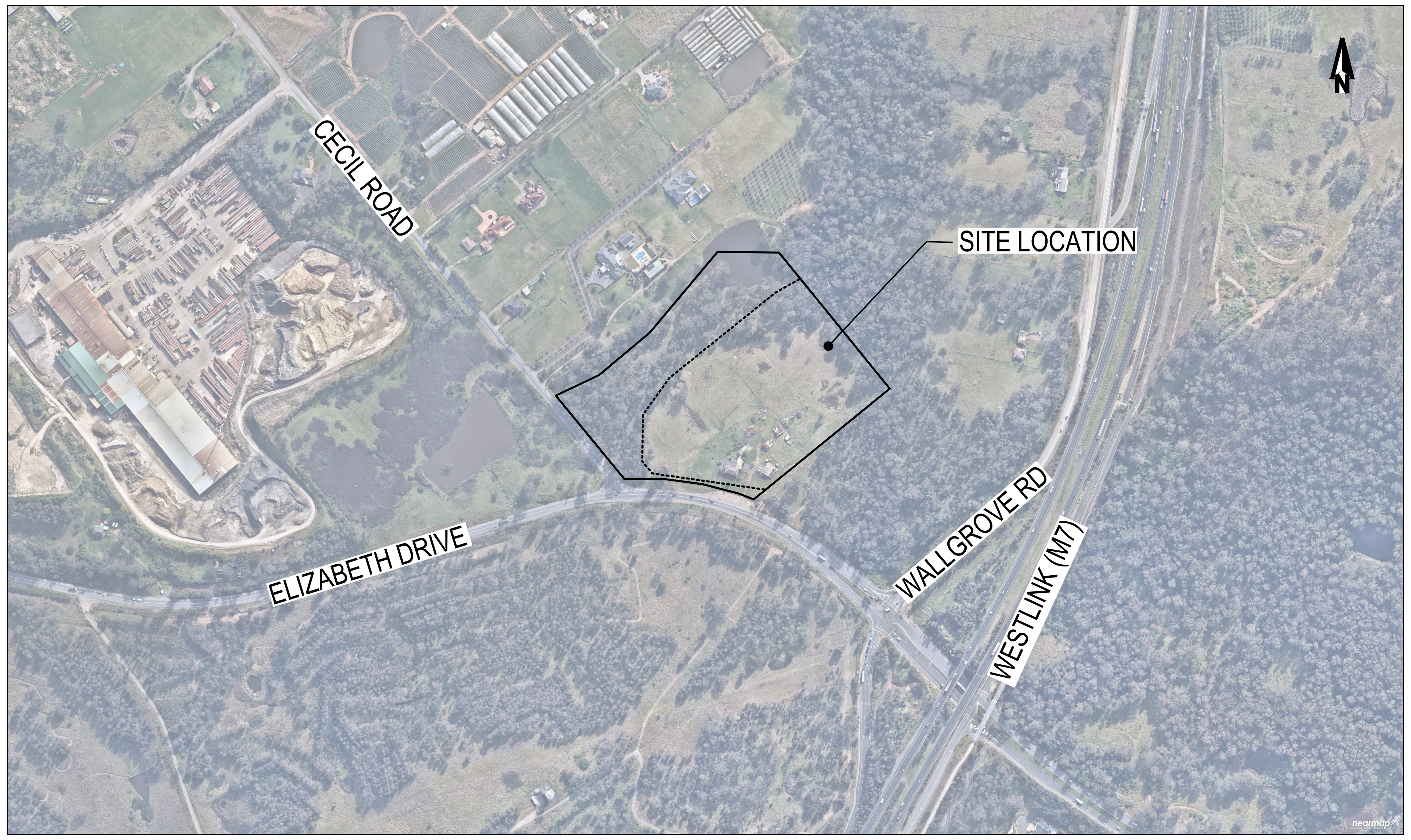
PROJECT: PROPOSED COMMERCIAL DEVELOPMENT

PLANSET: CONCEPT CIVIL DESIGN

CLIENT: AE DESIGN PARTNERSHIP



LOCALITY PLAN
NOT TO SCALE

LGA: FAIRFIELD CITY COUNCIL

1111-1141 ELIZABETH DRIVE, CECIL PARK, NSW-2573
LOT 2 SECTION 4 DP 2954

DRAWING LIST

DWG NO.	REV	DWG TITLE
GENERAL		
PS03-A000	B	COVER SHEET
PS03-A050	B	DEVELOPMENT OVERVIEW PLAN
CONSTRUCTION MANAGEMENT WORKS		
PS03-B300	B	SEDIMENT & EROSION CONTROL PLAN
PS03-B310	A	SEDIMENT & EROSION CONTROL DETAILS
EARTHWORKS		
PS03-C100	B	EARTHWORKS GRADING PLAN
PS03-C500	B	EARTHWORKS CUT-FILL PLAN
PS03-C600	A	EARTHWORKS SITE SECTION
ROADWORKS		
PS03-D100	B	ROADWORKS PLAN
PS03-D200	A	ROAD 1 (21-MRC01) LONGITUDINAL SECTION & TYPICAL SECTIONS
DRAINAGE		
PS03-E100	B	DRAINAGE PLAN
PS03-E200	A	DRAINAGE DETAILS
PS03-E600	B	OSD CATCHMENT PLAN, MODEL AND RESULTS
PS03-E700	B	WATER QUALITY CATCHMENT PLAN, MODEL AND RESULTS
STRUCTURE AND PAVEMENTS		
PS03-G210	A	RETAINING WALL SECTION
PS03-G220	A	CONCEPT RETAINING WALL DETAILS
PS03-G400	B	PAVEMENT PLAN

GENERAL NOTES

1 THIS PLAN IS FOR DEVELOPMENT APPLICATION PURPOSE AND NOT FOR CONSTRUCTION. DESIGN TO BE REVIEWED AND UPDATED FOR CONSTRUCTION CERTIFICATE.
2 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH, AND THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE RELEVANT AUSTRALIAN STANDARDS, COUNCIL SPECIFICATIONS, AND ALL PROJECT CONSULTANT'S PLANS AND REPORTS.
3 INTERNAL SURVEY INFORMATION SHOWN BASED ON SURVEY PROVIDED BY PROJECT SURVEYOR AND LIDAR DATA FROM NSW SPATIAL SERVICES.
4 SITE BOUNDARY BASED ON INFORMATION PROVIDED BY PROJECT SURVEYOR.
5 LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
6 FINAL SURFACE CONTOURS ARE BASED ON PROPOSED AND EXISTING SURFACE.
7 THIS PLANSET HAS BEEN PREPARED IN RESPONSE TO THE PROPOSED ACQUISITION OF PART OF THE SITE WHICH WILL REDUCE THE SITE AREA BY 26,617SQM. THE ACQUISITION OF THE AREA OF THE SITE PROPOSED BY TfNSW HAS REQUIRED AMENDMENTS TO BE MADE TO THE PROPOSED DEVELOPMENT AND DEVELOPMENT FOOTPRINT WHICH REQUIRE A RE-ASSESSMENT OF THE IMPACTS AND DESIGN WHICH RESPONDS TO THE NEW DEVELOPMENT SITE.

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/08/2020**	**JS**	**CG**	**SA**	**TH**
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE

GRID	DATUM	PROJECT MANAGER
---	---	TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE: PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
1111-1141 ELIZABETH DRIVE, CECIL PARK, NSW-2573
LOT 2 SECTION 4 DP 2954

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DRAWING TITLE: COVER SHEET

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-A000	B

KEY

EXISTING CONTOURS	
LOT BOUNDARY	
GAS PIPE EASEMENT	
BUSHFIRE ASSET PROTECTION ZONE	
LANDSCAPE SETBACK	
REVISED SITE BOUNDARY AFTER ACQUISITION	
SITE BOUNDARY	

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/08/2020	JS	CG	SA	TH
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

PRINTED: 14.08.2020 - USER: RKOLAHDOOZHA

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

SCALE 0 10 20 30 40 50 60 70 80 90 100 METRES
A1 (A3) 1:1,000 (1:2,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

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This plan must not be used for construction unless signed as approved by principal certifying authority.

All measurements in millimetres unless otherwise specified.

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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DRAWING TITLE
DEVELOPMENT OVERVIEW PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-A050	B

DRAWING ID: P1706121-PS03-R02-A050

KEY:

- EXISTING CONTOURS
- SEDIMENT FENCE
- EARTH BANK (LOW FLOW) WITH GEOTEXTILE LINING FOR UPSTREAM STORM WATER DIVERSION
- MESH AND GRAVEL INLET FILTER
- INDICATIVE STOCKPILE
- STABILISED SITE ACCESS WITH SHAKER PAD
- TREE TO BE REMOVED
- FEATURE TO BE REMOVED

NOTE:

- TO BE READ IN CONJUNCTION WITH SEDIMENT AND EROSION CONTROL DETAILS. PLEASE REFER TO PS03-B310.
- ALL EXCESS MATERIAL SHALL BE REMOVED FROM SITE.
- COUNCIL PERMISSION TO BE OBTAINED FROM REMOVAL OF TREES ON COUNCIL LAND.
- EROSION AND SEDIMENT CONTROLS TO BE IN PLACE AT ALL TIMES. CONTROLS TO BE INSPECTED, MAINTAINED AND REPLACED AS REQUIRED BY THE CONTRACTOR UNTIL WORKS ARE COMPLETED AND PERMANENT MEASURES HAVE BEEN ESTABLISHED.
- WHEEL WASH TO BE PROVIDED AT THE SITE ENTRY (BUILT IN SITU OR PORTABLE).

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/08/2020**	**JS**	**CG**	**SA**	**TH**
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

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A1 / A3 LANDSCAPE (A1LC_v02.0.01)

SCALE 0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID: MGA
DATUM: mAHD
PROJECT MANAGER: TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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DRAWING TITLE: SEDIMENT & EROSION CONTROL PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-B300	B

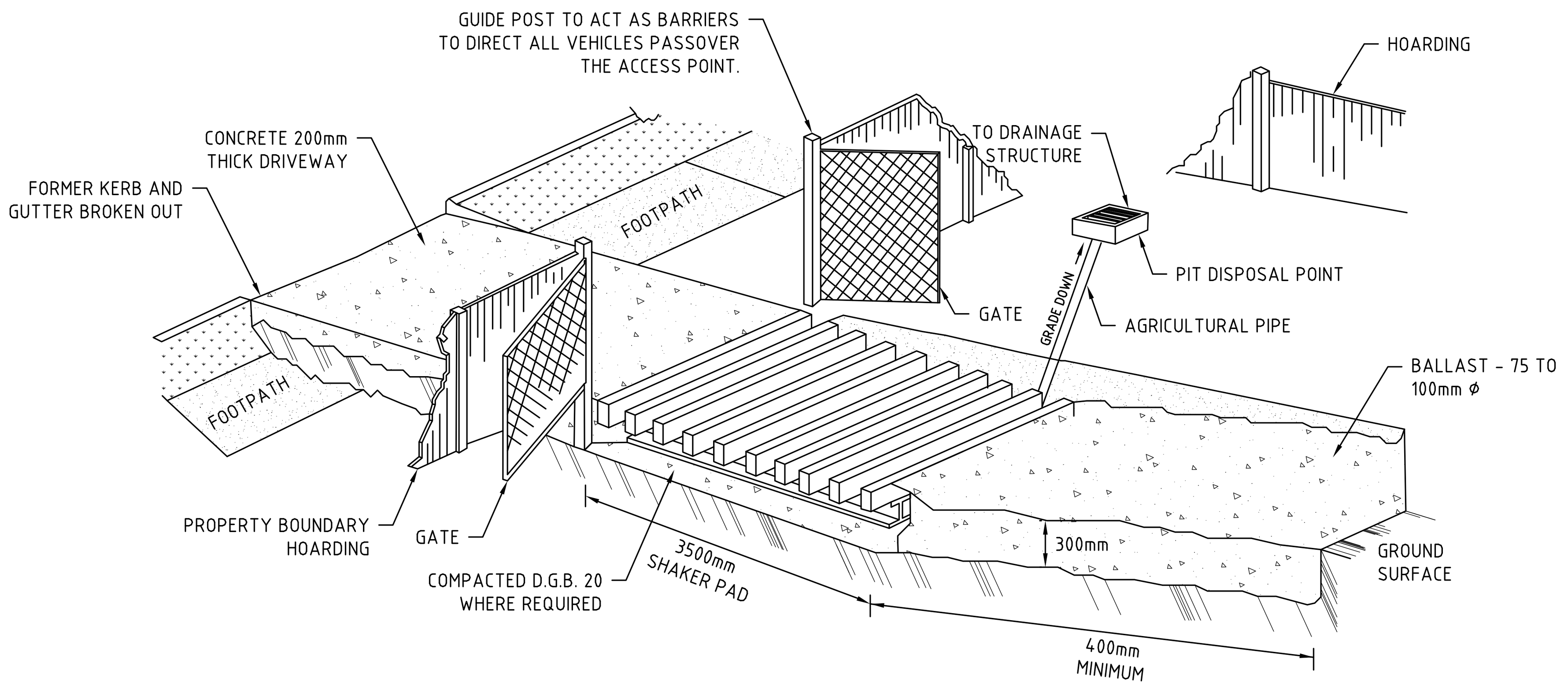
DRAWING ID: P1706121-PS03-R02-B300

STABILISED ACCESS POINT

TYPE II SAP

THE TYPE II SAP DESIGN IS MORE DEFINED IN THAT IT REQUIRES AN AREA OF BALLAST WITHIN THE SITE COMBINED WITH A SHAKER PAD; ADJACENT THE SHAKER PAD AND IN THE PUBLIC WAY IS A TEMPORARY (CONCRETE) VEHICULAR CROSSING. (SEE DIAGRAM)

STABILISED ACCESS POINT - TYPE 2



IN BOTH TYPE I AND TYPE II SAP'S, THE TEMPORARY VEHICULAR CROSSING MUST:

- CONNECT TO AN EXISTING GUTTER LAYBACK (WHERE THE KERB AND GUTTER EXIST) . IF A GUTTER LAYBACK DOES NOT EXIST THEN THE CONNECTION MUST BE MADE TO THE GUTTER BY REMOVING THE ADJCENT KERB SECTION ONLY.
- CONNECT TO A DISH CROSSING (WHERE KERB AND GUTTER DOES NOT EXIST). IF A DISH CROSSING DOES NOT EXIST, THEN IT MUST BE CONSTRUCTED IN ACCORDANCE WITH DETAILS CONTAINED IN COUNCIL'S ISSUED FOOTPATH CROSSING LEVELS.

IT SHOULD BE NOTED THAT THESE TYPES OF SAPS ARE CONSIDERED TO BE APPLICABLE FOR THE MAJORITY OF ACTIVITIES HOWEVER SOME SITES MAY REQUIRE SPECIAL CONSIDERATION.

SHAKER PAD (CATTLE GRID)

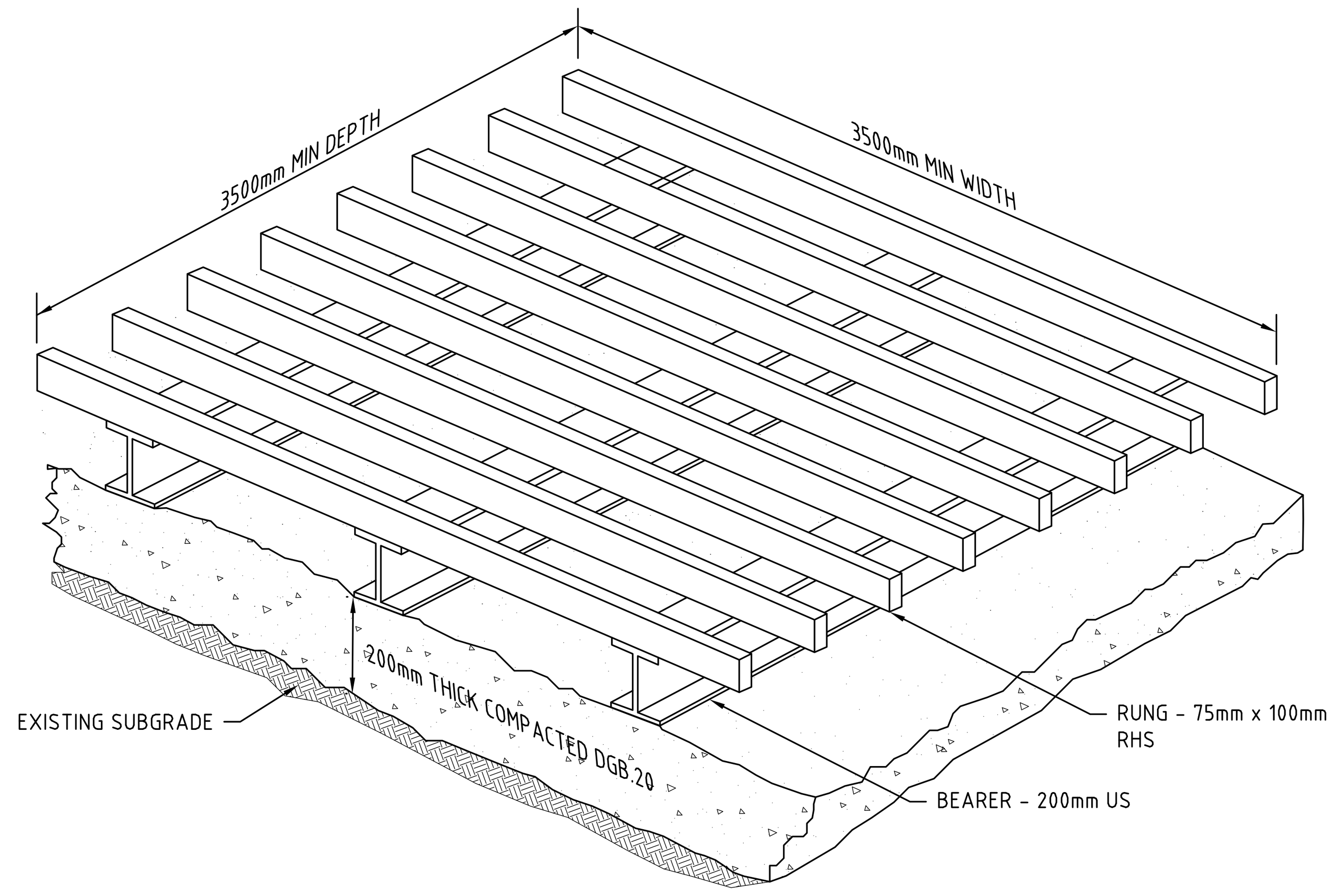
A CORRECTLY DESIGNED AND INSTALLED SHAKER PAD WILL ASSIST IN PREVENTING SEDIMENT TRANSFERE FROM A SITE. ANY STABILISED ACCESS POINT (SAP) CAN BE DESIGNED WITH A SHAKER PAD (COMPULSOPRY IN TYPE II SAP'S)

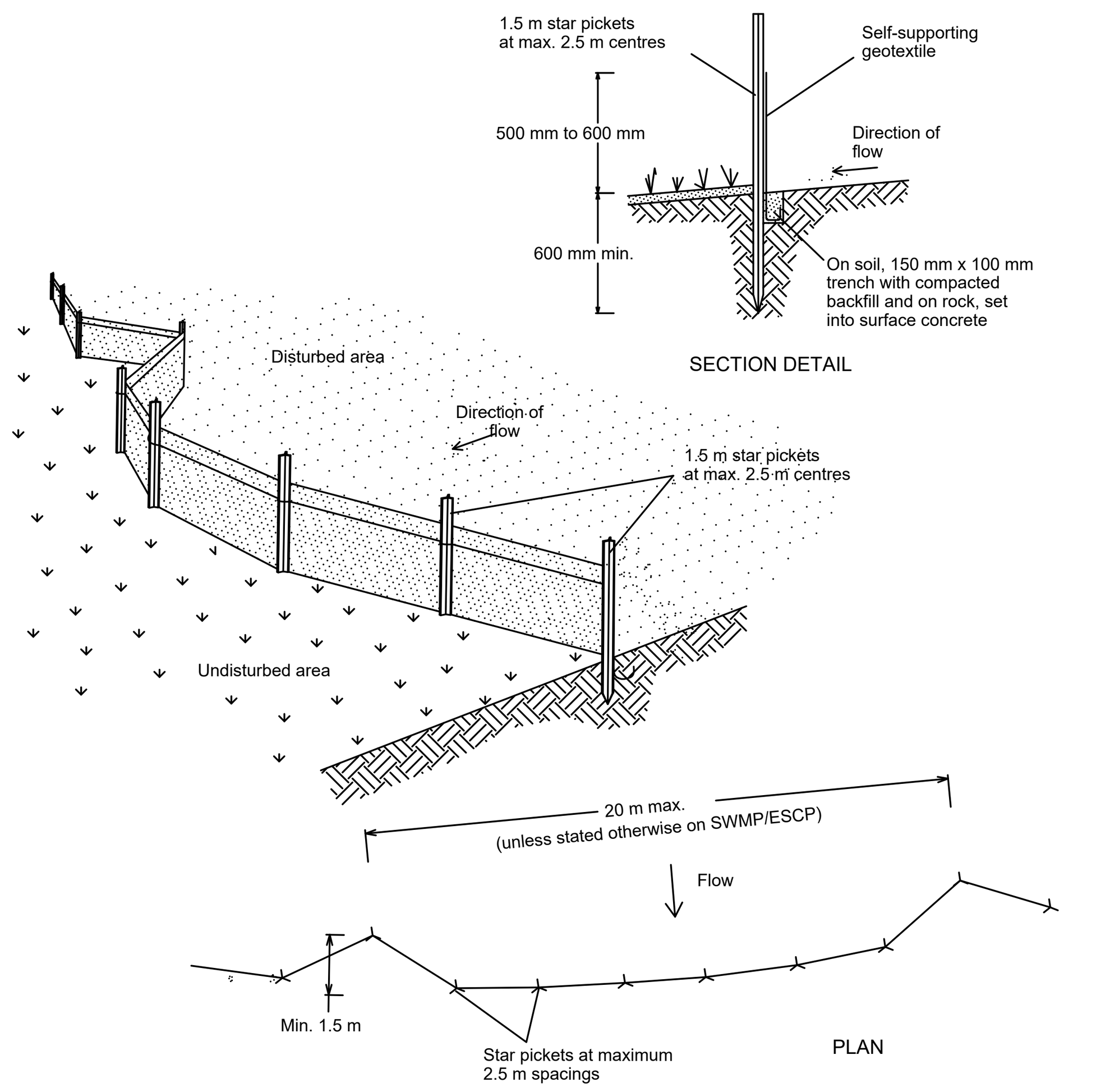
SHAKER PADS CAN BE DESIGNED AND CONSTRUCTED TO ENABLE RE-USE ON FUTURE PROJECTS.

THE SHAKER PAD:

- MUST BE DESIGNED AND CERTIFIED BY A PRACTICING STRUCTURAL ENGINEER. THE CERTIFIED DESIGN SHOULD BE SUBMITTED WITH THE RELEVENT APPLICATION.
- CAN BE CONSTRUCTED FROM ANY SUITABLE MATERIAL.
- MUST BE LOCATED ON A SUITABLY PREPARED AND COMPACTED SUB-GRADE/BASE MATERIAL.
- MUST BE SITUATED SUCH THAT THE RUNGS OF THE SHAKER PAD ARE LEVEL WITH THE ADJOINING NATURAL SURFACE.
- MUST BE A MINIMUM OF 3.5m IN LENGTH.
- MUST BE A MINIMUN OF 3.5m IN WIDTH.
- MUST HAVE CLEAR SPACING BETWEEN RUNGS OF 200 - 250mm.
- RUNGS MUST HAVE A MAXIMUM WIDTH (BEARING AREA) OF 75mm.
- MUST HAVE A MINIMUM CLEAR DEPTH OF 300mm IE FORM THE ROP OF THE RUNG TO THE FINISHED SUB-GRADE/BASE LEVEL.

THE SHAKER PAD MUST BE PROVIDED WITH SUITABLE BARRIERS AT THE SIDES TO ENSURE THAT ALL TYERS OF VEHICLES LEAVING THE SITE TRAVERSE THE DEVICE.

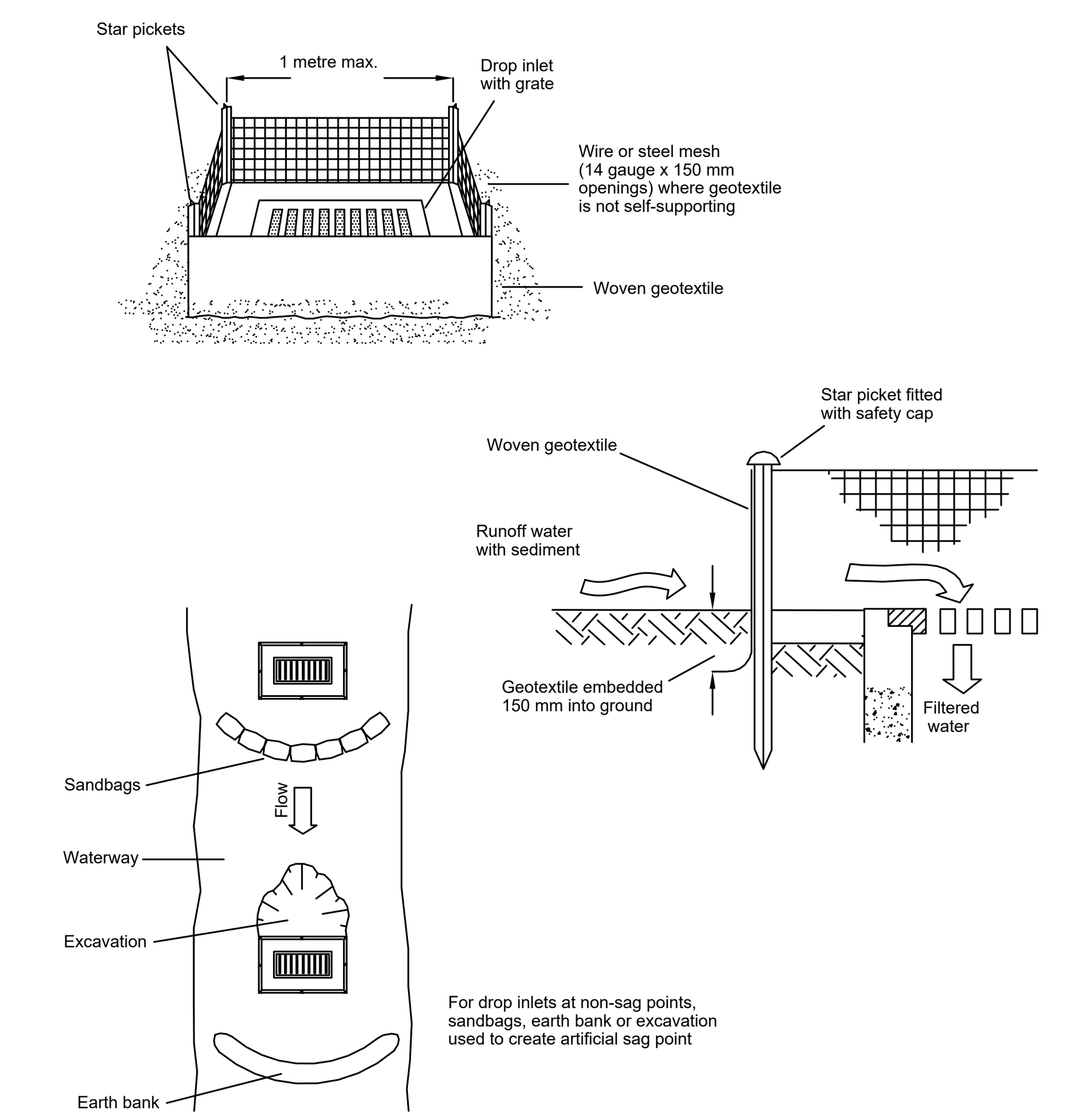




Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

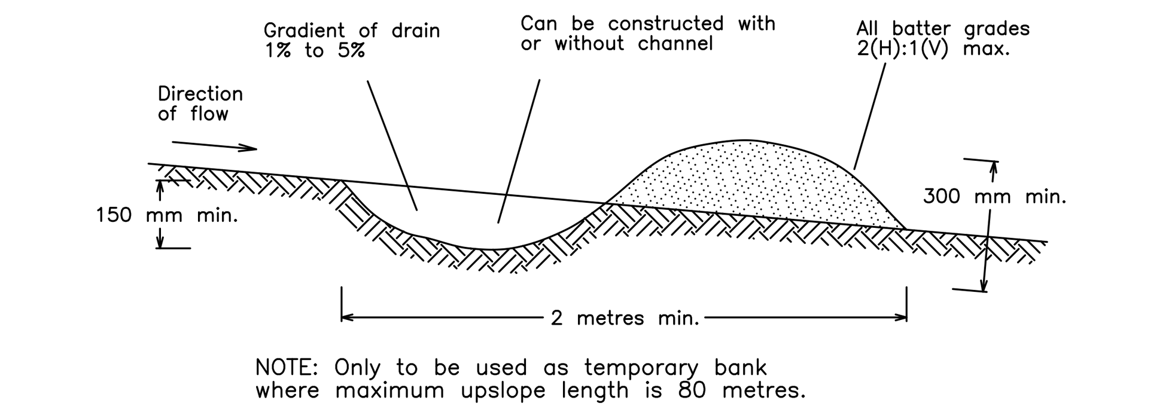
SEDIMENT FENCE SD 6-8



Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Follow Standard Drawing 6-7 and Standard Drawing 6-8 for installation procedures for the straw bales or geofabric. Reduce the picket spacing to 1 metre centres.
3. In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
4. Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

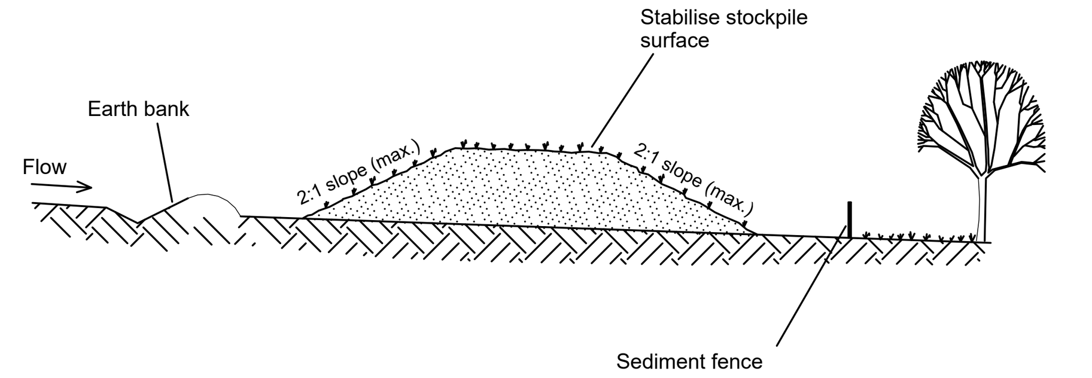
GEOTEXTILE INLET FILTER SD 6-12



Construction Notes

1. Build with gradients between 1 percent and 5 percent.
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities that could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V shaped.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction.

EARTH BANK (LOW FLOW) SD 5-5



Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES SD 4-1

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE

GRID: --- DATUM: --- PROJECT MANAGER: TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
1111-1141 ELIZABETH DRIVE, CECIL PARK, NSW-2573
LOT 2 SECTION 4 DP 2954

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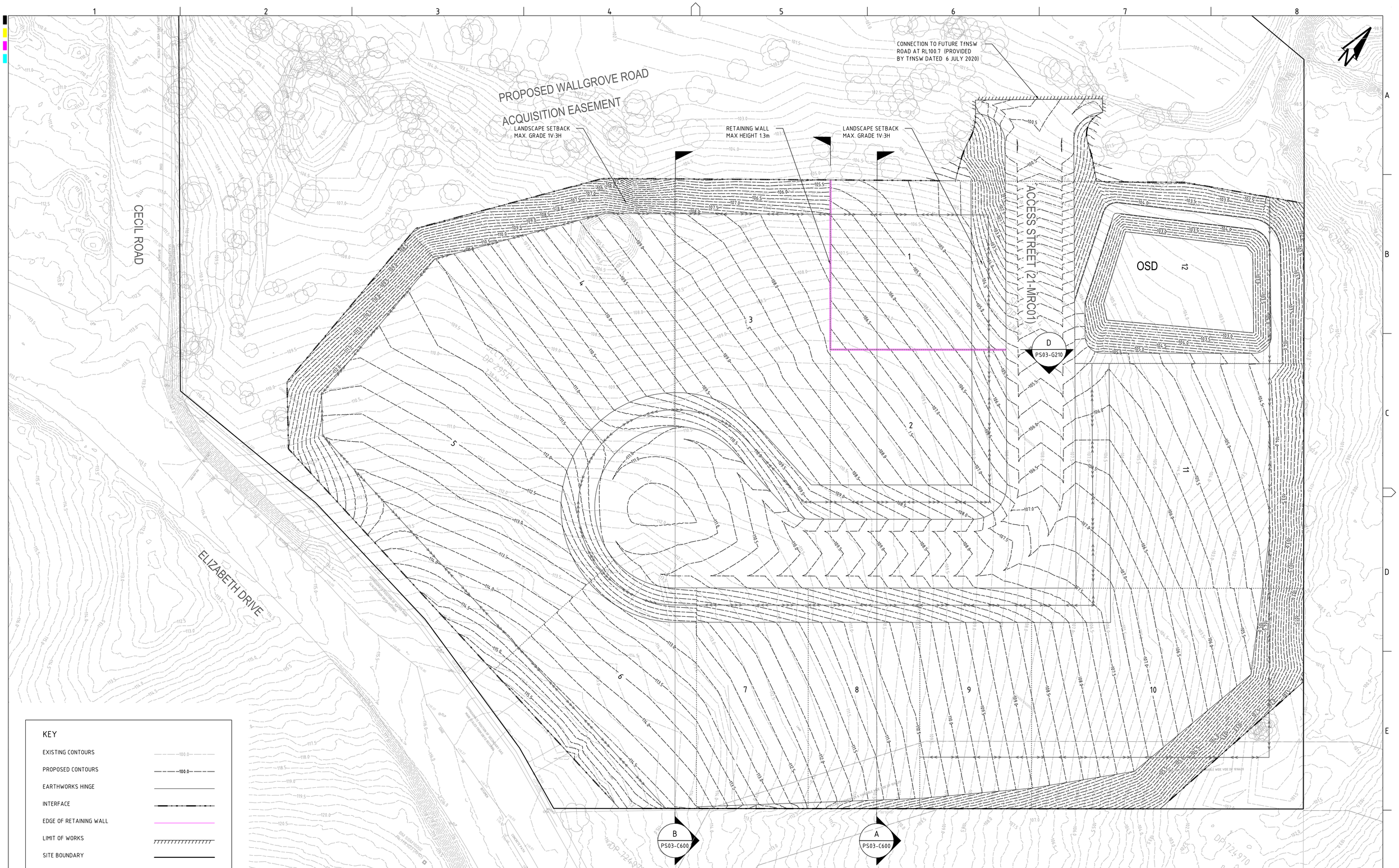
DRAWING TITLE
SEDIMENT & EROSION CONTROL DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-B310	A



KEY

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EARTHWORKS HINGE
- INTERFACE
- EDGE OF RETAINING WALL
- LIMIT OF WORKS
- SITE BOUNDARY

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
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A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
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DRAWING TITLE
EARTHWORKS GRADING PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-C100	B

DRAWING ID: P1706121-PS03-R02-C100

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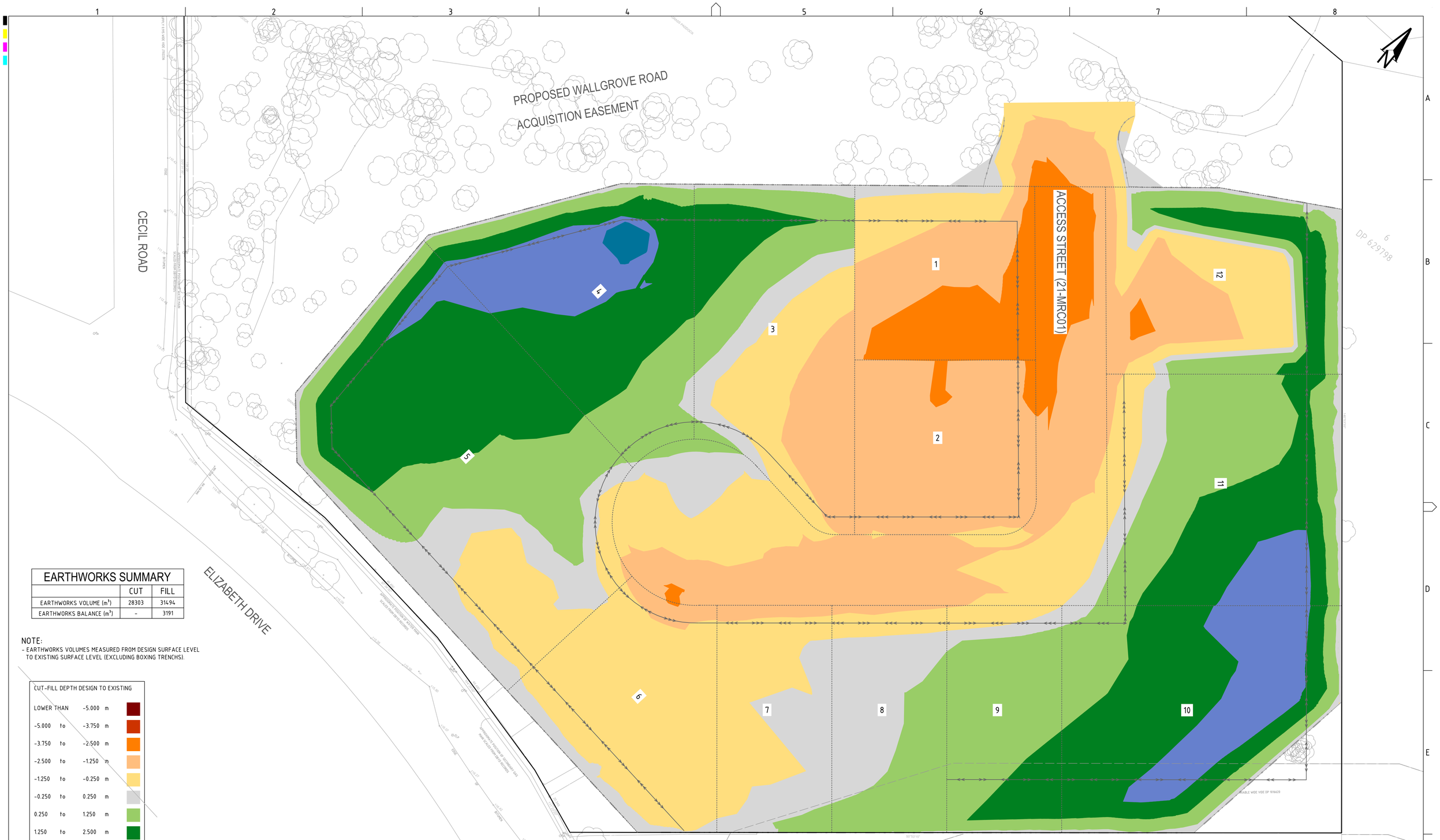
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



EARTHWORKS SUMMARY

	CUT	FILL
EARTHWORKS VOLUME (m^3)	28303	31494
EARTHWORKS BALANCE (m^3)	-	3191

NOTE:
- EARTHWORKS VOLUMES MEASURED FROM DESIGN SURFACE LEVEL TO EXISTING SURFACE LEVEL (EXCLUDING BOXING TRENCHS).

CUT-FILL DEPTH DESIGN TO EXISTING

LOWER THAN	-5.000	m	
-5.000	to -3.750	m	
-3.750	to -2.500	m	
-2.500	to -1.250	m	
-1.250	to -0.250	m	
-0.250	to 0.250	m	
0.250	to 1.250	m	
1.250	to 2.500	m	
2.500	to 3.750	m	
3.750	to 5.000	m	
HIGHER THAN	5.000	m	

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SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
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DRAWING TITLE
EARTHWORKS CUT-FILL PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-C500	B

DRAWING ID: P1706121-PS03-R02-C500

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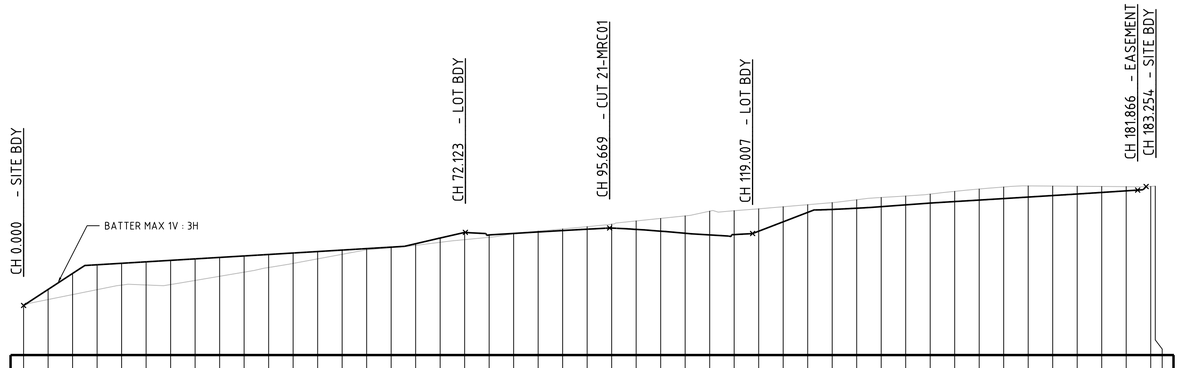
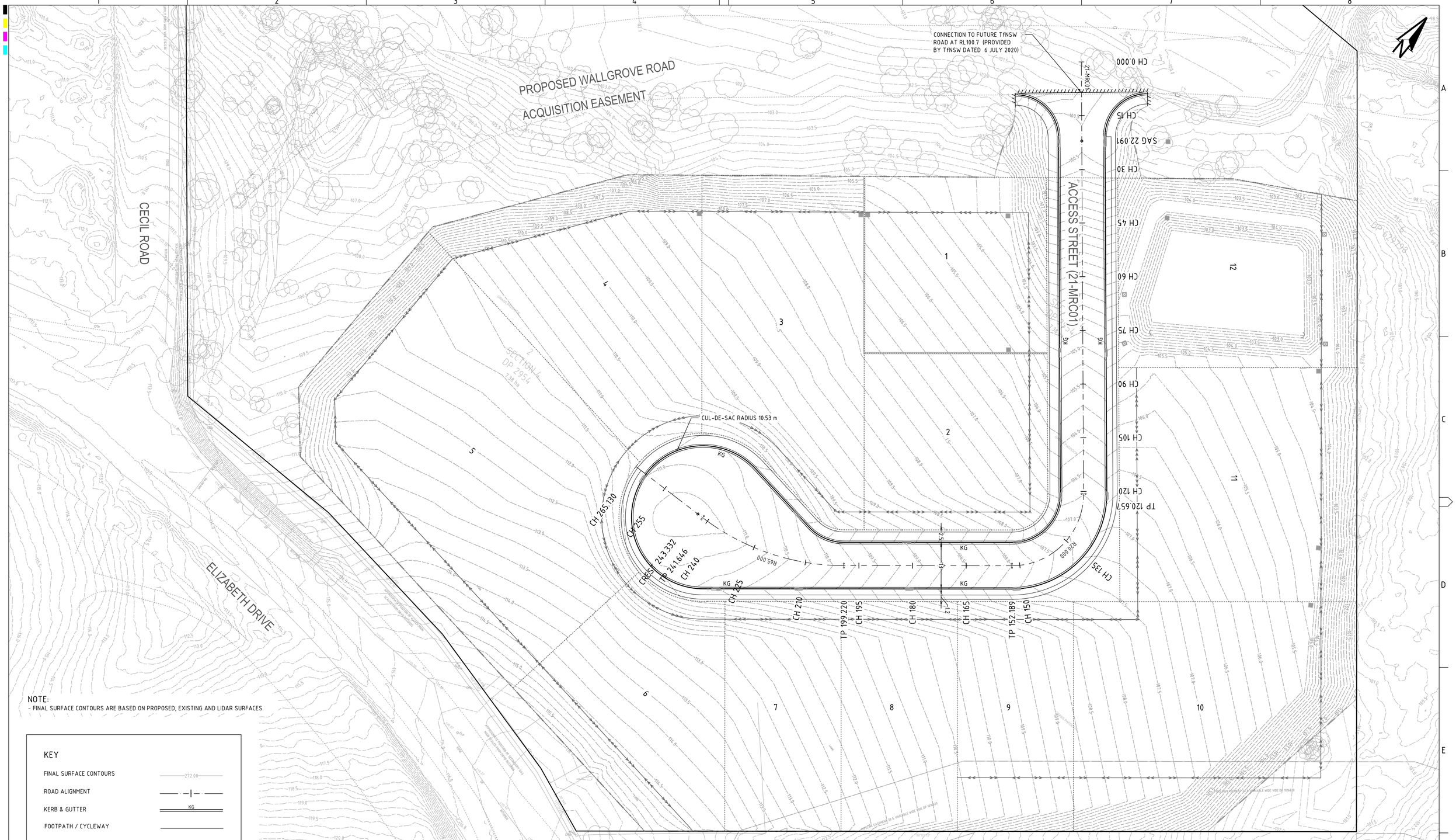
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



DATUM RL 101.000

| | | |



NOTE:
- FINAL SURFACE CONTOURS ARE BASED ON PROPOSED, EXISTING AND LIDAR SURFACES.

KEY

- FINAL SURFACE CONTOURS — 272.00
- ROAD ALIGNMENT
- KERB & GUTTER — KG
- FOOTPATH / CYCLEWAY
- LIMIT OF WORKS
- SITE BOUNDARY
- FUTURE TfNSW ROAD

DEVELOPMENT APPLICATION

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A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
0 5 10 15 20 25 30 35 40 45 50 METRES
A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
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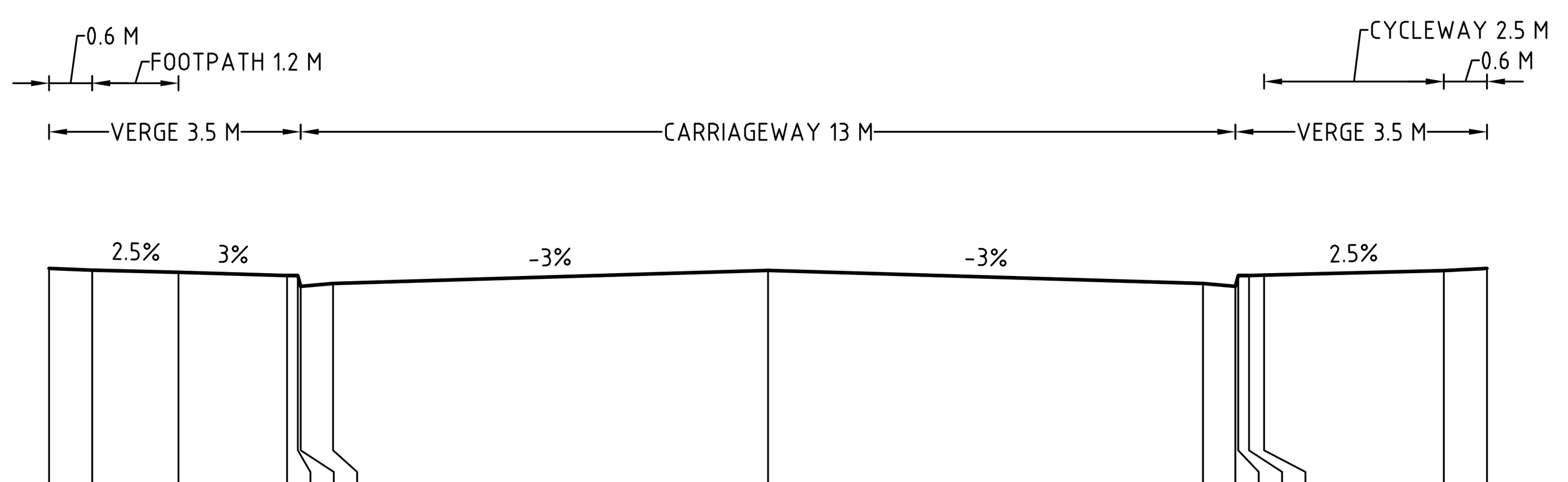
DRAWING TITLE
ROADWORKS PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-D100	B

DRAWING ID: P1706121-PS03-R02-D100

PRINTED: --- USER: RHILMORIZHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



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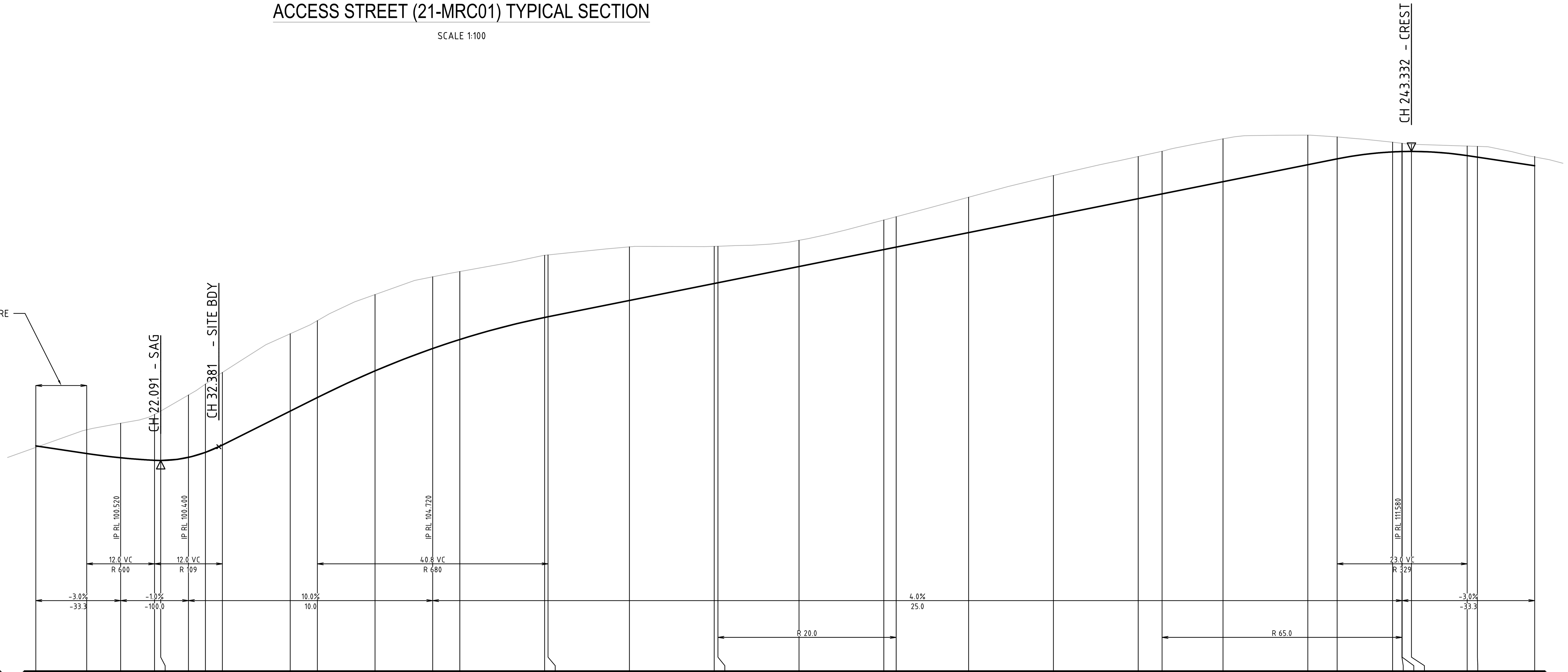
OFFSET	-10.000	-9.400	-8.200	-6.690	-6.540	-6.500	-6.050	0.000	6.050	6.500	6.540	6.690	6.900	9.400	10.000

ACCESS STREET (21-MRC01) TYPICAL SECTION

SCALE 1:100



VERTICAL CURVE LENGTH (m)
VERTICAL CURVE RADIUS (m)
VERTICAL GRADE (%)
VERTICAL GRADE (1 IN ...)
HORIZONTAL CURVE RADIUS (m)

12.0 VC R 600; 12.0 VC R 109; 40.8 VC R 680; 23.0 VC R 329
-3.0% -33.3; -1.0% -100.0; 10.0% 10.0; 4.0% 25.0; -3.0% -33.3
R 20.0; R 65.0

DATUM RL 93.000

CHAINAGE	DESIGN SURFACE LEVELS	EXISTING SURFACE LEVELS	CUT / FILL DEPTH
0.000	100.970	100.917	0.054
9.000	100.700	101.541	-0.840
15.000	100.550	101.771	-1.221
21.000	100.460	102.083	-1.623
22.091	100.455	102.202	-1.747
27.000	100.565	102.769	-2.204
30.000	100.742	103.156	-2.414
33.000	101.000	103.567	-2.566
45.000	102.200	104.935	-2.735
49.801	102.680	105.398	-2.718
60.000	103.624	106.321	-2.697
70.201	104.414	106.949	-2.535
75.000	104.733	107.135	-2.402
90.000	105.512	107.710	-2.198
90.601	105.536	107.722	-2.186
105.000	106.112	108.008	-1.896
120.000	106.712	108.025	-1.313
120.657	106.739	108.028	-1.289
135.000	107.312	108.237	-0.924
150.000	107.912	108.957	-1.045
152.189	108.000	109.073	-1.073
165.000	108.512	109.763	-1.250
180.000	109.112	110.530	-1.418
195.000	109.712	111.202	-1.490
199.220	109.881	111.387	-1.506
210.000	110.312	111.828	-1.516
225.000	110.912	111.958	-1.046
230.189	111.120	111.895	-0.775
240.000	111.366	111.709	-0.343
241.646	111.379	111.670	-0.291
241.689	111.379	111.669	-0.290
243.332	111.383	111.637	-0.254
253.189	111.235	111.572	-0.337
255.000	111.181	111.561	-0.380
265.130	110.877	111.186	-0.309

ACCESS STREET (21-MRC01) LONG. SECTION

SCALE: HORIZONTAL - 1:500
VERTICAL - 1:100

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
A1 (A3) 1:500 (1:1,000) METRES
A1 (A3) 1:100 (1:200) METRES

GRID	DATUM	PROJECT MANAGER	CLIENT
MGA	mAHD	TH	AE DESIGN PARTNERSHIP

DISCLAIMER & COPYRIGHT

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
1111-1141 ELIZABETH DRIVE, CECIL PARK, NSW-2573
LOT 2 SECTION 4 DP 2954

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DRAWING TITLE
ACCESS STREET (21-MRC01) LONGITUDINAL SECTION & TYPICAL SECTION

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-D200	A

DRAWING ID: P1706121-PS03-R02-D200

A1 / A3 LANDSCAPE (A1LC_v02 0.01)

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/08/2020	JS	CG	SA	TH
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE: A1 (A3) 1:500 (1:1,000) — 0 5 10 15 20 25 30 35 40 45 50 METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE: PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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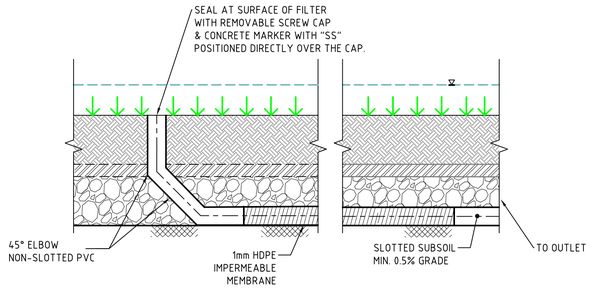
DRAWING TITLE: DRAINAGE PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-E100	B

DRAWING ID: P1706121-PS03-R02-E100

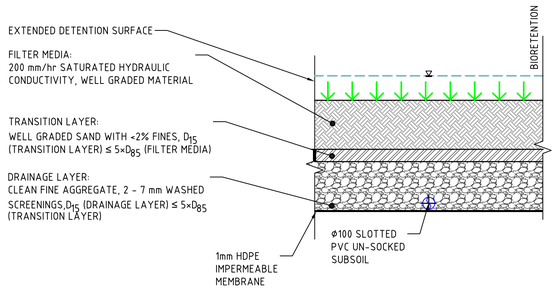
A1 / A3 LANDSCAPE (A1LC_v02.0.01)

PRINTED: ---- - USER: RKOLAHDOOZHA



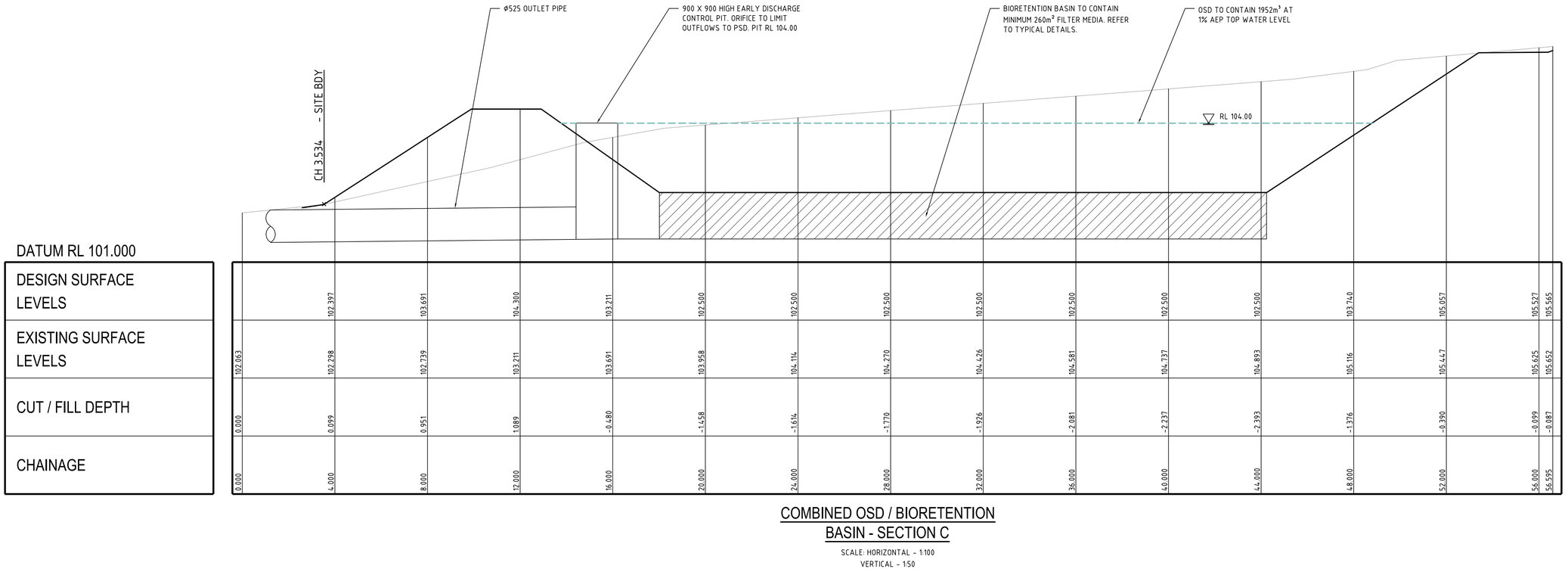
TYPICAL BIORETENTION SECTION

NOT TO SCALE



TYPICAL BIORETENTION DETAIL

NOT TO SCALE



COMBINED OSD / BIORETENTION BASIN - SECTION C

SCALE: HORIZONTAL - 1:100
VERTICAL - 1:50

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
A1 (A3) 1:100 (1:200) 0 1 2 3 4 5 6 7 8 9 10 METRES
A1 (A3) 1:50 (1:100) 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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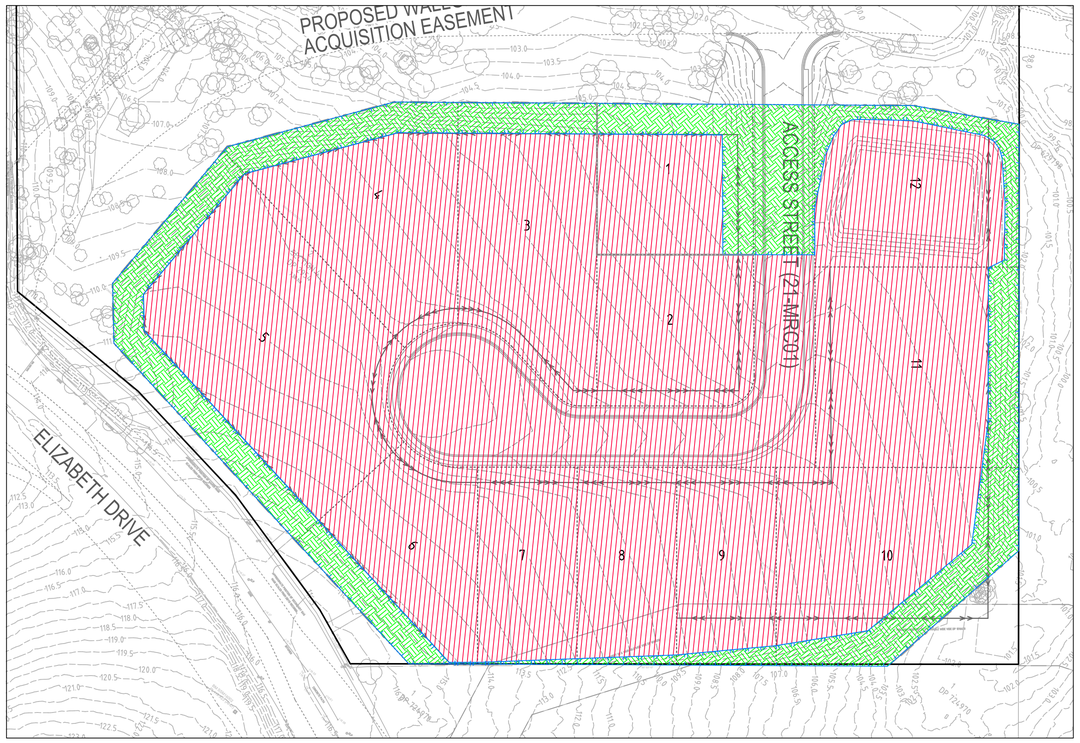
DRAWING TITLE
DRAINAGE DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-E200	A

DRAWING ID: P1706121-PS03-R02-E200

PRINTED: --- USER: RYAN.HARGOTHA
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



POST-DEVELOPMENT DRAINS CATCHMENT PLAN

SCALE 1:1000

KEY	CATCHMENT	AREA (ha)
	OSD	3.83
	BYPASS	0.82
	TOTAL AREA	4.65

OSD CALCULATIONS - SIMPLIFIED METHOD (FAIRFIELD STORMWATER MANAGEMENT POLICY)

$V = 4.09 \times A/100$

V = VOLUME (m^3)

A = DEVELOPMENT SITE AND OSD CATCHMENT (m^2)

DEVELOPMENT SITE AND OSD CATCHMENT:

AREA DRAINING TO OSD = 38300 m^2

AREA BYPASSING OSD = 8200 m^2

ADDITIONAL AREA TO BE CONSIDERED (15%) TO OFFSET BYPASS

OFFSET AREA = 8200×1.15

$= 9430\ m^2$

$A = 38300 + 9430$

$= 47730\ m^2$

$V = 4.09 \times (47730)/100$

$= 1952\ m^3$

MINIMUM REQUIRE OSD STORAGE = 1952 m^3

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/08/2020**	**JS**	**CG**	**SA**	**TH**
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
0 10 20 30 40 50 60 70 80 90 100 METRES
A1 (A3) 1:1,000 (1:2,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

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All measurements in millimetres unless otherwise specified.

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PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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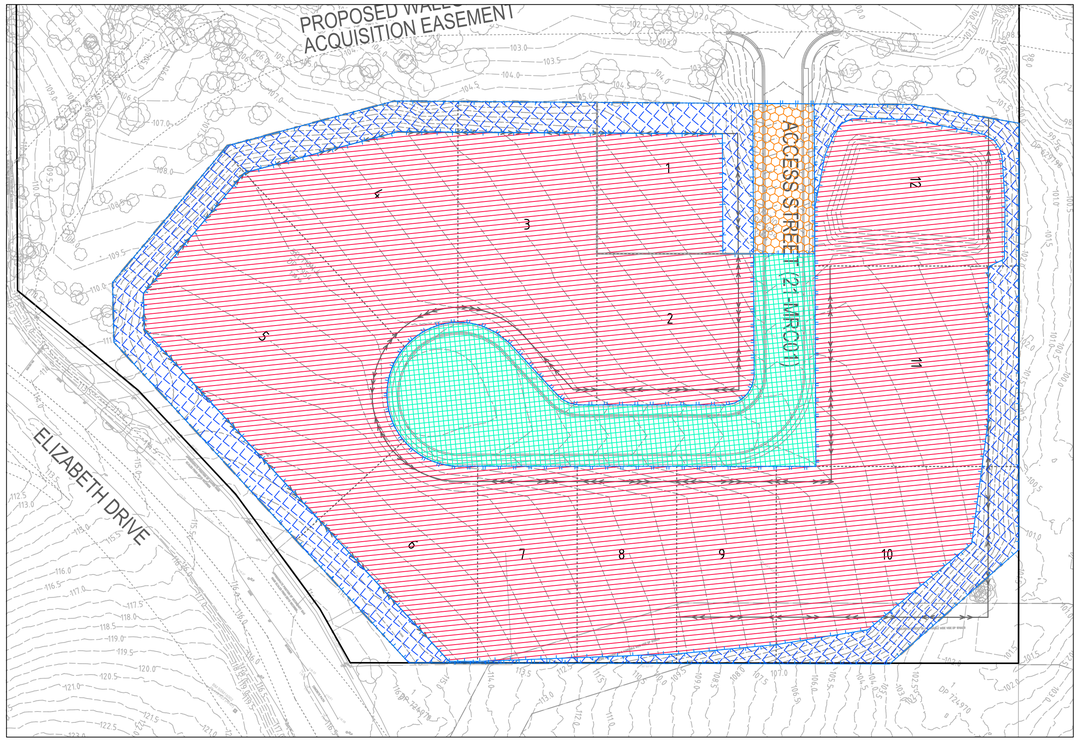
DRAWING TITLE
OSD CATCHMENT PLAN, MODEL AND RESULTS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-E600	B

DRAWING ID: P1706121-PS03-R02-E600

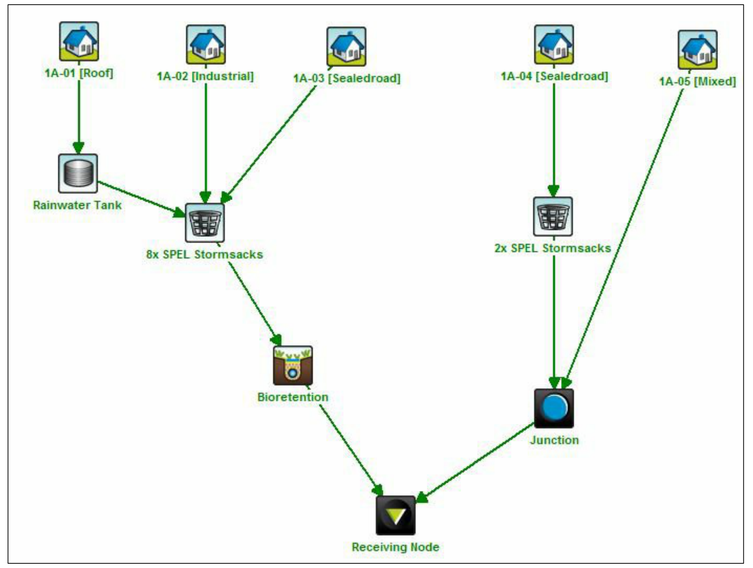
PRINTED: --- USER: RHILLMOOTHA

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

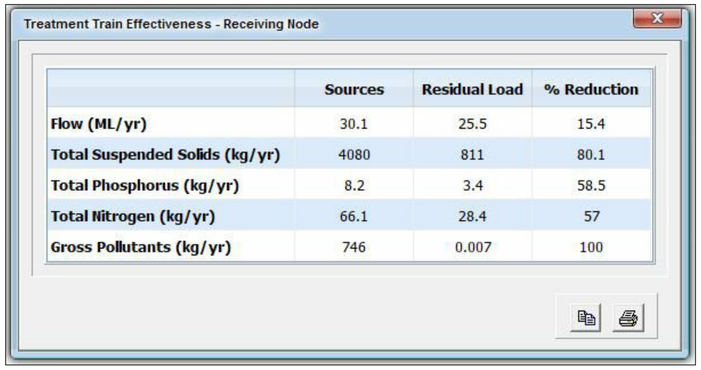


POST-DEVELOPMENT DRAINS CATCHMENT PLAN

SCALE 1:1000



POST-DEVELOPMENT MUSIC MODEL LAYOUT
(P1706121MUS01V03)


Treatment Train Effectiveness - Receiving Node

	Sources	Residual Load	% Reduction
Flow (ML/yr)	30.1	25.5	15.4
Total Suspended Solids (kg/yr)	4080	811	80.1
Total Phosphorus (kg/yr)	8.2	3.4	58.5
Total Nitrogen (kg/yr)	66.1	28.4	57
Gross Pollutants (kg/yr)	746	0.007	100

POST-DEVELOPMENT MUSIC MODEL LAYOUT
(P1706121MUS01V03)

KEY	MUSIC NODE		AREA (ha)	% PAVED
	1A-01		1.68	100%
	1A-02		1.68	100%
	1A-03		0.48	95%
	1A-04		0.1	95%
	1A-05		0.72	0%
		TOTAL AREA	4.65	= 100% OF TOTAL AREA
		TOTAL IMPERVIOUS AREA	3.9	= %84 OF TOTAL AREA
		TOTAL PERVIOUS AREA	0.75	= %16 OF TOTAL AREA

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENTS	14/08/2020	JS	CG	SA	TH
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
0 10 20 30 40 50 60 70 80 90 100 METRES
A1 (A3) 1:1,000 (1:2,000)

GRID: MGA | DATUM: mAHD | PROJECT MANAGER: TH

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
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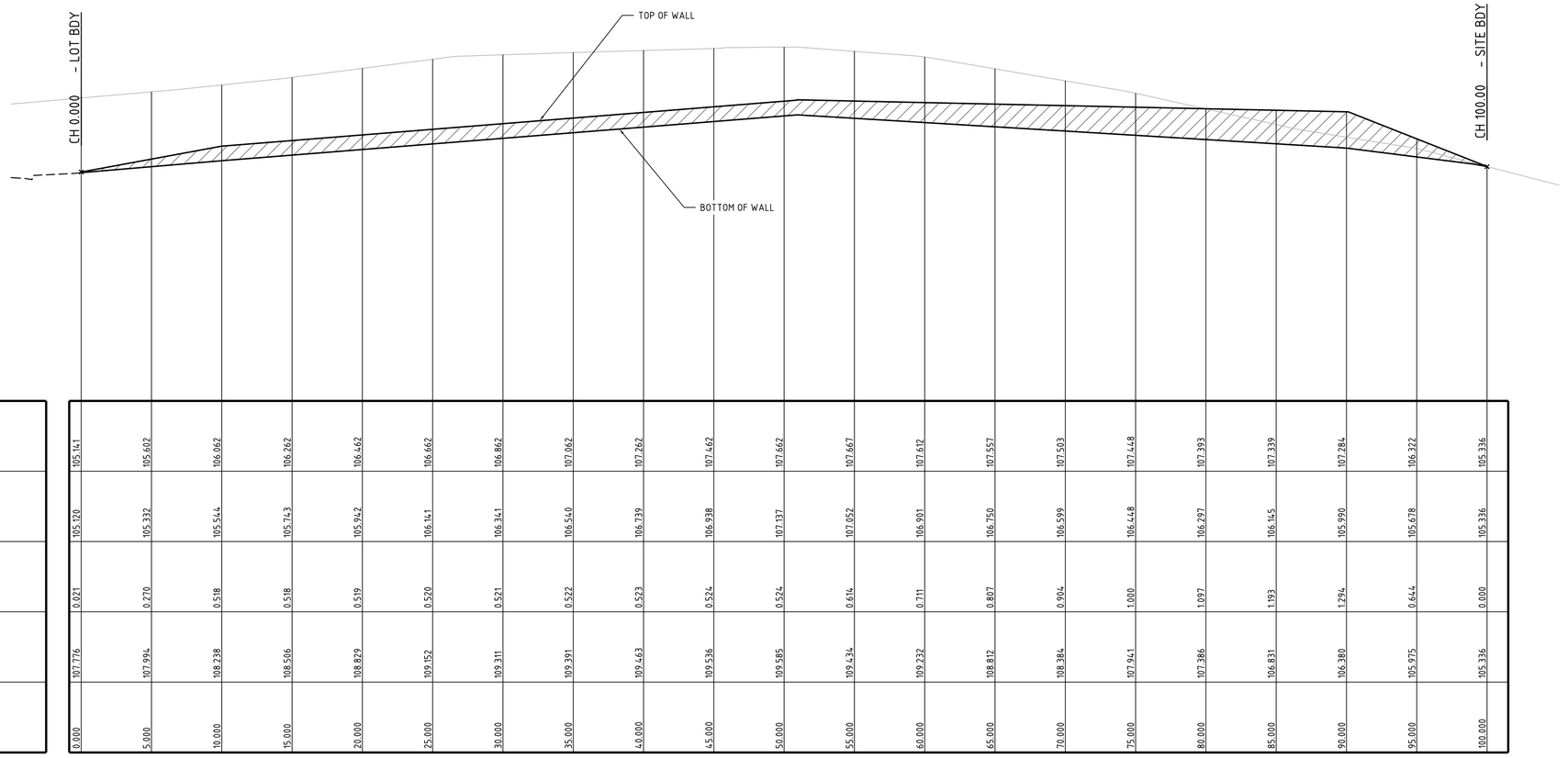
DRAWING TITLE
WATER QUALITY CATCHMENT PLAN, MODEL AND RESULTS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-E700	B

DRAWING ID: P1706121-PS03-R02-E700



DATUM RL 97.000

TOP OF WALL LEVELS	105.141	105.602	106.062	106.262	106.462	106.662	106.862	107.062	107.262	107.462	107.662	107.667	107.612	107.557	107.503	107.448	107.393	107.339	107.284	106.322	105.336
BOTTOM OF WALL LEVELS	105.120	105.332	105.544	105.743	105.942	106.141	106.341	106.540	106.739	106.938	107.137	107.052	106.901	106.750	106.599	106.448	106.297	106.145	105.990	105.678	105.336
WALL HEIGHT	0.021	0.270	0.518	0.518	0.519	0.520	0.521	0.522	0.523	0.524	0.524	0.614	0.711	0.807	0.904	1.000	1.097	1.193	1.294	0.644	0.000
EXISTING SURFACE LEVELS	107.776	107.994	108.238	108.506	108.829	109.152	109.311	109.391	109.463	109.536	109.585	109.434	109.232	108.812	108.384	107.941	107.386	106.831	106.380	105.975	105.336
CHAINAGE	0.000	5.000	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	55.000	60.000	65.000	70.000	75.000	80.000	85.000	90.000	95.000	100.000

RETAINING WALL SECTION D

SCALE: HORIZONTAL - 1:200
VERTICAL - 1:100

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE
A1 (A3) 1:200 (1:400) 0 2 4 6 8 10 12 14 16 18 20 METRES
A1 (A3) 1:100 (1:200) 0 1 2 3 4 5 6 7 8 9 10 METRES

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT
AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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LOT 2 SECTION 4 DP 2954

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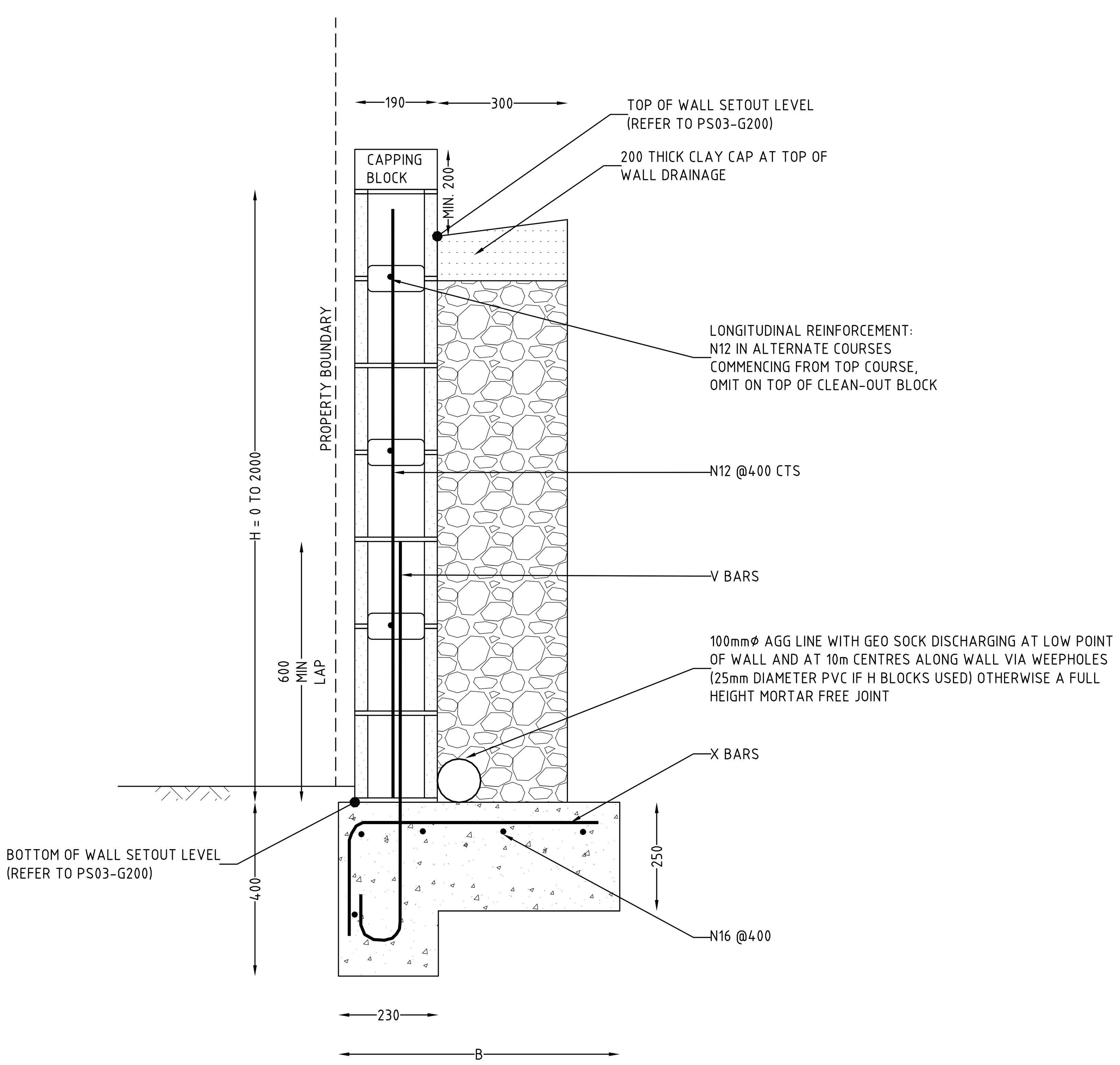
DRAWING TITLE
RETAINING WALL SECTION D

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-G210	A

DRAWING ID: P1706121-PS03-R02-G210

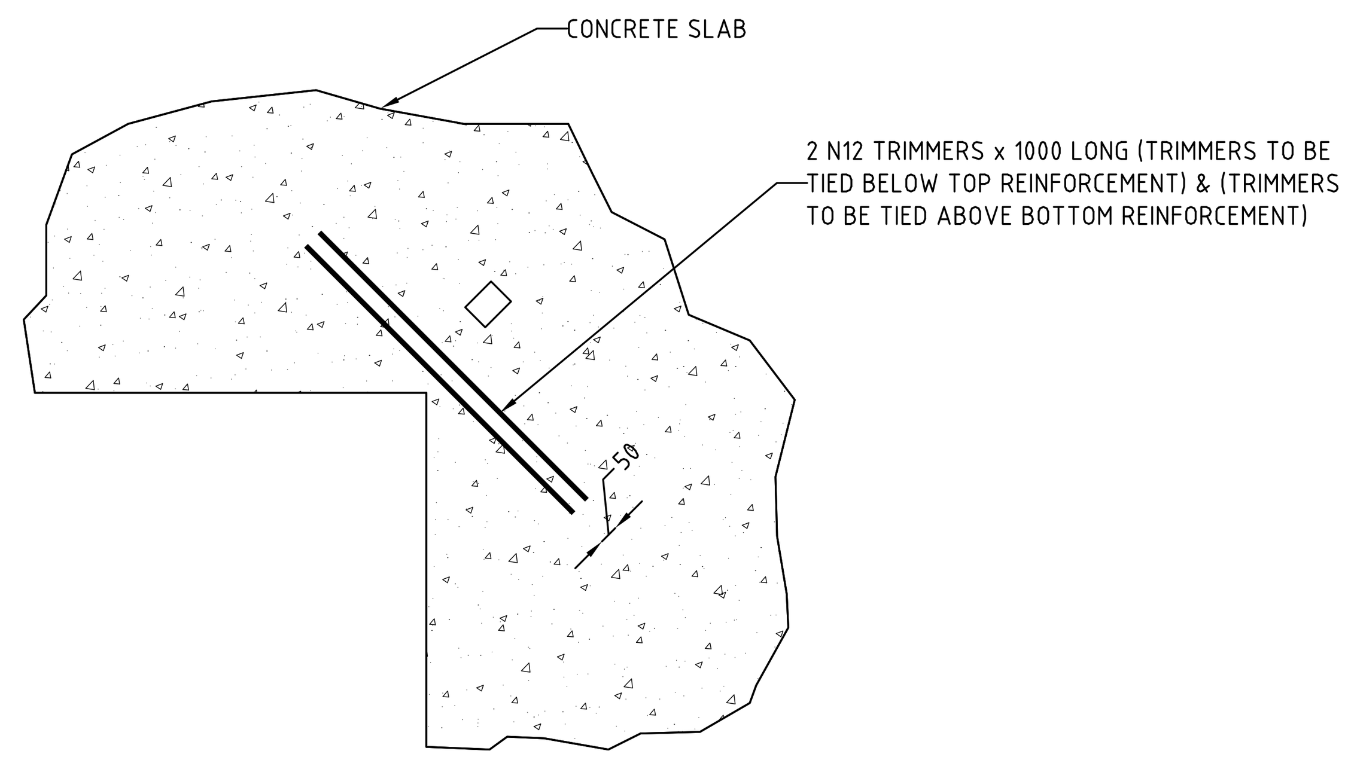
PRINTED ---- USER: PAUL.MURDOCH

A1 / A3 LANDSCAPE (A1LC_v02.0.01)



REINFORCED AND CORE FILLED RETAINING WALLS WITH BASE TYPE 1

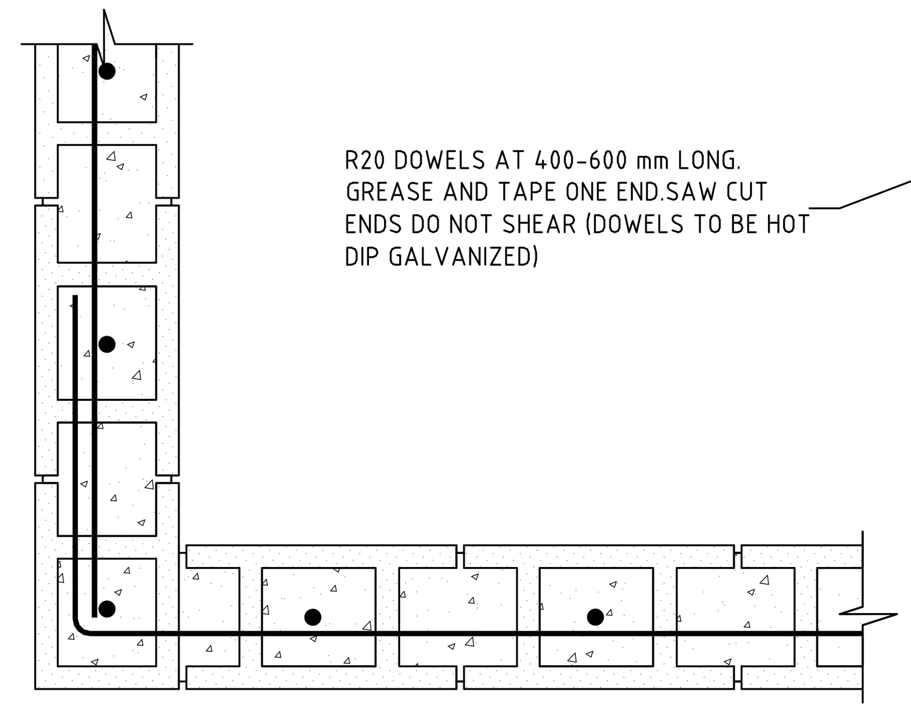
NOT TO SCALE



TYPICAL TRIMMER DETAIL

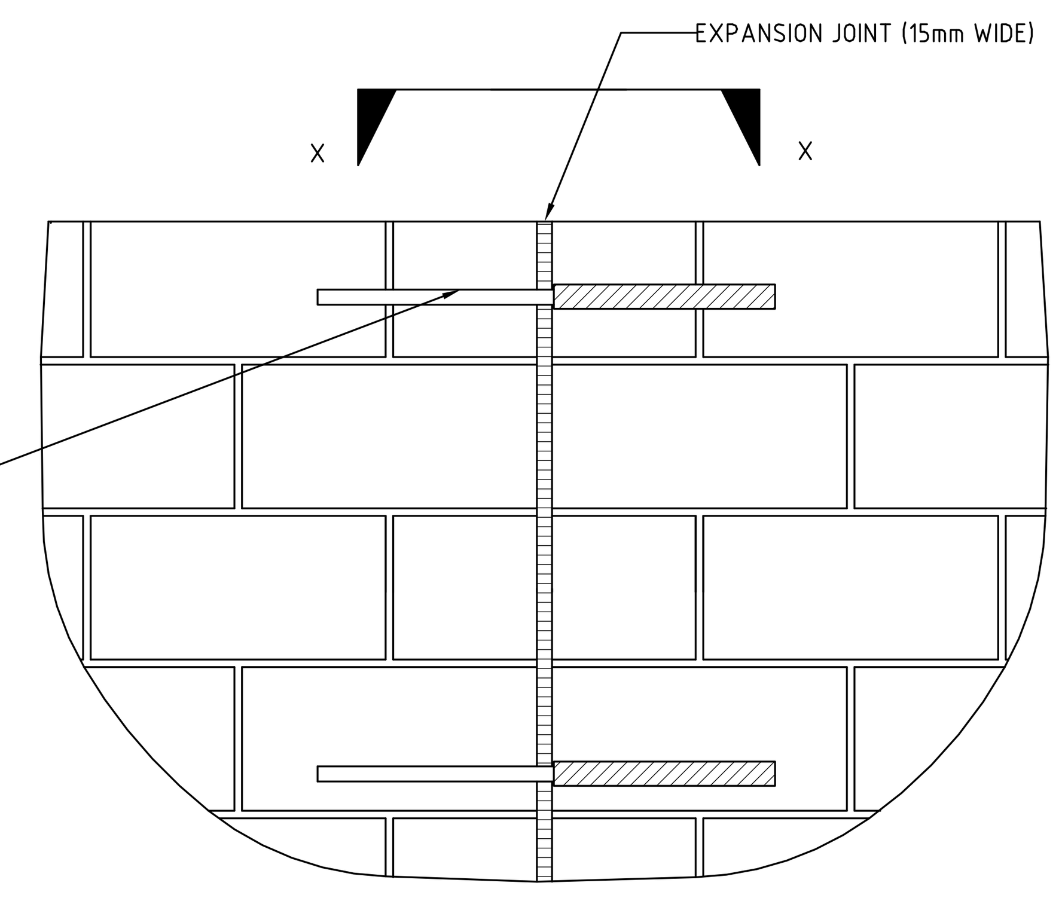
NOT TO SCALE

REINFORCED & CORE FILLED RETAINING WALLS WITH BASE TYPE 1				
WALL HEIGHT		REINFORCEMENTS	BASE DIMENSIONS	
TOTAL HEIGHT (mm) H	HEIGHT OF BLOCKWORK 200 SERIES	X-BARS AND V-BARS	WIDTH, B (mm) WITH THE FOLLOWING BACKFILL CONDITIONS LEVEL	MAX 1 IN 4 SLOPE
800	800	N12 @ 400	800	1000
1000	1000	N12 @ 400	1000	1200
1200	1200	N12 @ 400	1100	1500
1400	1400	N12 @ 400	1300	1700
1600	1600	N16 @ 400	1400	2000
1800	1800	N16 @ 400	1600	2200
2000	2000	N16 @ 200	1700	2500



TYPICAL CORNER DETAIL

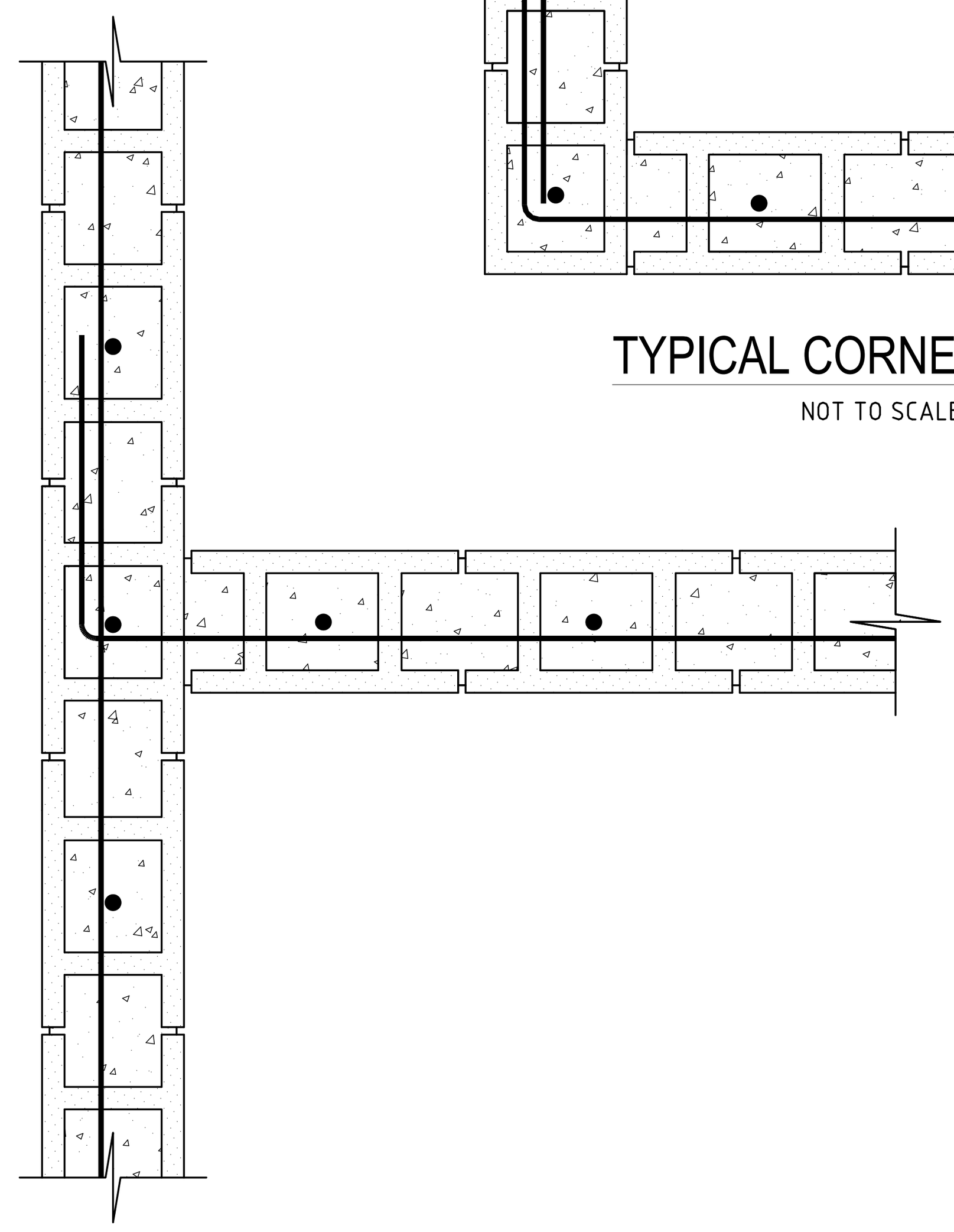
NOT TO SCALE



LOCATE JOINTS AT 6 m MAXIMUM CENTRES
OR IN ACCORDANCE WITH AS 3700

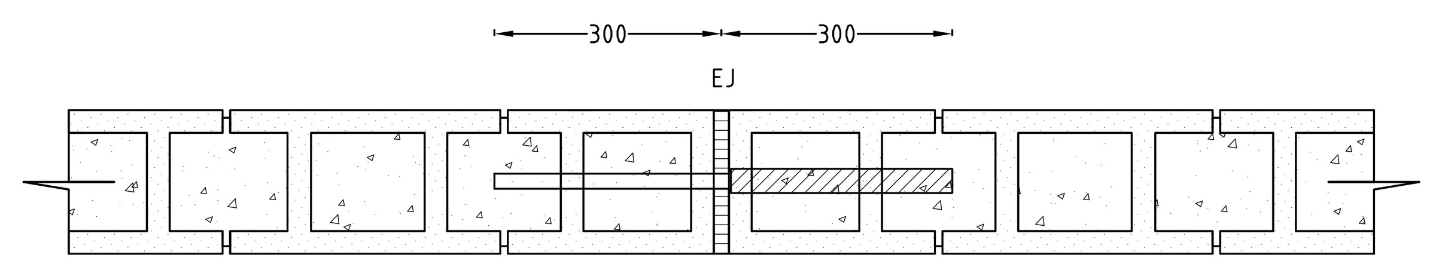
ELEVATION

NOT TO SCALE



TYPICAL 'T' INTERSECTION

NOT TO SCALE



SECTION X-X

TYPICAL EXPANSION

JOINT DETAILS

NOT TO SCALE

NOTES:

1. WALL DESIGN IS BASED ON THE BACKFILL BEING LEVEL AND WITH A MAXIMUM IMPOSED (LIVE) LOADING OF 5kPa BEHIND THE WALL. MAXIMUM SLOPE BEHIND WALL 1V: 4H (MAX).
2. ANY HIGHER LOADINGS (OR ADDITIONAL LOADINGS) PROPOSED FOR THE WALL SYSTEM NEED TO BE ASSESSED AND CERTIFIED BY THE DESIGN ENGINEER PRIOR TO APPLYING LOADS.
3. 20mm CLEAN DRAINAGE AGGREGATE FREE OF FINES TO BE PLACED BEHIND WALLS FOR ENTIRE HEIGHT OF WALL 300mm (MIN) THICKNESS AND WRAPPED WITH GEOTEXTILE (TYPE C), NOT SHOWN ON WALL DETAILS.
4. WALL BACKFILL MUST BE FREE DRAINING MATERIAL WITH A FRICTION ANGLE OF 27 DEGREES (MIN), WHICH COULD BE A TYPE A OR B SOIL IN ACCORDANCE WITH AS 4678 (2002).
5. REFER TO STRUCTURAL ENGINEERS / ARCHITECTURAL DETAILS FOR FENCING AND/OR HANDRAIL DETAILS.

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE: A1 (A3) 1:10 (1:20) — 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 METRES

GRID: MGA | DATUM: mAHD | PROJECT MANAGER: TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE
PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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DRAWING TITLE: CONCEPT RETAINING WALL DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-G220	A

DRAWING ID: P1706121-PS03-R02-G220

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

PAVEMENT DETAILS

KEY	TYPE	LAYER	THICKNESS (mm)	MATERIALS
	TYPE A	WEARING COURSE	50	PRIMER + 30mm THICK ASPHALTIC CONCRETE (AC14) LAYER + 20mm THICK ASPHALTIC CONCRETE (AC10)
		BASE	150	DGB20
		SUB-BASE	100	DGS40
	TYPE B	CONCRETE FOOTPATH	75mm CONCRETE. THICKNESS TO BE INCREASED TO 125mm AT PROPERTY ENTERANCES AND SL72 TO BE PLACED FOR THE WIDTH OF LAYBACKS.	
	TYPE C	CONCRETE CYCLEWAY	125mm CONCRETE WITH SL72 REINFORCING MESH ON 100mm OF COMPACTED ROAD BASE.	
	TYPE D	KERB RAMP	125mm CONCRETE WITH SL72 REINFORCING MESH ON 100mm OF COMPACTED ROAD BASE.	

NOTES:
- PAVEMENT DETAILS TO BE CONFIRMED AT DETAILED DESIGN STAGE.
- PAVEMENT DETAILS BASED ON ASSUMED CBR VALUE OF 15. CBR VALUE TO BE CONFIRMED AT DETAILED DESIGN STAGE.
- PAVEMENT DETAILS BASED ON FAIRFIELD CITY COUNCIL'S 'SPECIFICATION FOR ROADWORKS AND DRAINAGE ASSOCIATED WITH SUBDIVISION OR OTHER DEVELOPMENT' AND AUSTROADS 'GUIDE TO PAVEMENT TECHNOLOGY PART 2: PAVEMENT STRUCTURAL DESIGN' FIGURE 8.4.

DEVELOPMENT APPLICATION

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENTS**	**14/08/2020**	**JS**	**CG**	**SA**	**TH**
A	INITIAL RELEASE	06/08/2020	JS/GM	CG/AVG	SA	TH

SCALE: 0 5 10 15 20 25 30 35 40 45 50 METRES — A1 (A3) 1:500 (1:1,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	TH

CLIENT: AE DESIGN PARTNERSHIP

PROJECT NAME/PLANSET TITLE: PROPOSED COMMERCIAL DEVELOPMENT
CONCEPT CIVIL DESIGN
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LOT 2 SECTION 4 DP 2954

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Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: PAVEMENT PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1706121	PS03	R02	PS03-G400	B