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EWFW CONSULTING ENGINEERS
LEVEL 4, 360-362 KENT STREET, SYDNEY NSW 2000
t: 1300 553 654
e: ewfw@ewfw.com.au
w: www.ewfw.com.au

ISO 9001 Quality Management

To:	**Pablo Alvarez** **DesignInc** **Level 12, 77 Pacific Highway North Sydney NSW 2060**
Project Name:	**Lindfield Learning Village Stage 2 and 3**
Address:	**Eton Road, Lindfield**
Project Number:	**21951**
Part Number:	**001**

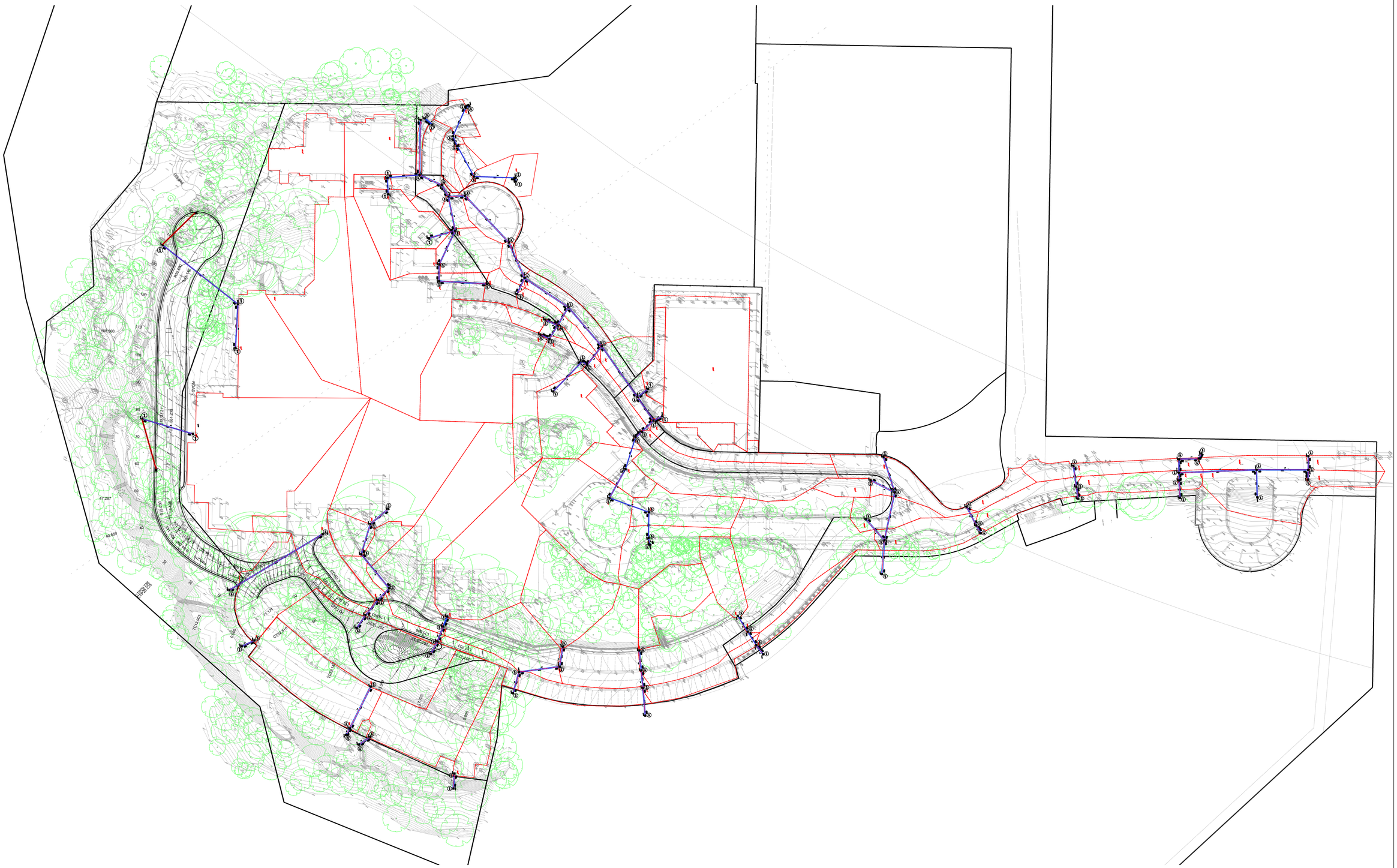
Authorised by: **CV** Printed by: **CV** Sheet No. Sheet No. **1** **of** **1**

Stage:	AS-As Builts	C-For Construction	CO-Co-ordination	**DAY**	**11**	**22**	**16**	**17**													
	CT-Contract	FA-For Approval	P-Preliminary	**MONTH**	**06**	**06**	**07**	**04**													
	R-For Review	T-Tender	W-Workshop	**YEAR**	**17**	**19**	**19**	**20**													
Media:	CD - Disc	E-Email	P - Print	**STAGE**	**R**	**R**	**R**	**R**													
	O - Original	U - Upload		**MEDIA**	**E**	**E**	**E**	**E**													

DESCRIPTION	**DWG No.**	**ISSUE**																	
ELECTRICAL SERVICES																			
Overall Site Plan	**C-100**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 1 of 7	**C-101**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 2 of 7	**C-102**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 3 of 7	**C-103**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 4 of 7	**C-104**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 5 of 7	**C-105**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 6 of 7	**C-106**	**A**	**B**		**C**														
Drainage Layout Plan Sheet 7 of 7	**C-107**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 1 of 8	**C-111**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 2 of 8	**C-112**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 3 of 8	**C-113**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 4 of 8	**C-114**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 5 of 8	**C-115**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 6 of 8	**C-116**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 7 of 8	**C-117**	**A**	**B**		**C**														
Drainage Longitudinal Section 1% AEP Results Sheet 8 of 8	**C-118**	**A**	**B**		**C**														
Proposed New Bus Road	**C-150**	**A**		**B**	**C**														
REPORTS																			
Overland Flow Assessment and Stormwater Report	**R001**				**N**														
Flood Emergency Management Plan	**R002**				**L**														
Stormwater Quality	**R003**				**H**														
Operation	**R004**				**G**														
SPECIFICATIONS																			

Delivery Method:	C - Courier	D - Delivered(EWFW)	E - Emailed	M - Mailed	P - Pick Up	**U - Uploaded**	
Delivery Format:	DOC - Word	DWG - AutoCAD	M - 3D Model	**PDF - Adobe/BB**	RVT - Revit	XLS - Excel	

Delivered to:																			
Client/Architect	**E**	**E**	**E**	**E**															
**	**PDF**	**PDF**	**PDF**	**PDF**															
Approved:	√	√	√	√															



4 0 4 8 12 16 20

DIMENSIONS ARE IN METRES

1:200 (A1)

FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	11-06-17	ORIGINAL ISSUE	LDG	
B	22-06-19	BUS LOOP ROAD ADDED	LDG	DDG
C	20-04-20	ISSUED FOR FINAL DRAFT REVIEW	LDG	DDG

COORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
HYD			
MECH			
STRUCT			
ELEC			
CIVIL	21151		

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Engineer:
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LEVEL 4, 360-362 KENT STREET,
SYDNEY NSW 2000
TELE: 1300 553 654
EMAIL: ewfw@ewfw.com.au
WEB: www.ewfw.com.au
ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
OVARALL SITE PLAN

SHEET 1 OF 7

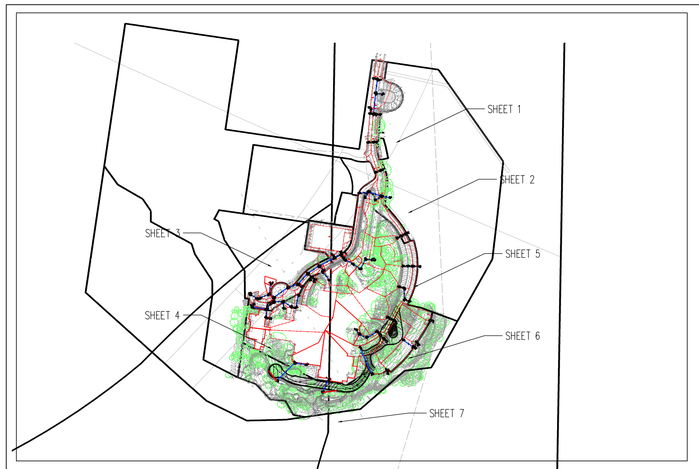
North Point:

Design: SB
Design Validated: LDG
Amendment Approved: DDG
Drawn: DS
Date: 12/10/2018
Scale: (A1) AS SHOWN

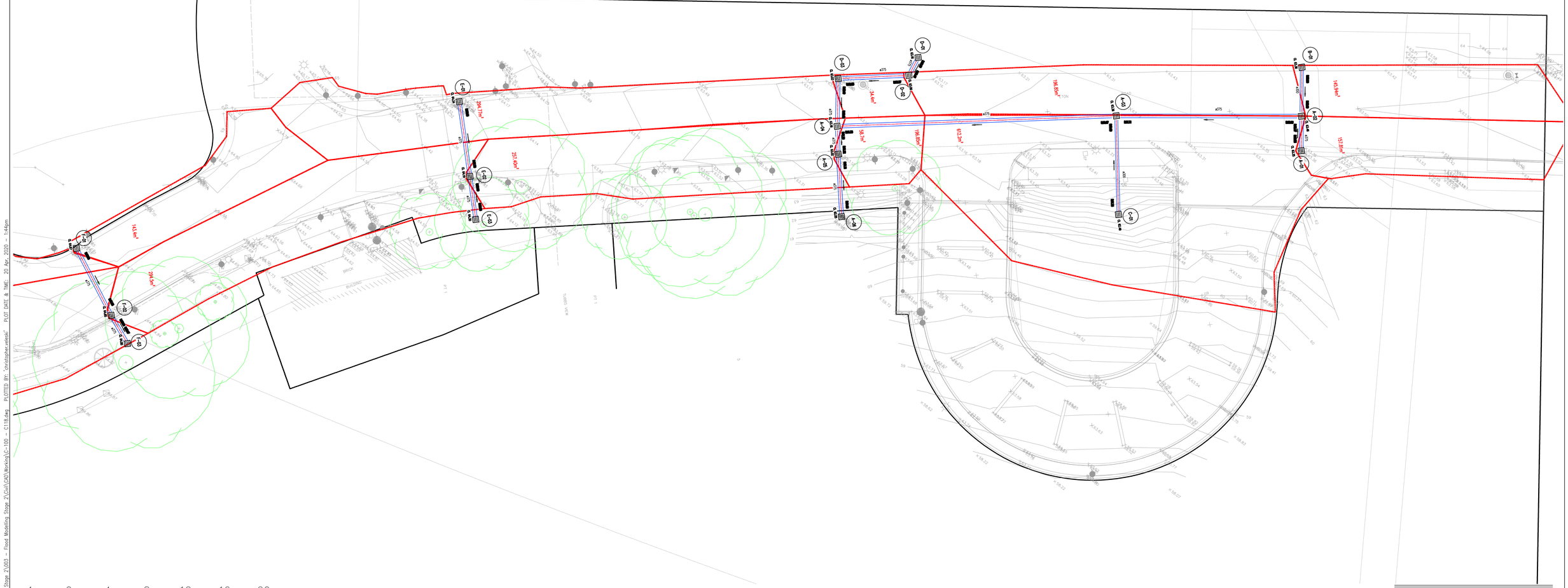
Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	101	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\217xx\21701 - Lindfield Learning Centre Stage 2\003 - Flood Modelling Stage 2\Civil\CAD\Working\C-100 - C118.dwg PLOTTED BY: 'christopher.weleski' PLOT DATE & TIME: 20 Apr, 2020 - 1:44pm



KEY PLAN



4 0 4 8 12 16 20 1:200 (A1)

DIMENSIONS ARE IN METRES

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CIVIL	21151		

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ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 1 OF 7

North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date:	12/10/2018
Scale: (A1)	AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	101	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21Tvx\21701 – Lindfield Learning Centre Stage 2\003 – Flood Modelling Stage 2\Civil\CAD\Working\C-100 – C118.dwg PLOTTED BY: 'christopher.vellesis' PLOT DATE & TIME: 20 Apr, 2020 – 1:44pm

FOR DA ONLY

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COORDINATED REFERENCE DRAWINGS			
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ELEC			
CIVIL	21151		

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Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 2 OF 7

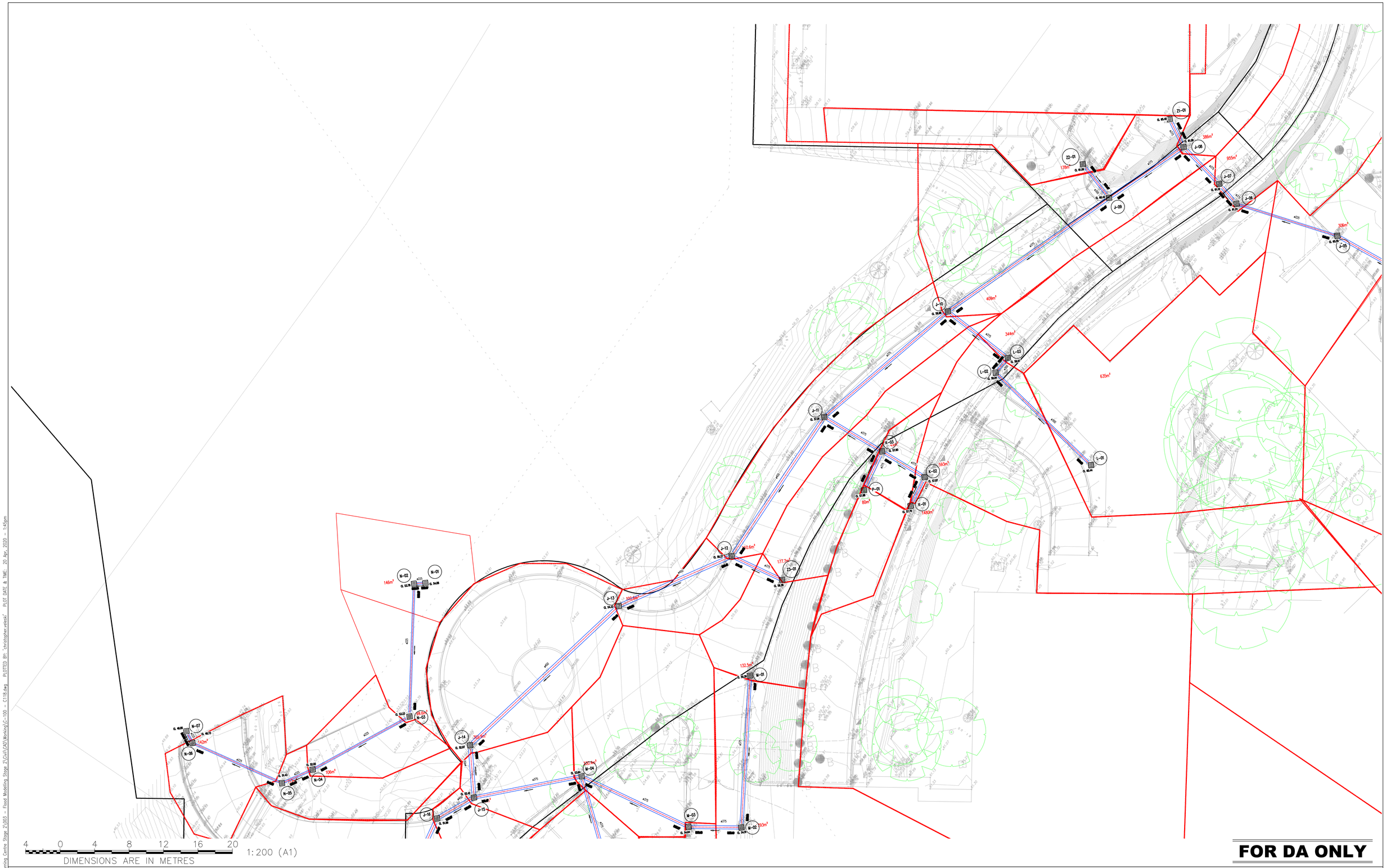
North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date: 12/10/2018	Scale: (A1) AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	102	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21xx\21701 - Lindfield Learning Centre Stage 2\003 - Flood Modelling Stage 2\Civil\CAD\Working\C-100 - C118.dwg PLOTTED BY: 'christopher.velesski' PLOT DATE & TIME: 20 Apr, 2020 - 1:45pm



FOR DA ONLY

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CIVIL	21151		

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Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 3 OF 7

North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date:	12/10/2018
Scale: (A1)	AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	103	1	C

ORIGINAL SIZE: A1

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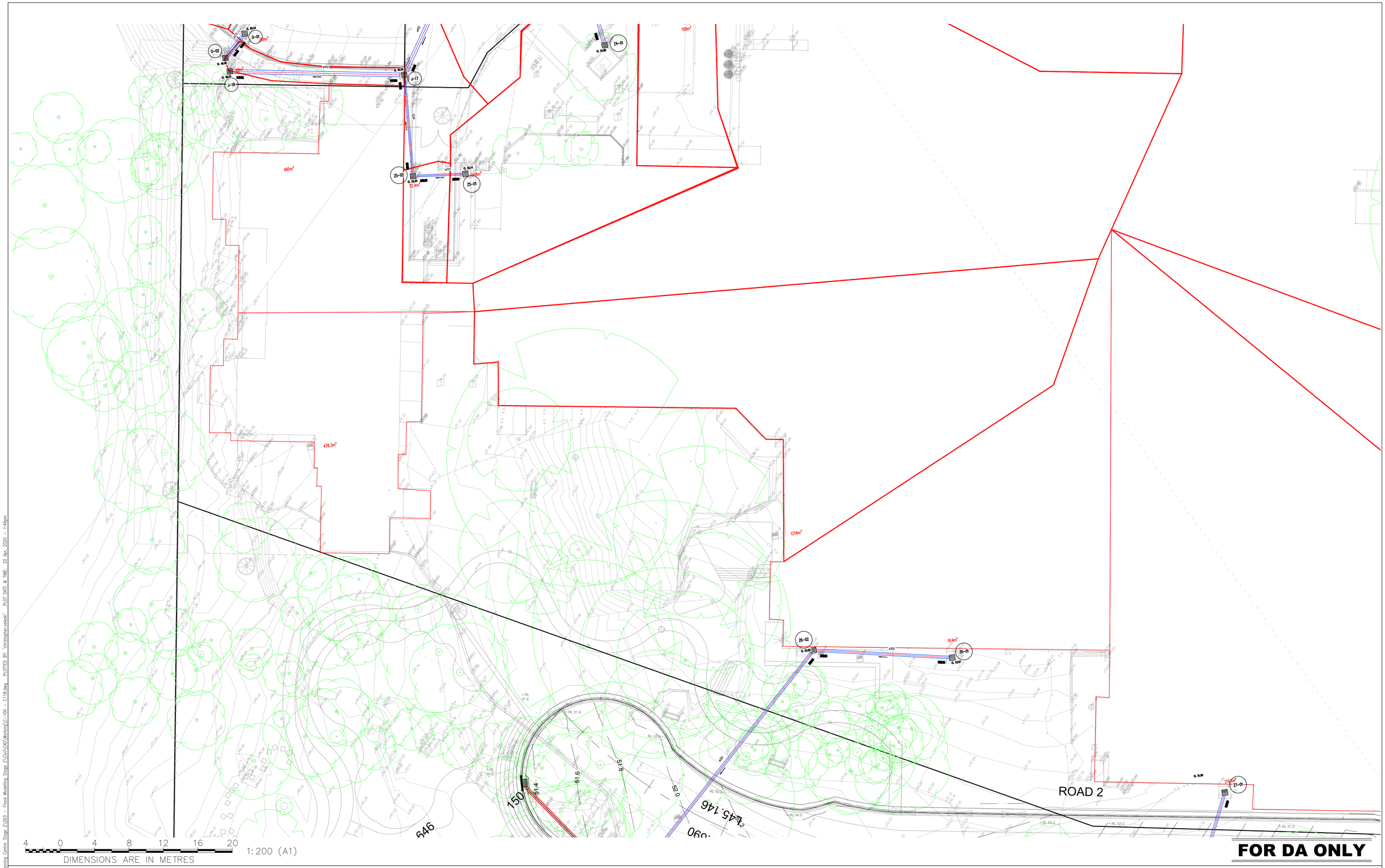

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CIVIL	21151		

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ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 4 OF 7

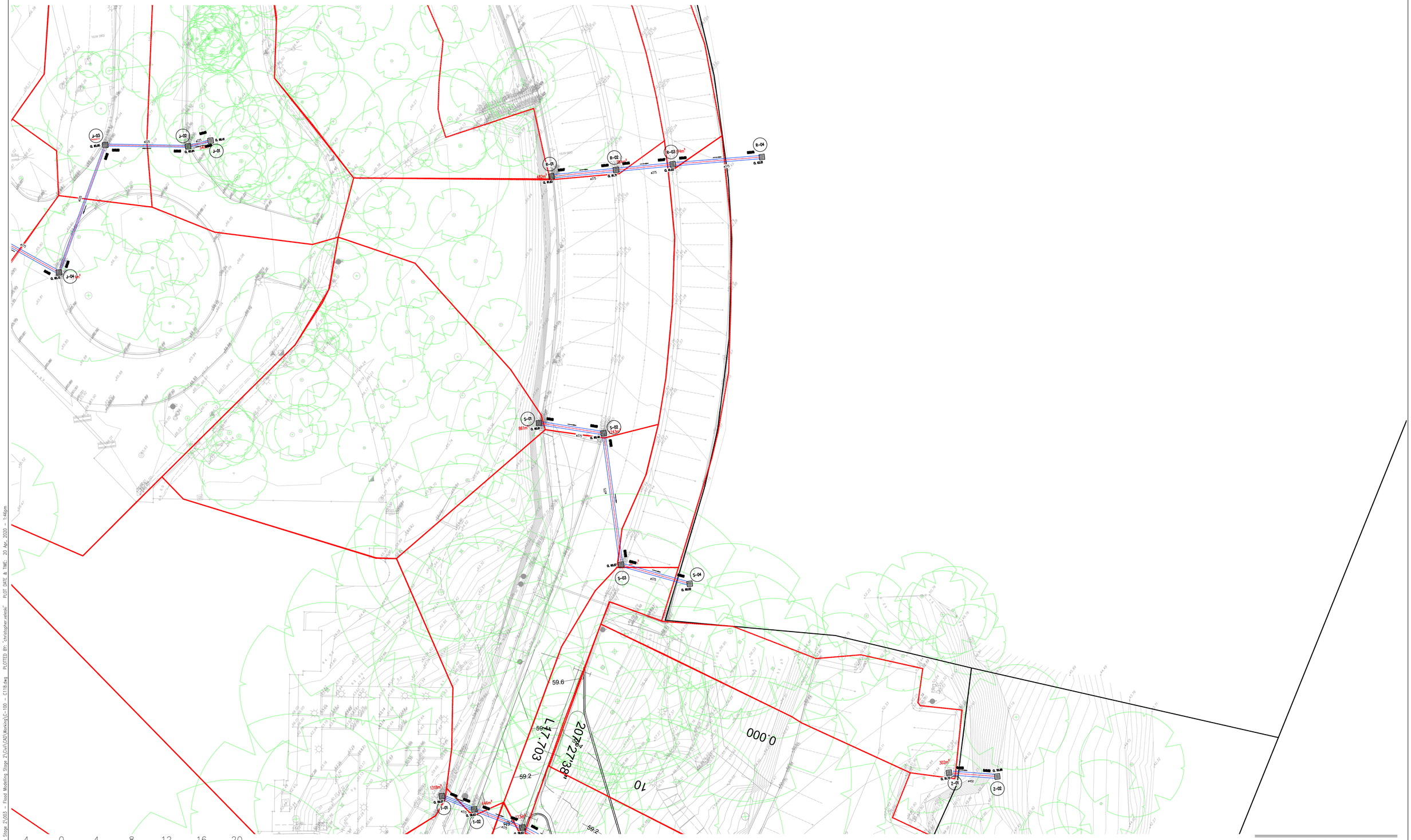
North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date:	12/10/2018
Scale: (A1)	AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	104	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\2171xx\21701 - Lindfield Learning Centre Stage 2\0003 - Flood Modelling Stage 2\Civil\CAD\Working\C-100 - C118.dwg PLOTTED BY: 'christopher.veleski' PLOT DATE & TIME: 20 Apr, 2020 - 1:46pm



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Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 5 OF 7

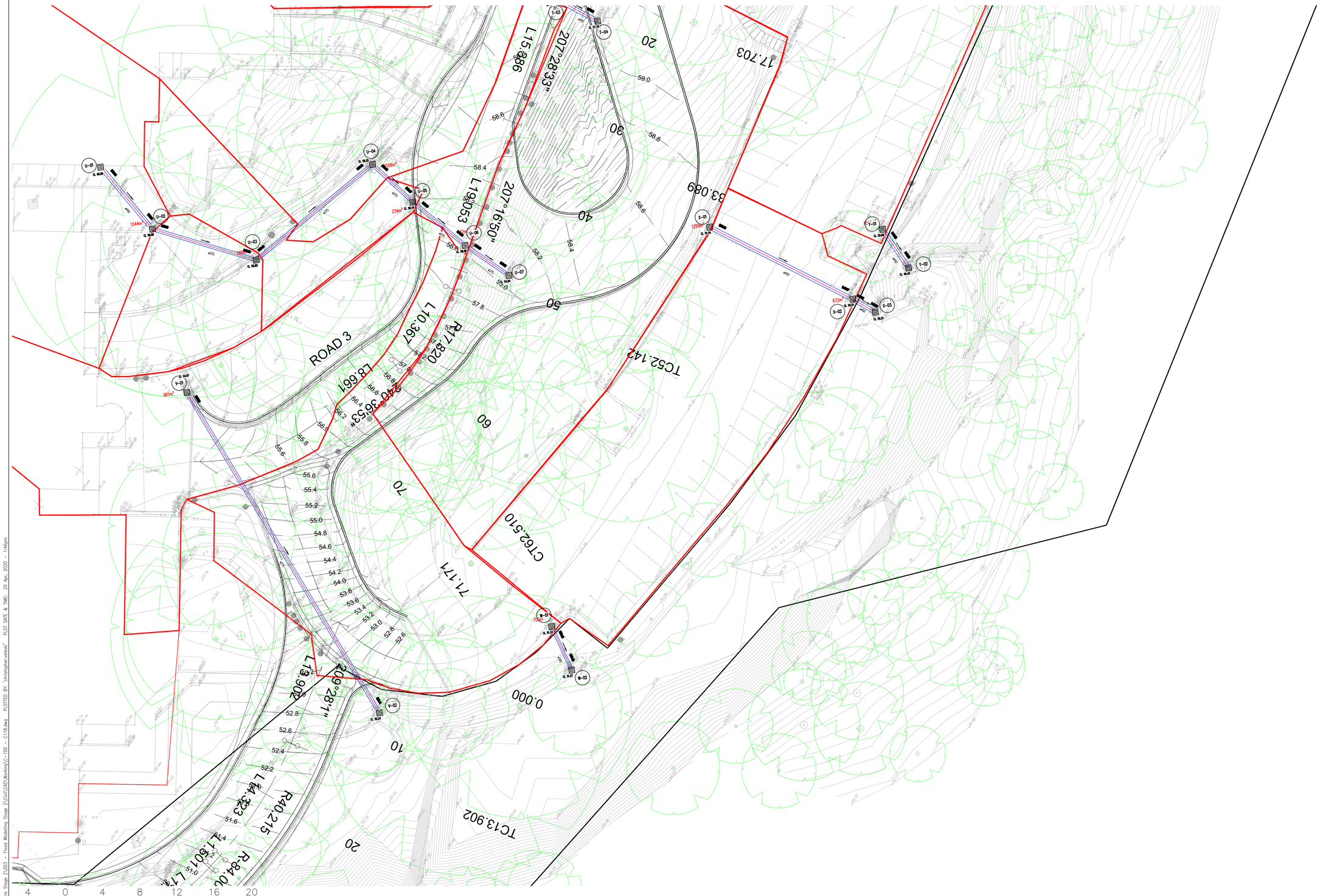
North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date: 12/10/2018	Scale: (A1) AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	105	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21 Tx\21701 – Lindfield Learning Centre Stage 2\003 – Flood Modelling Stage 2\Civil\CAD\Working\C-100 – C118.dwg PLOTTED BY: 'christopher.veleski' PLOT DATE & TIME: 20 Apr, 2020 – 1:46pm



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COORDINATED REFERENCE DRAWINGS			
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CIVIL	21151		

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Project:
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ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 6 OF 7

North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date:	12/10/2018
Scale: (A1)	AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	106	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21\x\x21701 – Lindfield Learning Centre Stage 2\003 – Flood Modelling Stage 2\Civil\CAD\Working\C-100 – C118.dwg PLOTTED BY: 'christopher.velesk' PLOT DATE & TIME: 20 Apr, 2020 – 1:46pm

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DIMENSIONS ARE IN METRES

1:200 (A1)

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LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LAYOUT PLAN

SHEET 7 OF 7

North Point:

Design: SB
Design Validated: LDG
Amendment Approved: DDG
Drawn: DS
Date: 12/10/2018
Scale: AS SHOWN (A1)

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	107	1	C

ORIGINAL SIZE: A1

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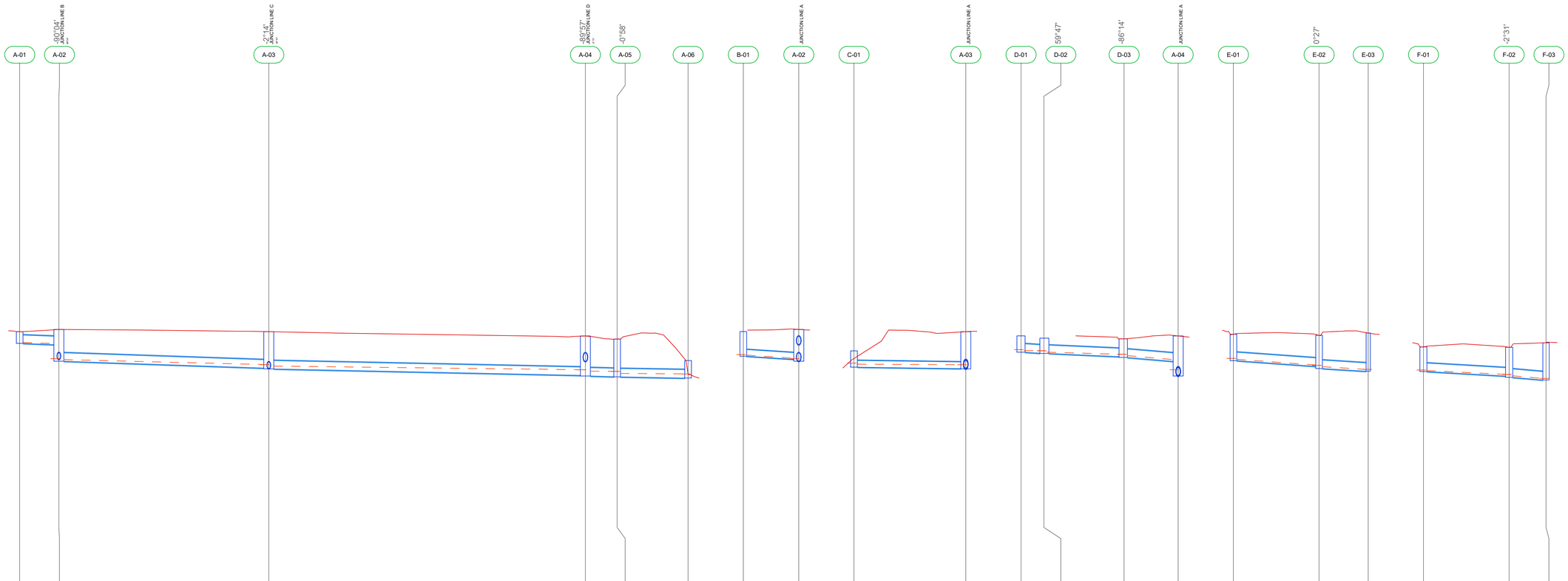
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A-02
-80°10'4"
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A-03
-26°1'14"
JUNCTION LINE C
A-04
-89°57'7"
JUNCTION LINE D
A-05
-0°58'
A-06
B-01
A-02
JUNCTION LINE A
C-01
A-03
JUNCTION LINE A
D-01
D-02
53°47'7"
D-03
-86°1'14"
A-04
JUNCTION LINE A
E-01
E-02
0°2'7"
E-03
F-01
F-02
-2°3'1"
F-03

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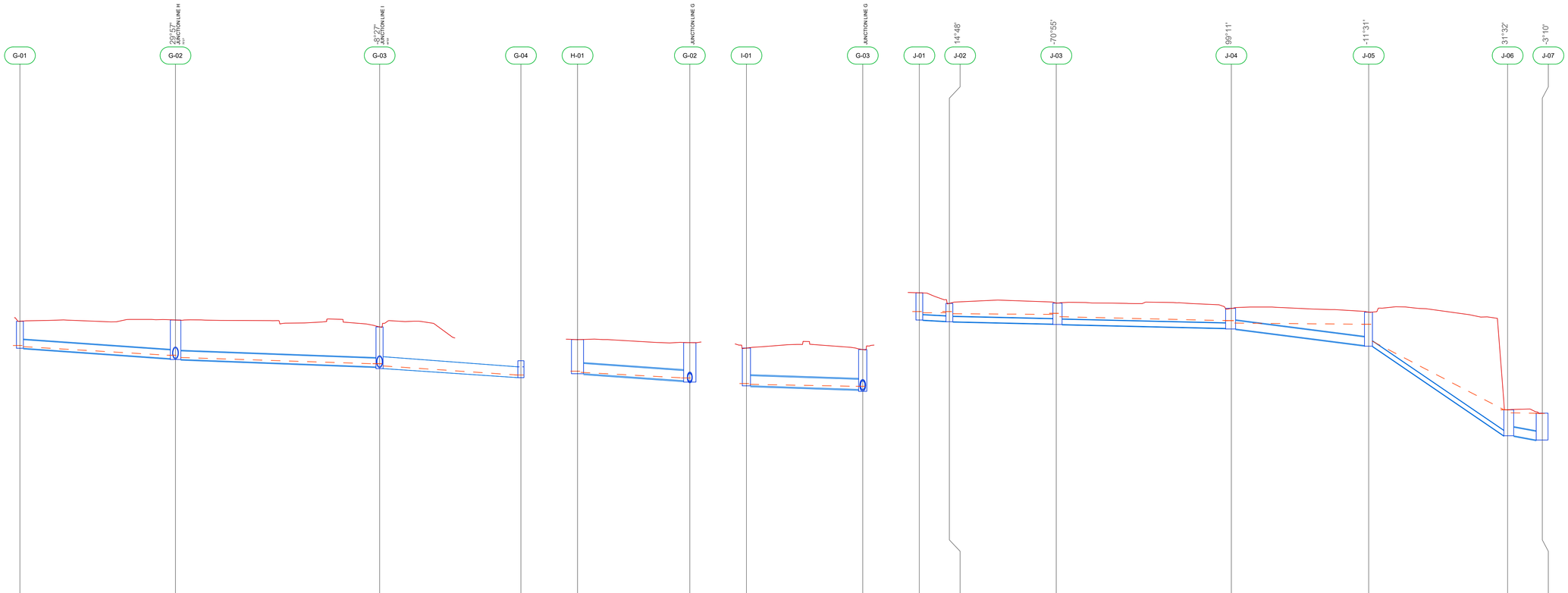
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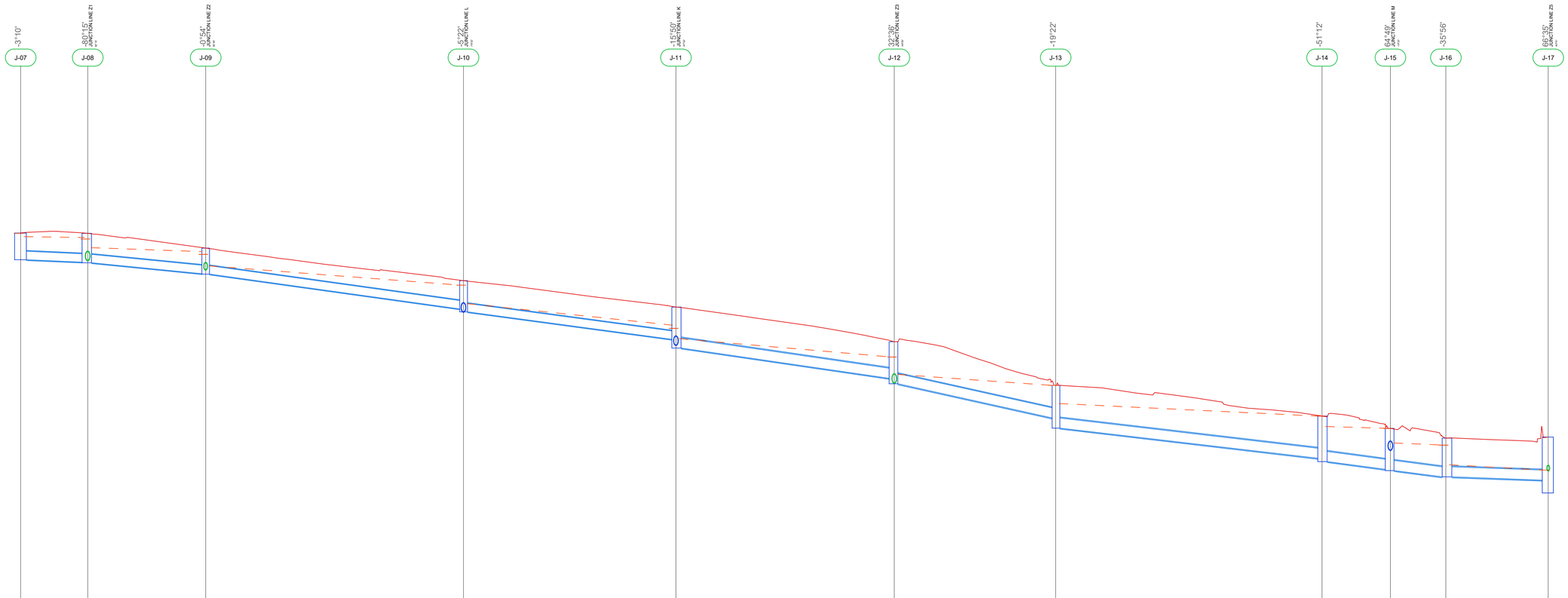
29°57'
JUNCTION LINE H
G-02
-8°27'
JUNCTION LINE I
G-03
G-04
H-01
JUNCTION LINE G
G-02
I-01
JUNCTION LINE G
G-03
J-01
14°48'
J-02
-70°55'
J-03
99°11'
J-04
-11°31'
J-05
31°32'
J-06
-3°10'
J-07

| | | |



PIPE DIAMETER (mm) & CLASS		Ø375		Ø375		Ø375		Ø375		Ø450		Ø450		Ø450		Ø450		Ø450		Ø450		Ø450		
VELOCITY 1% AEP (m/s)		1.570 m/s		2.190 m/s		2.660 m/s		3.300 m/s		2.940 m/s		3.100 m/s		2.810 m/s		2.140 m/s		2.750 m/s		2.950 m/s				
PIPE FLOW 1% AEP (m³/s)		0.168 (m³/s)		0.234 (m³/s)		0.285 (m³/s)		0.353 (m³/s)		0.460 (m³/s)		0.484 (m³/s)		0.461 (m³/s)		0.351 (m³/s)		0.450 (m³/s)		0.483 (m³/s)				
PIPE GRADE (%)		1.85 %		4.63 %		6.75 %		6.47 %		6.94 %		10.61 %		5.67 %		5.68 %		5.69 %		1.59 %				
DATUM R.L.		38.000																						
H.G.L. LEVELS 1% AEP	61.091	60.933	60.896	60.445	60.269	59.636	58.780	57.962	57.006	56.406	55.591	54.818	54.330	53.525	52.968	52.508	52.423	51.774	51.685	50.808	50.575			
INVERT OF PIPE	59.910		59.800	59.775	59.290	59.270	57.725	57.595	56.375	55.990	54.645	54.405	52.885	52.435	51.095	50.950	50.605	50.550	50.270		50.125			
DESIGN SURFACE	61.095		61.081		60.424		58.981		57.808		56.271		54.330		52.968		52.423		51.991			52.039		
EXISTING SURFACE	61.095		61.081		60.424		58.981		57.808		56.271		54.330		52.968		52.423		51.991			52.039		
PIPE CHAINAGE	55.022		60.972		71.444		94.333		113.200		132.590		146.917		170.568		176.638		181.561			190.655		

DRAINAGE LINE J

4 0 4 8 12 16 20

DIMENSIONS ARE IN METRES

1:200 (A1)

FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	11-06-17	ORIGINAL ISSUE	LDG	
B	22-06-19	BUS LOOP ROAD ADDED	LDG	DDG
C	20-04-20	ISSUED FOR FINAL DRAFT REVIEW	LDG	DDG

COORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
HYD			
MECH			
STRUCT			
ELEC			
CIVIL	21151		

NOTE : SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE

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Client:

Engineer:
EWFW CONSULTING ENGINEERS
LEVEL 4, 360-362 KENT STREET,
SYDNEY NSW 2000
TELE: 1300 553 654
EMAIL: ewfw@ewfw.com.au
WEB: www.ewfw.com.au
ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LONGITUDINAL SECTION 1% AEP RESULTS SHEET 3 OF 8

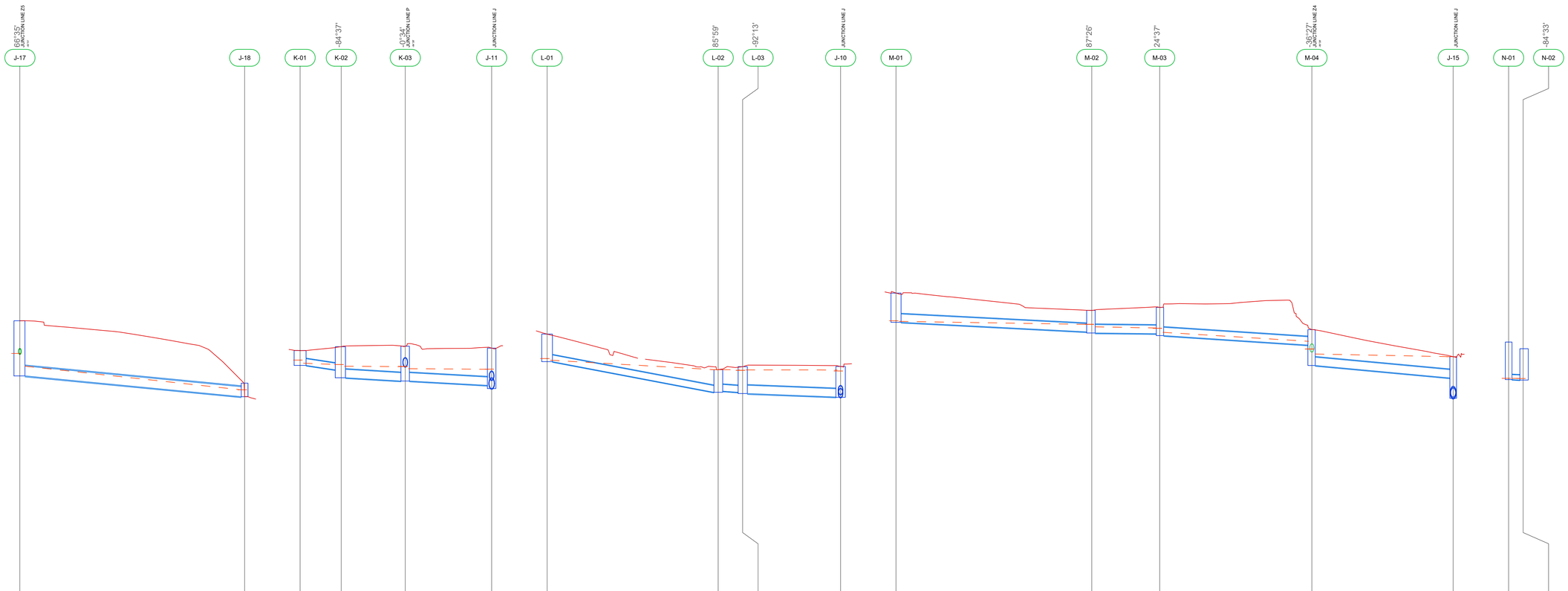
North Point:

Design:	SB
Design Validated:	LDG
Amendment Approved:	DDG
Drawn:	DS
Date:	12/10/2018
Scale: (A1)	AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	113	1	C

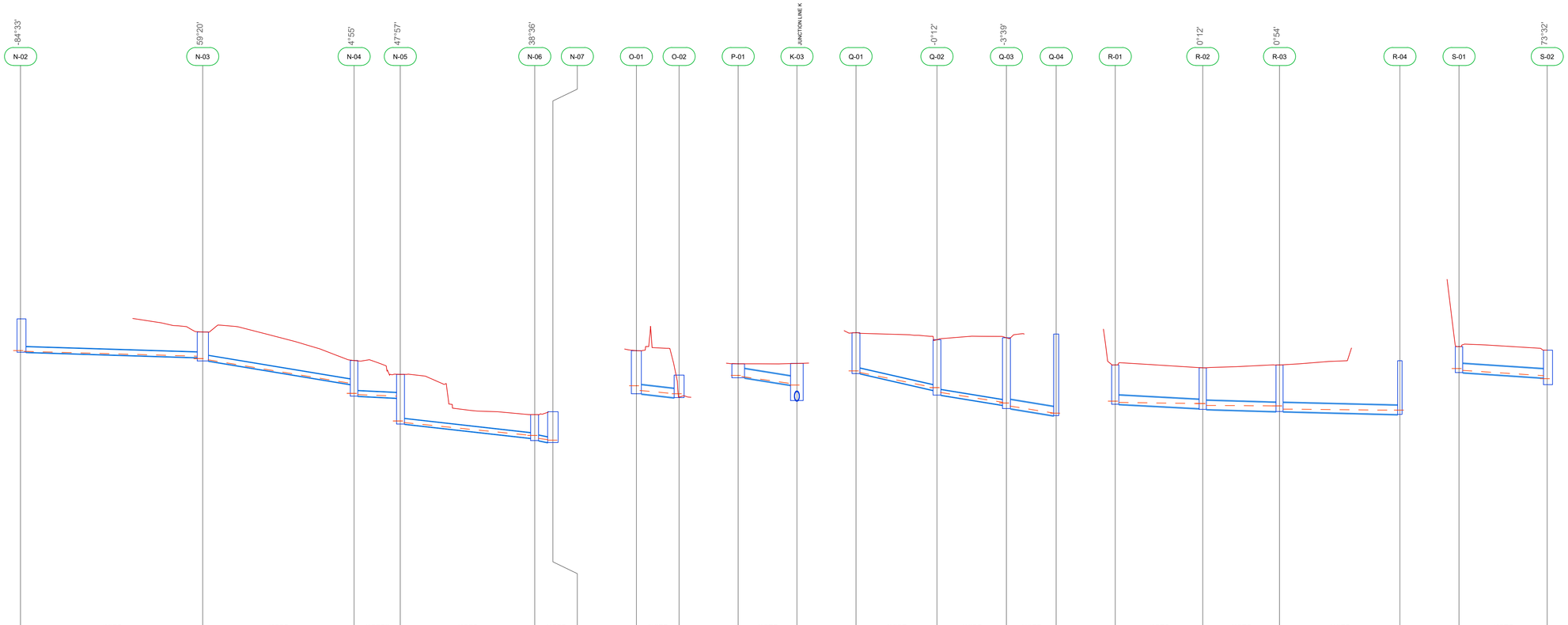
ORIGINAL SIZE: A1

FILE NAME & PATH: W:\217xx\21701 - Lindfield Learning Centre Stage 2\003 - Flood Modelling Stage 2\Civil\CAD\Working\C-100 - C118.dwg PLOTTED BY: 'christopher.vefeas' PLOT DATE & TIME: 20 Apr, 2020 - 1:48pm

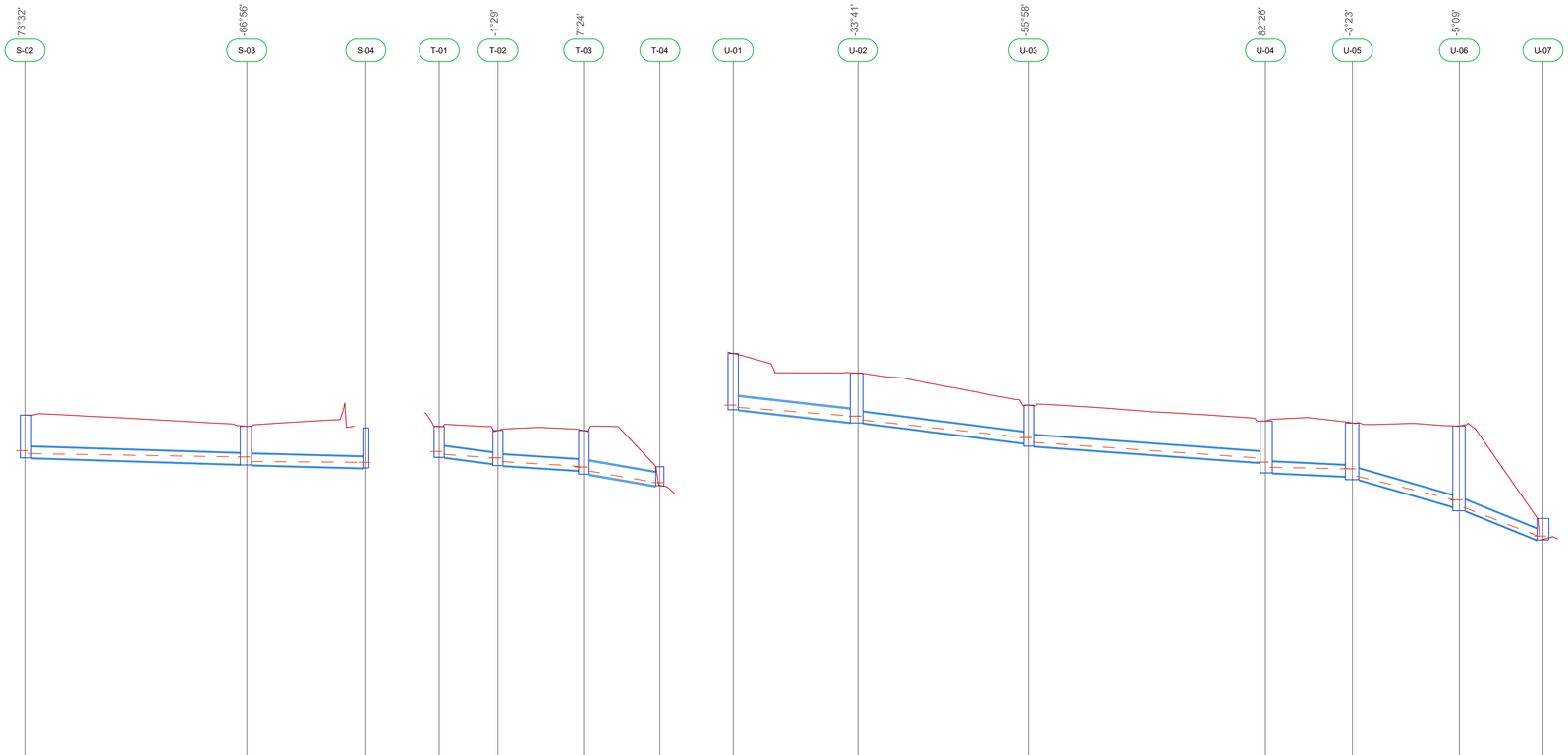


DRAINAGE LINE J

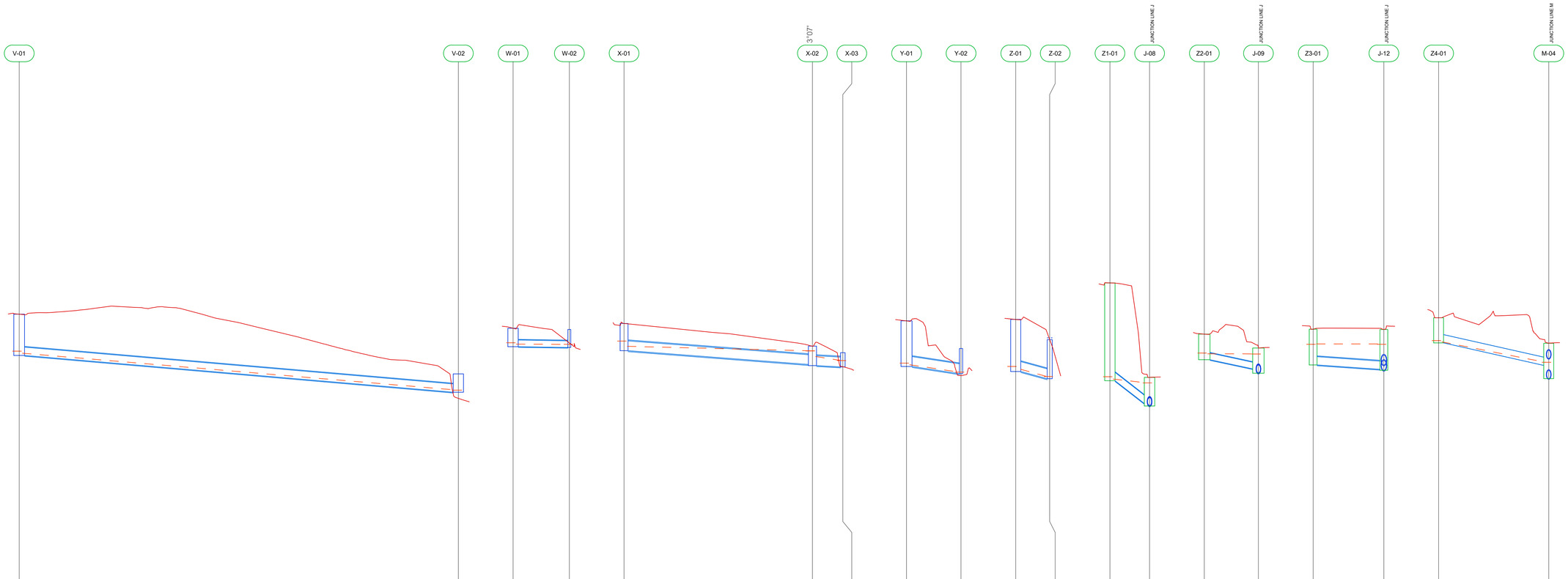
| | | |


-84°33'
59°20'
4°55'
47°57'
38°36'
JUNCTION LINE K
-0°12'
-3°39'
0°12'
0°54'
73°32'
N-02
N-03
N-04
N-05
N-06
N-07
O-01
O-02
P-01
K-03
Q-01
Q-02
Q-03
Q-04
R-01
R-02
R-03
R-04
S-01
S-02

| | | |


73°32'
-66°56'
-1°29'
7°24'
-33°41'
-55°58'
82°26'
-3°23'
-5°09'
S-02
S-03
S-04
T-01
T-02
T-03
T-04
U-01
U-02
U-03
U-04
U-05
U-06
U-07

| | | |



	V-01	V-02	W-01	W-02	X-01	X-02	X-03	Y-01	Y-02	Z-01	Z-02	Z1-01	J-08	Z2-01	J-09	Z3-01	J-12	Z4-01	M-04
PIPE DIAMETER (mm) & CLASS	Ø375		Ø300		Ø450	Ø450		Ø450		Ø450		Ø375		Ø300		Ø375		Ø375	
VELOCITY (m/s) 1% AEP	2.340 m/s		1.320 m/s		3.560 m/s	2.910 m/s		2.510 m/s		3.730 m/s		3.980 m/s		0.590 m/s		0.170 m/s		2.070 m/s	
PIPE FLOW 1% AEP (m³/s)	0.053 (m³/s)		0.034 (m³/s)		0.246 (m³/s)	0.325 (m³/s)		0.043 (m³/s)		0.093 (m³/s)		0.059 (m³/s)		0.040 (m³/s)		0.018 (m³/s)		0.016 (m³/s)	
PIPE GRADE (%)	4.19 %		0.68 %		3.66 %	2.15 %		6.63 %		10.64 %		28.67 %		8.50 %		3.10 %		10.23 %	
DATUM R.L.	36.000		33.000		33.000			32.000		33.000		45.000		43.000		38.000		36.000	
H.G.L. LEVELS 1% AEP	53.185	51.503	50.602	50.586	50.500	50.297	50.037	48.657	48.324	49.451	49.115	61.002	60.834	60.159	60.154	55.610	55.609	53.705	52.770
INVERT OF PIPE	53.085	51.405	50.485	50.450	50.300	49.670	49.620	48.580	48.250	49.350	49.020	60.930	59.890	59.890	59.470	54.650	54.450	53.658	52.628
DESIGN SURFACE	54.967	51.124	51.326	50.653	51.544	50.508	49.568	50.662	48.166	51.727	50.805	65.397	61.081	61.057	60.424	56.282	56.271	54.805	
EXISTING SURFACE	54.967	51.124	51.326	50.653	51.544	50.508	49.568	50.662	48.166	51.727	50.805	65.397	61.081	61.057	60.424	56.282	56.271	54.805	
PIPE CHAINAGE	0.000	40.122	0.000	5.139	0.000	17.204	19.989	0.000	4.980	0.000	3.102	0.000	3.627	0.000	4.942	0.000	6.462	0.000	

DRAINAGE LINE V

DRAINAGE LINE W

DRAINAGE LINE X

DRAINAGE LINE Y

DRAINAGE LINE Z

DRAINAGE LINE Z1

DRAINAGE LINE Z2

DRAINAGE LINE Z3

DRAINAGE LINE Z4

4 0 4 8 12 16 20

DIMENSIONS ARE IN METRES

1:200 (A1)

FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	11-06-17	ORIGINAL ISSUE	LDG	
B	22-06-19	BUS LOOP ROAD ADDED	LDG	DDG
C	20-04-20	ISSUED FOR FINAL DRAFT REVIEW	LDG	DDG

COORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
HYD			
MECH			
STRUCT			
ELEC			
CIVIL	21151		

NOTE : SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE

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Client:

Engineer:
EWFW CONSULTING ENGINEERS
LEVEL 4, 360-362 KENT STREET,
SYDNEY NSW 2000
TELE: 1300 553 654
EMAIL: ewfw@ewfw.com.au
WEB: www.ewfw.com.au
ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LONGITUDINAL SECTION
1% AEP RESULTS
SHEET 7 OF 8

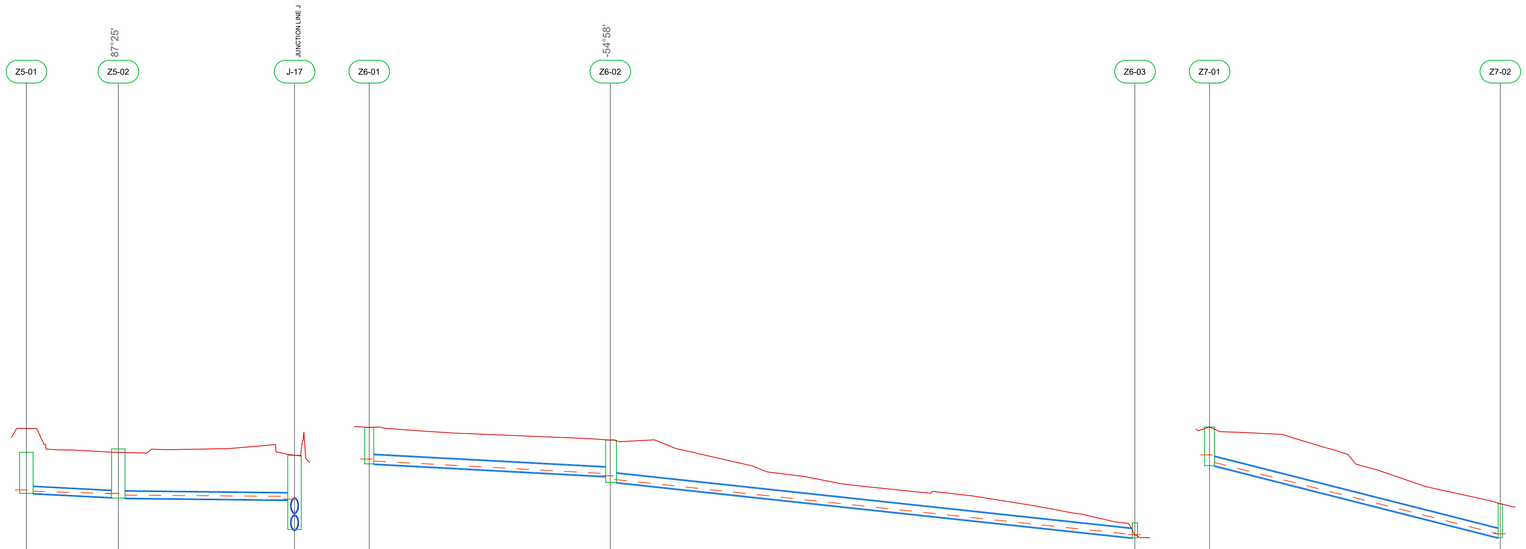
North Point:

Design: SB
Design Validated: LDG
Amendment Approved: DDG
Drawn: DS
Date: 12/10/2018
Scale: AS SHOWN (A1)

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	117	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21?xx\21701 – Lindfield Learning Centre Stage 2\003 – Flood Modelling Stage 2\Civil\CAD\Working\C-100 – C118.dwg PLOTTED BY: 'christopher.velesk' PLOT DATE & TIME: 20 Apr, 2020 – 1:49pm



	Z5-01	Z5-02	J-17	Z6-01	Z6-02	Z6-03	Z7-01	Z7-02
PIPE DIAMETER (mm) & CLASS	Ø225	Ø225		Ø300	Ø300		Ø300	
VELOCITY 1% AEP (m/s)	1.360 m/s	1.170 m/s		1.750 m/s	2.970 m/s		5.580 m/s	
PIPE FLOW 1% AEP (m³/s)	0.016 (m³/s)	0.020 (m³/s)		0.033 (m³/s)	0.060 (m³/s)		0.132 (m³/s)	
PIPE GRADE (%)	2.19 %	0.51 %		2.59 %	5.28 %		12.38 %	
DATUM R.L.	34.000			35.000			33.000	
H.G.L. LEVELS 1% AEP	50.834	50.755	50.705 / 50.662	52.844	52.426 / 52.228	50.381	50.799	48.409
INVERT OF PIPE	50.760	50.625	50.605 / 50.545	52.751	52.333 / 52.130	50.275	50.690	48.280
DESIGN SURFACE	52.936	52.139	52.039	53.970	53.548	50.357	51.985	49.414
EXISTING SURFACE	52.936	52.139	52.039	53.970	53.548	50.357	51.985	49.414
PIPE CHAINAGE	0.000	6.158	17.958	0.000	16.139	51.280	0.000	19.467

DRAINAGE LINE Z5 — DRAINAGE LINE Z6 — DRAINAGE LINE Z7

4 0 4 8 12 16 20 1:200 (A1)

DIMENSIONS ARE IN METRES

FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	11-06-17	ORIGINAL ISSUE	LDG	
B	22-06-19	BUS LOOP ROAD ADDED	LDG	DDG
C	20-04-20	ISSUED FOR FINAL DRAFT REVIEW	LDG	DDG

COORDINATED REFERENCE DRAWINGS

SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
HYD			
MECH			
STRUCT			
ELEC			
CIVIL	21151		

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Client:

Engineer:
EWFW CONSULTING ENGINEERS
LEVEL 4, 360-362 KENT STREET,
SYDNEY NSW 2000
TELE: 1300 553 654
EMAIL: ewfw@ewfw.com.au
WEB: www.ewfw.com.au
ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
DRAINAGE LONGITUDINAL SECTION 1% AEP RESULTS SHEET 8 OF 8

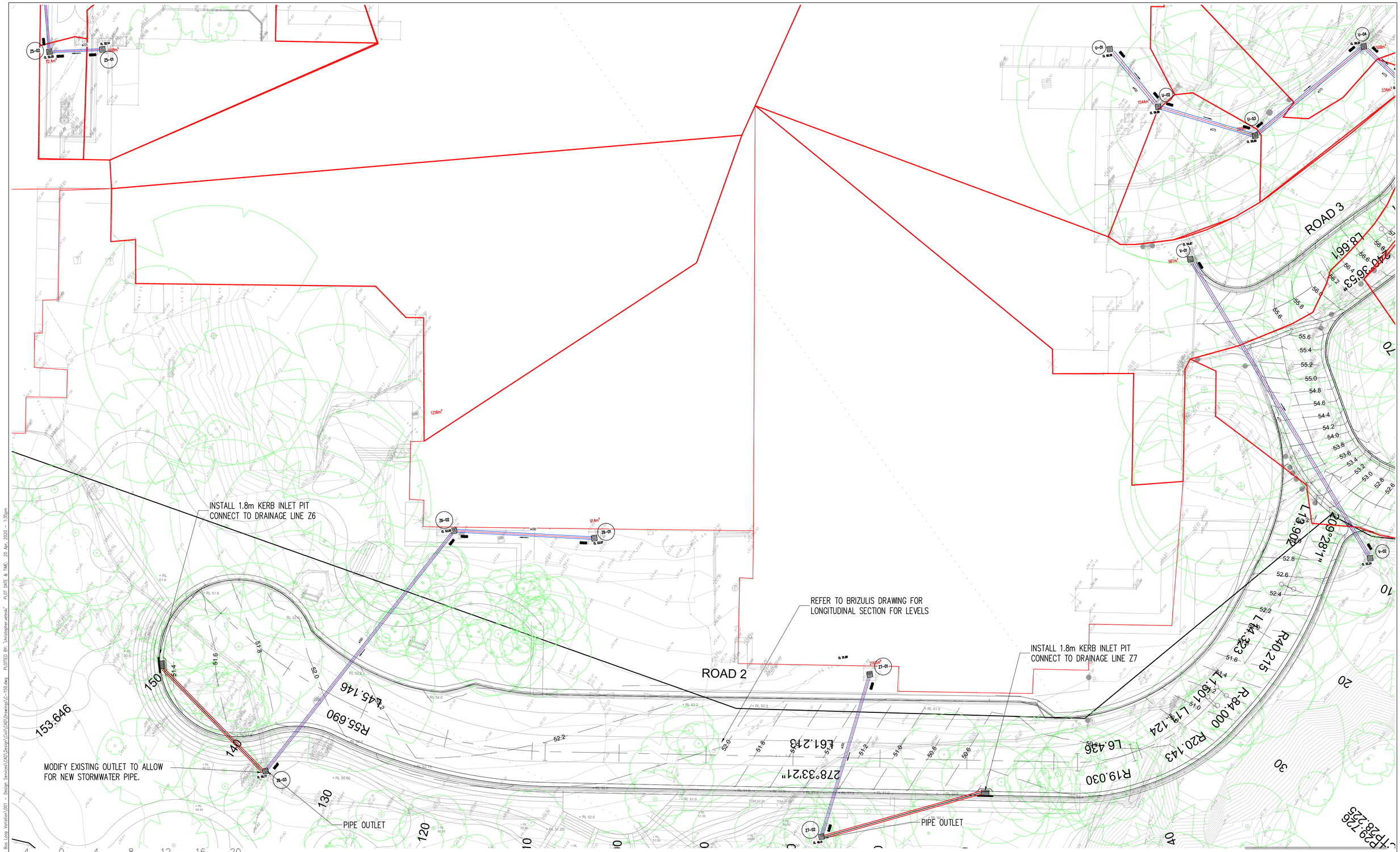
North Point:

Design: SB
Design Validated: LDG
Amendment Approved: DDG
Drawn: DS
Date: 12/10/2018
Scale: (A1) AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	118	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21Tvx\21701 – Lindfield Learning Centre Stage 2\003 – Flood Modelling Stage 2\Civil\CAD\Working\DC-100 – C118.dwg PLOTTED BY: 'christopher.velesis' PLOT DATE & TIME: 20 Apr, 2020 – 1:49pm



FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	11/06/19	ORIGINAL ISSUE	LDG	DDG
B	16/07/19	REVISED PIT LOCATIONS	LDG	DDG
C	17/04/20	ISSUED FOR FINAL DRAFT REVIEW	LDG	DDG

COORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
HYD			
MECH			
STRUCT			
ELEC			
CIVIL	21151		

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TELE: 1300 553 654
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WEB: www.ewfw.com.au

ISO 9001 Quality Management

Project:
LINDFIELD LEARNING VILLAGE - SCHOOL
ETON ROAD
LINDFIELD NSW 2070

Drawing Title:
PROPOSED NEW BUS ROAD

PLAN VIEW

North Point:	Design: SB
	Design Validated: LDG
	Amendment Approved: DDG
	Drawn: DS
Date: 12/10/2018	Scale: (A1) AS SHOWN

Job No:	Area:	Disc:	Dwg No:	Stage:	Issue:
21151	EX -	C	150	1	C

ORIGINAL SIZE: A1

FILE NAME & PATH: W:\21xx\21951 – Lindfield Learning Village Bus Loop Variation\001 – Design Services\CAD\Design\Civil\CAD\Drawings\C-150.dwg PLOTTED BY: 'christopher.veveiak' PLOT DATE & TIME: 20 Apr, 2020 – 1:35pm