		46.490	46.490										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

CH 59.200



DATUM 45

DESIGN SURFACE LEVEL		46.555	46.555	46.525		46.405	46.255	46.295		46.396		46.295	46.255	46.405		46.525		46.555	46.555										
EXISTING SURFACE LEVEL		46.612	46.613	46.622		46.638	46.639	46.641		46.670		46.706	46.709	46.711		46.726		46.734	46.734										
DESIGN OFFSET		-7.850	-7.800	-6.300		-3.800	-3.650	-3.350		0.000		3.350	3.650	3.800		6.600		8.100	8.150										

CH 36.150

COHEN AVENUE CROSS SECTIONS

AS CONSTRUCTED

COUNCIL REF. No. 2051/16 - 6215/12

1 0 1 2 3 4 5
2 0 2 4 6 8 10
ALL LENGTHS ARE IN METRES A1

V 1:50
H 1:100

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

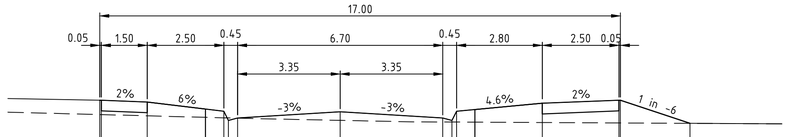
AMENDMENTS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

RIVERDALE VILLAGE STAGE 14

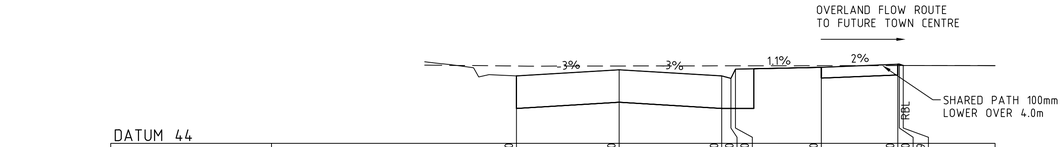
MUNICIPALITY: WYNDHAM
REFERENCE: 8554 E/14
SCALE: AS SHOWN
DATUM: AHD
DATE: NOV' 16
SHEET 8 OF 12
A



DATUM 44

DESIGN SURFACE LEVEL	45.687	45.687	45.657	45.507	45.357	45.397	45.498	45.397	45.357	45.507	45.637	45.687	45.687	45.308
EXISTING SURFACE LEVEL	45.452	45.451	45.432	45.399	45.397	45.394	45.358	45.331	45.330	45.330	45.322	45.315	45.315	45.308
DESIGN OFFSET	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	11.421

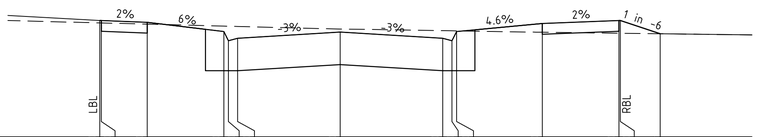
CH 115.600



DATUM 44

DESIGN SURFACE LEVEL	45.100	45.200	45.100	45.060	45.210	45.240	45.290	45.290	45.269
EXISTING SURFACE LEVEL	45.262	45.262	45.264	45.265	45.265	45.267	45.269	45.269	45.269
DESIGN OFFSET	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	9.276

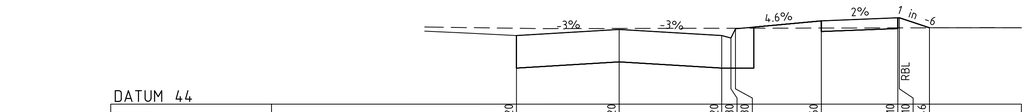
CH 175.050



DATUM 44

DESIGN SURFACE LEVEL	45.900	45.900	45.870	45.720	45.570	45.610	45.710	45.610	45.570	45.720	45.850	45.900	45.900	45.684
EXISTING SURFACE LEVEL	45.861	45.860	45.844	45.809	45.807	45.803	45.759	45.734	45.732	45.731	45.708	45.692	45.692	45.684
DESIGN OFFSET	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	10.447

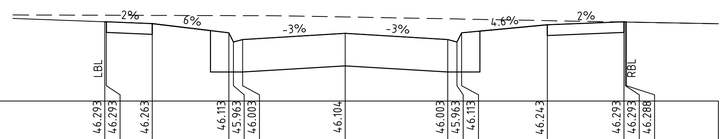
CH 90.100



DATUM 44

DESIGN SURFACE LEVEL	45.120	45.220	45.120	45.080	45.230	45.360	45.410	45.410	45.246
EXISTING SURFACE LEVEL	45.239	45.236	45.239	45.239	45.240	45.242	45.245	45.245	45.246
DESIGN OFFSET	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	10.132

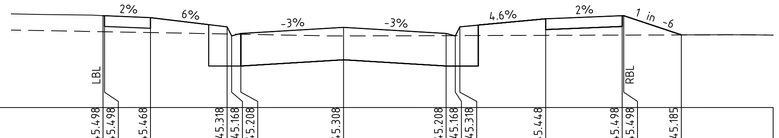
CH 171.050



DATUM 45

DESIGN SURFACE LEVEL	46.293	46.293	46.263	46.113	45.963	46.003	46.104	46.003	45.963	46.113	46.243	46.293	46.293	46.288
EXISTING SURFACE LEVEL	46.400	46.400	46.397	46.393	46.393	46.393	46.372	46.344	46.338	46.337	46.311	46.288	46.288	46.288
DESIGN OFFSET	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	9.184

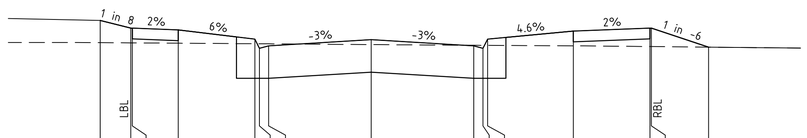
CH 65.100



DATUM 44

DESIGN SURFACE LEVEL	45.498	45.498	45.468	45.318	45.168	45.208	45.308	45.208	45.168	45.318	45.448	45.498	45.498	45.185
EXISTING SURFACE LEVEL	45.238	45.237	45.224	45.201	45.199	45.196	45.168	45.173	45.174	45.174	45.178	45.182	45.182	45.185
DESIGN OFFSET	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	11.029

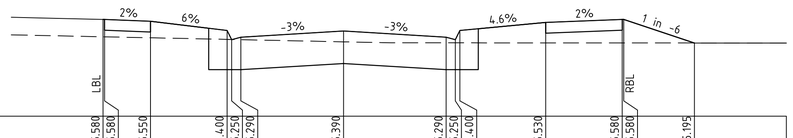
CH 153.450



DATUM 45

DESIGN SURFACE LEVEL	46.972	46.846	46.846	46.816	46.666	46.516	46.556	46.657	46.556	46.516	46.666	46.796	46.846	46.846	46.535
EXISTING SURFACE LEVEL	46.609	46.605	46.605	46.599	46.590	46.590	46.589	46.577	46.566	46.565	46.565	46.557	46.545	46.545	46.535
DESIGN OFFSET	-8.850	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	11.017

CH 31.100



DATUM 44

DESIGN SURFACE LEVEL	45.580	45.580	45.550	45.400	45.250	45.290	45.390	45.290	45.250	45.400	45.530	45.580	45.580	45.195
EXISTING SURFACE LEVEL	45.296	45.296	45.280	45.254	45.252	45.249	45.214	45.197	45.197	45.197	45.196	45.196	45.196	45.195
DESIGN OFFSET	-7.850	-7.800	-6.300	-3.800	-3.650	-3.350	0.000	3.350	3.650	3.800	6.600	9.100	9.150	11.457

CH 137.100

ESCAPADE STREET CROSS SECTIONS - 1

COUNCIL REF. No. 2051/16 - 6215/12

1 0 1 2 3 4 5 V 1:50
2 0 2 4 6 8 10 H 1:100
ALL LENGTHS ARE IN METRES A1

AS CONSTRUCTED

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

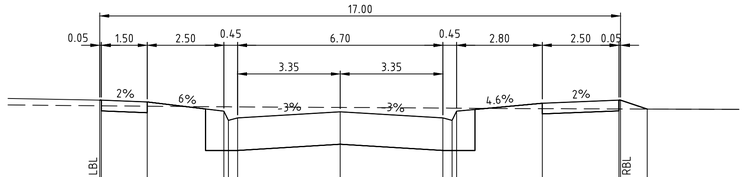
AMENDMENTS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

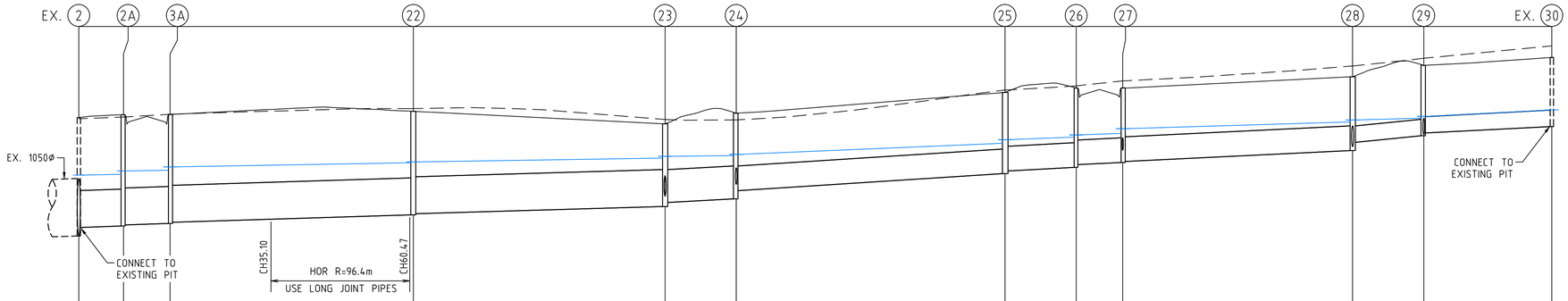
RIVERDALE VILLAGE STAGE 14

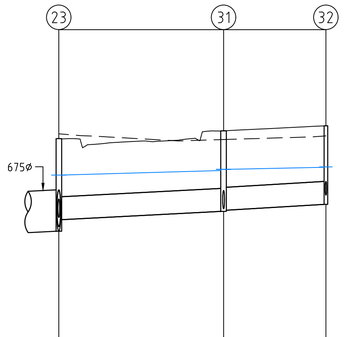
MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14
SCALE AS SHOWN DATUM AHD DATE NOV' 16
SHEET 9 OF 12 A


17.00
0.05
1.50
2.50
0.45
6.70
0.45
2.80
2.50
0.05
3.35
3.35
2%
6%
-3%
-3%
4.6%
2%
LBL
RBL

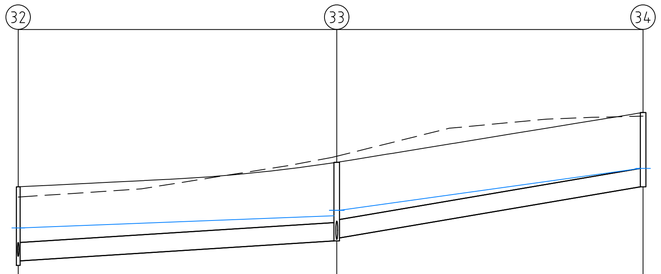
DATUM 44

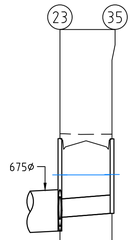
| | | |

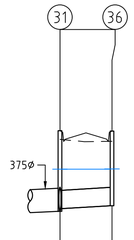


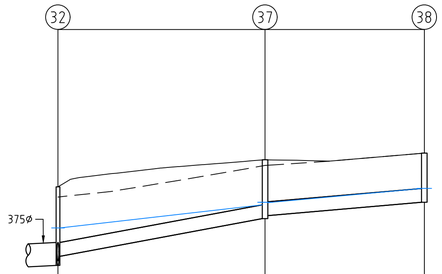


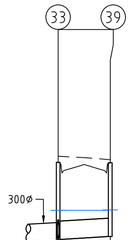
DESIGN FLOW (m?/s)		0.34	0.34	0.35			0.33			0.22			0.18			0.17	0.17	0.15		0.05	0.03			0.09	0.08		
PIPE CAPACITY (m3/s)		0.49	0.49	0.47			0.45			0.43			0.23			0.20	0.19	0.20		0.09	0.07			0.12	0.13		
AT GRADE VELOCITY (m/s)		1.36	1.36	1.30			1.26			1.54			1.43			1.27	1.21	1.23		1.32	0.97			1.12	1.20		
PIPE SIZE (mm)		675ø CL2	675ø CL4	675ø CL2			675ø CL4			600ø CL2			450ø CL4			450ø CL2	450ø CL6	450ø CL4		300ø CL2	300ø CL4			375ø CL6	375ø CL4		
PIPE GRADE		1 in 300	1 in 300	1 in 325			1 in 350			1 in 200			1 in 158			1 in 200	1 in 220	1 in 212		1 in 108	1 in 200			1 in 200	1 in 175		
DATUM RL	40.0																						40.0				
DEPTH TO INVERT	2.164	2.010	2.033	2.013	1.991	1.971			1.892	1.872		1.510	1.435	1.567	1.417		1.485	1.435	1.450	1.400	1.364	1.344		1.349	1.199	1.287	1.237		1.264	1.510	1.322		1.316	1.296		1.284
HYDRAULIC GRADE LINE	44.284		44.298	44.359	44.373	44.434			44.509	44.524		44.594	44.626	44.642	44.663		44.865	44.932	44.978	45.017	45.046	45.132		45.256	45.291	45.326	45.356		45.470	44.594	44.626		44.700	44.719		44.752
PIPE INVERT LEVELS	43.172	43.326	43.353	43.373	43.401	43.421			43.558	43.578		43.710	43.785	43.850	44.000		44.310	44.360	44.425	44.475	44.514	44.534		44.732	44.882	45.003	45.053		45.170	43.710	43.898		44.032	44.053		44.148
DESIGN SURFACE LEVELS		45.336	45.386	45.392					45.450			45.220		45.417			45.795		45.876		45.878			46.081		46.290			46.434	45.220			45.348			45.432
EXISTING SURFACE LEVELS		45.314	45.345	45.395					45.500			45.300		45.293			45.839		45.912		46.005			46.277		46.418			46.645	45.300			45.207			45.265
CHAINAGE	0.00		8.17	16.67					61.12			107.11		120.12			169.22		182.23		190.73			232.73		245.74			269.14	0.00			26.90			43.60
(Reach Length)		(8.17)	(8.50)	(44.46)			(45.99)			(13.01)			(49.10)			(13.01)	(8.50)				(42.00)			(13.01)		(23.40)				(26.90)			(16.70)		

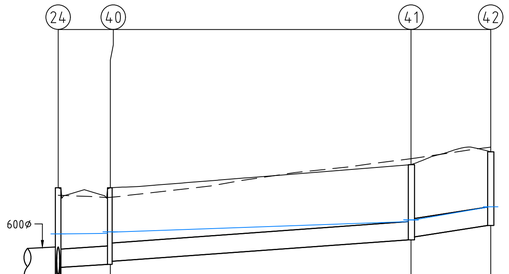












DESIGN FLOW (m?/s)		0.06			0.02					0.01			0.01			0.02			0.02			0.01			0.01			0.03		0.02			0.01	
PIPE CAPACITY (m3/s)		0.08			0.12					0.08			0.07			0.06			0.04			0.07			0.07			0.07		0.08			0.12	
AT GRADE VELOCITY (m/s)		1.08			1.77					1.18			1.02			1.52			1.03			1.02			1.02			1.05		1.15			1.64	
PIPE SIZE (mm)		300ø CL4			300ø CL4					300ø CL6			300ø CL6			225ø CL2			225ø CL2			300ø CL6			300ø CL6			300ø CL6		300ø CL4			300ø CL2	
PIPE GRADE		1 in 160			1 in 60					1 in 135			1 in 180			1 in 55			1 in 120			1 in 180			1 in 180			1 in 170		1 in 141			1 in 70	
DATUM RL	41.0									40.0			40.0			41.0						41.0			41.0			41.0							
DEPTH TO INVERT	1.284	1.209		1.284	1.234				1.214	1.510	1.285	1.216	1.316	1.272	1.219	1.284	1.134		0.961	0.911	0.803	1.284	1.259	1.206	1.567	1.301	1.251			1.228	1.178	1.202		
HYDRAULIC GRADE LINE	44.752	44.760		44.960	45.049				45.731	44.594	44.626	44.626	44.700	44.719	44.719	44.752	44.760		45.138	45.174	45.404	44.960	45.049	45.049	44.642	44.663	44.672	44.694		44.865	44.892	45.101		
PIPE INVERT LEVELS	44.148	44.223		44.548	44.998				45.431	43.710	43.935	43.998	44.032	44.076	44.123	44.148	44.298		44.913	44.963	45.179	44.548	44.573	44.620	43.850	44.116	44.166	44.216		44.565	44.615	44.801		
DESIGN SURFACE LEVELS	45.432			45.832					46.646	45.220		45.214	45.348		45.342	45.432			45.874		45.983	45.832		45.826	45.417		45.417			45.793		46.004		
EXISTING SURFACE LEVELS	45.265			45.930					46.585	45.300		45.291	45.207		45.176	45.265			45.780		45.983	45.930		45.874	45.293		45.260			45.892		46.079		
CHAINAGE	43.60			95.60					145.60	0.00		8.50	0.00		8.50	0.00			33.80		59.80	0.00		8.50	0.00		8.50	0.03		57.60		70.61		
(Reach Length)			(52.00)				(50.00)			(8.50)			(8.50)			(33.80)			(26.00)			(8.50)			(8.50)			(49.10)			(13.01)			

DRAINAGE LONGITUDINAL SECTIONS - 1

COUNCIL REF. No. 2051/16 - 6215/12

1 0 1 2 3 4 5 — V 1:50

10 0 10 20 30 40 50 — H 1:500

ALL LENGTHS ARE IN METRES A1

AS CONSTRUCTED

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

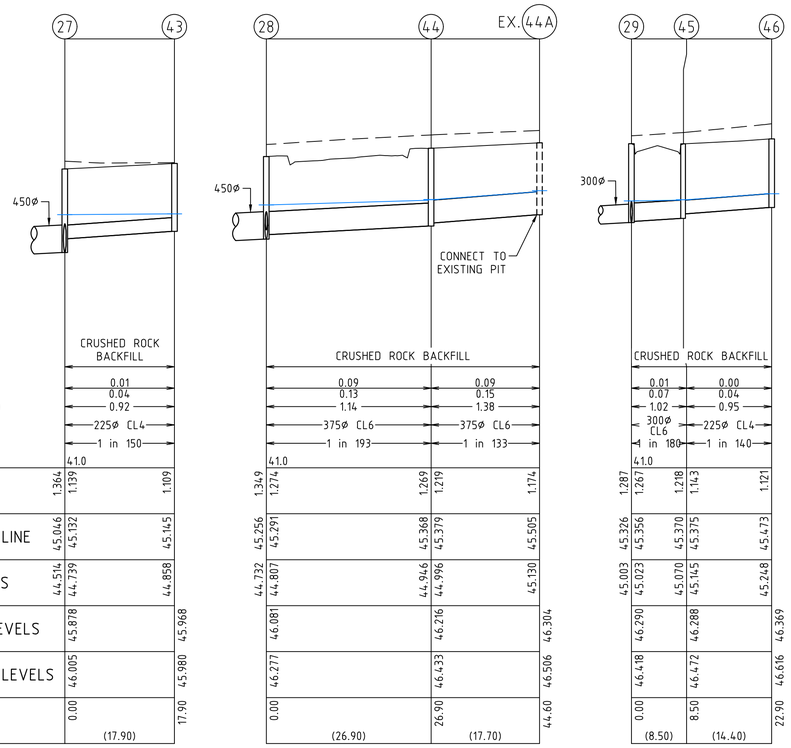
breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

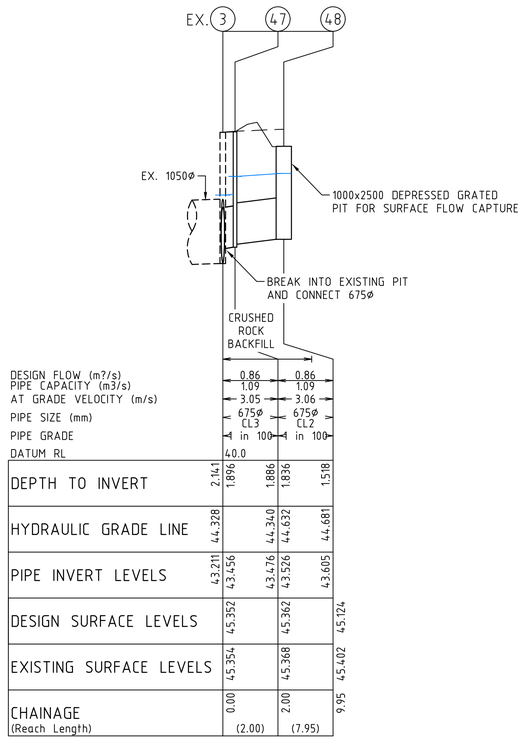
MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

RIVERDALE VILLAGE
STAGE 14

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14

SCALE AS SHOWN | DATUM AHD | DATE NOV' 16 | SHEET 11 OF 12 | A





PIT SCHEDULE

PIT No.	TYPE	INTERNAL		INLET DETAILS		OUTLET DETAILS		COVER LEVEL	DEPTH	STANDARD DRAWING	REMARKS
		W	L	DIA	LEVEL	DIA	LEVEL				
2	EX. PIT	1350	900	675 EX. 1050	43.326 43.190	EX. 1050	43.170	45.355	2.185	EDCM 601 & 607	CONNECT TO EXISTING PIT. CONVERT TO GRATED ENTRY PIT
3	EX. PIT	1350	900	225 TEMP 225 EX. 900 675	44.347 43.231 43.456	EX. 1050	43.211	45.352	2.141	EDCM 601 & 607	CONNECT TO EXISTING PIT. CONVERT TO GRATED ENTRY PIT
2A	GRATED ENTRY PIT	900	900	675	43.373	675	43.353	45.386	2.033	EDCM 601 & 607	
3A	GRATED ENTRY PIT	900	900	675	43.421	675	43.401	45.392	1.991	EDCM 601 & 607	
22	JUNCTION PIT	900	900	675	43.578	675	43.558	45.450	1.892	EDCM 605 & 607	
23	GRATED ENTRY PIT	900	900	600 375 300	43.785 43.898 43.935	675	43.710	45.220	1.510	EDCM 602 & 607	
24	GRATED ENTRY PIT	900	900	450 300	44.000 44.116	600	43.850	45.417	1.567	EDCM 601 & 607	
25	JUNCTION PIT	600	900	450	44.360	450	44.310	45.795	1.485	EDCM 605	
26	GRATED ENTRY PIT	600	900	450	44.475	450	44.425	45.876	1.450	EDCM 601	
27	GRATED ENTRY PIT	600	900	450 225	44.534 44.739	450	44.514	45.878	1.364	EDCM 601	
28	GRATED ENTRY PIT	600	900	300 375	44.882 44.807	450	44.732	46.081	1.349	EDCM 601	
29	GRATED ENTRY PIT	600	900	300 300	45.053 45.023	300	45.003	46.290	1.287	EDCM 601	
30	EX. GRATED ENTRY PIT	600	900	EX. 300 EX. 300	45.190 45.190	300	45.170	46.434	1.264		CONNECT TO EXISTING PIT
31	GRATED ENTRY PIT	600	900	375 300	44.053 44.076	375	44.032	45.348	1.316	EDCM 601	
32	JUNCTION PIT	600	900	300 225	44.223 44.298	375	44.148	45.432	1.284	EDCM 605	
33	GRATED ENTRY PIT	600	900	300 300	44.598 44.573	300	44.548	45.832	1.284	EDCM 601	
34	JUNCTION PIT	600	900			300	45.431	46.646	1.214	EDCM 605	
35	GRATED ENTRY PIT	600	900			300	43.998	45.214	1.216	EDCM 602	
36	GRATED ENTRY PIT	600	900			300	44.123	45.342	1.219	EDCM 601	
37	JUNCTION PIT	600	900	225	44.963	225	44.913	45.874	0.961	EDCM 605	
38	JUNCTION PIT	600	900			225	45.179	45.983	0.803	EDCM 605	
39	GRATED ENTRY PIT	600	900			300	44.620	45.826	1.206	EDCM 601	
40	GRATED ENTRY PIT	600	900	300	44.216	300	44.166	45.417	1.251	EDCM 601	
41	JUNCTION PIT	600	900	300	44.615	300	44.565	45.793	1.228	EDCM 605	
42	GRATED ENTRY PIT	600	900			300	44.801	46.004	1.202	EDCM 601	
43	JUNCTION PIT	600	900			225	44.858	45.968	1.109	EDCM 605	
44	GRATED ENTRY PIT	600	900	375	44.996	375	44.946	46.216	1.269	EDCM 601	
44A	EX. GRATED ENTRY PIT	600	900	EX. 300	45.180	375	45.130	46.304	1.174		CONNECT TO EXISTING PIT
45	GRATED ENTRY PIT	600	900	225	45.145	300	45.070	46.288	1.218	EDCM 601	
46	JUNCTION PIT	600	900			225	45.248	46.369	1.121	EDCM 605	
47	JUNCTION PIT - GRATED	900	900	675	43.526	675	43.476	45.362	1.886	EDCM 605 & 607	
48	JP - DEPRESSED STEEL GRATE	1000	2500			675	43.605	45.124	1.518	VR SD1411	PROVIDE HEAVY DUTY BOLT DOWN GRATES. SETOUT TO CENTRE OF PIT: E947.119 N655.007

AS CONSTRUCTED

DRAINAGE LONGITUDINAL SECTIONS AND PIT SCHEDULE

COUNCIL REF. No. 2051/16 - 6215/12

1 0 1 2 3 4 5 — V 1:50
10 0 10 20 30 40 50 — H 1:500
ALL LENGTHS ARE IN METRES A1

VER.	DATE	REMARKS
A	14-10-2016	ISSUED FOR CONSTRUCTION

AMENDMENTS

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 Cato Street
Hawthorn East, 3123
Telephone 8823 2300
Fax no. 8823 2310

MELWAY REF. 234-G-2
SURVEY BPD
DESIGN L.G.
DRAWN L.G.
CHECKED

RIVERDALE VILLAGE
STAGE 14

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/14

SCALE AS SHOWN | DATUM AHD | DATE NOV' 16 | SHEET 12 OF 12 | A