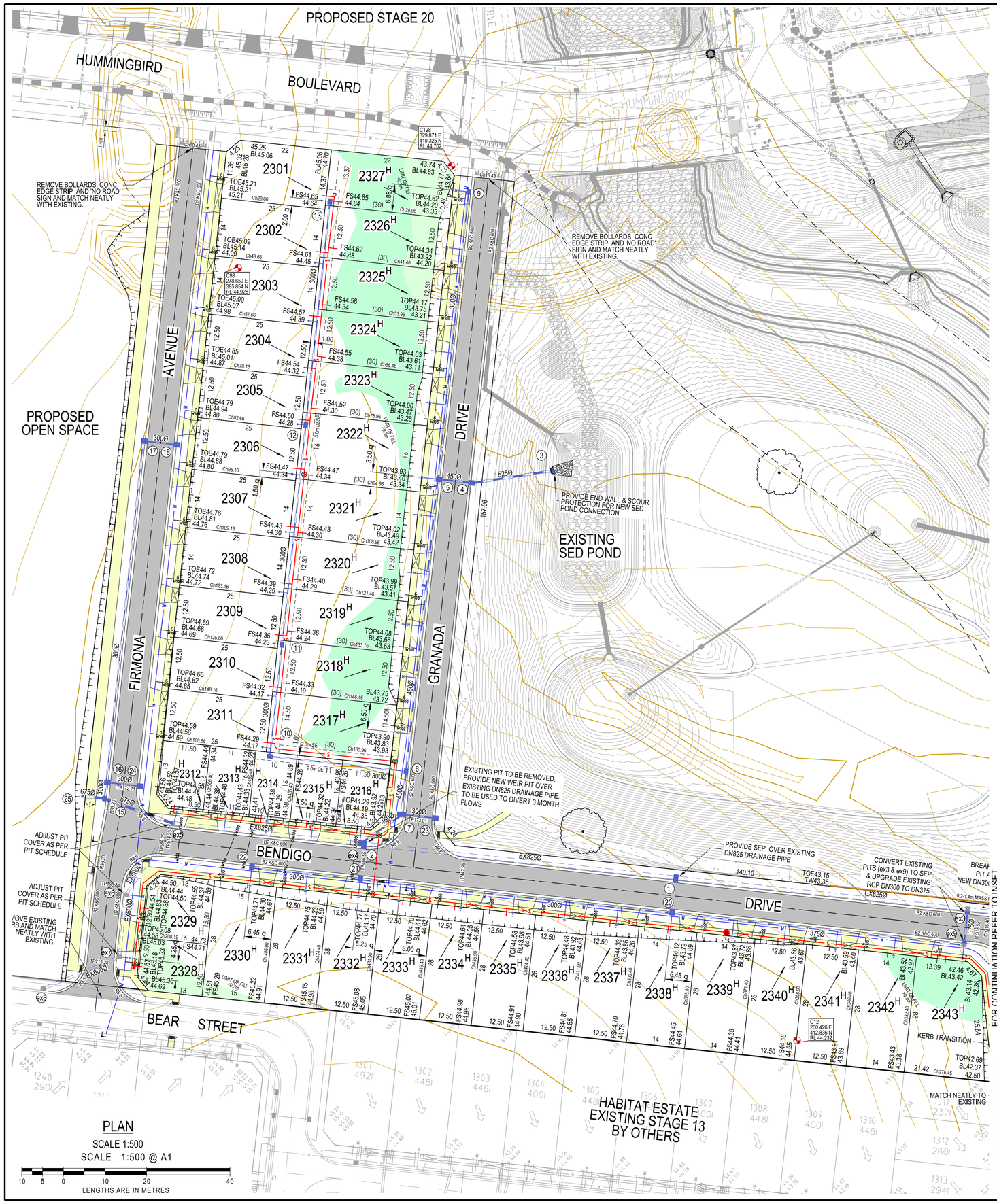


PLAN

SCALE 1:500

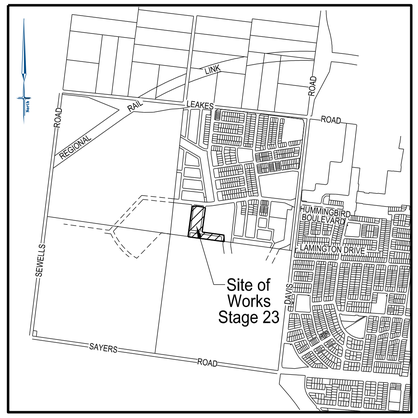
SCALE 1:500 @ A1

10 5 0 10 20 40

LENGTHS ARE IN METRES

SHEET INDEX

SHT No.	VER	DESCRIPTION
1	P2	DETAIL PLAN, LOCALITY PLAN, SERVICES SCHEDULE & SHEET INDEX
2	P2	GENERAL NOTES, PAVEMENT DETAILS & TYPICAL SECTIONS
3	P2	INTERSECTION DETAILS - NO.1
4	P2	INTERSECTION DETAILS - NO.2
5	P2	FIRMONA AVENUE - LONGITUDINAL SECTION
6	P2	FIRMONA AVENUE - CROSS SECTIONS - NO.1
7	P2	FIRMONA AVENUE - CROSS SECTIONS - NO.2
8	P2	BENDIGO DRIVE - LONGITUDINAL SECTION
9	P2	BENDIGO DRIVE - CROSS SECTIONS - NO.1
10	P2	BENDIGO DRIVE - CROSS SECTIONS - NO.2
11	P2	GRANADA DRIVE - LONGITUDINAL SECTION
12	P2	GRANADA DRIVE - CROSS SECTIONS
13	P2	DRAINAGE LONGITUDINAL SECTIONS - NO.1
14	P2	DRAINAGE LONGITUDINAL SECTIONS - NO.2
15	P2	DRAINAGE LONGITUDINAL SECTIONS - NO.3
16	P2	PIT SCHEDULE
17	P2	SIGNAGE & LINEMARKING PLAN



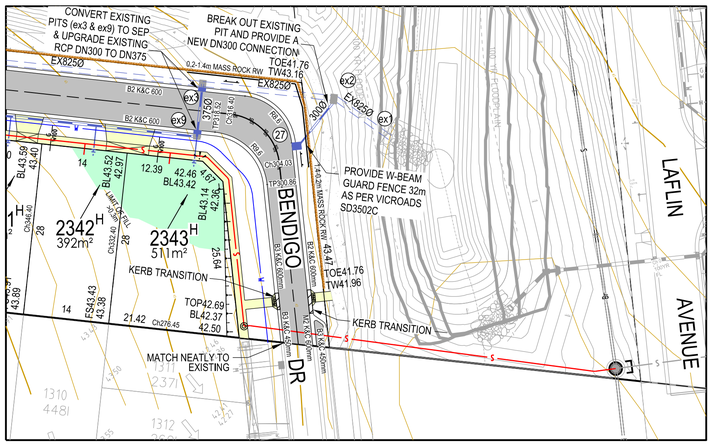
LOCALITY PLAN

SCALE 1:20000

SERVICES OFFSETS AND LOCATIONS

Location	Gas	Water		Communications		Electricity		BOK	Road Width	Joint Trenching	Street Classification
		NDW	DW	Cables	Pits	Cables	Poles				
FIRMONA AVENUE (Lots 2301-2312)	2.20 E	2.70 E	3.20 E	2.85 W	1.80 E	3.60 W	1.00 BOK	4.35 E 5.05 W	17.00	G & W, FTTH & E	STREET LEVEL 1
FIRMONA AVENUE (Lots 2328-2329)	2.20 E	2.70 E	3.20 E	2.85 W	1.80 E	3.60 W	1.00 BOK	5.35 E 4.05 W	17.00	G & W, FTTH & E	STREET LEVEL 1
GRANADA DRIVE (LOTS 2327-2317)	2.20 W	2.70 W	3.20 W	0.30 E	3.20 W	1.05 E	1.00 BOK	4.35 W 2.55 E	14.50	G & W, FTTH & E	STREET LEVEL 1
GRANADA DRIVE (FROM LOT 2317)	2.20 W	2.70 W	3.20 W	0.30 E	3.20 W	1.05 E	1.00 BOK	4.35 W 2.55 E	14.50	G & W, FTTH & E	STREET LEVEL 1
BENDIGO DRIVE (Lots2312 to 2316)	2.20 S	2.70 S	3.20 S	1.85 N	1.80 S	2.60 N	1.00 BOK	4.35 S 4.05 N	16.00	G & W, FTTH & E	STREET LEVEL 1
BENDIGO DRIVE (Lots 2334 to 2343)	2.20 S	2.70 S	3.20 S	0.35 N	1.80 S	1.10 N	1.00 BOK	4.35 S 2.55 N	14.50	G & W, FTTH & E	STREET LEVEL 1
BENDIGO DRIVE (Lot 2343)	3.60 W	4.10 W	4.60 W	1.85 W	1.85 W	2.55 W	1.00 BOK	6.55 W 2.05 E	14.50	G & W, FTTH & E	STREET LEVEL 1

NOTE: a) At the court bowl where water and gas mains pass, the watermain offset is to be increased by 0.5 metres.
b) * Indicates offsets from back of kerb where services do not run parallel to title boundary.
c) ^ Indicates Telecommunication pits placed within concrete footpath.



INSET

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.

ATTENTION TO CONTRACTOR

1. **IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.**
2. **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.**
3. Where concrete works abut a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

SYMBOL LEGEND

Drains, Sewer < 300Ø, Sewer ≥ 300Ø, Water (DW), Water (NDW), House Drain, Property Inlet, Street Sign, PSM, Rock Ret Wall, Sleeper Ret Wall, Conduits 50mm, Conduits 100mm, Street Tree without/with Passive Irrigation (Refer Detail), Ex Drains, Ex Water DW/NDW, Ex Sewer/Gas, Ex Elect/Comm

Ex/Natural/FS Level, FS @ Building Line, Top/Toe of Batter, Top Ret. Wall Level, 100yr Flood Level, Fill Proposed (<0.3m/≥0.3m), Cut Proposed, Aspalt Surface Prop, Concrete Surface Prop (Paths/Driveways/Slabs), Tree To Be Removed, Tree To Be Retained with Tree Protection Zone (TPZ)

AMENDMENTS

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN

MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 1 OF 17 | P2

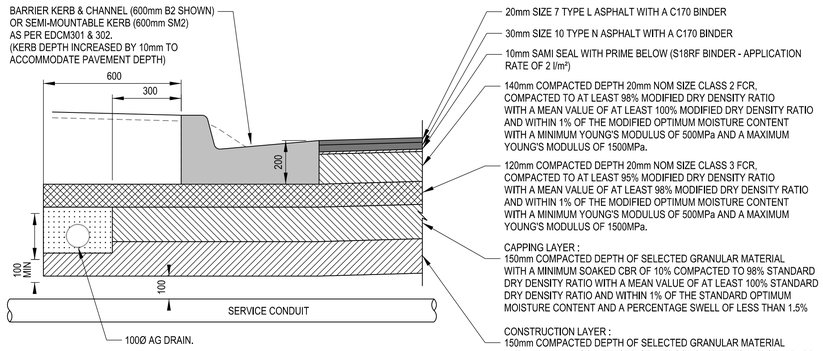
Plotted: 16-Dec-20

EN8554\ENG\ST23\E23_R01_DET.dgn

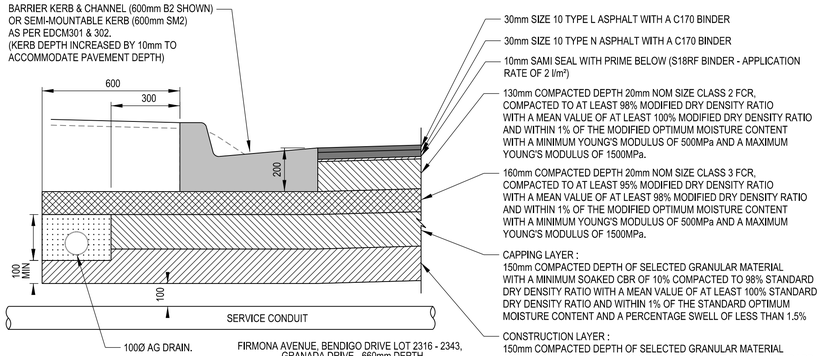
NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH WYNDHAM CITY COUNCIL 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 THUS 31H ARE TO BE PROVIDED WITH A 100mm. DIA. HOUSE DRAIN PLACED 5.5m 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 (REFER DRAINAGE LONGITUDINAL SECTIONS FOR RELEVANT PIPE CLASS). ALL OTHER PIPES TO BE RRJ RCP CLASS 2.
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 SD6-10 (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 SERVICES OR HIS REPRESENTATIVE.
10. AGRICULTURAL PIPE DRAINS TO BE PLACED BEHIND ALL KERB AND CHANNEL, KERB ONLY AND EDGE STRIPS. REFER TO VPA STANDARD DRAWING 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 PRIOR TO COMMENCEMENT OF WORKS.
12. BATTERS SHALL BE IN 1 IN 6 FOR CUT AND FILL UNLESS OTHERWISE SHOWN.
13. 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.
14. 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.
15. ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL RUBBISH AND SPOIL FROM THE SITE.
16. 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.
17. 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.
18. 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.
19. LOTS TO BE GRADED TO THE SATISFACTION OF THE DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE. ALL LOTS TO BE 1 IN 150 MINIMUM SLOPE FRONT TO REAR OR REAR TO FRONT.
20. 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% 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.
21. 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.
22. 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.
23. 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.
24. TELSTRA/NBN Co TO BE NOTIFIED 7 DAYS PRIOR TO CONCRETE WORKS BEING PLACED.
25. ALL DRIVEWAYS TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN.
26. TRANSITION FROM STANDARD TO ROLLOVER KERB AND CHANNEL AT SIDE ENTRY PITS.
27. B2 AND B3 (MEDIAN) PROFILE KERB AND CHANNEL TO BE CONSTRUCTED IN ALL STREET UNLESS OTHERWISE SHOWN.
28. PSM's TO BE HIGH STABILITY TYPE. REFER TO COUNCIL STANDARD DRAWING SD11-10. MGA CO-ORDINATES AND AHD LEVEL TO BE SUPPLIED TO COUNCIL.

32. PAVEMENT SHOULDER TO CONSIST OF:
    a) 150mm DEPTH 14mm NOMINAL SIZE CLASS 3 F.C.R. COMPACTED TO 98% MODIFIED COMPACTION.
34. 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.
35. OFF-STREET PARKING TO BE IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD11-6A
36. 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 VPA STANDARD DRAWING EDCM 401.
37. CONCRETE BIN AREAS TO BE 125mm THICK CONCRETE PAVING TO BE REINFORCED WITH SL62 MESH AND MUST BE CONSTRUCTED WITH A 50mm UNDERLAYER OF 20mm COMPACTED CLASS 3 FCR IN ACCORDANCE WITH COUNCIL STANDARD DRAWING No SD2-1.
38. 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.
39. 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).
40. 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.
41. 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.
42. 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.
43. 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.
44. 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 COUNCIL STANDARD DRG SD11-8).
45. THE CONTRACTOR IS TO INSTALL BLUE RRPM'S ON THE ROAD CENTRLINE AND MARKER POSTS TO INDICATE THE LOCATION OF FIRE PLUGS OR HYDRANTS IN ACCORDANCE WITH WYNDHAM CITY COUNCIL'S STANDARD DRAWING SD11-11.
46. GAS AND WATER CONDUITS TO BE 50mm & 100mm DIAMETER RESPECTIVELY.
48. ALL SERVICE TRENCHES UNDER CONCRETE FOOTPATHS AND VEHICLE CROSSINGS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK MATERIAL.
49. CONTRACTOR TO INSTALL IRRIGATION CONDUITS REFER TO IRRIGATION INFRASTRUCTURE PLAN PREPARED BY MAKE IT WET PTY LTD FOR LOCATIONS AND SIZES.
50. EXISTING DAM OR WATERCOURSES TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED TO LEVEL 1 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 DIRECTOR ENGINEERING SERVICES OR HIS REPRESENTATIVE.
51. PROVIDE 1.8m HIGH PALING FENCE ALONG ANY COMMON BOUNDARY BETWEEN A LOT AND MUNICIPAL RESERVE. PALINGS TO BE ON THE RESERVE SIDE AND CONSTRUCTED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD11-5B.
52. PROVIDE TEMPORARY SAFETY BARRIER FENCE (FARM FENCE AS PER MW STD. DWG. 7251/4/203) ALONG EDGE OF OUTFALL DRAINS. SAFETY FENCE TO REMAIN UNTIL PERMANENT UNDERGROUND DRAINAGE IS INSTALLED.
53. PROVIDE TIMBER BOLLARDS AT 1.5m CTS AS PER COUNCIL STANDARD DRAWING SD10-2 AT A 0.25m OFFSET FROM THE RESERVE TITLE BOUNDARY.
54. FITZROY BOXES TO BE PROVIDED FOR WATER AND GAS TAPPINGS LOCATED UNDER PARKING BAYS IN FRONT OF LOTS .



BENDIGO DRIVE LOT 2312 - 2316 - 620mm DEPTH



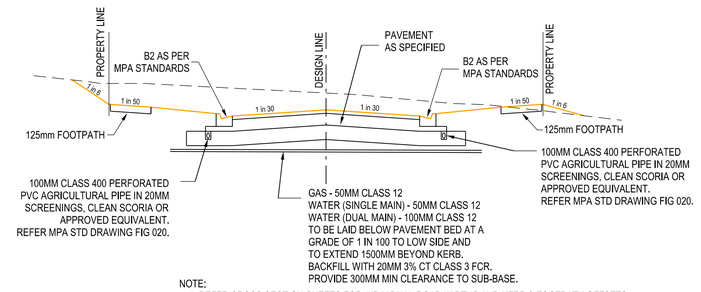
FIRMONA AVENUE, BENDIGO DRIVE LOT 2316 - 2343, GRANADA DRIVE - 660mm DEPTH

PAVEMENT COMPOSITION

REFER EDCM202a FOR ADDITIONAL DETAILS

(Dimensions in Millimetres)

N.T.S.



NOTE:
1. REFER CROSS SECTION SHEETS FOR INDIVIDUAL ROAD WIDTHS AND KERB & FOOTPATH OFFSETS.
2. REFER SERVICES SCHEDULE FOR SERVICES OFFSETS.

TYPICAL CROSS SECTION

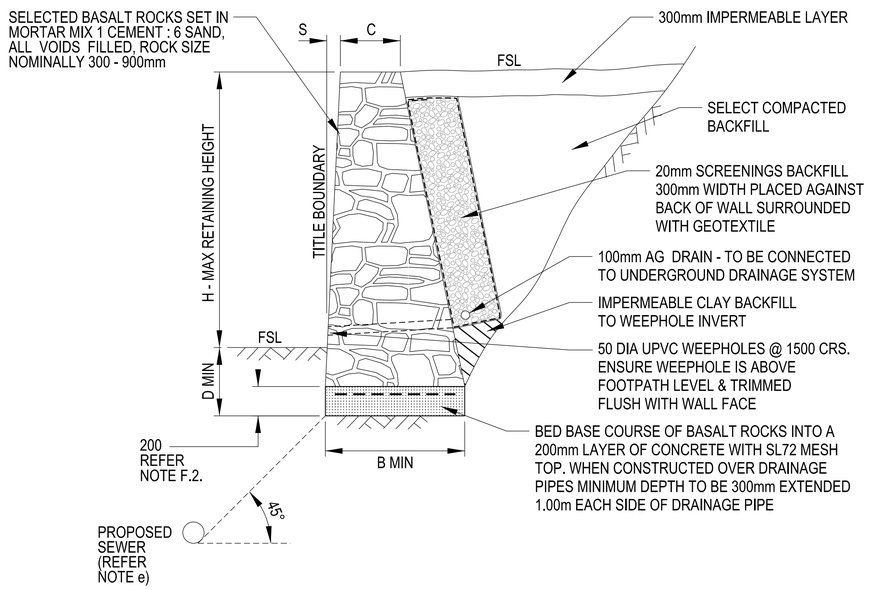
(N.T.S.)

MASS ROCK RETAINING WALL SCHEDULE

MAX WALL HEIGHT - H (mm)	FOUNDING DEPTH - D (mm)	BASE WIDTH - B (mm)	FRONT FACE SETBACK - S (mm)	CREST WIDTH - C (mm)
500	500	515	15	300
1000	500	600	30	300
1500	500	750	45	500
2000	500	1000	60	500
2500	500	1500	75	600
3000	500	1800	90	600

FOOTING NOTE F.2.

a. TOE OF WALL SHALL PENETRATE THROUGH ANY FILL MATERIAL & THE NATURAL SILT SOILS TO BE FOUNDED AT LEAST 100mm INTO THIS UNDERLYING NATURAL STIFF CLAY OR WEATHERED ROCK.
   ALL EXCAVATIONS SHALL HAVE FOUNDING DEPTHS AND BEARING CAPACITY APPROVED BY THE ENGINEER OR BUILDING SURVEYOR BEFORE CONCRETE IS PLACED.
   FOOTING EXCAVATIONS WHICH ARE DEEPENED TO PENETRATE THROUGH UNSUITABLE SOILS SHALL BE BACKFILLED UP TO UNDERSIDE OF FOOTINGS WITH 15 MPa BLINDING CONCRETE.
b. ALL EXCAVATION FOUNDING SURFACES SHALL BE LEVEL (NOT INCLINED) CLEAN CUT & FREE OF MUD OR WATER.
c. ALL SEEPAGE INFLOW SHALL BE REMOVED BEFORE PLACEMENT OF CONCRETE.
d. FOOTINGS SHALL BE FOUNDED IN STIFF NATURAL CLAY HAVING A SAFE BEARING CAPACITY OF 100KPa.
e. WHERE A PARALLEL SEWER IS PROPOSED ADJACENT TO THE RETAINING WALL, LOWER FOUNDING DEPTH 'D' TO ENSURE SEWER PIPE IS ABOVE THE 45° ANGLE OF REPOSE. REFER R&D SHEET FOR BOTTOM OF FOOTING SLAB LEVEL.



TYPICAL MASS ROCK RETAINING WALL DETAIL

(Dimensions in millimetres)

(N.T.S.)

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

AMENDMENTS			
VER	DATE	REMARKS	

MELWAY REF.	234-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 2 OF 17 | P2

Plotted: 15-Dec-20

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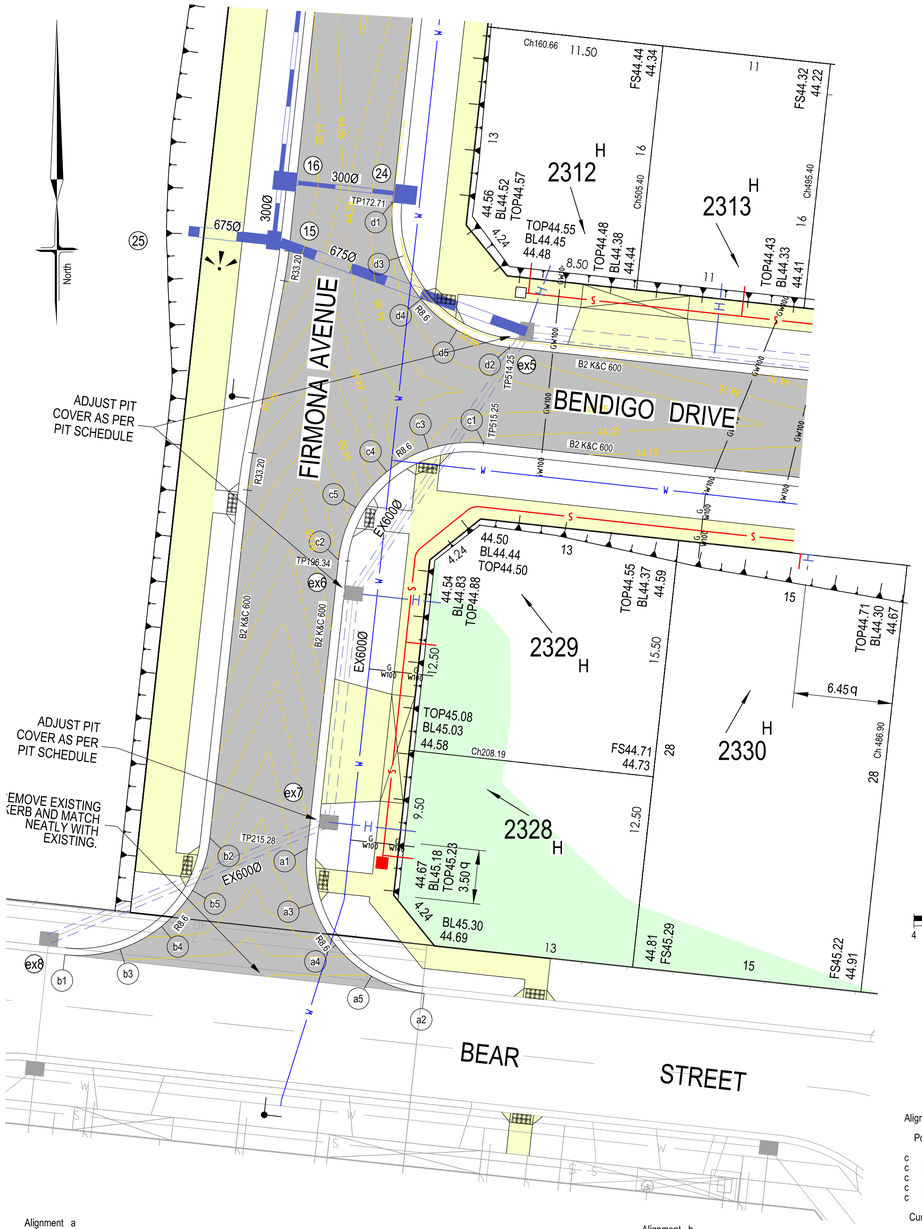
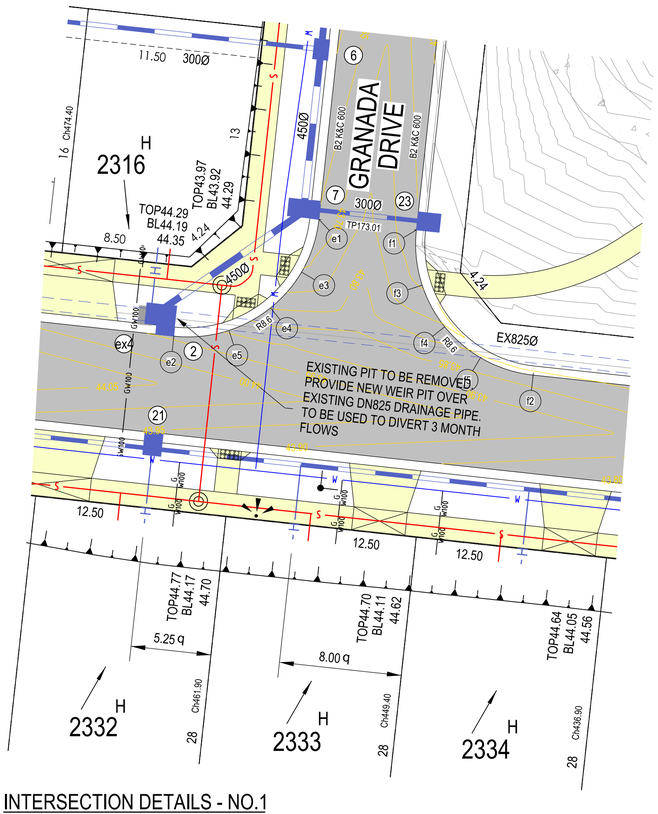




INTERSECTION DETAILS - NO.1

SCALE 1:200

SCALE 1:200 @ A1

4 2 0 4 8 16

LENGTHS ARE IN METRES

NOTES

a) ALL SIGNS TO BE SLEEVED USING A SL27 SLEEVE.

c) INDICATES UNIDIRECTIONAL & BIDIRECTIONAL RRPM'S PLACED AT 3.00m CTS

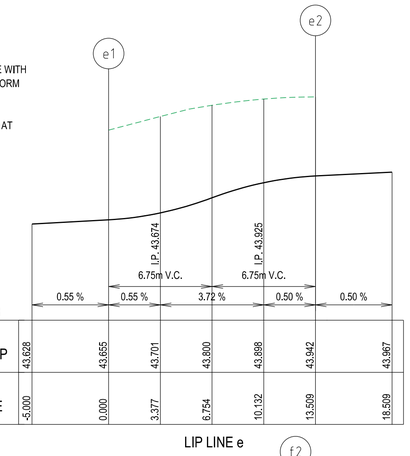
d) HAZARD / DIRECTIONAL TGSI'S SHOWN THUS / AND FOOTPATH RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VICROADS STD DWGS SD2031 TO SD2035. TGSI'S SHALL CONFORM TO AS1428.4

e) KERB TRANSITION TO TAKE PLACE AT PRAM CROSSINGS AND AT KERB SHOWN THUS (OVER 3m)

Alignment e

Point no		Easting	Northing	RL
e	1	318.841	253.954	43.655
e	2	309.365	246.330	43.942
e	3	317.703	250.519	43.707
e	4	315.682	248.180	43.800
e	5	312.965	246.706	43.892

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
e 1 2	8.600	12.162	2.519	1.963	43.800



DATUM 43

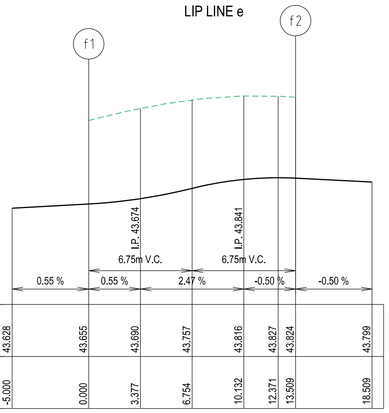
DESIGN LIP	43.628	43.655	43.701	43.800	43.898	43.942	43.967
CHAINAGE	-5.000	0.000	3.377	6.754	10.132	13.509	18.509

LIP LINE e

Alignment f

Point no		Easting	Northing	RL
f	1	325.204	253.265	43.655
f	2	332.828	243.789	43.824
f	3	325.580	249.666	43.694
f	4	327.053	246.948	43.757
f	5	329.392	244.828	43.813

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
f 1 2	-8.600	12.162	2.519	1.963	43.757



DATUM 43

DESIGN LIP	43.628	43.655	43.690	43.757	43.816	43.827	43.824	43.799
CHAINAGE	-5.000	0.000	3.377	6.754	10.132	12.371	13.509	18.509

LIP LINE f

Alignment a

Point no		Easting	Northing	RL
a	1	248.745	218.764	44.814
a	2	256.370	209.288	45.101
a	3	249.121	215.164	44.878
a	4	250.595	212.446	44.968
a	5	252.934	210.426	45.054

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
a 1 2	-8.600	12.163	2.519	1.964	44.968

Alignment b

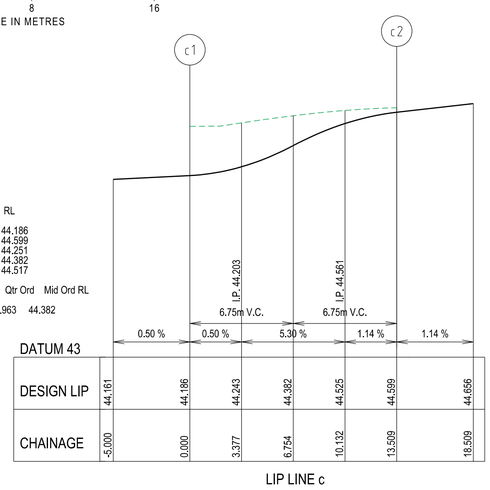
Point no		Easting	Northing	RL
b	1	232.907	211.825	44.983
b	2	242.381	219.449	44.814
b	3	236.506	212.202	44.975
b	4	239.223	213.675	44.926
b	5	241.244	216.014	44.866

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
b 1 2	-8.600	12.161	2.518	1.963	44.926

Alignment c

Point no		Easting	Northing	RL
c	1	260.259	245.211	44.186
c	2	250.783	237.586	44.599
c	3	256.659	244.834	44.251
c	4	253.942	243.361	44.382
c	5	251.921	241.022	44.517

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
c 1 2	-8.600	12.162	2.519	1.963	44.382



DATUM 43

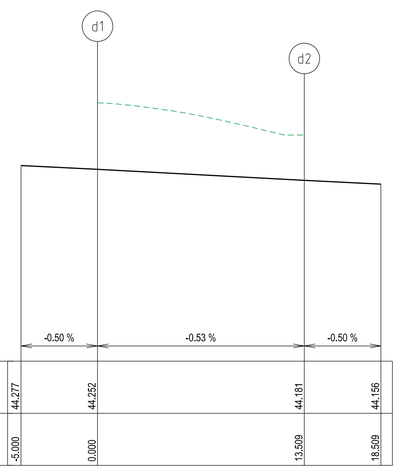
DESIGN LIP	44.161	44.186	44.243	44.382	44.525	44.599	44.656
CHAINAGE	-5.000	0.000	3.377	6.754	10.132	13.509	18.509

LIP LINE c

Alignment d

Point no		Easting	Northing	RL
d	1	254.318	260.942	44.252
d	2	261.942	251.466	44.181
d	3	254.694	257.342	44.233
d	4	256.168	254.625	44.217
d	5	258.506	252.604	44.200

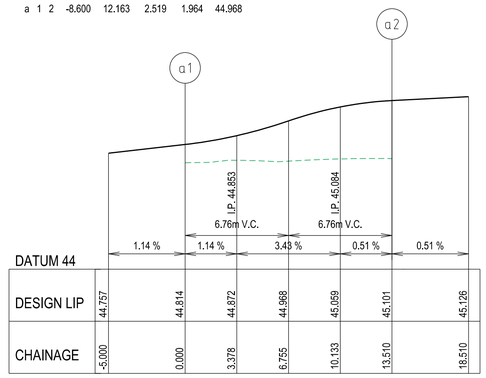
Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
d 1 2	-8.600	12.162	2.519	1.963	44.217



DATUM 43

DESIGN LIP	44.277	44.252	44.181	44.156
CHAINAGE	-5.000	0.000	13.509	18.509

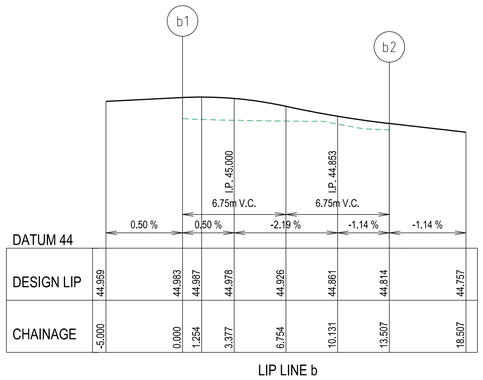
LIP LINE d



DATUM 44

DESIGN LIP	44.757	44.814	44.872	44.968	45.059	45.101	45.126
CHAINAGE	-5.000	0.000	3.378	6.755	10.133	13.510	18.510

LIP LINE a



DATUM 44

DESIGN LIP	44.959	44.983	44.987	44.978	44.926	44.861	44.814	44.757
CHAINAGE	-5.000	0.000	1.254	3.377	6.754	10.131	13.507	18.507

LIP LINE b

SYMBOL LEGEND

Prop / Prev Stage

Drains
Sewer < 300Ø
Sewer ≥ 300Ø
Water (DW)
Water (NDW)
House Drain
Property Inlet
Street Sign
PSM
Rock Ret Wall
Sleeper Ret Wall
Conduits 50mm
Conduits 100mm
Street Tree without/with Passive Irrigation (Refer Detail)

Ex Drains
Ex Water DW/NDW
Ex Sewer/Gas
Ex Elect/Comm

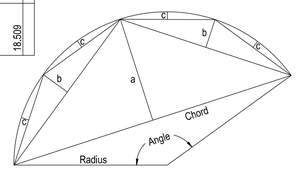
Ex/Natural/FS Level
FS @ Building Line
Top/Toe of Batter
Top Ret. Wall Level
100yr Flood Level
Fill Proposed (<0.3m/≥0.3m)
Cut Proposed
Asphalt Surface Prop
Concrete Surface Prop (Paths/Driveways/Slabs)

Tree To Be Removed

Tree To Be Retained with Tree Protection Zone (TPZ)

LIP OF KERB PROFILES

SCALE - HORIZONTAL 1:200
VERTICAL 1: 40



CURVE SETOUT DIAGRAM

AMENDMENTS

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN

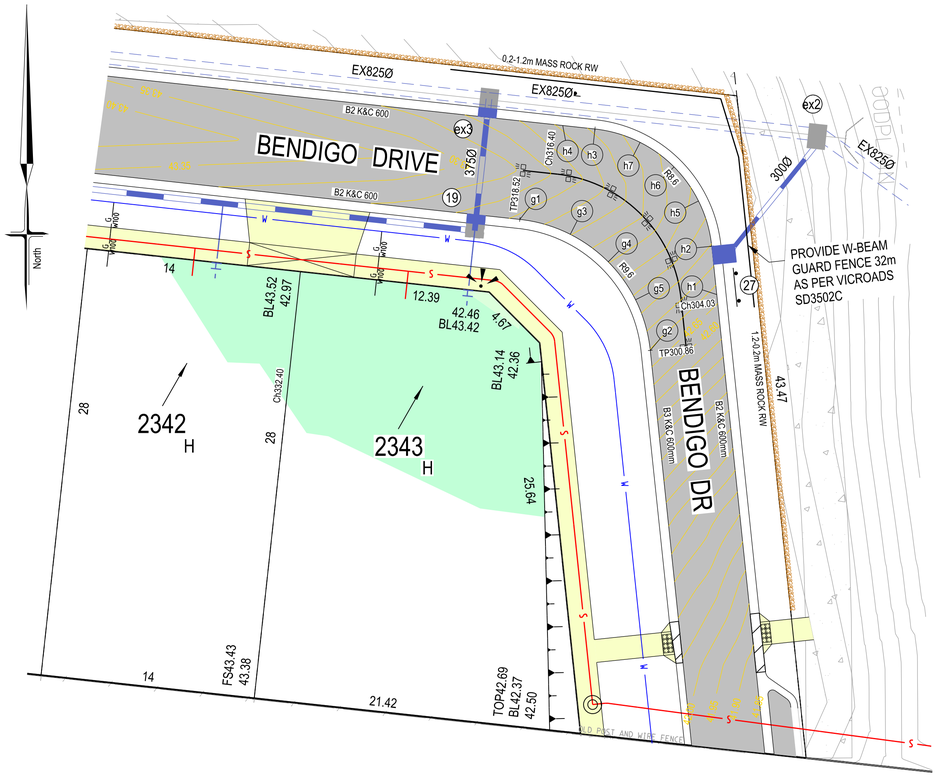
MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 3 OF 17 | P2

I:\H8554\ENG\ST23\E23_R03_INT.dgn

Plotted: 16-Dec-20



INTERSECTION DETAILS - NO.2

SCALE 1:200

SCALE 1:200 @ A1

4 2 0 4 8 16

LENGTHS ARE IN METRES

NOTES

a) ALL SIGNS TO BE SLEEVED USING A SL27 SLEEVE.

c) INDICATES UNIDIRECTIONAL & BIDIRECTIONAL RRPM'S PLACED AT 3.00m CTS

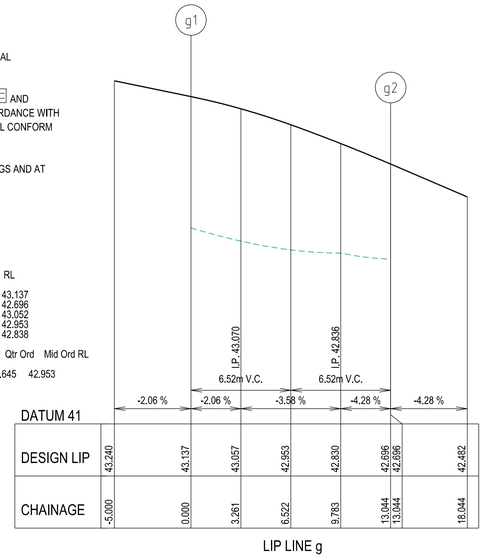
d) HAZARD / DIRECTIONAL TGSI'S SHOWN THUS / AND FOOTPATH RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VICROADS STD DWGS SD2031 TO SD2035. TGSI'S SHALL CONFORM TO AS1428.4

e) KERB TRANSITION TO TAKE PLACE AT PRAM CROSSINGS AND AT KERB SHOWN THUS (OVER 3m)

Alignment g

	Point no	Easting	Northing	RL
g	1	455.848	224.030	43.137
g	2	464.362	215.484	42.696
g	3	459.142	223.055	43.052
g	4	461.615	221.262	42.953
g	5	463.399	218.782	42.838

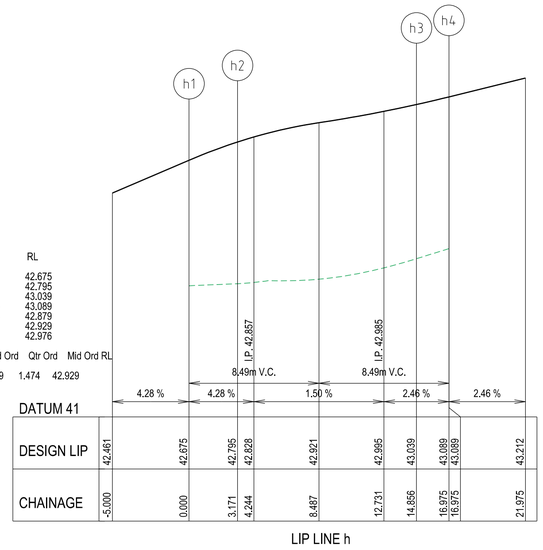
Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
g	1 2	9.600	12.063	2.131	1.645	42.953



Alignment h

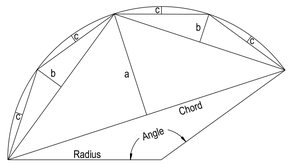
	Point no	Easting	Northing	RL
h	1	468.707	219.127	42.675
h	2	468.377	222.281	42.795
h	3	460.749	229.937	43.039
h	4	458.643	230.165	43.089
h	5	467.514	225.235	42.879
h	6	465.916	227.457	42.929
h	7	463.700	229.063	42.976

Curve no		Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
h	2 3	-8.600	10.807	1.909	1.474	42.929



LIP OF KERB PROFILES

SCALE - HORIZONTAL 1:200
VERTICAL 1: 40



CURVE SETOUT DIAGRAM

SYMBOL LEGEND

Prop / Prev Stage

Drains
Sewer < 300Ø
Sewer ≥ 300Ø
Water (DW)
Water (NDW)
House Drain
Property Inlet
Street Sign
PSM
Rock Ret Wall
Sleeper Ret Wall
Conduits 50mm
Conduits 100mm
Street Tree without/with Passive Irrigation (Refer Detail)

Ex Drains
Ex Water DW/NDW
Ex Sewer/Gas
Ex Elect/Comm

Ex/Natural/FS Level
FS @ Building Line
Top/Toe of Batter
Top Ret. Wall Level
100yr Flood Level
Fill Proposed (<0.3m/≥0.3m)
Cut Proposed
Asphalt Surface Prop
Concrete Surface Prop (Paths/Driveways/Slabs)
Tree To Be Removed
Tree To Be Retained with Tree Protection Zone (TPZ)

AMENDMENT'S

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

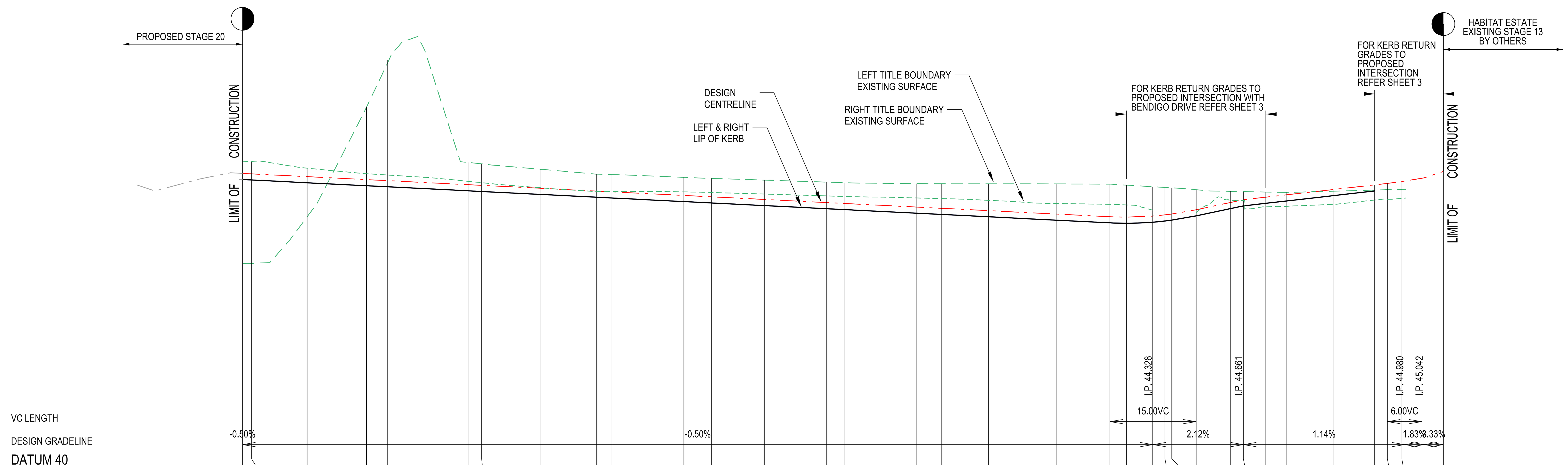
MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 4 OF 17 | P2

Plotted: 6-Dec-20

E:\H8554\ENG\ST23\E23_R04_INTZ.dgn



ES LEFT TITLE BDY	45.32	45.33	45.21	45.11	45.09	44.98	44.96	44.87	44.80	44.80	44.80	44.79	44.76	44.73	44.72	44.69	44.68	44.65
FS LEFT TITLE BDY	45.27	45.26	45.21	45.16	45.14	45.07	45.06	45.01	44.96	44.94	44.88	44.86	44.81	44.76	44.74	44.68	44.66	44.62
LEFT LIP OF KERB	45.01	45.01	44.96	44.91	44.89	44.82	44.81	44.75	44.71	44.69	44.63	44.61	44.56	44.51	44.49	44.43	44.41	44.36
DESIGN CL	45.12	45.11	45.06	45.01	44.99	44.92	44.91	44.86	44.81	44.80	44.74	44.71	44.67	44.61	44.60	44.53	44.51	44.47
RIGHT LIP OF KERB	45.01	45.01	44.96	44.91	44.89	44.82	44.81	44.75	44.71	44.69	44.63	44.61	44.56	44.51	44.49	44.43	44.41	44.36
FS RIGHT TITLE BDY	45.27	45.27	45.22	45.17	45.15	45.08	45.07	45.02	44.97	44.95	44.89	44.87	44.82	44.77	44.75	44.69	44.67	44.63
ES RIGHT TITLE BDY		43.55	44.36	46.28	47.04	45.31	45.29	45.19	45.11	45.10	45.05	45.03	45.00	44.97	44.96	44.94	44.94	44.94
CHAINAGE CENTRE LINE	18.43	20.00	29.66	40.00	43.66	57.66	60.00	70.16	80.00	82.66	95.16	100.00	109.16	120.00	123.16	135.66	140.00	148.16

ES LEFT TITLE BDY	44.60	44.58	44.57	44.48						44.54	44.55	44.58	44.66	44.67	44.68		
FS LEFT TITLE BDY	44.56	44.51	44.51							44.89	44.93	45.03	45.11				
LEFT LIP OF KERB	44.31	44.26	44.25	44.27	44.29	44.31	44.38	44.51	44.55	44.60	44.64	44.73	44.81				
DESIGN CL	44.41	44.37	44.36	44.38	44.40	44.41	44.49	44.61	44.66	44.71	44.75	44.84	44.92	44.95	44.98	45.04	45.15
RIGHT LIP OF KERB	44.31	44.26	44.25	44.27	44.29	44.31	44.38	44.51	44.55	44.60	44.64	44.73	44.81				
FS RIGHT TITLE BDY	44.57	44.52	44.51	44.53	44.55	44.56	44.62	44.73	44.78	44.82	44.86	44.95	45.04				
ES RIGHT TITLE BDY	44.94	44.93	44.91	44.89	44.88	44.87	44.84	44.81	44.80	44.80	44.79	44.81	44.83	44.84	44.84		
CHAINAGE CENTRE LINE	160.00	169.24	TP172.71	176.61	178.81	180.00	184.24	190.24	192.45	TP196.34	200.00	208.19	TP215.28	217.49	220.00	223.49	227.23

FIRMONA AVENUE

LONGITUDINAL SECTION

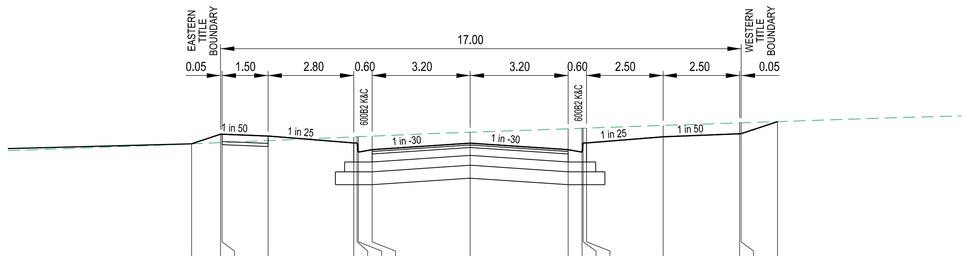
SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

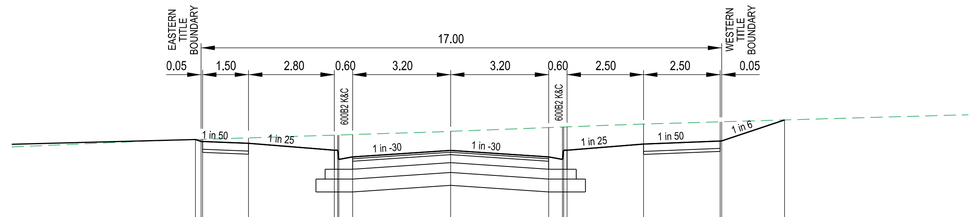
AMENDMENTS			
VER	DATE	REMARKS	
MELWAY REF. 234-F-2	RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN	MUNICIPALITY WYNDHAM	
SURVEY BPD		REFERENCE 8557 E/23	
DESIGN D.P			
DRAWN D.P			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE NOV' 20
SHEET 5 OF 17	P2		



DATUM RL43.0

DESIGN SURFACE	44.85	45.01	45.01	44.98	44.86	44.86	44.71	44.75	44.86	44.75	44.71	44.86	44.86	44.96	45.01	45.02	45.21
EXISTING SURFACE	44.85	44.87	44.87	44.90	44.96	44.96	44.97	44.98	45.04	45.10	45.10	45.10	45.11	45.15	45.19	45.19	45.21
OFFSET	-9.10	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	10.03

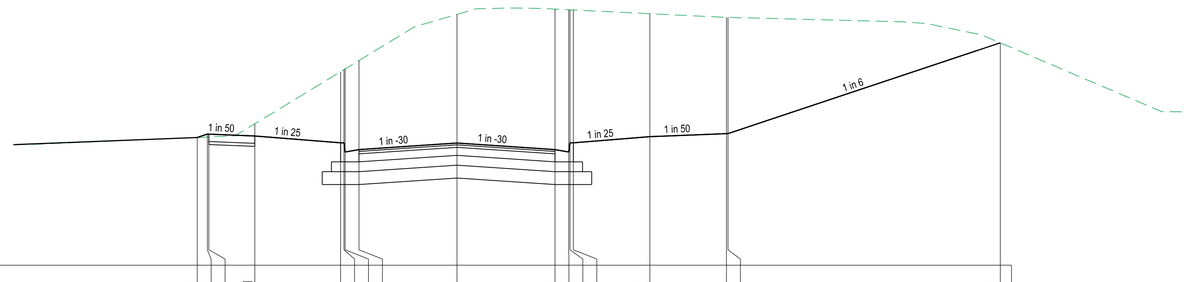
CH 70.16



DATUM RL43.0

DESIGN SURFACE	44.65	44.62	44.62	44.59	44.47	44.47	44.32	44.36	44.47	44.36	44.32	44.47	44.47	44.57	44.62	44.63	44.97
EXISTING SURFACE	44.65	44.65	44.65	44.68	44.72	44.72	44.72	44.73	44.78	44.84	44.85	44.85	44.86	44.90	44.94	44.94	44.97
OFFSET	-8.33	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	10.90

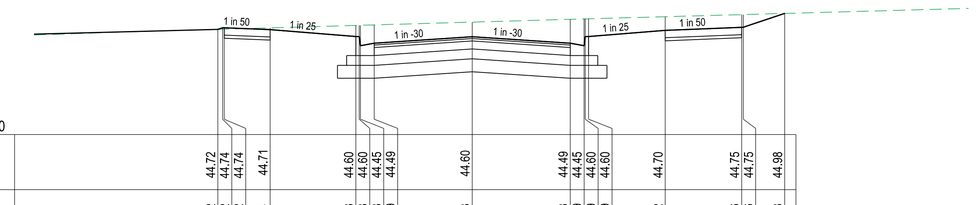
CH 148.16



DATUM RL43.0

DESIGN SURFACE	45.08	45.14	45.14	45.11	45.00	45.00	44.85	44.89	44.99	44.89	44.85	45.00	45.00	45.10	45.15	45.15	46.63
EXISTING SURFACE	45.08	45.09	45.09	45.31	46.16	46.19	46.20	46.34	47.09	47.18	47.17	47.17	47.17	47.10	47.05	47.04	46.63
OFFSET	-8.48	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	17.74

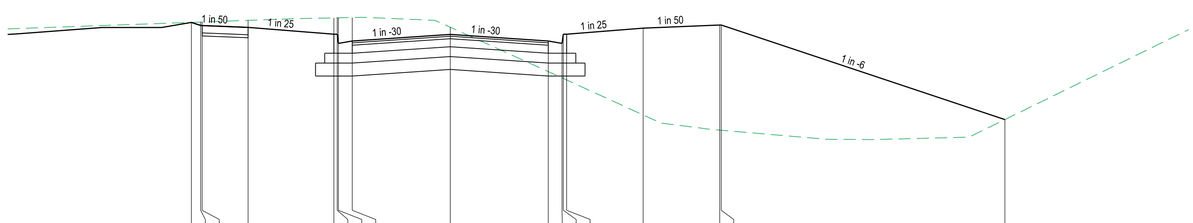
CH 43.66



DATUM RL43.0

DESIGN SURFACE	44.72	44.74	44.74	44.71	44.60	44.60	44.45	44.49	44.60	44.49	44.45	44.60	44.60	44.70	44.75	44.75	44.98
EXISTING SURFACE	44.72	44.72	44.72	44.74	44.78	44.78	44.78	44.79	44.83	44.88	44.89	44.89	44.89	44.92	44.96	44.96	44.98
OFFSET	-8.31	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	10.20

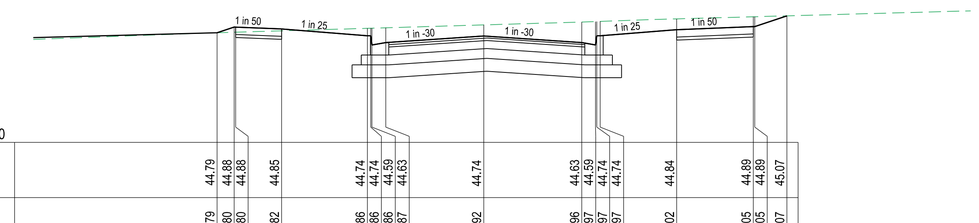
CH 123.16



DATUM RL42.0

DESIGN SURFACE	45.32	45.27	45.26	45.23	45.12	45.12	44.97	45.01	45.12	45.01	44.97	45.12	45.12	45.22	45.27	45.27	43.73
EXISTING SURFACE	45.32	45.32	45.32	45.35	45.39	45.39	45.39	45.40	45.24	44.51	44.41	44.40	44.38	43.81	43.56	43.56	43.73
OFFSET	-8.45	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	18.11

CH 18.43



DATUM RL43.0

DESIGN SURFACE	44.79	44.88	44.88	44.85	44.74	44.74	44.59	44.63	44.74	44.63	44.59	44.74	44.74	44.84	44.89	44.89	45.07
EXISTING SURFACE	44.79	44.80	44.80	44.82	44.86	44.86	44.86	44.87	44.92	44.96	44.97	44.97	44.97	45.02	45.05	45.05	45.07
OFFSET	-8.71	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	9.90

CH 95.16

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)

FIRMONA AVENUE - NO.1

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SCALE H 1:100 V 1:50 @ A1

HORIZ 2 1 0 2 4 8
VERT 1 0.5 0 1 2 4

LENGTHS ARE IN METRES

AMENDMENTS

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

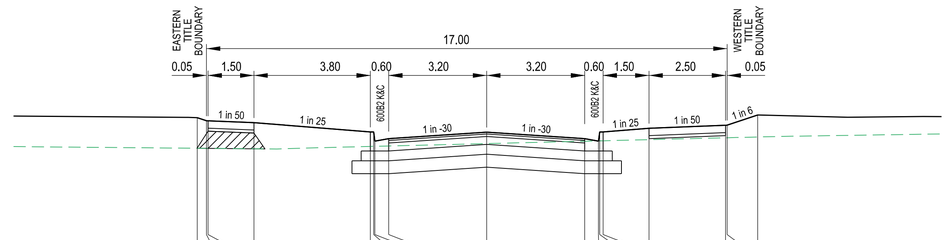
MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 6 OF 17 | P2

I:\H8554\ENG\ST23\E23_R06_FA CS.dgn

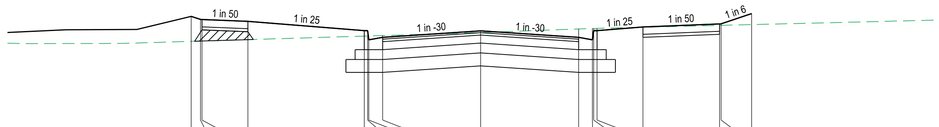
Plotted: 10-Dec-20



DATUM RL43.0

DESIGN SURFACE	45.16	45.11	45.11	45.08	44.92	44.92	44.77	44.81	44.92	44.81	44.77	44.92	44.92	44.98	45.03	45.04	45.20
EXISTING SURFACE	44.66	44.66	44.66	44.65	44.69	44.69	44.69	44.69	44.73	44.77	44.78	44.78	44.78	44.80	44.83	44.83	44.84
OFFSET	-9.45	-9.15	-9.10	-7.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	5.30	7.80	7.85	8.85

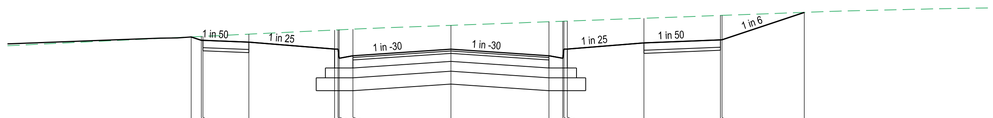
CH 215.28



DATUM RL43.0

DESIGN SURFACE	44.94	44.89	44.89	44.86	44.71	44.71	44.56	44.60	44.71	44.60	44.56	44.71	44.71	44.77	44.82	44.82	44.99
EXISTING SURFACE	44.53	44.54	44.54	44.56	44.62	44.62	44.62	44.63	44.68	44.74	44.74	44.74	44.75	44.76	44.79	44.80	44.81
OFFSET	-9.45	-9.15	-9.10	-7.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	5.30	7.80	7.85	8.85

CH 196.34



DATUM RL43.0

DESIGN SURFACE	44.56	44.51	44.50	44.47	44.36	44.36	44.21	44.25	44.36	44.25	44.21	44.36	44.36	44.46	44.51	44.51	44.96
EXISTING SURFACE	44.56	44.57	44.57	44.61	44.67	44.68	44.68	44.69	44.75	44.81	44.82	44.82	44.82	44.87	44.91	44.91	44.96
OFFSET	-8.48	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	8.80	8.85	11.54

CH 172.71

FIRMONA AVENUE - NO.2

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SCALE H 1:100 V 1:50 @ A1

HORIZ 2 1 0 2 4 8
VERT 1 0.5 0 1 2 4

LENGTHS ARE IN METRES

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)

AMENDMENTS

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

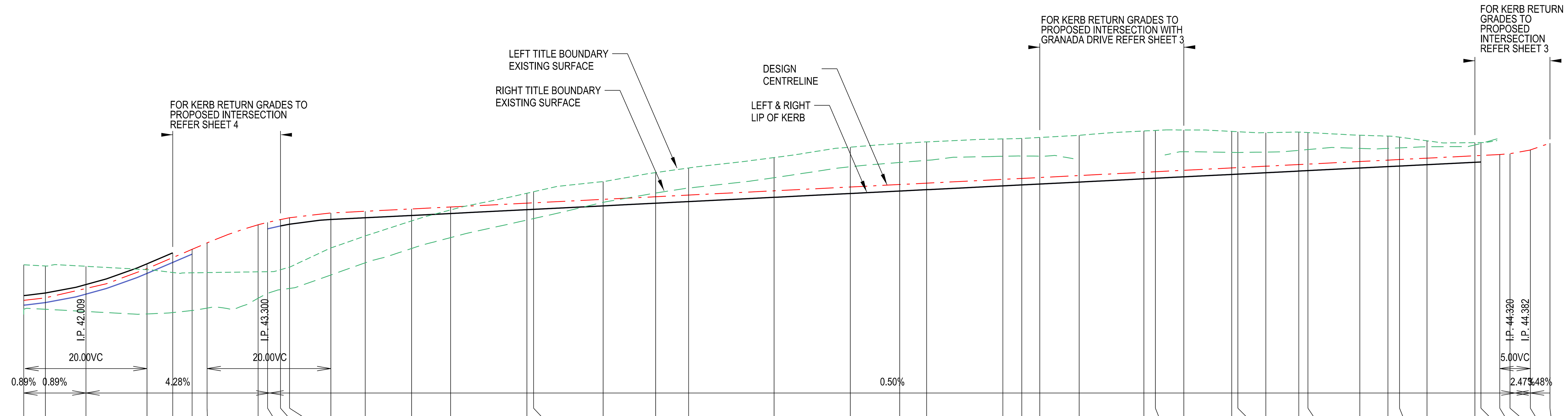
MELWAY REF.	234-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY: WYNDHAM
REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 7 OF 17 | P2

I:\H8554\ENG\ST23\E23_R07_FA CS2.dgn
Plotted: 16-Dec-20



CHAINAGE CENTRE LINE	ES LEFT TITLE BDY	FS LEFT TITLE BDY	LEFT LIP OF KERB	DESIGN CL	RIGHT LIP OF KERB	FS RIGHT TITLE BDY	ES RIGHT TITLE BDY
276.45	42.50	42.36	42.00	41.92	41.84	41.78	41.78
280.00	42.48	42.40	42.04	41.96	41.88	41.88	41.77
286.64	42.48	42.54	42.18	42.09	42.02	42.06	41.74
296.64	42.42	42.88	42.52	42.44	42.36	42.46	41.70
TP300.86	42.37	43.06	42.70	42.62	42.54	42.67	41.72
304.03	42.41			42.75			41.75
306.49	42.40			42.86			41.79
314.85	42.37			43.16			41.95
316.40	42.36			43.20			42.03
TP318.52	42.42	43.39	43.14	43.24	43.14	43.30	42.09
320.00	42.46	43.42	43.17	43.27	43.17	43.32	42.11
326.78	42.78	43.50	43.24	43.35	43.24	43.36	42.33
332.40	42.97	43.52	43.27	43.38	43.27	43.36	42.53
340.00	43.22	43.56	43.31	43.42	43.31	43.36	42.77
346.40	43.40	43.59	43.34	43.45	43.34	43.36	42.95
358.90	43.67	43.66	43.40	43.51	43.40	43.36	43.23
360.00	43.70	43.66	43.41	43.52	43.41	43.26	43.26
371.40	43.86	43.72	43.47	43.57	43.47	43.52	43.52
380.00	44.01	43.76	43.51	43.62	43.51	43.66	43.68
385.40	44.09	43.79	43.54	43.64	43.54	43.75	43.76
399.40	44.26	43.86	43.61	43.71	43.61	43.93	43.93
411.90	44.43	43.92	43.67	43.78	43.67	44.10	44.11
420.00	44.49	43.96	43.71	43.82	43.71	44.18	44.18
424.40	44.51	43.98	43.73	43.84	43.73	44.22	44.21
436.90	44.56	44.05	43.79	43.90	43.79	44.27	44.28
440.00	44.57	44.06	43.81	43.92	43.81	44.28	44.28
TP442.95	44.59	44.08	43.82	43.93	43.82		44.28
449.40	44.62	44.11	43.86	43.96	43.86		
460.00	44.69	44.16	43.91	44.02	43.91		
461.90	44.70	44.17	43.92	44.03	43.92		
TP466.55	44.71	44.19	43.94	44.05	43.94	44.18	44.35
474.40	44.69	44.23	43.98	44.09	43.98	44.22	44.34
475.40	44.68	44.24	43.99	44.09	43.99	44.23	44.34
480.00	44.67	44.26	44.01	44.12	44.01	44.25	44.35
485.40	44.67	44.29	44.04	44.14	44.04	44.28	44.38
486.90	44.67	44.30	44.04	44.15	44.04	44.28	44.39
495.40	44.62	44.34	44.09	44.19	44.09	44.33	44.41
500.00	44.61	44.36	44.11	44.22	44.11	44.35	44.41
501.90	44.59	44.37	44.12	44.23	44.12	44.36	44.42
506.40	44.53	44.39	44.14	44.25	44.14	44.38	44.44
TP514.25	44.50	44.43	44.18	44.29			44.46
TP515.25	44.50			44.29			44.49
518.33				44.31			
520.00				44.32			
523.33				44.38			
526.55				44.49			

BENDIGO DRIVE

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

AMENDMENTS		
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

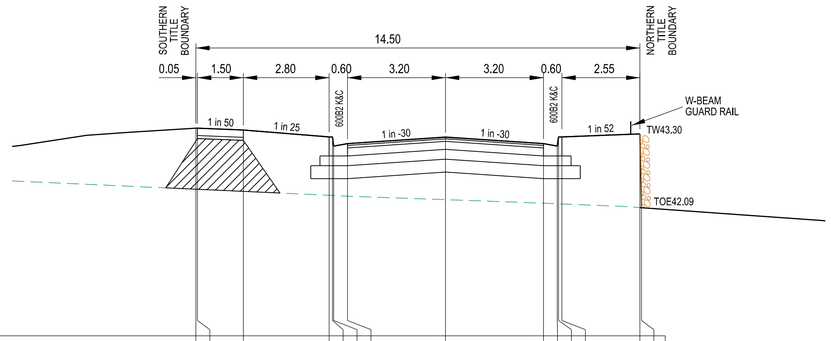
MELWAY REF.	234-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY: WYNDHAM
REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 8 OF 17 | P2

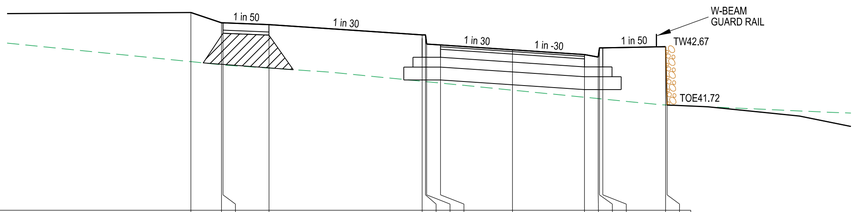
Plotted: 16-Dec-20
t:\H8554\ENG\ST23\E23_R08_BD LS.dgn



DATUM RL40.0

DESIGN SURFACE	43.39	43.39	43.36	43.25	43.25	43.25	43.10	43.14	43.24	43.14	43.10	43.25	43.25	43.30	42.09
EXISTING SURFACE	42.39	42.39	42.36	42.29	42.29	42.29	42.29	42.28	42.22	42.16	42.16	42.15	42.15	42.09	42.09
OFFSET	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35	6.40

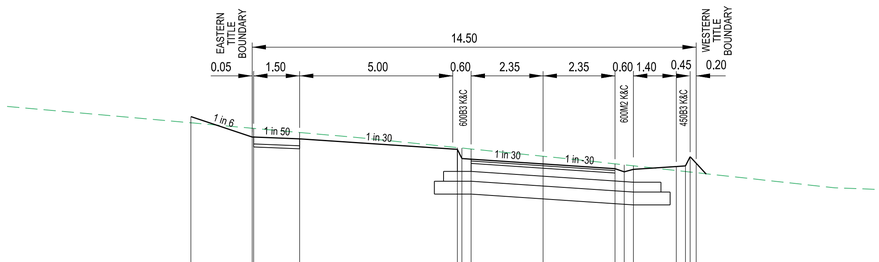
CH 318.52



DATUM RL40.0

DESIGN SURFACE	43.23	43.06	43.06	43.03	42.86	42.86	42.71	42.70	42.62	42.54	42.50	42.65	42.65	42.67	41.72
EXISTING SURFACE	42.42	42.37	42.37	42.32	42.10	42.10	42.10	42.07	41.96	41.84	41.82	41.82	41.81	41.72	41.72
OFFSET	-10.50	-9.50	-9.45	-7.95	-2.95	-2.84	-2.80	-2.35	0.00	2.35	2.80	2.84	2.95	5.00	5.05

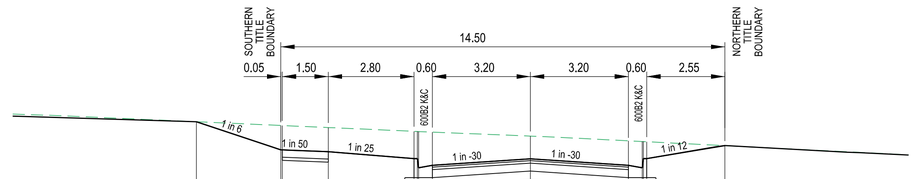
CH 300.86



DATUM RL40.0

DESIGN SURFACE	42.69	42.36	42.36	42.33	42.16	42.01	42.00	41.92	41.84	41.79	41.83	41.88	41.89	42.04	41.93
EXISTING SURFACE	42.59	42.50	42.50	42.43	42.18	42.18	42.16	42.04	41.92	41.90	41.89	41.81	41.79	41.79	41.78
OFFSET	-11.50	-9.50	-9.45	-7.95	-2.80	-2.65	-2.35	0.00	2.35	2.65	2.95	4.35	4.65	4.80	5.00

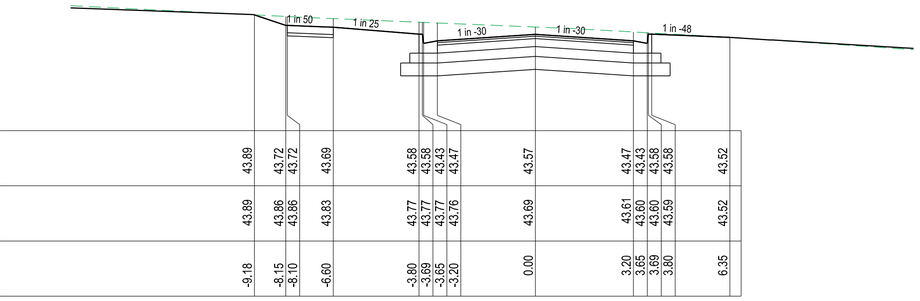
CH 276.45



DATUM RL42.0

DESIGN SURFACE	44.32	43.86	43.86	43.83	43.72	43.72	43.57	43.61	43.71	43.61	43.57	43.72	43.72	43.93
EXISTING SURFACE	44.32	44.26	44.26	44.22	44.16	44.16	44.16	44.15	44.08	44.01	44.00	43.99	43.99	43.93
OFFSET	-10.90	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35

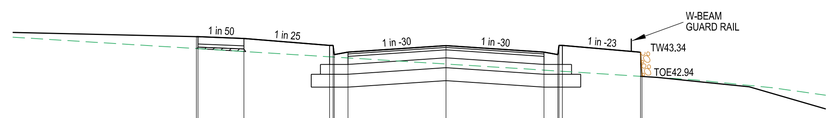
CH 399.40



DATUM RL42.0

DESIGN SURFACE	43.89	43.72	43.72	43.69	43.58	43.58	43.43	43.47	43.57	43.47	43.43	43.58	43.58	43.52
EXISTING SURFACE	43.89	43.86	43.86	43.83	43.77	43.77	43.77	43.76	43.69	43.61	43.60	43.60	43.59	43.52
OFFSET	-9.18	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35

CH 371.40



DATUM RL41.0

DESIGN SURFACE	43.59	43.59	43.56	43.45	43.45	43.30	43.34	43.45	43.34	43.30	43.45	43.45	43.34	42.94
EXISTING SURFACE	43.40	43.40	43.35	43.26	43.26	43.26	43.25	43.15	43.05	43.03	43.03	43.03	42.95	42.94
OFFSET	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35	6.40

CH 346.40

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)

BENDIGO DRIVE - NO.1

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SCALE H 1:100 V 1:50 @ A1

HORIZ 2 1 0 2 4 8
VERT 1 0.5 0 1 2 4

LENGTHS ARE IN METRES

AMENDMENTS

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

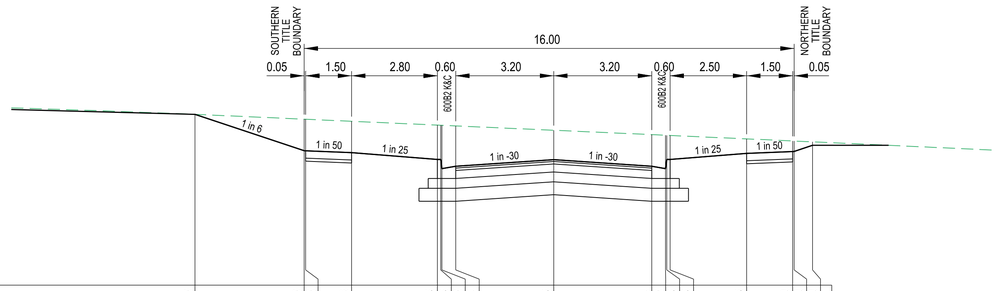
MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 9 OF 17 | P2

Plotted: 10-Dec-20

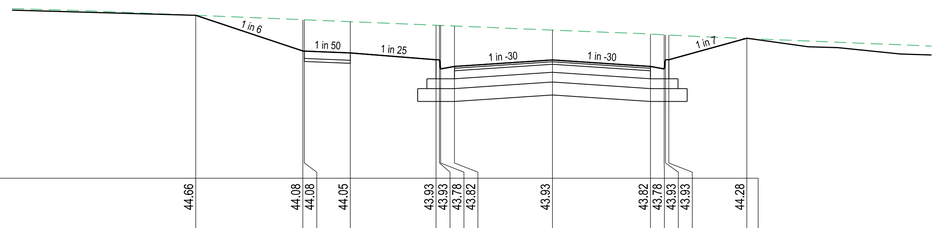
I:\H8554\ENG\ST23\E23_R09_BD CS.dgn



DATUM RL42.0

DESIGN SURFACE	44.79	44.19	44.19	44.16	44.05	44.05	43.90	43.94	44.05	43.94	43.90	44.05	44.05	44.15	44.18	44.18	44.28
EXISTING SURFACE	44.79	44.71	44.71	44.68	44.61	44.61	44.61	44.60	44.53	44.46	44.45	44.45	44.44	44.39	44.35	44.35	44.34
OFFSET	-11.71	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	8.45

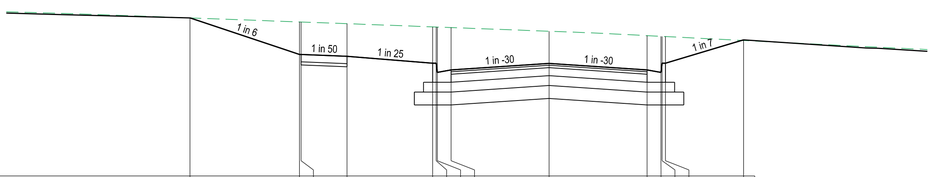
CH 466.55



DATUM RL42.0

DESIGN SURFACE	44.66	44.08	44.08	44.05	43.93	43.93	43.78	43.82	43.93	43.82	43.78	43.93	43.93	44.28
EXISTING SURFACE	44.66	44.59	44.59	44.55	44.50	44.49	44.49	44.48	44.42	44.35	44.34	44.34	44.34	44.28
OFFSET	-11.65	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35

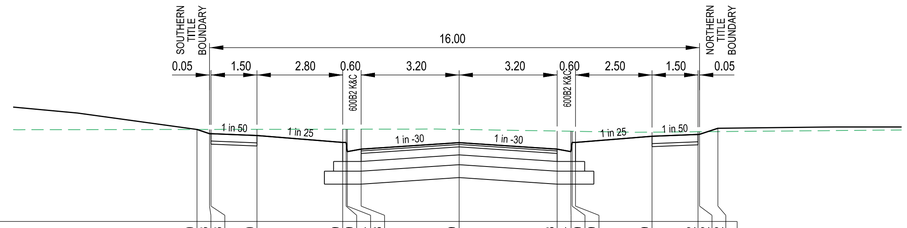
CH 442.95



DATUM RL42.0

DESIGN SURFACE	44.58	43.98	43.98	43.95	43.84	43.84	43.69	43.73	43.84	43.73	43.69	43.84	43.84	44.22
EXISTING SURFACE	44.58	44.51	44.51	44.49	44.43	44.43	44.43	44.42	44.36	44.29	44.28	44.28	44.28	44.21
OFFSET	-11.72	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.35

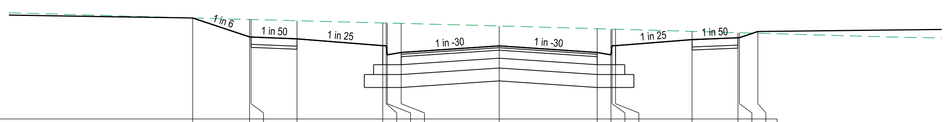
CH 424.40



DATUM RL43.0

DESIGN SURFACE	44.50	44.43	44.43	44.40	44.29	44.29	44.14	44.18	44.29	44.18	44.14	44.29	44.29	44.39	44.42	44.42	44.52
EXISTING SURFACE	44.50	44.50	44.50	44.50	44.51	44.51	44.51	44.51	44.50	44.48	44.47	44.47	44.47	44.46	44.46	44.46	44.47
OFFSET	-8.56	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	8.45

CH 514.25



DATUM RL43.0

DESIGN SURFACE	44.65	44.34	44.34	44.31	44.20	44.20	44.05	44.09	44.19	44.09	44.05	44.20	44.20	44.30	44.33	44.33	44.43
EXISTING SURFACE	44.65	44.62	44.62	44.60	44.57	44.57	44.57	44.56	44.52	44.47	44.47	44.47	44.47	44.43	44.41	44.41	44.40
OFFSET	-10.01	-8.15	-8.10	-6.60	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.30	7.80	7.85	8.45

CH 495.40

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)

BENDIGO DRIVE - NO.2

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SCALE H 1:100 V 1:50 @ A1

HORIZ 2 1 0 2 4 8
VERT 1 0.5 0 1 2 4

LENGTHS ARE IN METRES

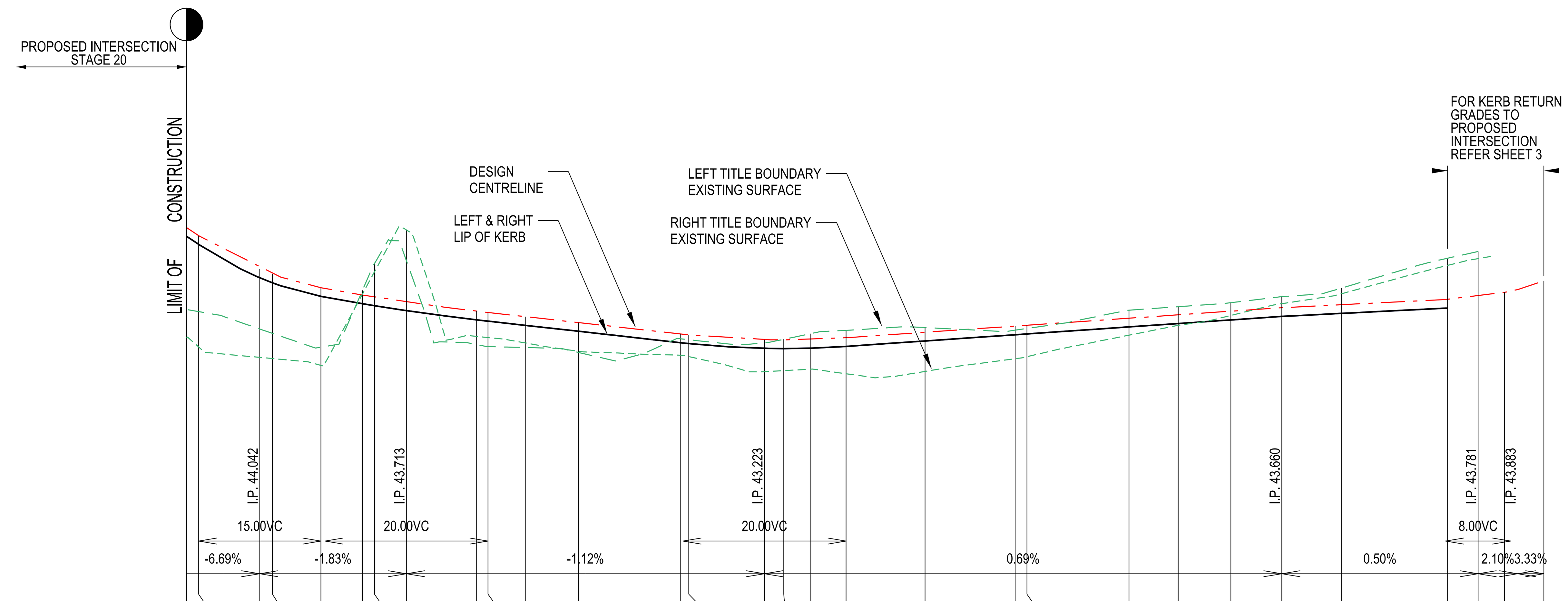
AMENDMENTS

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-F-2	RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN	MUNICIPALITY: WYNDHAM
SURVEY	BPD		REFERENCE: 8557 E/23
DESIGN	D.P		
DRAWN	D.P		
CHECKED		SCALE AS SHOWN / DATUM AHD / DATE NOV' 20	SHEET 10 OF 17 P2

t:\#8554\ENG\ST23\E23_R10_BD CSZ.dgn
Plotted: 16-Dec-20



ES LEFT TITLE BDY	43.29	43.18	43.05	43.04	42.95	43.83	44.10	44.61	43.31	43.29	43.23	43.13	43.08	43.06	42.88
FS LEFT TITLE BDY	44.56	44.47	44.03	43.95	43.69	43.51	43.48	43.37	43.20	43.18	43.10	43.02	42.90	42.90	42.87
LEFT LIP OF KERB	44.53	44.44	44.03	43.96	43.80	43.71	43.69	43.62	43.51	43.50	43.44	43.37	43.23	43.22	43.16
DESIGN CL	44.64	44.54	44.13	44.07	43.91	43.82	43.79	43.73	43.62	43.60	43.55	43.48	43.34	43.33	43.27
RIGHT LIP OF KERB	44.43	44.44	44.03	43.96	43.80	43.71	43.69	43.62	43.51	43.50	43.44	43.37	43.23	43.22	43.16
FS RIGHT TITLE BDY	44.77	44.67	44.26	44.20	44.03	43.94	43.92	43.86	43.75	43.73	43.68	43.61	43.47	43.45	43.40
ES RIGHT TITLE BDY	43.64	43.61	43.40	43.35	43.18	43.87	44.20	44.24	43.21	43.18	43.17	43.11	43.28	43.27	43.23
CHAINAGE CENTRE LINE	18.43	19.91	27.41	28.96	34.91	40.00	41.46	45.39	53.96	55.39	60.00	66.46	78.96	80.00	89.28

ES LEFT TITLE BDY	42.89	42.91	42.85	42.88	43.03	43.06	43.32	43.44	43.57	43.71	43.83	44.17	44.26		
FS LEFT TITLE BDY	42.86	42.87	42.89	42.94	43.11	43.13	43.32	43.41	43.51	43.60	43.71	43.90			
LEFT LIP OF KERB	43.16	43.16	43.19	43.25	43.33	43.34	43.42	43.47	43.51	43.55	43.59	43.66			
DESIGN CL	43.27	43.27	43.29	43.36	43.44	43.45	43.53	43.57	43.62	43.66	43.70	43.76	43.80	43.85	43.99
RIGHT LIP OF KERB	43.16	43.16	43.19	43.25	43.33	43.34	43.42	43.47	43.51	43.55	43.59	43.66			
FS RIGHT TITLE BDY	43.39	43.40	43.42	43.49	43.56	43.57	43.66	43.70	43.75	43.79	43.82	43.89			
ES RIGHT TITLE BDY	43.27	43.34	43.38	43.42	43.38	43.41	43.63	43.67	43.72	43.80	43.90	44.26	44.35		
CHAINAGE CENTRE LINE	91.65	94.96	99.28	108.96	120.00	121.46	133.96	140.00	146.46	152.70	160.00	TP173.01	176.76	180.00	184.81

GRANADA DRIVE

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

AMENDMENTS

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

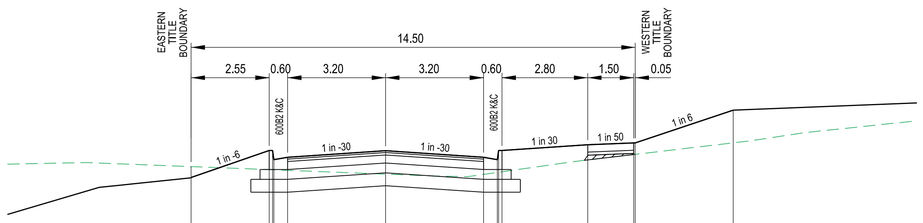
MELWAY REF. 234-F-2
SURVEY BPD
DESIGN D.P
DRAWN D.P
CHECKED

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY WYNDHAM
REFERENCE 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 11 OF 17 | P2

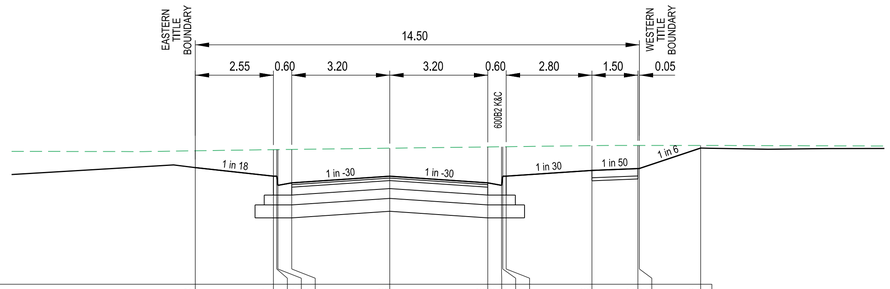
Plotted: 16-Dec-20
t:\H8554\ENG\ST23\E23_R11_GD LS.dgn



DATUM RL41.0

DESIGN SURFACE	42.90	43.34	43.34	43.19	43.23	43.34	43.23	43.19	43.34	43.34	43.44	43.47	43.47	44.00
EXISTING SURFACE	43.08	43.03	43.03	43.03	43.02	42.96	42.95	42.98	42.99	42.99	43.19	43.28	43.28	43.47
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	11.35

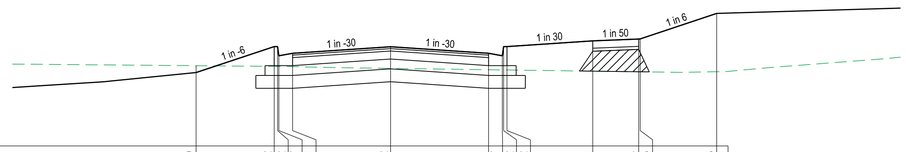
CH 78.96



DATUM RL42.0

DESIGN SURFACE	43.90	43.77	43.77	43.62	43.66	43.76	43.66	43.62	43.77	43.77	43.86	43.89	43.89	44.22
EXISTING SURFACE	44.18	44.20	44.20	44.20	44.20	44.22	44.24	44.24	44.24	44.25	44.26	44.27	44.27	44.27
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	10.15

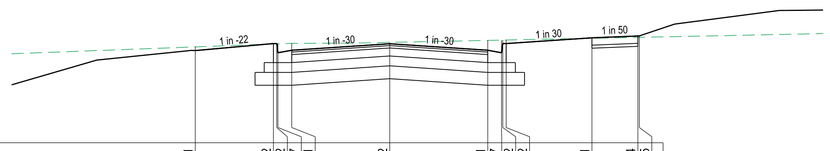
CH 173.01



DATUM RL42.0

DESIGN SURFACE	43.20	43.62	43.62	43.47	43.51	43.62	43.51	43.47	43.62	43.62	43.71	43.74	43.75	44.16
EXISTING SURFACE	43.31	43.30	43.30	43.30	43.29	43.27	43.24	43.24	43.24	43.24	43.22	43.21	43.21	43.21
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	10.65

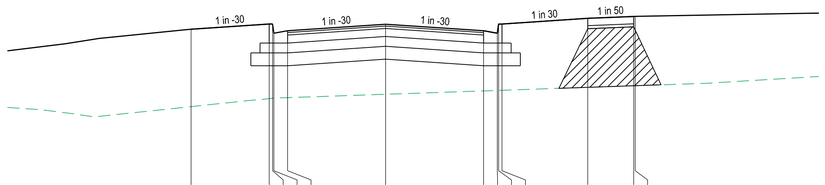
CH 53.96



DATUM RL42.0

DESIGN SURFACE	43.51	43.62	43.62	43.47	43.51	43.62	43.51	43.47	43.62	43.62	43.71	43.74	43.75
EXISTING SURFACE	43.57	43.61	43.62	43.62	43.62	43.64	43.67	43.68	43.68	43.68	43.71	43.72	43.72
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15

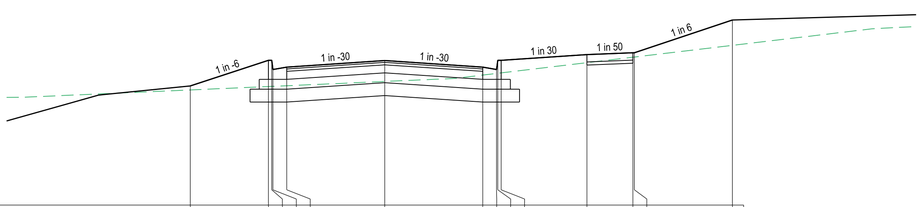
CH 146.46



DATUM RL42.0

DESIGN SURFACE	44.56	44.64	44.64	44.49	44.53	44.64	44.53	44.49	44.64	44.64	44.74	44.77	44.77
EXISTING SURFACE	43.30	43.43	43.43	43.43	43.44	43.50	43.55	43.56	43.56	43.56	43.61	43.64	43.64
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15

CH 18.43



DATUM RL41.0

DESIGN SURFACE	42.94	43.36	43.36	43.21	43.25	43.36	43.25	43.21	43.36	43.36	43.46	43.49	43.49	44.02
EXISTING SURFACE	42.88	42.93	42.94	42.94	42.95	43.02	43.12	43.15	43.15	43.16	43.32	43.41	43.42	43.61
OFFSET	-6.35	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15	11.35

CH 108.96

LEGEND

- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)

GRANADA DRIVE

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50

SCALE H 1:100 V 1:50 @ A1

HORIZ 2 1 0 2 4 8
VERT 1 0.5 0 2 4

LENGTHS ARE IN METRES

AMENDMENTS

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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

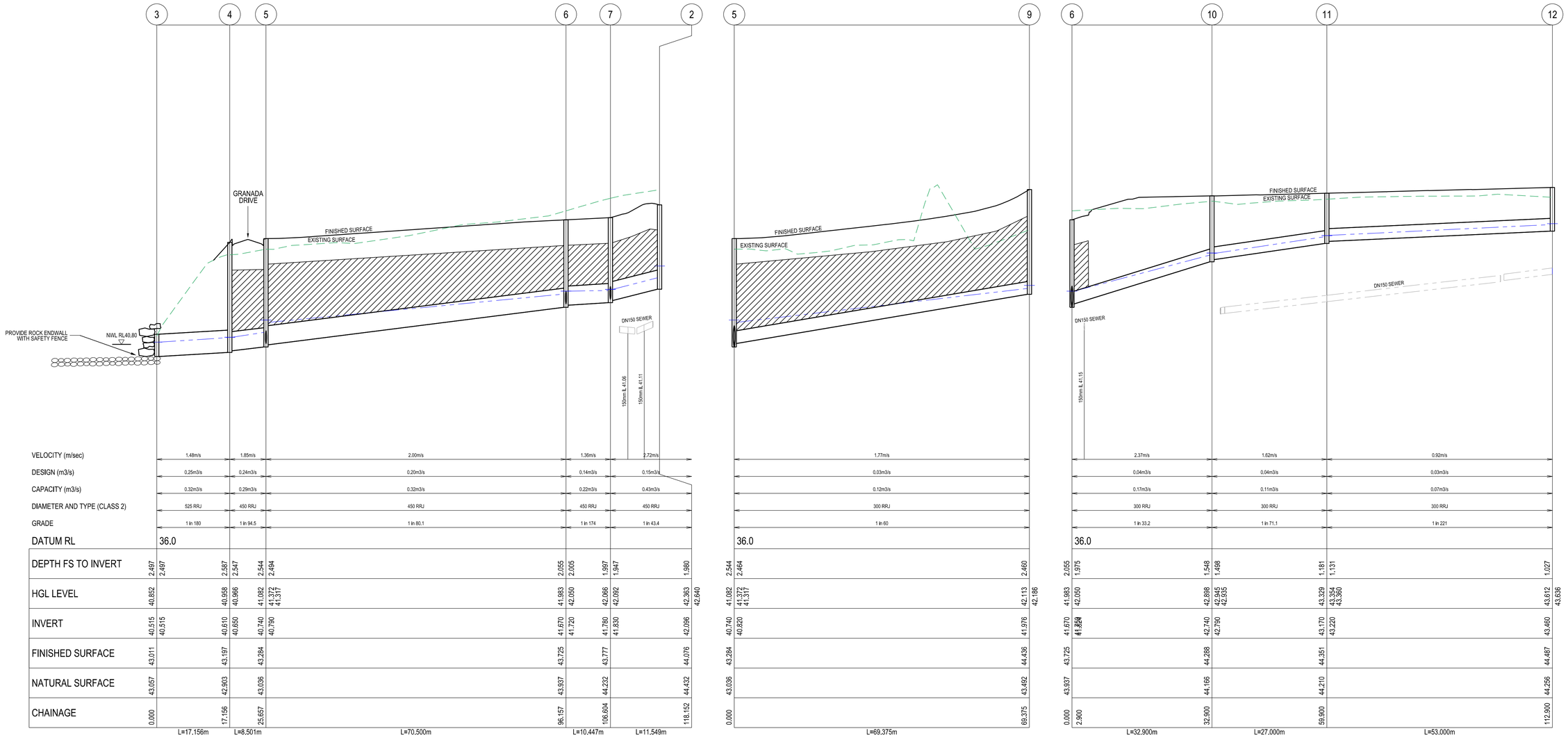
MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 12 OF 17 | P2

Plotted: 6-Dec-20

I:\H8554\ENG\ST23\E23_R12_GD CS.dgn



DRAINAGE LONGITUDINAL SECTIONS - NO.1

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

INDICATES CRUSHED ROCK BACKFILL
INDICATES 5YR HGL
INDICATES 100YR HGL
"LDA" INDICATES PIPES WITH LARGER DEFLECTION ANGLE TO BE ORDERED
"SL" INDICATES PIPES WITH SACRIFICIAL LINING TO BE ORDERED

AMENDMENTS			
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-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY: WYNDHAM
REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 13 OF 17 | P2

Plotted: 16-Dec-20

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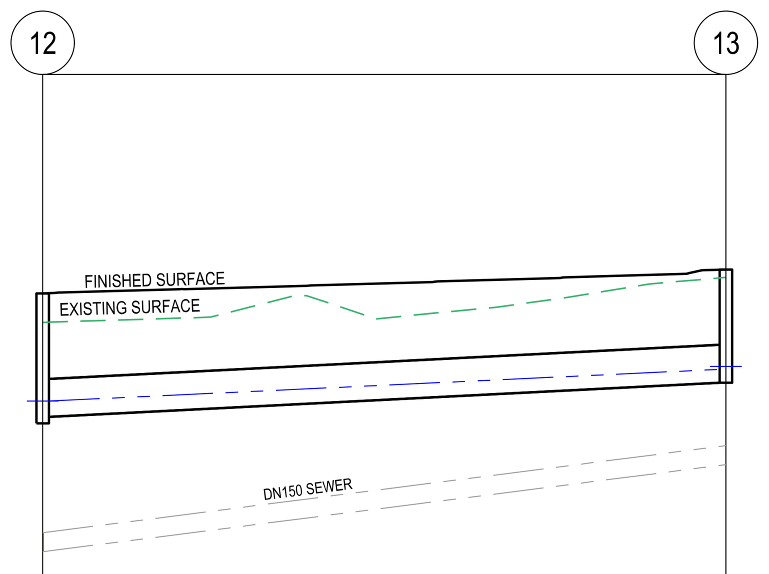
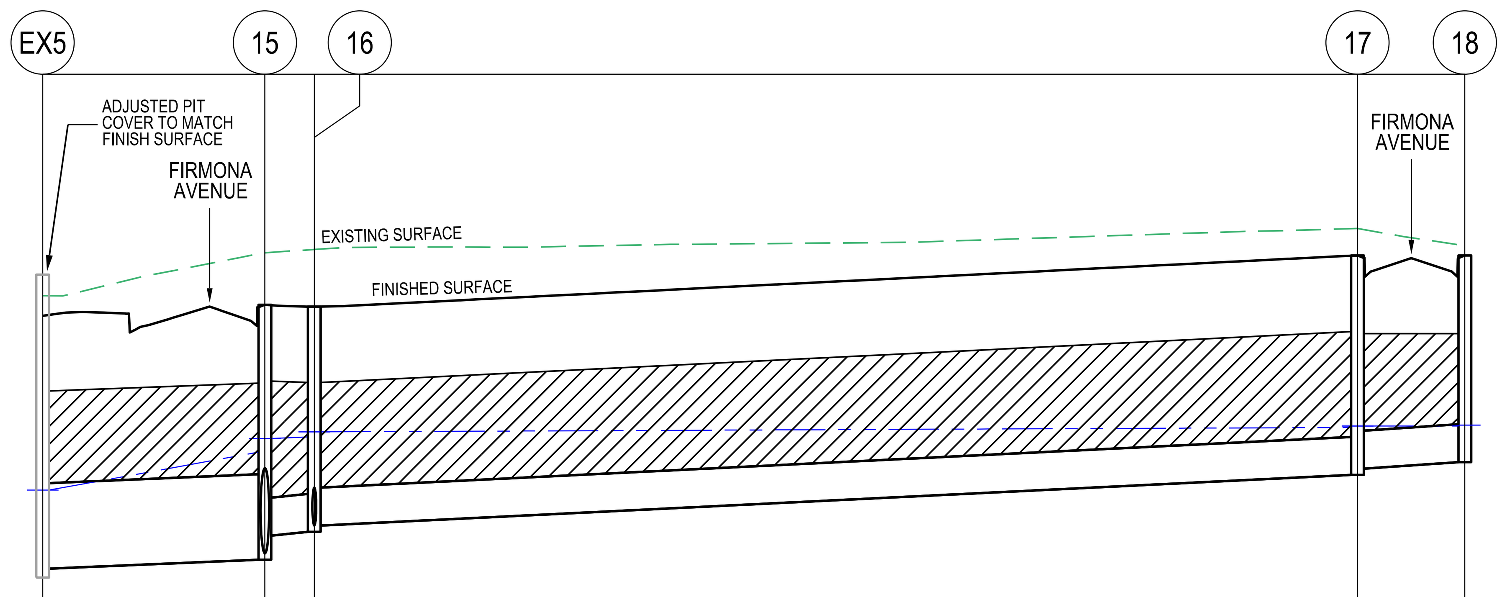
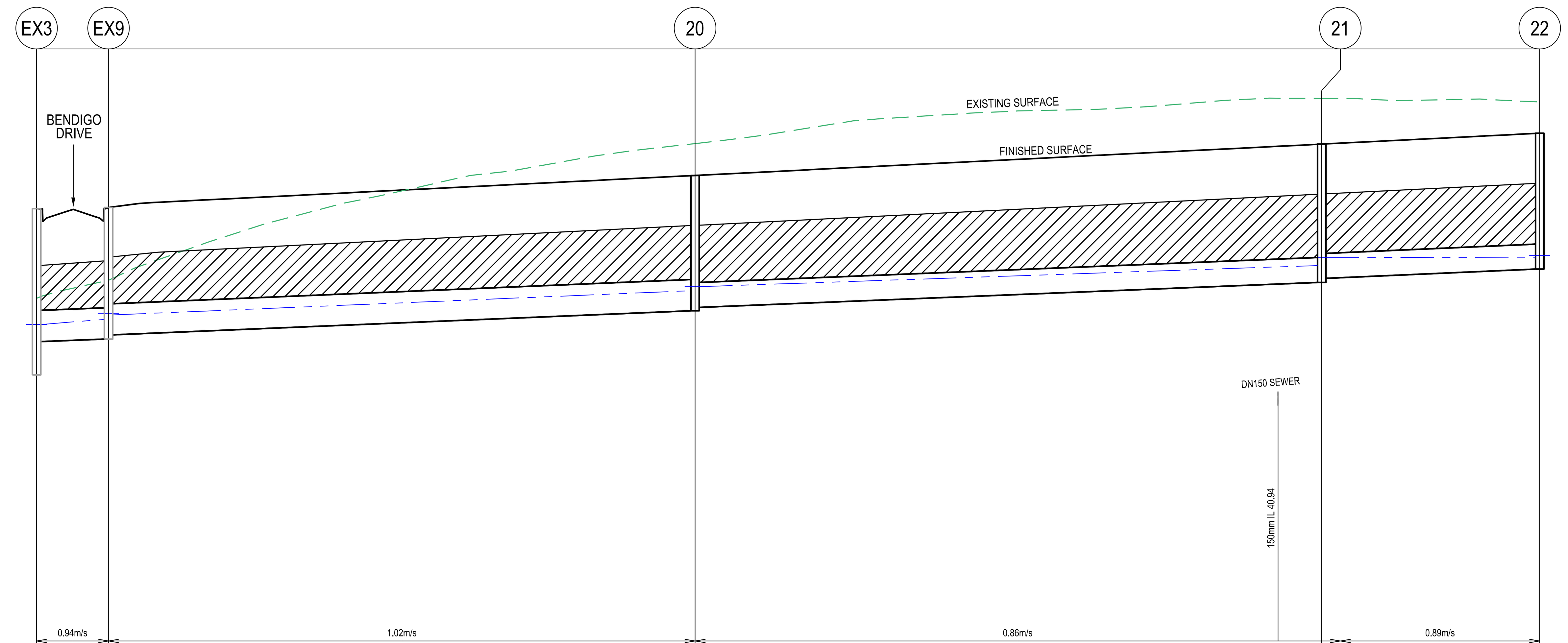


Pit	12	13
VELOCITY (m/sec)	0.97m/s	
DESIGN (m3/s)	0.02m3/s	
CAPACITY (m3/s)	0.07m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 200	
DATUM RL	37.0	
DEPTH FS TO INVERT	1.027 / 0.977	0.895
HGL LEVEL	43.612 / 43.636	43.886 / 43.910
INVERT	43.460 / 43.510	43.780
FINISHED SURFACE	44.487	44.675
NATURAL SURFACE	44.256	44.613
CHAINAGE	112.900	166.900

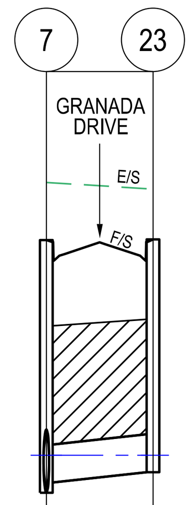
L=54.000m



Pit	EX5		15		16		17		18
VELOCITY (m/sec)		1.48m/s		1.20m/s		0.95m/s		1.05m/s	
DESIGN (m3/s)		1.04m3/s		0.05m3/s		0.02m3/s		0.01m3/s	
CAPACITY (m3/s)		0.53m3/s		0.08m3/s		0.07m3/s		0.07m3/s	
DIAMETER AND TYPE (CLASS 2)		675 RRJ		300 RRJ		300 RRJ		300 RRJ	
GRADE		1 in 251		1 in 130		1 in 206		1 in 170	
DATUM RL	37.0								
DEPTH FS TO INVERT	2.069 / 1.997		2.014 / 1.824		1.780 / 1.730		1.735 / 1.685		1.634
HGL LEVEL	42.930		43.230 / 43.338		43.349 / 43.390		43.425 / 43.437 / 43.436		43.436 / 43.443
INVERT	42.240 / 42.310		42.380 / 42.570		42.600 / 42.650		43.050 / 43.100		43.150
FINISHED SURFACE	44.307		44.394		44.380		44.785		44.784
NATURAL SURFACE	44.467		44.806		44.831		44.998		44.863
CHAINAGE	0.000		17.564		21.469		103.926		112.407
		L=17.564m		L=3.906m		L=82.456m		L=8.481m	

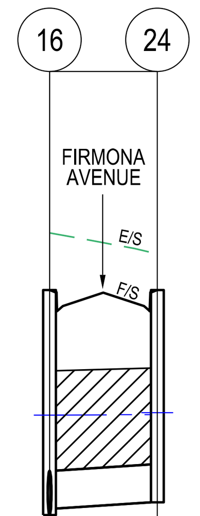


Pit	EX3		EX9		20		21		22
VELOCITY (m/sec)		0.94m/s		1.02m/s		0.86m/s		0.89m/s	
DESIGN (m3/s)		0.08m3/s		0.08m3/s		0.05m3/s		0.02m3/s	
CAPACITY (m3/s)		0.10m3/s		0.11m3/s		0.06m3/s		0.06m3/s	
DIAMETER AND TYPE (CLASS 2)		375 RRJ		375 RRJ		300 RRJ		300 RRJ	
GRADE		1 in 288		1 in 243		1 in 251		1 in 238	
DATUM RL	36.0								
DEPTH FS TO INVERT	1.998 / 1.598		1.581 / 1.531		1.626 / 1.586		1.663 / 1.613		1.634
HGL LEVEL	41.905		41.966 / 42.034 / 42.020		42.311 / 42.359		42.613 / 42.707		42.714 / 42.733
INVERT	41.300 / 41.700		41.730 / 41.780		42.070 / 42.110		42.410 / 42.460		42.570
FINISHED SURFACE	43.298		43.311		43.696		44.073		44.204
NATURAL SURFACE	42.220		42.437		44.079		44.623		44.581
CHAINAGE	0.000		8.650		79.132		154.432		180.632
		L=8.650m		L=70.482m		L=75.300m		L=26.200m	



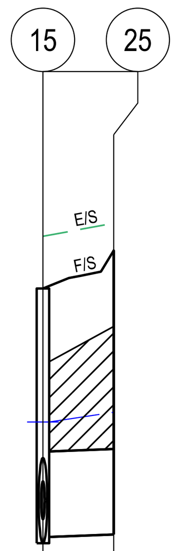
Pit	7	23
VELOCITY (m/sec)	1.35m/s	
DESIGN (m3/s)	0.00m3/s	
CAPACITY (m3/s)	0.10m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 103	
DATUM RL	36.0	
DEPTH FS TO INVERT	1.997 / 1.917	1.839
HGL LEVEL	42.050 / 42.076	42.076
INVERT	41.780 / 41.860	41.942
FINISHED SURFACE	43.777	43.782
NATURAL SURFACE	44.232	44.179
CHAINAGE	0.000	8.453

L=8.453m



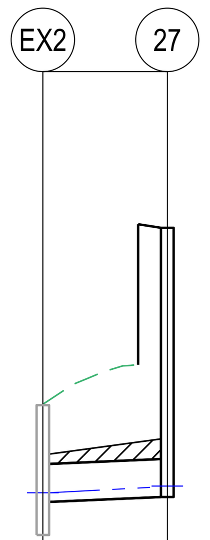
Pit	16	24
VELOCITY (m/sec)	1.05m/s	
DESIGN (m3/s)	0.02m3/s	
CAPACITY (m3/s)	0.07m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 170	
DATUM RL	37.0	
DEPTH FS TO INVERT	1.780 / 1.730	1.680
HGL LEVEL	43.349 / 43.390	43.394 / 43.409
INVERT	42.600 / 42.650	42.700
FINISHED SURFACE	44.380	44.380
NATURAL SURFACE	44.831	44.665
CHAINAGE	0.000	8.497

L=8.497m



Pit	15	25
VELOCITY (m/sec)	1.41m/s	
DESIGN (m3/s)	0.99m3/s	
CAPACITY (m3/s)	0.50m3/s	
DIAMETER AND TYPE (CLASS 2)	675 RRJ	
GRADE	1 in 279	
DATUM RL	37.0	
DEPTH FS TO INVERT	2.014 / 1.964	2.244
HGL LEVEL	43.230 / 43.338	43.416 / 44.196
INVERT	42.380 / 42.430	42.450
FINISHED SURFACE	44.394	44.694
NATURAL SURFACE	44.806	44.909
CHAINAGE	0.000	5.589

L=5.589m



Pit	EX2	27
VELOCITY (m/sec)	0.87m/s	
DESIGN (m3/s)	0.01m3/s	
CAPACITY (m3/s)	0.06m3/s	
DIAMETER AND TYPE (CLASS 2)	300 RRJ	
GRADE	1 in 246	
DATUM RL	35.0	
DEPTH FS TO INVERT	1.025 / 0.765	2.126
HGL LEVEL	40.784	40.830 / 40.837
INVERT	40.450 / 40.710	40.750
FINISHED SURFACE	41.475	42.876
NATURAL SURFACE	41.475	41.815
CHAINAGE	0.000	9.836

L=9.836m

DRAINAGE LONGITUDINAL SECTIONS - NO.2

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

INDICATES CRUSHED ROCK BACKFILL
INDICATES 5YR HGL
INDICATES 100YR HGL
"LDA" INDICATES PIPES WITH LARGER DEFLECTION ANGLE TO BE ORDERED
"SL" INDICATES PIPES WITH SACRIFICIAL LINING TO BE ORDERED

AMENDMENTS

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-F-2	RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN		MUNICIPALITY WYNDHAM
SURVEY BPD			REFERENCE 8557 E/23
DESIGN D.P			
DRAWN D.P			
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE NOV' 20

SHEET 14 OF 17 P2

Plotted: 16-Dec-20

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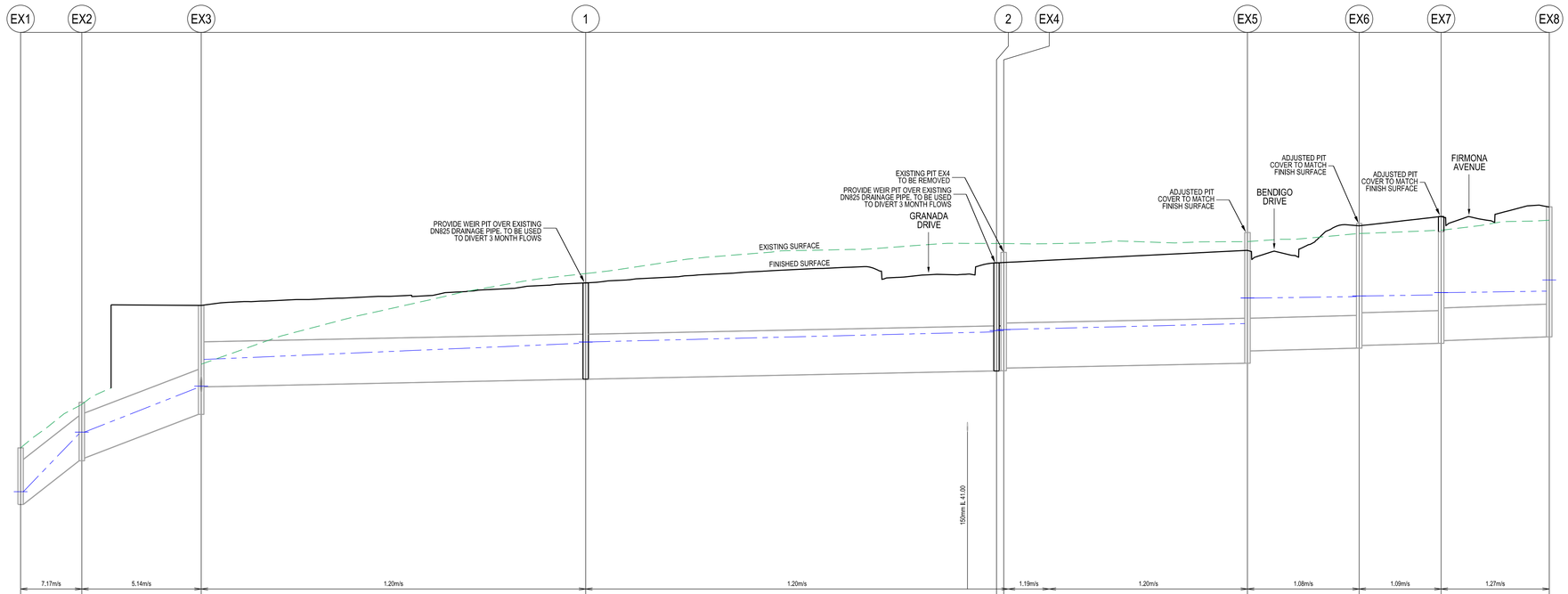

VELOCITY (m/sec)	7.17m/s		5.14m/s		1.20m/s				1.20m/s				1.19m/s		1.20m/s		1.08m/s		1.09m/s		1.27m/s			
DESIGN (m3/s)	0.68m3/s		0.68m3/s		0.69m3/s				0.71m3/s				0.71m3/s		0.72m3/s		0.22m3/s		0.23m3/s		0.23m3/s			
CAPACITY (m3/s)	3.83m3/s		2.75m3/s		0.64m3/s				0.64m3/s				0.64m3/s		0.64m3/s		0.31m3/s		0.31m3/s		0.36m3/s			
DIAMETER AND TYPE (CLASS 2)	EX825 RRJ		EX825 RRJ		EX825 RRJ				EX825 RRJ				EX825 RRJ		EX825 RRJ		EX600 RRJ		EX600 RRJ		EX600 RRJ			
GRADE	1 in 14		1 in 27.4		1 in 500				1 in 500				1 in 507		1 in 502		1 in 402		1 in 395		1 in 291			
DATUM RL	36.0																							
DEPTH FS TO INVERT	1.040	1.040	1.025	0.975	1.998	1.493			1.765	1.765			1.980	1.980	1.985	1.935	2.069	1.844	2.243	2.193	2.325	2.275	2.383	
HGL LEVEL	39.885		40.945	40.976	41.796	41.817	42.307		42.605	42.627			42.812	42.834	42.837	42.855	42.964	43.433	43.432	43.459	43.470	43.490	43.533	43.531	43.559	43.763
INVERT	39.650	39.650	40.450	40.500	41.300	41.805			41.946	41.946			42.096	42.096	42.099	42.149	42.238	42.463		42.514	42.564	42.602	42.652		42.720	
FINISHED SURFACE	40.690		41.475		43.298				43.711				44.076		44.084		44.307			44.757		44.927			45.103	
NATURAL SURFACE	40.690		41.475		42.220				43.881				44.432		44.431		44.467			44.615		44.675			44.858	
CHAINAGE	0.000		11.219		33.109				103.807				178.935		180.254		224.954			245.437		260.464			280.283	
	L=11.219m		L=21.891m		L=70.498m				L=75.328m				L=1.319m		L=44.700m		L=20.483m			L=15.027m		L=19.819m		

DRAINAGE LONGITUDINAL SECTIONS - NO.3

SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

HORIZ 10 5 0 10 20 40
VERT 1 0.5 0 1 2 4
LENGTHS ARE IN METRES

INDICATES CRUSHED ROCK BACKFILL
INDICATES 5YR HGL
INDICATES 100YR HGL
"LDA" INDICATES PIPES WITH LARGER DEFLECTION ANGLE TO BE ORDERED
"SL" INDICATES PIPES WITH SACRIFICIAL LINING TO BE ORDERED

AMENDMENTS

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-F-2
SURVEY BPD
DESIGN D.P
DRAWN D.P
CHECKED

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY WYNDHAM
REFERENCE 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 15 OF 17 | P2

Plotted: 6-Dec-20

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PIT SCHEDULE

PIT No.	PIT DESCRIPTION	LENGTH	WIDTH	INLET INVERT	INLET DIA	OUTLET INVERT	OUTLET DIA	TOP PIT RL	DEPTH INVERT	REMARKS
1	SIDE ENTRY PIT	900	1100	41.946	825	41.946	**825**	43.71	1.77	VPA STD. DWG. EDCM 601 & 607 (HAUNCHED)
2	SIDE ENTRY PIT	1700	1100			42.10	450	44.08	1.98	VIC ROADS STD DRAWING SD 1023 A (HAUNCHED). CONSTRUCT AS WEIR PIT TO DIVERT 3 MONTH FLOWS
				42.10	825	42.10	825			
3	END WALL			40.52	525			43.01	2.50	PROVIDE END WALL & SCOUR PROTECTION FOR NEW SED POND CONNECTION
4	SIDE ENTRY PIT	900	600	40.65	450	40.61	525	43.20	2.59	VPA STD. DWG. EDCM 601
5	SIDE ENTRY PIT	900	600	40.79	450	40.74	450	43.28	2.54	VPA STD. DWG. EDCM 601
				40.82	300					
6	JUNCTION PIT	900	600	41.72	450	41.67	450	43.73	2.06	VPA STD. DWG. EDCM 605
				41.75	300					
7	SIDE ENTRY PIT	900	1200	41.83	450	41.78	450	43.78	2.00	VPA STD. DWG. EDCM 601 & 607 (HAUNCHED)
				41.86	300					
9	JUNCTION PIT	900	600			41.98	300	44.44	2.46	VPA STD. DWG. EDCM 605
10	JUNCTION PIT	900	600	42.79	300	42.74	300	44.29	1.55	VPA STD. DWG. EDCM 605
11	JUNCTION PIT	900	600	43.22	300	43.17	300	44.35	1.18	VPA STD. DWG. EDCM 605
12	JUNCTION PIT	900	600	43.51	300	43.46	300	44.49	1.03	VPA STD. DWG. EDCM 605
13	JUNCTION PIT	900	600			43.78	300	44.68	0.90	VPA STD. DWG. EDCM 605
15	JUNCTION PIT	900	600	42.57	300	42.38	675	44.39	2.01	VPA STD. DWG. EDCM 605
				42.43	675					
16	SIDE ENTRY PIT	900	600	42.65	300	42.60	300	44.38	1.78	VPA STD. DWG. EDCM 601
				42.65	300					
17	SIDE ENTRY PIT	900	600	43.10	300	43.05	300	44.79	1.74	VPA STD. DWG. EDCM 601
18	SIDE ENTRY PIT	900	600			43.15	300	44.78	1.63	VPA STD. DWG. EDCM 601
20	SIDE ENTRY PIT	900	600	42.11	300	42.07	375	43.70	1.63	VPA STD. DWG. EDCM 601
21	SIDE ENTRY PIT	900	600	42.46	300	42.41	300	44.07	1.66	VPA STD. DWG. EDCM 601
22	SIDE ENTRY PIT	900	600			42.57	300	44.20	1.63	VPA STD. DWG. EDCM 601
23	SIDE ENTRY PIT	900	600			41.94	300	43.78	1.84	VPA STD. DWG. EDCM 601
24	SIDE ENTRY PIT	900	600			42.70	300	44.38	1.68	VPA STD. DWG. EDCM 601
25	END PIPE	900	600			42.45	675	44.69	2.24	CAP OFF END PIPE FOR FUTURE CONNECTION
27	SIDE ENTRY PIT	900	600			40.75	300	42.87	2.13	VPA STD. DWG. EDCM 601
ex1	EXISTING END PIPE	900	600	39.65	825			40.69	1.04	
ex2	EXISTING JUNCTION PIT			40.71	300			41.48	1.03	BREAK OUT EXISTING PIT AND PROVIDE A NEW DN300 CONNECTION
				40.50	825	40.45	825			
ex3	EXISTING JUNCTION PIT			41.70	375			43.30	2.00	CONVERT EXISTING PIT TO SEP AS PER VPA STD. DWG. EDCM 601 & 607 (HAUNCHED)
				41.81	825	41.30	825			
ex4	EXISTING JUNCTION PIT			42.15	825	42.10	825	44.08	1.99	PIT TO BE REMOVED
ex5	EXISTING JUNCTION PIT			42.31	675			44.31	2.07	ADJUSTED PIT COVER TO MATCH FINISH SURFACE
				42.46	600	42.24	825			
ex6	EXISTING JUNCTION PIT			42.56	600	42.51	600	44.76	2.24	ADJUSTED PIT COVER TO MATCH FINISH SURFACE
ex7	EXISTING JUNCTION PIT			42.65	600	42.60	600	44.93	2.33	ADJUSTED PIT COVER TO MATCH FINISH SURFACE
ex8	EXISTING JUNCTION PIT					42.72	600	45.10	2.38	
ex9	EXISTING JUNCTION PIT			41.78	375	41.73	375	43.31	1.58	CONVERT EXISTING PIT TO SEP AS PER VPA STD. DWG. EDCM 601 & 607 (HAUNCHED)

AMENDMENTS

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-F-2
SURVEY BPD
DESIGN D.P
DRAWN D.P
CHECKED

RIVERDALE VILLAGE
STAGE 23
DETAIL DESIGN

MUNICIPALITY WYNDHAM
REFERENCE 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 16 OF 17 | P2

Plotted: 15-Dec-20
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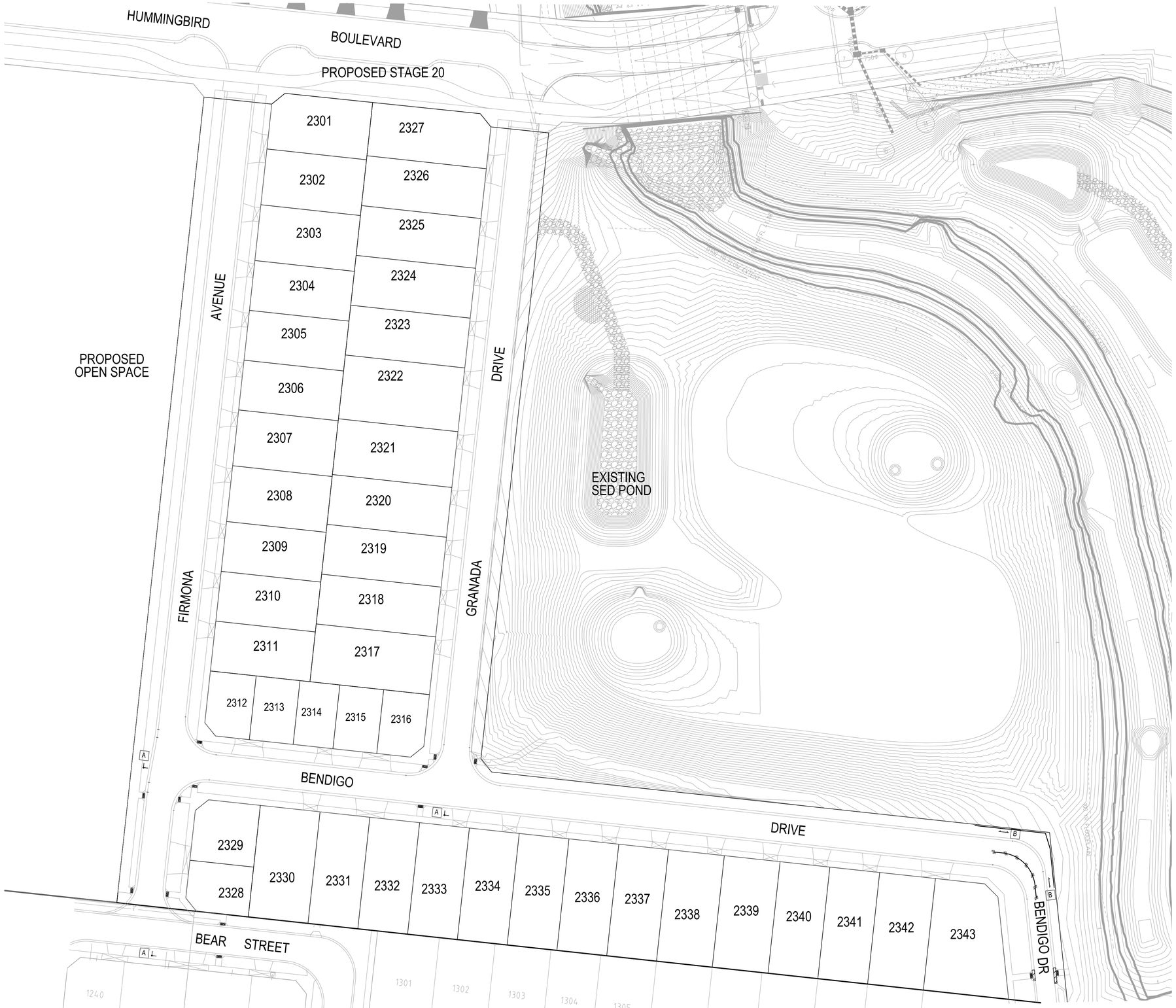

SIGNAGE LEGEND

A STREET SIGN

B CHEVRON SIGNS (D4-1-3) D4-1-3

SIGNAGE & LINE MARKING PLAN

SCALE 1:500

SCALE 1:500 @ A1

10 5 0 10 20 40

LENGTHS ARE IN METRES

AMENDMENTS			
VER	DATE	REMARKS	

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hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	234-F-2
SURVEY	BPD
DESIGN	D.P
DRAWN	D.P
CHECKED	

RIVERDALE VILLAGE STAGE 23 DETAIL DESIGN

MUNICIPALITY: WYNDHAM

REFERENCE: 8557 E/23

SCALE AS SHOWN | DATUM AHD | DATE NOV' 20 | SHEET 18 OF 17 | P2

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Plotted: 15-Dec-20