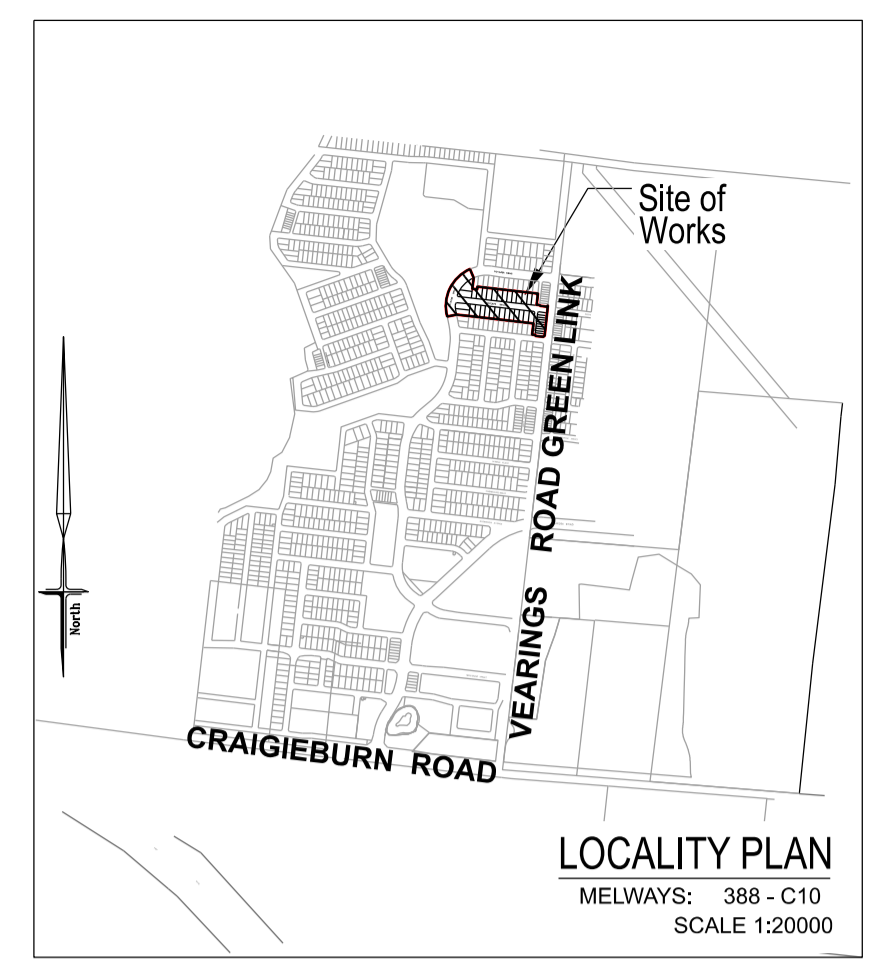


WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

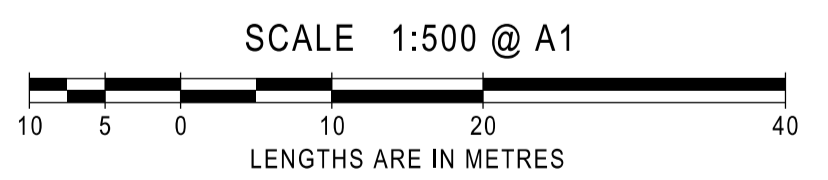
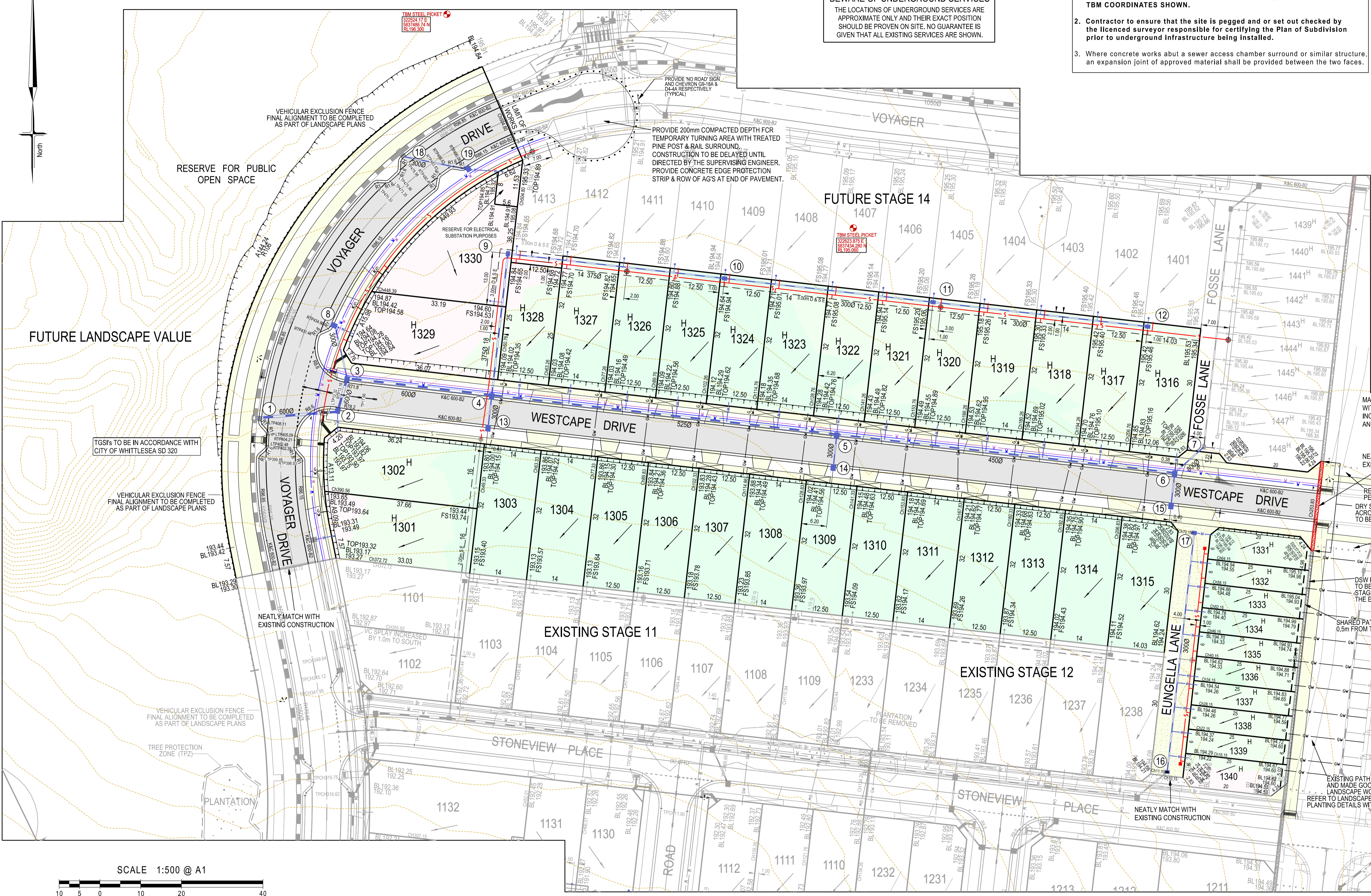
ATTENTION TO CONTRACTOR

- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DETAIL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
- Contractor to ensure that the site is pegged and set out checked by the licenced surveyor responsible for certifying the Plan of Subdivision prior to underground infrastructure being installed.
- Where concrete works about a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.



SHEET INDEX

SHT No.	VER	DESCRIPTION
1	D	DETAIL PLAN, LOCALITY PLAN, SERVICES SCHEDULE & SHEET INDEX
2	A	GENERAL NOTES, TYPICAL SECTIONS & PAVEMENT DETAILS
3	A	INTERSECTION DETAILS
4	B	VOYAGER DRIVE - LONGITUDINAL SECTION
5	B	VOYAGER DRIVE - CROSS SECTION
6	A	WESTCAPE DRIVE - LONGITUDINAL SECTION
7	A	WESTCAPE DRIVE - CROSS SECTION
8	A	EUNGELLA LANE - LONGITUDINAL AND CROSS SECTIONS
9	A	DRAINAGE LONGITUDINAL SECTIONS - Sheet 1
10	C	DRAINAGE LONGITUDINAL SECTIONS - Sheet 2
11	A	SIGNAGE & LINEMARKING PLAN
12	A	SAW CUT PLAN



SERVICES OFFSETS AND LOCATIONS

Location	Gas	Water		Communications		Electricity		BOK	Road Width	Joint Trenching	Street Classification	Street Trees
		NDW	DW	Cables	Pits	Cables	Poles					
WESTCAPE	2.10N	2.60N	3.10N	1.80S	1.80N/S	2.60S	1.00 BOK	4.05S, 4.35N	16	GW, FTTH/E	LEVEL 1	CENTRE OF NS
EUNGELLA/FOSSA							1.00 BOK		8		LEVEL 1	CENTRE OF NS
VOYAGER	2.25E	2.70E	3.20E	1.80W	1.80E/W	2.60W	1.00 BOK	4.55E, 8.55W	25	GW, FTTH/E	COLLECTOR	CENTRE OF NS
VEARINGS	2.25E	2.70E	3.20E	1.80W	1.80E/W	2.60W	1.00 BOK	4.55E, 8.55W	25	GW, FTTH/E	COLLECTOR	CENTRE OF NS

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

SYMBOL LEGEND

Drains	Prop	Prev Stage	Ex Natural/FS Level	+25.57	+5027.57
Sewer < 3000	S	S	FS @ Building Line	+28.57	+5297.57
Sewer ≥ 3000	S	S	Top/Toe Batter Level	+TOP28.57	+TOP27.57
Water (DW)	W	W	Top/Bottom RW Level	+TW28.57	+BW27.57
Water (NDW)	W	W	100yr Flood Level	+FL28.57	
House Drain	W	W	Fill Proposed (<0.3m≥0.3m)		
Property Inlet	W	W	Cut Proposed		
Street Sign	W	W	Asphalt Surface Prop		
PSM	W	W	Concrete Surface Prop (Paths/Driveways/Slabs)		
Rock Ret Wall	W	W	Tree To Be Removed		
Sleeper Ret Wall	W	W	Tree To Be Retained with Tree Protection Zone (TPZ)		
Conduits 50mm	W	W			
Conduits 100mm	W	W			
Street Tree without/with Passive Irrigation (Refer Detail)	W	W			

AS CONSTRUCTED

breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310

RATHDOWNE ESTATE STAGE 13

MELWAY REF. 103-C-10
SURVEY BPD
DESIGN RGW
DRAWN GL

AMENDMENTS

VER	DATE	REMARKS
D	03/11/22	SHEET 12 SAW CUT PLAN ADDED
C	08/03/22	SHEETS 1,4,5 & 10 UPDATED
B	21/01/22	DRAINAGE LINE 16- 17 UPDATED
A	16/12/21	ISSUE FOR CONSTRUCTION

CHECKED
SCALE AS SHOWN DATUM AHD DATE AUG'21 SHEET 1 OF 12 D

NOTES

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH PLANS AND CURRENT CITY OF WHITTLESEA SPECIFICATIONS AND STANDARD DRAWINGS APPROVED BY COUNCIL AND TO THE SATISFACTION OF THE ENGINEER.
- COUNCIL TO BE NOTIFIED 2 CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
- DRAINAGE AND PITS TO BE SET OUT FROM OFFSETS SHOWN RATHER THAN FROM CENTRELINE PIPE CHAINAGES. REFER EDM061-608 FOR FURTHER DETAILS.
- ALL PIPES TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED AND SHALL BE RRJ UP TO AND INCLUDING 750mm DIAMETER. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS. ALL DRAINS THAT CROSS UNDER ROAD PAVEMENTS ARE TO BE CLASS 4 R.C.P.
- JOINTING FOR CURVED PIPE ALIGNMENT SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS (RRJ'S FOR MINOR DEFLECTIONS OR COMPLETE R.C. BANDAGES)
- PROPERTY INLETS ARE TO BE PLACED 1.0m FROM THE LOW CORNER OF LOT UNLESS OTHERWISE SHOWN.
- LOTS DENOTED THUS 416H ARE TO BE PROVIDED WITH A 100mm HOUSE DRAIN PLACED 5.5m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN. HOUSE DRAINS TO BE CONNECTED TO STREET DRAINAGE WITH 27A & CAP. CLEAR OF ANY PAVING. IF CONNECTION IS WITHIN PAVING A PIT MUST BE USED.
- APPROVED GRANULAR BACKFILL TO BE PROVIDED WHERE PIPE TRENCHES ENCR OACH UNDER ROADWAY DUE TO DEEP EXCAVATIONS IN ROCK.
- SHALLOW CUT OFF DRAINS ARE TO BE PROVIDED ON SUBDIVISION BOUNDARY WHERE NECESSARY.
- PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING ALL RELEVANT REGULATIONS, HAVE BEEN ADDRESSED. IN PARTICULAR, THE REQUIRED NOTIFICATIONS MUST BE CONVEYED TO THE VICTORIAN WORKCOVER AUTHORITY - HEALTH & SAFETY DIVISION WITH RESPECT TO TRENCHING OPERATIONS. DETAILS OF THE CONTRACTORS OCCUPATIONAL HEALTH & SAFETY PROCEDURES MUST BE LODGED WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS.
- AGRICULTURAL PIPE DRAINS TO BE PLACED BEHIND ALL KERB AND CHANNEL AND BUFFER PITCHERS AND WHERE DIRECTED BY THE ENGINEER (REFER TO STD DRG EDM202).
- ALL DRAINAGE TRENCHES UNDER ROAD PAVEMENTS, KERB & CHANNEL, PARKING BAYS, DRIVEWAYS, FOOTPATHS AND BEHIND KERB & CHANNEL SHALL BE BACKFILLED WITH CRUSHED ROCK
- BATTERS SHALL BE 1 IN 6 FOR CUT & FILL UNLESS OTHERWISE SHOWN. BATTERS EXCEEDING 1 IN 6 MUST BE STABILISED AS PER COUNCIL REQUIREMENTS.
- ALL NATIVE TREES AND SHRUBS TO BE RETAINED UNLESS ROAD CONSTRUCTION NECESSITATES THEIR REMOVAL OR REMOVAL IS DIRECTED BY THE ENGINEER.
- LOTS TO BE GRADED AND LEFT CLEAN TO THE SATISFACTION OF THE ENGINEER.
- ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF RUBBISH AND SPOIL FROM SITE.
- WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND THE VARIOUS AUTHORITIES NOTIFIED PRIOR TO COMMENCEMENT OF WORKS.
- ALL MATERIAL SURROUNDING SERVICE AUTHORITY PITS LOCATED IN FOOTPATHS MUST BE ADEQUATELY COMPACTED IN 150mm LAYERS AND TESTED TO THE SATISFACTION OF THE CITY OF WHITTLESEA PRIOR TO THE CONSTRUCTION OF FOOTPATH BAYS ADJACENT TO THESE PITS.
- THE WATER CONDUIT OFFSET FROM THE LOT BOUNDARY IS GIVEN ON THE WATER RETICULATION PLAN. THE CONTRACTOR MUST CONSTRUCT CONDUITS TO ACCORD WITH THE GIVEN OFFSET AND ENSURE THAT THE CONCRETE MARKS THE KERB AND FOOTPATH EXACTLY ABOVE THE CONDUIT.
- ALL GAS AND WATER CONDUITS FOR RESIDENTIAL LOTS TO BE PVC CLASS 12, 50mm DIAMETER & 100mm DIAMETER RESPECTIVELY.
- TELSTRAINB Co TO BE NOTIFIED 7 DAYS PRIOR TO CONCRETE BEING PLACED.
- CONDUITS ARE TO BE EXTENDED 450mm BEHIND FACE OF KERB AND TO BE REFERENCED ON FACE OF KERB.
- ALL STREET SIGNS TO BE CONSTRUCTED AND ERECTED TO CURRENT CITY OF WHITTLESEA STANDARDS. STREET NAME PLATES TO BE IN ACCORDANCE WITH STANDARD DRAWING SD825, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE.
- TRAFFIC CONTROL SIGNS, MARKINGS & DELINEATORS TO BE INSTALLED IN ACCORDANCE WITH AS1742.2. ALL LINE MARKING IS TO BE LONG LIFE ROAD MARKING, WITH LONGITUDINAL LINES IN THERMOPLASTIC & TRANSVERSE MARKINGS IN COLD APPLIED.
- ALL DRIVEWAYS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH EDM051 & 502 AND ARE TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN.
- ALL DRIVEWAY RAMPS INTO PROPERTIES ARE TO BE CUT IN AT A MAXIMUM GRADE OF 1 IN 6.
- ALL PEDESTRIAN CROSSINGS ARE TO BE CONSTRUCTED GENERALLY IN ACCORDANCE WITH EDM0403. ALL PRAM CROSSING SPLAYS MUST BE 600mm WIDE AND NO GREATER.
- FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLANS. FILLING TO BE CLEAN CLAY COMPACTED TO A DRY DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1289.5.2.1-2003. CONTROL TESTING TO COMPLY WITH AS3798-2007 APPENDIX B, LEVEL 1.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION No. 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE SUPERVISING ENGINEER.
- FILL REQUIRED UNDER ROADWAY KERB AND CHANNEL AND FOOTPATH TO BE UNDERTAKEN AS PER COUNCIL'S CONSTRUCTION SPECIFICATION FOR ROAD & DRAINAGE WORKS 20.6 (TYPE A MATERIAL AS PER VICROADS STANDARD SPECIFICATION 204) AND COMPACTED TO 98% AASHO IN 150mm LAYERS.
- PAVEMENT DEPTH MAY NOT BE ALTERED WITHOUT WRITTEN APPROVAL FROM CITY OF WHITTLESEA DEVELOPMENT ENGINEERING UNIT PRIOR TO THE COMMENCEMENT OF WORKS. ADDITIONAL COSTS WILL NOT BE CONSIDERED POST TENDER.
- THE CONTRACTOR IS TO ORGANISE AND PAY FOR TESTING OF PAVEMENT BASE COURSE MATERIAL AND FINAL LAYER OF CRUSHED ROCK. A COPY OF RESULTS IS TO BE FORWARDED TO THE DIRECTOR OF ENGINEERING OR HIS REPRESENTATIVE. THE RESULTS MUST MEET THE REQUIREMENTS OF THE CITY OF WHITTLESEA SPECIFICATION BEFORE ANY FURTHER WORKS ARE REQUIRED.
- THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES BEFORE COMMENCEMENT OF WORKS. ALL TBM'S AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE DEVELOPER'S CONSULTANT TO ARRANGE RE-INSTATEMENT AT THE CONTRACTORS EXPENSE.

34. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR MUST SUBMIT A SMP TO THE DEVELOPER'S CONSULTANT FOR APPROVAL. THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENT PROTECTION AUTHORITY PUBLICATION No.275 "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL" AND MW SITE ENVIRONMENTAL MANAGEMENT POLICY 3.8.2. APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS. THE SMP SHALL BE APPROVED BY CITY OF WHITTLESEA DEVELOPMENT ENGINEERING UNIT PRIOR TO THE COMMENCEMENT OF WORKS.

35. ALL FOOTPATHS IN ROADS TO BE OFFSET 50mm FROM PROPERTY BOUNDARY. FOOTPATHS CONSTRUCTED ABOVE EXISTING LEVEL TO BE CONSTRUCTED ON APPROVED FILL (TO AS-3798) OF F.C.R. INTO NATURAL GROUND.

36. PRIOR TO COMMENCEMENT OF WORKS TREE PROTECTION ZONES (TPZ) ARE TO BE INSTALLED AS SPECIFIED IN THE ANNOTATED DETAILS FORMING PART OF THE PLANNING PERMIT TO TREES NOTED "TO BE RETAINED". THIS INCLUDES THE FOLLOWING
 - RING LOCK WIRE MESH MINIMUM 1.20m HIGH (STD DRG SDL 2.02)
 - MAIN POSTS 100mm TREATED PINE (TP), MINIMUM 1.80m HIGH
 - INTERMEDIATE POSTS STEEL STAR PICKETS (SP), MINIMUM 1.80m HIGH
 - THE CORNER POSTS ARE TO BE TP WITH TP STAYS
 - EVERY THIRD POST TO BE TP
 - SP TO BE PLACED INTERMEDIATELY BETWEEN THE TP AT MAX 3.0m INTERVALS
 - THE RING LOCK MESH TO ENIRCLE THE STRUCTURE AND BE FIRMLY SECURED AT EACH POST
 - POSTS MUST BE SUNK INTO THE GROUND BY 450mm (THERE IS TO BE NO CONCRETE TO SECURE POSTS AS THIS WILL AFFECT PH LEVELS)
 - HIGH VISIBILITY HAZARD MARKER TAPE SECURELY FIXED TO TOP OF WIRE MESH FENCE WITH WIRE TIES
 - THE TREE PROTECTION ZONE IS TO BE CLEARLY SIGN POSTED IN ACCORDANCE WITH CONDITION 20 OF THE PLANNING PERMIT (STD DRG SDL.2.03)

NO EXCAVATION SHALL BE CARRIED OUT WITHIN 5.0m OF ANY TREE UNTIL APPROVAL IS GIVEN BY THE ENGINEER.

37. PROVIDE 1.8m HIGH PALING FENCE ALONG ANY COMMON BOUNDARY BETWEEN A LOT AND MUNICIPAL RESERVE. FENCING TO BE ERECTED BY THE DEVELOPER (OR OWNER) AT NO COST TO COUNCIL. PALINGS TO BE ON THE RESERVE SIDE AND CONSTRUCTED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SDL.3.09 & SDL.3.10.

38. VEHICULAR EXCLUSION FENCING TO BE PROVIDED ALONG THE ROAD FRONTAGES OF ALL RESERVES. REFER LANDSCAPE PLANS FOR FENCE DETAILS. FENCING TO BE CONSTRUCTED AS PART OF LANDSCAPE WORKS.

39. PROVIDE TEMPORARY SAFETY BARRIER FENCE (FARM FENCE AS PER MW STD. DWG. 7251/8/203) ALONG EDGE OF OUTFALL DRAINS. SAFETY FENCE TO REMAIN UNTIL PERMANENT UNDERGROUND DRAINAGE IS INSTALLED.

40. EXISTING DAM OR WATERCOURSES TO BE EXCAVATED TO A FIRM BASE AND BACKFILLED AS SPECIFIED. DEVELOPER'S CONSULTANT TO BE NOTIFIED WHEN THE DAM OR WATERCOURSES ARE EXCAVATED TO A FIRM BASE. NO FILLING IS TO BE PLACED PRIOR TO DAMS BEING INSPECTED AND LEVELS TAKEN. BACKFILLING IS TO BE CARRIED OUT TO THE SATISFACTION OF THE COUNCIL SUPERVISING ENGINEER.

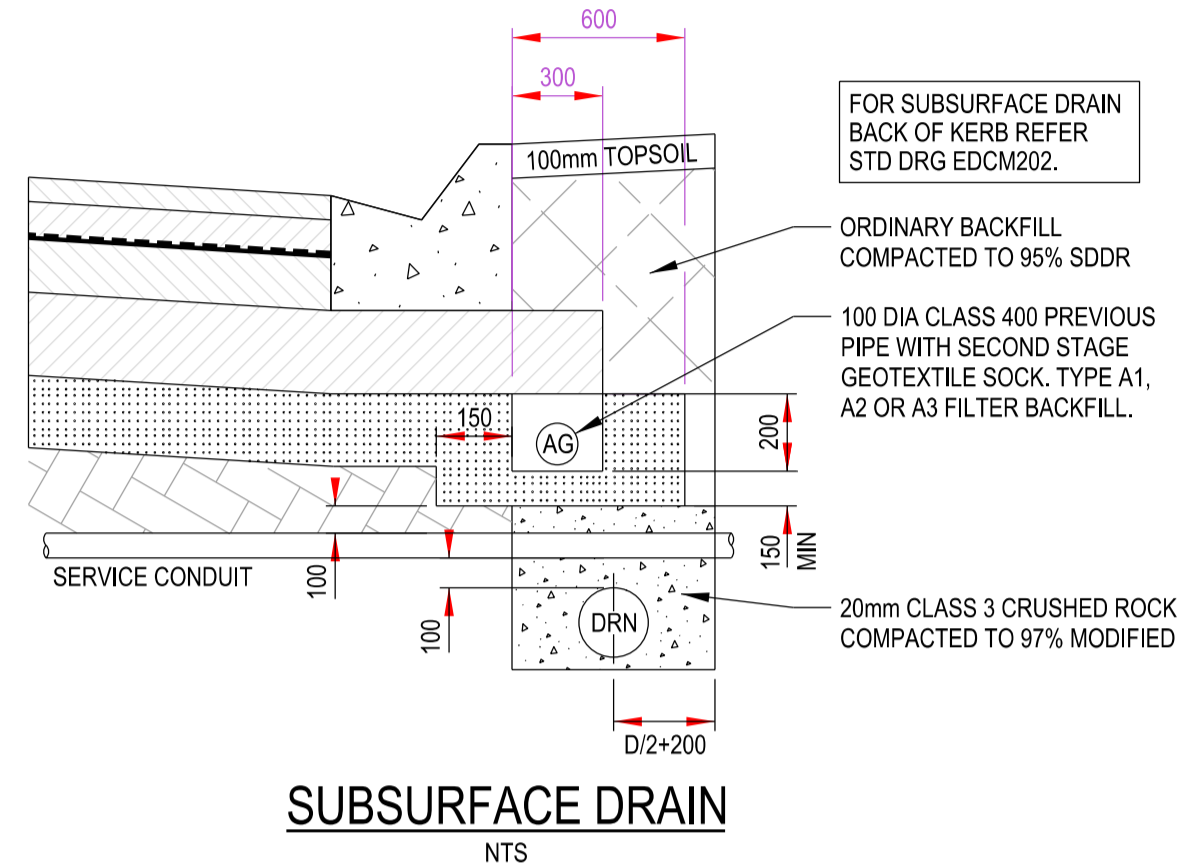
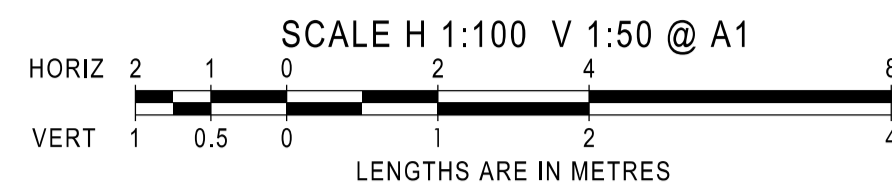
41. TACTILE GROUND SURFACE INDICATORS (TGS) ARE TO BE INSTALLED WHERE SHOWN IN ACCORDANCE WITH COUNCIL STD DRG SD320 AND AS1428.

42. A BUILDING PERMIT MUST BE OBTAINED FOR ANY STRUCTURAL/RETAINING WALL EXCEEDING 1.0m IN HEIGHT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ACCORDANCE WITH THE BUILDING CODE OF AUSTRALIA. A COPY OF BUILDING PERMITS AND 'CERTIFICATE OF COMPLIANCE - CONSTRUCTION' TO BE SUBMITTED TO COUNCIL PRIOR TO STATEMENT OF COMPLIANCE.

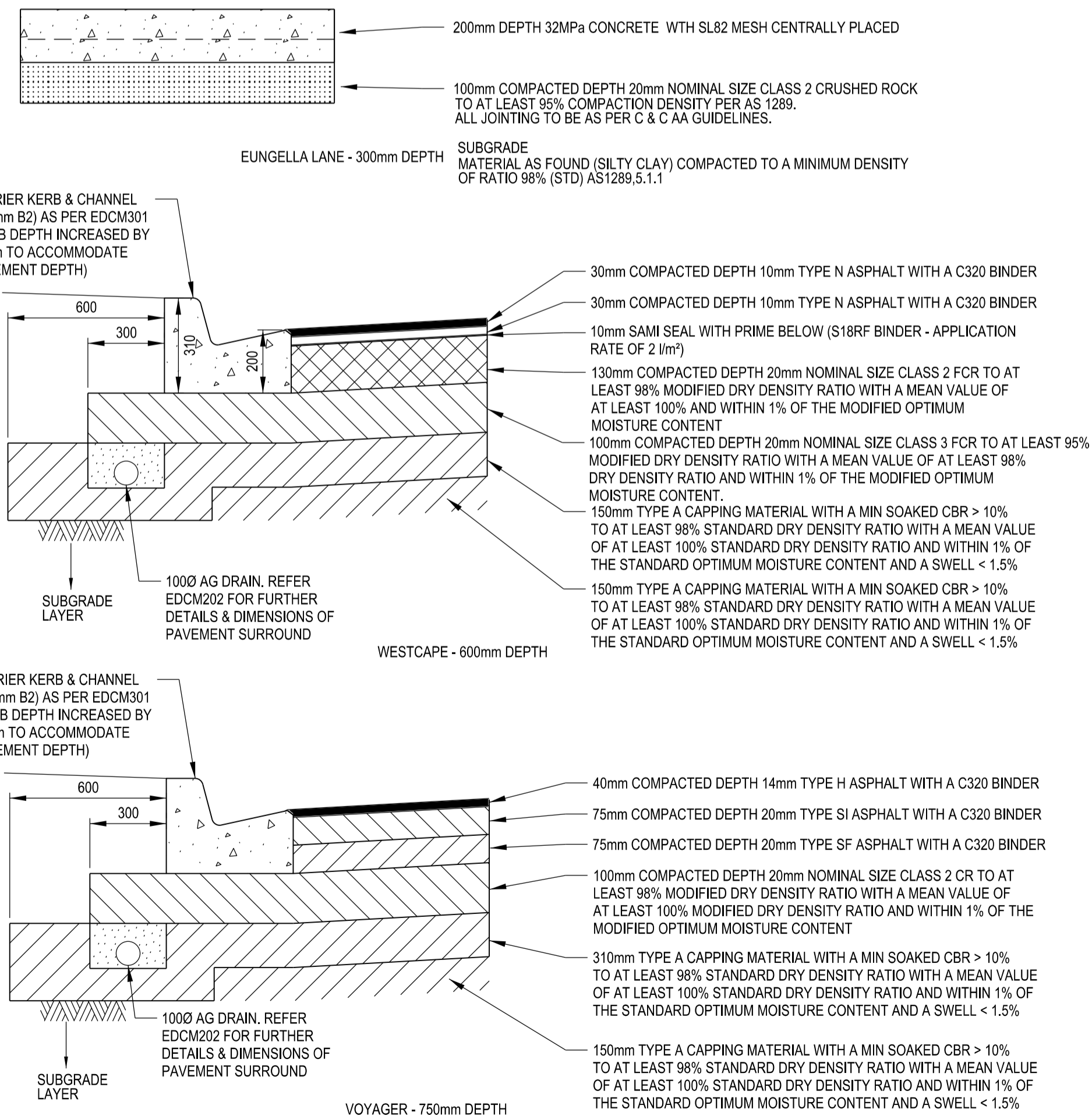
43. ALL STRUCTURAL WORKS MUST BE SUPERVISED BY A QUALIFIED STRUCTURAL ENGINEER.

TYPICAL ROAD CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50



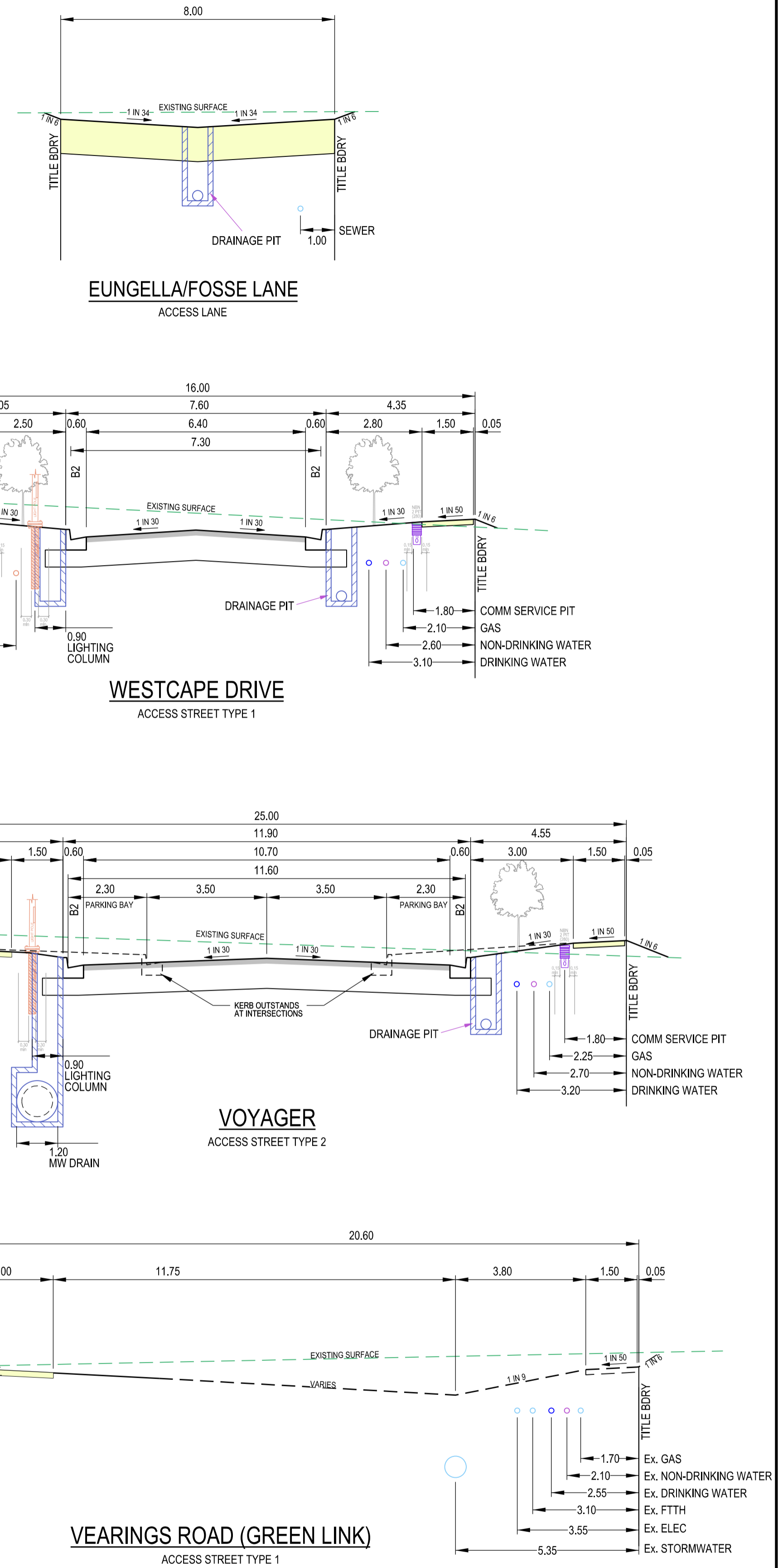
SUBSURFACE DRAIN
NTS



PAVEMENT COMPOSITION

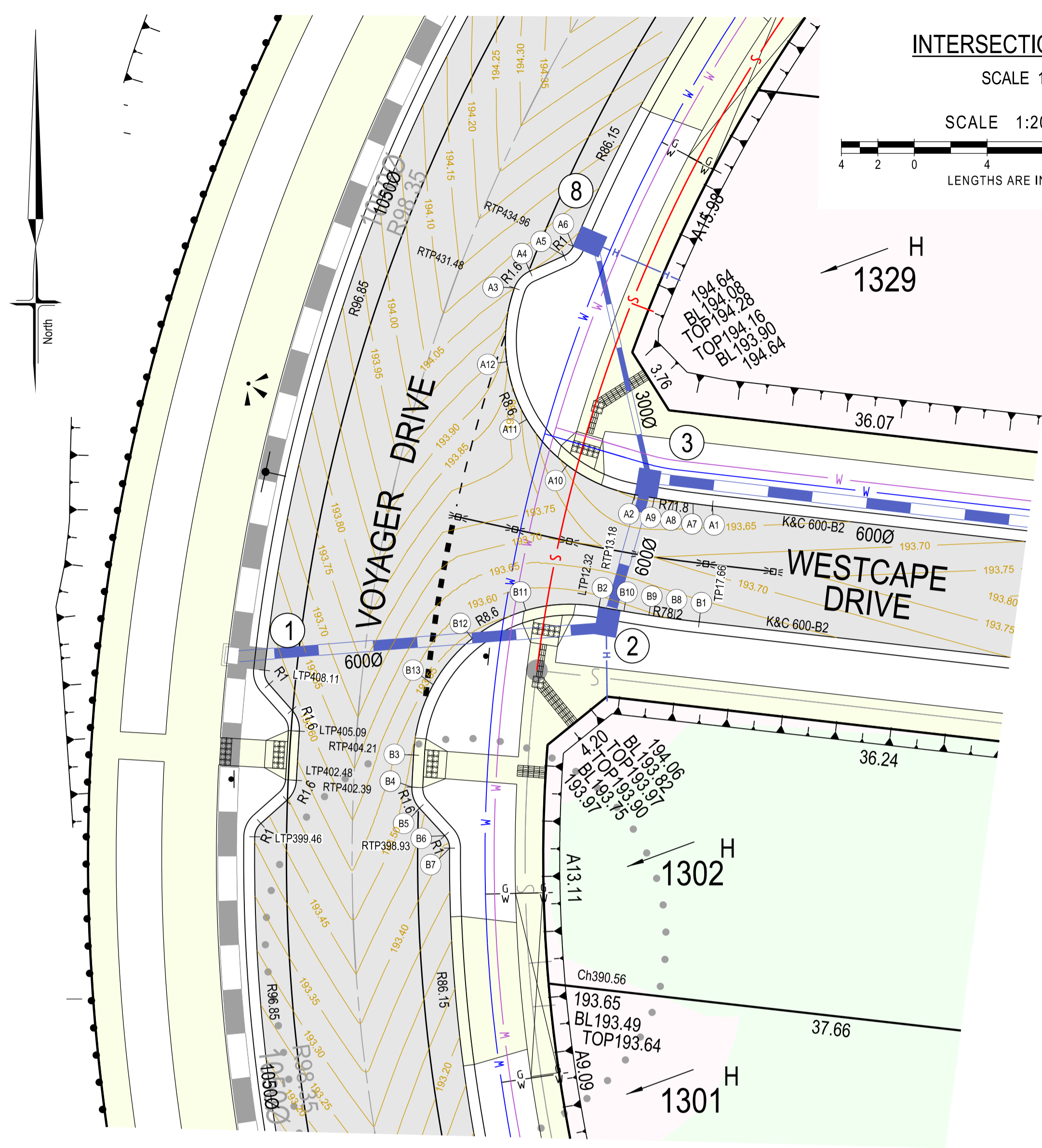
(Dimensions in millimetres)
(N.T.S.)

REFER TO EDM202 FOR FURTHER AG, SERVICE CONDUIT AND TRENCH BACKFILL DETAILS



AS CONSTRUCTED

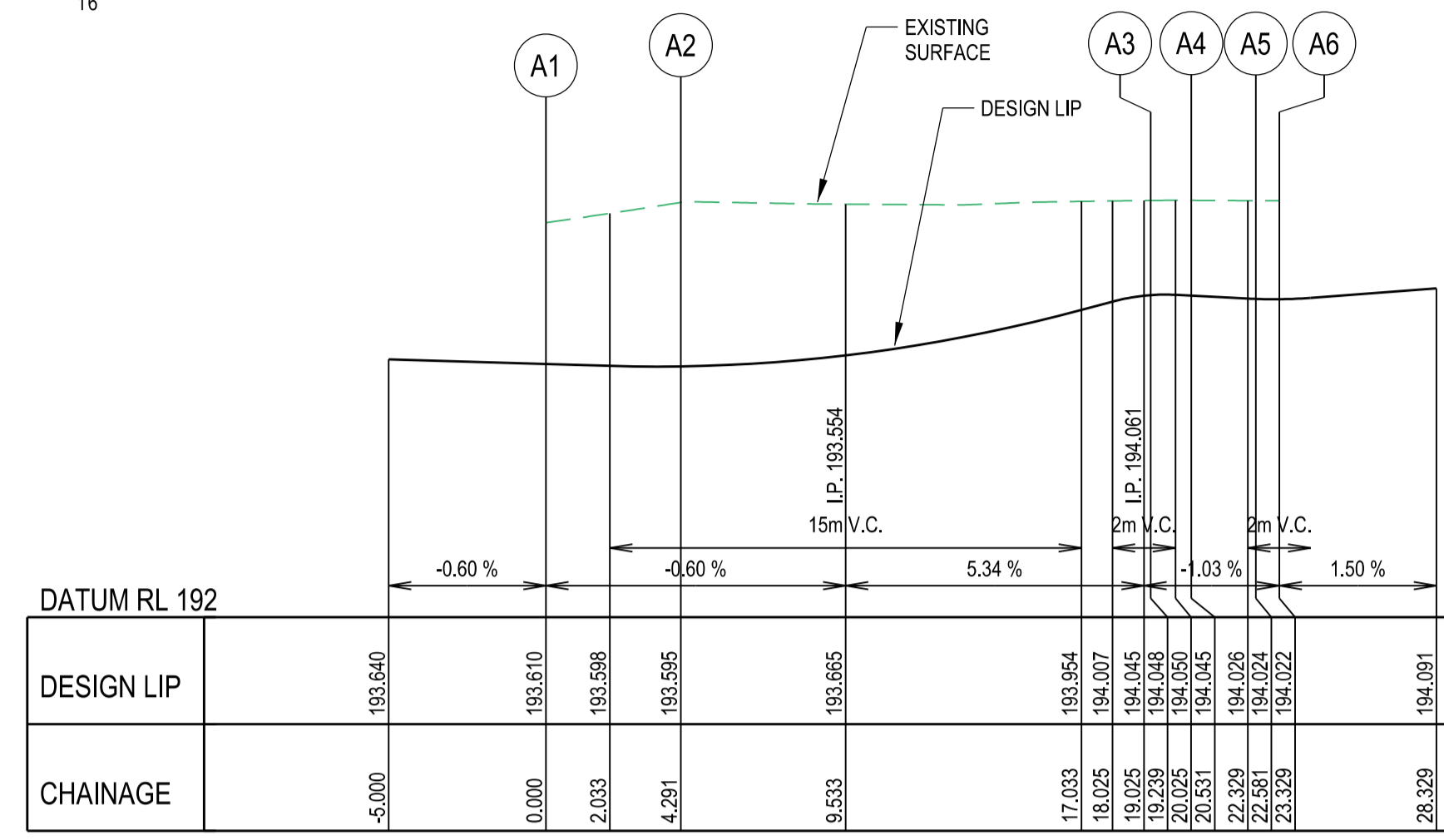
AMENDMENTS				<p>breese pitt dixon pty. ltd. land surveyors civil engineers</p>	1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310		
						MELWAY REF. 103-C-10 SURVEY BPD DESIGN RGW	MUNICIPALITY WHITTLESEA
						DRAWN GL	REFERENCE 9365 E/13
						CHECKED	SCALE AS SHOWN DATUM AHD DATE AUG'21 SHEET 2 OF 12 A
	DATE	REMARKS					
A	16/12/21	ISSUE FOR CONSTRUCTION					



INTERSECTION DETAIL

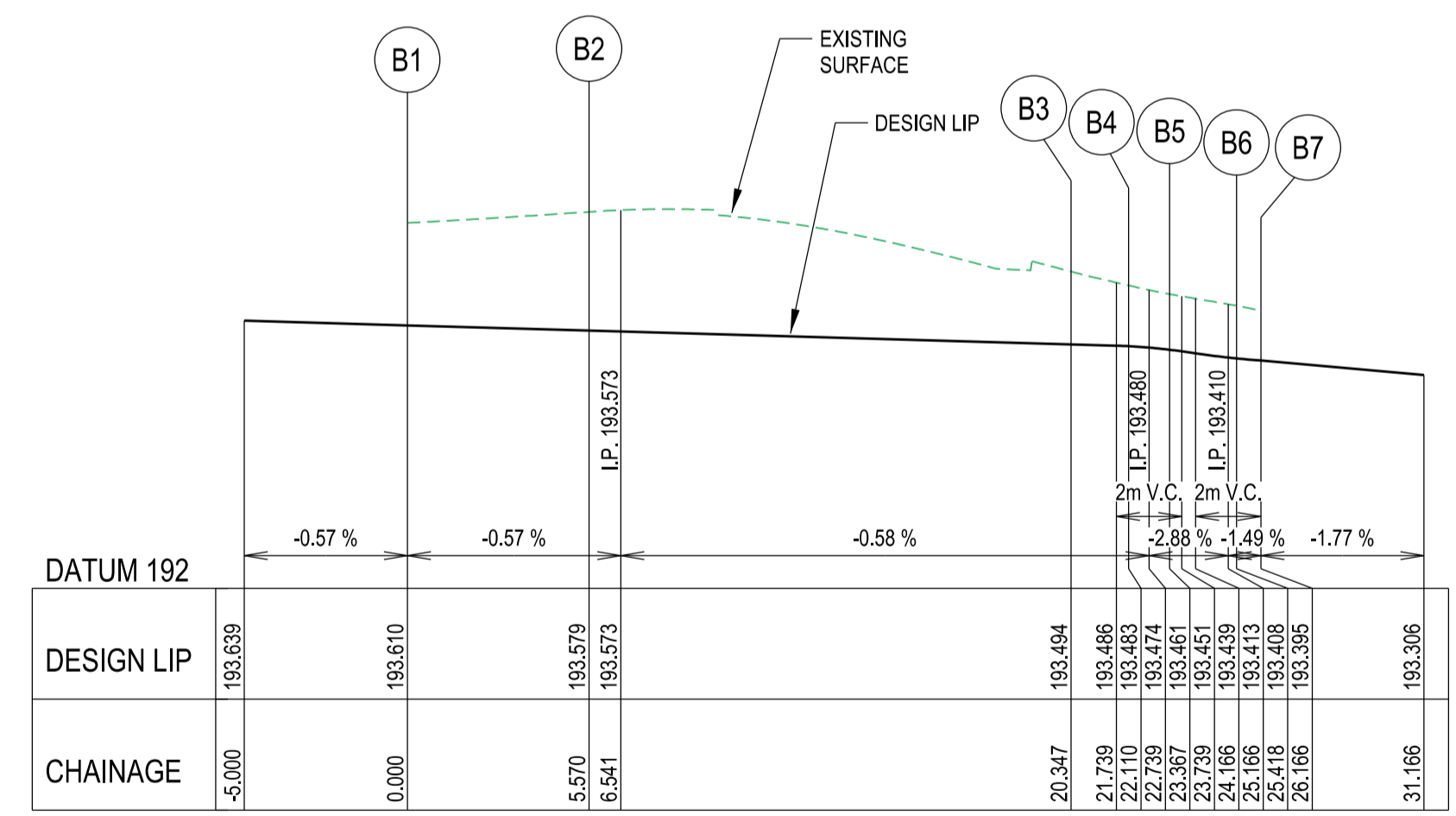
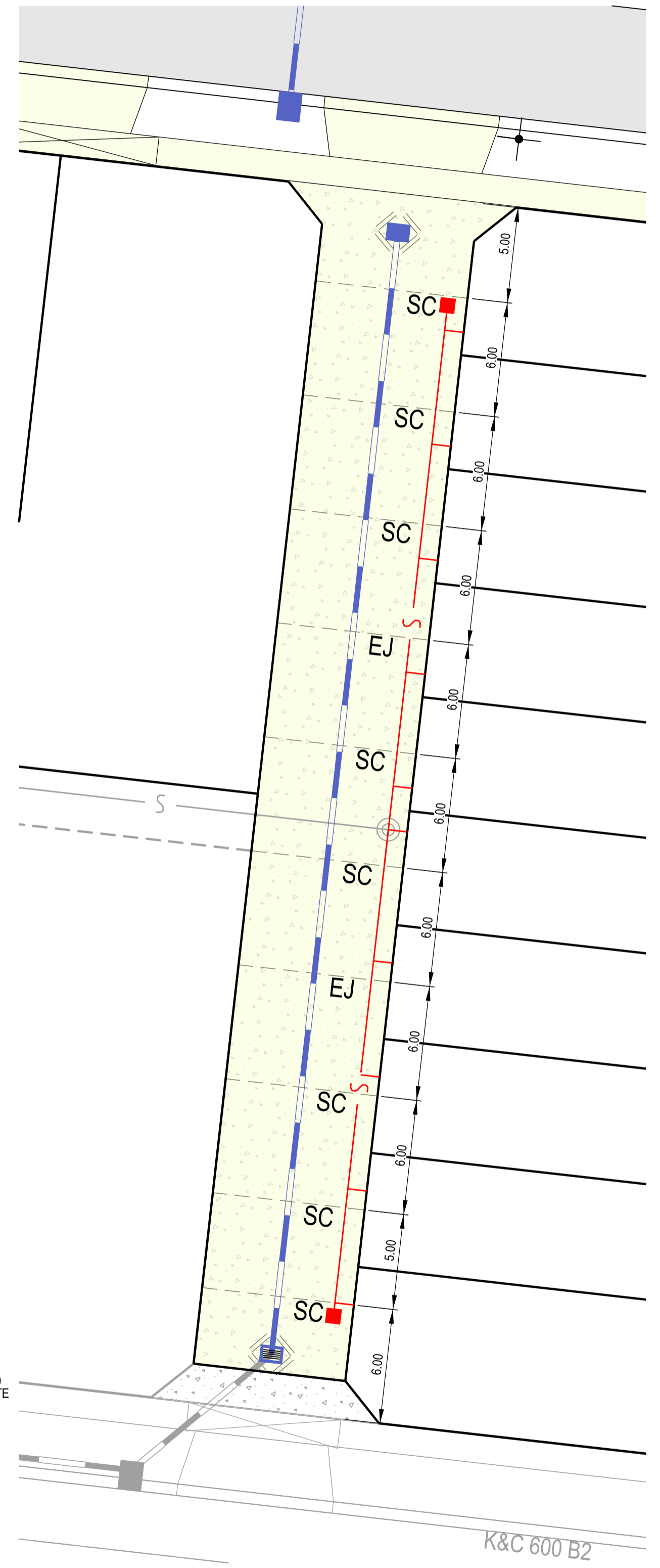
SCALE 1:200

SCALE 1:200 @ A1



DATUM RL 192	DESIGN LIP	CHAINAGE
	193.540	-5.000
	193.510	0.000
	193.598	2.033
	193.595	4.291
	193.665	9.533
	193.554	17.033
	194.007	18.025
	194.045	19.025
	194.048	19.239
	194.050	20.025
	194.045	20.951
	194.026	22.329
	194.022	23.329
	194.081	28.329

LIP LINE A

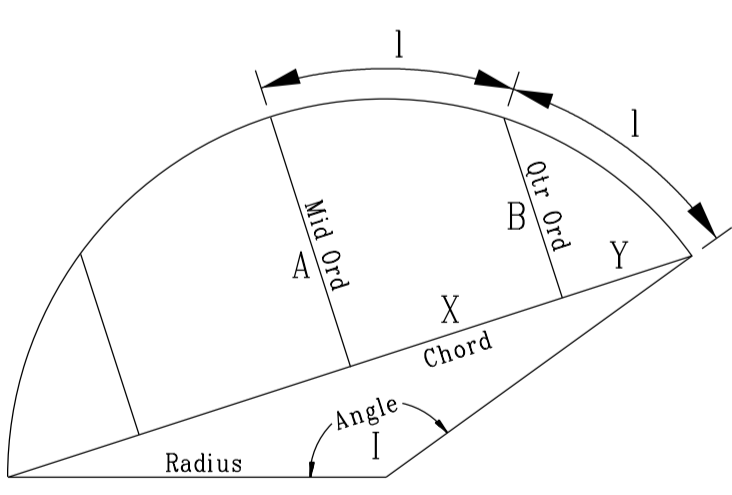


DATUM 192	DESIGN LIP	CHAINAGE
	193.639	-5.000
	193.610	0.000
	193.579	5.570
	193.573	6.541
	193.494	20.347
	193.486	21.739
	193.483	22.110
	193.474	22.739
	193.461	23.367
	193.451	23.739
	193.413	25.166
	193.408	25.418
	193.395	26.166
	193.306	31.166

LIP LINE B

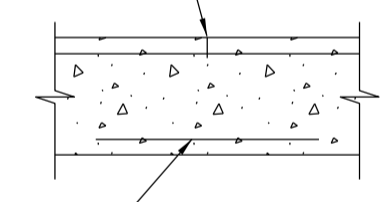
ALL SETOUT DETAILS ARE PROVIDED AT LIP OF KERB

LIP OF KERB PROFILES
SCALE - HORIZONTAL 1:200
VERTICAL 1:40

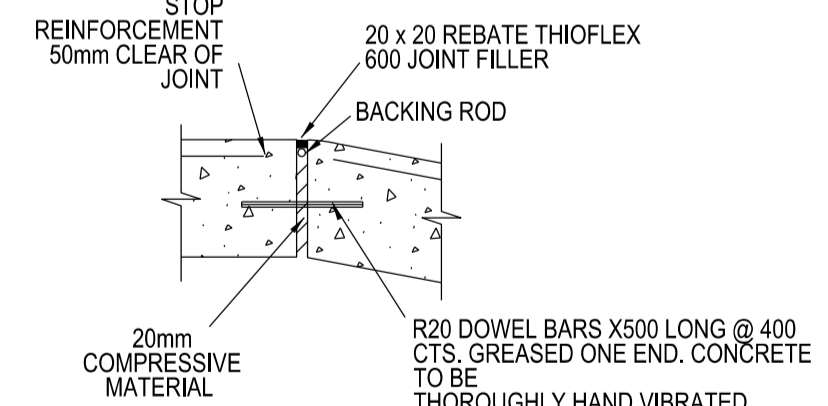


CURVE SETOUT DIAGRAM

3mm WIDE x 50mm DEEP SAWCUT TO BE FORMED AS SOON AS THE SLAB CAN SUPPORT EQUIPMENT AND WITHIN 24 HOURS OF POURING



SAWCUT JOINT (SC) DETAIL



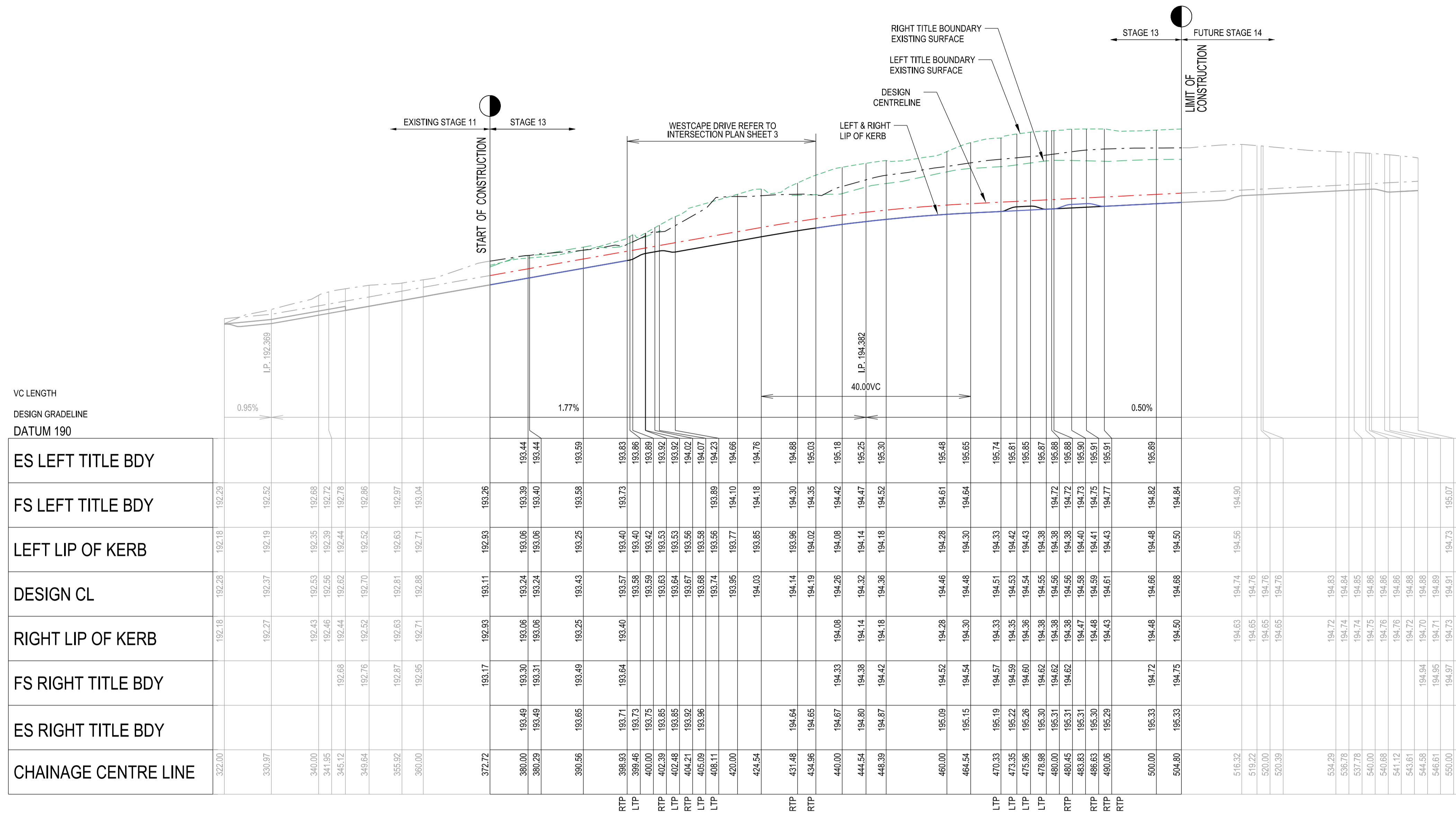
EXPANSION JOINT (EJ) DETAIL

AS CONSTRUCTED

SYMBOL LEGEND

Drains	Prop	Prev Stage	Ex Natural/FS Level	+26.57	+26.57
Sewer < 3000	S	S	FS @ Building Line	+BL28.57	+FS29.57
Sewer ≥ 3000	S	S	Top/Toe Batter Level	+TOP28.57	+TOE27.57
Water (DW)	W	W	Top/Bottom RW Level	+TW28.57	+BW27.57
Water (NDW)	W	W	100yr Flood Level	+FL28.57	
House Drain	H	H	Fill Proposed (<0.3m±0.3m)		
Property Inlet	P	P	Cut Proposed		
Street Sign	S	S	Asphalt Surface Prop		
PSM	PSM	PSM	Concrete Surface Prop (Paths/Driveways/Slabs)		
Rock Ret Wall	R	R	Tree To Be Removed		
Sleeper Ret Wall	S	S	Tree To Be Retained with Tree Protection Zone (TPZ)		
Conduits 50mm	GW	GW			
Conduits 100mm	W100	W100			
Street Tree without/with Passive Irrigation (Refer Detail)	T	T			
Ex Drains	Ex W	Ex W			
Ex Water DW/NDW	Ex S	Ex S			
Ex Sewer/Gas	Ex G	Ex G			
Ex Elect/Comm	Ex E	Ex E			

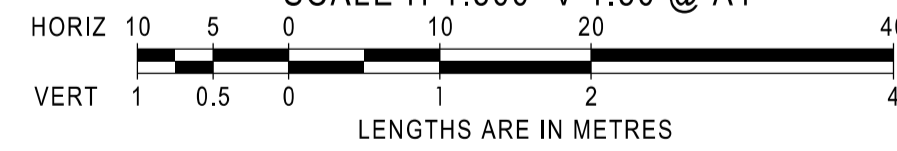
AMENDMENTS		MELWAY REF. 103-C-10		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
		SURVEY BPD		RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA	
		DESIGN RGW		DRAWN GL		REFERENCE 9365 E/13	
VER	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE AUG'21	SHEET 3 OF 12



**VOYAGER DRIVE
LONGITUDINAL SECTION**

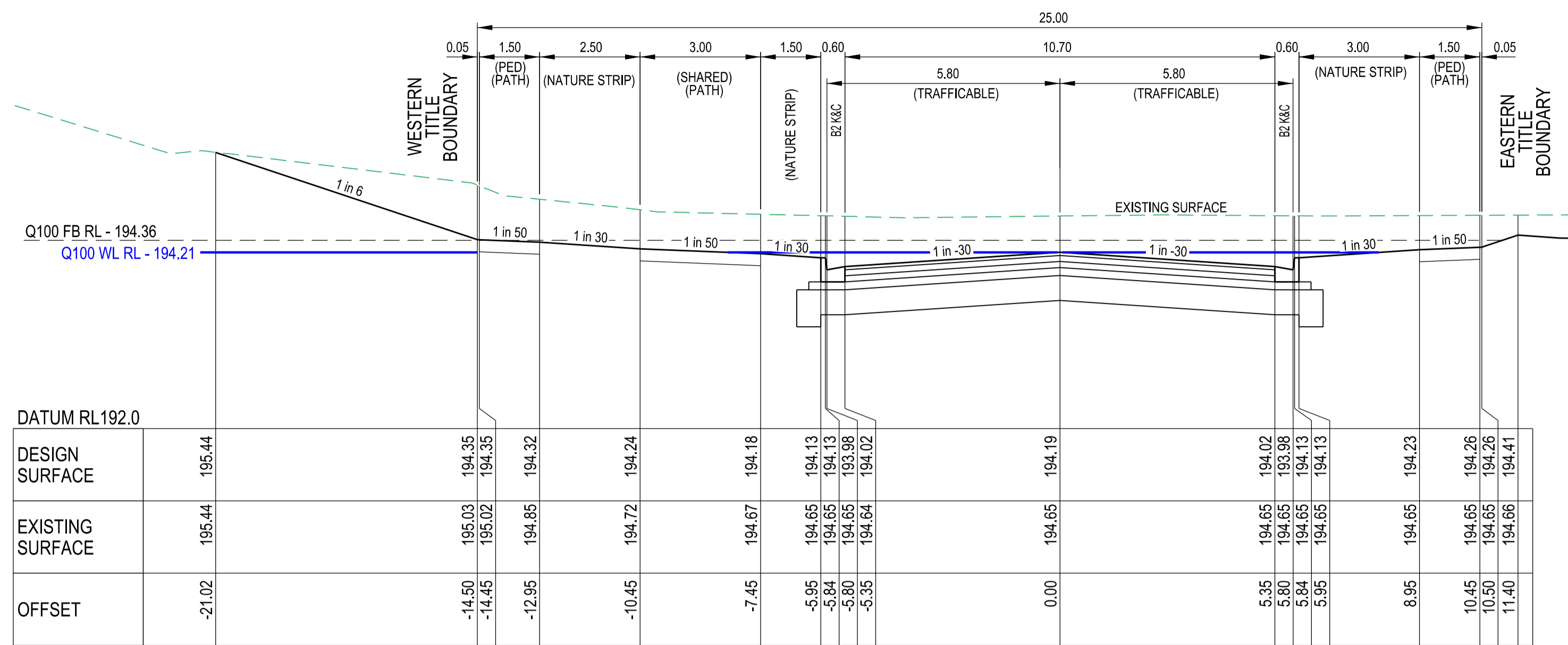
SCALE HORIZONTAL 1:500
VERTICAL 1:50

SCALE H 1:500 V 1:50 @ A1

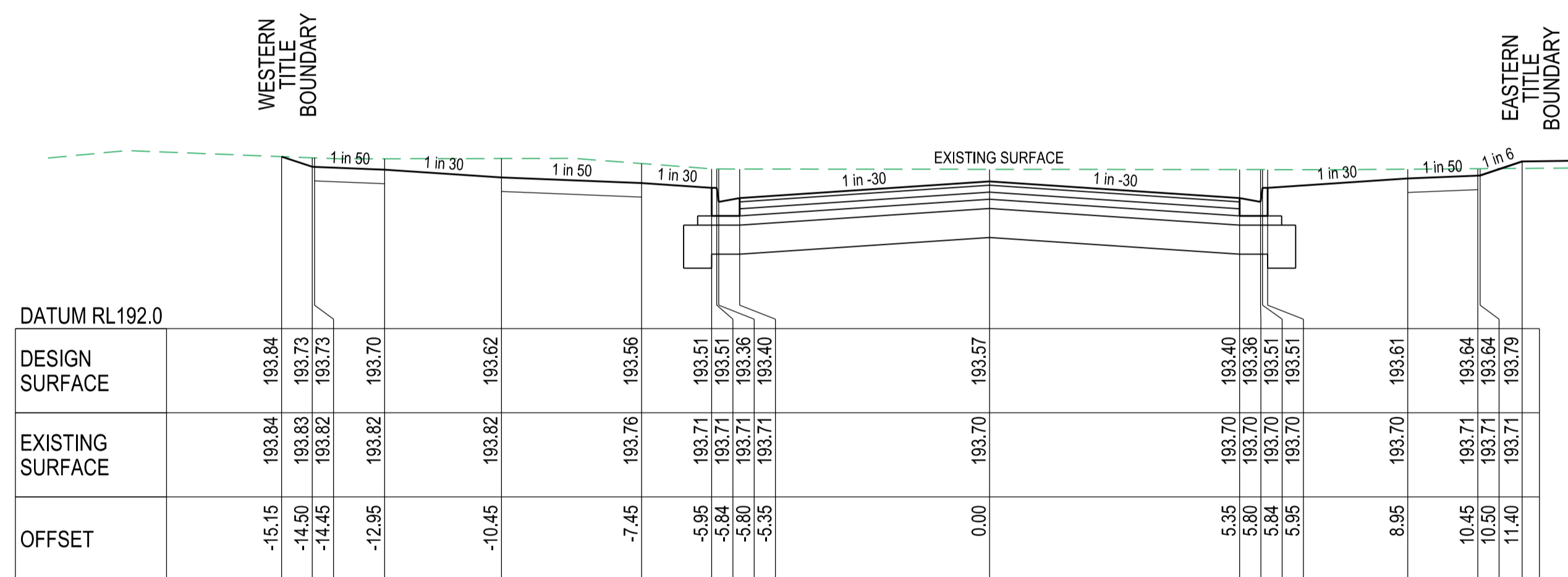


AS CONSTRUCTED

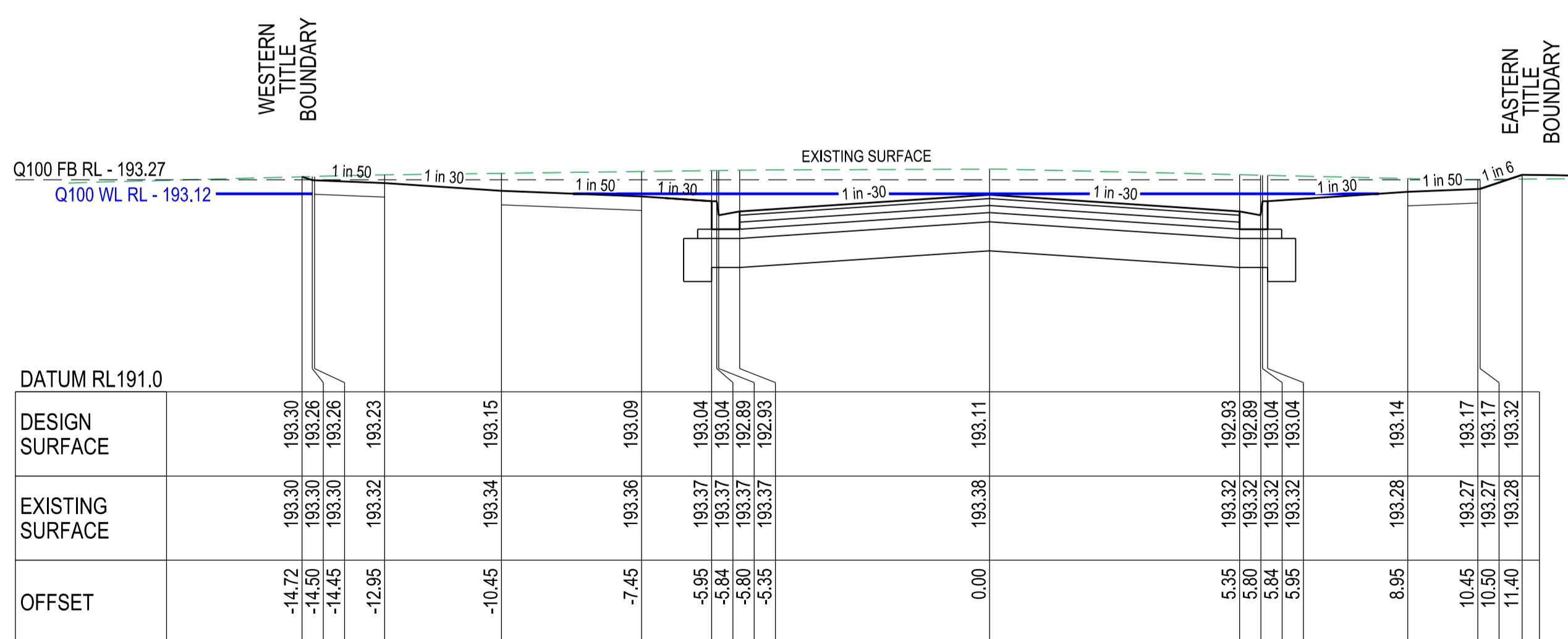
AMENDMENTS		 breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
B	08/03/22	LONGITUDINAL SECTION AMENDED	MELWAY REF. 103-C-10	RATHDOWNE ESTATE STAGE 13	
A	16/12/21	ISSUE FOR CONSTRUCTION	SURVEY BPD	MUNICIPALITY WHITTLESEA	
VER	DATE	REMARKS	DESIGN RGW	REFERENCE 9365 E/13	
			DRAWN GL	SCALE AS SHOWN	DATUM AHD
			CHECKED	DATE AUG'21	SHEET 4 OF 12



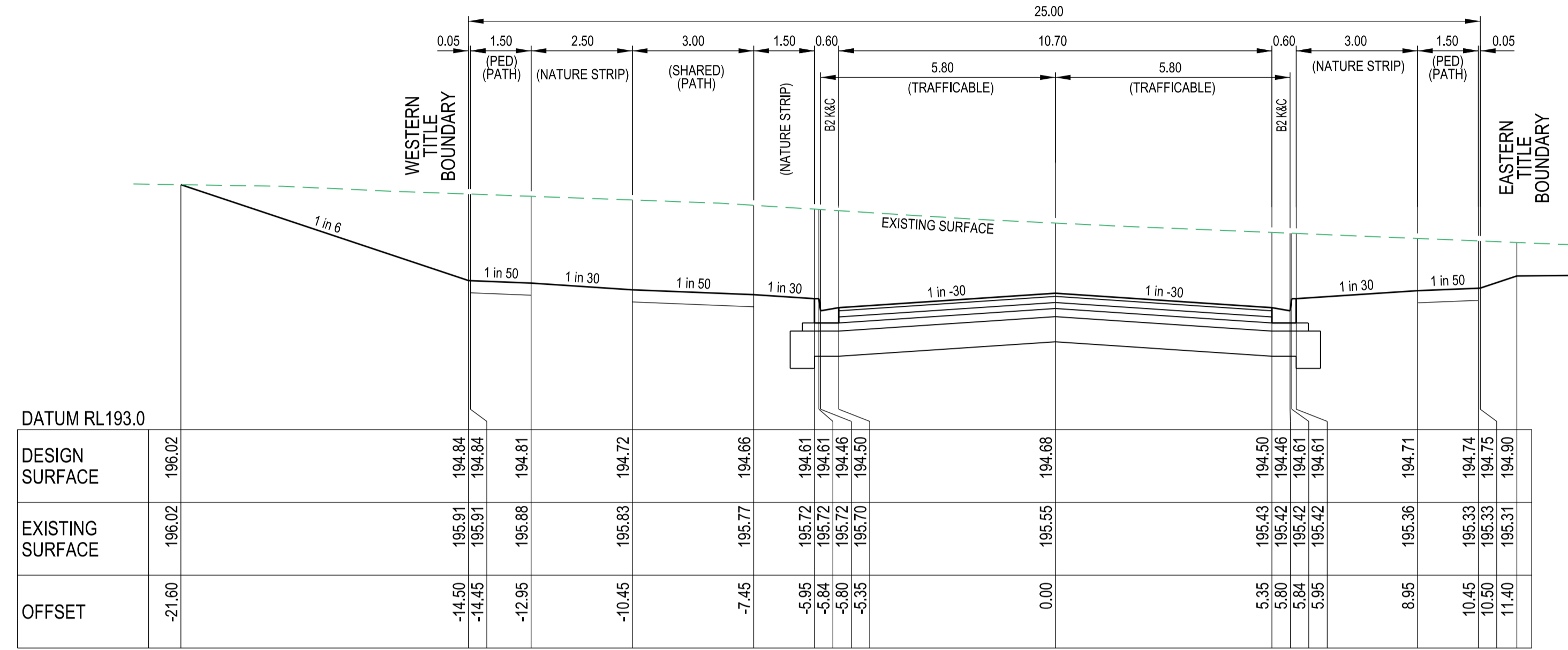
RTP434.96



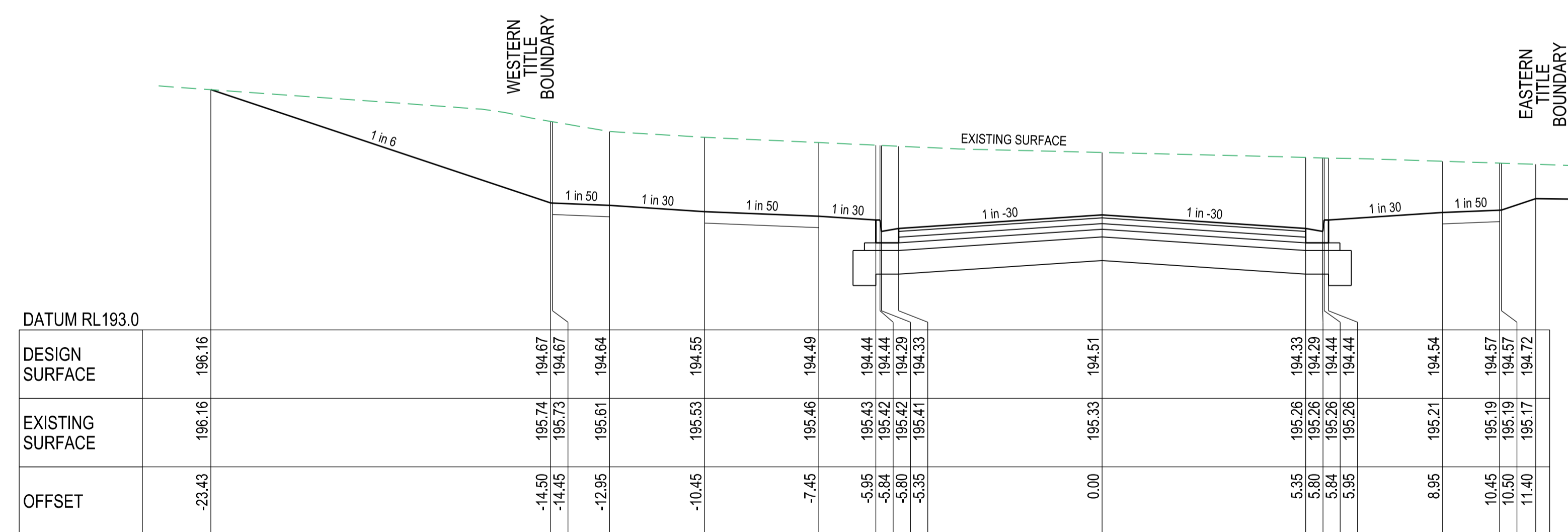
RTP398.93



Ch372.72



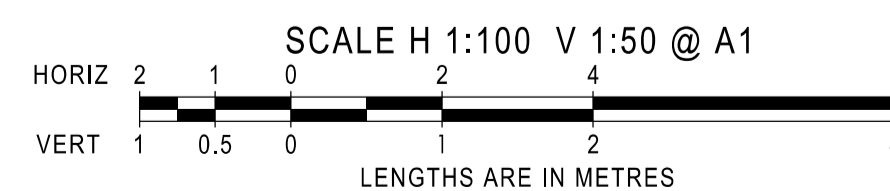
Ch504.80



LTP470.33

VOYAGER DRIVE

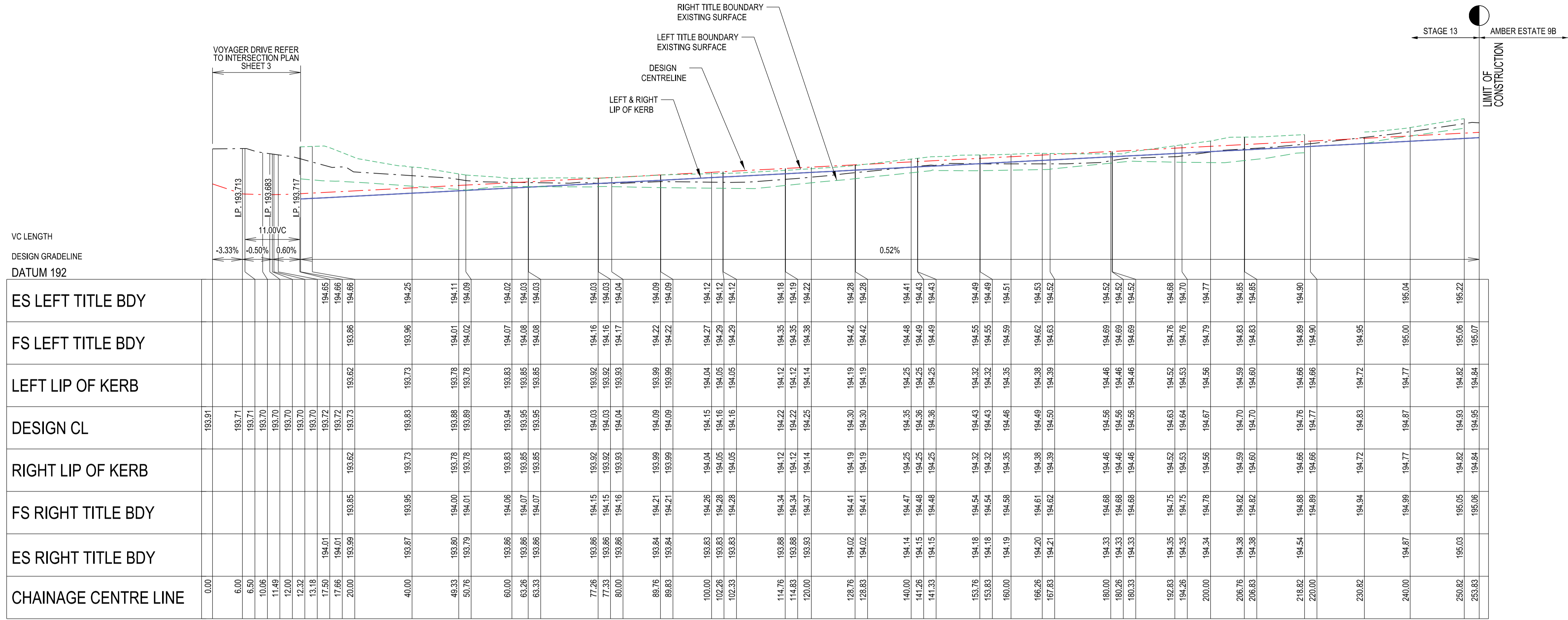
CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50



INDICATES CRUSHED ROCK BACKFILL REFER NOTE 35, SHEET 2 LEVEL 1 SUPERVISION REQUIRED

AS CONSTRUCTED

AMENDMENTS		 breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
B	08/03/22	CROSS SECTIONS AMENDED	MELWAY REF. 103-C-10	RATHDOWNE ESTATE STAGE 13	
A	16/12/21	ISSUE FOR CONSTRUCTION	SURVEY BPD	MUNICIPALITY WHITTLESEA	
VER	DATE	REMARKS	DESIGN RGW	REFERENCE 9365 E/13	
			DRAWN GL	SCALE AS SHOWN	DATUM AHD
			CHECKED	DATE AUG'21	SHEET 5 OF 12

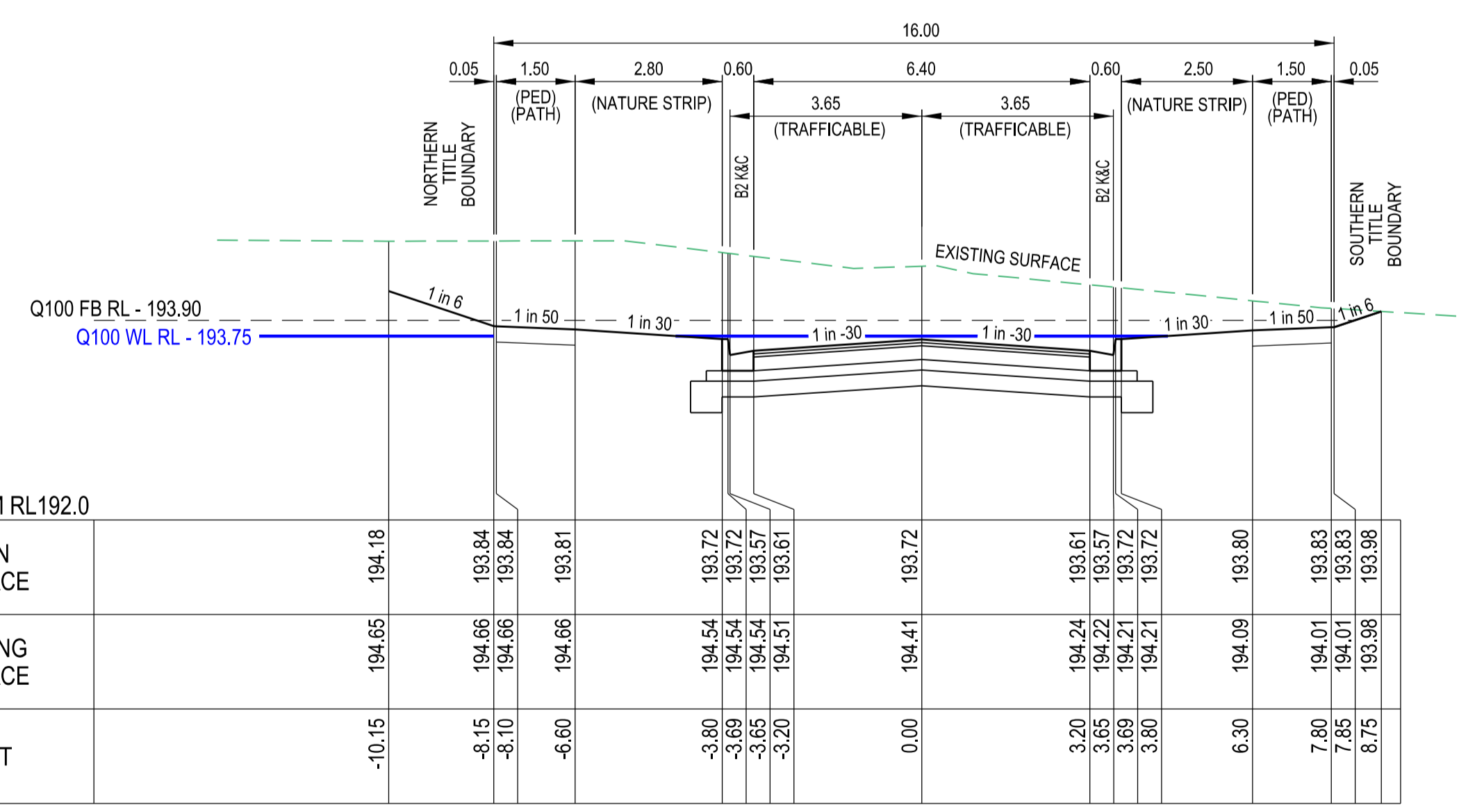
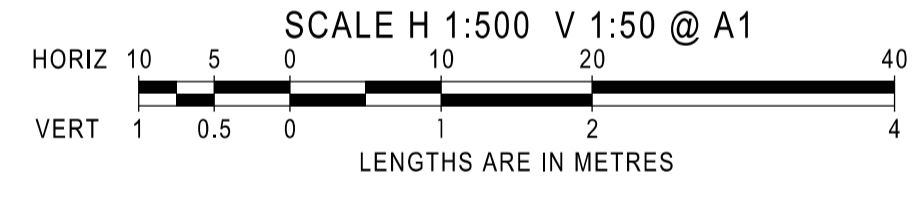


CHAINAGE CENTRE LINE	ES RIGHT TITLE BDY	FS RIGHT TITLE BDY	RIGHT LIP OF KERB	DESIGN CL	LEFT LIP OF KERB	FS LEFT TITLE BDY	ES LEFT TITLE BDY
0.00	193.91			193.91			
6.00	193.71			193.71			
6.50	193.71			193.71			
10.06	193.70			193.70			
11.49	193.70			193.70			
12.00	193.70			193.70			
12.32	193.70			193.70			
13.18	193.70			193.70			
17.50	194.01			194.01			194.65
17.66	194.01			194.01			194.66
20.00	193.98	193.85	193.82	193.73	193.62	193.66	194.66
40.00	193.87	193.95	193.73	193.83	193.73	193.96	194.25
46.33	193.80	194.00	193.78	193.88	193.78	194.01	194.11
50.76	193.79	194.01	193.78	193.89	193.78	194.02	194.09
60.00	193.86	194.06	193.83	193.94	193.83	194.07	194.02
63.26	193.86	194.07	193.85	193.95	193.85	194.08	194.03
63.33	193.86	194.07	193.85	193.95	193.85	194.08	194.03
77.26	193.86	194.15	193.92	194.03	193.92	194.16	194.03
77.33	193.86	194.15	193.92	194.03	193.92	194.16	194.03
80.00	193.86	194.16	193.93	194.04	193.93	194.17	194.04
89.76	193.84	194.21	193.99	194.09	193.99	194.22	194.09
89.83	193.84	194.21	193.99	194.09	193.99	194.22	194.09
100.00	193.83	194.26	194.04	194.15	194.04	194.27	194.12
102.26	193.83	194.28	194.05	194.16	194.05	194.29	194.12
102.33	193.83	194.28	194.05	194.16	194.05	194.29	194.12
114.76	193.88	194.34	194.12	194.22	194.12	194.35	194.18
114.83	193.88	194.34	194.12	194.22	194.12	194.35	194.18
120.00	193.93	194.37	194.14	194.25	194.14	194.38	194.22
128.76	194.02	194.41	194.19	194.30	194.19	194.42	194.28
128.83	194.02	194.41	194.19	194.30	194.19	194.42	194.28
140.00	194.14	194.47	194.25	194.35	194.25	194.48	194.41
141.26	194.15	194.48	194.25	194.36	194.25	194.49	194.43
141.33	194.15	194.48	194.25	194.36	194.25	194.49	194.43
153.76	194.18	194.54	194.32	194.43	194.32	194.55	194.49
153.83	194.18	194.54	194.32	194.43	194.32	194.55	194.49
160.00	194.19	194.59	194.35	194.46	194.35	194.59	194.51
166.26	194.20	194.61	194.38	194.49	194.38	194.62	194.53
167.83	194.21	194.62	194.39	194.50	194.39	194.63	194.52
180.00	194.33	194.68	194.46	194.56	194.46	194.69	194.52
180.26	194.33	194.68	194.46	194.56	194.46	194.69	194.52
180.33	194.33	194.68	194.46	194.56	194.46	194.69	194.52
192.83	194.35	194.75	194.52	194.63	194.52	194.76	194.68
194.26	194.35	194.75	194.52	194.63	194.52	194.76	194.70
200.00	194.34	194.78	194.56	194.67	194.56	194.79	194.77
206.76	194.38	194.82	194.59	194.70	194.59	194.83	194.85
206.83	194.38	194.82	194.59	194.70	194.59	194.83	194.85
218.82	194.54	194.88	194.66	194.76	194.66	194.89	194.90
220.00	194.54	194.88	194.66	194.76	194.66	194.89	194.90
230.82	194.84	194.94	194.72	194.83	194.72	194.95	
240.00	194.87	194.99	194.77	194.87	194.77	195.00	195.04
250.82	195.03	195.05	194.82	194.93	194.82	195.06	195.22
253.83	195.06	195.06	194.84	194.95	194.84	195.07	

WESTCAPE DRIVE

LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50

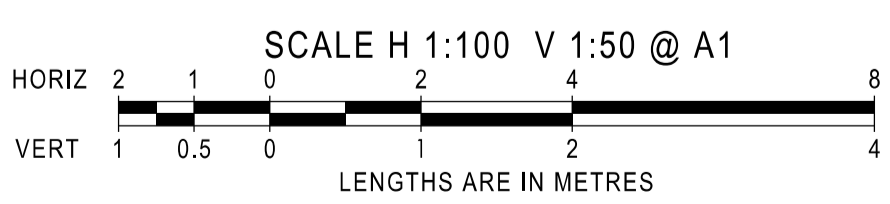


DESIGN SURFACE	EXISTING SURFACE	OFFSET
194.18	194.65	-10.15
193.84	194.66	-8.15
193.84	194.66	-8.10
193.81	194.66	-6.60
193.72	194.54	-3.80
193.72	194.54	-3.69
193.57	194.54	-3.65
193.61	194.51	-3.20
193.72	194.21	3.80
193.80	194.09	6.30
193.83	194.01	7.80
193.83	194.01	7.85
193.98	193.98	8.75

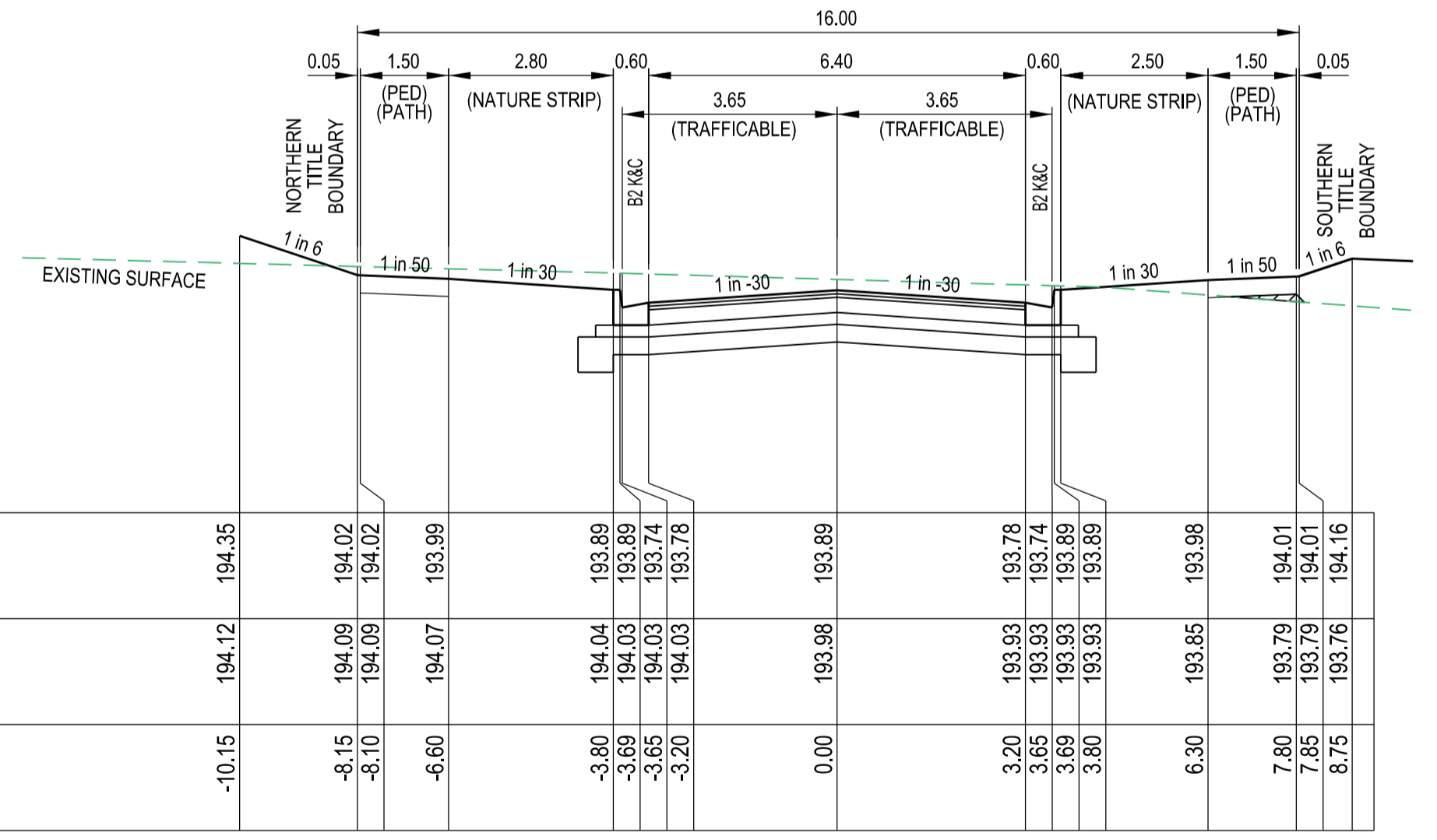
TP17.66

CROSS SECTIONS

SCALE HORIZONTAL 1:100
VERTICAL 1:50



INDICATES CRUSHED ROCK
BACKFILL REFER NOTE 35, SHEET 2
LEVEL 1 SUPERVISION REQUIRED

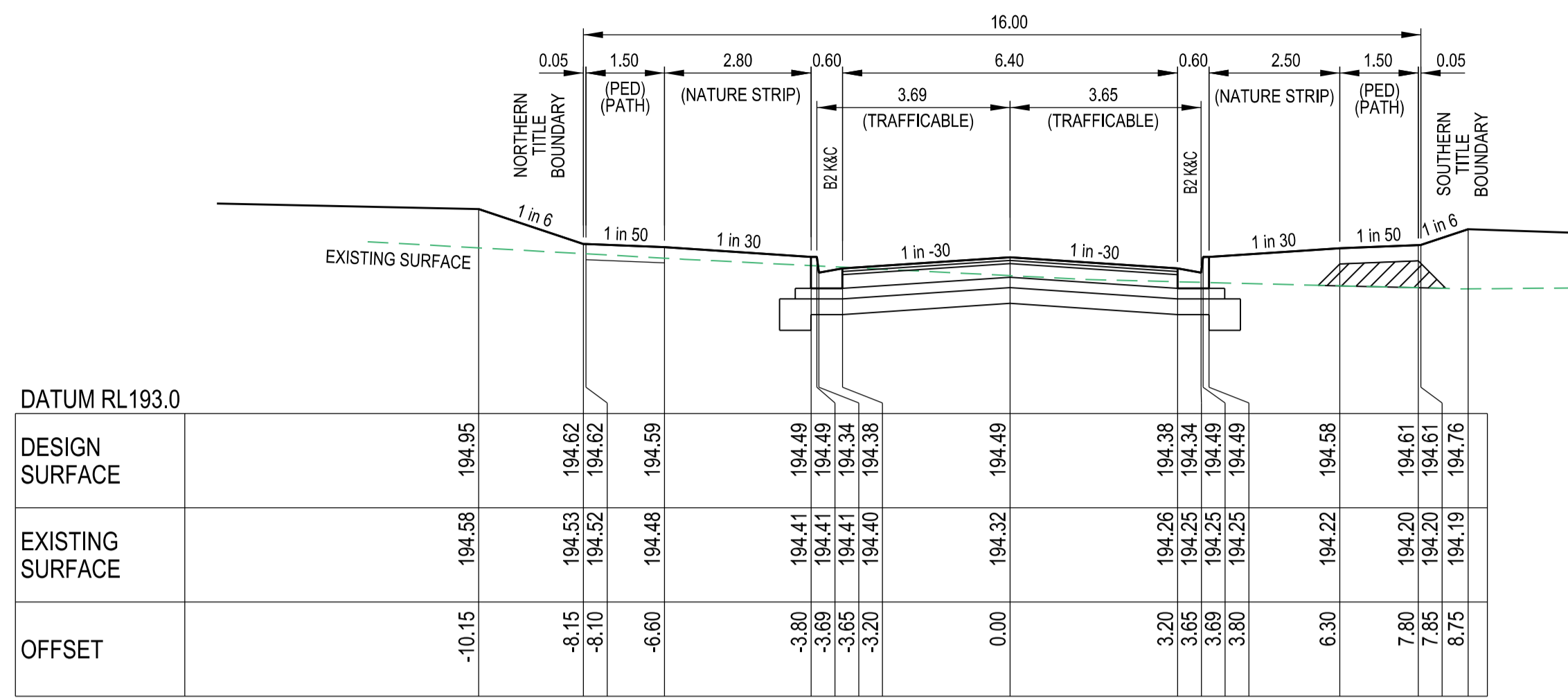


DESIGN SURFACE	EXISTING SURFACE	OFFSET
194.35	194.12	-10.15
194.02	194.09	-8.15
194.02	194.09	-8.10
193.99	194.07	-6.60
193.89	194.04	-3.80
193.89	194.03	-3.69
193.74	194.03	-3.65
193.89	193.93	3.69
193.89	193.93	3.80
193.98	193.85	6.30
194.01	193.79	7.80
194.01	193.79	7.85
194.16	193.76	8.75

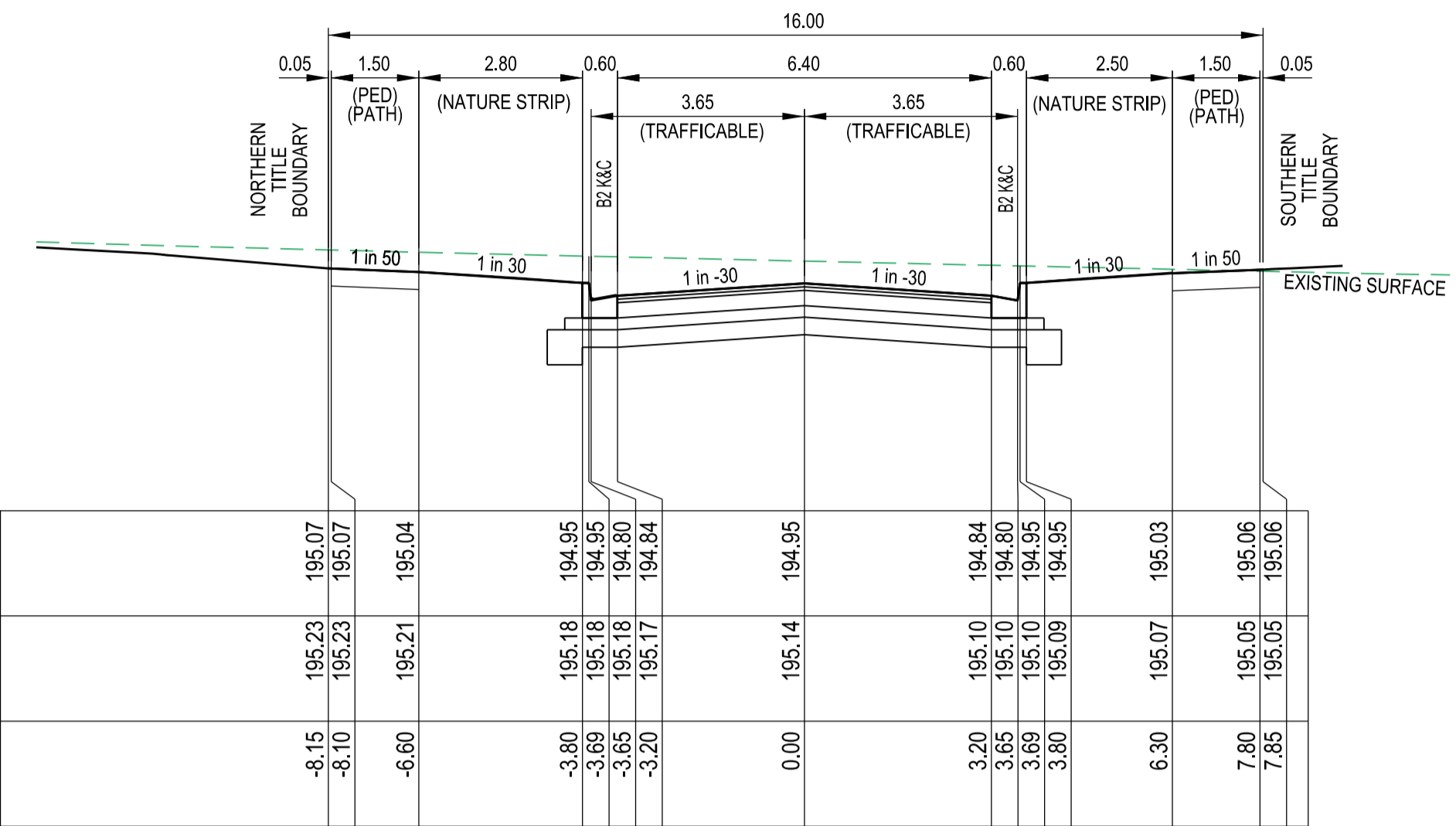
Ch50.76

AS CONSTRUCTED

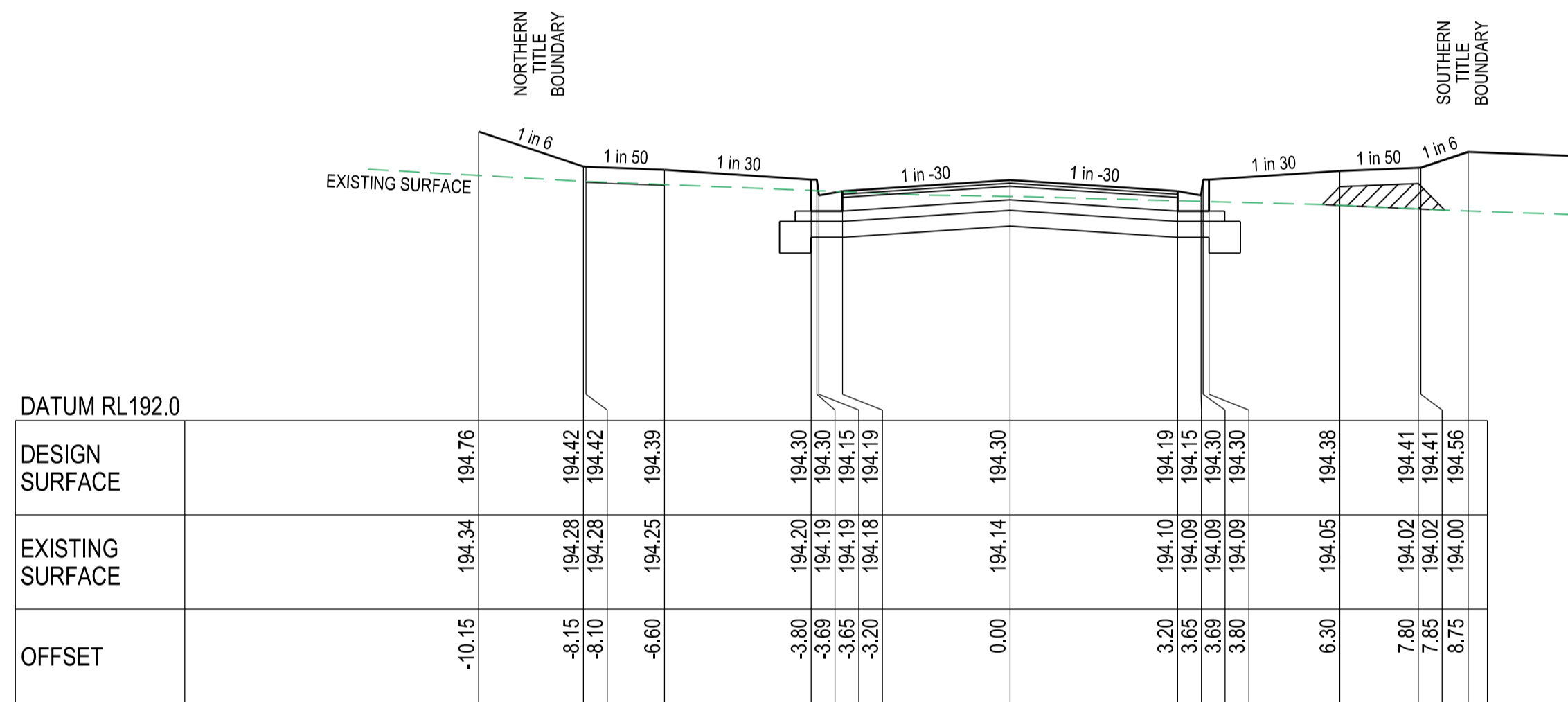
		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 103-C-10 SURVEY BPD DESIGN RGW		RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA REFERENCE 9365 E/13	
AMENDMENTS A 16/12/21 ISSUE FOR CONSTRUCTION	DRAWN GL	CHECKED	SCALE AS SHOWN DATUM AHD	DATE AUG'21	SHEET 6 OF 12 A



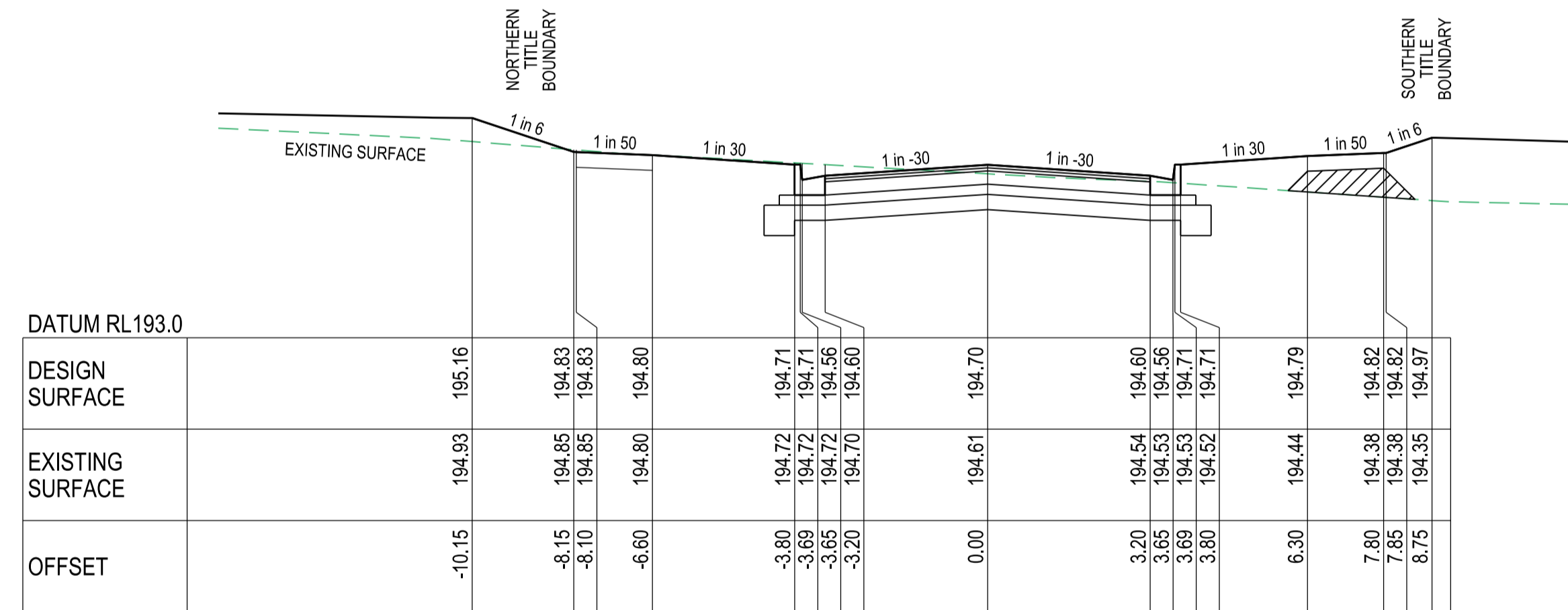
Ch166.26



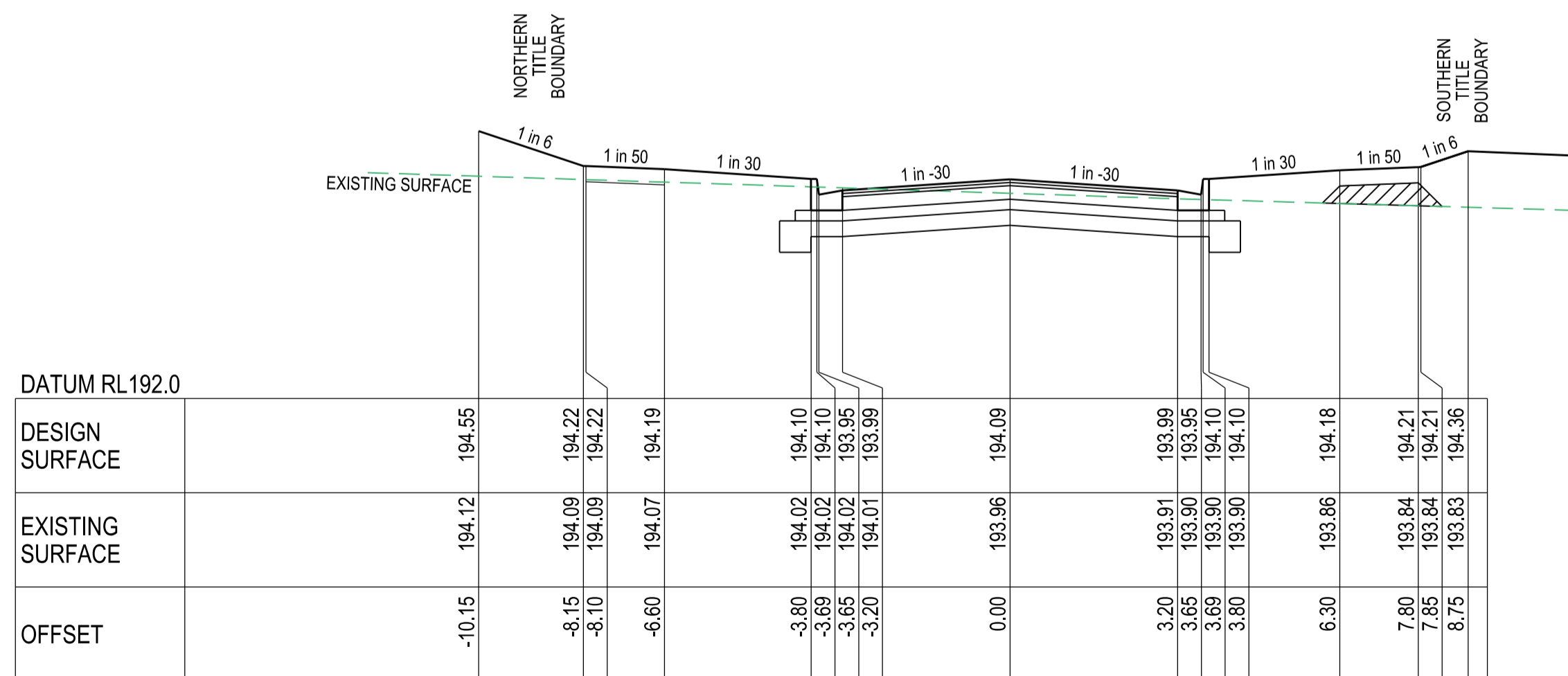
Ch253.82



Ch128.76



Ch206.83

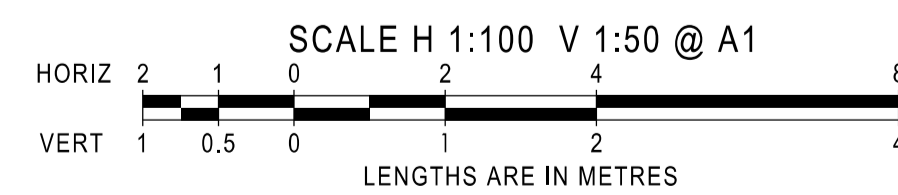


Ch89.76

WESTCAPE DRIVE

CROSS SECTIONS

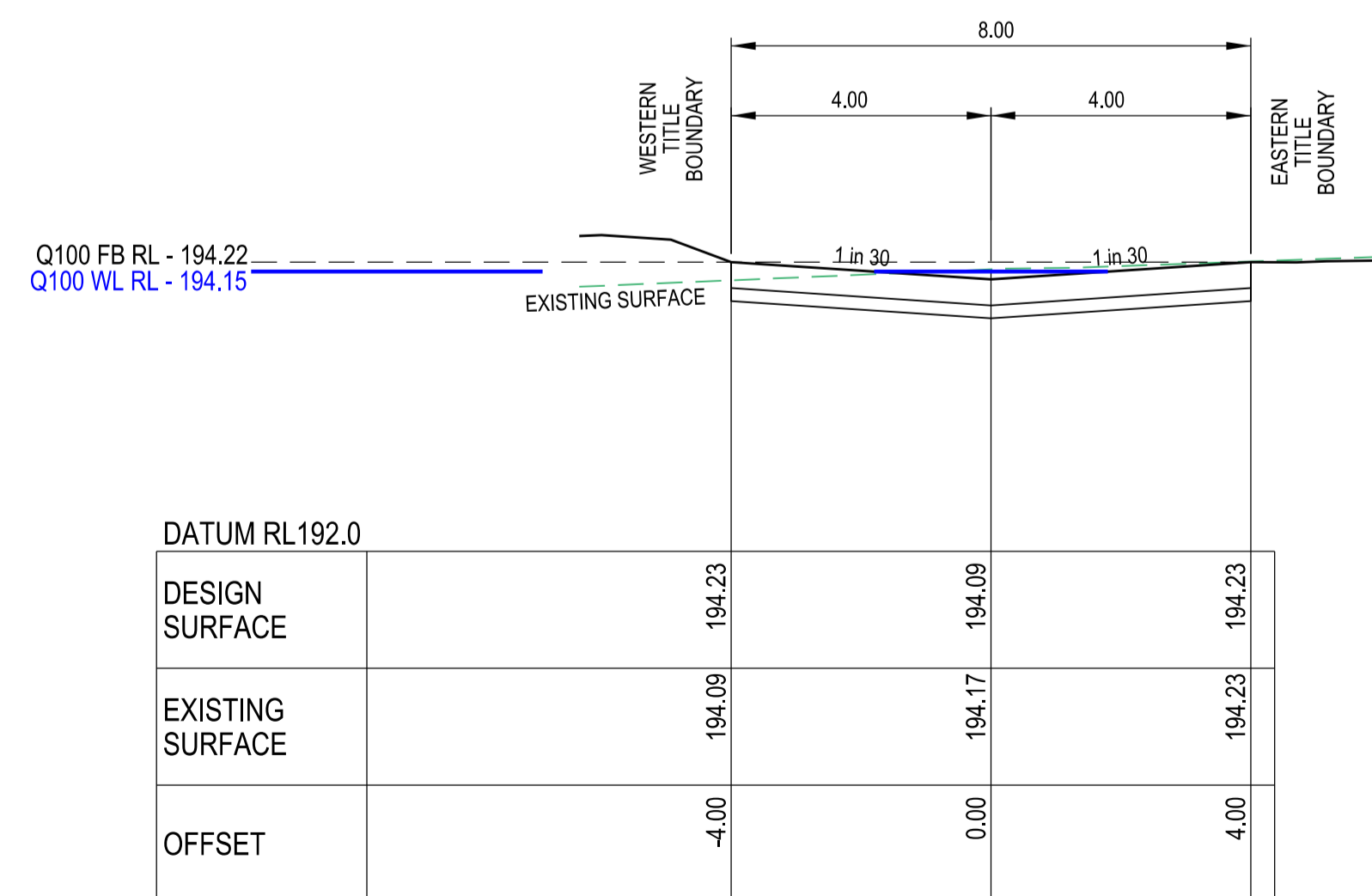
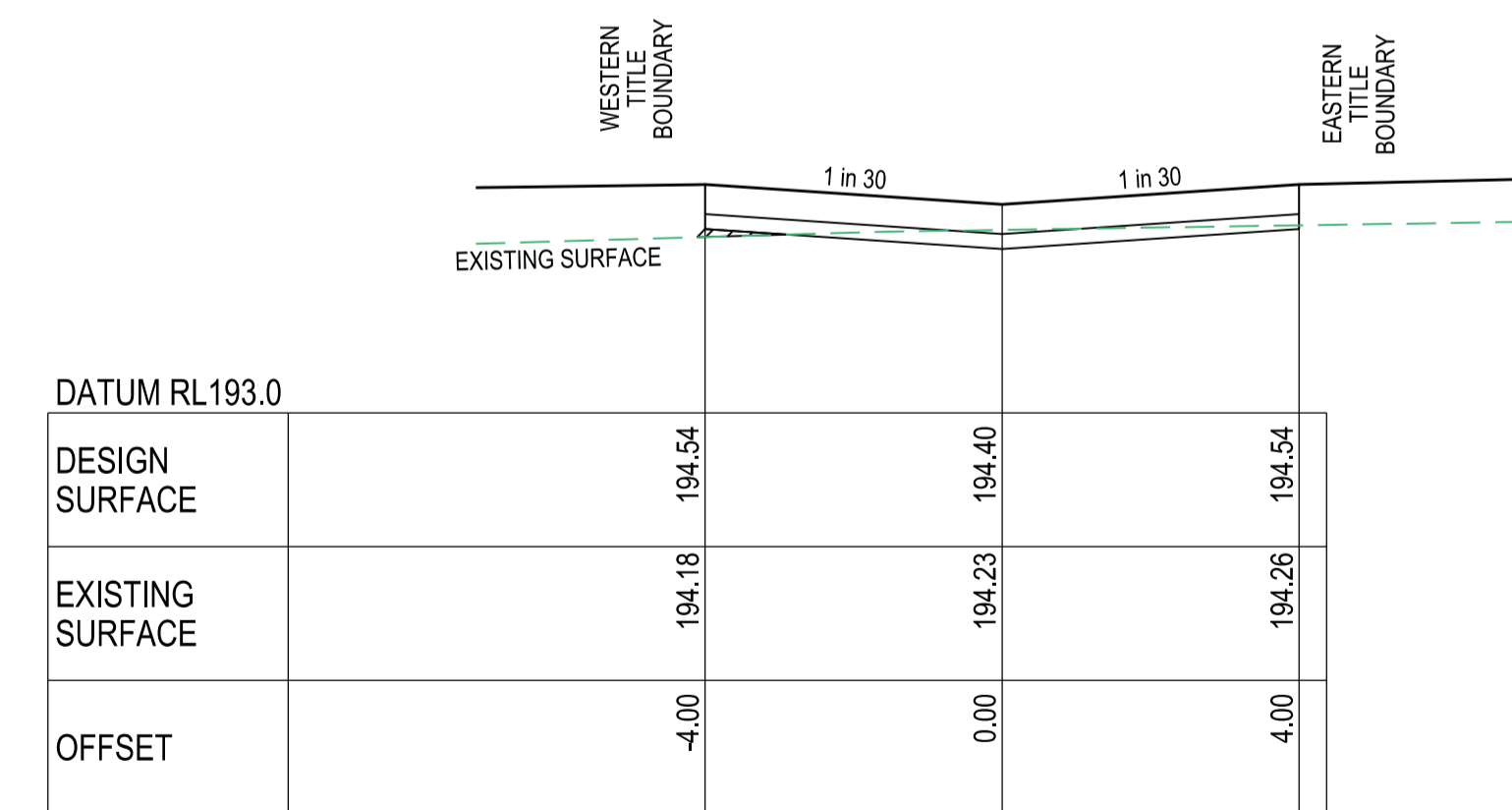
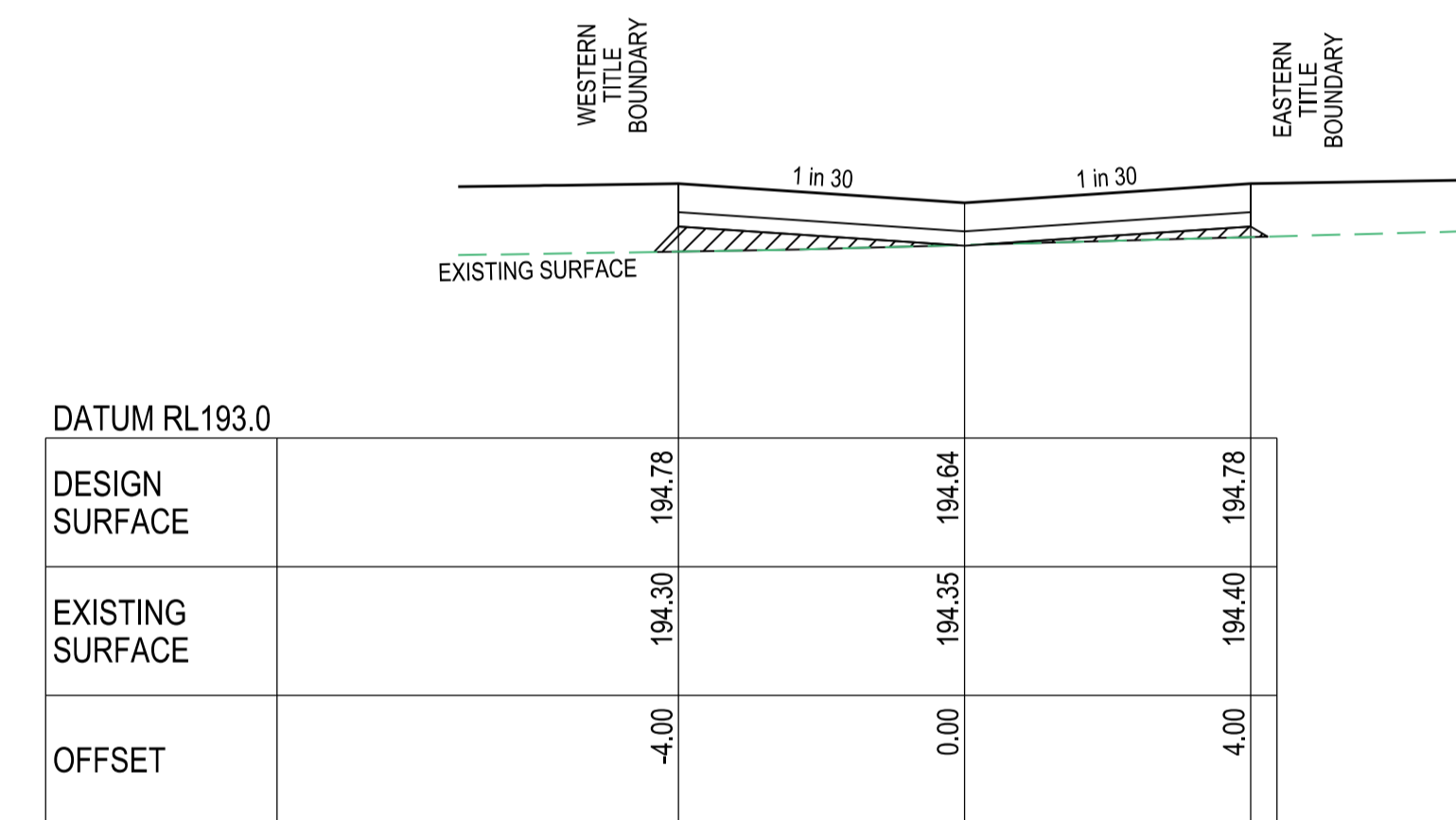
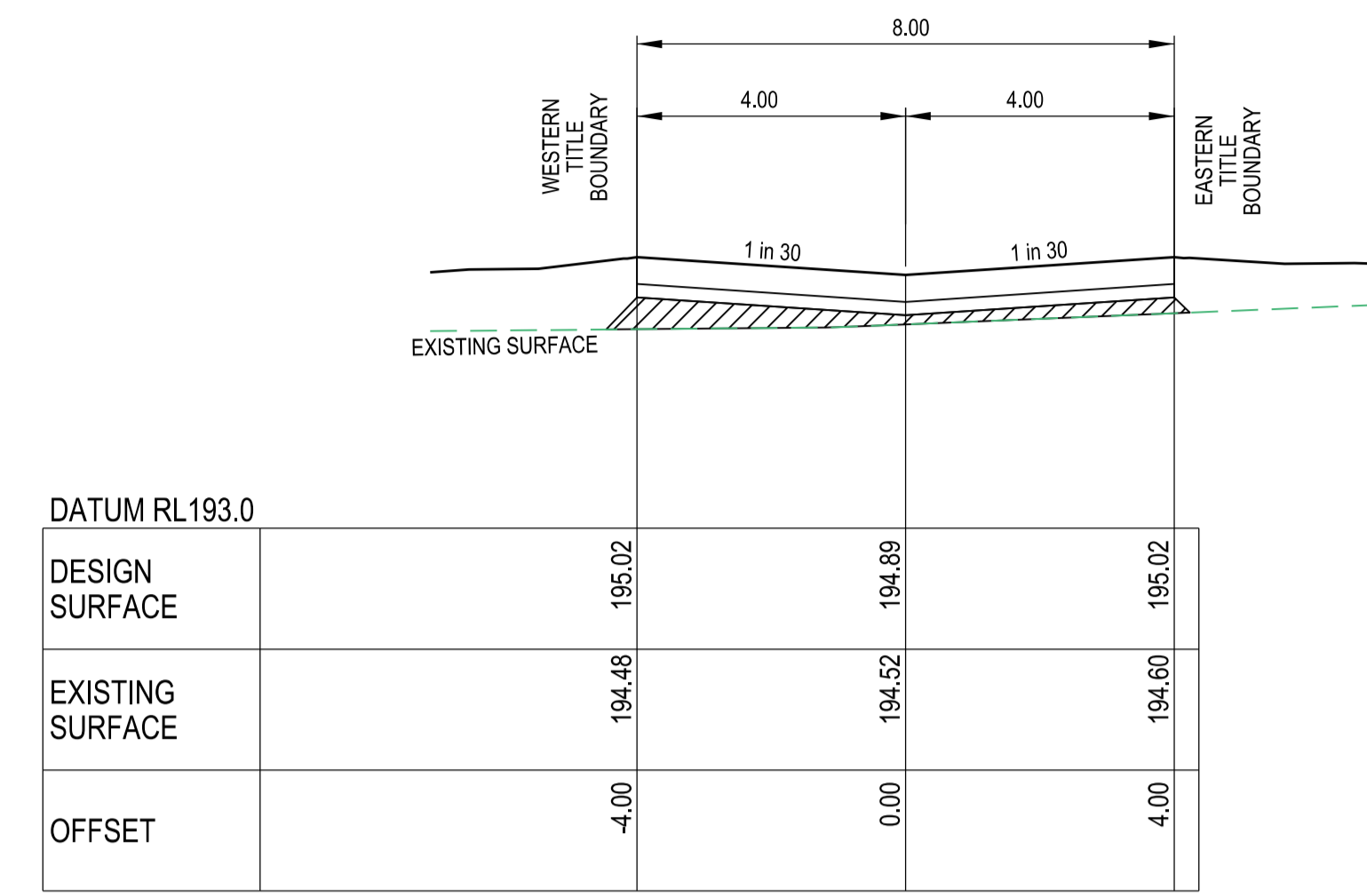
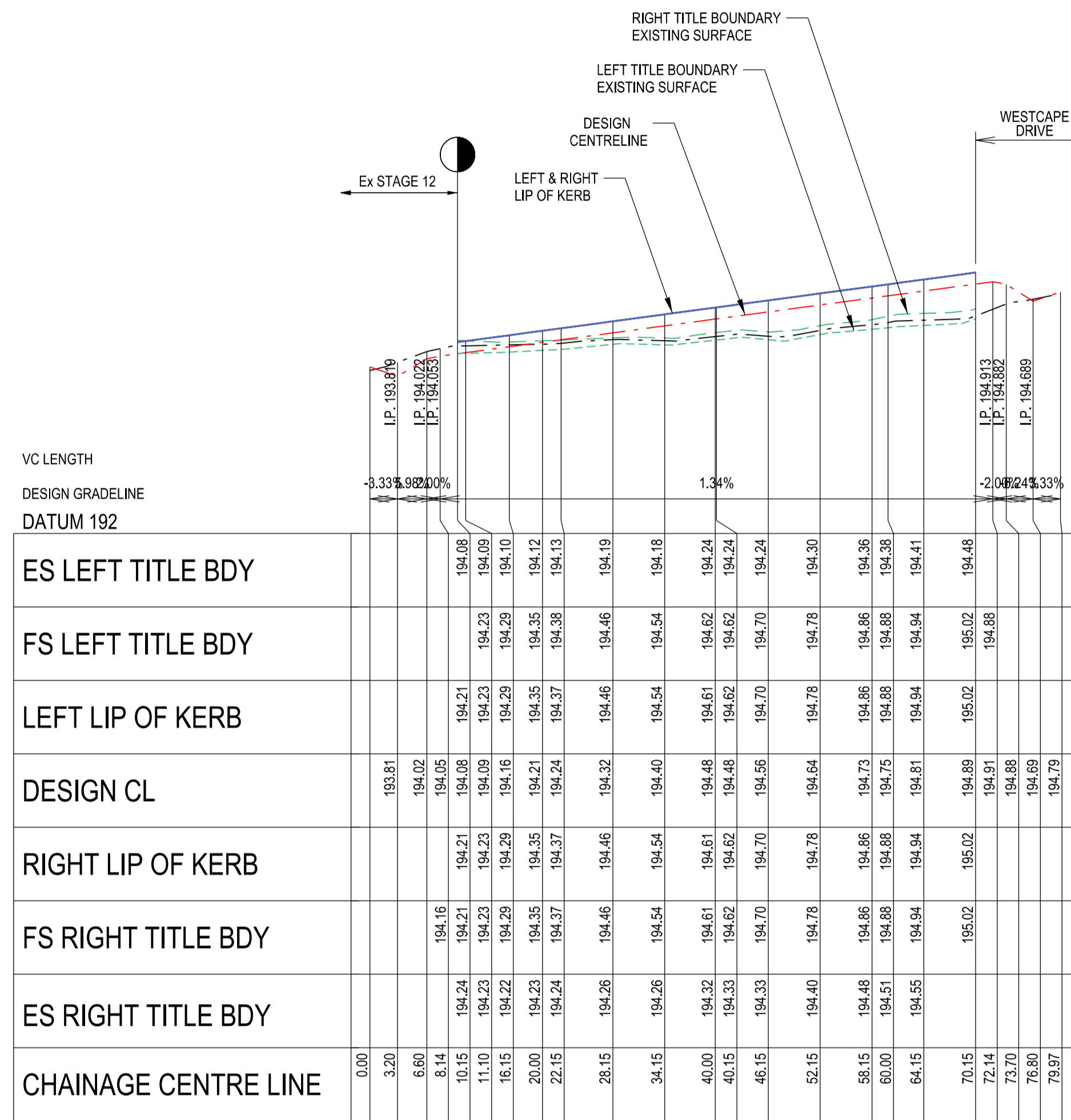
SCALE HORIZONTAL 1:100
VERTICAL 1:50



INDICATES CRUSHED ROCK BACKFILL REFER NOTE 35, SHEET 2 LEVEL 1 SUPERVISION REQUIRED

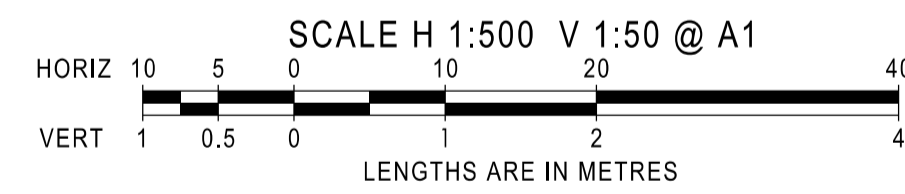
AS CONSTRUCTED

AMENDMENTS		 breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
A		MELWAY REF.	103-C-10	MUNICIPALITY	
VER		SURVEY	BPD	WHITTLESEA	
		DESIGN	RGW	REFERENCE	
		DRAWN	GL	9365 E/13	
DATE		CHECKED		SCALE	AS SHOWN
16/12/21		ISSUE FOR CONSTRUCTION		DATUM	AHD
		REMARKS		DATE	AUG'21
				SHEET	7 OF 12
					A

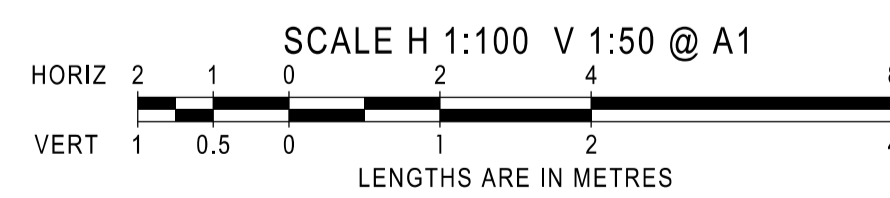


EUNGELLA LANE
LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50



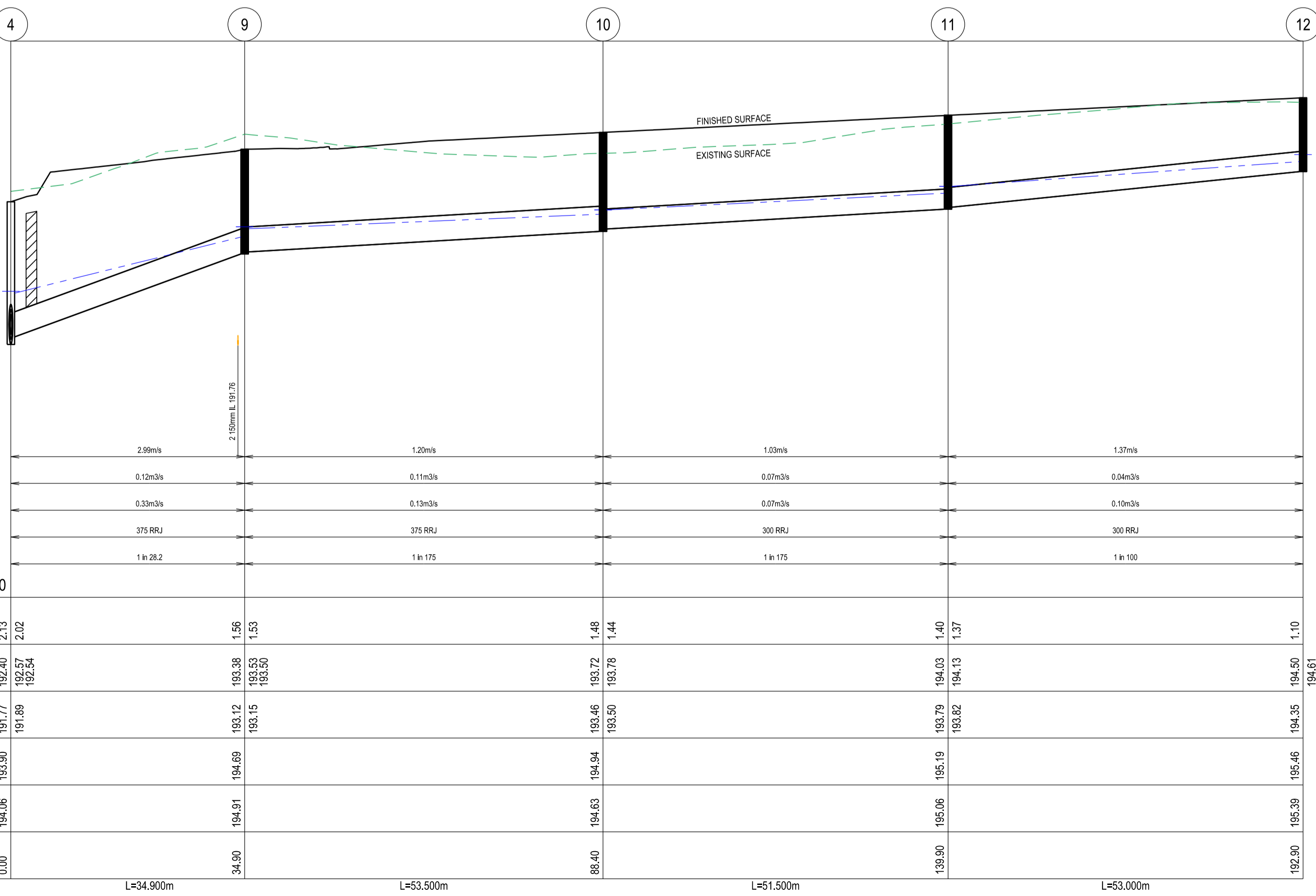
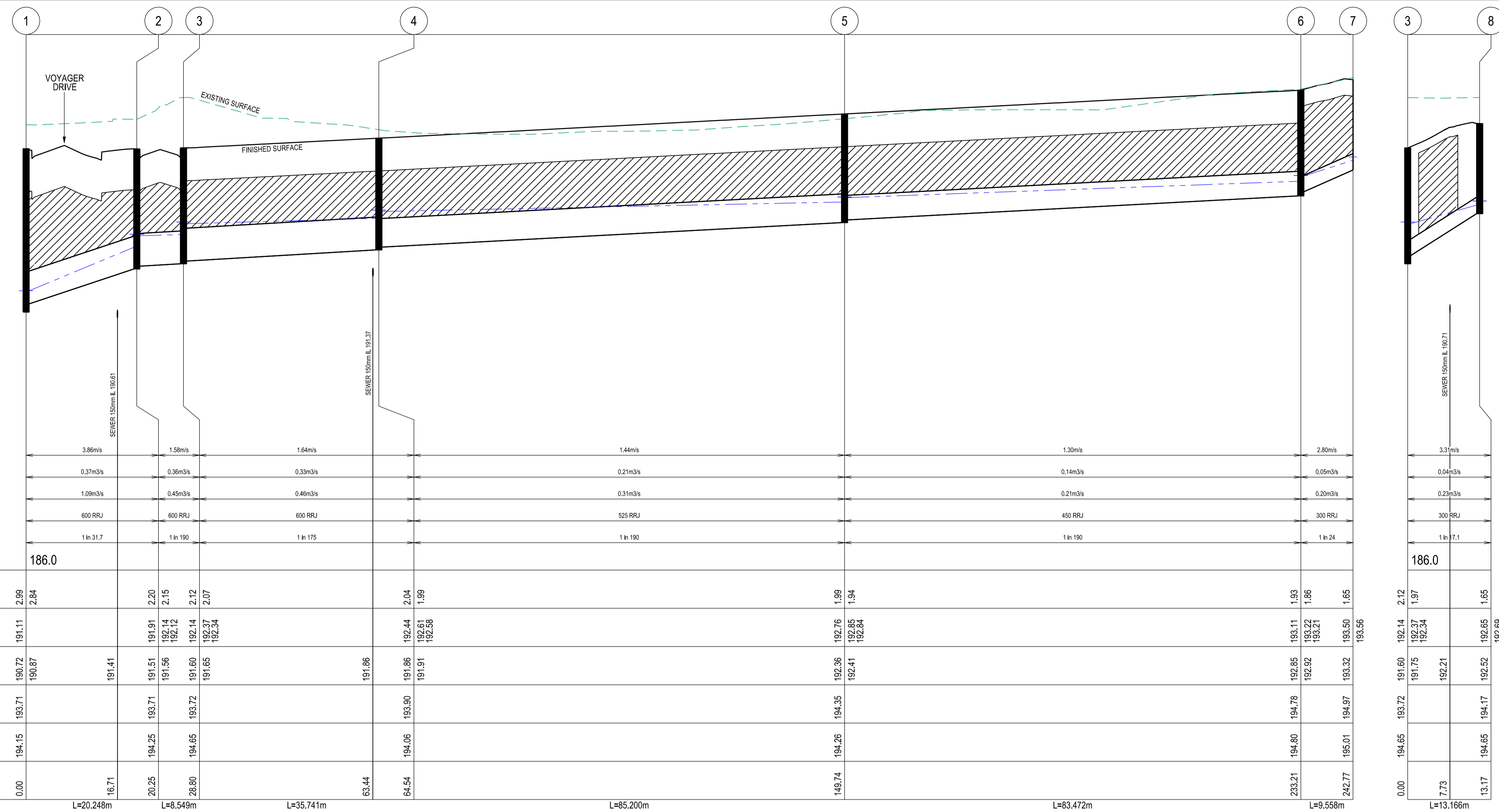
CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50



INDICATES CRUSHED ROCK
BACKFILL REFER NOTE 35, SHEET 2
LEVEL 1 SUPERVISION REQUIRED

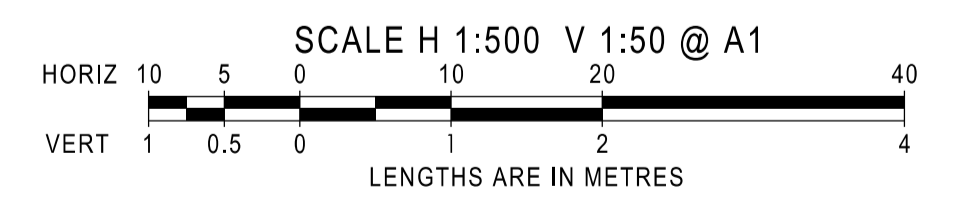
AS CONSTRUCTED

AMENDMENTS		 land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
		MELWAY REF. 103-C-10	RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA
		SURVEY BPD			REFERENCE 9365 E/13
		DESIGN RGW	DRAWN GL		SHEET 8 OF 12
A 16/12/21 ISSUE FOR CONSTRUCTION		CHECKED	SCALE AS SHOWN	DATUM AHD	DATE AUG'21



DRAINAGE LONGITUDINAL SECTIONS

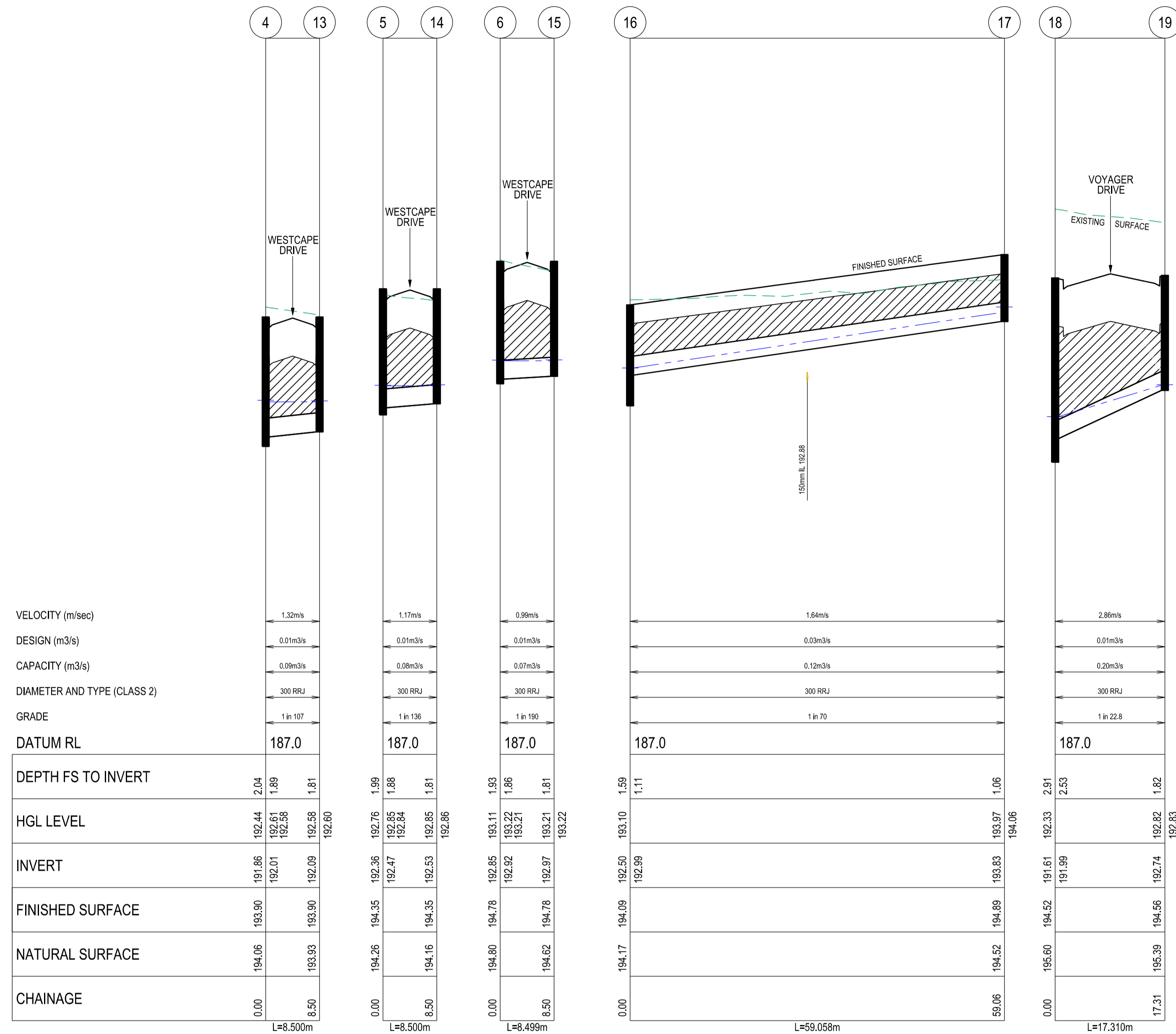
SCALE HORIZONTAL 1:500
VERTICAL 1:50



INDICATES CRUSHED ROCK BACKFILL
INDICATES 5YR HGL

AS CONSTRUCTED

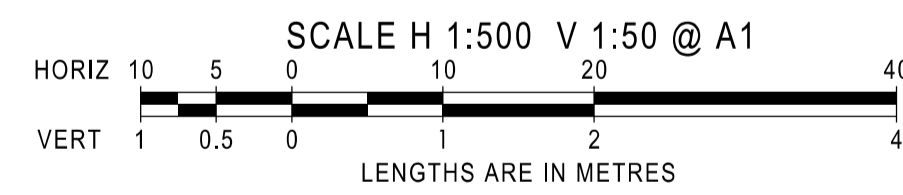
		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 103-C-10 SURVEY BPD DESIGN RGW		RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA	
DRAWN GL				REFERENCE 9365 E/13	
AMENDMENTS	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD
A	16/12/21	ISSUE FOR CONSTRUCTION	GL	DATE	AUG'21
			SHEET 9 OF 12		A



PIT SCHEDULE										
PIT No.	PIT TYPE	LENGTH	WIDTH	IN INVERT	IN DIA.	OUT INVERT	OUT DIA.	COVER RL	DEPTH	NOTES
1	Ex JUNCTION PIT			190.87	600			193.71	2.89	CONNECT TO EXISTING PIT
2	GRADED ENTRY PIT	900	900	191.56	600	191.51	600	193.71	2.20	
3	GRADED ENTRY PIT	900	900	191.65	600	191.60	600	193.72	2.12	VPAST D DWG EDCM 601 (B2 KERB)
4	GRADED ENTRY PIT	900	900	191.75	300					
				191.91	525	191.86		193.90	2.04	VPAST D DWG EDCM 601 (B2 KERB)
5	GRADED ENTRY PIT	900	900	191.97	375					
				192.01	300					
6	GRADED ENTRY PIT	900	600	192.41	450	192.36	525	194.35	1.99	VPAST D DWG EDCM 601 (B2 KERB)
				192.47	300					
7	END OF PIPE	900	600					193.32	300	194.97
						192.50	300	194.15	1.65	CAP AND SEAL
8	GRADED ENTRY PIT	900	600			192.50	300	194.15	1.65	VPAST D DWG EDCM 601 (B2 KERB)
9	JUNCTION PIT	900	600	193.17	375	193.12	375	194.69	1.57	VPAST D DWG EDCM 605
10	JUNCTION PIT	900	600	193.50	375	193.45	375	194.94	1.49	VPAST D DWG EDCM 605
11	JUNCTION PIT	900	600	193.82	375	193.77	375	195.20	1.42	VPAST D DWG EDCM 605
12	JUNCTION PIT	900	600			194.35	300	195.46	1.10	VPAST D DWG EDCM 605
13	GRADED ENTRY PIT	900	600			192.09	300	193.90	1.82	VPAST D DWG EDCM 601 (B2 KERB)
14	GRADED ENTRY PIT	900	600			192.53	300	194.35	1.82	VPAST D DWG EDCM 601 (B2 KERB)
15	GRADED ENTRY PIT	900	600			192.97	300	194.78	1.82	VPAST D DWG EDCM 601 (B2 KERB)
16	GRADED PIT	900	600	192.99	300			194.09	1.59	VPAST D DWG EDCM 605 CLASS D GRATED LID
17	JUNCTION PIT	900	600			193.83	300	194.89	1.06	VPAST D DWG EDCM 605
18	GRADED ENTRY PIT	900	600	191.99	300			194.52	2.91	VPAST D DWG EDCM 601 (B2 KERB)
19	GRADED ENTRY PIT	900	600			192.74	300	194.56	1.82	VPAST D DWG EDCM 601 (B2 KERB)

DRAINAGE LONGITUDINAL SECTIONS

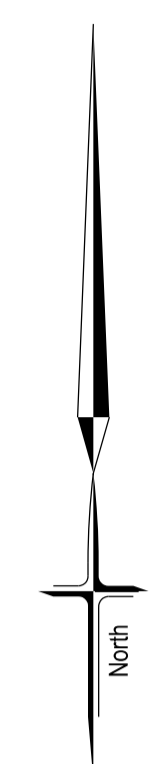
SCALE HORIZONTAL 1:500
VERTICAL 1:50



INDICATES CRUSHED ROCK BACKFILL
 INDICATES 5YR HGL

AS CONSTRUCTED

				breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
AMENDMENTS		MELWAY REF.	103-C-10	RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA	
C	08/03/22	SURVEY	BPD			REFERENCE 9365 E/13	
B	21/01/22	DESIGN	RGW			SHEET 10 OF 12	
A	16/12/21	ISSUE FOR CONSTRUCTION	DRAWN	GL	DATE	AUG'21	C
VER	DATE	REMARKS	CHECKED	SCALE	AS SHOWN	DATUM	AHD



SIGNAGE LEGEND

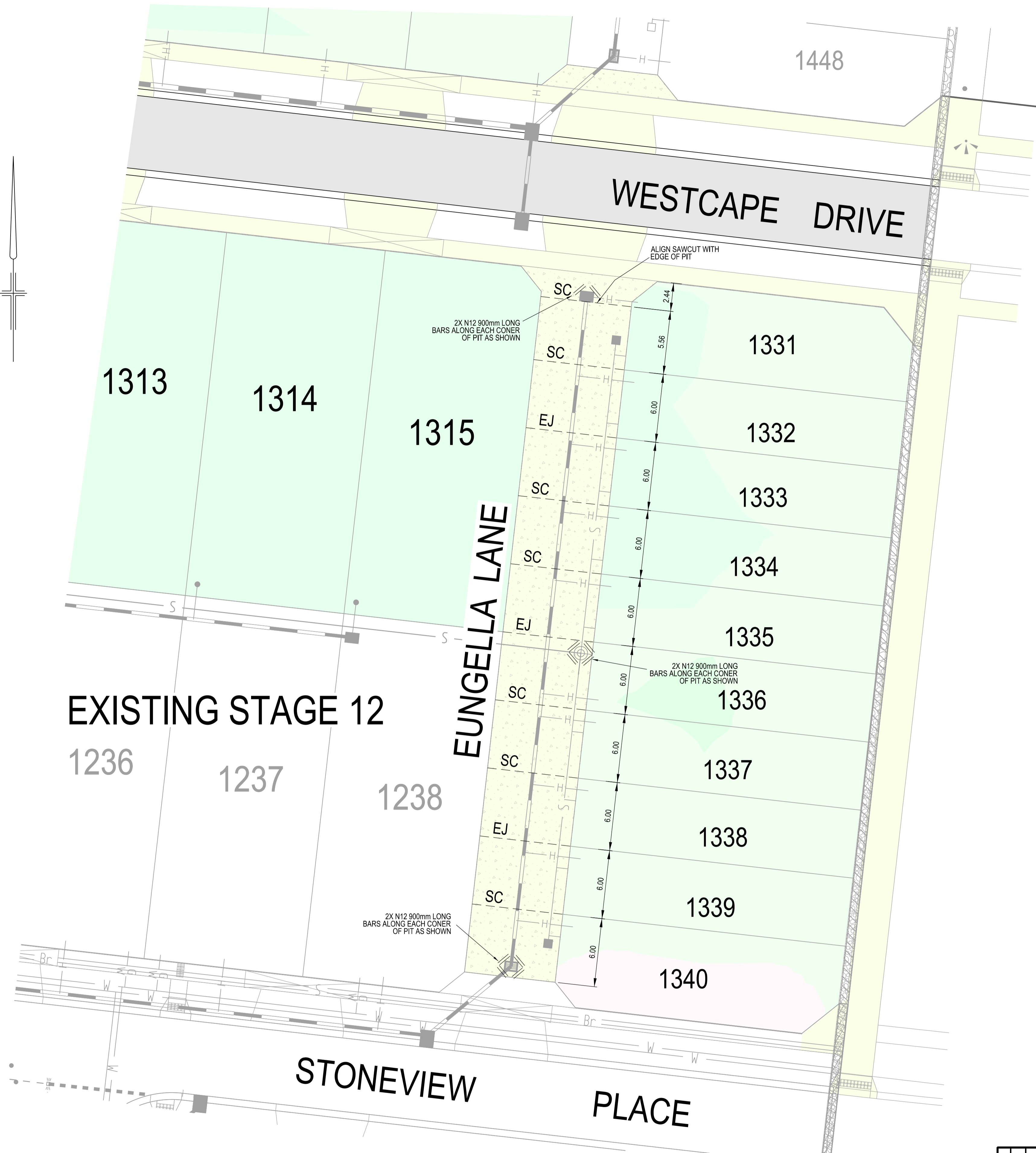
- A** STREET SIGNS
- B** GIVE WAY SIGN (R1-2A) - CLASS 1
- C** BICYCLE PEDESTRIAN WARNING SIGN (W6-9A) WITH CROSSING ARROW SIGN (W8-23A) BELOW. ALL CLASS 1.
- D** ROAD CLOSED SIGN (G9-20) WITH OBSTRUCTION MARKER SIGN (D4-5) - CLASS 1

NOTES

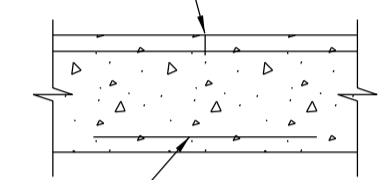
- a) ALL SIGNS TO BE SLEEVED USING A SL27 SLEEVE WITH A MINIMUM OF 2 WEDGES.
- b) HAZARD / DIRECTIONAL TGSIS SHOWN THUS AND FOOTPATH RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH VICROADS STD DWGS SD2031 TO SD2035. TGSIS SHALL CONFORM TO AS1428.4
- c) ALL SIGNS TO BE INSTALLED IN ACCORDANCE WITH MCC205
- d) SWLM - INDICATES SOLID WHITE "LONGLIFE" LINE MARKING
BWLM - INDICATES BROKEN WHITE "LONGLIFE" LINE MARKING

AS CONSTRUCTED

				breese pitt dixon pty. ltd. land surveyors civil engineers		RATHDOWNE ESTATE STAGE 13		MUNICIPALITY WHITTLESEA REFERENCE 9365 E/13	
AMENDMENTS									
A	16/12/21	ISSUE FOR CONSTRUCTION							
VER	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE AUG'21	SHEET 11 OF 12	A	

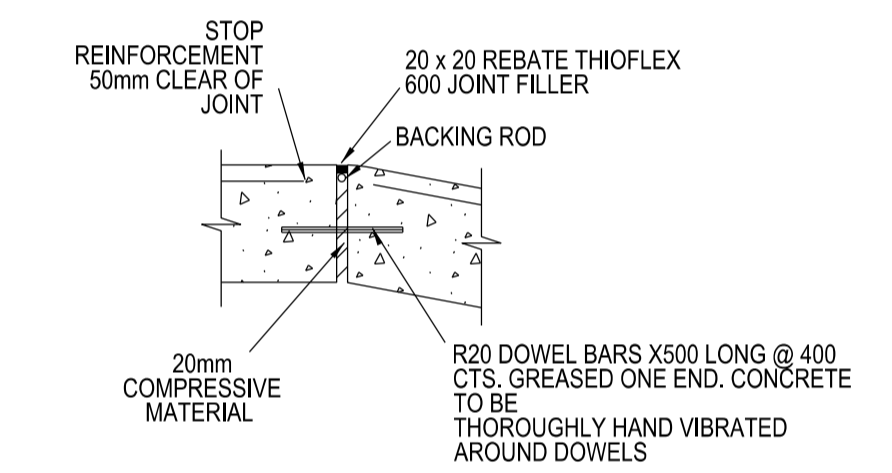


3mm WIDE x 50mm DEEP SAWCUT TO BE FORMED AS SOON AS THE SLAB CAN SUPPORT EQUIPMENT AND WITHIN 24 HOURS OF POURING



200 RC SLAB (32MPa) 32 MESH TOP AND BOTTOM WITH MIN 40mm COVER

SAWCUT JOINT (SC) DETAIL



EXPANSION JOINT (EJ) DETAIL

AS CONSTRUCTED

AMENDMENTS		MELWAY REF.	103-C-10	bpd breese pitt dixon pty. ltd. land surveyors civil engineers	1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
		SURVEY	BPD		
A		16/12/21	ISSUE FOR CONSTRUCTION	RATHDOWNE ESTATE STAGE 13 SAW CUT PLAN	MUNICIPALITY
VER		DATE	REMARKS		REFERENCE
		CHECKED		SCALE AS SHOWN	DATUM AHD
				DATE	AUG'21
				SHEET	12 OF 12
					A

J:\H365\Eng\Stage 13\E13_R12_LANE.dgn