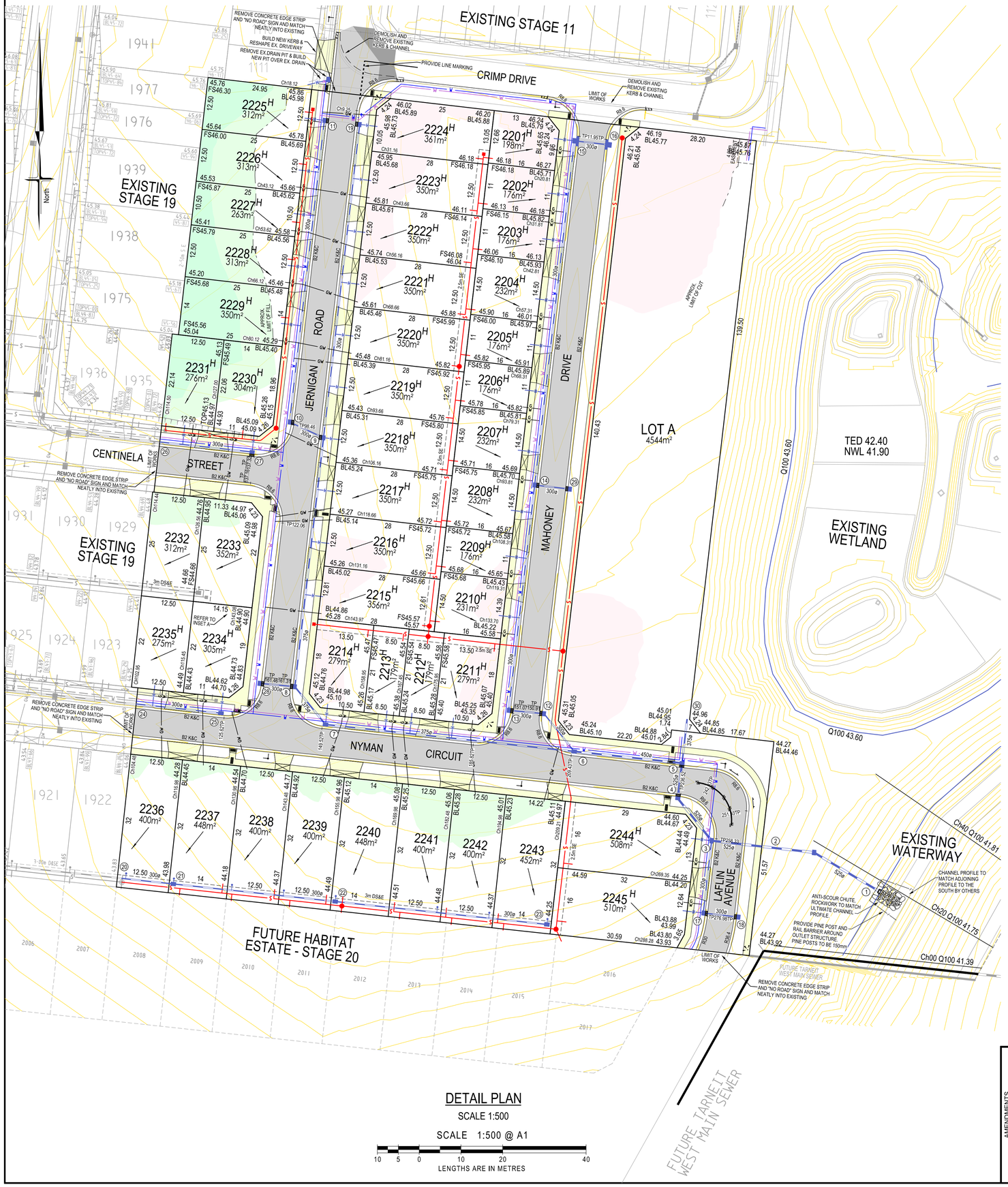


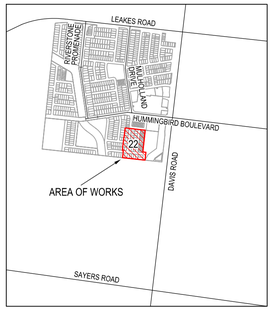
DETAIL PLAN

SCALE 1:500

SCALE 1:500 @ A1

10 5 0 10 20 40

LENGTHS ARE IN METRES



LOCALITY PLAN

SCALE 1:20000

SHEET INDEX

SHT No.	VER	DESCRIPTION
1	I	DETAIL PLAN, SERVICES SCHEDULE & LOCALITY PLAN
2	A	NOTES, PAVEMENT DETAILS & TYPICAL CROSS SECTIONS
3	A	INTERSECTION DETAILS No.1
4	A	INTERSECTION DETAILS No.2
5	A	INTERSECTION DETAILS No.3
6	A	JERNIGAN ROAD LONGITUDINAL SECTION
7	A	JERNIGAN ROAD CROSS SECTION
8	A	MAHONEY DRIVE LONGITUDINAL SECTION
9	A	MAHONEY DRIVE CROSS SECTION
10	A	CENTINELA STREET LONGITUDINAL & CROSS SECTION
11	A	NYMAN CIRCUIT / LAFLIN AVENUE LONGITUDINAL SECTION
12	A	NYMAN CIRCUIT / LAFLIN AVENUE CROSS SECTION
13	B	DRAINAGE LONGITUDINAL SECTION No.1
14	B	DRAINAGE LONGITUDINAL SECTION No.2
15	C	DRAINAGE LONGITUDINAL SECTION No.3 & PIT SCHEDULE
16	C	SIGNAGE & LINEMARKING AND MW CREEK OUTLET DETAIL

SERVICES OFFSETS AND LOCATIONS

Location	Gas	Water		Communications		Electricity		BOK	Road Width	Joint Trenching	Street Classification
		NDW	DW	Cables	Pits	Cables	Poles				
JERNIGAN ROAD	2.15 W	2.65 W	3.15 W	1.85 E	1.78 E/W	2.45 E	1.00 BOK	4.10 E 4.30 W	16.00	G&W, FTTH&E	ACCESS PLACE
CENTINELA STREET	2.20 N	2.70 N	3.20 N	1.85 S	1.78 N/S	2.50 S	1.00 BOK	4.35 N 4.05 S	16.00	G&W, FTTH&E	ACCESS PLACE
NYMAN CIRCUIT	2.20 N	2.70 N	3.20 N	1.80 S	1.78 N/S	2.40 S	1.00 BOK	4.35 N 4.05 S	16.00	G&W, FTTH&E	ACCESS PLACE
LAFLIN AVENUE	2.20 W	2.70 W	3.20 W	1.80 E	1.78 E/W	2.30 E	1.00 BOK	4.05 E 4.35 W	16.00	G&W, FTTH&E	ACCESS PLACE
MAHONEY DRIVE	2.25 W	2.75 W	3.25 W	1.85 E	1.78 E/W	2.40 E	1.00 BOK	4.05 E 4.35 W	16.00	G&W, FTTH&E	ACCESS PLACE
CRIMP CIRCUIT	-	3.25 S	3.75 S	1.85 S	-	2.60 S	1.00 BOK	3.90 N 4.35 S	16.00	G&W, FTTH&E	ACCESS PLACE
FUTURE PAPER ROAD	1.75 E	2.20 E	2.70 E	-	-	-	1.00 BOK		4.00	G&W, FTTH&E	-

[redacted]

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
Asphalt Surface Prop
Concrete Surface Prop (Paths/Driveways/Slabs)
Tree To Be Removed
Tree To Be Retained with Tree Protection Zone (TPZ)

AMENDMENTS			
I	25.02.22	SHEET INDEX AMENDED	
H	11.02.22	LOT 2233 AREA REVISED	
G	24.11.21	G/W CONDUIT LOT 2217 & 2221 RELOCATED, SHEET INEX UPDATED	
F	09.11.21	WATER ALIGNMENT ON CRIMP CIRCUIT AND PAPER LANE AMENDED G/W PROPERTY CONNECTIONS FOR LOTS 2224 & 2225 RELOCATED	
E	29.09.21	LOT2225 & 2212 AREAS AMENDED	
D	16.09.21	PIT 5 TO PIT 30 SWD ALIGNMENT AMENDED, SERVICES OFFSET TABLE & SHEET INDEX UPDATED	
A	09.07.21	ISSUED FOR CCONSTRUCTION	
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	AR
DRAWN	AR
CHECKED	CH

RIVERDALE VILLAGE ESTATE STAGE 22

DETAIL PLAN, SERVICES OFFSET TABLE & LOCALITY PLAN

MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 1 OF 16 | I

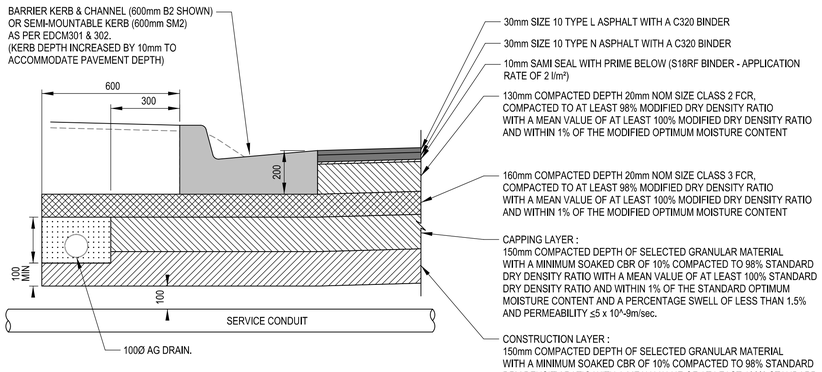
I:\H8554\ENG\ST22\E22_R01_DET.dgn

Plotted: 25/02/2022

NOTES

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH VICTORIAN PLANNING AUTHORITY (VPA) ENGINEERING DESIGN AND CONSTRUCTION MANUAL FOR SUBDIVISION AND 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 "H" 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. REFER TO COUNCIL STD.DWG. SD4-1.
26. THE CONTRACTOR IS TO ARRANGE CCTV OF DRAINAGE AND ACCEPTANCE FROM COUNCIL PRIOR TO INSTALLATION OF THE KERB & CHANNEL AND ASPHALT PLACEMENT.
27. 600 B2 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.

29. - PAVEMENT TO CONSIST OF:



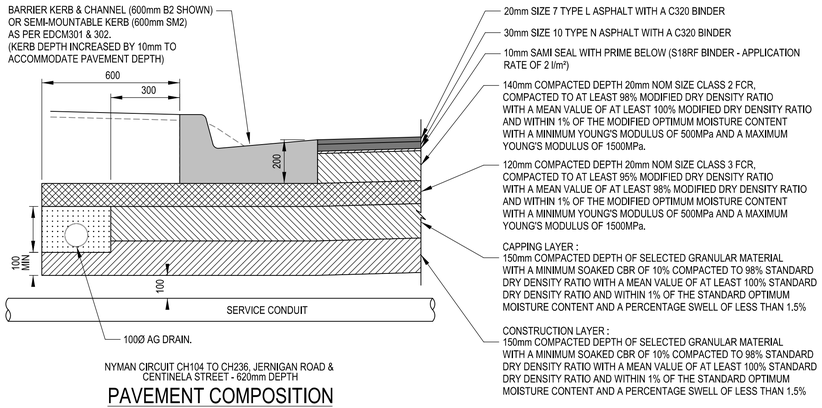
LAFFLIN AVENUE CH236 TO CH288 & MAHONEY DRIVE - 660mm DEPTH

PAVEMENT COMPOSITION

REFER EDCM202a FOR ADDITIONAL DETAILS

(Dimensions in Millimetres)

N.T.S.



NYMAN CIRCUIT CH104 TO CH236, JERNIGAN ROAD & CENTINELA STREET - 620mm DEPTH

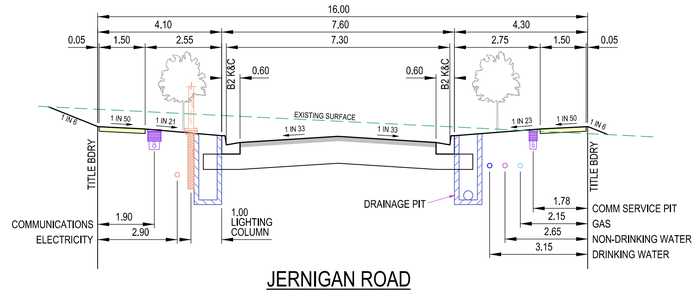
PAVEMENT COMPOSITION

REFER EDCM202a FOR ADDITIONAL DETAILS

(Dimensions in Millimetres)

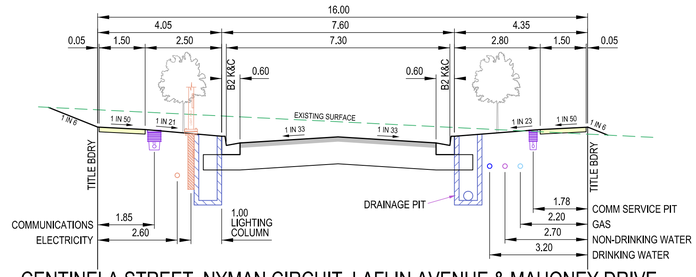
N.T.S.

30. 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.
31. 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.
32. 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.
33. 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.
34. 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).
35. 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.
36. 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.
37. 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.
38. 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.
39. 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).
40. 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.
41. GAS AND WATER CONDUITS TO BE 50mm & 100mm DIAMETER RESPECTIVELY.
42. ALL SERVICE TRENCHES UNDER CONCRETE FOOTPATHS AND VEHICLE CROSSINGS TO BE BACKFILLED WITH CLASS 3 CRUSHED ROCK MATERIAL.
43. 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.
44. 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.
45. FITZROY BOXES TO BE PROVIDED FOR WATER AND GAS TAPPINGS LOCATED UNDER THE BICYCLE PATH FOR LOTS 2004-2006.



JERNIGAN ROAD

ACCESS STREET TYPE 1



CENTINELA STREET, NYMAN CIRCUIT, LAFLIN AVENUE & MAHONEY DRIVE

ACCESS STREET TYPE 1

AMENDMENTS			
A	09.07.21	ISSUED FOR CCONSTRUCTION	
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	AR
DRAWN	AR
CHECKED	CH

RIVERDALE VILLAGE ESTATE
STAGE 22
NOTES, PAVEMENT DETAILS & TYPICAL CROSS SECTIONS

MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE: AS SHOWN | DATUM: AHD | DATE: NOV '21 | SHEET 2 OF 16

Plotted: 25/02/2022

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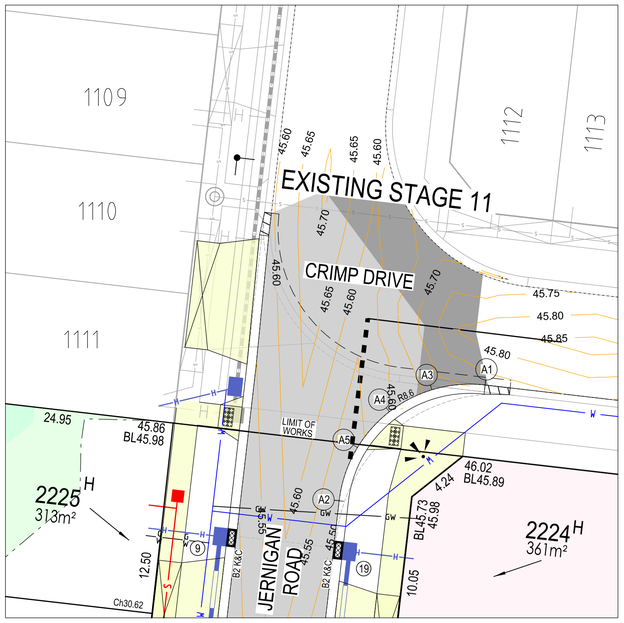
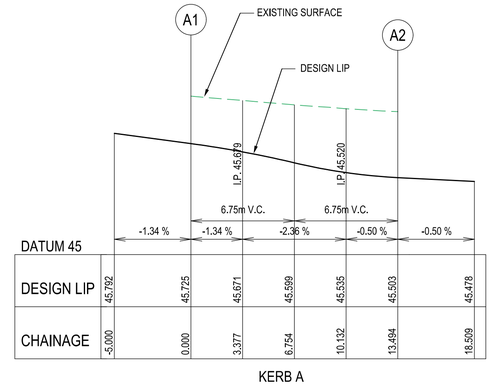


INTERSECTION DETAILS

SCALE 1:200



KERB A

Alignment A

Point no	Easting	Northing	RL
A1	696.645	365.600	45.722
A2	687.162	358.213	45.503
A3	687.162	358.213	45.503
A4	693.097	365.264	45.663
A5	690.392	363.846	45.598

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
A1 - 2	-8.600	12.020	2.459	1.915	45.598

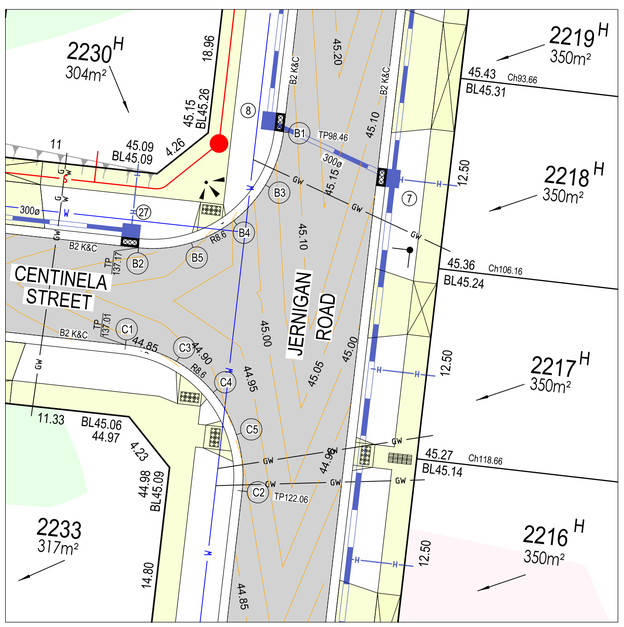
INTERSECTION DETAILS

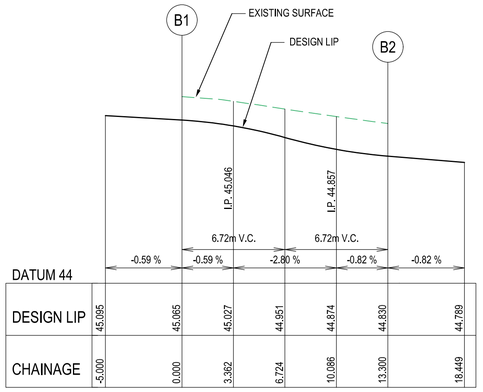
SCALE: HORIZONTAL 1:200
VERTICAL 1:20

SCALE 1:200

4 2 0 4 8 16

LENGTHS ARE IN METRES



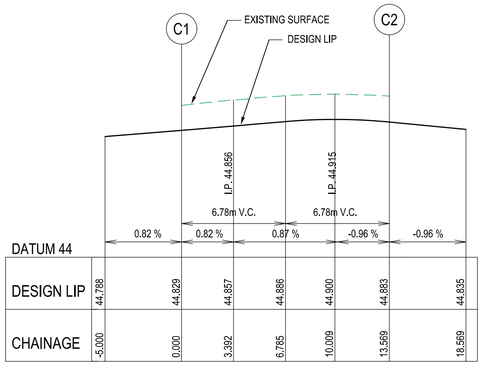


KERB B

Alignment B

Point no	Easting	Northing	RL
B1	671.989	282.589	45.065
B2	662.538	275.174	44.831
B3	670.801	279.238	45.023
B4	668.772	276.958	44.953
B5	666.075	275.531	44.881

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
B1 - 2	8.600	12.012	2.445	1.903	44.953

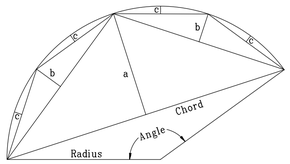


KERB C

Alignment C

Point no	Easting	Northing	RL
C1	661.686	268.829	44.830
C2	669.318	259.443	44.883
C3	665.097	267.705	44.860
C4	667.432	265.705	44.886
C5	668.913	263.012	44.900

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
C1 - 2	8.599	12.097	2.487	1.938	44.886



CURVE SETOUT DIAGRAM

AMENDMENTS

VER	DATE	REMARKS
A	09.07.21	ISSUED FOR CCONSTRUCTION

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	AR
DRAWN	AR
CHECKED	CH

RIVERDALE VILLAGE ESTATE
STAGE 22
INTERSECTION DETAIL No.1

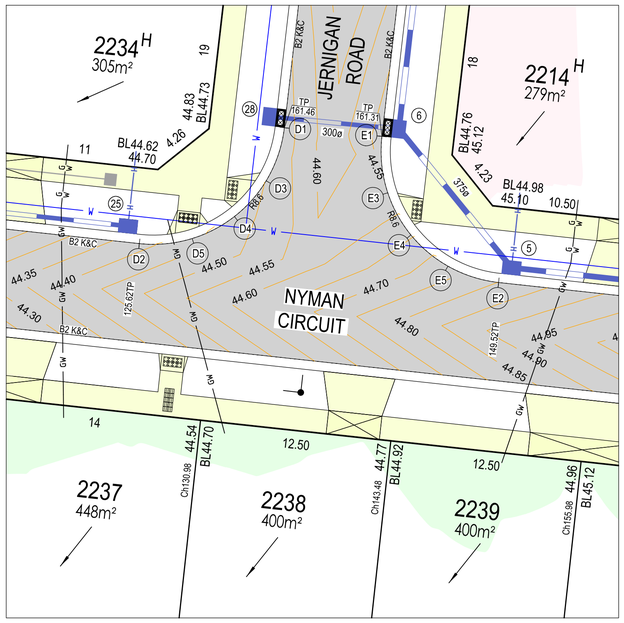
MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 3 OF 16

E:\8554\ENG\ST22\E22_R03_INT1.dgn

Plotted: 25/02/22



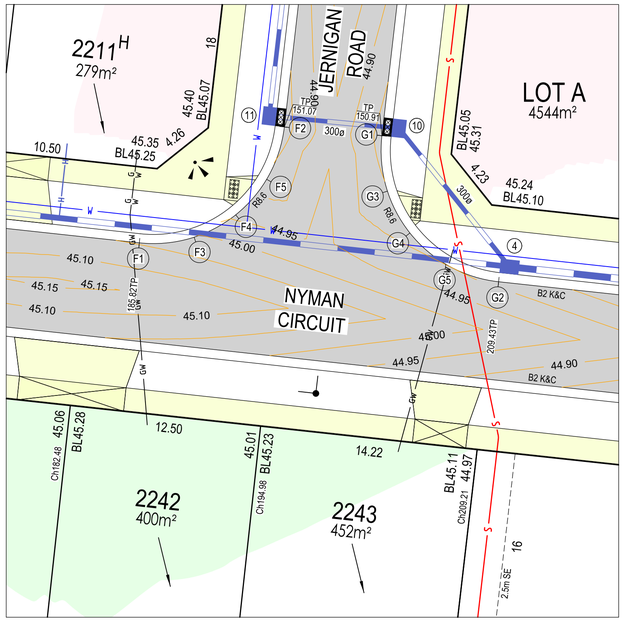
INTERSECTION DETAILS

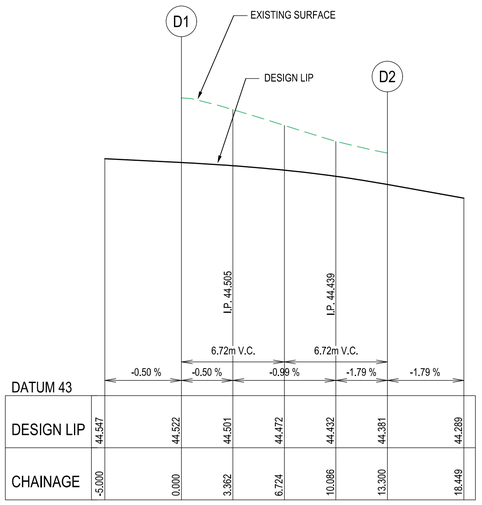
SCALE 1:200

SCALE 1:200

4 2 0 4 8 16

LENGTHS ARE IN METRES





DATUM 43

DESIGN LIP	44.547	44.522	44.501	44.472	44.432	44.381	44.289
CHAINAGE	-5.000	0.000	3.362	6.724	10.086	13.300	18.449

KERB D

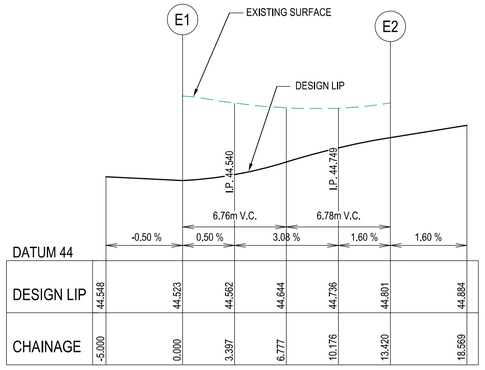
Alignment D

Point no	Easting	Northing	RL
D1	664.767	220.002	44.522
D2	655.317	212.588	44.381
D3	655.317	212.588	44.381
D4	663.579	216.651	44.500
D5	661.551	214.372	44.473

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
D1 - 2	8.600	12.012	2.445	1.903	44.473

INTERSECTION DETAILS

SCALE: HORIZONTAL 1:200
VERTICAL 1:20



DATUM 44

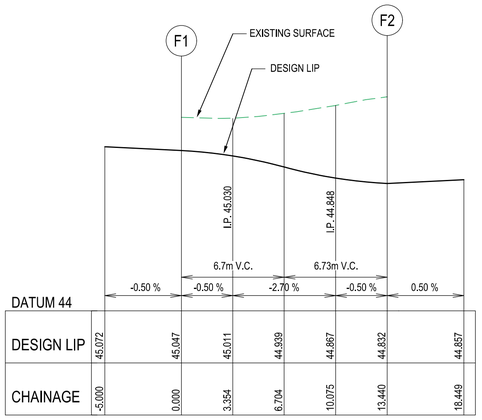
DESIGN LIP	44.548	44.523	44.562	44.644	44.736	44.801	44.884
CHAINAGE	-5.000	0.000	3.397	6.777	10.176	13.420	18.569

KERB E

Alignment E

Point no	Easting	Northing	RL
E1	671.150	219.435	44.523
E2	678.782	210.047	44.801
E3	671.554	215.865	44.566
E4	673.036	213.172	44.642
E5	675.370	211.171	44.727

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
E1 - 2	-8.600	12.099	2.487	1.938	44.642



DATUM 44

DESIGN LIP	45.072	45.047	45.011	44.939	44.867	44.832	44.857
CHAINAGE	-5.000	0.000	3.354	6.704	10.075	13.440	18.449

KERB F

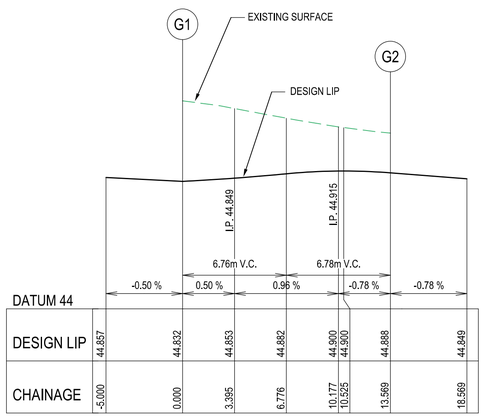
Alignment F

Point no	Easting	Northing	RL
F1	715.022	206.120	45.047
F2	724.491	213.685	44.831
F3	718.604	206.491	45.007
F4	721.315	207.951	44.939
F5	723.338	210.273	44.871

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
F1 - 2	-8.600	12.120	2.498	1.946	44.939

INTERSECTION DETAILS

SCALE: HORIZONTAL 1:200
VERTICAL 1:20



DATUM 44

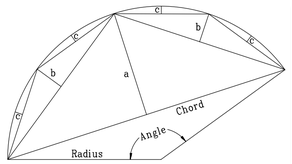
DESIGN LIP	44.857	44.832	44.853	44.882	44.900	44.888	44.849
CHAINAGE	-5.000	0.000	3.395	6.776	10.177	13.569	18.569

KERB G

Alignment G

Point no	Easting	Northing	RL
G1	730.868	213.117	44.832
G2	738.485	203.582	44.888
G3	731.225	209.497	44.855
G4	732.692	206.764	44.882
G5	735.033	204.729	44.899

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
G1 - 2	-8.600	12.205	2.540	1.981	44.882



CURVE SETOUT DIAGRAM

AMENDMENTS			
A	09.07.21	ISSUED FOR CCONSTRUCTION	
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	AR
DRAWN	AR
CHECKED	CH

RIVERDALE VILLAGE ESTATE
STAGE 22
INTERSECTION DETAIL No.2

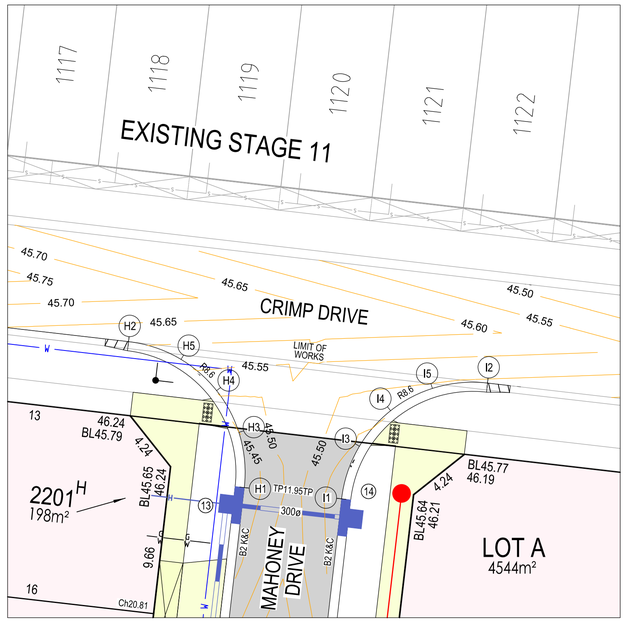
MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 4 OF 16

Plotted: 25/02/2022

E:\8554\ENG\ST22\E22_R04_INT2.dgn



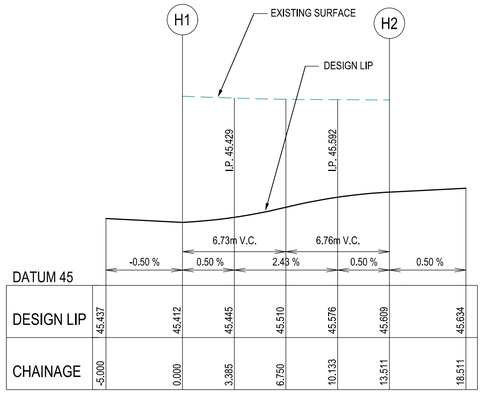
INTERSECTION DETAILS

SCALE 1:200

SCALE 1:200

4 2 0 4 8 16

LENGTHS ARE IN METRES



DATUM 45							
DESIGN LIP	45.437	45.412	45.445	45.510	45.576	45.609	45.634
CHAINAGE	-5.000	0.000	3.385	6.750	10.133	13.511	18.511

KERB H

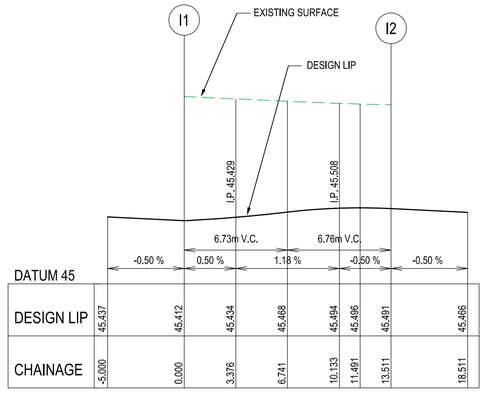
Alignment H

Point no	Easting	Northing	RL
H1	740.434	351.892	45.412
H2	732.875	361.421	45.609
H3	740.083	355.494	45.449
H4	738.629	358.222	45.510
H5	736.303	360.259	45.572

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
H1 - 2	-8.600	12.163	2.519	1.964	45.510

INTERSECTION DETAILS

SCALE: HORIZONTAL 1:200
VERTICAL 1:20



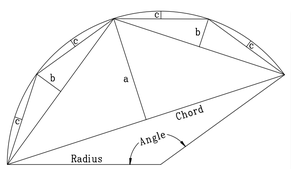
DATUM 45								
DESIGN LIP	45.437	45.412	45.434	45.468	45.494	45.496	45.491	45.466
CHAINAGE	-5.000	0.000	3.376	6.741	10.133	11.491	13.511	18.511

KERB I

Alignment I

Point no	Easting	Northing	RL
I1	746.792	351.158	45.412
I2	756.323	358.716	45.491
I3	747.955	354.586	45.437
I4	749.992	356.911	45.468
I5	752.720	358.365	45.493

Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
I1 - 2	8.600	12.163	2.519	1.964	45.468



CURVE SETOUT DIAGRAM

VER	DATE	REMARKS
A	09.07.21	ISSUED FOR CCONSTRUCTION

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	AR
DRAWN	AR
CHECKED	CH

RIVERDALE VILLAGE ESTATE
STAGE 22
INTERSECTION DETAIL No.3

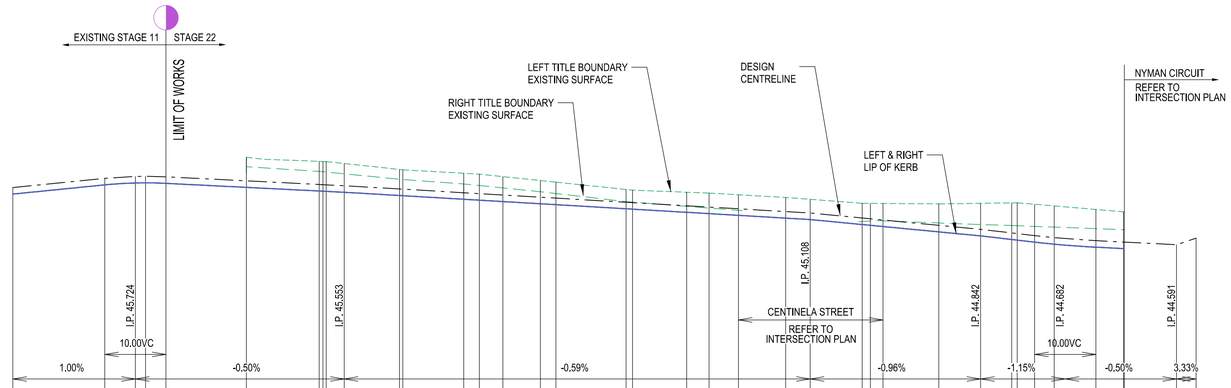
MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 5 OF 16

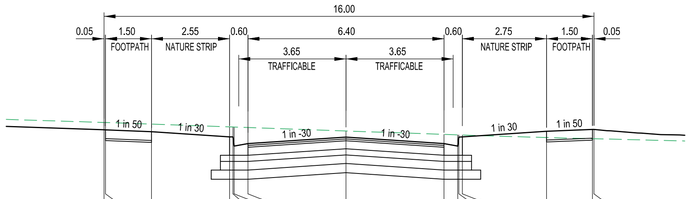
I:\8554\ENG\ST22\E22_R05_INT3.dgn

Plotted: 25/02/2022


EXISTING STAGE 11
STAGE 22
LIMIT OF WORKS
LEFT TITLE BOUNDARY EXISTING SURFACE
RIGHT TITLE BOUNDARY EXISTING SURFACE
DESIGN CENTRELINE
LEFT & RIGHT LIP OF KERB
NYMAN CIRCUIT
REFER TO INTERSECTION PLAN
I.P. 45.724
I.P. 45.553
I.P. 45.108
I.P. 44.842
I.P. 44.682
I.P. 44.591
CENTINELA STREET
REFER TO INTERSECTION PLAN
10.00VC
10.00VC
VC LENGTH
DESIGN GRADELINE
1.00%
-0.50%
-0.59%
-0.96%
-1.15%
-0.50%
3.33%

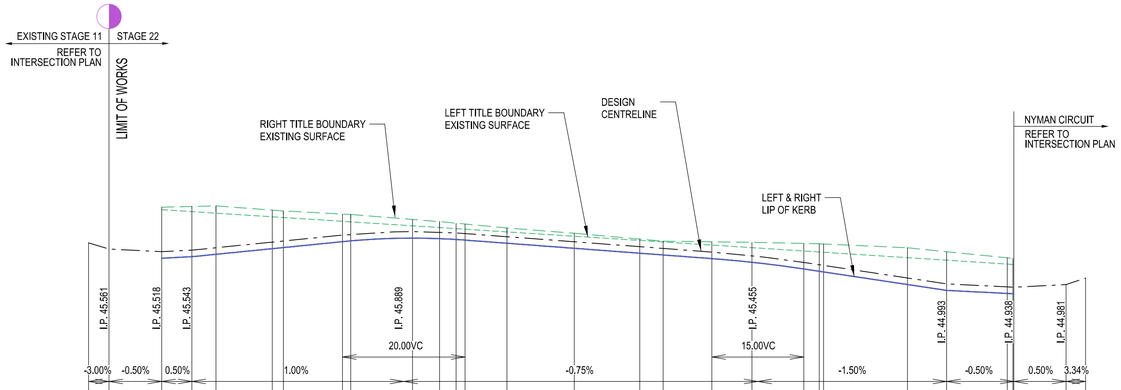
DATUM 42

| | | |


16.00
0.05
1.50
FOOTPATH
2.55
NATURE STRIP
0.60
6.40
3.65
TRAFFICABLE
3.65
TRAFFICABLE
0.60
2.75
NATURE STRIP
1.50
FOOTPATH
0.05
1 in 50
1 in 30
1 in -30
1 in -30
1 in 30
1 in 50

DATUM RL44.0

| | | |

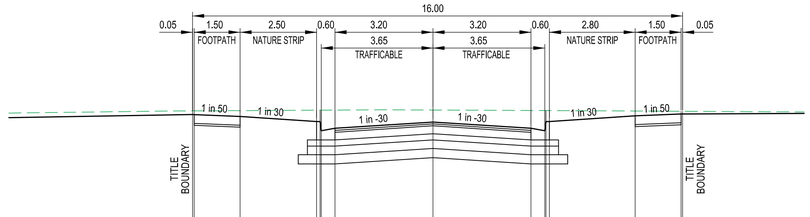


VC LENGTH

DESIGN GRADELINE

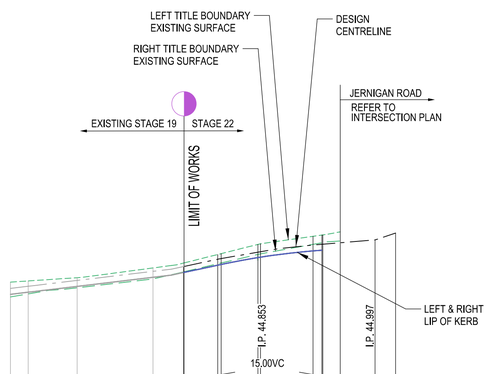
DATUM 43

| | | |


16.00
0.05
1.50 FOOTPATH
2.50 NATURE STRIP
0.60
3.20 3.65 TRAFFICABLE
3.20 3.65 TRAFFICABLE
0.60
2.80 NATURE STRIP
1.50 FOOTPATH
0.05
1 in 50
1 in 30
1 in -30
1 in -30
1 in 30
1 in 50
TITLE BOUNDARY
TITLE BOUNDARY

DATUM RL44.0

| | | |

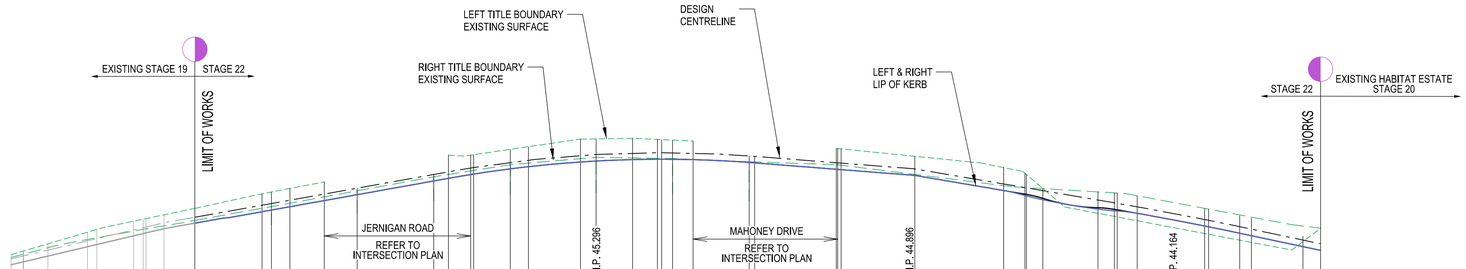


VC LENGTH

DESIGN GRADELINE

DATUM 42

| | | |

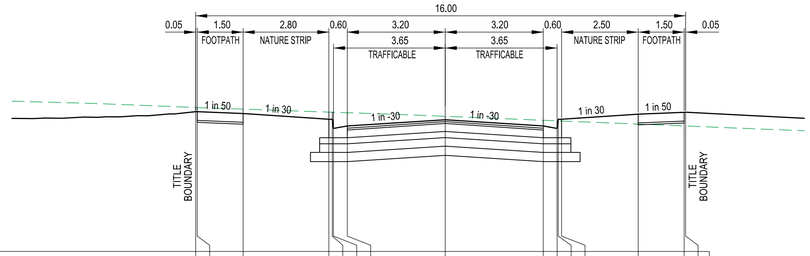

EXISTING STAGE 19
STAGE 22
LIMIT OF WORKS
LEFT TITLE BOUNDARY
EXISTING SURFACE
RIGHT TITLE BOUNDARY
EXISTING SURFACE
DESIGN
CENTRELINE
LEFT & RIGHT
LIP OF KERB
STAGE 22
EXISTING HABITAT ESTATE
STAGE 20
LIMIT OF WORKS
JERNIGAN ROAD
REFER TO
INTERSECTION PLAN
I.P. 45.296
MAHONEY DRIVE
REFER TO
INTERSECTION PLAN
I.P. 44.896
I.P. 44.164
50.00VC
20.00VC
VC LENGTH
DESIGN GRADELINE
2.36%
1.79%
1.79%
-0.78%
-1.70%
-2.12%

DATUM 42

| | | |

LEGEND

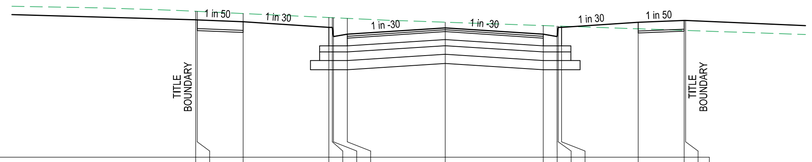
- EXISTING SURFACE
- DESIGN SURFACE
- TYPE A SELECTED MATERIAL FILL (REFER TO CONSTRUCTION NOTE 17)



DATUM RL43.0

DESIGN SURFACE	45.28	45.28	45.25	45.16	45.16	45.01	45.05	45.15	45.05	45.01	45.16	45.16	45.24	45.27	45.27
EXISTING SURFACE	45.35	45.35	45.32	45.27	45.27	45.27	45.26	45.20	45.14	45.13	45.13	45.13	45.08	45.05	45.05
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	6.30	7.80	7.85

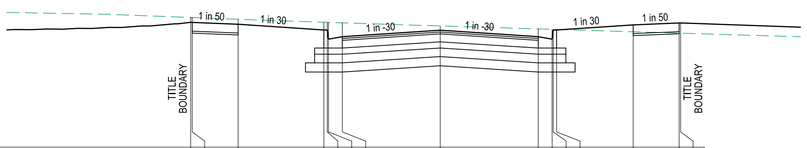
CH 185.82



DATUM RL43.0

DESIGN SURFACE	45.24	45.24	45.21	45.12	45.12	44.97	45.01	45.11	45.01	44.97	45.12	45.12	45.20	45.23	45.23
EXISTING SURFACE	45.38	45.38	45.35	45.28	45.28	45.28	45.27	45.20	45.15	45.14	45.14	45.14	45.10	45.07	45.07
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	6.30	7.80	7.85

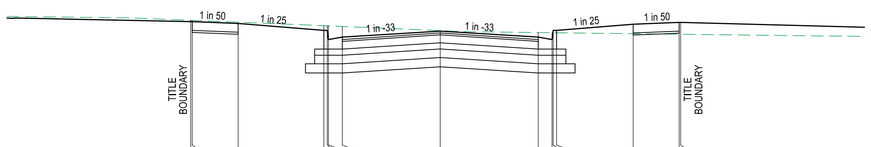
CH 167.45



DATUM RL43.0

DESIGN SURFACE	45.04	45.04	45.01	44.91	44.91	44.76	44.80	44.91	44.80	44.76	44.91	44.91	45.00	45.03	45.03
EXISTING SURFACE	45.12	45.12	45.09	45.04	45.04	45.04	45.03	44.98	44.93	44.92	44.92	44.92	44.88	44.86	44.86
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	6.30	7.80	7.85

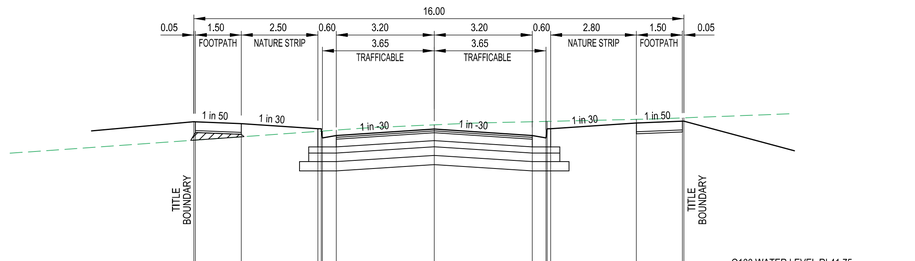
CH 149.52



DATUM RL42.0

DESIGN SURFACE	44.26	44.26	44.23	44.12	44.12	43.97	44.01	44.11	44.01	43.97	44.12	44.12	44.22	44.25	44.25
EXISTING SURFACE	44.28	44.28	44.25	44.20	44.19	44.19	44.18	44.12	44.08	44.08	44.08	44.08	44.07	44.06	44.06
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	6.30	7.80	7.85

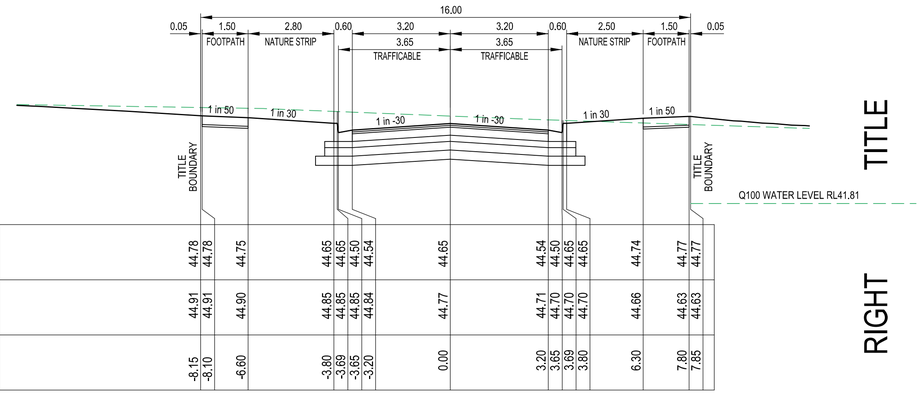
CH 104.48



DATUM RL41.0

DESIGN SURFACE	44.19	44.19	44.16	44.07	44.07	43.92	43.96	44.07	43.96	43.92	44.07	44.07	44.17	44.20	44.20
EXISTING SURFACE	43.89	43.89	43.94	44.03	44.03	44.04	44.05	44.14	44.19	44.19	44.19	44.20	44.23	44.25	44.25
OFFSET	-7.85	-7.80	-6.30	-3.80	-3.69	-3.65	-3.20	0.00	3.20	3.65	3.69	3.80	6.60	8.10	8.15

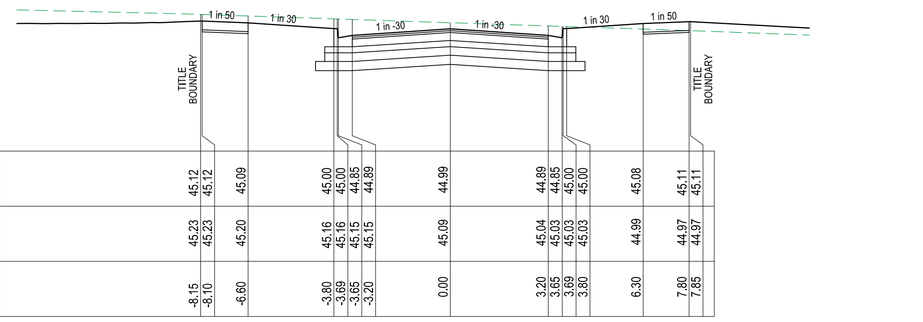
CH 269.35



DATUM RL43.0

DESIGN SURFACE	44.78	44.78	44.75	44.65	44.65	44.50	44.54	44.65	44.54	44.50	44.65	44.65	44.74	44.77	44.77
EXISTING SURFACE	44.91	44.91	44.90	44.85	44.85	44.85	44.84	44.77	44.71	44.70	44.70	44.70	44.66	44.63	44.63
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	6.30	7.80	7.85

CH 236.52



DATUM RL43.0

DESIGN SURFACE	45.12	45.12	45.09	45.00	45.00	44.85	44.89	44.99	44.89	44.85	45.00	45.00	45.08	45.11	45.11
EXISTING SURFACE	45.23	45.23	45.20	45.16	45.16	45.15	45.15	45.09	45.04	45.03	45.03	45.03	44.99	44.97	44.97
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	6.30	7.80	7.85

CH 209.43

LEFT TITLE BOUNDARY

RIGHT TITLE BOUNDARY

LEFT TITLE BOUNDARY

RIGHT TITLE BOUNDARY

NYMAN CIRCUIT / LAFLIN AVENUE

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

VER	DATE	REMARKS
A	09.07.21	ISSUED FOR CCONSTRUCTION

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	AR
DRAWN	AR
CHECKED	CH

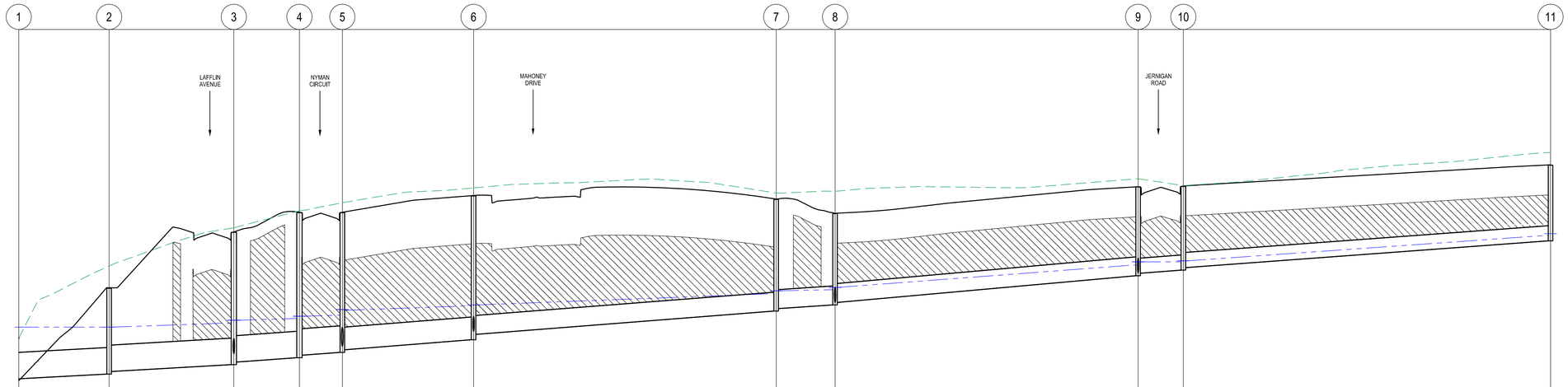
RIVERDALE VILLAGE ESTATE
STAGE 22
NYMAN CIRCUIT / LAFLIN AVENUE
CROSS SECTIONS

MUNICIPALITY: WYNDHAM
REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 12 OF 16

Plotted: 2/10/2022

I:\H8554\ENG\ST22\E22_R12_NC XS.dgn



VELOCITY (m/sec)	0.00m/s	1.48m/s	1.62m/s	1.62m/s	1.57m/s	1.39m/s	1.25m/s	1.49m/s	1.14m/s	1.17m/s	
DESIGN (m3/s)	0.24m3/s	0.25m3/s	0.23m3/s	0.23m3/s	0.17m3/s	0.11m3/s	0.10m3/s	0.09m3/s	0.03m3/s	0.02m3/s	
CAPACITY (m3/s)	0.00m3/s	0.32m3/s	0.35m3/s	0.35m3/s	0.25m3/s	0.15m3/s	0.14m3/s	0.16m3/s	0.08m3/s	0.08m3/s	
DIAMETER AND TYPE (CLASS 2)	525 RRJ	525 RRJ	525 RRJ	525 RRJ	450 RRJ	375 RRJ	375 RRJ	375 RRJ	300 RRJ	300 RRJ	
GRADE	1 in 190	1 in 180	1 in 150	1 in 150	1 in 130	1 in 130	1 in 161	1 in 114	1 in 145	1 in 137	
DATUM RL	37.0										
DEPTH FS TO INVERT	-0.031 -0.036	1.710 1.660	2.628 2.578	2.885 2.835	2.776 2.726	2.858 2.751	2.220 2.170	1.816 1.766	1.764 1.714	1.669 1.619	1.507
HGL LEVEL	42.400	42.400	42.482 42.536	42.572 42.615	42.638 42.748	42.824 42.838	43.065 43.120	43.142 43.167	43.634 43.693	43.694 43.715	44.220 44.253
INVERT	41.375	41.469 41.519	41.657 41.707	41.793 41.843	41.900 41.950	42.150 42.257	42.718 42.768	42.840 42.890	43.418 43.468	43.520 43.580	44.109
FINISHED SURFACE	41.339	43.180	44.285	44.678	44.676	45.008	44.938	44.656	45.182	45.199	45.617
NATURAL SURFACE	42.176	43.611	44.370	44.704	44.865	45.159	45.057	45.091	45.341	45.206	45.862
CHAINAGE	0.000	17.898	42.601	55.591	64.092	90.082	150.004	161.672	221.687	230.642	303.366
	L=17.898m	L=24.704m	L=12.990m	L=8.501m	L=25.990m	L=59.922m	L=11.668m	L=60.015m	L=8.955m	L=72.724m	

DRAINAGE LONGITUDINAL SECTIONS

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		
B	26.07.21	DRAINAGE LONG SECTION AMENDED
A	09.07.21	ISSUED FOR CCONSTRUCTION
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 AR
DRAWN AR
CHECKED CH

RIVERDALE VILLAGE ESTATE
STAGE 22
DRAINAGE LONGITUDINAL SECTION No.1

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 13 OF 16 | B

Plotted: 2/10/2022
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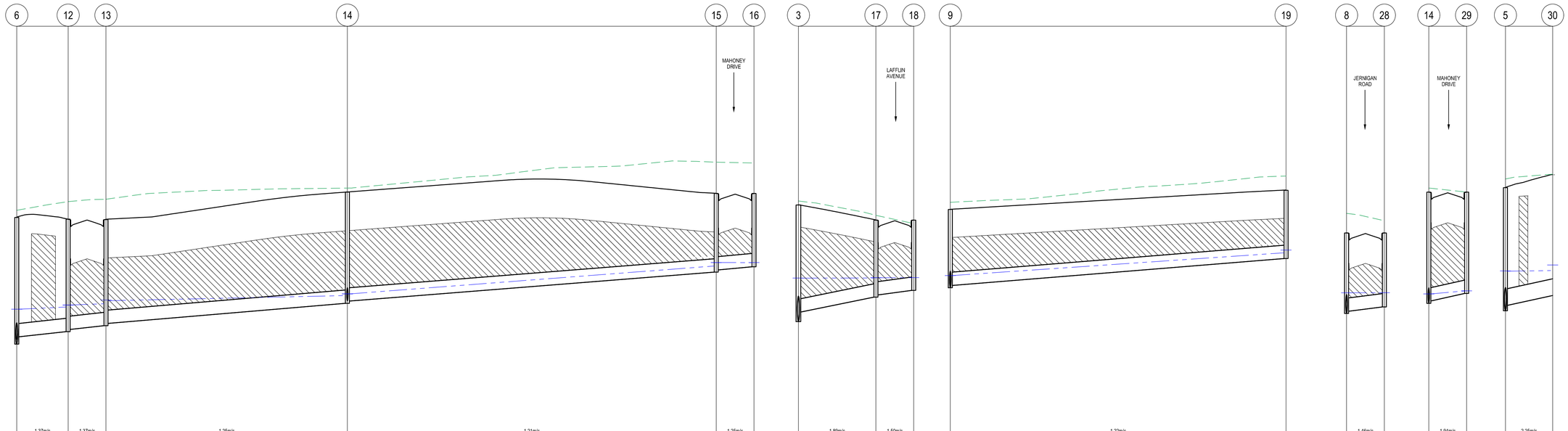

VELOCITY (m/sec)		1.37m/s		1.37m/s		1.25m/s		1.21m/s		1.25m/s		1.89m/s		1.50m/s		1.22m/s		1.46m/s		1.94m/s		2.25m/s	
DESIGN (m3/s)		0.06m3/s		0.06m3/s		0.05m3/s		0.03m3/s		0.01m3/s		0.01m3/s		0.01m3/s		0.03m3/s		0.00m3/s		0.01m3/s		0.06m3/s	
CAPACITY (m3/s)		0.10m3/s		0.10m3/s		0.09m3/s		0.09m3/s		0.09m3/s		0.13m3/s		0.11m3/s		0.09m3/s		0.10m3/s		0.14m3/s		0.25m3/s	
DIAMETER AND TYPE (CLASS 2)		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		300 RRJ		375 RRJ	
GRADE		1 in 100		1 in 100		1 in 120		1 in 127		1 in 120		1 in 52.2		1 in 82.8		1 in 125		1 in 87.9		1 in 50		1 in 50	
DATUM RL		38.0										37.0				38.0				38.0		38.0		37.0	
DEPTH FS TO INVERT	2.858	2.693	2.530	2.480	2.394	2.344	2.504	2.454	1.773	1.723	1.652	2.628	2.413	1.737	1.687	1.584	1.764	1.712	1.542	1.816	1.766	1.668	2.504	2.452	2.282	2.776	2.654	2.730
HGL LEVEL	42.920	42.935	42.985	43.029	43.059	43.141	43.242	43.280	43.907	43.986	43.964	43.986	42.582	42.635	42.638	42.643	42.643	42.646	43.634	43.693	44.205	44.265	43.259	43.305	43.304	43.306	43.242	43.280	43.347	43.349	42.714	42.796	42.805
INVERT	42.150	42.315	42.431	42.481	42.566	42.616	43.068	43.118	43.770	43.820	43.891	41.657	41.872	42.206	42.256	42.359	43.418	43.470	44.074	42.840	42.890	42.987	43.068	43.120	43.290	41.900	42.022	42.234
FINISHED SURFACE	45.008		44.960		44.960		45.572		45.543		45.543	44.285		43.943		43.943	45.182		45.617	44.656		44.655	45.572		45.572	44.676		44.964
NATURAL SURFACE	45.159		45.355		45.409		45.660		46.242		46.225	44.370		44.048		43.858	45.341		45.931	45.091		44.925	45.660		45.571	44.865		44.973
CHAINAGE	0.000		11.569		20.076		74.395		157.387		165.887	0.000		17.430		25.930	0.000		75.545	0.000		8.502	0.000		8.500	0.000		10.618
		L=11.569m		L=8.507m		L=54.319m		L=82.993m		L=8.500m			L=17.430m		L=8.500m			L=75.545m			L=8.502m			L=8.500m			L=10.618m	

DRAINAGE LONGITUDINAL SECTIONS

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		
B	16.09.21	DRAINAGE LS PIT 5 TO 30 AMENDED
A	09.07.21	ISSUED FOR CCONSTRUCTION
VER	DATE	REMARKS

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land surveyors civil engineers
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telephone 8823 2300
fax no. 8823 2310

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

RIVERDALE VILLAGE ESTATE
STAGE 22
DRAINAGE LONGITUDINAL SECTION No.2

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 14 OF 16 | B

Plotted: 25/02/2022

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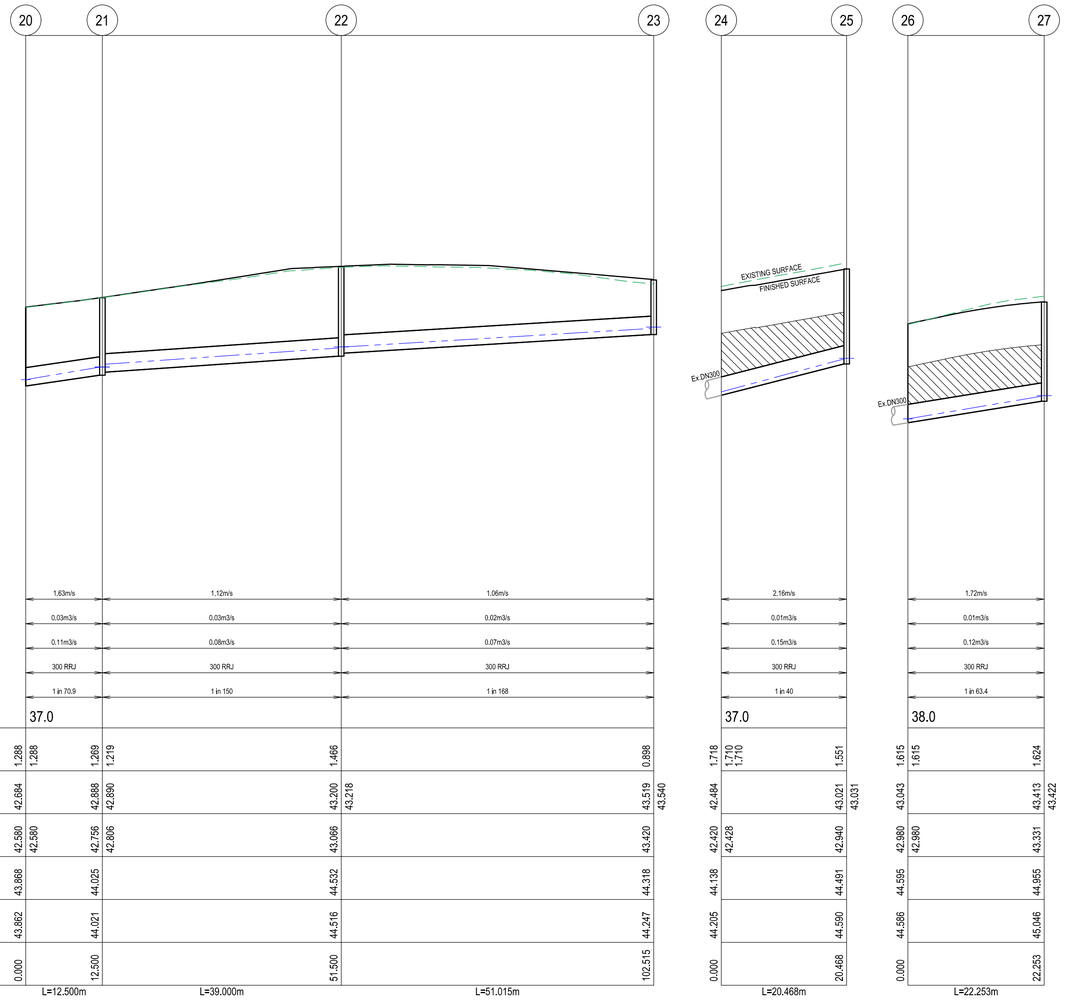

PIT SCHEDULE

PIT No.	PIT DESCRIPTION	LENGTH	WIDTH	INLET INVERT	INLET DIA	OUTLET INVERT	OUTLET DIA	TOP PIT RL	DEPTH INVERT	REMARKS
1	END OF PIPE			41.38	525			42.18	0.81	CONNECT TO EX PIPE
2	JUNCTION PIT	900	900	41.52	525	41.47	525	43.17	1.70	EDCM STD DWG 605 (HAUNCHED)
3	JUNCTION PIT	900	900	41.71	525	41.66	525	44.28	2.62	EDCM STD DWG 605 (HAUNCHED)
				41.87	300					
4	GRATED SIDE ENTRY PIT	900	900	41.84	525	41.79	525	44.67	2.88	EDCM STD DWG 601 (HAUNCHED)
5	GRATED SIDE ENTRY PIT	900	900	41.95	450	41.90	525	44.67	2.77	EDCM STD DWG 601 (HAUNCHED)
				42.02	375					
6	JUNCTION PIT	900	600	42.26	375	42.15	450	45.00	2.85	EDCM STD DWG 605
				42.32	300					
7	JUNCTION PIT	900	600	42.77	375	42.72	375	44.93	2.21	EDCM STD DWG 605
8	GRATED SIDE ENTRY PIT	900	600	42.89	375	42.84	375	44.65	1.81	EDCM STD DWG 601
				42.89	300					
9	GRATED SIDE ENTRY PIT	900	600	43.47	300	43.42	375	45.18	1.76	EDCM STD DWG 601
				43.47	300					
10	GRATED SIDE ENTRY PIT	900	600	43.58	300	43.53	300	45.19	1.66	EDCM STD DWG 601
11	GRATED SIDE ENTRY PIT	900	600			44.11	300	45.61	1.50	EDCM STD DWG 601
12	GRATED SIDE ENTRY PIT	900	600	42.48	300	42.43	300	44.96	2.53	EDCM STD DWG 601
13	GRATED SIDE ENTRY PIT	900	600	42.62	300	42.57	300	44.95	2.38	EDCM STD DWG 601
14	GRATED SIDE ENTRY PIT	900	600	43.12	300	43.07	300	45.57	2.50	EDCM STD DWG 601
				43.12	300					
15	GRATED SIDE ENTRY PIT	900	600	43.82	300	43.77	300	45.54	1.77	EDCM STD DWG 601
16	GRATED SIDE ENTRY PIT	900	600			43.89	300	45.54	1.65	EDCM STD DWG 601
17	GRATED SIDE ENTRY PIT	900	600	42.26	300	42.21	300	43.94	1.73	EDCM STD DWG 601
18	GRATED SIDE ENTRY PIT	900	600			42.36	300	43.94	1.58	EDCM STD DWG 601
19	GRATED SIDE ENTRY PIT	900	600			44.07	300	45.61	1.54	EDCM STD DWG 601
20	END OF PIPE			42.58	300			43.86	1.28	
21	JUNCTION PIT	900	600	42.81	300	42.76	300	44.02	1.26	EDCM STD DWG 605
22	JUNCTION PIT	900	600	43.12	300	43.07	300	44.53	1.46	EDCM STD DWG 605
23	JUNCTION PIT	900	600			43.42	300	44.31	0.89	EDCM STD DWG 605
24	END OF PIPE			42.43	300			44.13	1.71	
25	JUNCTION PIT	900	600			42.94	300	44.49	1.55	EDCM STD DWG 605
26	END OF PIPE			42.98	300			44.59	1.61	
27	GRATED SIDE ENTRY PIT	900	600			43.33	300	44.95	1.62	EDCM STD DWG 601
28	GRATED SIDE ENTRY PIT	900	600			42.99	300	44.65	1.66	EDCM STD DWG 601
29	GRATED SIDE ENTRY PIT	900	600			43.29	300	45.57	2.28	EDCM STD DWG 601
30	END OF PIPE					42.23	375	44.96	2.73	CAP & SEAL FOR FUTURE

DRAINAGE LONGITUDINAL SECTIONS

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
C	16.09.21	DRAINAGE PIT SCHEDULE AMENDED
B	26.07.21	DRAINAGE PIT SCHEDULE AMENDED
A	09.07.21	ISSUED FOR CCONSTRUCTION

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 AR
DRAWN AR
CHECKED CH

RIVERDALE VILLAGE ESTATE STAGE 22

DRAINAGE LONGITUDINAL SECTION No.3 & PIT SCHEDULE

MUNICIPALITY WYNDHAM
REFERENCE 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 15 OF 16 | C

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Plotted: 25/02/2022

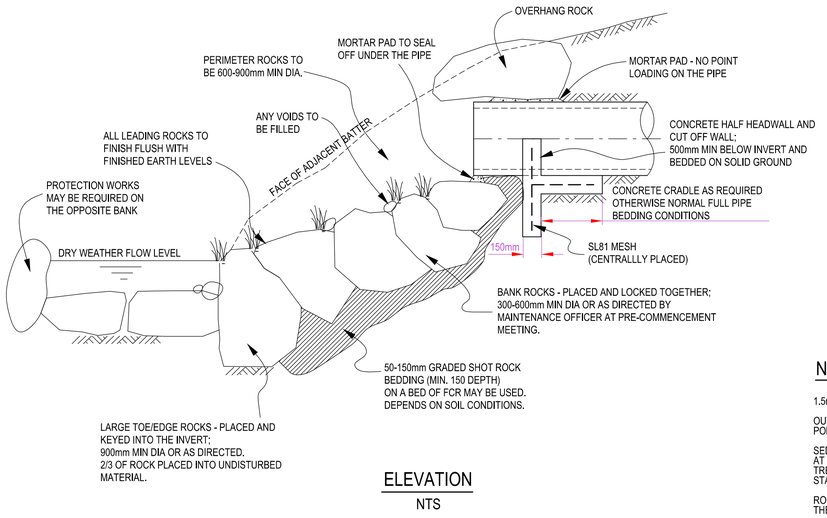
SIGNAGE & LINEMARKING PLAN

SCALE 1:500

SCALE 1:500 @ A1

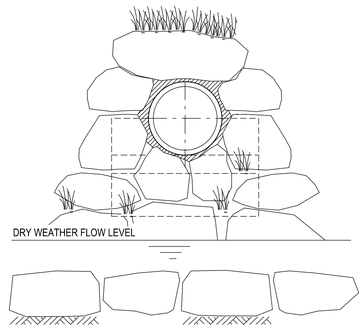
10 5 0 10 20 40

LENGTHS ARE IN METRES



ELEVATION

NTS



FRONT VIEW

NTS

PROCEDURE:

PRIOR TO THE COMMENCEMENT OF WORKS, ASSET SERVICES OFFICER TO BE CONTACTED TO DISCUSS ON SITE THE PROPOSED WORKS AND "PERMIT TO WORK". PROVIDE AT LEAST 5 WORKING DAYS NOTICE.

THE CONSTRUCTION WORK ON THE WATERWAY, AND REINSTATEMENT OF THE AFFECTED AREA IS TO BE CARRIED OUT TO THE SATISFACTION OF MELBOURNE WATER'S MAINTENANACE COORDINATOR.

EXCAVATE/BOX OUT TO ENABLE TOE AND PERIMETER ROCKS TO BE PLACED FIRST.

KEY TOE ROCKS TO TWO THIRDS DIAMETER INTO UNDISTURBED MATERIAL.

INFILL THE CHUTE WITH ROCK SPALLS. THE CONTRACTOR SHALL USE METHODS FOR HANDLING AND PLACEMENT OF ROCK THAT WILL AVOID SEGREGATION OF ROCK SIZE FRACTIONS.

ROCK SHALL BE CAREFULLY PLACED INTO POSITION. ROCK SHALL NOT BE DUMPED DIRECTLY. IT IS IMPERATIVE THAT ROCK SPALLS USED TO FORM THE ROCK CHUTE ARE WELL GRADED WITH MINIMAL VOIDS TO PRODUCE A BLANKET OF INTERLOCKING ROCK.

MW CREEK OUTLET DETAIL AT PIT 1

NOTES:

1.5m/SEC MAX. OUTLET VELOCITY.

OUTLET PIPE TO BE SET BACK INTO THE FINISHED BATTER SLOPE, POINTING A MAX. OF 45 DEGREES DOWNSTREAM.

SEDGES AND GRASSES MUST BE PLACED IN BETWEEN VOIDS WITHIN ROCK CHUTE AT 3-4 PLANTS PER m2 TO PROVIDE ADDITIONAL SCREENING. SHRUBS & SMALL TREES MUST ALSO BE PLACED AROUND THE POST BARRIER TO SCREEN FLOWS AND STABILISE THE GROUND WHERE NEEDED.

ROCKS ABUTTING THE PIPE TO HAVE A MORTAR PAD BETWEEN THE ROCK AND THE OUTSIDE EDGE OF THE PIPE (NO POINT LOADING).

ROCKWORK PROTECTION REQUIRED FOR THE BED AND BANKS, FROM THE END OF PIPE TO THE LOW FLOW WATER LEVEL. ROCK PROTECTION REQUIRED FOR THE FULL EROSION PROJECTION OF THE OPPOSITE BANK AND BED AS REQUIRED FOR THE WATER FLOW PROFILE WHEN THE OUTLET IS FLOWING FULL.

ROCKS WITHIN THE BASE TO BE PLACED ON A FCR BEDDING TO ENSURE THE STORMWATER DISCHARGE IS FLOWING OVER AND AROUND THE ROCKS DOWN INTO THE CREEK, AND NOT UNDERNEATH. THE REMAINING EXPOSED DIMENSION OF THE ROCKWORK IS TO BE A MINIMUM OF 150mm.

DISTURBED AREAS OF EXISTING BANK RESULTING FROM THESE WORKS ARE TO BE STABILISED WITH REVEGETATION.

THE OUTLET MUST BE INTEGRATED INTO THE BANK AND SURROUNDING LANDSCAPE TO MAXIMISE AESTHETICS AND MINIMISE IMPACTS.

TOE AND SIDE ROCKS ARE TO BE ADEQUATELY KEYED INTO THE BED OF THE CREEK.

ALL VOIDS SHALL BE FILLED WITH SMALLER ROCKS.

APPROPRIATE SILT/DEBRIS CONTROL MEASURES MUST BE INSTALLED.

PINE POST (150mm DIA) AND RAIL BARRIER TO BE INSTALLED AROUND OUTLET STRUCTURE. RAILS MUST BE PERMANENTLY FIXED TO POSTS WITH NO ROTATIONAL MOVEMENT.

SIGNAGE LEGEND

- S2 — STREET SIGN (DOUBLE)
- S7 — D4-1-3
- TGSI DIRECTIONAL
- TGSI KERB RAMP
- RRPM

NOTES

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

b) INDICATES UNIDIRECTIONAL & BIDIRECTIONAL RRPM'S PLACED AT 6.00m CTS

c) SWLM - INDICATES SOLID WHITE "LONGLIFE" LINE MARKING
BWLM - INDICATES BROKEN WHITE "LONGLIFE" LINE MARKING

AMENDMENTS		
C	25.02.22	LOT 2233 SUBSTATION REMOVED
B	26.07.21	MW CREEK OUTLET DETAIL ADDED
A	09.07.21	ISSUED FOR CCONSTRUCTION
VER	DATE	REMARKS

breese pitt dixon pty. ltd.
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fax no. 8823 2310

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

RIVERDALE VILLAGE ESTATE
STAGE 22
SIGNAGE & LINEMARKING AND
MW CREEK OUTLET DETAIL

MUNICIPALITY: WYNDHAM

REFERENCE: 8554 E/22

SCALE AS SHOWN | DATUM AHD | DATE NOV '21 | SHEET 16 OF 16 | C

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Plotted: 25/02/202