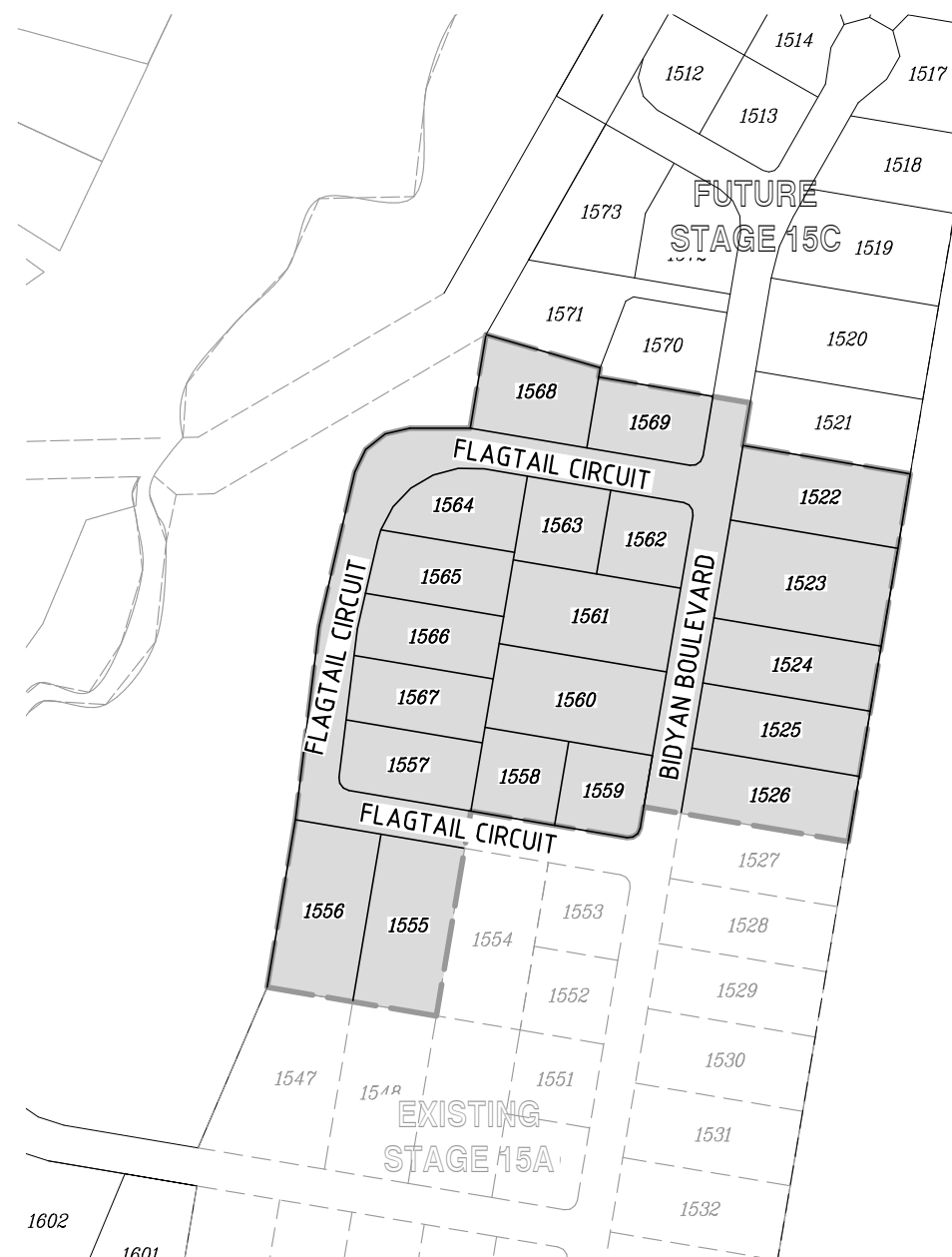


SPRING MOUNTAIN ACREAGE ESTATE STAGE 15B



LOCALITY PLAN
SCALE 1:10000



PLAN
SCALE 1:2000

DRAWING INDEX

DRAWING NO.	DRAWING TITLE
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18-118-02	GENERAL - SETOUT PLAN
18-118-03	GENERAL - LAYOUT PLAN - SHEET 1
18-118-04	GENERAL - LAYOUT PLAN - SHEET 2
18-118-05	EARTHWORKS - CONTOUR PLAN - SHEET 1
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18-118-07	ROADWORKS - LONGITUDINAL SECTION - BIDYAN BOULEVARD
18-118-08	ROADWORKS - CROSS SECTIONS - BIDYAN BOULEVARD - SHEET 1
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18-118-11	ROADWORKS - LONGITUDINAL SECTION - FLAGTAIL CIRCUIT
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18-118-14	ROADWORKS - CROSS SECTIONS - FLAGTAIL CIRCUIT - SHEET 3
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18-118-16	ROADWORKS - INTERSECTION DETAILS, SIGNS AND LINEMARKING PLAN
18-118-17	STORMWATER - CATCHMENT PLAN
18-118-18	STORMWATER - CALCULATION TABLE - SHEET 1
18-118-19	STORMWATER - CALCULATION TABLE - SHEET 2
18-118-20	STORMWATER - LONGITUDINAL SECTIONS - SHEET 1
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18-118-22	STORMWATER - MANHOLE DETAILS
18-118-23	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - CONSTRUCTION PHASE - SHEET 1
18-118-24	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - CONSTRUCTION PHASE - SHEET 2
18-118-25	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - POST CONSTRUCTION PHASE - SHEET 1
18-118-26	EROSION AND SEDIMENT CONTROL - LAYOUT PLAN - POST CONSTRUCTION PHASE - SHEET 2
18-118-27	EROSION AND SEDIMENT CONTROL - NOTES
18-118-28	EROSION AND SEDIMENT CONTROL - DETAILS
18-118-29	WATER RETICULATION - LAYOUT PLAN - SHEET 1
18-118-30	WATER RETICULATION - LAYOUT PLAN - SHEET 2
18-118-31	WATER RETICULATION - LIVE CONNECTION DETAILS AND NOTES
18-118-32	SAFETY IN DESIGN

DATUM A.H.D.
P.M. No 61324
E 491712.179
N 6931003.529
RL 69.322

MARK SHAW
I, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

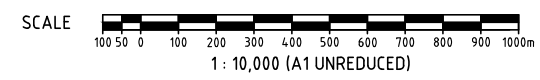
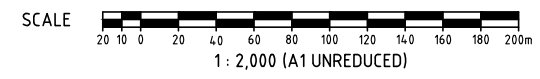
Signed..... RPEQ No. 17544 Dated... 15/04/2020.....

GENERAL NOTES

- ALL WORK SHALL BE JOINED NEATLY TO EXISTING CONSTRUCTION.
- WHERE REFERENCE IS MADE ON THESE DRAWINGS TO A KERB LINE, IT SHALL BE TAKEN TO MEAN THE KERB INVERT LINE.
- LEVELS FOR KERB AND CHANNEL CONSTRUCTION ARE SHOWN AT LIP OF CHANNEL UNLESS SHOWN OTHERWISE.
- KERB AND CHANNEL AND SPOON DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA STANDARD DWG NO SEQ RS-80. SPOON DRAINS ACROSS ROAD INTERSECTIONS SHALL BE IN ACCORDANCE WITH INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALIA STD DWG NO SEQ RS-80. THE CONCRETE SHALL BE CLASS N32 AND THE DEPTH INCREASED BY 50mm TO 175mm AT INVERT. FLUSH KERB TO BE INCREASED IN DEPTH BY 50mm TO 280mm.
- IF MACHINE MADE KERB AND CHANNEL IS USED, EXTRA FINES AND 20mm SLUMP IS REQUIRED.
- ALL DRAINAGE CENTRE LINES ARE 2m FROM INVERT OF KERB UNLESS OTHERWISE SHOWN.
- GULLY CONNECTIONS AND STORMWATER PIPES SHALL BE 375mm DIAMETER CLASS '2' R.C. PIPES UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL INITIALLY EXCAVATE THE PAVEMENT BOX TO 280mm BELOW THE FINISHED PAVEMENT LEVEL SHOWN ON THE DRAWINGS. HE SHALL THEN NOTIFY THE ENGINEER WHO WILL FIX THE PAVEMENT THICKNESS TO BE CONSTRUCTED FOLLOWING THE RESULTS OF SUB-GRADE TESTING.
- NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE ENGINEER AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE ENGINEER DURING CONSTRUCTION.
- THE MINIMUM CLEARANCE BETWEEN OUTER WALLS OF PIPES IN MANHOLES SHALL BE 150mm.
- SUBSURFACE DRAIN CLEANING POINTS SHALL BE INSTALLED IN ACCORDANCE WITH IPWEAQ STD DWG NO SEQ RS-142.
- CONSTRUCTION LOAD CONTROL ON THE INSTALLATION OF REINFORCED CONCRETE STORMWATER PIPE WORK SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE RECOMMENDATIONS DEFINED IN THE CONCRETE PIPE ASSOCIATIONS OF AUSTRALASIA'S "THE INSTALLATIONS OF STEEL REINFORCED CONCRETE PIPES - MINIMUM PIPE COVER REQUIRED FOR VARIOUS COMPACTORS".
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL ERRECT A 2 STRAND WIRE FENCE INCLUDING SAFETY BARRIER MESH TO THE PERIMETER OF VEGETATION TO BE RETAINED AND/OR EXCLUSION ZONES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES/DIAL BEFORE YOU DIG PRIOR TO COMMENCING WORKS.
- THE CONTRACTOR SHALL NOTE THE PRESENCE OF EXISTING SERVICES ASSOCIATED WITH THE WORKS. SPECIAL CARE MUST BE TAKEN BY THE CONTRACTOR IN THE VICINITY OF ALL SERVICES.

ROOFWATER

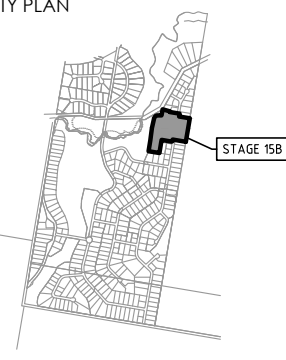
- THE ENDS OF 100mm ROOFWATER CONNECTIONS FROM LOT DIRECTLY TO GULLY PIT SHALL BE CAPPED AND LOCATED WITH NOT LESS THAN 300mm AND NOT MORE THAN 450mm COVER UNLESS OTHERWISE APPROVED.
- PROVIDE 2 x KERB ADAPTORS FOR ALL LOTS GRADING TO KERB AND CHANNEL AS PER LAYOUT PLAN. ALL KERB ADAPTORS SHALL BE CAST INTO KERB AND CHANNEL.
- ROOFWATER KERB ADAPTORS SHALL BE LOCATED IN THE KERB AND CHANNEL FOR EACH ALLOTMENT THAT DRAINS PREDOMINANTLY TO THE ROAD FRONTAGE. KERB ADAPTORS SHALL BE LOCATED 0.6 METERS OFF THE SIDE BOUNDARY POSITION OR IF THE ALLOTMENT DRAINS PREDOMINANTLY TO ONE SIDE BOUNDARY THEN LOCATE BOTH KERB ADAPTORS 0.3 METERS AND APART 0.5 METERS OFF THE LOWER BOUNDARY LINE.



DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES
C	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Client

Project
**SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019**



Approved

Drawing Title
**GENERAL
LOCALITY PLAN,
DRAWING INDEX AND NOTES**

Drawn	Designed	Checked	Date
NJS	JB	GG	OCT 18
Scale	Sheet		Revision
AS SHOWN	01 of 32		
A1	Drawing No	Revision	
	18-118-01	C	

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SETOUT PLAN
SCALE 1:1000

CONTROL LINE DETAILS - FLAGTAIL CIRCUIT

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 1	0.000	492728.255	6930796.586	279°35'19.76"			
TC	164.829	492565.728	6930824.043	279°35'19.76"			
IP 2	176.271	492551.592	6930826.431		R = 15.000	22.884	87°24'40.24"
CT	187.713	492553.339	6930840.662	7°00'00.00"			
TC	263.455	492562.569	6930915.838	7°00'00.00"			
IP 3	268.691	492563.208	6930921.040		R = 100.000	10.472	6°00'00.00"
CT	273.927	492564.387	6930926.147	13°00'00.00"			
TC	317.120	492574.103	6930968.233	13°00'00.00"			
IP 4	362.458	492586.820	6931023.314		R = 60.000	90.676	86°35'19.76"
CT	407.796	492642.560	6931013.897	99°35'19.76"			
IP 5	528.492	492761.570	6930993.792	99°35'19.76"			

CONTROL LINE DETAILS - BIDYAN BOULEVARD

PT	CHAINAGE	EASTING	NORTHING	BEARING	RAD/SPIRAL	A.LENGTH	DEFL.ANGLE
IP 9	2792.209	492731.885	6930805.894		R = -30.000	8.576	16°22'47.14"
IP 10	2796.497	492732.604	6930810.151				
TC	2968.297	492761.222	6930979.551	9°35'19.80"			
IP 11	2972.585	492761.941	6930983.808		R = -30.000	8.576	16°22'46.59"
CC	2976.874	492761.431	6930988.096	353°12'33.21"			
IP 12	2979.732	492761.091	6930990.954		R = 20.000	5.718	16°22'46.61"
CC	2982.591	492761.570	6930993.792	9°35'19.82"			
IP 13	2985.450	492762.049	6930996.630		R = 20.000	5.718	16°22'46.57"
CC	2988.309	492763.310	6930999.218	25°58'06.38"			
IP 14	2992.597	492765.200	6931003.100		R = -30.000	8.576	16°22'47.14"
CT	2996.885	492765.920	6931007.357				
TC	3118.592	492786.193	6931127.364				
IP15	3128.354	492787.870	6931137.291		R = -32.457	19.525	34°27'59.39"

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No...17544..... Dated...15/04/2020.....

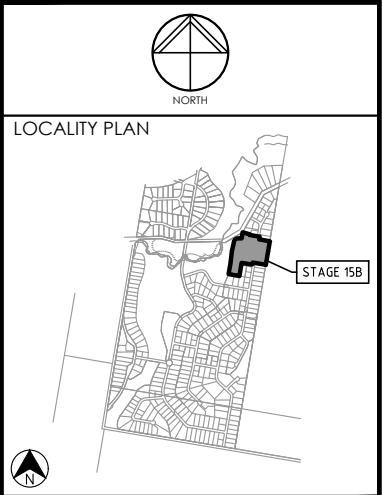
LEGEND

--- STAGE BOUNDARY

--- PROPOSED ROAD CENTRELINE

SCALE 1 : 1000 (A1 UNREDUCED)

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES
C	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Client

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

ABN 35 112 53 611
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Spring Hill Q 4000
07 3017 1900
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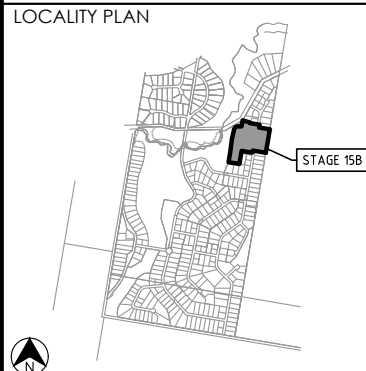
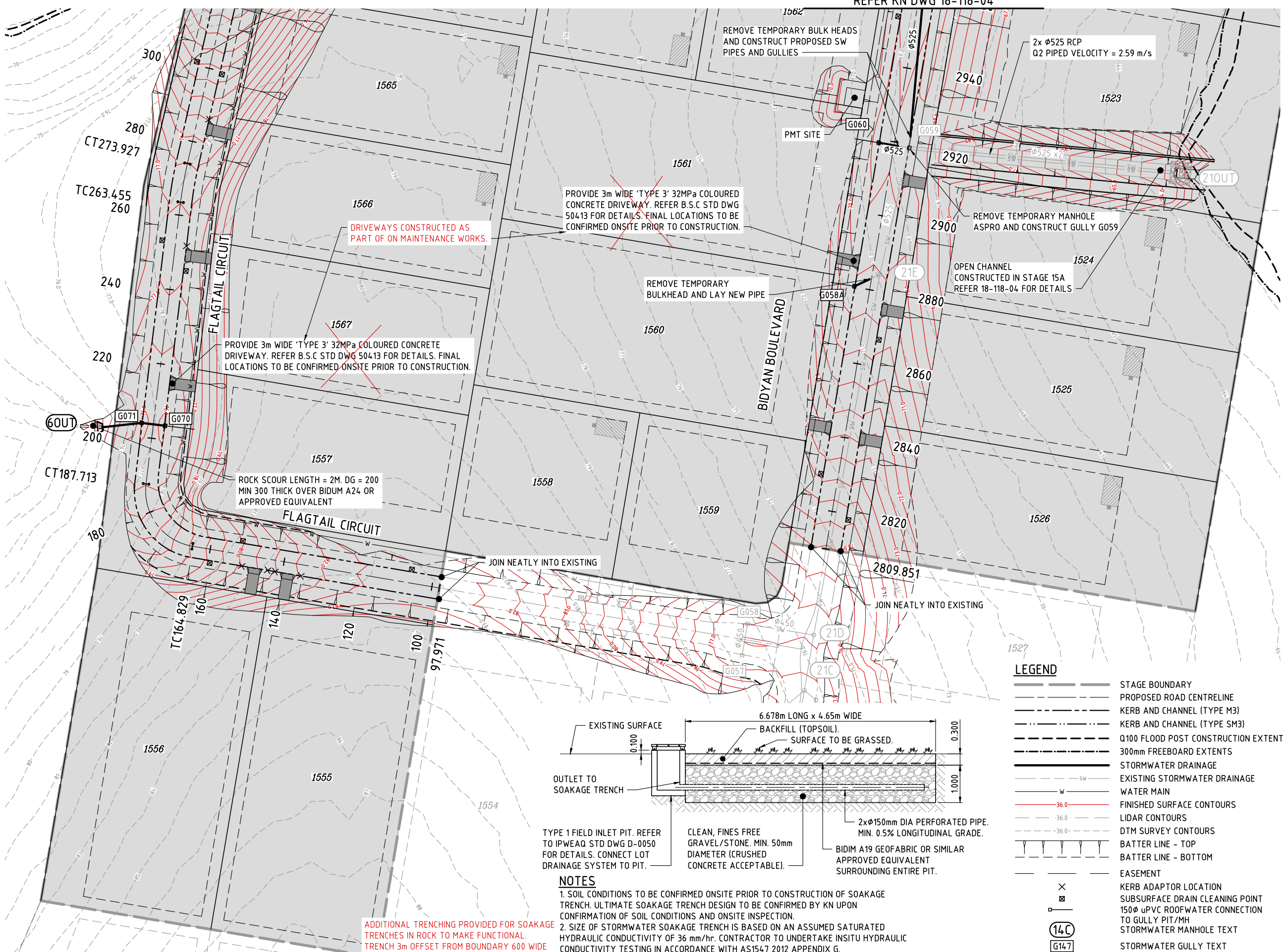
Approved

Drawing Title
GENERAL SETOUT PLAN

Drawn	Designed	Checked	Date
NJS	JB	GG	OCT 18

Scale	Sheet
AS SHOWN	02 of 32

Drawing No	Revision
18-118-02	C



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	RE-ISSUE FOR APPROVAL	24.04.19	DES
C	PMT SITE, BLDG ENV., DETAIL UPDATE	02.07.19	DES
D	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES
E	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Project
SPRING MOUNTAIN
 ACREAGE ESTATE
 STAGE 15B
 OW/45/2019



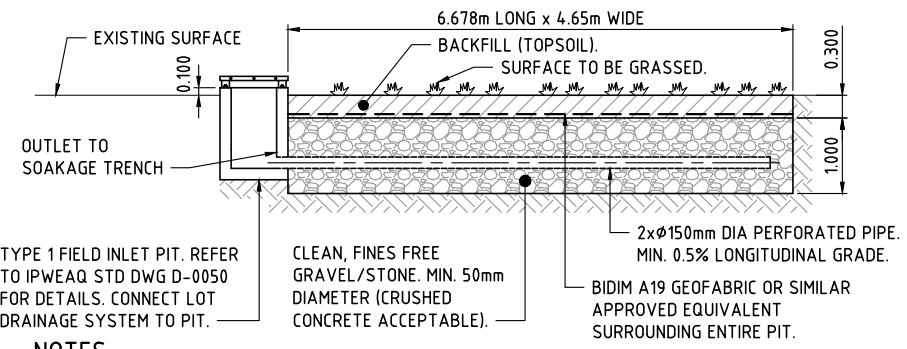
Approved

Drawing Title
GENERAL LAYOUT PLAN SHEET 1

Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Sheet 03 of 32		Revision E
Drawing No 18-118-03		Revision E	

LEGEND

- STAGE BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE
- WATER MAIN
- FINISHED SURFACE CONTOURS
- LIDAR CONTOURS
- DTM SURVEY CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- EASEMENT
- KERB ADAPTOR LOCATION
- SUBSURFACE DRAIN CLEANING POINT
- 150ø uPVC ROOFWATER CONNECTION TO GULLY PIT/MH
- STORMWATER MANHOLE TEXT
- STORMWATER GULLY TEXT
- STORMWATER SOAKAGE TRENCH REFER DETAIL
- DRIVEWAY LOCATION



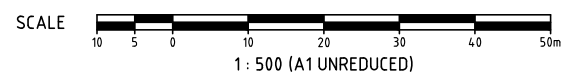
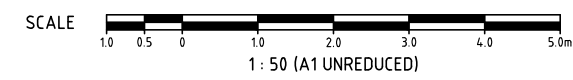
NOTES

- SOIL CONDITIONS TO BE CONFIRMED ONSITE PRIOR TO CONSTRUCTION OF SOAKAGE TRENCH. ULTIMATE SOAKAGE TRENCH DESIGN TO BE CONFIRMED BY KN UPON CONFIRMATION OF SOIL CONDITIONS AND ONSITE INSPECTION.
- SIZE OF STORMWATER SOAKAGE TRENCH IS BASED ON AN ASSUMED SATURATED HYDRAULIC CONDUCTIVITY OF 36 mm/hr. CONTRACTOR TO UNDERTAKE INSITU HYDRAULIC CONDUCTIVITY TESTING IN ACCORDANCE WITH AS1547 2012 APPENDIX G.

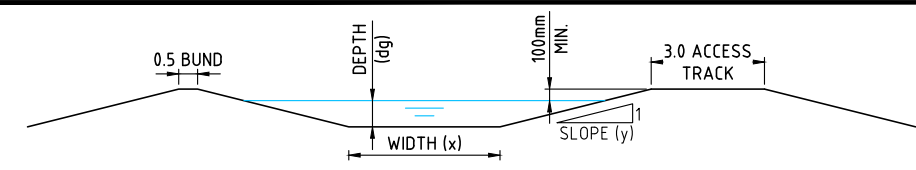
LAYOUT PLAN
 SCALE 1:500

MARK SHAW
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Signed..... RPEQ No. 17544 Dated 15/04/2020



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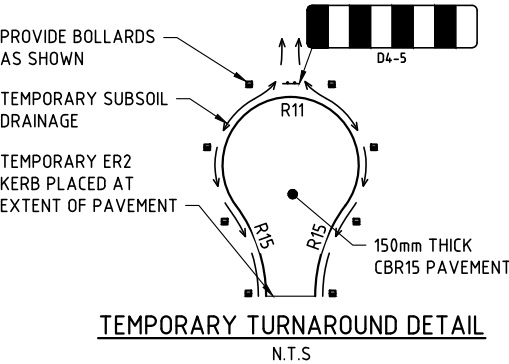


EXISTING OPEN CHANNEL DESIGN

GRADE = 7.8%
 MANNINGS n = 0.035
 WIDTH (x) = 4.0m
 SLOPE (y) = 1 in 4 (MAX)
 REQUIRED CAPACITY (Q) Q100 = 1.85m³/sec
 THEREFORE, DEPTH (dg) Q100 = 175mm
 WITH A VELOCITY = 2.26m/sec
 AND dgV Q100 = 0.396m³/sec

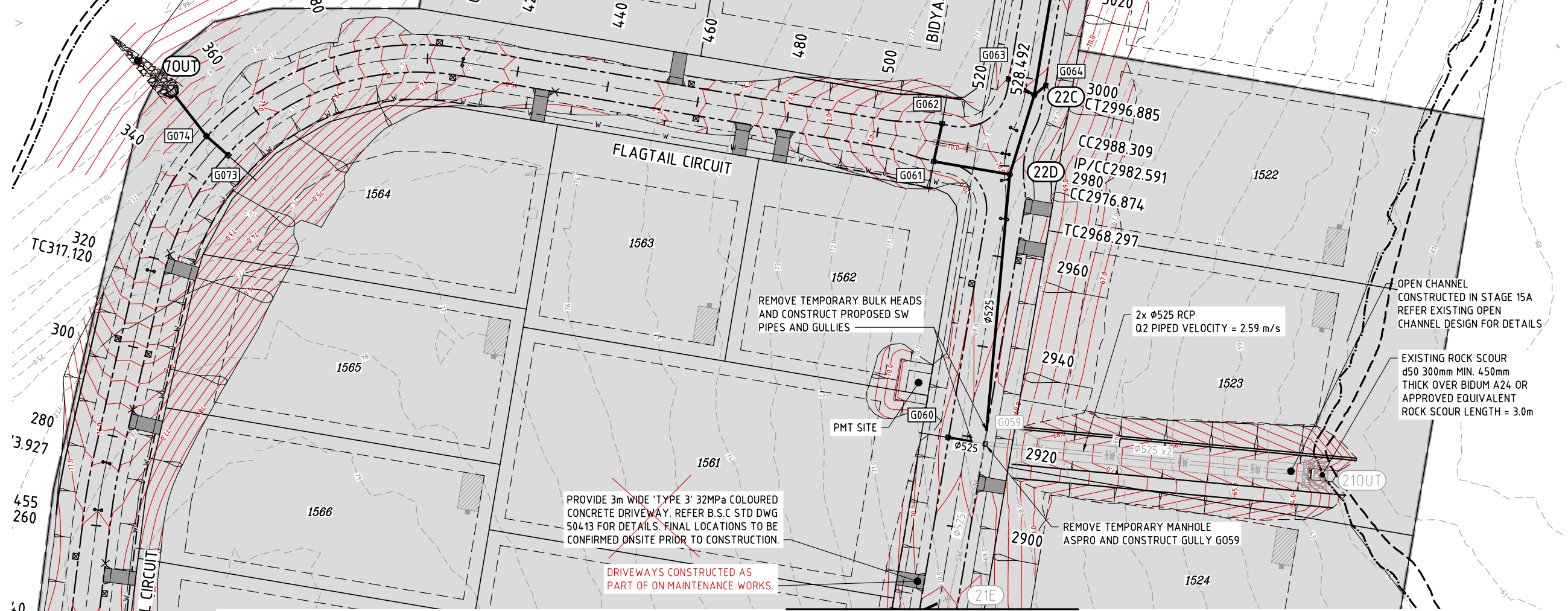
EXISTING OPEN CHANNEL - TYPICAL SECTION

NTS
 NB: REINFORCED TURF TO CHANNEL



TEMPORARY TURNAROUND DETAIL N.T.S.

ROCK SCOUR LENGTH = 20M.
 DG = 200 MIN 300 THICK OVER BIDUM A24 OR APPROVED EQUIVALENT.



REMOVE TEMPORARY BULK HEADS AND CONSTRUCT PROPOSED SW PIPES AND GULLIES

2x Ø525 RCP
 Q2 PIPED VELOCITY = 2.59 m/s

EXISTING ROCK SCOUR
 d50 300mm MIN. 450mm THICK OVER BIDUM A24 OR APPROVED EQUIVALENT
 ROCK SCOUR LENGTH = 3.0m

REMOVE TEMPORARY MANHOLE ASPRO AND CONSTRUCT GULLY G059

PROVIDE 3m WIDE 'TYPE 3' 32MPa COLOURED CONCRETE DRIVEWAY. REFER B.S.C STD DWG 50413 FOR DETAILS. FINAL LOCATIONS TO BE CONFIRMED ONSITE PRIOR TO CONSTRUCTION.

DRIVEWAYS CONSTRUCTED AS PART OF ON MAINTENANCE WORKS.

LAYOUT PLAN SCALE 1:500

REFER KN DWG 18-118-03

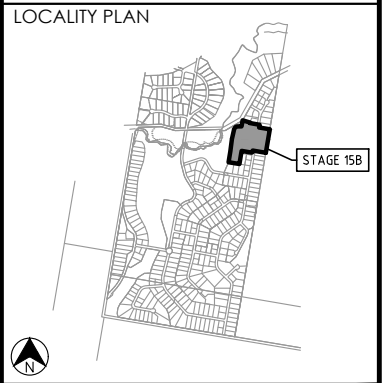
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LEGEND

- STAGE BOUNDARY
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE M3)
- KERB AND CHANNEL (TYPE SM3)
- Q100 FLOOD POST CONSTRUCTION EXTENTS
- 300mm FREEBOARD EXTENTS
- STORMWATER DRAINAGE
- EXISTING STORMWATER DRAINAGE
- W WATER MAIN
- FINISHED SURFACE CONTOURS
- 36.0 LIDAR CONTOURS
- 36.0 DTM SURVEY CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- EASEMENT
- X KERB ADAPTOR LOCATION
- SUBSURFACE DRAIN CLEANING POINT
- 150Ø uPVC ROOFWATER CONNECTION TO GULLY PIT/MH
- STORMWATER MANHOLE TEXT
- STORMWATER GULLY TEXT
- STORMWATER SOAKAGE TRENCH
- REFER DETAIL ON DWG 18-118-03
- DRIVEWAY LOCATION

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REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	RE-ISSUE FOR APPROVAL	24.04.19	DES
C	PMT SITE, REVISED BLDG ENV.	02.07.19	DES
D	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES
E	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client



Project

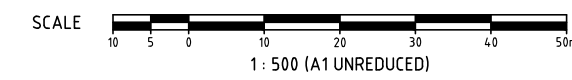
SPRING MOUNTAIN
 ACREAGE ESTATE
 STAGE 15B
 OW/45/2019



Approved

Drawing Title
GENERAL LAYOUT PLAN SHEET 2

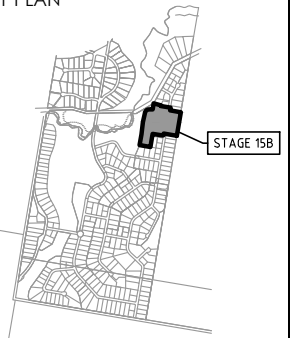
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Scale AS SHOWN	Drawing No 18-118-04		Sheet 04 of 32
A1		Revision E	



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LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

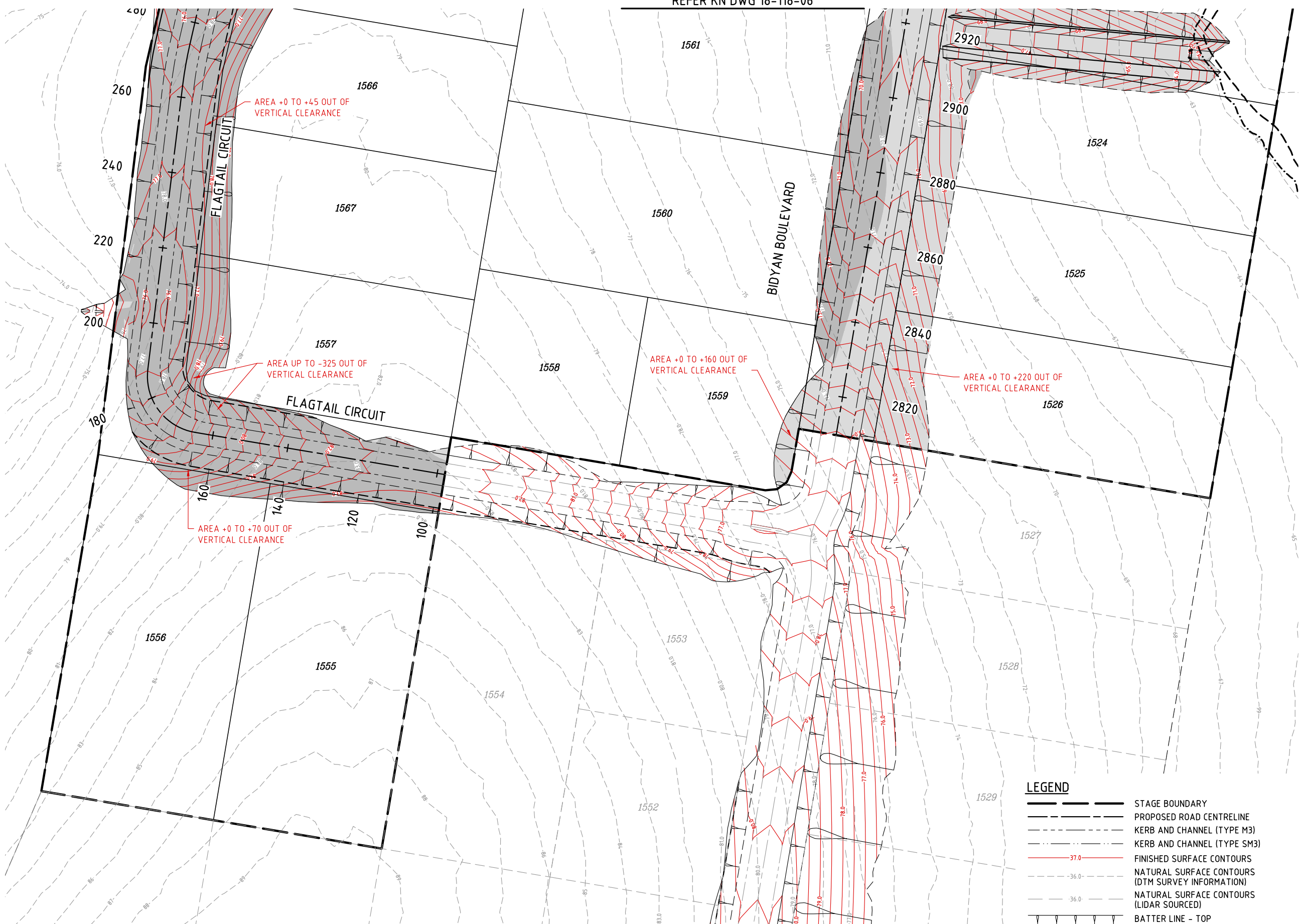


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L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
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Approved

Drawing Title
**EARTHWORKS
CONTOUR PLAN
SHEET 1**

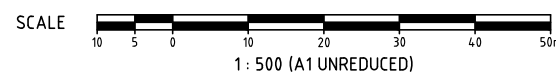
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Scale AS SHOWN			Sheet 05 of 32
A1	Drawing No 18-118-05	Revision B	



EARTHWORKS CONTOUR PLAN
SCALE 1:500

LEGEND

	STAGE BOUNDARY
	PROPOSED ROAD CENTRELINE
	KERB AND CHANNEL (TYPE M3)
	KERB AND CHANNEL (TYPE SM3)
	FINISHED SURFACE CONTOURS
	NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
	NATURAL SURFACE CONTOURS (LIDAR SOURCED)
	BATTER LINE - TOP
	BATTER LINE - BOTTOM
	EXTENT OF CUT
	EXTENT OF FILL

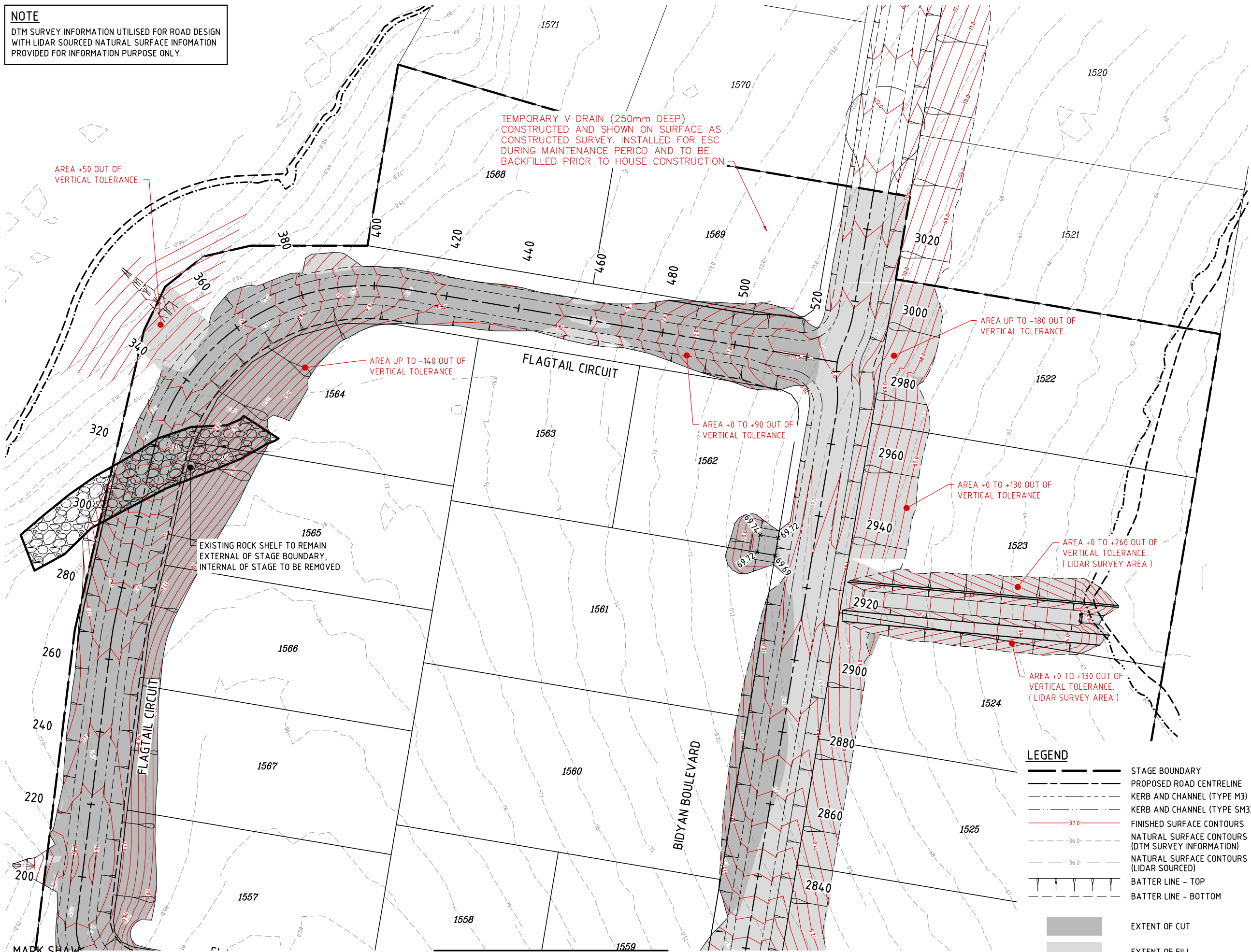


NOTE
DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFORMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

I, **MARK SHAW**, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544..... Dated 15/04/2020.....

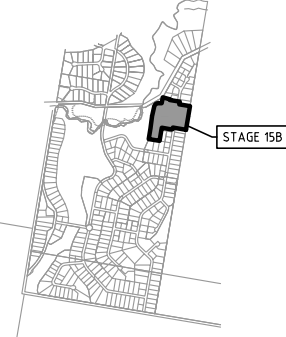
NOTE
DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFORMATION PROVIDED FOR INFORMATION PURPOSE ONLY.



DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	PMT SITE, ROCK SHELF ADDED	02.07.19	DES
C	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES

Associated Consultants

Client

PEET

Project

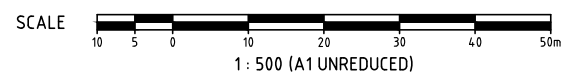
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

Approved

Drawing Title
EARTHWORKS
CONTOUR PLAN
SHEET 2

Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Sheet 06 of 32		Revision C
Drawing No 18-118-06		Revision C	

- LEGEND**
- STAGE BOUNDARY
 - PROPOSED ROAD CENTRELINE
 - KERB AND CHANNEL (TYPE M3)
 - KERB AND CHANNEL (TYPE SM3)
 - FINISHED SURFACE CONTOURS
 - NATURAL SURFACE CONTOURS (DTM SURVEY INFORMATION)
 - NATURAL SURFACE CONTOURS (LIDAR SOURCED)
 - BATTER LINE - TOP
 - BATTER LINE - BOTTOM
 - EXTENT OF CUT
 - EXTENT OF FILL



I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

REFER KN DWG 18-118-05
LAYOUT PLAN
SCALE 1:500

M:\2018\1818 Spring Mountain Stage 15B\Engineering\Ascon\18-118-05-06-EW-CONTOUR.dwg Plotted by: LS on 15/04/2020 11:49:17 AM

Signed..... RPEQ No. 17544..... Dated 15/04/2020.....

MARK SHAW

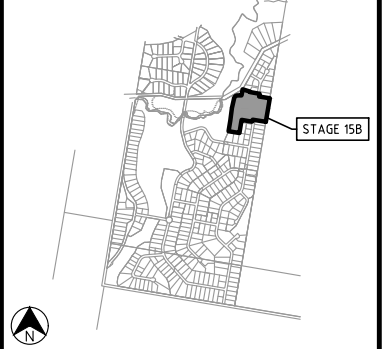
I, MARK SHAW, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544..... Dated 15/04/2020.....

NOMINAL PAVEMENT DETAILS
COLLECTOR STREET - CBR 3.0
 30mm ASPHALTIC CONCRETE
 7mm PRIMER SEAL AMC 6 BINDER
 100mm BASE COURSE (TYPE 2.1, CBR 80)
 100mm SUB-BASE COURSE (TYPE 2.3, CBR 45)
 SUBGRADE REPLACEMENT AS REQUIRED (TYPE 2.5, CBR 15)
 DESIGN ESA = 4.0x10⁵

DO NOT SCALE THIS DRAWING
 IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client

PEET

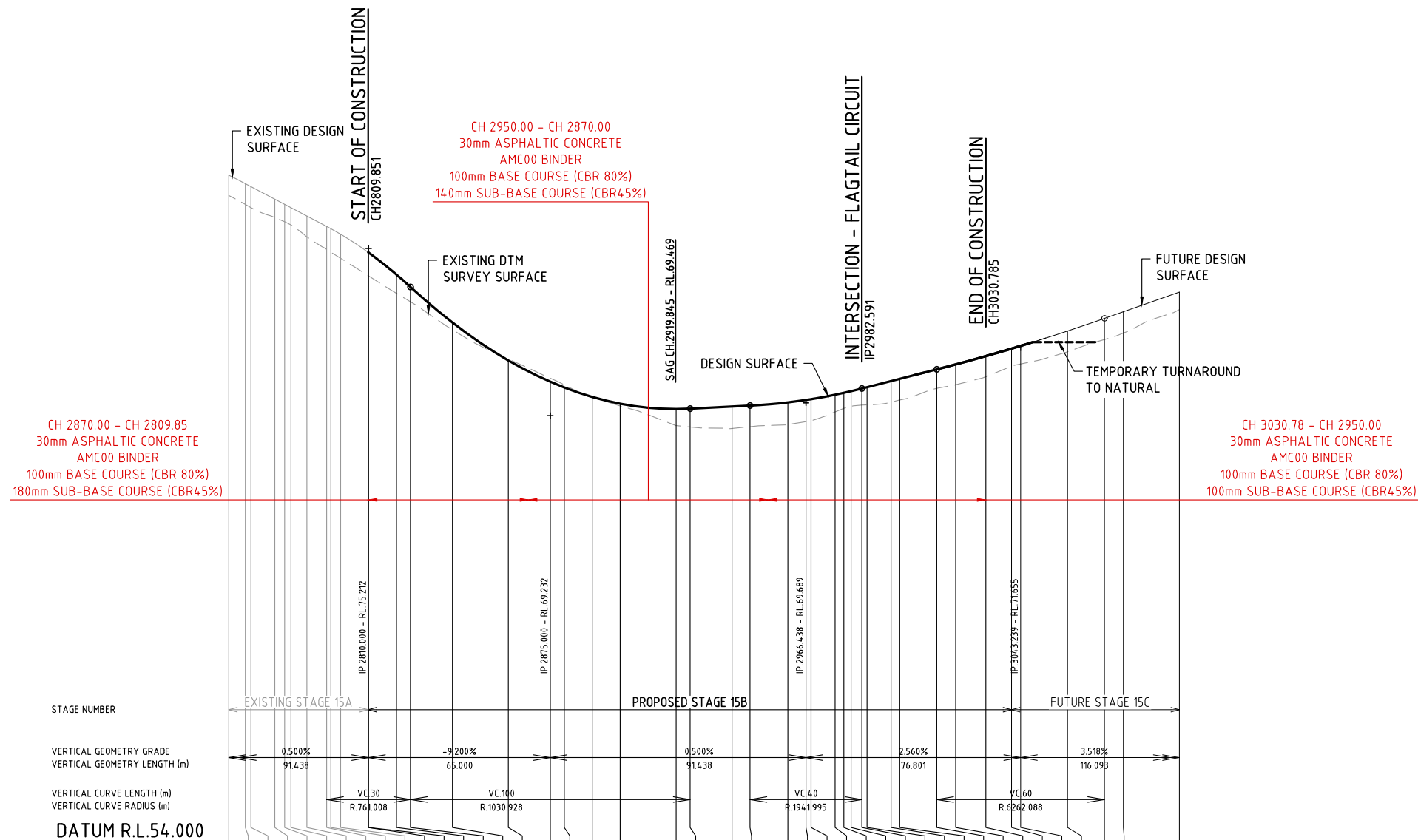
Project

SPRING MOUNTAIN
 ACREAGE ESTATE
 STAGE 15B
 OW/45/2019

Approved

Drawing Title
ROADWORKS
LONGITUDINAL SECTION
BIDYAN BOULEVARD

Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Drawing No 18-118-07		Sheet 07 of 32
A1		Revision B	



VOLUMES	CUT	FILL	STAGE NUMBER																																																		
			0	0	0	6	57	110	49	38	33	0	0	0	0	0	0	0	0																																		
LIP OF KERB RHS			77.722	77.722	77.417	77.313	76.862	76.677	76.562	76.261	75.889	75.809	75.609	74.963	74.952	74.164	73.720	72.449	71.094	70.333	70.127	69.789	69.548	69.357	69.370	69.445	69.477	69.592	69.681	69.710	69.710	69.868	69.935	69.995	70.089	70.137	70.357	70.436	70.775	70.952	71.249	71.517	71.615	72.147	72.599	72.836	73.540						
LIP OF KERB LHS			77.722	77.722	77.417	77.313	76.862	76.677	76.562	76.261	75.889	75.809	75.609	74.963	74.952	74.164	73.720	72.449	71.094	70.333	70.127	69.789	69.548	69.357	69.370	69.445	69.477	69.592	69.681	69.710	69.710	69.868	69.935	69.995	70.089	70.137	70.357	70.436	70.775	70.952	71.249	71.517	71.615	72.147	72.599	72.836	73.540						
NATURAL SURFACE			77.107	77.107	76.785	76.673	76.320	76.171	76.053	75.752	75.480	75.080	74.861	74.241	74.231	73.606	73.303	72.449	71.251	70.570	70.336	69.877	69.577	68.875	68.827	68.773	68.837	68.915	69.018	69.053	69.367	69.492	69.565	69.611	69.616	69.712	69.793	70.548	70.755	70.208	70.338	70.952	71.002	71.078	71.159	71.615	72.147	72.599	72.836	73.024	73.540		
CUT/FILL DEPTH			0.727	0.727	0.743	0.752	0.654	0.618	0.620	0.746	0.826	0.841	0.860	0.834	0.833	0.669	0.529	-0.044	-0.126	-0.097	-0.024	-0.083	-0.594	-0.555	-0.584	-0.752	-0.790	-0.774	-0.769	-0.612	-0.555	-0.541	-0.590	-0.633	-0.616	-0.755	-0.679	-0.679	-0.726	-0.739	-0.649	-0.739	-0.755	-0.755	-0.762	-0.628	-0.628	-0.628	-0.628				
DESIGN SURFACE			77.834	77.834	77.529	77.425	76.974	76.789	76.674	76.373	76.001	75.920	75.721	75.076	75.064	74.276	73.832	72.561	71.206	70.445	70.239	69.901	69.660	69.457	69.470	69.537	69.721	69.806	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822	69.822
PEGGED CHAINAGE			2760.000	2760.000	2765.938	2767.909	2776.486	2780.000	2782.203	2787.921	2795.000	2796.491	2800.000	2809.851	2810.000	2820.000	2825.000	2840.000	2860.000	2875.000	2880.000	2890.000	2900.000	2920.000	2925.000	2940.000	2946.438	2960.000	2966.438	2968.291	2976.874	2982.591	2986.438	2988.309	2996.885	3000.000	3003.239	3013.239	3020.000	3030.785	3040.000	3043.239	3060.000	3073.239	3080.000	3100.000							

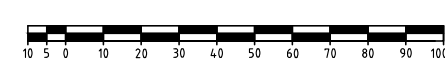
Horiz Curve Data

R.-30	R.-30	R.-30	R.-30
5.718	8.576	5.718	8.576

LONGITUDINAL SECTION - BIDYAN BOULEVARD

SCALE - 1:1000 (H)
 1:100 (V)

SCALE A 1:1000
 (Horiz.)



SCALE B 1:100
 (Vert.)



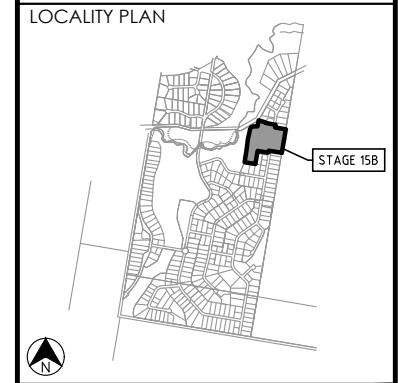
M:\2018\1818_Spring Mountain Stage 15B\Engineering\Ascon\18-118-07-15-RD-LONG-CROSS.dwg Plotted by: LS on 15/04/2020 11:49:22 AM

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544 Dated 15/04/2020

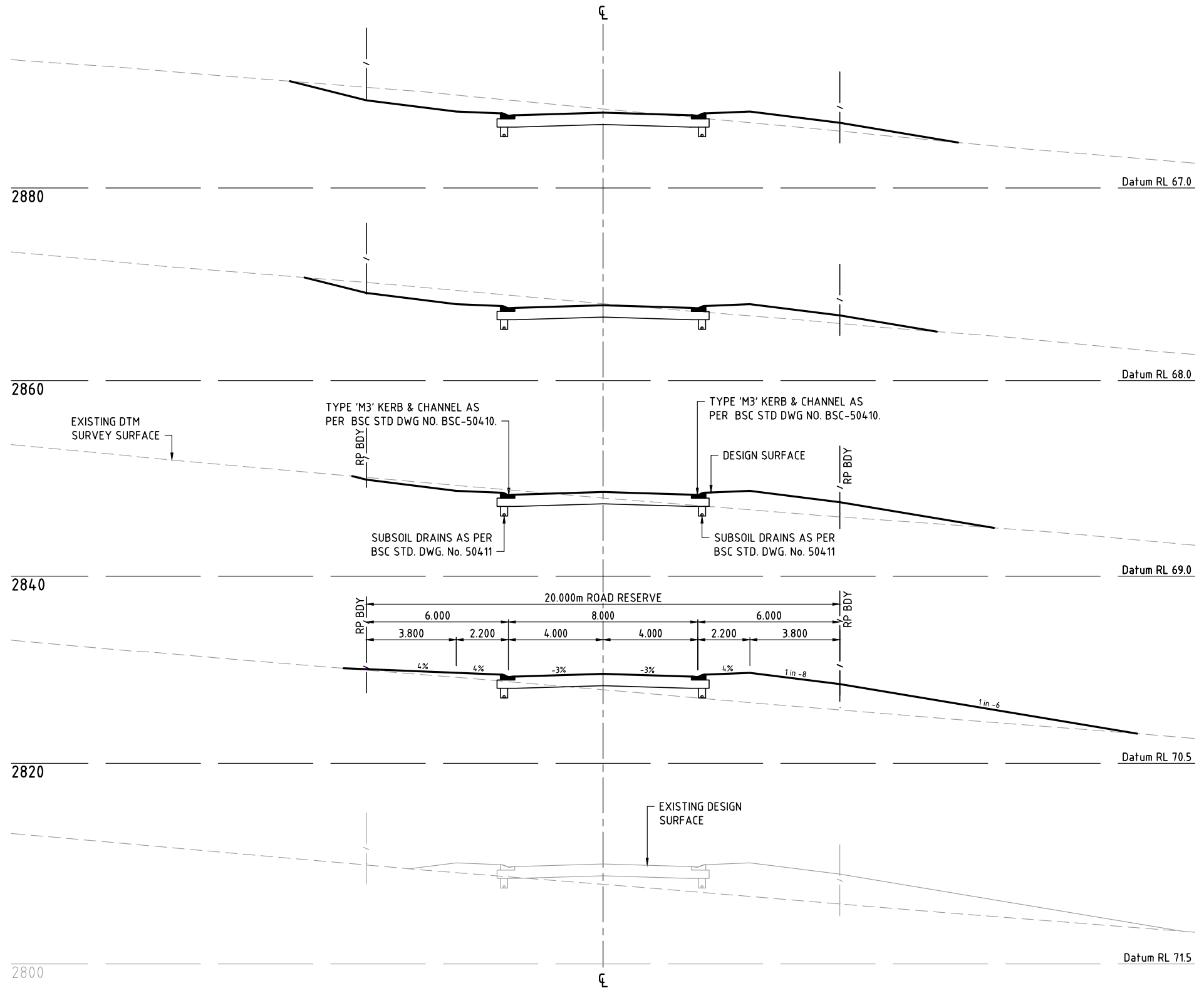
NOTE
DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFORMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



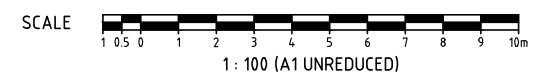
REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS



VERGE PROFILE IN TOLERANCE

CROSS SECTIONS - BIDYAN BOULEVARD
SCALE 1:100



Associated Consultants

Client
PEET

Project
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

kn group
Quality ISO 9001
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.knigroup.com.au

Approved

Drawing Title
ROADWORKS
CROSS SECTIONS
BIDYAN BOULEVARD - SHEET 1

Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Drawing No 18-118-08		Sheet 08 of 32
A1	Revision B		

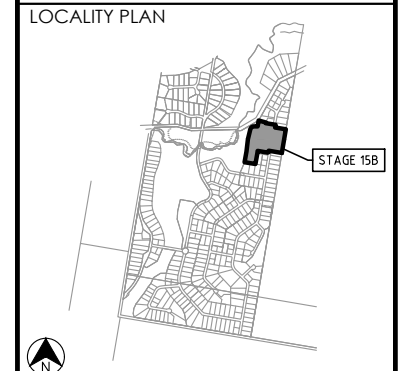
M:\2018\1818 Spring Mountain Stage 15B\Engineering\Ascon\18-118-07-15-RD-LONG-CROSS.dwg Plotted by: LS on 15/04/2020 11:49:23 AM

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Signed..... RPEQ No. 17544 Dated 15/04/2020.....

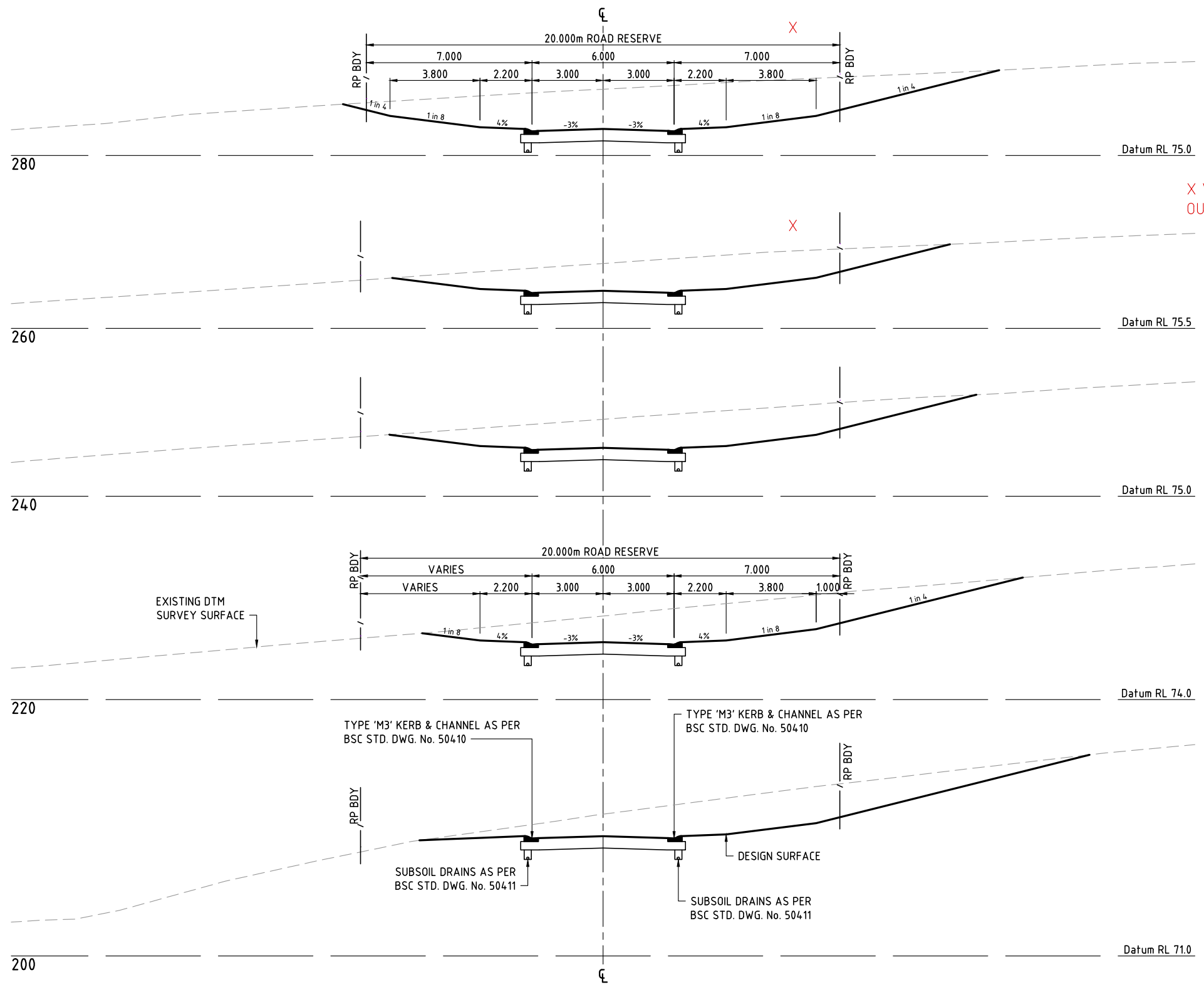
NOTE
DTM SURVEY INFORMATION UTILISED FOR ROAD DESIGN WITH LIDAR SOURCED NATURAL SURFACE INFORMATION PROVIDED FOR INFORMATION PURPOSE ONLY.

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!

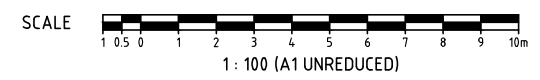


REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS



CROSS SECTIONS - FLAGTAIL CIRCUIT
SCALE 1:100



Associated Consultants



Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019



Approved

Drawing Title

ROADWORKS
CROSS SECTIONS
FLAGTAIL CIRCUIT - SHEET 2

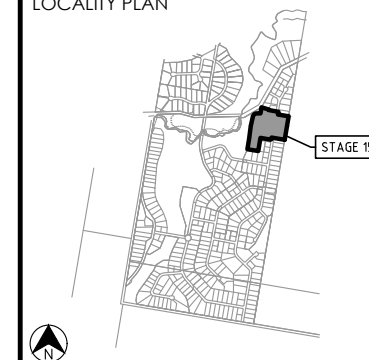
Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Drawing No 18-118-13		Sheet 13 of 32
Revision A1		Revision B	

M:\2018\1818 Spring Mountain Stage 15B\Engineering\Ascon\18-118-07-15-RD-LONG-CROSS.dwg Plotted by: LS on 15/04/2020 11:49:30 AM

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LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	LEVELS AMENDED	02.07.19	JJH
C	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE

STAGE 15B

OW/45/2019

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

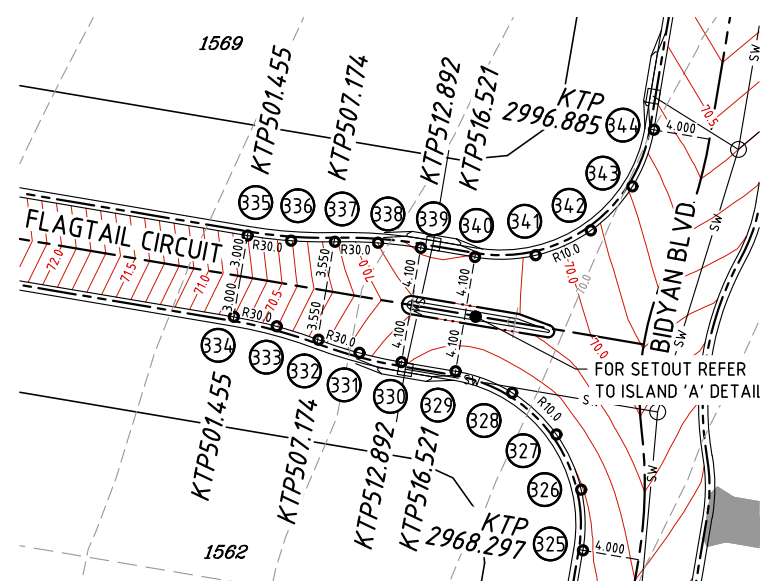
Approved

Drawing Title
ROADWORKS
INTERSECTION DETAILS,
SIGNS AND LINEMARKING PLAN

Drawn: NJS, Designed: JB, Checked: GG, Date: OCT 18

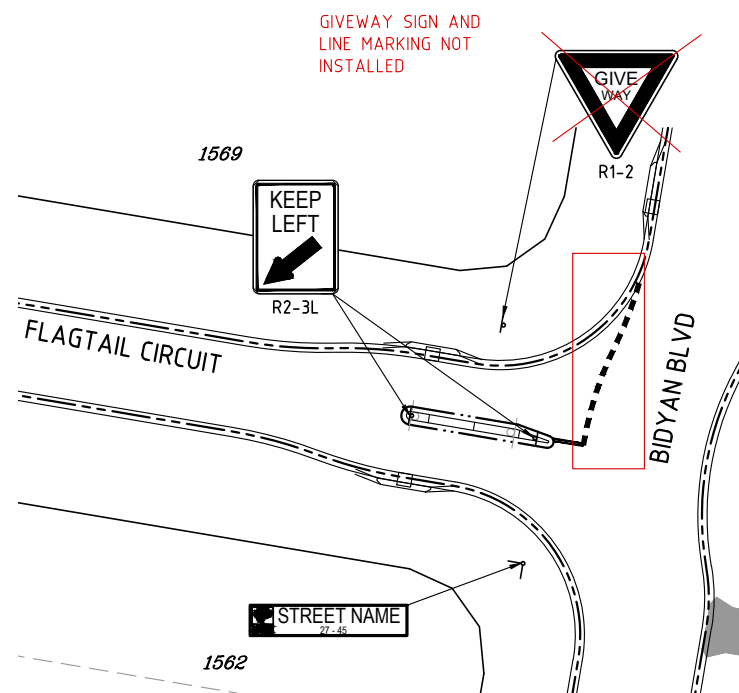
Scale: AS SHOWN, Sheet: 16 of 32

A1, Drawing No: 18-118-16, Revision: C



SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
325	492757.544	6930980.172	69.672
326	492757.428	6930984.178	69.693
327	492755.788	6930987.834	69.713
328	492752.874	6930990.584	69.733
329	492749.129	6930992.010	69.753
330	492745.550	6930992.614	69.814
331	492742.766	6930993.223	69.947
332	492740.053	6930994.096	70.147
333	492737.291	6930994.984	70.406
334	492734.457	6930995.604	70.700
335	492735.366	6931000.988	70.700
336	492738.247	6931000.642	70.409
337	492741.148	6931000.574	70.118
338	492743.997	6931000.507	69.899
339	492746.826	6931000.167	69.786
340	492750.404	6930999.563	69.813
341	492754.410	6930999.679	69.929
342	492758.066	6931001.319	70.072
343	492760.816	6931004.233	70.214
344	492762.242	6931007.978	70.357

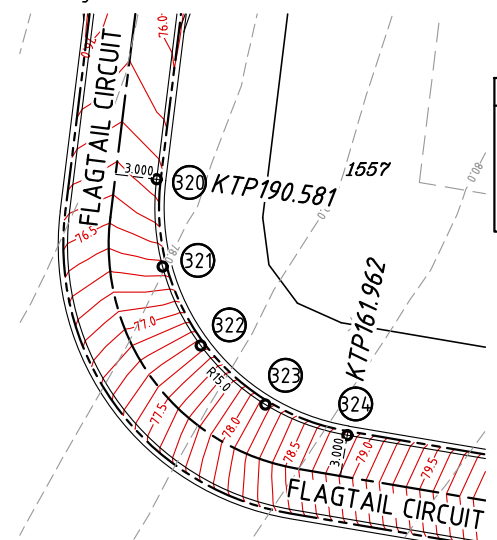


SIGNS AND LINEMARKING DETAIL
BIDYAN BLVD & FLAGTAIL CIRCUIT
SCALE 1:250

INTERSECTION DETAIL
BIDYAN BLVD & FLAGTAIL CIRCUIT
SCALE 1:250

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed: RPEQ No. 17544, Dated: 15/04/2020



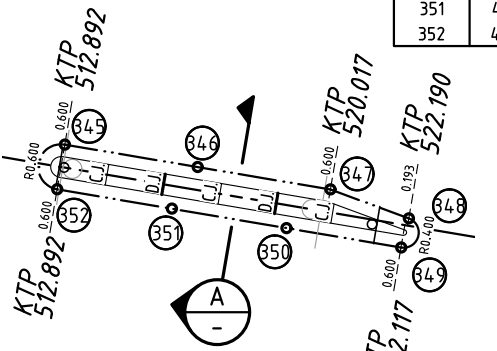
KERB WIDENING
FLAGTAIL CIRCUIT
SCALE 1:250

SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
320	492556.398	6930843.175	76.251
321	492556.794	6930837.400	76.639
322	492559.312	6930832.187	77.353
323	492563.589	6930828.286	78.152
324	492569.010	6930826.257	78.829

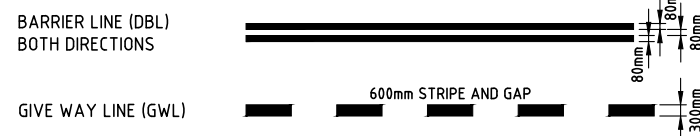
SETOUT TABLE

PT No.	EASTING	NORTHING	LEVEL
345	492746.288	6930996.982	69.899
346	492749.801	6930996.389	69.851
347	492753.313	6930995.795	69.898
348	492755.389	6930995.032	69.942
349	492755.184	6930994.262	69.915
350	492752.152	6930994.775	69.859
351	492749.120	6930995.287	69.844
352	492746.088	6930995.799	69.904

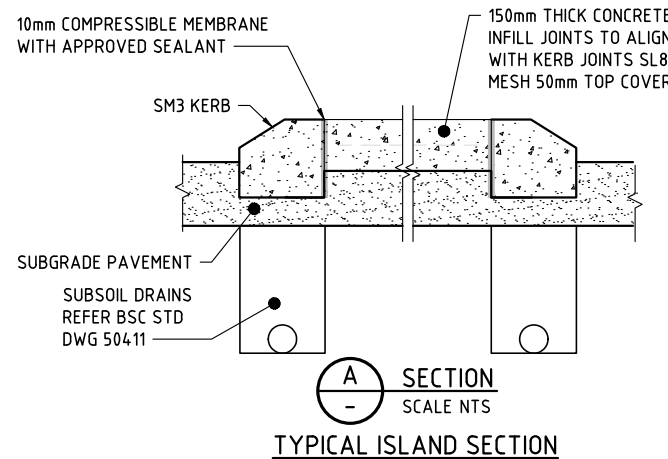


ISLAND DETAIL 'A'
SCALE 1:100

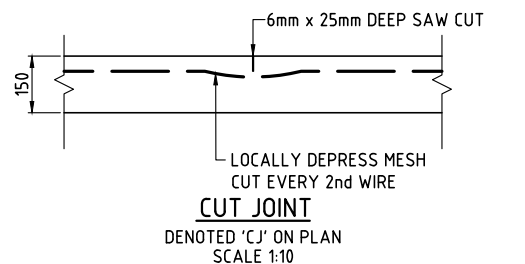
LINEMARKING LEGEND



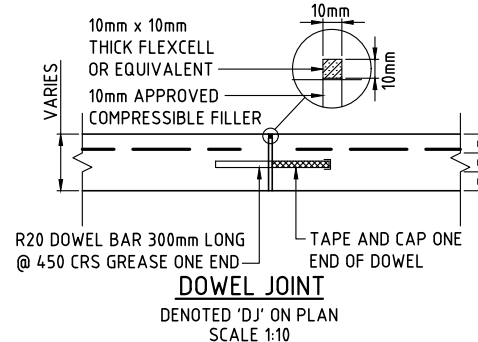
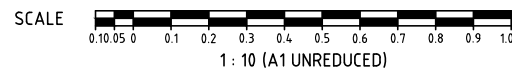
NOTE - RETROREFLECTIVE RAISED PAVEMENT MARKERS (RRPM'S) REQUIRED TO ALL LANE LANES AND ALL PERIMETER OF CHEVRONS AS PER MAIN ROADS 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES' (MUTCD).



TYPICAL ISLAND SECTION
SCALE NTS



CUT JOINT
DENOTED 'CJ' ON PLAN
SCALE 1:10



DOWEL JOINT
DENOTED 'DJ' ON PLAN
SCALE 1:10



GENERAL NOTES

- SETOUT TABLES ARE GIVEN AT KERB LIP LEVELS.
- KERB LIP LEVELS ARE GIVEN AT QUARTER POINTS, TP'S AND EQUAL PARTS U.N.O.
- KERB RADII AND OFFSETS ARE GIVEN AT HORIZONTAL SETOUT POINT SHOWN ON KERB SETOUT DETAILS BELOW.
- EXTRA DETAIL FOR SETTING OUT IS AVAILABLE ON CAD FILE.

PAVEMENT MARKING NOTES

ALL PAVEMENT MARKING TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - CURRENT EDITION.

OUTLINE MARKINGS, OFFSET 75mm MINIMUM FROM THE KERB FACE SHALL BE PROVIDED AROUND ALL RAISED ISLANDS AND MEDIANS.

WHITE REFLECTIVE PAINT SHALL BE USED FOR ALL LANE AND EDGE LINES, CHEVRONS AND OUTLINE MARKINGS.

WHITE REFLECTIVE THERMOPLASTIC MATERIAL SHALL BE USED FOR ALL CONTINUITY, TURNING, HOLDING, GIVE WAY, STOP, CROSSWALK MARKINGS AND TURN ARROWS.

ALL EXISTING PAVEMENT MARKINGS THAT SHALL BE MADE OBSOLETE BY THESE WORKS SHALL BE REMOVED FROM THE ROAD SURFACE BY APPROVED METHOD.

SIGN NOTES

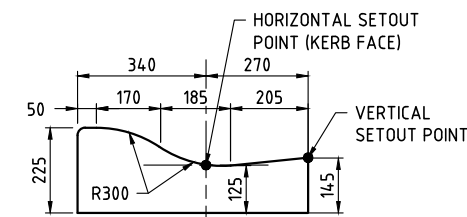
- ALL SIGNS TO BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - CURRENT EDITION
- THE LOCATION OF EXISTING SIGNS ARE INDICATED ON PLAN.
- THE LOCATIONS OF PROPOSED SIGNS ARE INDICATED ON PLAN. ALL SIGNS TO BE INSTALLED WITH THE FOLLOWING MINIMUM CLEARANCES TO EDGE OF SIGN FACE:

- NO KERB - 600mm BEHIND GUIDEPOSTS
- BARRIER KERB - 300mm FROM FACE OF KERB
- MOUNTABLE KERB - 500mm FROM FACE OF KERB.

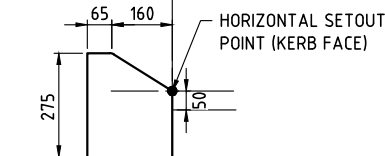
4. CHECK FOR ALL IN GROUND SERVICES PRIOR TO PLACING SIGN SUPPORTS.

5. SIGN SUPPORT CONSTRUCTION TO BE IN ACCORDANCE WITH MAIN ROADS STANDARD DRAWING 1368 FOR SIGN SUPPORTS AND FOR MULTIPLE SUPPORT. REUSE EXISTING SIGN SUPPORTS WHERE POSSIBLE.

6. EXACT LOCATION OF ALL SIGNS IS TO BE VERIFIED ON SITE WITH THE SUPERINTENDENT PRIOR TO INSTALLATION.



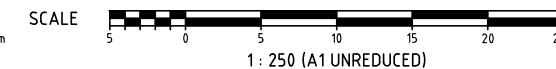
KERB SETOUT DETAIL
KERB AND CHANNEL - TYPE M3
SCALE 1:10



KERB SETOUT DETAIL
KERB - TYPE SM3
SCALE 1:10

LEGEND

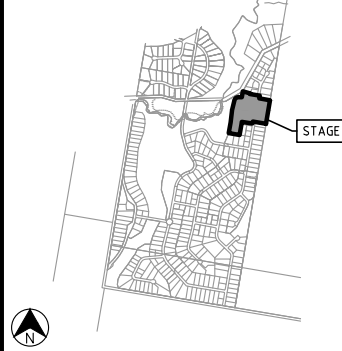
- PROPOSED ROAD CENTRELINE
- KERB AND CHANNEL (TYPE SM3)
- KERB AND CHANNEL (TYPE M3)
- SW PROPOSED STORMWATER DRAINAGE
- 36.0 FINISHED SURFACE CONTOURS
- 3.000 OFFSET TO KERB FACE
- D.J. DOWEL JOINT (D.J.)
- C.J. CUT JOINT (C.J.)



M:\2018\1818_Spring Mountain Stage 15B\Engineering\Ascon\18-118-16-RD-DETAILS.dwg Plotted by: L.S on 15/04/2020 11:49:42 AM

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LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	RE-ISSUE FOR APPROVAL	24.04.19	DES
C	SW CALCS AMENDED	02.07.19	JJH
D	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client



Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019



ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.kngroup.com.au

Approved

Drawing Title
**STORMWATER
CALCULATION TABLE
SHEET 1**

Drawn NJS	Designed ET	Checked GG	Date OCT 18
Scale AS SHOWN		Sheet 18 of 32	
Drawing No A1		Revision D	

DESIGN ARI	STRUCTURE No.	DRAIN SECTION	SUB-CATCHMENTS CONTRIBUTING	LAND USE	SLOPE OF CATCHMENT	TIME		SUB-CATCHMENT RUNOFF						INLET DESIGN						DRAIN DESIGN										HEADLOSSES										PART FULL		DESIGN LEVELS					
						tc	I	C10	C	A	CxA	+CA	Q	tc	I	+CA	Qt	Qm	Qs	Qp	L	S	V	T	Y2/Zg	Ku	hu	Kl	hl	Kw	hw	Sf	hf	Vp	Obvert Levels	Drain Section H.G.L.	Upstream H.G.L.	LAT. H.G.L.	W.S.E.	Surface OR R&C Invert Level	Structure No.						
2	G090	G090 to G091	90			15.00	15.00	0.62	0.372	0.231	0.231	61	61	2.90	530	2	56	5	15.00	95	0.231	174		56	9.170	0.51	0.231	0.013	7.90	0.105		7.90	0.105	0.10	0.009	0.122	1.81	70.306	70.123	70.306	70.118	70.411	70.411	71.262	G090		
2	G091	G091 to 100UT	90,91			5.00	5.00	0.72	0.041	0.041	0.041	12	12	2.90	530	2	12	0	15.15	94	0.261	196	3253	133	63	21.131	4.85	0.017	0.91	0.015		0.91	0.015	0.13	0.028	0.103	2.57	70.103	70.103	70.103	70.118	70.118	71.150	G091			
2	G052	G052 to G051	52			5.00	5.00	0.72	0.210	0.210	0.210	62	62	0.00	272	1850.112	62	0	5.00	147	0.151	172		62	8.295	1.00	0.016	7.90	0.127		7.90	0.127	0.12	0.010		79.442	79.359	79.773	79.763	79.900	79.900	80.198	G052				
2	G051	G051 to 21A	52,51			5.00	5.00	0.72	0.245	0.245	0.245	72	89	0.00	272	1850.112	89	0	5.14	146	0.327	369		150	17.967	0.73	0.093	1.70	0.158		2.10	0.195	0.73	0.131		79.339	79.208	79.605	79.474	79.763	79.800	80.203	G051				
2	21A	21A to 21B	52,51												16			5.36	144	0.327	364		150	12.648	0.73	0.093	1.76	0.164		2.06	0.192	0.73	0.092		79.188	79.096	79.310	79.218	79.474	79.502	80.675	21A					
2	G081	G081 to G080	81			15.00	15.00	0.62	0.312	0.193	0.193	51	51	0.00	199	1850.083	51	0	15.00	95	0.193	147		51	8.495	2.00	0.011	5.90	0.064		5.90	0.064	0.08	0.007	0.116	1.77	73.904	73.734	73.904	73.682	73.968	74.658	G081				
2	G080	G080 to 22A	81,80			5.00	5.00	0.72	0.075	0.075	0.075	22	22	0.00	199	1850.083	22	0	15.14	95	0.247	187		65	10.962	0.58	0.018	1.75	0.042		1.75	0.042	0.14	0.015	0.185	1.20	73.714	73.650	73.640	73.625	73.682	74.581	G080				
2	22A	22A to 22B	81,80												16			15.32	94	0.247	186		65	17.912	1.78	0.018	1.40	0.234		1.40	0.234	0.14	0.025	0.135	1.81	73.630	73.311	73.391	73.138	73.625	74.682	22A					
2	22B	22B to 22BA	81,80												16			15.62	93	0.247	184		65	61.030	3.47	0.018	0.40	0.108		0.40	0.108	0.14	0.084	0.114	2.30	73.291	71.173	73.030	73.138	73.138	74.246	22B					
2	22BA	22BA to 22C	81,80												16			16.64	91	0.247	179		65	61.030	3.00	0.018	0.30	0.073		0.30	0.073	0.14	0.084	0.118	2.19	71.153	69.324	70.896	69.512	70.969	72.119	22BA					
2	G050	G050 to 21B	50			15.00	15.00	0.62	0.542	0.336	0.336	89	89	1.20	341	2	72	17	15.00	95	0.336	254		72	5.144	13.83	0.022	5.90	0.127		5.90	0.127	0.17	0.009	0.084	3.87	79.807	79.096	79.807	79.218	79.934	80.742	G050				
2	21B	21B to 21BA	52,51,50												16			15.09	95	0.663	497		170	86.742	0.94	0.121	1.18	0.142		1.19	0.144	0.94	0.819		79.076	78.256	79.076	78.256	79.218	79.220	80.860	21B					
<p>MARK SHAW I, MARK SHAW hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.</p> <p>Signed..... RPEQ No. 17544 Dated 15/04/2020.....</p>																																															
2	21BA	21BA to 21C	52,51,50												16			16.03	92	0.663	484		170	84.400	2.40	0.121	0.30	0.103		0.30	0.103	0.94	0.797	0.215	2.60	78.237	78.077	78.180	78.180	78.180	80.447	21BA					
2	G055	G055 to 21C	55			13.00	13.00	0.62	0.979	0.607	0.607	170	170	5.30	717	2	117	53	13.00	101	0.607	491		117	7.306	3.54	0.057	7.90	0.452		7.90	0.452	0.45	0.033		76.470	76.211	76.679	76.646	77.131	77.131	77.428	G055				
2	G056	G056 to 21C	56			5.00	5.00	0.72	0.072	0.072	0.072	21	21	4.70	675	2	21	0	5.00	147	0.052	59		21	4.058	2.00	0.002	7.90	0.014		7.90	0.014	0.01	0.001		76.292	76.211	76.646	76.661	76.661	77.251	G056					
2	21C	21C to 21D	52,51,50,55,56												16			16.94	90	1.322	943		284	14.989	7.14	0.337	1.35	0.455		1.35	0.455	2.62	0.393	0.211	4.44	76.191	75.121	76.191	75.438	76.646	76.646	77.229	21C				
2	G057	G057 to G058	57			15.00	15.00	0.62	0.500	0.310	0.310	82	135	0.00	272	1850.112	135	0	15.00	95	0.310	235		135	8.495	4.44	0.037	7.90	0.290		7.90	0.290	0.22	0.019	0.145	3.05	75.684	75.306	75.684	75.598	75.974	76.641	G057				
2	G058	G058 to 21D	57,58			5.00	5.00	0.62	0.120	0.074	0.074	30	30	0.00	272	1850.112	30	0	15.14	95	0.384	291		126	16.5	0.50	0.055	1.80	0.100		2.00	0.111	0.34	0.060		75.286	75.196	75.498	75.438	75.609	76.466	G058					
2	21D	21D to 21E	52,51,50,55,56,57,58												16			17.04	90	1.706	1219		440	97.855	6.70	0.811	0.30	0.244		0.30	0.244	6.32	6.184		75.101	75.194	75.194	75.438	75.438	76.355	21D						
2	G062	G062 to G061	62			15.00	15.00	0.62	0.316	0.196	0.196	52	85	0.00	272	1850.112	85	0	15.00	95	0.196	148		85	8.506	0.50	0.030	7.90	0.239		7.90	0.239	0.24	0.020		68.831	68.788	68.969	68.949	69.208	69.787	G062					
2	G061	G061 to 22D	62,61			5.00	5.00	0.72	0.119	0.086	0.086	35	35	0.00	272	1850.112	35	0	15.14	95	0.282	212		108	16.922	0.95	0.049	1.60	0.079		1.92	0.094	0.38	0.064		68.768	68.806	68.806	68.949	68.964	69.804	G061					
2	G063	G063 to 22C	63			15.00	15.00	0.62	0.769	0.477	0.477	126	126	2.60	502	2	92	34	15.00	95	0.477	361		92	6.649	2.00	0.036	7.90	0.285		7.90	0.285	0.28	0.018		69.457	69.324	69.512	69.815	69.815	70.412	G063					
2	G064	G064 to 22C	64			5.00	5.00	0.72	0.085	0.061	0.061	25	25	2.60	502	2	25	0	5.00	147	0.061	70		25	3.321	4.10	0.003	5.90	0.016		5.90	0.016	0.02	0.001		69.460	69.324	69.512	69.529	69.529	70.412	G064					

CALCULATIONS TABLE

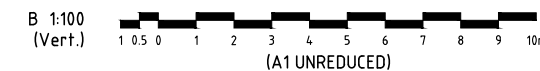
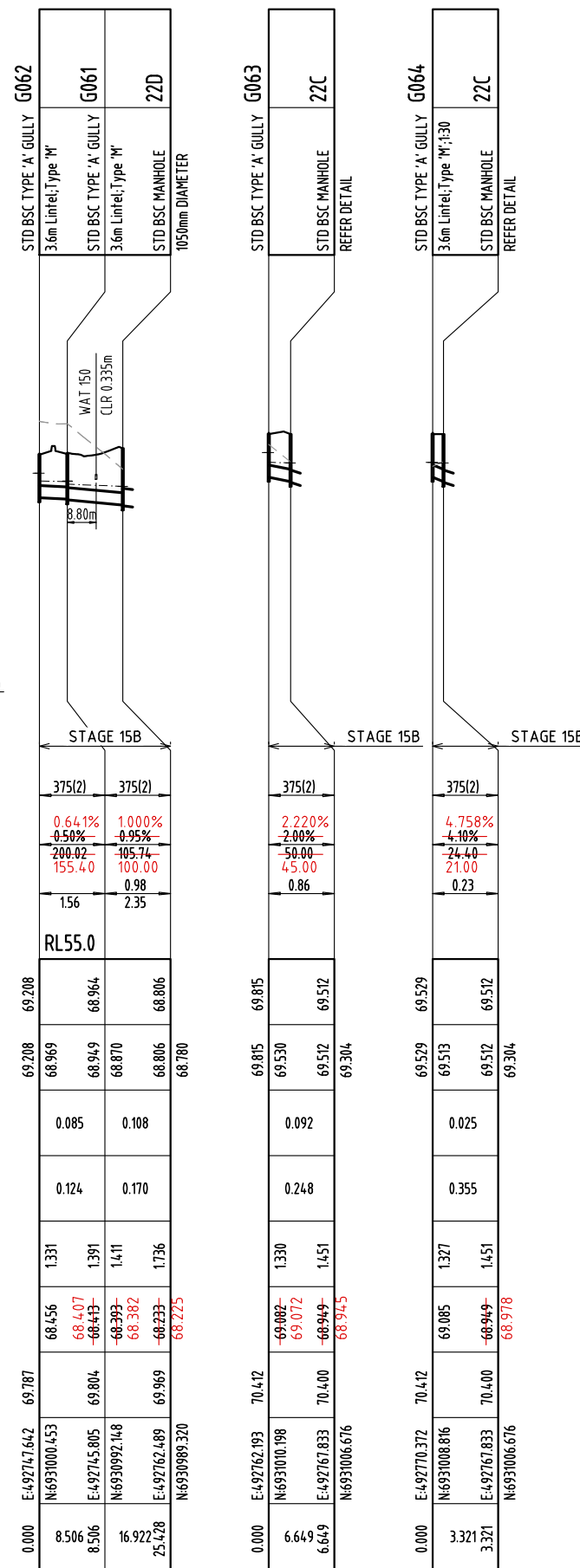
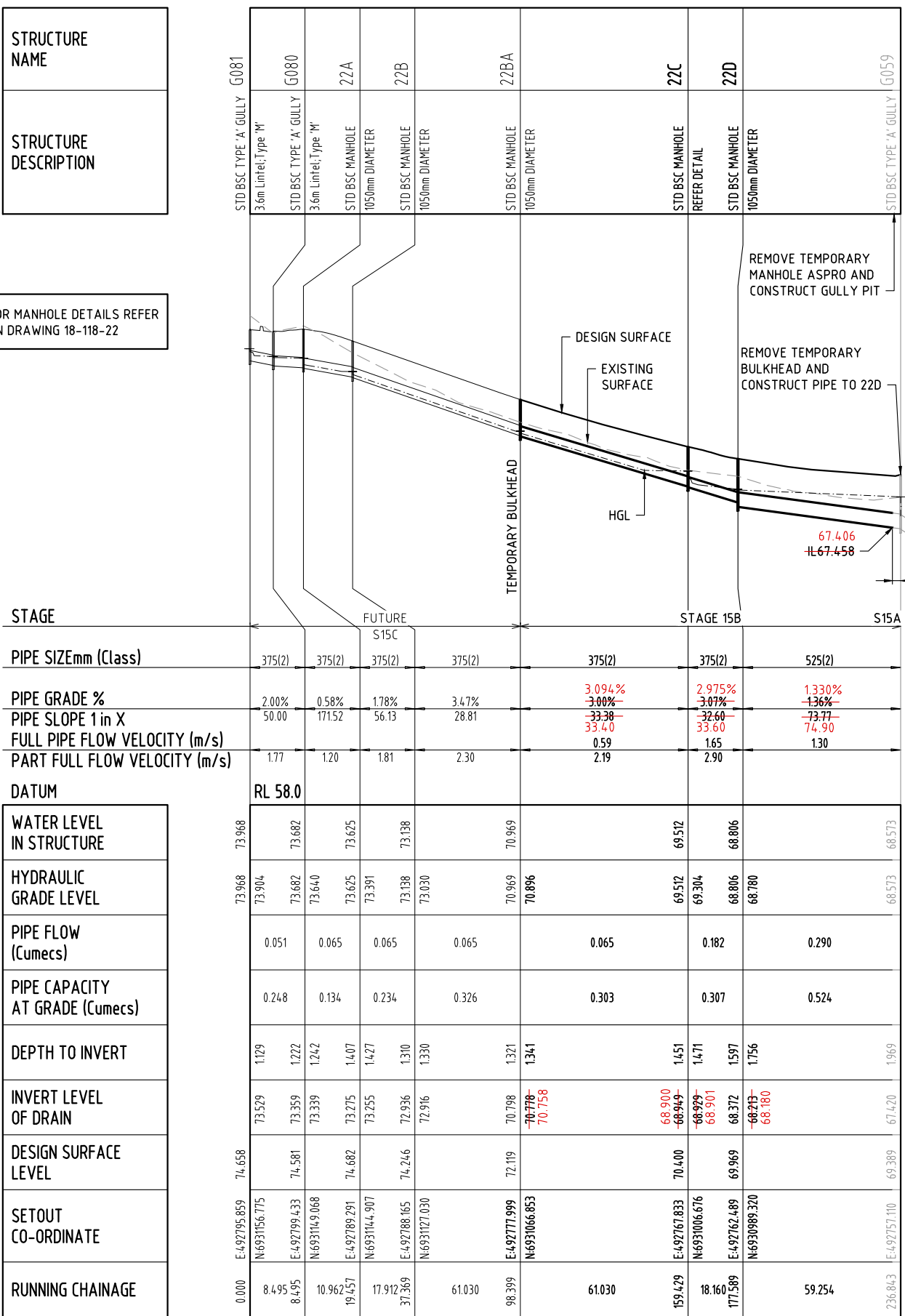
NOTE
 FOR BSC STD DRAWINGS REFER:
 • 1050-1500 MANHOLE DETAILS IPWEAQ - DS-0010, DS-0011
 • TYPE A GULLY (LIP IN LINE) IPWEAQ - DS-0063
 • DRAINWAY STORMWATER GULLY IPWEAQ - DS-0064, DS-0067

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544..... Dated...15/04/2020.....

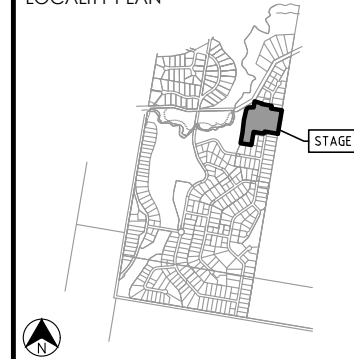
STRUCTURE NAME
STRUCTURE DESCRIPTION

FOR MANHOLE DETAILS REFER KN DRAWING 18-118-22



DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	SW LEVELS AMENDED	02.07.19	JJH
C	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Project
SPRING MOUNTAIN
 ACREAGE ESTATE
 STAGE 15B
 OW/45/2019



Approved

Drawing Title
STORMWATER
 LONGITUDINAL SECTIONS
 SHEET 1

Drawn NJS	Designed ET	Checked GG	Date OCT 18
Scale AS SHOWN	Drawing No 18-118-20		Sheet 20 of 32
Revision A1		Revision C	



EROSION AND SEDIMENT CONTROL PLAN - POST CONSTRUCTION PHASE
SCALE 1:500

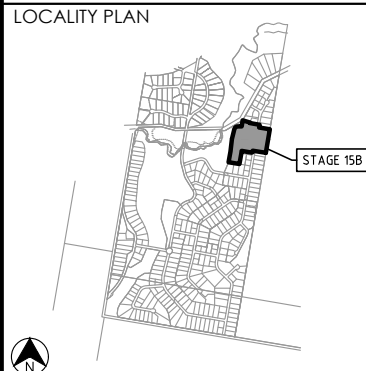
LEGEND

- STAGE BOUNDARY
- - - KERB AND CHANNEL (TYPE M3)
- - - KERB AND CHANNEL (TYPE SM3)
- SW PROPOSED STORMWATER DRAINAGE
- 36.0 FINISHED SURFACE CONTOURS
- - - Q100 FLOOD POST CONSTRUCTION EXTENTS
- - - 300mm FREEBOARD EXTENTS
- - - DTM SURVEY CONTOURS
- - - LIDAR CONTOURS
- BATTER LINE - TOP
- BATTER LINE - BOTTOM
- GULLY BAGS
- SEDIMENT AND DIVERSION FENCE (TEMP)

SCALE 1 : 500 (A1 UNREDUCED)

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544 Dated 15/04/2020



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Client
PEET

Project
**SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019**



Approved

Drawing Title
**EROSION AND SEDIMENT CONTROL
LAYOUT PLAN
POST CONSTRUCTION PHASE - SHEET 1**

Drawn NJS	Designed TE	Checked GG	Date OCT 18
Scale AS SHOWN	Sheet 25 of 32		Revision B
A1		Drawing No 18-118-25	Revision B

EROSION AND SEDIMENT CONTROL PROGRAM

- THIS PROGRAM AND ASSOCIATED PLANS SHOULD BE READ IN CONJUNCTION WITH THE SITE MANAGEMENT SPECIFICATION INCORPORATED IN THE CONTRACT DOCUMENTS. THE PROVISIONS OF THE SPECIFICATION ARE TO BE STRICTLY ADHERED TO.
- THE BASIC OBJECTIVES OF THE EROSION AND SEDIMENT CONTROL ARE:
 - IDENTIFY CRITICAL AREAS AND PROVIDE APPROPRIATE ATTENTION TO THOSE AREAS.
 - PLAN SITE LAYOUTS SO THAT ACCESS TO ALL REQUIRED DRAINAGE EROSION AND SEDIMENT CONTROL MEASURE IS MAINTAINED.
 - LIMIT EXPOSURE TIME BY PROGRAMMING TO MINIMISE THE AREA OF LAND EXPOSED TO POTENTIALLY ADVERSE WEATHER CONDITIONS AT ANY ONE TIME. I.E. PROGRESSIVELY CLEAR AND REVEGETATE.
 - PROVIDE CONTROL MEASURES INCLUDING TEMPORARY AND PERMANENT DRAINAGE, EROSION AND SEDIMENT CONTROLS.
- THE EROSION AND SEDIMENT CONTROL SHALL COMPLY WITH BEST PRACTICE FOR EROSION AND SEDIMENT CONTROL, THE POLLUTION CONTROL MANUAL FOR URBAN STORMWATER MANAGEMENT, THE QUEENSLAND URBAN DRAINAGE MANUAL, AND THE SOIL EROSION AND SEDIMENT CONTROL - ENGINEERING GUIDELINES FOR QUEENSLAND (CURRENT EDITIONS).
- CONSTRUCTION SEQUENCE THE CONSTRUCTION SEQUENCE WILL GENERALLY BE:
 - OBTAIN ALL NECESSARY PERMITS AND APPROVALS BEFORE SITE ESTABLISHMENTS.
 - HOLD A PRE-CONSTRUCTION CONFERENCE.
 - STABILISE ALL CONSTRUCTION ACCESS ROUTES AND ENTRY/EXIT POINTS.
 - ESTABLISH SEDIMENT CONTROL STRUCTURES AND TEMPORARY DRAINAGE CONTROL MEASURES AS NECESSARY.
 - CARRY OUT BULK EARTHWORKS.
 - MAINTAIN AND REPAIR DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES.
 - REMOVE SEDIMENT CONTROL MEASURES WHEN THE SITE IS STABILISED. I.E. >70% GROUND COVER
 - THE CONTRACTOR SHALL PREPARE A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO SUIT HIS/HER CONSTRUCTION METHODOLOGY, AND SUBMIT THIS PLAN FOR APPROVAL TO THE SUPERINTENDENT. IT SHOULD BE NOTED THAT ANY SIGNIFICANT VARIATION TO THIS PLAN MAY REQUIRE RESUBMISSION TO COUNCIL FOR APPROVAL. THE CLIENT SHALL NOT BE RESPONSIBLE FOR ANY SUCH ASSOCIATED DELAY.
- ALL ESC DEVICES ARE TO BE INSPECTED WEEKLY, PRIOR TO EXPECTED AND AFTER RAINFALL ANY DAMAGE IS TO BE REPAIRED AS REQUIRED TO MAINTAIN THEIR EFFICACY.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL (ESC) MEASURE TO BE MAINTAINED AND FULLY OPERATIONAL DURING THE MAINTENANCE PERIOD AND ARE TO BE REMOVED AFTER THE SATISFACTORY COMPLETION OF AN OFF-MAINTENANCE INSPECTION BY COUNCIL AND PRIOR TO FORMAL ACCEPTANCE "OFF MAINTENANCE" BY COUNCIL.
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR IS TO PROVIDE A DETAILED PROGRAM TO THE SUPERINTENDENT SHOWING THE TIMING FOR ALL WORKS ASSOCIATED WITH THE PROJECT, NOMINATING, IN PARTICULAR, THE PROGRAM FOR INSTALLATION OF SOIL AND EROSION CONTROL SYSTEMS.
- EARTHWORKS SHALL BE CARRIED OUT IN SUCH A MANNER THAT THE SITE IS MAINTAINED IN A WELL DRAINED CONDITION, AREAS OF LOOSE SOIL ARE MINIMISED AND CONCENTRATIONS OF STORMWATER ARE MINIMISED. BULK EARTHWORKS WILL BE CARRIED OUT OVER THE ENTIRE SITE IN ONE STAGE.
- A SHAKE DOWN AS DETAILED ON THE PLAN COMPRISING FREE DRAINAGE GRAVEL SHALL BE LOCATED ADJACENT TO THE POINT OF ACCESS WHERE VEHICLES CAN BE WASHED DOWN PRIOR TO EXIT TO THE STREET SYSTEM IF REQUIRED. THE WASH DOWN AREA SHALL BE KEPT FREE OF MUD.
- FOR DETAILS OF ENTRY/EXIT SEDIMENT PAD REFER TO BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.48, FIGURE 2.6.
- SUPPLEMENTARY EROSION AND SEDIMENT CONTROL DEVICES MAY BE REQUIRED AT THE DISCRETION OF THE SUPERINTENDENT.
- SEDIMENTATION FENCES TO BE PLACED AS SHOWN. FOR DETAILS OF SEDIMENT FENCE REFER BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.50, FIGURE 2.8.
- WHERE SEDIMENT FENCES ARE SHOWN TO BE CONSTRUCTED IN AREAS OF SIGNIFICANT EARTHWORKS, ERECTION OF THE FENCE MAY BE DEFERRED UNTIL COMPLETION OF THE BULK EARTHWORKS, SUBJECT TO ABSENCE OF RAIN.

TREES

- ENSURE COMPLIANCE WITH THE REQUIREMENTS OF AS4970 - TREES ON CONSTRUCTION SITES. THIS MAY REQUIRE CONSULTATION AND GUIDANCE FROM A CLASS V CERTIFIED ARBORIST AS TREES OUTSIDE THE IMMEDIATE WORK AREA MAY BE AFFECTED.

EROSION AND SEDIMENT CONTROL NOTES

- NO DISTURBED AREA IS TO REMAIN DENUDED LONGER THAN 60 DAYS.
- ALL EROSION AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING AND GRUBBING OR ANY OTHER EARTHWORKS OR TRENCHING.
- ALL STORMWATER, SEWER LINE AND SERVICES TRENCHES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 15 DAYS AFTER BACKFILL, NO MORE THAN 150 METRES ARE TO BE OPEN AT ANY ONE TIME.
- ALL TEMPORARY EARTH BANKS, DIVERSIONS AND SEDIMENT DAM EMBANKMENTS ARE TO BE MACHINE-COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER WITHIN 10 DAYS AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED.
- ALL FILL EMBANKMENTS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END OF EACH DAYS OPERATION.
- ALL CUT AND FILL BATTERS ARE TO BE SEEDED AND MULCHED WITHIN 10 DAYS OF COMPLETION OF GRADING.
- ADDITIONAL SILT AND EROSION CONTROLS MAY BE REQUIRED AS ORDERED ON SITE BY THE SUPERVISING ENGINEER.
- ALL CONTROLS ARE TO BE INSPECTED AFTER EACH STORM EVENT AND MAINTAINED AS REQUIRED. CONTROLS ARE TO BE MAINTAINED UNTIL THE DISTURBED AREAS ARE PERMANENTLY STABILIZED OR UNTIL NO LONGER REQUIRED.

PHASE 1 - CLEARING AND BULK EARTHWORKS

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS, CATCH DRAINS AND HYDROMULCHING WHICH CONTROL SEDIMENT AND EROSION DURING CLEARING AND BULK EARTHWORKS.

PHASE 2 - TRENCH EXCAVATION

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS AND CATCH DRAINS WHICH CONTROL SEDIMENTATION AND EROSION DURING TRENCHING WORK.

PHASE 3 - PAVEMENT CONSTRUCTION

CONSTRUCT AND MAINTAIN SILT FENCES, STRAW BALE TRAPS, ALLOTMENT DRAINAGE BANKS, GULLY INLET PROTECTION, AND PIPE INLET/OUTLET PROTECTION WHICH CONTROL SEDIMENTATION AND EROSION DURING PAVEMENT CONSTRUCTION. SAND BAGGING TO BE PLACED ACROSS PAVEMENT TO CONTROL RUNOFF IN PAVEMENT BOXING AS DIRECTED ON SITE.

PHASE 4 - MAINTENANCE PERIOD

CONSTRUCT AND MAINTAIN CONTROLS AND VEGETATIVE TREATMENTS WHICH CONTROL SEDIMENTATION AND EROSION PRIOR TO THE ESTABLISHMENT OF GRASS COVER. PROVIDE 600mm WIDE GRASS FILTER STRIPS BEHIND KERB AND CHANNEL.

NOTE: TURF TREATMENT IN CERTAIN AREAS BY LANDSCAPER. REFER TO LANDSCAPE DRAWING.

NOTE

ALL VEHICLES EXITING FROM THE SITE ARE TO BE CLEANED AND TREATED TO PREVENT MATERIAL BEING TRACKED OR DEPOSITED ONTO PUBLIC ROADS. IF MATERIAL IS ACCIDENTLY DEPOSITED ONTO PUBLIC ROADS IT SHALL BE REMOVED WITHOUT DELAY. IF THE SHAKEDOWN DEVICE PROVES TO BE INEFFECTIVE THE CONTRACTOR IS TO USE OTHERS MEANS TO PREVENT MATERIAL BEING DEPOSITED ONTO PUBLIC ROADS.

TOPSOIL

- STRIP AND STOCKPILE AVAILABLE TOPSOIL (ASSUMED AVERAGE DEPTH 150mm) FROM ALL DISTURBED AREAS PRIOR TO BULK EARTHWORKS. GRADE EVENLY BETWEEN ALLOTMENT FINISHED SURFACE LEVELS AND ENSURE LOTS ARE FREE DRAINING.
- MINIMUM SLOPE ACROSS ALLOTMENTS TO BE 1%.
- ALL FOOTPATHS, BATTERS, AND EARTHWORKS AFFECTED ALLOTMENTS ARE TO BE TOPSOILED TO A MINIMUM DEPTH OF 150mm (LIGHTLY COMPACTED) AND TURFED WHERE SPECIFIED.

SEDIMENT FENCES

- SEDIMENT FENCES TO BE PLACED AS SHOWN. SEDIMENT FENCED TO BE REPAIRED AND EXCESSIVE SEDIMENT DEPOSITS SHALL BE REMOVED ONCE CAPACITY FALLS BELOW 75%.
- FOR DETAILS OF SEDIMENT FENCE REFER BEST PRACTICE EROSION & SEDIMENT CONTROL BOOK 1, PAGE 2.50, FIGURE 2.8.
- SEDIMENT FENCES TO BE REPAIRED AS REQUIRED AND EXCESSIVE SEDIMENT DEPOSITS SHOULD BE REMOVED.
- INSTALL KERB INLETS WITH GRAVEL RANGING FROM 50mm TO 75mm IN SIZE SHALL BE INSTALLED AT ALL COMPLETED INLETS. REFER IPWEAQ STANDARD DRAWING D-004.1. THESE SHALL BE MAINTAINED IN A CLEAN CONDITION. IN THE EVENT OF HEAVY RAIN THEY SHALL BE REMOVED TO MINIMISE THE POTENTIAL FOR FLOODING.
- CHECKS OF SILT CONTROL DEVICES ARE TO BE MADE WEEKLY, OR AFTER ANY SIGNIFICANT STORM EVENT TO ENSURE INTEGRITY AND PERFORMANCE.

TURFING

- PROVIDE TURFING TO ENTIRE WIDTH OF ALL SWALES, FOOTPATHS AND 1 IN 4 CUT AND FILL BATTERS.
- FOOTPATH BATTERS ARE TO BE STABILISED WITH TOPSOIL (AND TURFED) AS SOON AS PRACTICAL AFTER THE BATTERS HAVE BEEN COMPLETED.

DURING CONSTRUCTION SEQUENCE:

- TOPSOIL STOCKPILES SHALL BE LESS THAN 1m DEEP AND UNCOMPACTED. A SEDIMENTATION FENCE SHALL BE CONSTRUCTED ON THE D/S SIDE, OR THE STOCKPILE STABILISED WITH VEGETATION, MULCH, OR A SOIL STABILISER.
- SEDIMENTATION FENCES TO BE PLACED AS SHOWN.
- REGULARLY INSPECT BANKS AND REPAIR ANY SLUMPS, WHEEL TRACK DAMAGE OR LOSS OF FREEBOARD.
- REMOVE SEDIMENT TO AVOID PONDING FROM CATCH DRAINS.
- REMOVE EXCESSIVE SEDIMENT FROM UPSTREAM OF CHECK DAM.
- ROAD RESERVE TO BE USED AS HAUL ROAD.
- A CATCH DRAIN OR DIVERSION BANK IS TO BE PROVIDED ON THE TOP SIDE OF ALL CUTS, WITH DISCHARGE EITHER TO UNDISTURBED GRASS LANDS OR TO THE CROSS ROAD DRAINAGE.
- SUPPLEMENTARY EROSION AND SEDIMENT CONTROL DEVICES MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
- WATER QUALITY SAMPLES MUST BE TAKEN AND ANALYSED PRIOR TO THE RELEASE OF ANY WATER FROM THE SEDIMENT POND. WATER QUALITY MUST SATISFY THE FOLLOWING CRITERIA: TSS-50MG/L PH BETWEEN 6.5 AND 8.5.
- ALL WATER QUALITY DATA INCLUDING DATES OF RAINFALL, TESTING AND WATER RELEASE MUST BE MAINTAINED IN AN ON-SITE REGISTER. THIS REGISTER IS TO BE MAINTAINED FOR THE DURATION OF THE APPROVED WORKS AND BE AVAILABLE ON SITE FOR INSPECTION BY COUNCIL OFFICERS ON REQUEST.
- EXPOSED AREAS ON LOTS ARE TO BE SEEDED AND MULCHED (E.G. HYDROMULCHED). MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 2.5T/HA. ALTERNATIVELY THEY SHALL BE DRILL-SEEDED AND IRRIGATED SO AS TO ENSURE >70% GROUND COVER WITHIN 14 DAYS FROM NOVEMBER TO APRIL, OR 30 DAYS FROM MAY TO OCTOBER.

FOLLOWING CONSTRUCTION:

- SEDIMENTATION FENCES TO BE MAINTAINED UNTIL TURFING IS COMPLETED.
- SEDIMENT BASINS TO BE CHECKED AFTER EVERY SIGNIFICANT STORM AND DESILTED ONCE THE SETTLEMENT LIMIT HAS BEEN REACHED.

STABILISATION:

- THE AMOUNT OF AREA EXPOSED AT ANY ONE TIME TO BE MINIMISED BY STAGING THE WORKS WHEREVER POSSIBLE AND AIMING TO ACHIEVE FINISHED LEVEL IN EACH AREA AS QUICKLY AS POSSIBLE BEFORE OPENING NEW AREAS.
- TOPSOIL TO BE STRIPPED AND STOCKPILED SEPARATELY TO SUB-SOILS.
- STOCKPILES TO BE PROVIDED WITH SURFACE COVER USING A CHEMICAL SURFACE STABILISER SUCH AS VITAL CHEMICALS VITAL-BON MATT STONEWALL.
- IF WORKS ARE DELAYED OR PUT ON HOLD THEN TEMPORARY EROSION CONTROL COVERING TO BE PROVIDED USING VITAL CHEMICALS VITAL-BON MATT P47-VR1 OR EQUIVALENT.
- ONCE AREAS REACH FINISHED LEVEL:
 - TOPSOIL TO BE SPREAD TO CAP/BURY THE DISPERSIVE SUBSOILS.
 - TOPSOIL TO BE DRILL-SEEDED WITH A MIXTURE OF ANNUAL AND PERENIAL GRASS SPECIES (REFER TABLE) AND FERTILISER WITH CROP-KING 88 (0.3t/Ha).
 - TEMPORARY SOIL COVER TO BE APPLIED CONSISTING OF VITAL CHEMICALS VITAL-BON MATT P47-VR1 OR EQUIVALENT.
 - WATERING UNDERTAKEN AS NECESSARY UNTIL STABLE GRASS SURFACE COVER IS ESTABLISHED.

SEED MIXES			
	SUMMER BLEND (APPLICATIONS NOVEMBER - DECEMBER)	MID SEASON BLEND (APPLICATIONS MARCH/APRIL & SEPTEMBER/OCTOBER)	WINTER BLEND (APPLICATIONS MAY AUGUST)
UNHULLED GREEN COUCH (CYNODON DACTYLON) OR BLUE COACH (DIGITARIA DIDACYLEA)	25%	25%	25%
HULLED GREEN COUCH (CYNODON DACTYLON) OR BLUE COACH (DIGITARIA DIDACYLEA)	25%	25%	25%
JAPANESE MILLET	30%	15%	N/A
RYE GRASS	N/A	15%	30%
CARPET GRASS (AXONOPUS AFFINIS)	20%	20%	20%

LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants



Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019



Approved

Drawing Title
EROSION AND SEDIMENT CONTROL NOTES

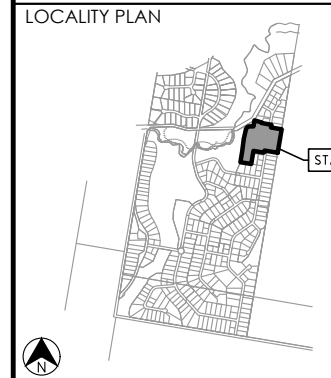
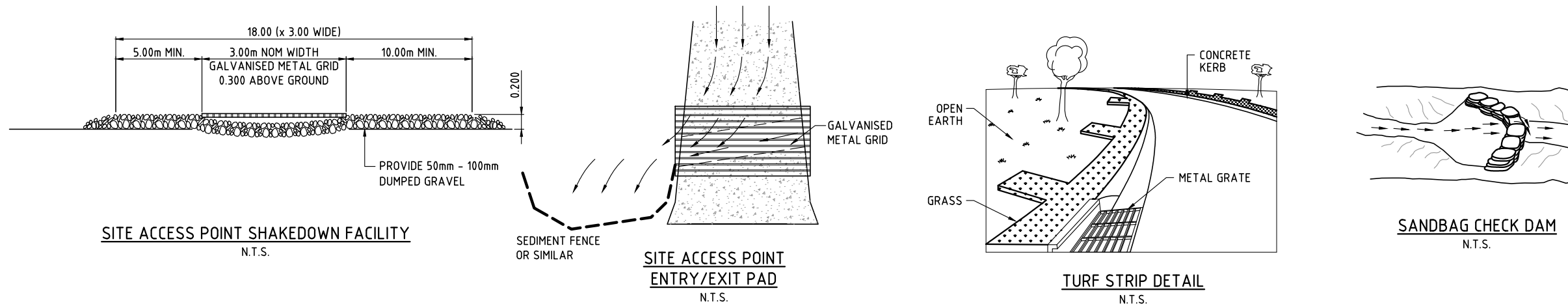
Drawn NJS	Designed TE	Checked GG	Date OCT 18
Scale AS SHOWN			Sheet 27 of 32
A1	Drawing No 18-118-27	Revision B	

M:\2018\1818 Spring Mountain Stage 15B (GENERAL.dwg) Plotted by: LS on 15/04/2020 11:50:17 AM

I, **MARK SHAW**, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

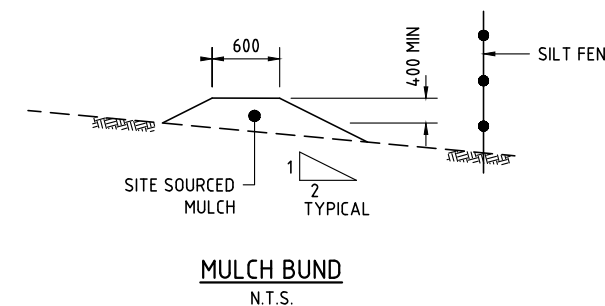
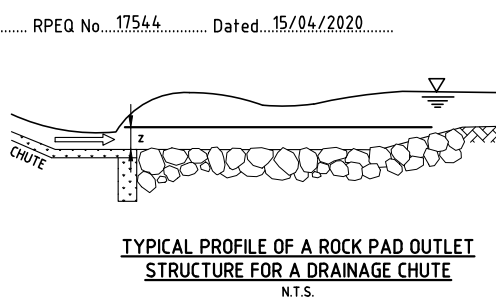
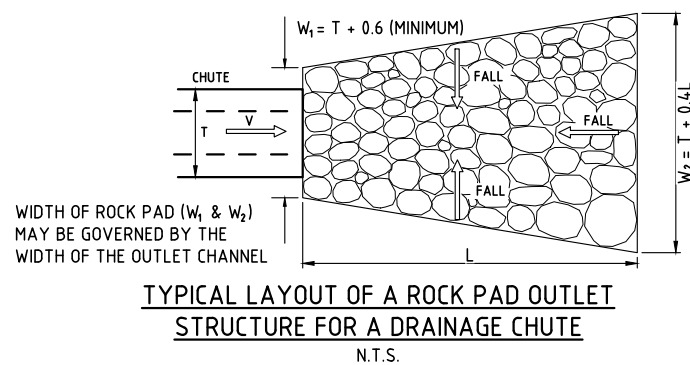
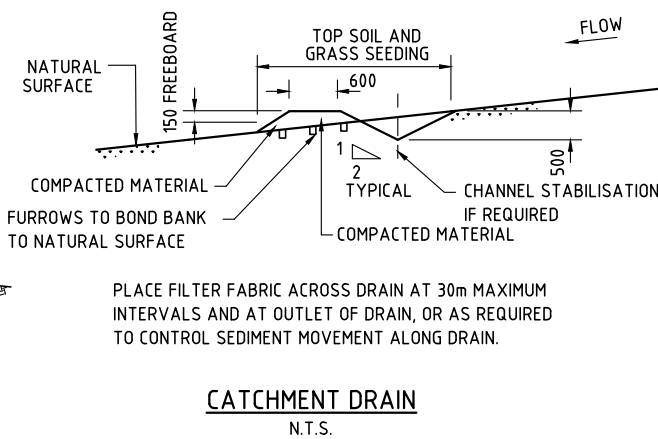
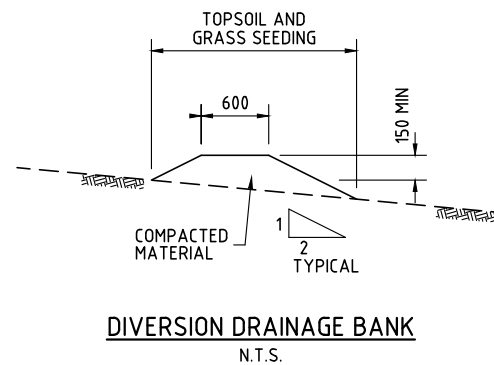
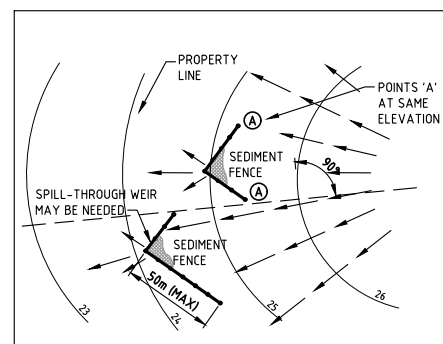
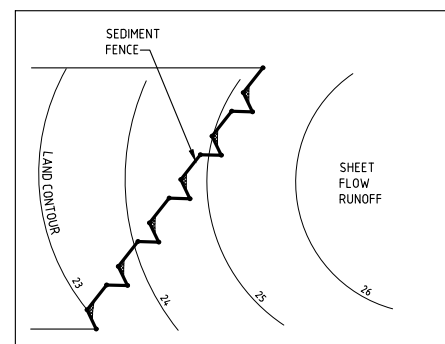
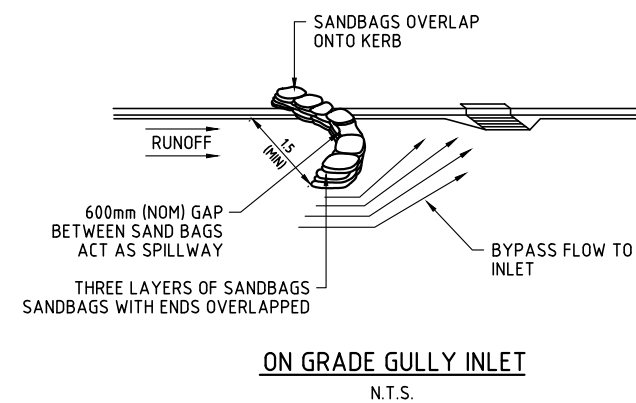
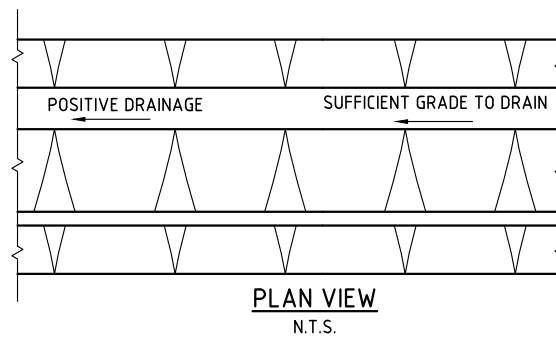
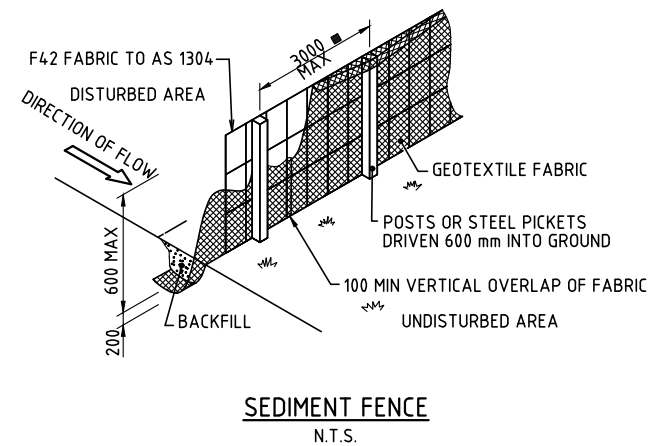
Signed..... RPEQ No. 17544..... Dated. 15/04/2020.....

DO NOT SCALE THIS DRAWING
IF IN DOUBT - ASK!



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	AS CONSTRUCTED	09.04.20	LMS



I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544 Dated...15/04/2020.....

Associated Consultants

Client

PEET

Project

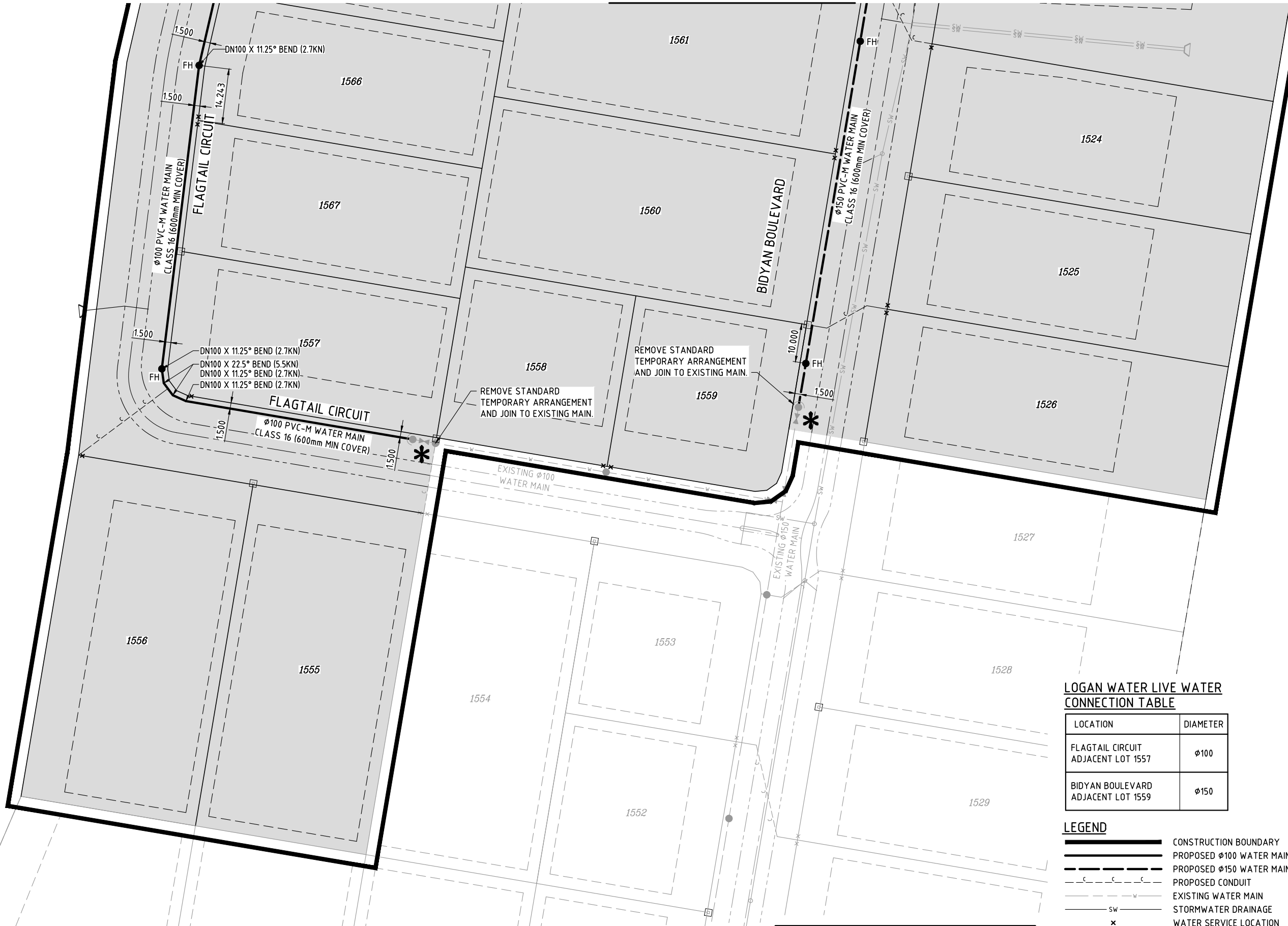
SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.knigroup.com.au

Approved

Drawing Title
EROSION AND SEDIMENT CONTROL DETAILS

Drawn	Designed	Checked	Date
NJS	TE	GG	OCT 18
Scale AS SHOWN			Sheet 28 of 32
A1	Drawing No 18-118-28	Revision B	



WATER RETICULATION LAYOUT PLAN
SCALE 1:500

NOTE

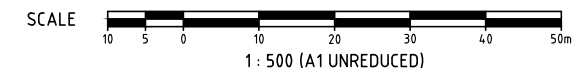
- ALL LIVE CONNECTIONS TO EXISTING MAINS TO BE UNDERTAKEN BY LOGAN WATER AT DEVELOPERS COST
- WATER SERVICE CONDUITS MUST MAINTAIN MINIMUM CLEARANCES AS PER TABLE 5.5 OF THE SEQ D&C CODE

LOGAN WATER LIVE WATER CONNECTION TABLE

LOCATION	DIAMETER
FLAGTAIL CIRCUIT ADJACENT LOT 1557	ø100
BIDYAN BOULEVARD ADJACENT LOT 1559	ø150

LEGEND

- CONSTRUCTION BOUNDARY
- PROPOSED ø100 WATER MAIN
- PROPOSED ø150 WATER MAIN
- PROPOSED CONDUIT
- EXISTING WATER MAIN
- STORMWATER DRAINAGE
- WATER SERVICE LOCATION
- FIRE HYDRANT
- TEMPORARY FIRE HYDRANT
- VALVE
- CONNECTION REQUIRED BY LOGAN WATER
- ELECTRICAL PILLAR (BY OTHERS)



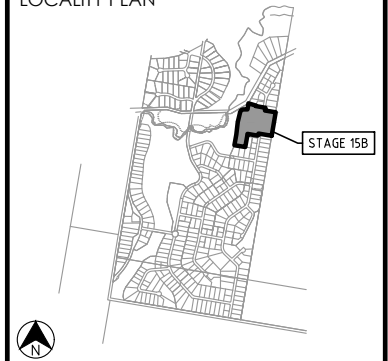
I, **MARK SHAW**, hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544 Dated 15/04/2020.....

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	REVISED CONDUITS	02.07.19	DES
C	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client



Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019



Approved

Drawing Title
WATER RETICULATION LAYOUT PLAN SHEET 1

Drawn	Designed	Checked	Date
NJS	JB	GG	OCT 18

Scale: AS SHOWN Sheet: 29 of 32

Drawing No	Revision
18-118-29	C

I, **MARK SHAW** hereby certify that the As Constructed information shown on this plan is a true and correct record of the sizes, types, materials, classes etc., and it corresponds with the relevant approved Engineering Drawings.

Signed..... RPEQ No. 17544..... Dated.. 15/04/2020.....

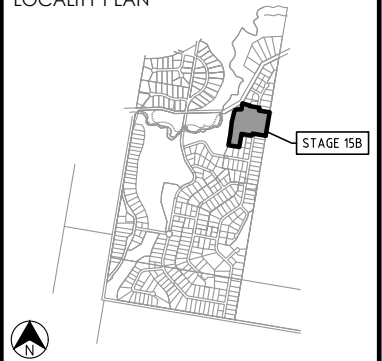
SCHEDULE OF FITTINGS

① $\phi 150 \times \phi 150 \times \phi 100$ TEE 1 REQUIRED

DO NOT SCALE THIS DRAWING IF IN DOUBT - ASK!



LOCALITY PLAN



REVISIONS

No	Description	Date	By
A	FOR APPROVAL	14.02.19	DES
B	REVISED WATER MAIN CALL UP	24.04.19	DES
C	PMT SITE ADDED, REVISED CONDUITS	02.07.19	DES
D	LOT 1562 RP BDY/SERVICES SHIFT	18.09.19	DES
E	AS CONSTRUCTED	09.04.20	LMS

Associated Consultants

Client

PEET

Project

SPRING MOUNTAIN
ACREAGE ESTATE
STAGE 15B
OW/45/2019

kn group
ABN 35 112 53 611
L1, 62 Astor Tce
Spring Hill Q 4000
07 3017 1900
www.knigroup.com.au

Approved

Drawing Title

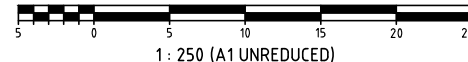
WATER RETICULATION LAYOUT PLAN SHEET 2

Drawn NJS	Designed JB	Checked GG	Date OCT 18
Scale AS SHOWN	Sheet 30 of 32		Revision E
A1	Drawing No 18-118-30	Revision	



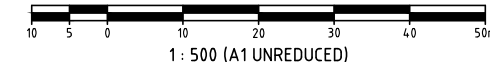
REFER KN DWG 18-118-29 **WATER RETICULATION LAYOUT PLAN**

SCALE 1:500



1 : 250 (A1 UNREDUCED)

SCALE



1 : 500 (A1 UNREDUCED)

NOTE
• ALL LIVE CONNECTIONS TO EXISTING MAINS TO BE UNDERTAKEN BY LOGAN WATER AT DEVELOPERS COST
• WATER SERVICE CONDUITS MUST MAINTAIN MINIMUM CLEARANCES AS PER TABLE 5.5 OF THE SEQ D&C CODE

LEGEND

	CONSTRUCTION BOUNDARY
	PROPOSED $\phi 100$ WATER MAIN
	PROPOSED $\phi 150$ WATER MAIN
	PROPOSED CONDUIT
	EXISTING WATER MAIN
	STORMWATER DRAINAGE
	WATER SERVICE LOCATION
	FIRE HYDRANT
	TEMPORARY FIRE HYDRANT
	VALVE
	CONNECTION REQUIRED BY LOGAN WATER
	ELECTRICAL PILLAR (BY OTHERS)

M:\2018\1818 Spring Mountain Stage 15B (Engineering)\Ascon\18-118-29-31-W-LAYOUT.dwg Plotted by: L.S on 15/04/2020 11:50:22 AM

