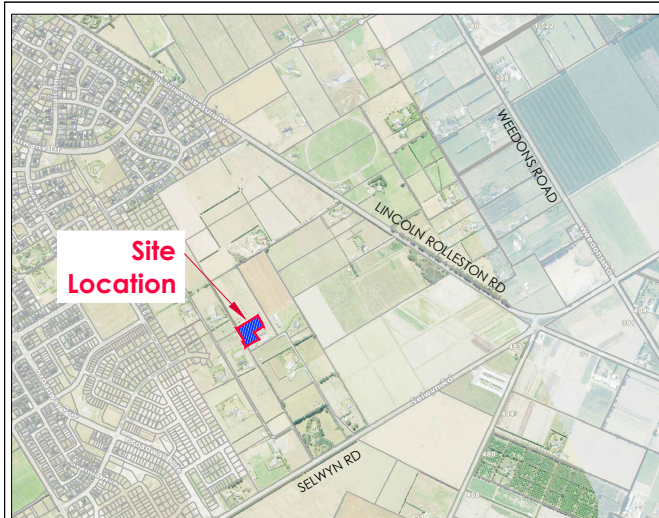
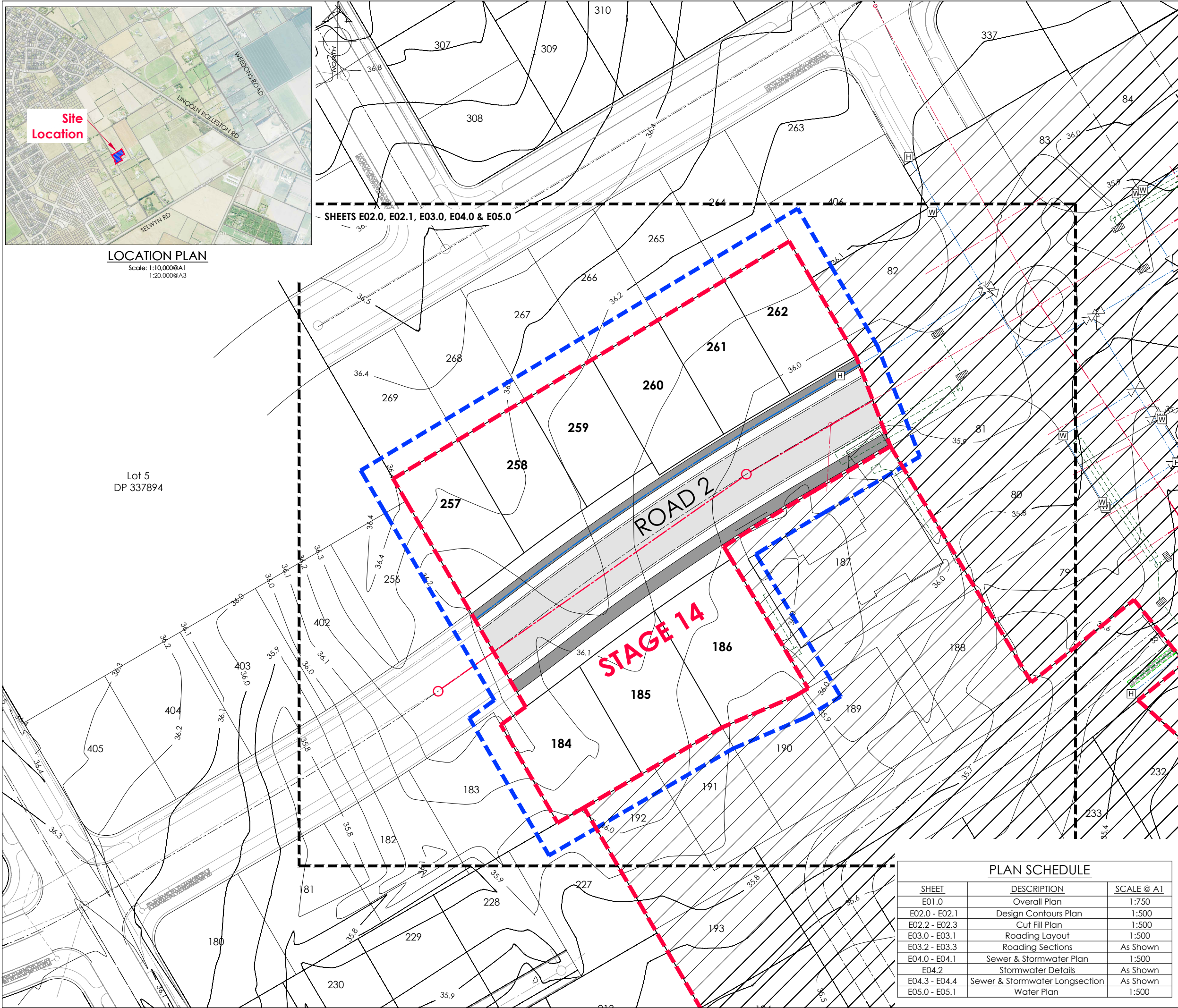




LOCATION PLAN
Scale: 1:10,000@A1
1:20,000@A3



Lot 5
DP 337894

AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION

- NOTES:
- ALL WORKS IN ACCORDANCE WITH SDC CODE OF PRACTICE PARTS 1-11 STANDARDS, IF STANDARDS ARE UNSPECIFIED REFER TO CCC CSS PARTS 1-7.
 - ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
 - ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.
 - TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.
 - CONTOUR INTERVAL: 0.1m MINOR. 1.0m MAJOR.
 - ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m
 - CONTROL OF SW, SEDIMENT AND DUST ON SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.

LEGEND:

- STAGE BOUNDARY (Red dashed line)
- EXTENT OF WORKS (Blue dashed line)
- FLUSHING POINT (FP)
- STREET LIGHT
- PROPOSED TREE
- BOUNDARY BOX (B)
- EXISTING STREET LIGHT
- NEW ASPHALT PAVEMENT
- NEW CHIP SEAL PAVEMENT
- NEW EXPOSED AGGREGATE CONCRETE
- NEW FOOTPATH
- COMPLETED STAGES

EXISTING SERVICES

SANITARY SEWER	STD. MH
SANITARY SEWER	VENTED MH
STORMWATER	MH
WATER	FH VALVE
KERB	CUT DOWN

PROPOSED SERVICES

SANITARY SEWER	STD. MH
SANITARY SEWER	VENTED MH
STORMWATER	MH
WATER	FH VALVE METER
KERB	CUT DOWN

NAME	SIGNED	DATE
DESIGNED BY BEN FOX	BEN FOX	
CHECKED BY ANDY HALL	ANDY HALL	


DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:
**Broadfield Grange
Stage 14**

SHEET TITLE:
**Overall Plan
RC245118 & RC245458**

DRAWING STATUS:
For Engineering Approval

SCALE: 1:750@A1 1:1500@A3	DATE: November 2025	DRAWN: JS
CAD FILE: J:\20666\Eng\Drawings\STAGE 14\E20666_E01.0 STG 14_R0.dwg	SHEET No:	REVISION:
E.20666	E01.0	R0

PLAN SCHEDULE		
SHEET	DESCRIPTION	SCALE @ A1
E01.0	Overall Plan	1:750
E02.0 - E02.1	Design Contours Plan	1:500
E02.2 - E02.3	Cut Fill Plan	1:500
E03.0 - E03.1	Roading Layout	1:500
E03.2 - E03.3	Roading Sections	As Shown
E04.0 - E04.1	Sewer & Stormwater Plan	1:500
E04.2	Stormwater Details	As Shown
E04.3 - E04.4	Sewer & Stormwater Longsection	As Shown
E05.0 - E05.1	Water Plan	1:500



AMENDMENTS :

AMENDMENT	DATE	DESCRIPTION

NOTES :

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3.

CARRIAGEWAY AND FOOTPATH ACCEPTANCE TESTING IN ACCORDANCE WITH CCC CSS PART 6 AND CCC IDS.

4.

ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m

5.

FOOTPATH BASECOURSE TESTING - MINIMUM CLEGG HAMMER VALUE OF 25 REQUIRED FOR FOOTPATHS & RESIDENTIAL CROSSINGS.

6.

- MINIMUM CLEGG HAMMER VALUE OF 35 REQUIRED FOR COMMERCIAL CROSSINGS.

7.

KERB & CHANNEL BASECOURSE TESTING - MINIMUM DRY DENSITY OF 2100kg/m³ WITH 75% EQUAL OR EXCEEDING 2150kg/m³.

8.

CUTDOWNS AT RESIDENTIAL PARKING AREAS TO HAVE 280mm OF CONCRETE AS PER SD611 AND CUT DOWN IN COMMERCIAL PARKING AREAS TO HAVE 280mm OF CONCRETE WITH REINFORCEMENT AS PER SD611.

9.

ALL BERMS TO BE AND COVERED WITH A MINIMUM OF 150mm GRADE 1 TOPSOIL AND GRASSED WITH CCC BERM MIX.

10.

ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.

11.

ALL ROAD AND FOOTPATH AREAS TO BE SURFACED USING ASPHALTIC CONCRETE. FOOTPATHS TO BE CONSTRUCTED IN ACCORDANCE WITH SDC REQUIREMENTS WITH 25mm DEPTH AC, WHILE ROAD PAVEMENTS TO BE 35mm DEPTH.

12.

METAL DEPTHS TO BE CONFIRMED OR INCREASED PRIOR TO COMMENCEMENT OF WORK FOLLOWING THE CHECKING OF SUBGRADE CBR ON SITE.

13.

KERBS AT INTERSECTIONS HAVE A RADIUS OF 6.0m UNLESS SHOWN OTHERWISE.

14.

ALL PAVEMENT CROSSFALLS ARE TO BE CONSTRUCTED IN ACCORDANCE SD423.

15.

TACTILE PAVERS ARE TO BE INSTALLED AS PER SD423 AND RTS14 GUIDELINES FOR FACILITIES FOR THE BLIND AND VISION -IMPAIRED PEDESTRIANS.

16.

ROAD BASECOURSE TESTING - MAXIMUM BENKELMAN BEAM DEFLECTION OF 2.00mm WITH 95% BELOW 1.6mm FOR ROADS AND A MAXIMUM DEFLECTION OF 2.5mm WITH 95% BELOW 2.00mm FOR ROWS.

17.

ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.

	NAME	SIGNED	DATE
DESIGNED BY	BEN FOX	BEN FOX	
CHECKED BY	ANDY HALL	ANDY HALL	



DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

**Broadfield Grange
Stage 14**

SHEET TITLE:

**Roothing Layout
RC245118 & RC245458**

DRAWING STATUS

For Engineering Approval

SCALE : 1:550@A1
1:1100@A3

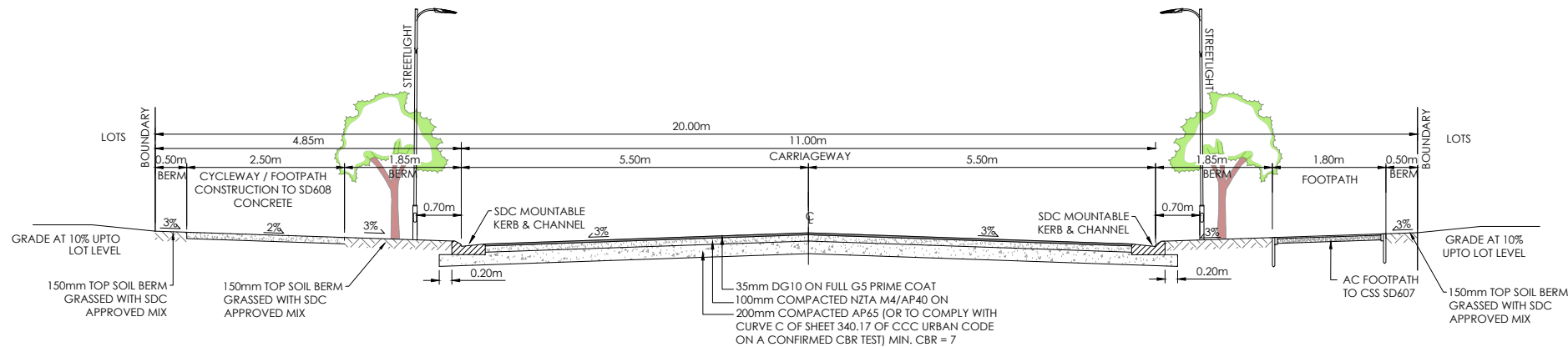
DATE : November 2025

CAD FILE : J:\20666\Eng\Drawings\STAGE 14\E20666_E01.0 STG 14_R0.dwg

DRAWING No : **E.20666**

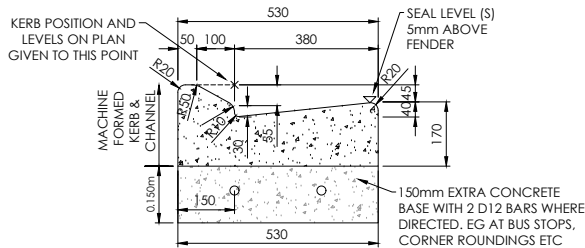
SHEET No: **E03.0**

DRAWN : JS
REVISION : **R0**



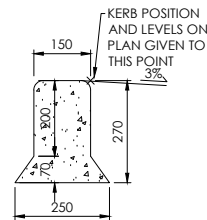
TYPICAL CROSS SECTION 20m ROAD 2

SCALES 1:50@A1
1:100@A3



SDC MOUNTABLE KERB & CHANNEL

SCALE 1:10@A1
1:20@A3



KERB ONLY TO CCC SD602

VARIES AS SPECIFIED ON DESIGN PLANS

SCALES 1:10@A1
1:20@A3

AMENDMENTS :			
AMENDMENT	DATE	DESCRIPTION	
NOTES :			
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3. CARRIAGEWAY AND FOOTPATH ACCEPTANCE TESTING IN ACCORDANCE WITH CCC CSS PART 6 AND CCC IDS.			
4. <u>ORIGIN OF LEVELS</u> LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937 ORIGIN MARK B882 (UG 32) RL 55.908m CHK EJ8W (CC 370 NO 2) RL 58.154m			
5. FOOTPATH BASECOURSE TESTING - MINIMUM CLEGG HAMMER VALUE OF <u>25</u> REQUIRED FOR FOOTPATHS & RESIDENTIAL CROSSINGS.			
6. - MINIMUM CLEGG HAMMER VALUE OF <u>35</u> REQUIRED FOR COMMERCIAL CROSSINGS.			
7. KERB & CHANNEL BASECOURSE TESTING - MINIMUM DRY DENSITY OF <u>2100kg/m³</u> WITH 75% EQUAL OR EXCEEDING <u>2150kg/m³</u> .			
8. <u>CUTDOWNS AT RESIDENTIAL PARKING AREAS TO HAVE 280mm OF CONCRETE AS PER SD611 AND CUT DOWN IN COMMERCIAL PARKING AREAS TO HAVE 280mm OF CONCRETE WITH REINFORCEMENT AS PER SD611.</u>			
9. ALL BERMS TO BE AND COVERED WITH A MINIMUM OF <u>150mm GRADE 1 TOPSOIL</u> AND GRASSED WITH <u>CCC BERM MIX</u> .			
10. ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.			
11. ALL ROAD AND FOOTPATH AREAS TO BE SURFACED USING ASPHALTIC CONCRETE. FOOTPATHS TO BE CONSTRUCTED IN ACCORDANCE WITH SDC REQUIREMENTS WITH 25mm DEPTH AC, WHILE ROAD PAVEMENTS TO BE 35mm DEPTH.			
12. METAL DEPTHS TO BE CONFIRMED OR INCREASED PRIOR TO COMMENCEMENT OF WORK FOLLOWING THE CHECKING OF SUBGRADE CBR ON SITE.			
13. KERBS AT INTERSECTIONS HAVE A RADIUS OF <u>6.0m</u> UNLESS SHOWN OTHERWISE.			
14. ALL PAVEMENT CROSSFALLS ARE TO BE CONSTRUCTED IN ACCORDANCE SD623.			
15. TACTILE PAVERS ARE TO BE INSTALLED AS PER SD623 AND RTS14 GUIDELINES FOR FACILITIES FOR THE BLIND AND VISION -IMPAIRED PEDESTRIANS.			
16. ROAD BASECOURSE TESTING - MAXIMUM BENKELMAN BEAM DEFLECTION OF 2.00mm WITH 95% BELOW 1.6mm FOR ROADS AND A MAXIMUM DEFLECTION OF 2.5mm WITH 95% BELOW 2.00mm FOR ROW.			
17. <u>ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.</u>			
DESIGNED BY	NAME BEN FOX	SIGNED BEN FOX	DATE
CHECKED BY	ANDY HALL	ANDY HALL	

 DAVIE LOVELL-SMITH PLANNING SURVEYING ENGINEERING			
116 Wrights Road P O Box 679 Christchurch 8140. New Zealand Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz			
JOB TITLE: Broadfield Grange Stage 14			
SHEET TITLE: Roading Sections RC245118 & RC245458			
DRAWING STATUS: For Engineering Approval			
SCALE : As Shown		DATE : November 2025	
CAD FILE : J:\20666\Eng\Drawings\STAGE 14\E20666_E01.0 STG 14_R0.dwg		DRAWN : JS	
DRAWING No : E.20666		SHEET No : E03.2	
REVISION : R0		REVISION : R0	



AMENDMENTS :

AMENDMENT	DATE	DESCRIPTION

NOTES :

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3.

ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.

4.

ALL UPVC PIPES (WHETHER SEWER OR STORMWATER) SHALL CONFORM TO AS NZS 1260:1999 AND SHALL HAVE THE FOLLOWING STIFFNESS NUMBERS AS SET OUT IN THE STANDARD: DN 100 AND 150...SN16; DN225 AND LARGER ... SN8.

5.

ALL SERVICES UP DRIVEWAYS & ROWs TO BE INSTALLED BY A REGISTERED DRAIN LAYER AND IN TERMS OF THE BUILDING CONSENT.

6.

REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.

7.

ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m

8.

ALL SEWER AND STORMWATER LATERALS TO BE LAID AT 1:60, MINIMUM GRADE AND LAID TO 1.0m WITHIN LOTS.

9.

NOMINATED PIPE SIZES ARE INTERNAL DIAMETER UNLESS NOTED OTHERWISE.

10.

ALL RESIDENTIAL STORMWATER LATERALS TO BE 100mm DIAMETER AND INDUSTRIAL LATERALS TO BE A MINIMUM OF 150mm.

11.

RAMPED RISERS ARE TO BE USED FOR LATERALS TO ENSURE A MAXIMUM DEPTH OF 1.5m COVER AT THE LOT BOUNDARY.

12.

BEDDING TO BE AS PER SD344 UNLESS OTHERWISE SPECIFIED.

13.

ALL STORMWATER PIPES 225mm DIAMETER uPVC SN8 UNLESS NOTED OTHERWISE. REFER TO LONSECTIONS FOR DETAILS.

LEGEND :

STREET LIGHT

EXISTING STREET LIGHT

STORMWATER SOAKPIT

EXISTING SERVICES

PROPOSED SERVICES

STORMWATER

STORMWATER

KERB

KERB

MH

MH

CUT DOWN

NAME	SIGNED	DATE
DESIGNED BY BEN FOX	BEN FOX	
CHECKED BY ANDY HALL	ANDY HALL	

DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:
**Broadfield Grange
Stage 14**

SHEET TITLE:
**Sewer & Stormwater Plan
RC245118 & RC245458**

DRAWING STATUS
For Engineering Approval

SCALE : 1:550@A1
1:1100@A3

DATE : November 2025

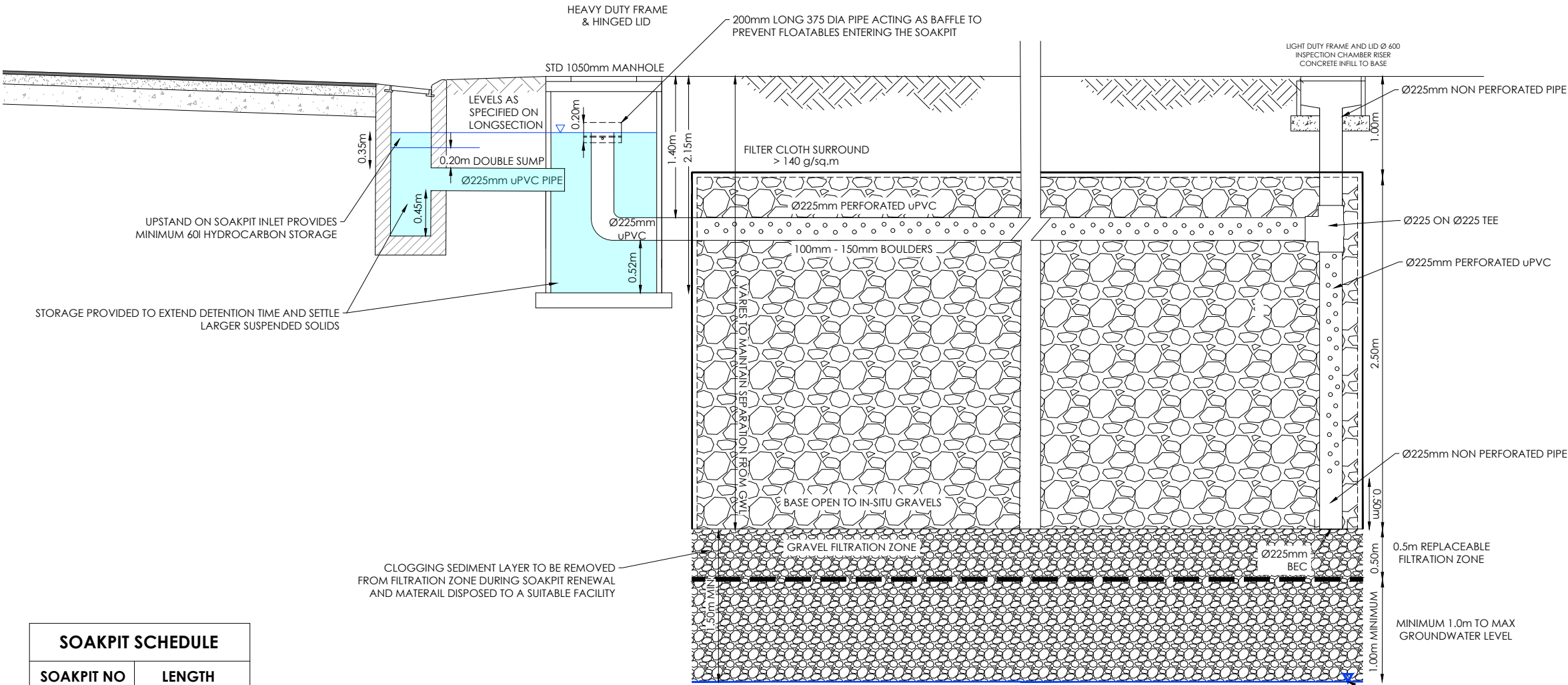
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DRAWING No : **E.20666**

SHEET No: **E04.0**

REVISION : **R0**

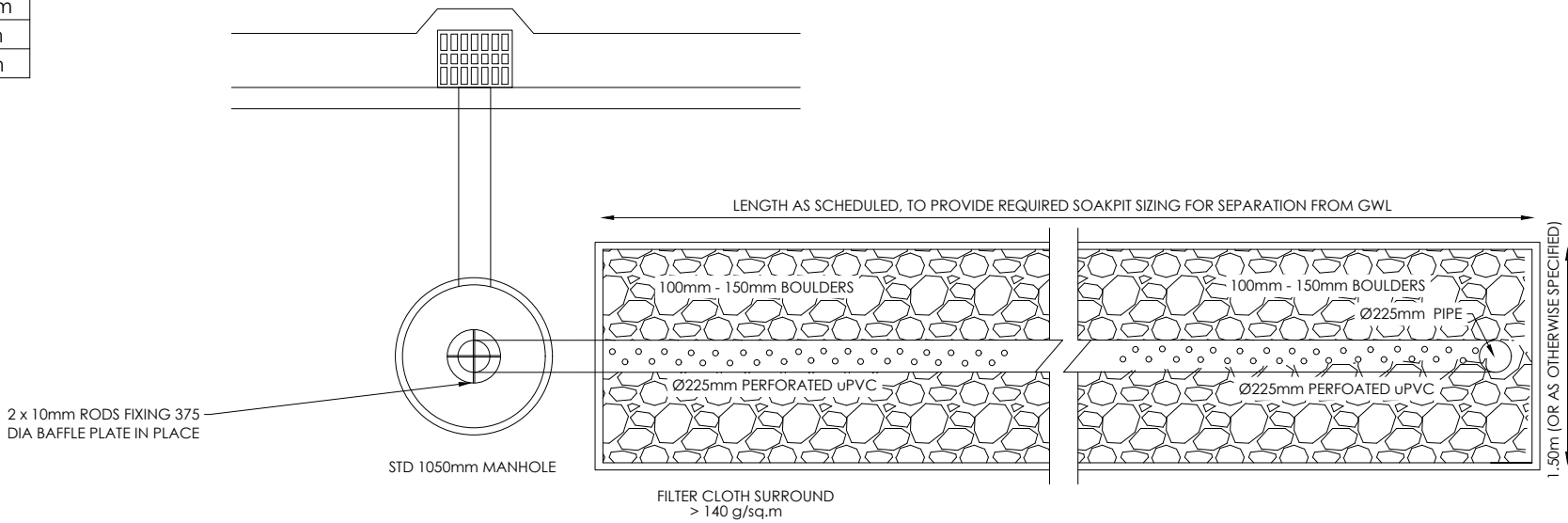
SOAKAGE RATE TO BE CONFIRMED ONSITE. REFER TO ENGINEER FOR SOAKPIT SIZING.



SOAKPIT TYPE 1 CONNECTION CROSS-SECTION

SCALE:
1:25@A1
1:50@A3

SOAKPIT SCHEDULE	
SOAKPIT NO	LENGTH
SW.9	31.2m x 2m
SW.10	30.7m x 2m
SW.11	29.5m x 2m
SW.12	36.9m x 1.5m
SW.13	12.8m x 1.5m
SW.14	23.5m x 1.5m
SW.15	10.4m x 2m
SW.23	28.3m x 2m



SUMP TO SOAKPIT TYPE 1 CONNECTION PLAN

SCALE:
1:25@A1
1:50@A3

AMENDMENTS :		
AMENDMENT	DATE	DESCRIPTION
NOTES :		
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3. ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.		
4. ALL UPVC PIPES (WHETHER SEWER OR STORMWATER) SHALL CONFORM TO AS NZS 1260:1999 AND SHALL HAVE THE FOLLOWING STIFFNESS NUMBERS AS SET OUT IN THE STANDARD: DN 100 AND 150...SN16; DN225 AND LARGER ... SN8.		
5. <u>ALL SERVICES UP DRIVEWAYS & ROWs TO BE INSTALLED BY A REGISTERED DRAIN LAYER AND IN TERMS OF THE BUILDING CONSENT.</u>		
6. REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.		
7. <u>ORIGIN OF LEVELS</u> LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937 ORIGIN MARK B882 (UG 32) RL 55.908m CHK EJBW (CC 370 NO 2) RL 58.154m		
8. <u>ALL SEWER AND STORMWATER LATERALS TO BE LAID AT 1:60. MINIMUM GRADE AND LAID TO 1.0m WITHIN LOTS.</u>		
9. NOMINATED PIPE SIZES ARE INTERNAL DIAMETER UNLESS NOTED OTHERWISE.		
10. <u>ALL RESIDENTIAL STORMWATER LATERALS TO BE 100mm DIAMETER AND INDUSTRIAL LATERALS TO BE A MINIMUM OF 150mm.</u>		
11. RAMPED RISERS ARE TO BE USED FOR LATERALS TO ENSURE A MAXIMUM DEPTH OF <u>1.5m COVER AT THE LOT BOUNDARY.</u>		
12. BEDDING TO BE AS PER SD344 UNLESS OTHERWISE SPECIFIED.		



116 Wrights Road P O Box 679 Christchurch 8140 New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:
**Broadfield Grange
Stage 14**

SHEET TITLE:
**Stormwater Details
RC245118 & RC245458**

DRAWING STATUS:
For Engineering Approval

SCALE: As Shown DATE: November 2025

CAD FILE: J:\20666\Eng\Drawings\STAGE 14\E20666_E01.0 STG 14_R0.dwg	DRAWN: JS
DRAWING No: E.20666	REVISION: R0
SHEET No: E04.2	



AMENDMENTS :

AMENDMENT	DATE	DESCRIPTION

NOTES :

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3.

TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.

4.

ALL SERVICES TO BE FULLY SEARCHED AND PILOTED PRIOR TO TRENCHING.

5.

ALL WATER PIPES TO BE PE PN12.5 AND ALL FITTINGS TO BE PN16.

6.

WATERMAINS AND SUBMAINS TO BE INSTALLED AT THE OFFSET STATED ON THE PLAN AND AGREED WITH ENGINEER.

7.

WATERMAINS TO HAVE A MINIMUM COVER OF 0.75M.

8.

CONTRACTORS ATTENTION IS DRAWN TO THE COUNCILS REQUIREMENTS FOR PE WELD TESTING.

9.

REGISTERED CRAFTSMAN PLUMBER TO INSTALL ALL REAR LOT LATERALS. REFER TO THE BUILDING CODE.

10.

CONTRACTOR TO INSTALL WATER MAIN TO ENSURE NO CLASHES WITH OTHER SERVICES. TO BE INSTALLED IN ACCORDANCE WITH THE IDS 7.9.5.

11.

THRUST BLOCK AS PER WSD-004, 1m² DN300 TEE, 05m² DN200 TEE.

12.

ALL SUBMAIN CONNECTIONS TO MAIN PIPES TO BE BY TAPPING BAND OR HYDRANT CROSSOVER

LEGEND :

EXISTING SERVICES

WATER  VALVE  KERB 

PROPOSED SERVICES

WATER  VALVE  METER  CUT DOWN 

	NAME	SIGNED	DATE
DESIGNED BY	BEN FOX	BEN FOX	
CHECKED BY	ANDY HALL	ANDY HALL	



DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

**Broadfield Grange
Stage 14**

SHEET TITLE:

**Water Plan
RC245118 & RC245458**

DRAWING STATUS

For Engineering Approval

SCALE : 1:550@A1
1:1100@A3

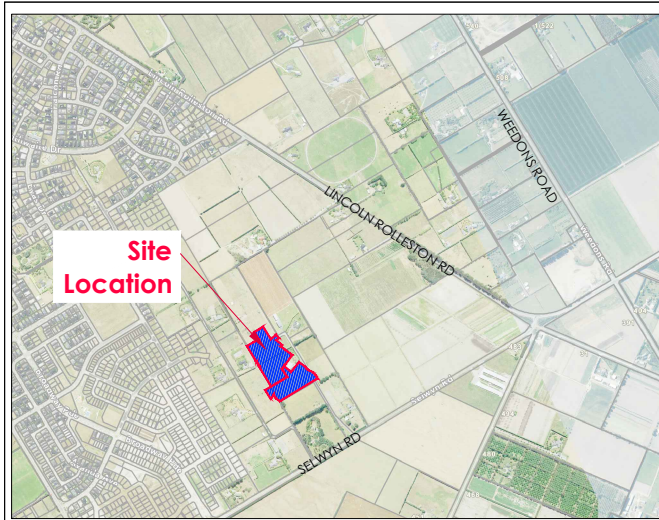
DATE : November 2025

CAD FILE : J:\20666\Eng\Drawings\STAGE 14\E20666_E01.0 STG 14_R0.dwg

DRAWING No : **E.20666**

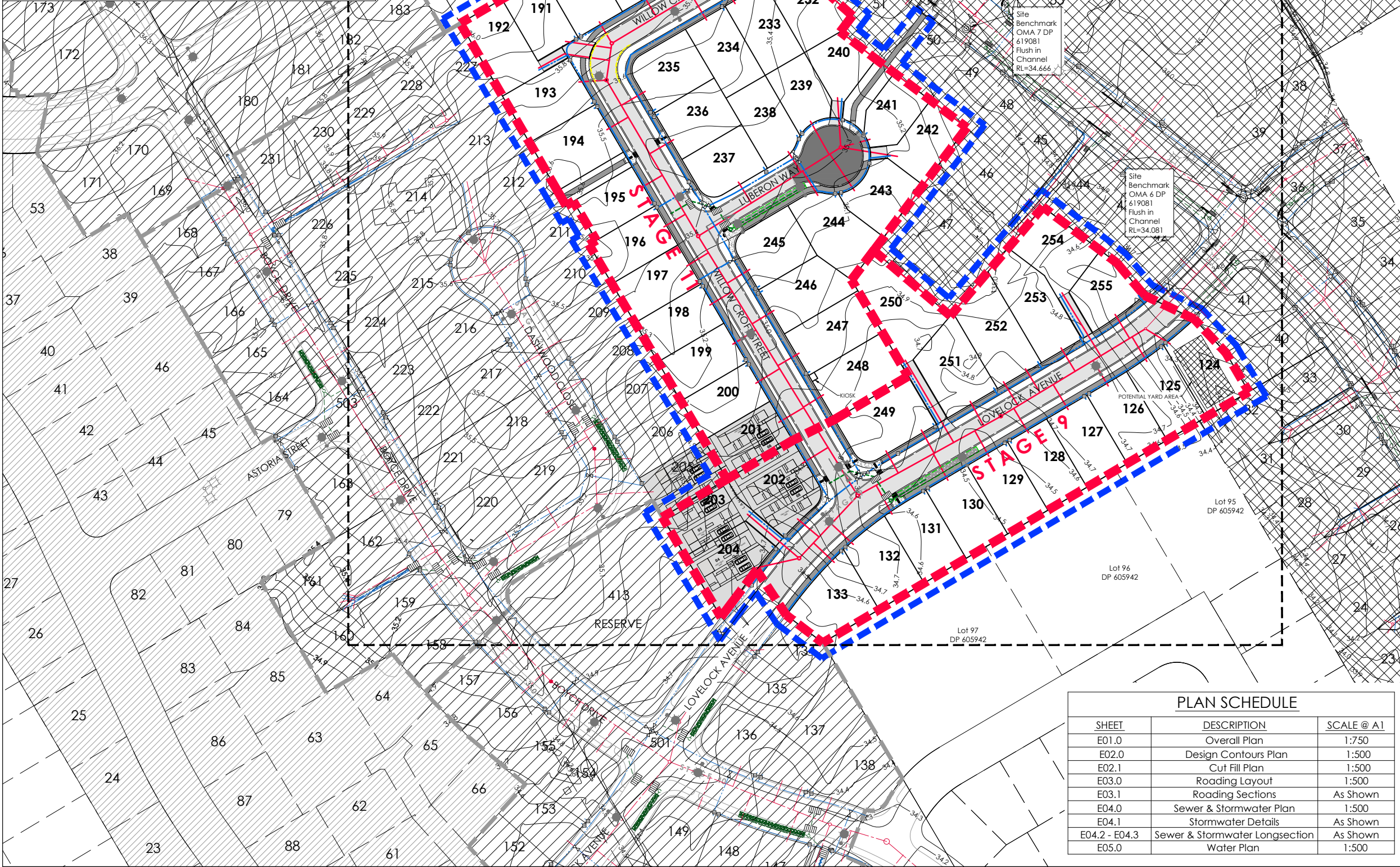
SHEET No: **E05.0**

REVISION : **R0**



LOCATION PLAN

Scale: 1:10,000@A1
1:20,000@A3



AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

- NOTES:
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 - CONTOUR INTERVAL: 0.1m MINOR, 1.0m MAJOR.
 - ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m
 - CONTROL OF SW, SEDIMENT AND DUST ON SITE IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.

LEGEND:

- STAGE BOUNDARY (Red dashed line)
- EXTENT OF WORKS (Blue dashed line)
- FLUSHING POINT (FP)
- STREET LIGHT
- PROPOSED TREE
- NEW ASPHALT PAVEMENT
- NEW CHIP SEAL PAVEMENT
- NEW EXPOSED AGGREGATE CONCRETE
- NEW FOOTPATH
- COMPLETED STAGES

EXISTING SERVICES

- SANITARY SEWER STD. MH
- SANITARY SEWER VENTED MH
- STORMWATER MH
- WATER FH VALVE
- KERB

PROPOSED SERVICES

- SANITARY SEWER STD. MH
- SANITARY SEWER VENTED MH
- STORMWATER MH
- WATER FH VALVE METER
- KERB CUT DOWN

NAME	SIGNED	DATE
DESIGNED BY JALAY SHAH	JALAY SHAH	
CHECKED BY BEN FOX	BEN FOX	

DAVE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140, New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:

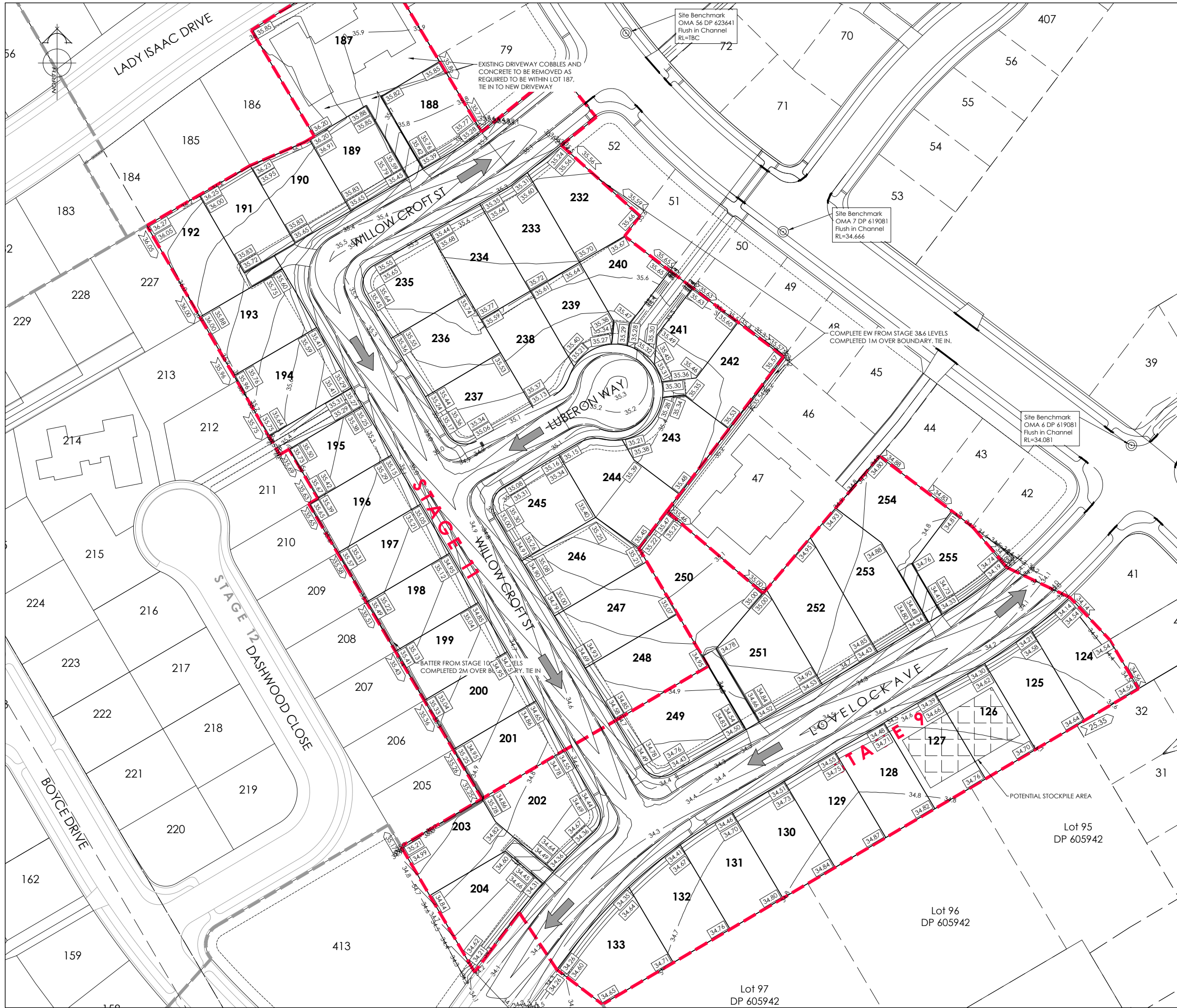
**Overall Plan
RC245458**

DRAWING STATUS

For Engineering Approval

SCALE: 1:750@A1 1:1500@A3	DATE: March 2026	DRAWN: JS
CAD FILE: J:\21490\Eng\Drawings\STAGES 9 & 11\21490_E01.0 STG 9 & 11_R1.dwg	DRAWING No:	REVISION:
	SHEET No:	
E21490	E01.0	R1

PLAN SCHEDULE		
SHEET	DESCRIPTION	SCALE @ A1
E01.0	Overall Plan	1:750
E02.0	Design Contours Plan	1:500
E02.1	Cut Fill Plan	1:500
E03.0	Roading Layout	1:500
E03.1	Roading Sections	As Shown
E04.0	Sewer & Stormwater Plan	1:500
E04.1	Stormwater Details	As Shown
E04.2 - E04.3	Sewer & Stormwater Longsection	As Shown
E05.0	Water Plan	1:500



AMENDMENTS:

AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

NOTES:

- ALL WORKS IN ACCORDANCE WITH SDC CODE OF PRACTICE PARTS 1-11 STANDARDS, IF STANDARDS ARE UNSPECIFIED REFER TO CCC CSS PARTS 1-7.
- ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m
- METAL DEPTHS TO BE CONFIRMED OR INCREASED BY ENGINEER FOLLOWING CHECKING OF SUBGRADE CBR STRENGTH ONCE EXCAVATED.
- ALL BERMS TO BE COVER WITH A MINIMUM OF 150mm SCREENED TOPSOIL GRASSED WITH SDC BERM MIX.
- EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL SERVICES TO BE FULLY SEARCHED & PILOTTED PRIOR TO TRENCHING.
- ALL TREES, VEGETATION AND FENCES TO BE REMOVED CLEAR OF THE EXTENT OF WORKS. MAINTAIN RESIDENTIAL PALING & FENCES.
- DESIGN CONTOUR INTERVAL: MAJOR 1m MINOR 0.1m.
- ALL EARTHFILL WORKS TO COMPLY WITH NZS 4431:2022 RELEVANT CERTIFICATION REQUIRED AS PROOF.
- IF PEAT OR OTHER UNSUITABLE MATERIAL IS LOCATED IN THE SUBGRADE THE ENGINEER IS TO BE CONTACTED FOR INSTRUCTION.
- ESCMP TO BE IN PLACE PRIOR TO ANY EARTHWORKS.
- CONTRACTOR MUST READ ALL DISCHARGE CONSENTS PRIOR TO ANY EARTHWORKS.
- DRAWINGS TO BE DISTRIBUTED AND READ AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.

LEGEND:

FUTURE STAGES

COMPLETED STAGES

EARTHWORKS BREAKLINE

STAGE BOUNDARY

LEVELS

20.31

PROPOSED LOT LEVELS

25.35

EXISTING LOT LEVELS

SEC FLOW

DIRECTION OF FLOW

EXISTING SERVICES

PROPOSED SERVICES

KERB

KERB

CUT/DOWN

DAVE LOVELL-SMITH

PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand

Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

Broadfield Grange Stages 9 & 11

SHEET TITLE:

Design Contours RC245458

DRAWING STATUS

For Engineering Approval

SCALE: 1:500@A1
1:1000@A3

DATE: March 2026

CAD FILE: J:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E02.0 STGs 9 & 11_R1.dwg

DRAWING No: E21490

SHEET No: E02.0

DRAWN: JS

REVISION: R1



AMENDMENTS:

AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

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LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

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COMPLETED STAGES

EARTHWORKS BREAKLINE

STAGE BOUNDARY

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PROPOSED LOT LEVELS

25.35

EXISTING LOT LEVELS

SEC. FLOW

DIRECTION OF FLOW

ENGINEERING FILL

CUT

EXISTING SERVICES

PROPOSED SERVICES

KERB

KERB

CUT/DOWN

NAME	SIGNED	DATE
DESIGNED BY: JALAY SHAH	JALAY SHAH	
CHECKED BY: BEN FOX	BEN FOX	

DAVE LOVELL-SMITH

PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

Broadfield Grange
Stages 9 & 11

SHEET TITLE:

Cut Fill Plan
RC245458

DRAWING STATUS

For Engineering Approval

SCALE: 1:500@A1
1:1000@A3

DATE: March 2026

CAD FILE: J:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E02.0 STGs 9 & 11_R1.dwg

DRAWING No: E21490

SHEET No: E02.1

DRAWN: JS

REVISION: R1



AMENDMENTS:

AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

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3.

CARRIAGEWAY AND FOOTPATH ACCEPTANCE TESTING IN ACCORDANCE WITH SDC CSS PART 6 AND CCC IDS.

4.

ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJBW (CC 370 NO 2)
RL 58.154m

5.

FOOTPATH BASECOURSE TESTING - MINIMUM CLEGG HAMMER VALUE OF 25 REQUIRED FOR FOOTPATHS.

6.

- MINIMUM CLEGG HAMMER VALUE OF 35 REQUIRED FOR CROSSINGS.

7.

KERB & CHANNEL BASECOURSE TESTING - MINIMUM DRY DENSITY OF 2100kg/m³ WITH 75% EQUAL OR EXCEEDING 2150kg/m³.

8.

CUTDOWNS AT RESIDENTIAL PARKING AREAS TO HAVE 280mm OF CONCRETE AS PER SD611 AND CUT DOWN IN COMMERCIAL PARKING AREAS TO HAVE 280mm OF CONCRETE WITH REINFORCEMENT AS PER SD611.

9.

ALL BERMS TO BE COVERED WITH A MINIMUM OF 150mm GRADE 1 TOPSOIL AND GRASSED WITH SDC BERM MIX.

10.

ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.

11.

ALL ROAD AND FOOTPATH AREAS TO BE SURFACED USING ASPHALTIC CONCRETE. FOOTPATHS TO BE CONSTRUCTED IN ACCORDANCE WITH SDC REQUIREMENTS WITH 25mm DEPTH AC, WHILE ROAD PAVEMENTS TO BE 35mm DEPTH.

12.

METAL DEPTHS TO BE CONFIRMED OR INCREASED PRIOR TO COMMENCEMENT OF WORK FOLLOWING THE CHECKING OF SUBGRADE CBR ON SITE.

13.

KERBS AT INTERSECTIONS HAVE A RADIUS OF 6.0m UNLESS SHOWN OTHERWISE.

14.

ALL PAVEMENT CROSSFALLS ARE TO BE CONSTRUCTED IN ACCORDANCE SD623.

15.

TACTILE PAVERS ARE TO BE INSTALLED AS PER SD623 AND RTS14 GUIDELINES FOR FACILITIES FOR THE BLIND AND VISION -IMPAIRED PEDESTRIANS.

16.

ROAD BASECOURSE TESTING - MAXIMUM BENKELMAN BEAM DEFLECTION OF 2.00mm WITH 95% BELOW 1.6mm FOR ROADS AND A MAXIMUM DEFLECTION OF 2.5mm WITH 95% BELOW 2.00mm FOR ROWS.

17.

ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.

	NAME	SIGNED	DATE
DESIGNED BY	JALAY SHAH	JALAY SHAH	
CHECKED BY	BEN FOX	BEN FOX	



DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

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Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:
**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:
**Roading Layout
RC245458**

DRAWING STATUS:
For Engineering Approval

SCALE: 1:500@A1
1:1000@A3

DATE: March 2026

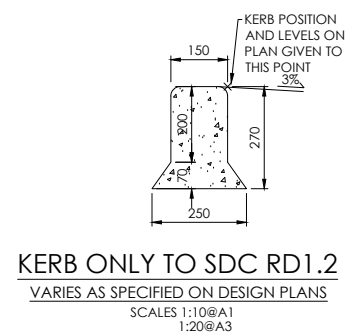
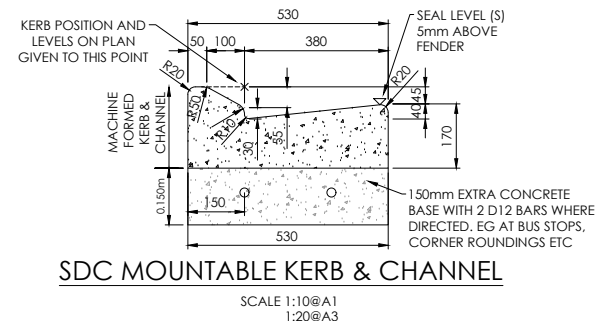
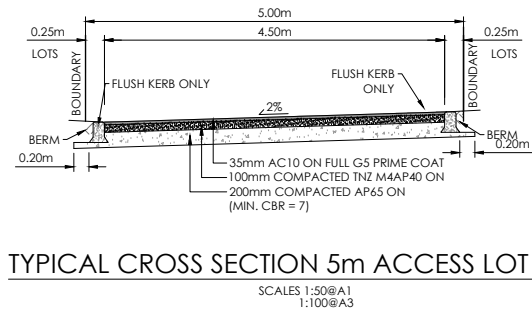
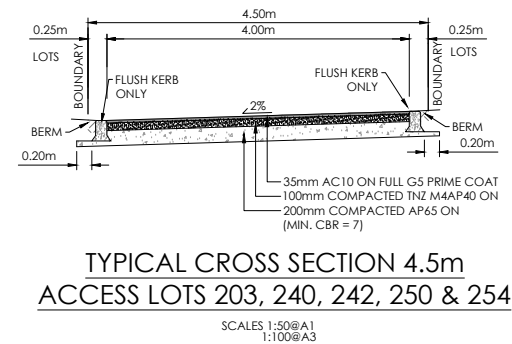
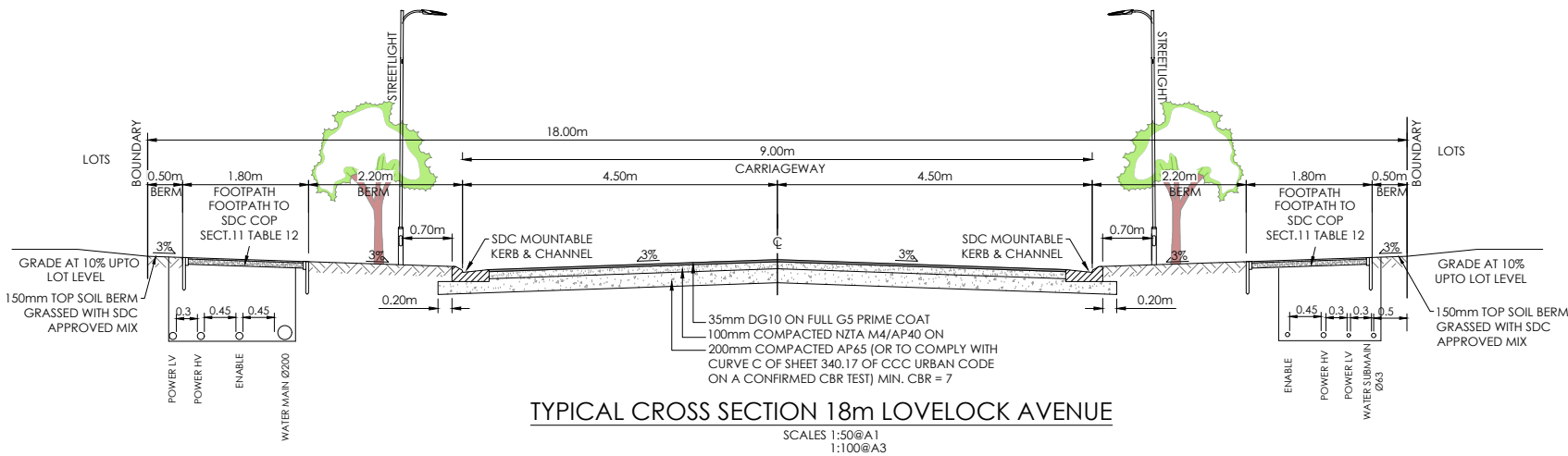
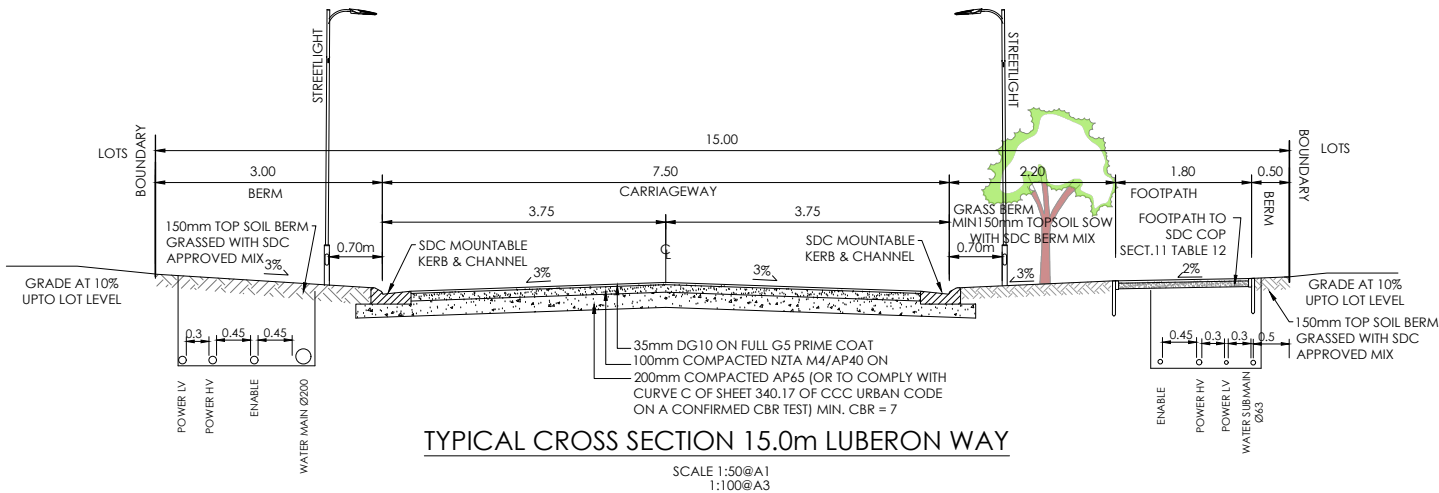
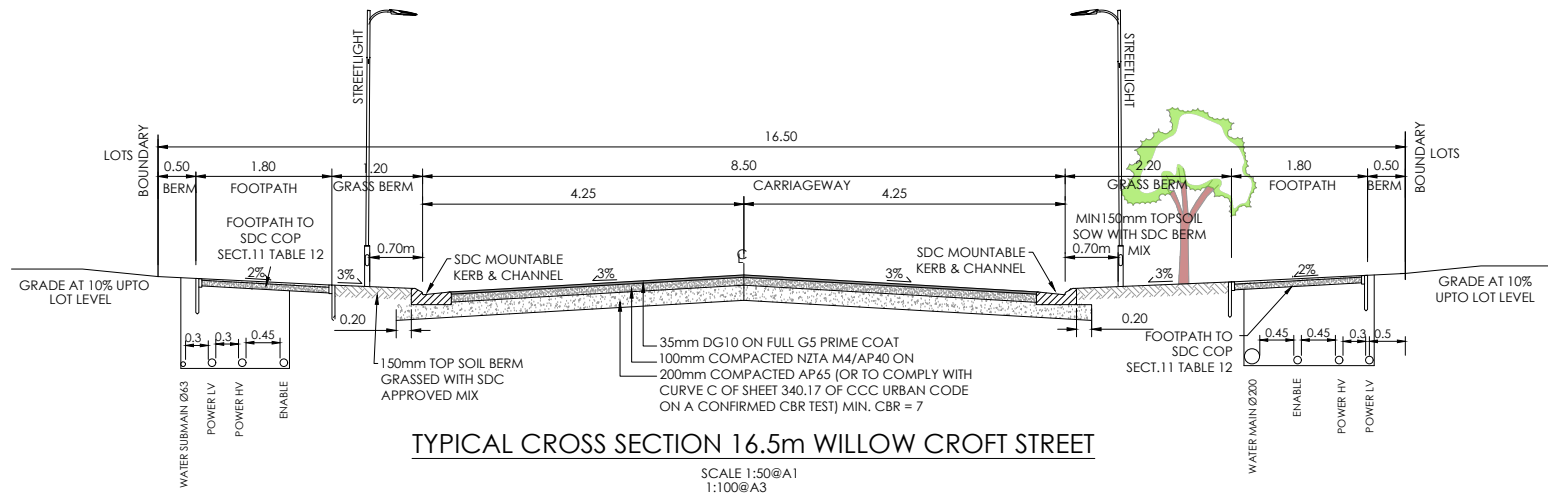
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DRAWN: JS

DRAWING No: E21490

SHEET No: E03.0

REVISION: R1



AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

- NOTES :
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 - ORIGIN OF LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937
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RL 55.908m
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 - ALL ROW AND DRIVEWAYS ARE TO HAVE 50mm DUCTS INSTALLED FOR COMMUNICATIONS AND POWER SUPPLY.

	NAME	SIGNED	DATE
DESIGNED BY	JALAY SHAH	JALAY SHAH	
CHECKED BY	BEN FOX	BEN FOX	

DAVE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

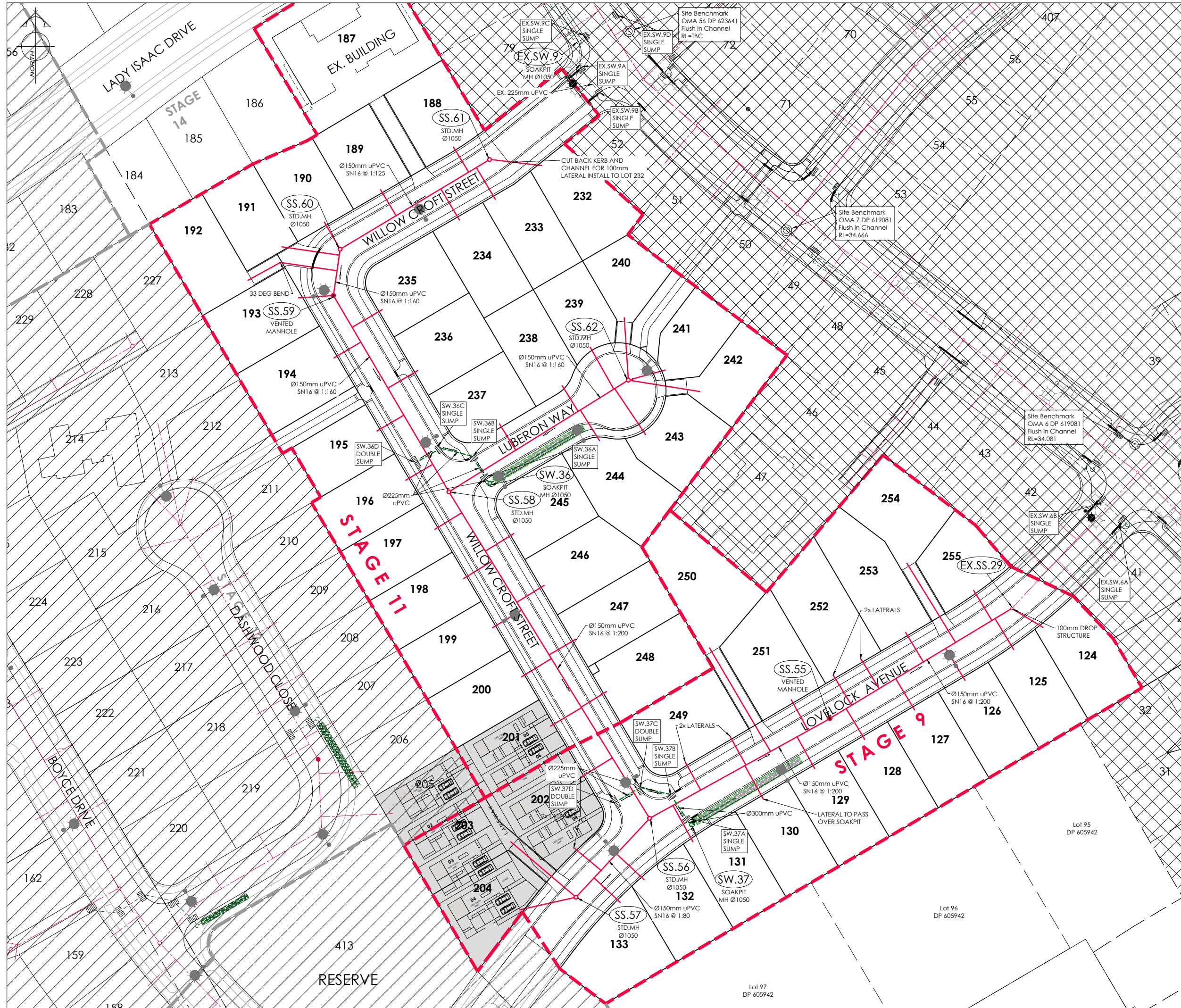
JOB TITLE:
Broadfield Grange Stages 9 & 11

SHEET TITLE:
Roading Sections RC245458

DRAWING STATUS:
For Engineering Approval

SCALE: As Shown DATE: March 2026

CAD FILE: J:\21490\Eng\Drawing\STAGES 9 & 11\21490_E01.0 STGs 9 & 11_R1.dwg	DRAWN: JS
DRAWING No: E21490	REVISION: R1
SHEET No: E03.1	



AMENDMENTS:

AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

NOTES:

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3.

ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.

4.

ALL UPVC PIPES (WHETHER SEWER OR STORMWATER) SHALL CONFORM TO AS NZS 1260:1999 AND SHALL HAVE THE FOLLOWING STIFFNESS NUMBERS AS SET OUT IN THE STANDARD: DN 100 AND 150...SN16; DN225 AND LARGER ...SN8.

5.

ALL SERVICES UP DRIVEWAYS & ROWs TO BE INSTALLED BY A REGISTERED DRAIN LAYER AND IN TERMS OF THE BUILDING CONSENT.

6.

REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.

7.

ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

ORIGIN MARK B882 (UG 32)
RL 55.908m
CHK EJ8W (CC 370 NO 2)
RL 58.154m

8.

ALL SEWER AND STORMWATER LATERALS TO BE LAID AT 1:60, MINIMUM GRADE AND LAID TO 1.0m WITHIN LOTS.

9.

NOMINATED PIPE SIZES ARE INTERNAL DIAMETER UNLESS NOTED OTHERWISE.

10.

ALL RESIDENTIAL STORMWATER LATERALS TO BE 100mm DIAMETER.

11.

RAMPED RISERS ARE TO BE USED FOR LATERALS TO ENSURE A MAXIMUM DEPTH OF 1.5m COVER AT THE LOT BOUNDARY.

12.

BEDDING TO BE AS PER SD344 UNLESS OTHERWISE SPECIFIED.

13.

ALL STORMWATER PIPES 225mm DIAMETER uPVC SN8 UNLESS NOTED OTHERWISE. REFER TO LONGSECTIONS FOR DETAILS.

LEGEND:

STREET LIGHT

EXISTING STREET LIGHT

STORMWATER SOAKPIT

EXISTING SERVICES

STD. MH

VENTED MH

MH

KERB

PROPOSED SERVICES

STD. MH

VENTED MH

MH

CUT DOWN

NAME	SIGNED	DATE
DESIGNED BY JALAY SHAH	JALAY SHAH	
CHECKED BY BEN FOX	BEN FOX	

DAVIE LOVELL-SMITH

PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

Broadfield Grange

Stages 9 & 11

SHEET TITLE:

Sewer & Stormwater Plan

RC245458

DRAWING STATUS

For Engineering Approval

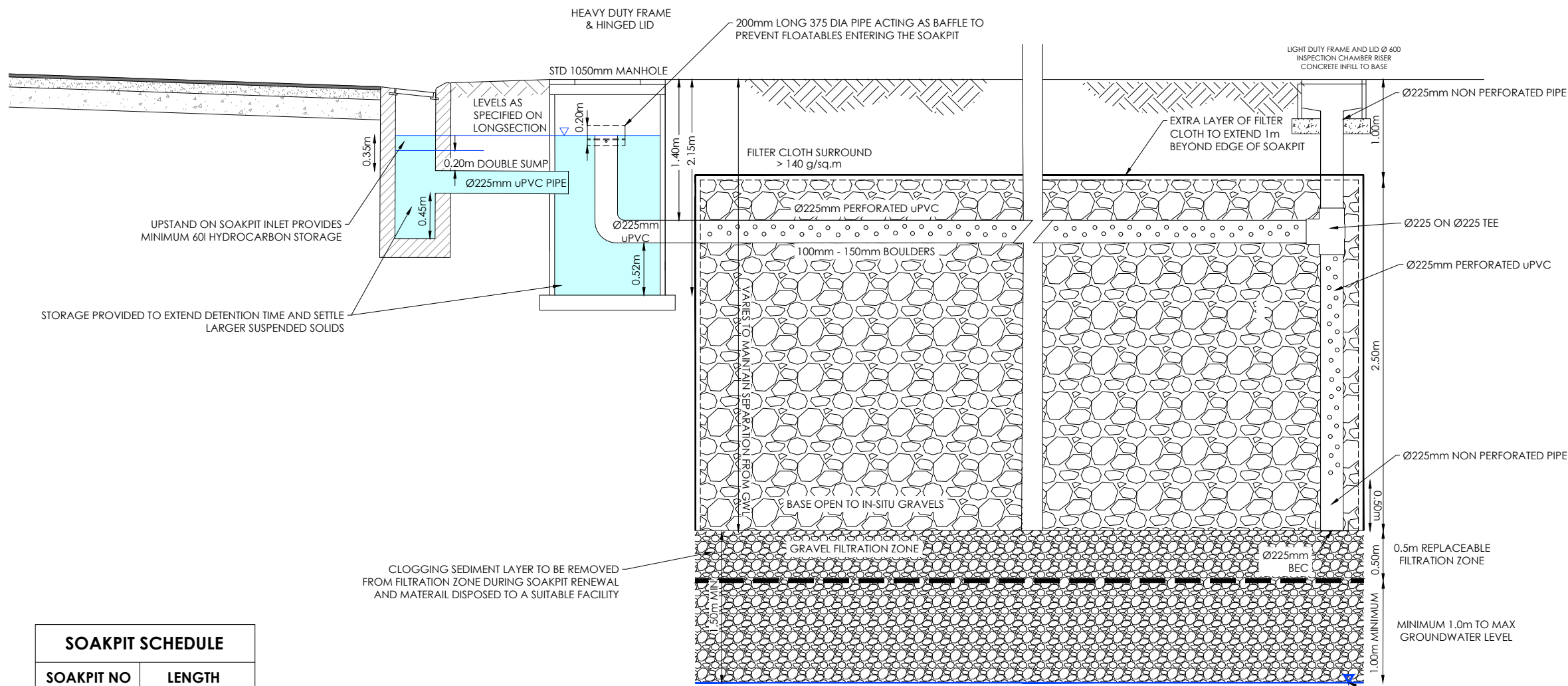
SCALE: 1:500@A1
1:1000@A3

DATE: March 2026

CAD FILE: J:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E01.0 STGs 9 & 11_R1.dwg

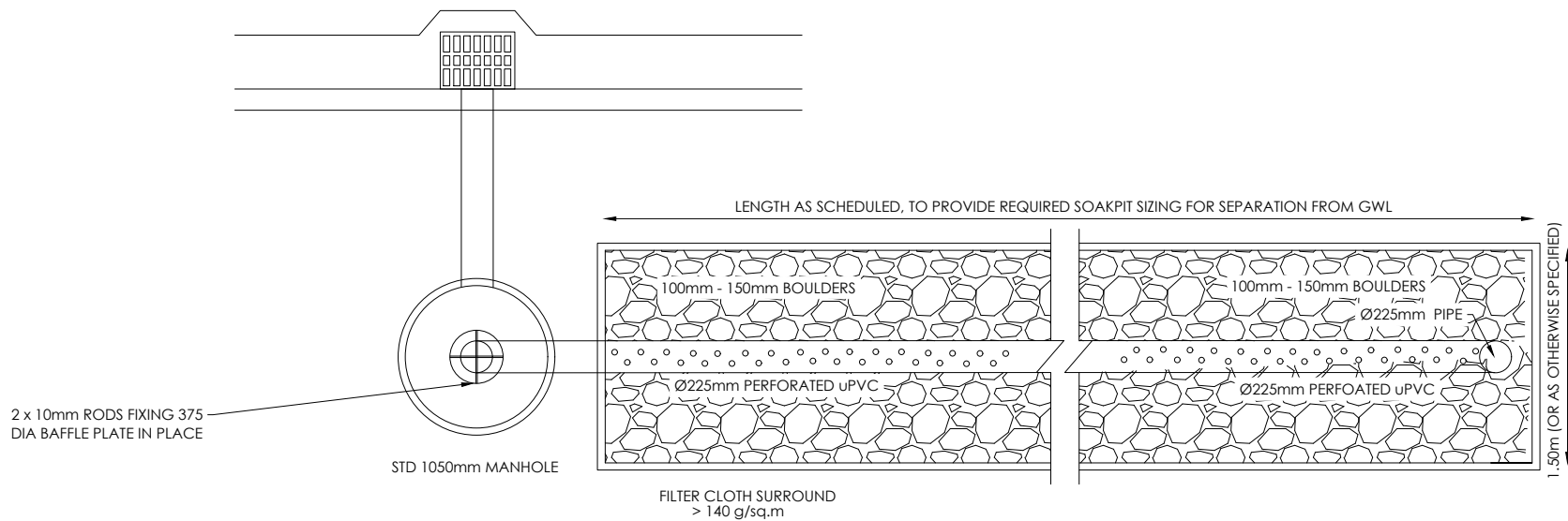
DRAWING No: E21490 SHEET No: E04.0 REVISION: R1

SOAKAGE RATE TO BE CONFIRMED ONSITE. REFER TO ENGINEER FOR SOAKPIT SIZING.



CLOGGING SEDIMENT LAYER TO BE REMOVED FROM FILTRATION ZONE DURING SOAKPIT RENEWAL AND MATERIAL DISPOSED TO A SUITABLE FACILITY

SOAKPIT SCHEDULE	
SOAKPIT NO	LENGTH
SW.36	28.7m x 2m
SW.37	31.7m x 2m



2 x 10mm RODS FIXING 375 DIA BAFFLE PLATE IN PLACE

SUMP TO SOAKPIT TYPE 1 CONNECTION PLAN

SCALE:
1:25@A1
1:50@A3

AMENDMENTS :		
AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

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- REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.
- ORIGIN OF LEVELS
LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937

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- ALL STORMWATER PIPES 225mm DIAMETER uPVC SN8 UNLESS NOTED OTHERWISE. REFER TO LONGSECTIONS FOR DETAILS.

	NAME	SIGNED	DATE
DESIGNED BY	JALAY SHAH	JALAY SHAH	
CHECKED BY	BEN FOX	BEN FOX	



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Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:

**Stormwater Details
RC245458**

DRAWING STATUS

For Engineering Approval

SCALE : As Shown

DATE : March 2026

CAD FILE : \\21490\Eng\Drawings\STAGES 9 & 11\21490_E01.0 STGs 9 & 11_R1.dwg

DRAWING No :

E21490

SHEET No :

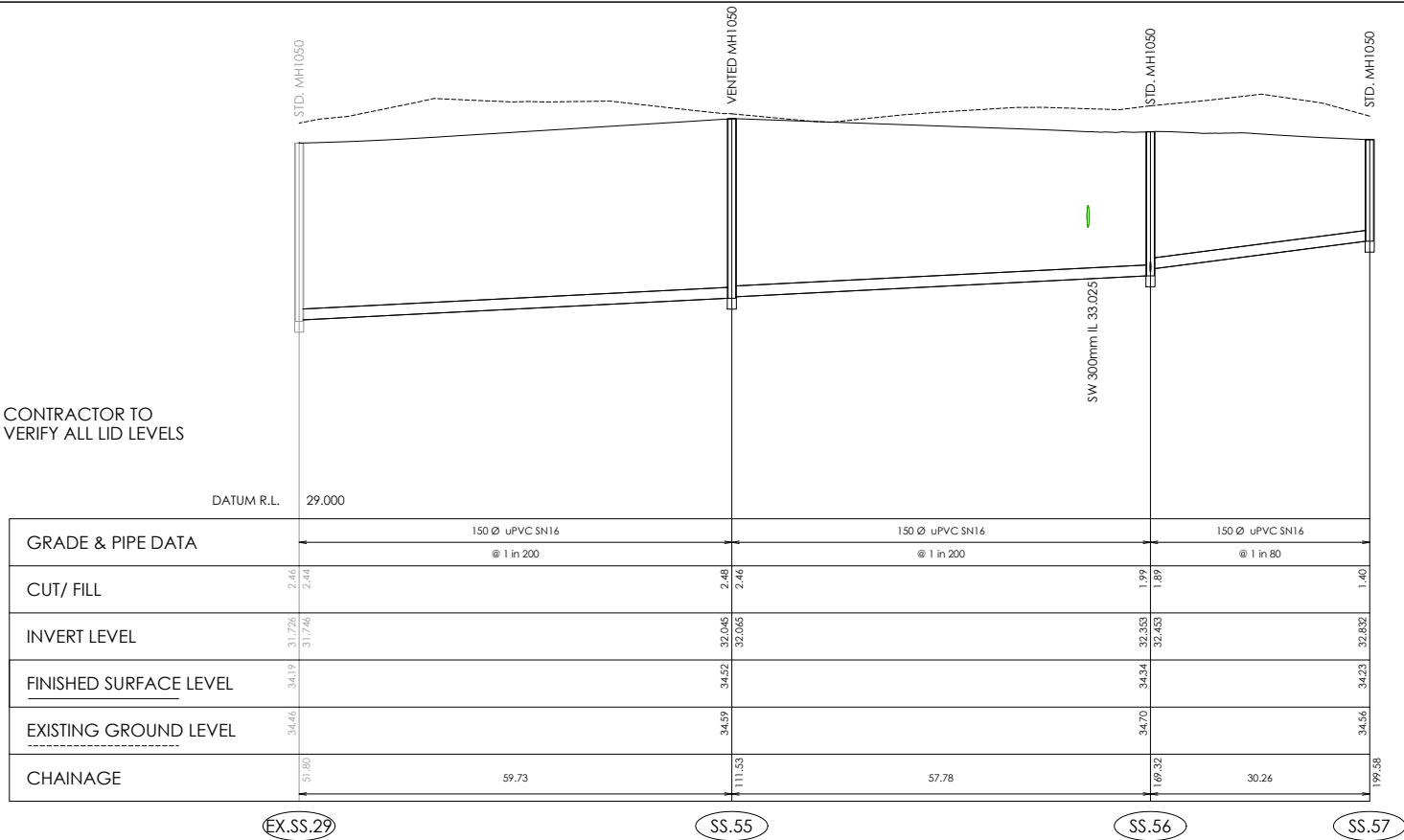
E04.1

DRAWN : JS

REVISION :

R1

CONTRACTOR TO
VERIFY ALL LID LEVELS



SEWER LONGSECTION
EX.SS.29 TO SS.57

Scale 1:500 Horiz @A1
1:50 Vert @A1
1:1000 Horiz @A3
1:100 Vert @A3

CONTRACTOR TO
VERIFY ALL LID LEVELS

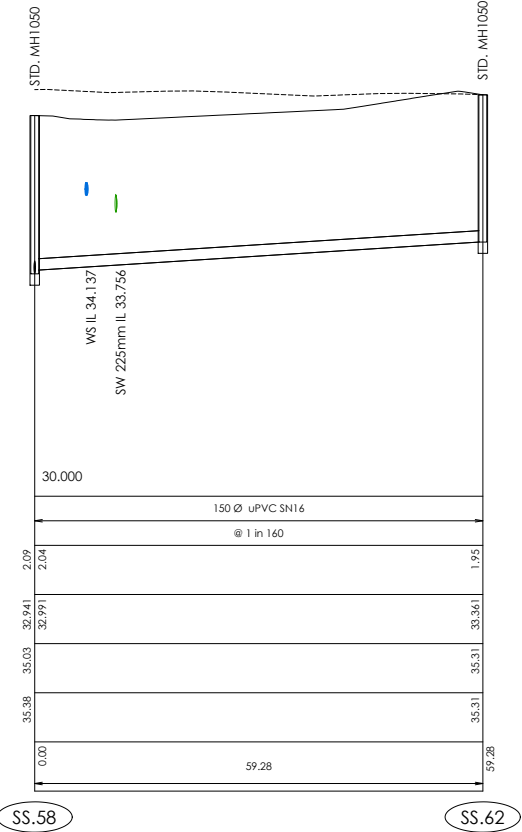
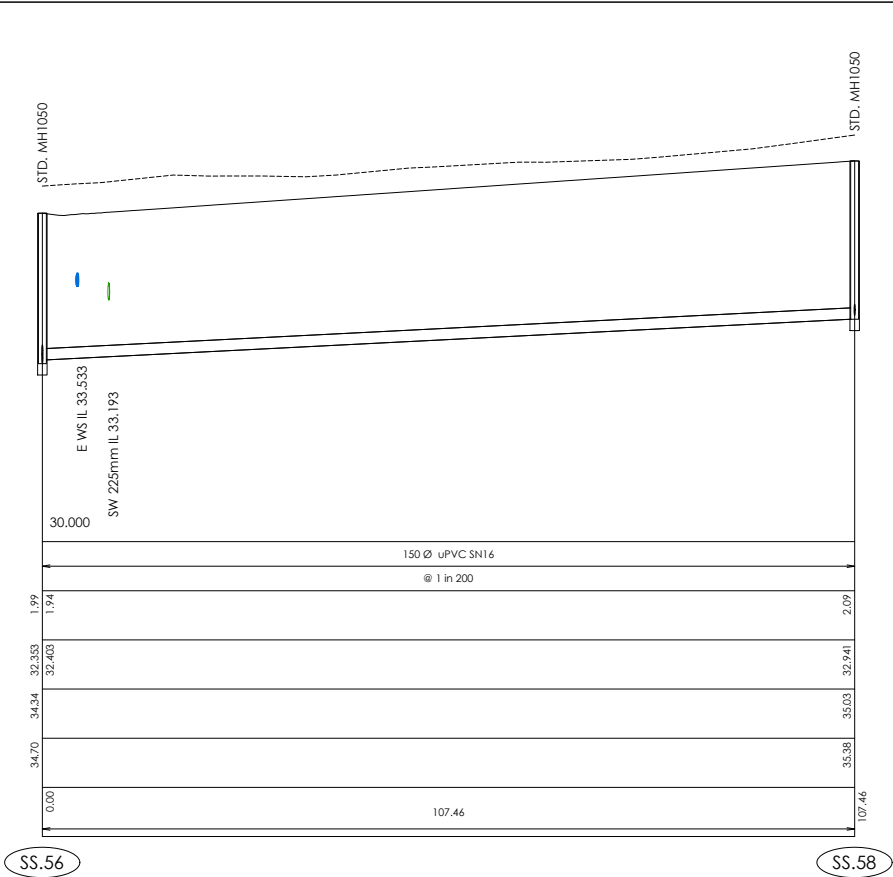


SEWER LONGSECTION
SS.58 TO SS.61

Scale 1:500 Horiz @A1
1:50 Vert @A1
1:1000 Horiz @A3
1:100 Vert @A3

SEWER LONGSECTION
SS.56 TO SS.58

Scale 1:500 Horiz @A1
1:50 Vert @A1
1:1000 Horiz @A3
1:100 Vert @A3



SEWER LONGSECTION
SS.58 TO SS.62

Scale 1:500 Horiz @A1
1:50 Vert @A1
1:1000 Horiz @A3
1:100 Vert @A3

- AMENDMENTS:
- | AMENDMENT | DATE | DESCRIPTION |
|-----------|----------|-----------------------|
| R1 | 17/03/26 | NO CHANGES THIS SHEET |
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 - ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.
 - TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.
 - NOMINATED PIPE SIZES ARE INTERNAL DIAMETER UNLESS NOTED OTHERWISE.
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 - RAMPED RISERS ARE TO BE USED FOR LATERALS TO ENSURE A MAXIMUM DEPTH OF 1.5m COVER AT THE LOT BOUNDARY.
 - BEDDING TO BE AS PER SD342 UNLESS OTHERWISE SPECIFIED.
 - CONCRETE CAPPING TO SD342 WHERE LESS THAN 750MM COVER TO SEWER WITHIN ROAD CARRIAGEWAY.
 - MANHOLE CONNECTIONS SHALL BE STARTERS & SHORTS AND SHORTS & FINISHERS.
 - CORBELS TO BE CONSTRUCTED TO SDC STANDARD INCLUDING CHEMSET.
 - LADDERS ARE REQUIRED FOR SEWER MANHOLES DEEPER THAN 1.2m MEASURED FROM THE TOP OF BENCHING TO FINISHED LEVEL.
 - CONTRACTOR TO VERIFY ALL EXISTING INVERTS AND LID LEVELS ON SITE.

	NAME	SIGNED	DATE
DESIGNED BY	JALAY SHAH	JALAY SHAH	
CHECKED BY	BEN FOX	BEN FOX	


DAVIE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140. New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:

**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:

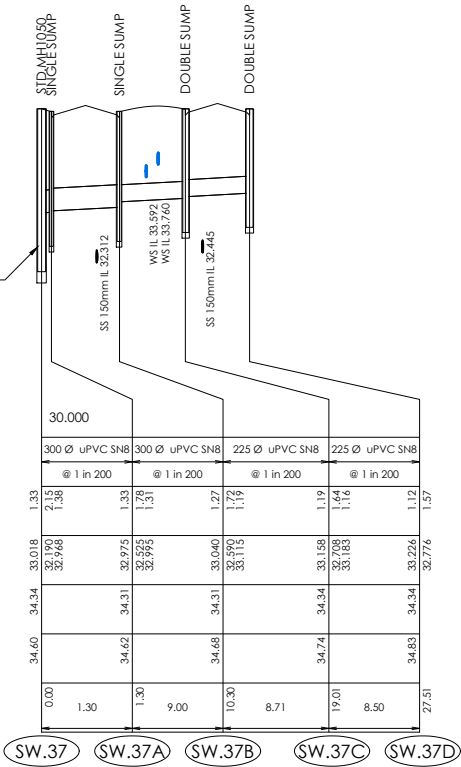
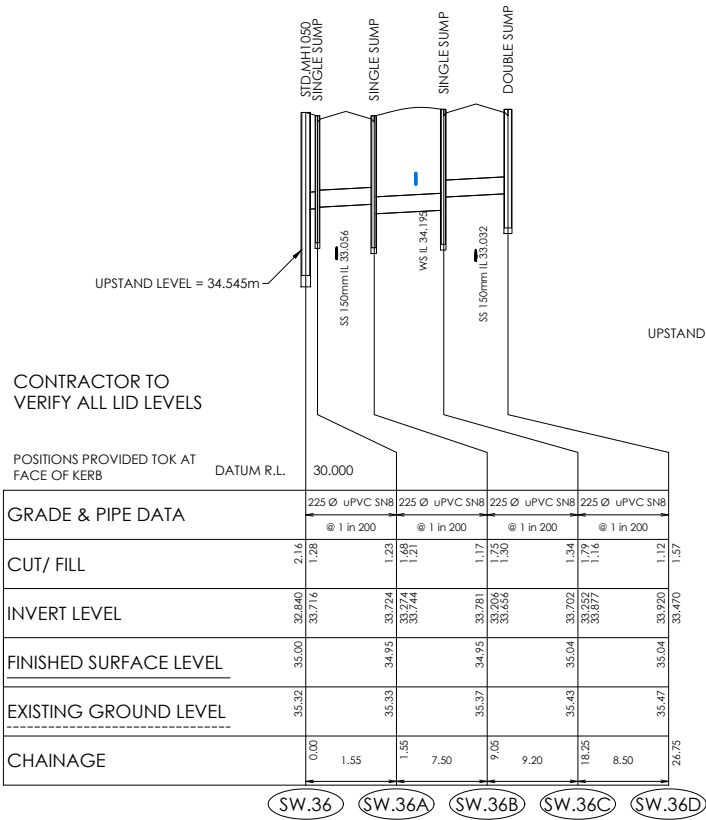
**Sewer Longsections
RC245458**

DRAWING STATUS

For Engineering Approval

SCALE: As Shown DATE: March 2026

CAD FILE : J:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E04.3 STGs 9 & 11_R1.dwg
DRAWING No : E.21490 SHEET No: E04.2 REVISION : R1



AMENDMENTS :		
AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	NO CHANGES THIS SHEET

- NOTES :
- ALL WORKS IN ACCORDANCE WITH SDC CODE OF PRACTICE PARTS 1-11 STANDARDS, IF STANDARDS ARE UNSPECIFIED REFER TO CCC CSS PARTS 1-7.
 - ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
 - ORIGIN OF LEVELS
ORIGIN MARK 8882 (UG 32)
RL=55.908m
CHK EJBW (CC 370 NO 2)
RL=58.154m

LEVELS ARE IN TERMS OF LYTTELTON VERTICAL DATUM 1937.
 - EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED. ALL SERVICES TO BE FULLY SEARCHED AND PILOTED PRIOR TO TRENCHING.
 - ELECTRICITY & TELECOM SERVICES NOT SHOWN. REFER TO ELECTRICAL & COMMUNICATION PLANS FOR DUCT LOCATIONS.
 - TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - REFER TO LONGSECTIONS FOR ALL SEWER & STORMWATER LEVELS.
 - NOMINATED PIPE SIZES ARE INTERNAL DIAMETER UNLESS NOTED OTHERWISE.
 - ALL UPVC PIPES (WHETHER SEWER OR STORMWATER) SHALL CONFORM TO AS NZS 1260:1999 AND SHALL HAVE THE FOLLOWING STIFFNESS NUMBERS AS SET OUT IN THE STANDARD: DN 100 AND 150...SN16; DN225 AND LARGER ... SN8.
 - ALL SEWER AND STORMWATER LATERALS TO BE LAID AT 1:60 MINIMUM GRADE AND LAID TO 1.0m WITHIN LOTS.
 - RAMPED RISERS ARE TO BE USED FOR LATERALS TO ENSURE A MAXIMUM DEPTH OF 1.5m COVER AT THE LOT BOUNDARY.
 - BEDDING TO BE AS PER SD344 UNLESS OTHERWISE SPECIFIED.
 - CONCRETE CAPPING TO SD342 WHERE LESS THAN 750MM COVER TO SEWER WITHIN ROAD CARRIAGEWAY.
 - MANHOLE CONNECTIONS SHALL BE STARTERS & SHORTS AND SHORTS & FINISHERS.
 - CORBELS TO BE CONSTRUCTED TO SDC STANDARD INCLUDING CHEMSET.
 - LADDERS ARE REQUIRED FOR SEWER MANHOLES DEEPER THAN 1.2m MEASURED FROM THE TOP OF BENCHING TO FINISHED LEVEL.
 - CONTRACTOR TO VERIFY ALL EXISTING INVERTS AND LID LEVELS ON SITE.

	NAME	SIGNED	DATE
DESIGNED BY	JALAY SHAH	JALAY SHAH	
CHECKED BY	BEN FOX	BEN FOX	



DAVIE LOVELL-SMITH
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JOB TITLE:

**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:

**Stormwater Longsections
RC245458**

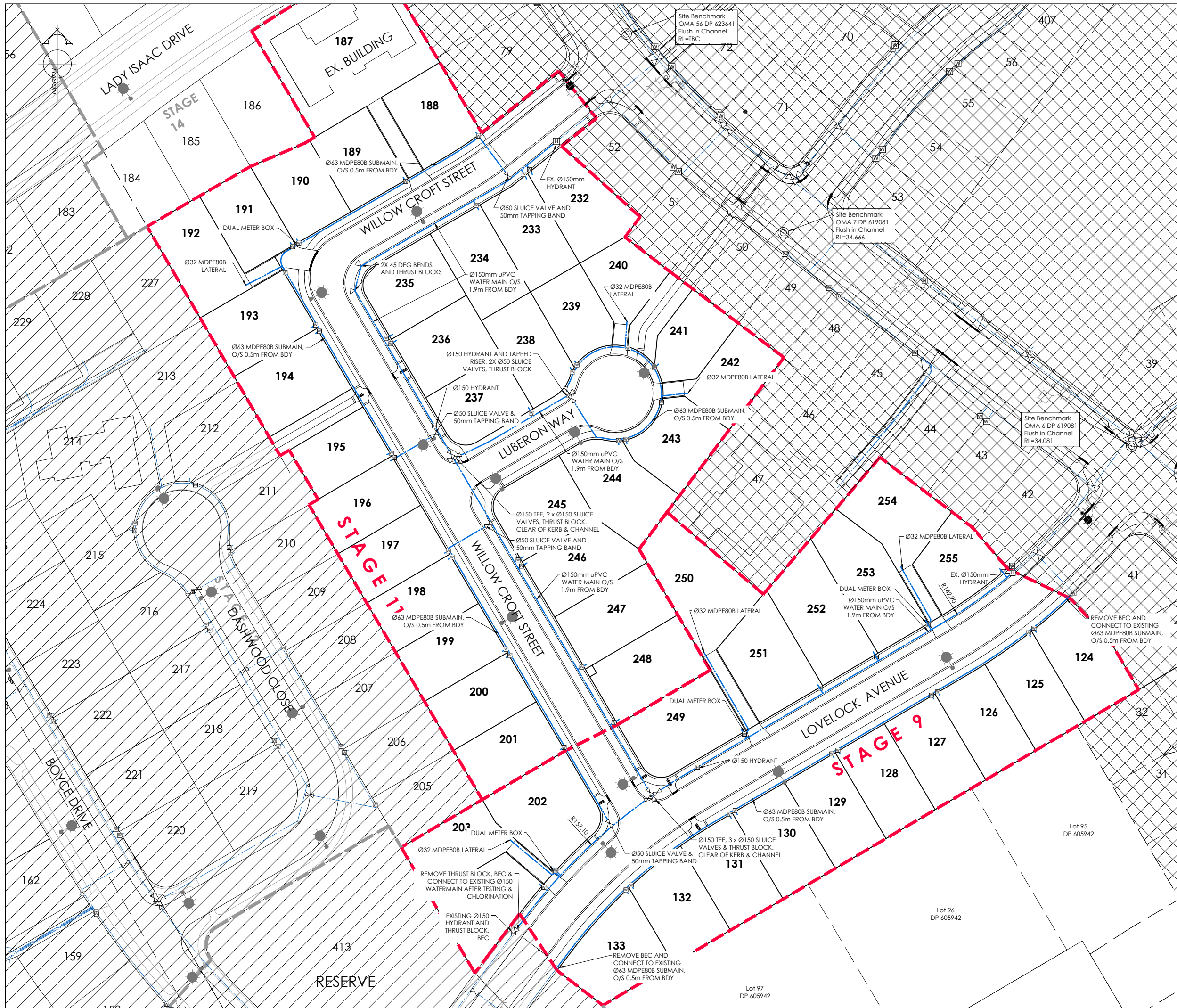
DRAWING STATUS

For Engineering Approval

SCALE : As Shown DATE : March 2026

CAD FILE : Z:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E04.3 STGs 9 & 11_R1.dwg DRAWN : JS

DRAWING No : **E.21490** SHEET No: **E04.3** REVISION : **R1**



AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION
R1	17/03/26	DUAL WATER LATERALS REMOVED

- NOTES:
- ALL WORKS IN ACCORDANCE WITH SDC CODE OF PRACTICE PARTS 1-11 STANDARDS, IF STANDARDS ARE UNSPECIFIED REFER TO CCC CSS PARTS 1-7.
 - ALL PLANS ARE TO BE READ AND DISTRIBUTED AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
 - TRENCHING AND INSTALLATION OF POWER AND TELECOM SERVICES TO BE PROVIDED IN ACCORDANCE WITH SERVICE PROVIDERS PLANS AND SPECIFICATIONS.
 - ALL SERVICES TO BE FULLY SEARCHED AND PILOTTED PRIOR TO TRENCHING.
 - ALL WATER PIPES TO BE PE PN12.5 AND ALL FITTINGS TO BE PN16.
 - WATERMAINS AND SUBMAINS TO BE INSTALLED AT THE OFFSET STATED ON THE PLAN AND AGREED WITH ENGINEER.
 - WATERMAINS TO HAVE A MINIMUM COVER OF 0.75M.
 - CONTRACTOR TO INSTALL WATER MAIN TO ENSURE NO CLASHES WITH OTHER SERVICES. TO BE INSTALLED IN ACCORDANCE WITH THE IDS 7.9.5.
 - THRUST BLOCK AS PER WSD-004, 1m² DN300 TEE, 0.5m² DN200 TEE.
 - ALL SUBMAIN CONNECTIONS TO MAIN PIPES TO BE BY TAPPING BAND OR HYDRANT CROSSOVER

LEGEND:	
EXISTING SERVICES	PROPOSED SERVICES
WATER  VALVE 	WATER  VALVE  METER
KERB 	KERB  CUT DOWN

NAME	SIGNED	DATE
DESIGNED BY: JALAY SHAH	JALAY SHAH	
CHECKED BY: BEN FOX	BEN FOX	



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JOB TITLE:
**Broadfield Grange
Stages 9 & 11**

SHEET TITLE:
**Water Plan
RC245458**

DRAWING STATUS:
For Engineering Approval

SCALE: 1:500@A1
1:1000@A3 DATE: March 2026

CAD FILE: J:\21490\Eng\Drawings\STAGES 9 & 11\E21490_E01.0 STGs 9 & 11_R1.dwg	DRAWN: JS
DRAWING No: E21490	REVISION: R1
SHEET No: E05.0	