PROJECT: HANSON CONCRETE RECYCLING FACILITY

PLANSET: CONCEPT DRAINAGE PLAN

CLIENT: HANSON CONSTRUCTION MATERIALS

LOCALITY PLAN
NOT TO SCALE

DRAWING LIST		
DWG NO.	REV	DWG TITLE
GENERAL		
PS02-A000	C	COVER SHEET
CONSTRUCTION MANAGEMENT WORKS		
PS02-B300	B	SEDIMENT & EROSION CONTROL PLAN
PS02-B310	A	SEDIMENT & EROSION CONTROL DETAILS
DRAINAGE		
PS02-E100	C	DRAINAGE PLAN - SHEET 1
PS02-E101	A	DRAINAGE PLAN - SHEET 2
PS02-E200	B	DRAINAGE DETAILS
PS02-E300	B	DRAINAGE LONGITUDINAL SECTIONS (SHEET 1)
PS02-E301	B	DRAINAGE LONGITUDINAL SECTIONS (SHEET 2)
PS02-E302	A	DRAINAGE LONGITUDINAL SECTIONS (SHEET 3)
PS02-E700	D	WATER BALANCE CATCHMENT PLAN & MODEL

LGA: BLACKTOWN CITY COUNCIL

HANSON PLACE, EASTERN CREEK

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	**MINOR AMENDMENT**	**23/07/2021**	**LL/JS**	**EZ**	**SL**	**JF**
B	MINOR AMENDMENT	19/02/2021	LL	SS/LL	SL	JF
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

SCALE

GRID: ---
DATUM: ---
PROJECT MANAGER: JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: COVER SHEET

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-A000	C

DRAWING ID: P1806739-PS02-R06-A000

KEY:

- INDICATIVE STOCKPILE
- SEDIMENT FENCE
- EARTH BANK (LOW FLOW)
- STABILISED SITE ACCESS
- INLET FILTER
- SITE BOUNDARY

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENT	23/07/2021	LL/JS	EZ	SL	JF
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

SCALE: 0 7.5 15.0 22.5 30.0 37.5 45.0 52.5 60.0 67.5 75.0 METRES
A1 (A3) 1:750 (1:1,500)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

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Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: SEDIMENT & EROSION CONTROL PLAN

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-B300	B

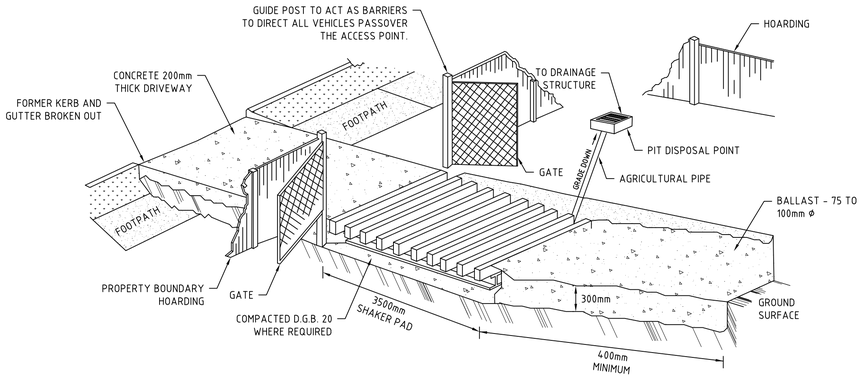
PRINTED: --- USER ISSUANCE
A1 / A3 LANDSCAPE (A1LC_v02.0.01)
DRAWING ID: P1806739-PS02-R06-B300

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)

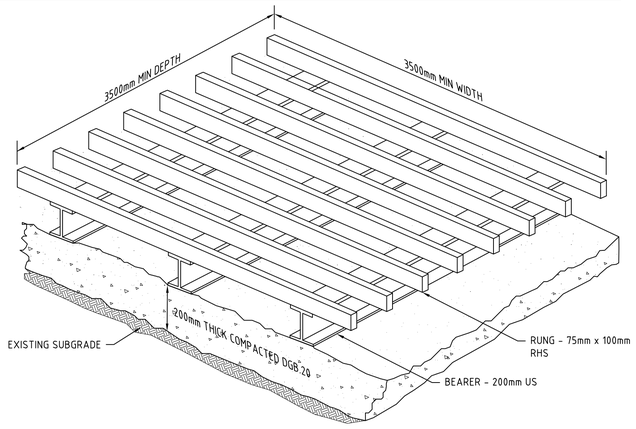
A CORRECTLY DESIGNED AND INSTALLED SHAKER PAD WILL ASSIST IN PREVENTING SEDIMENT TRANSFERE FROM A SITE. ANY STABILISED ACCESS POINT (SAP) CAN BE DESIGNED WITH A SHAKER PAD (COMPULSOPRY IN TYPE II SAP'S)

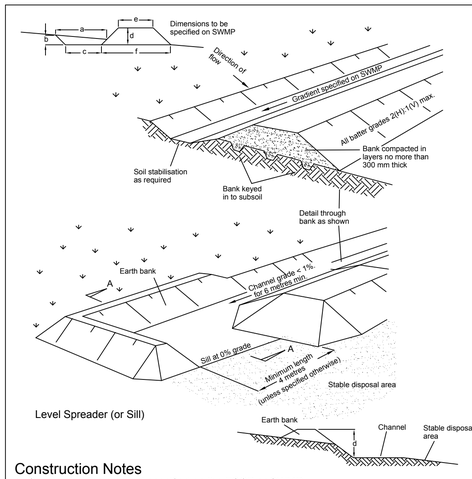
SHAKER PADS CAN BE DESIGNED AND CONSTRUCTED TO ENABLE RE-USE ON FUTURE PROJECTS.

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.





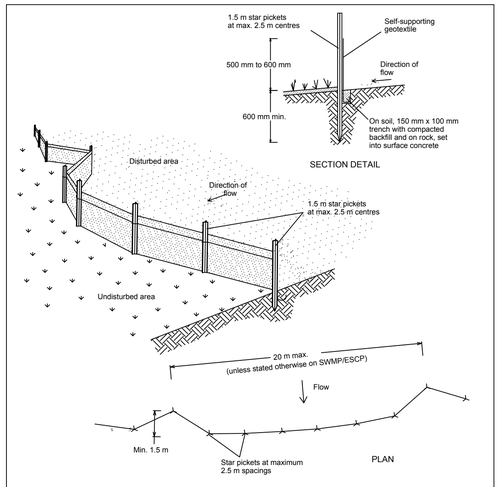
Level Spreader (or Sill)

Section AA

Construction Notes

1. Construct at the gradient specified on the ESCP or SWMP, normally between 1 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, at the dimensions shown on the SWMP.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction following Table 5.2 in Landcom (2004).
7. Where discharging to erodible lands, ensure they outlet through a properly constructed level spreader.
8. Construct the level spreader at the gradient specified on the ESCP or SWMP, normally less than 1 percent or level.
9. Where possible, ensure they discharge waters onto either stabilised or undisturbed disposal sites within the same subcatchment area from which the water originated. Approval might be required to discharge into other subcatchments.

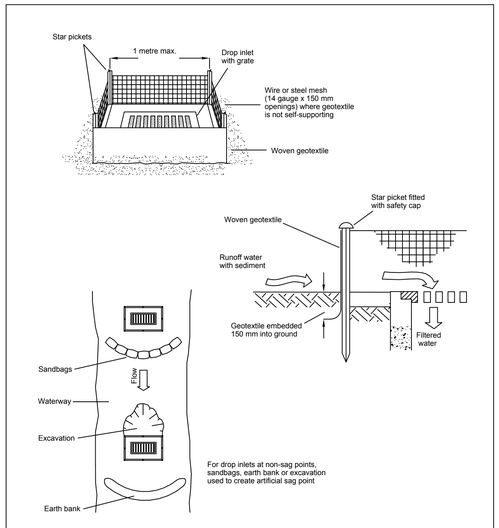
EARTH BANK (HIGH FLOWS) SD 5-6



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.

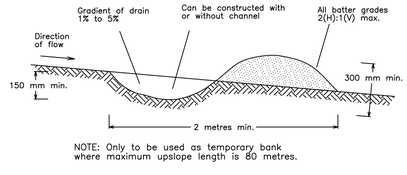
SEDIMENT FENCE SD 6-8



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

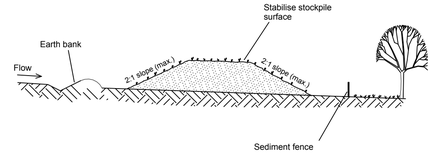


NOTE: Only to be used as temporary bank where maximum upslope length is 80 metres.

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

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

SCALE

GRID	DATUM	PROJECT MANAGER
---	---	JF

CLIENT: HANSON CONSTRUCTION MATERIALS

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All measurements in millimetres unless otherwise specified.

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PROJECT NAME/PLANSET TITLE: HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE: SEDIMENT & EROSION CONTROL DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-B310	A

DRAWING ID: P1806739-PS02-R06-B310

PRINTED ---- USER: JSUAREZ

A1 / A3 LANDSCAPE (A1LC_v02.0.01)

PROVIDE SWALE ALONG BOUNDARY TO DIVERT 1% AEP FLOWS FROM SITE TO GPT NEAR PIT 1A610-01 BEFORE DISCHARGING TO STREET.
PROPOSED TRENCH GRATE TO COLLECT & DIRECT SURFACE FLOW FROM DRIVEWAY TO PIT & PIPE SYSTEM.
PROVIDE A GPT (VORTSENTRY HS18 OR SIMILAR APPROVED BY BLACKTOWN CITY COUNCIL).
PROPOSED SWALE TYPE 2 TO DIRECT 1% AEP FLOWS FROM LOT 3 TO 1A601-01. REFER TO E200 FOR MORE DETAILS.
PROPOSED TRENCH GRATE TO COLLECT SURFACE FLOW FROM DRIVEWAY TO SWALE.
CAP AND SEAL EXISTING PIT AND RETAIN PIPE FOR FUTURE USE.
PROPOSED NEW KERB INLET PIT CONNECTING TO EXISTING PIT R01/25
PROPOSED TRENCH GRATE ALONG FRONT BOUNDARY CONNECTS TO NEW KERB INLET PIT
ENCLOSED AREA (9,490 sqm). ROOF DRAINAGE DIRECTS TO PROPOSED RAINWATER TANKS.
LIGHT VEHICLE ENTRY
SALES OFFICE
PRODUCTION OFFICE
TRUCK PARKING & BIN DEPOT
TRUCK ENTRY
TRUCK EXIT
WEIGHBRIDGE
EQUIPMENT STORAGE AREA
WASTE & STEEL BAY
MOBILE IMPACT
BRICKS 1,000T
ASPHALT 2,000T
GLASS 3,000T
1A605-01
1A605-02
1A605-03
1A605-04
1A605-05
1A605-06
1A605-07
1A606-01
1A606-02
1A606-03
1A607-01
1A609-01
1A609-02
STUB 07
STUB 08
STUB 09
STUB 10
STUB 12
STUB 13
R01/19
R15/01
R16/01
R17/01
R18/01
R19/01
R01/21
R01/22
R01/23
R01/25
P01/03
P01/04
P01/05
SWP
FOR CONTINUATION SEE DRG PS02 - E101

NOTE:
1. ALL PIT AND PIPE LOCATIONS & SIZES ARE PRELIMINARY ONLY AND ARE SUBJECTED TO CHANGE AT CC STAGE.
2. PIT SURFACE LEVELS ARE TO BE CONFIRMED AT CC STAGE.
3. EXISTING STORM WATER SYSTEM ON HANSON PLACE ARE BASED ON WAE PLAN (C431 TO C434) PROVIDED BY HANSON.
4. EXISTING CONTOURS & SURVEY HEIGHTS ARE BASED ON CIVIL PACKAGE PLAN (C010726.13) PROVIDED BY HANSON.
5. ROOF DRAINAGE AND INTERNAL DRAINAGE OF PROPOSED BUILDING ON LOT 5 TO BE PROVIDED BY OTHERS AT CC STAGE.

KEY

PROPOSED STORMWATER PIPELINE	Ø450
EXISTING STORMWATER PIPELINE	
PROPOSED SWALE	
PROPOSED SURFACE INLET PIT	
EXISTING SURFACE INLET PIT	
FLOW DIRECTION	
PIT NAME	1A501-03
SITE BOUNDARY	

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
C	**MINOR AMENDMENT**	**23/07/2021**	**LL/JS**	**EZ**	**SL**	**JF**
B	MINOR AMENDMENT	19/02/2021	LL	SS/LL	SL	JF
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

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: JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

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DRAWING TITLE
DRAINAGE PLAN
SHEET 1

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E100	C

DRAWING ID: P1806739-PS02-R06-E100

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

FOR CONTINUATION SEE DRG PS02 - E100

KEY

- PROPOSED STORMWATER PIPELINE ø450
- EXISTING STORMWATER PIPELINE
- PROPOSED SWALE
- PROPOSED SURFACE INLET PIT
- EXISTING SURFACE INLET PIT
- FLOW DIRECTION
- PIT NAME 1A501-03
- SITE BOUNDARY

CAP AND SEAL EXISTING PIT AND RETAIN PIPE FOR FUTURE USE.

PROVIDE A GPT (VORTSENTRY HS18 OR SIMILAR APPROVED BY BLACKTOWN CITY COUNCIL).

PROPOSED SWALE TYPE 2 TO DIRECT 1% AEP FLOWS FROM LOT 3 TO 1A601-01. REFER TO E200 FOR MORE DETAILS.

PROPOSED TRENCH GRATE TO COLLECT SURFACE FLOW FROM DRIVEWAY TO SWALE.

CAP AND SEAL EXISTING PIT AND RETAIN PIPE FOR FUTURE USE.

PROPOSED NEW KERB INLET PIT CONNECTING TO EXISTING PIT R01/25

PROPOSED TRENCH GRATE ALONG FRONT BOUNDARY CONNECTS TO NEW KERB INLET PIT

ENCLOSED AREA (9,490 sqm). ROOF DRAINAGE DIRECTS TO PROPOSED RAINWATER TANKS.

PROVIDE A GPT (VORTSENTRY HS24 OR SIMILAR APPROVED BY BLACKTOWN CITY COUNCIL.

INSET A - PROPOSED 6x46.4kL (STORAGE VOLUME) ABOVE GROUND RAINWATER TANK. REFER TO E200 FOR MORE DETAILS.

EXISTING PIPE TO BE REDUNDANT (CAP AND SEAL)

PROPOSED STORMWATER TANK. REFER TO PS02-E200 FOR DETAILS.

PROPOSED SPLITTER PIT. REFER TO PS02-E200 FOR DETAILS.

PROPOSED SWALE TYPE 1 TO COLLECT DRIVEWAY RUNOFFS. REFER TO E200 FOR MORE DETAILS.

PROPOSED SWALE TYPE 2 ALONG BOTTOM OF BATTER TO DIRECT 1% AEP FLOWS FROM LOT 4 TO 1A602-08. REFER TO E200 FOR MORE DETAILS.

PROPOSED SWALE TYPE 3 BETWEEN DRIVEWAY AND EXISTING UPSTREAM SWALE TO CONVEY 1% AEP SITE FLOW TO THE ESTATE BASIN

NOTE:
1. ALL PIT AND PIPE LOCATIONS & SIZES ARE PRELIMINARY ONLY AND ARE SUBJECTED TO CHANGE AT CC STAGE.
2. PIT SURFACE LEVELS ARE TO BE CONFIRMED AT CC STAGE.
3. EXISTING STORM WATER SYSTEM ON HANSON PLACE ARE BASED ON WAE PLAN (C431 TO C434) PROVIDED BY HANSON.
4. EXISTING CONTOURS & SURVEY HEIGHTS ARE BASED ON CIVIL PACKAGE PLAN (C010726.13) PROVIDED BY HANSON.
5. ROOF DRAINAGE AND INTERNAL DRAINAGE OF PROPOSED BUILDING ON LOT 5 TO BE PROVIDED BY OTHERS AT CC STAGE.

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	MINOR AMENDMENT	23/07/2021	LL/JS	EZ	SL	

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

GRID | DATUM | PROJECT MANAGER: JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
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CONCEPT DRAINAGE PLAN
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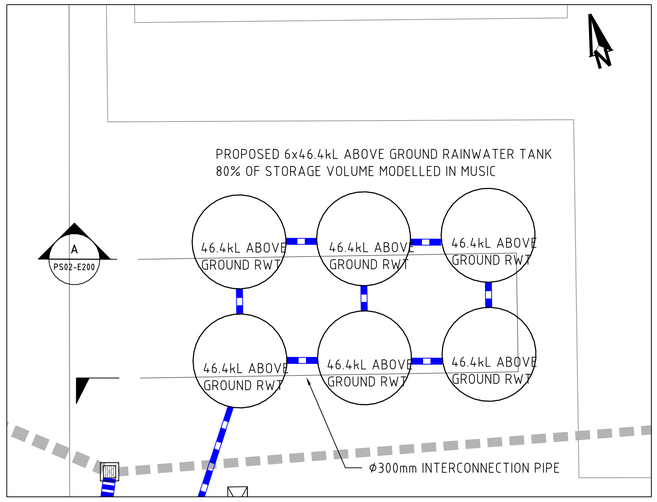
DRAWING TITLE
DRAINAGE PLAN
SHEET 2

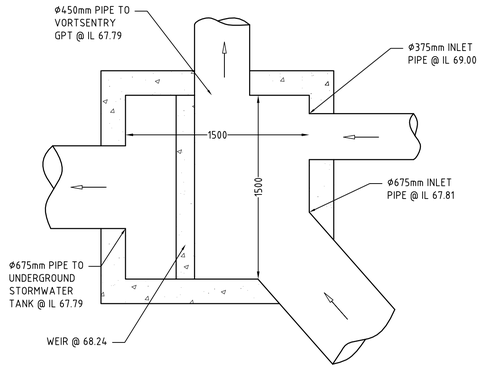
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E101	A

PRINTED: --- USER ISUAREZ
A1 / A3 LANDSCAPE (A1LC_v02.0.01)
DRAWING ID: P1806739-PS02-R06-E101



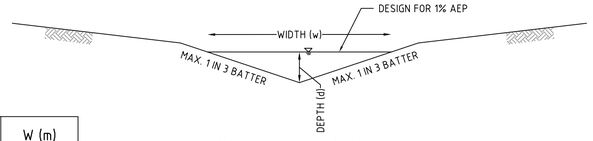
INSET A - PROPOSED INTERCONNECTED ABOVE GROUND RAINWATER TANK LAYOUT

SCALE - N.T.S



SPLITTER PIT DETAILS

SCALE 1:25



SWALE TYPE	H (m)	W (m)
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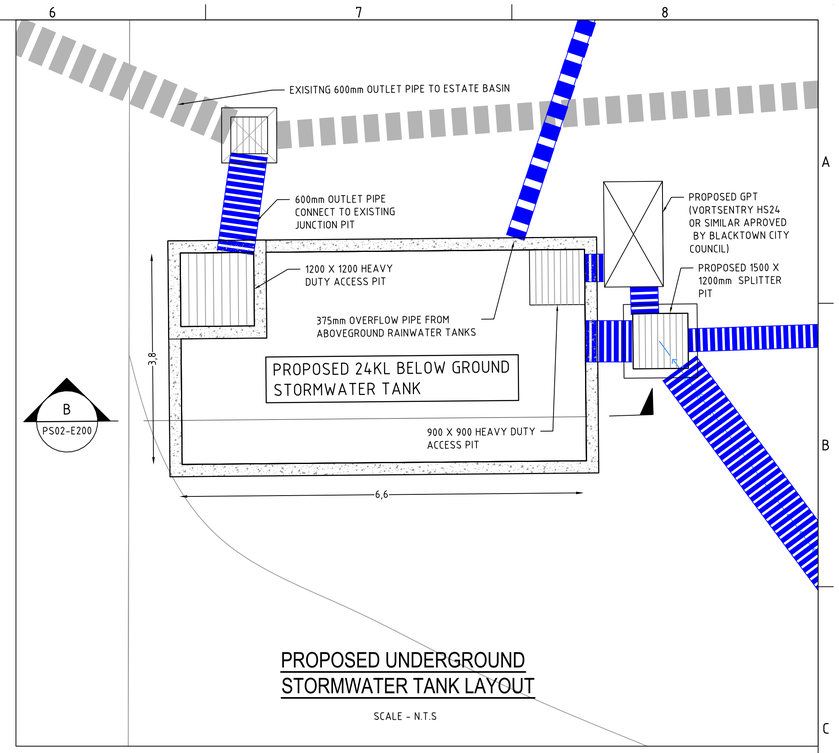
2	0.25	1.50
3	0.50	3.00

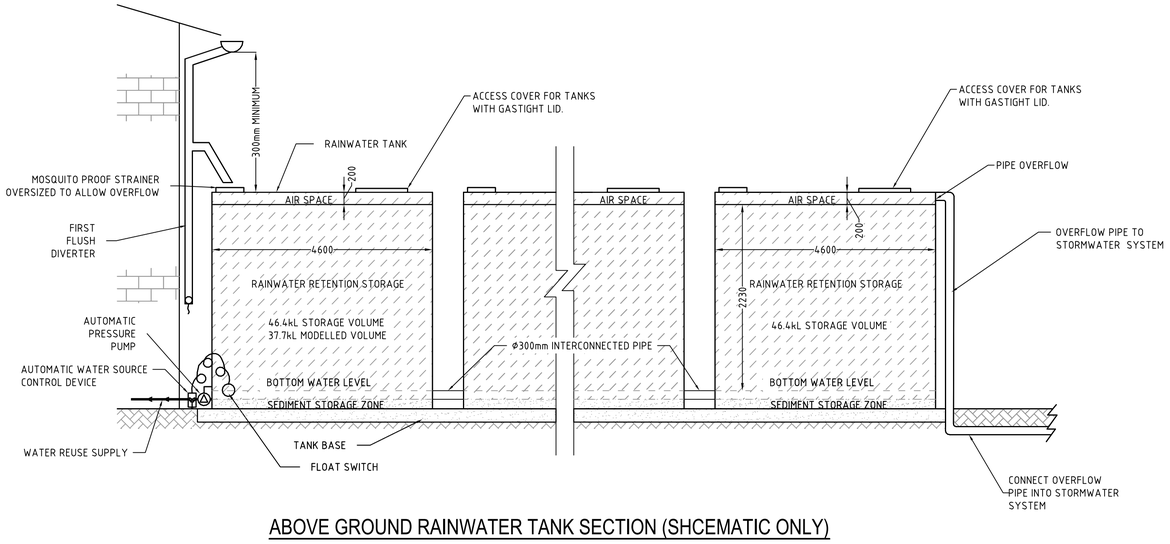
TYPICAL SWALE SECTION

SCALE - N.T.S



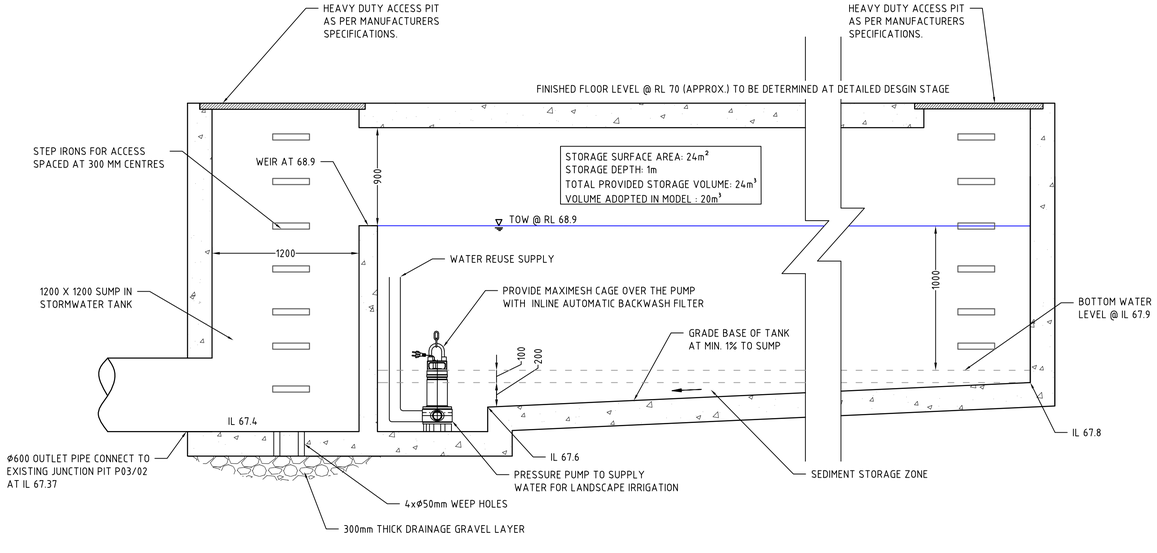
PROPOSED UNDERGROUND STORMWATER TANK LAYOUT

SCALE - N.T.S



ABOVE GROUND RAINWATER TANK SECTION (SHCEMATIC ONLY)

SCALE - N.T.S



UNDERGROUND STORMWATER TANK DETAILS

NOT TO SCALE

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	MINOR AMENDMENT	23/07/2021	LL/JS	EZ	SL	JF
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SCALE

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

CLIENT
HANSON CONSTRUCTION MATERIALS

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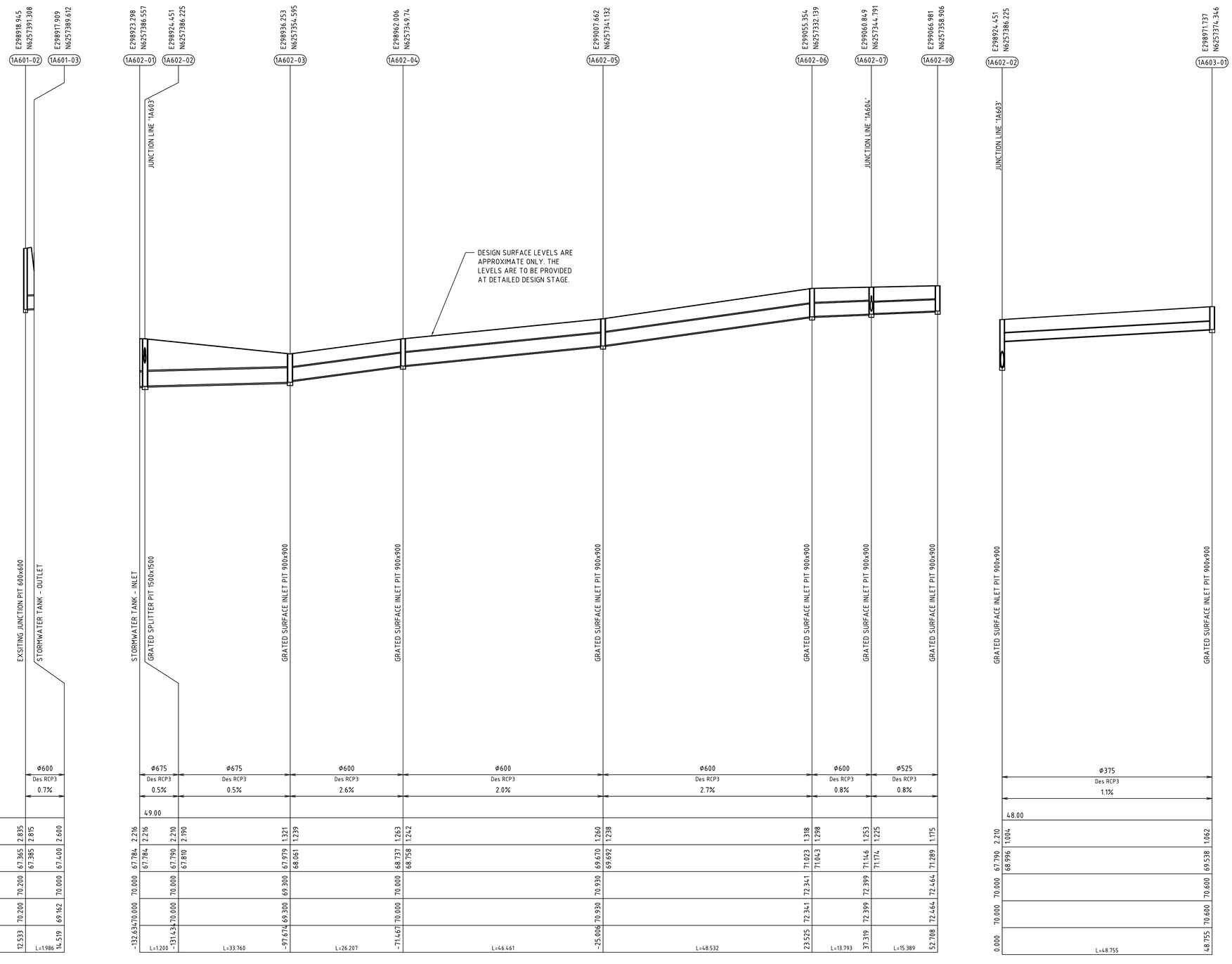
DRAWING TITLE
DRAINAGE DETAILS

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E200	B

DRAWING ID: P1806739-PS02-R06-E200



LINE 1A601

LINE 1A602

LINE 1A603

NOTE:
- ALL PIPE LEVELS AND CLASSES TO BE CONFIRMED AT DETAILED DESIGN STAGE.

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENT**	**23/07/2021**	**LL/JS**	**EZ**	**SL**	**JF**
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

SCALE

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

martens & Associates Pty Ltd
Consulting Engineers
Environment
Water
Geotechnical
Civil
Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 1)

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E300	B

DRAWING ID: P1806739-PS02-R06-E300

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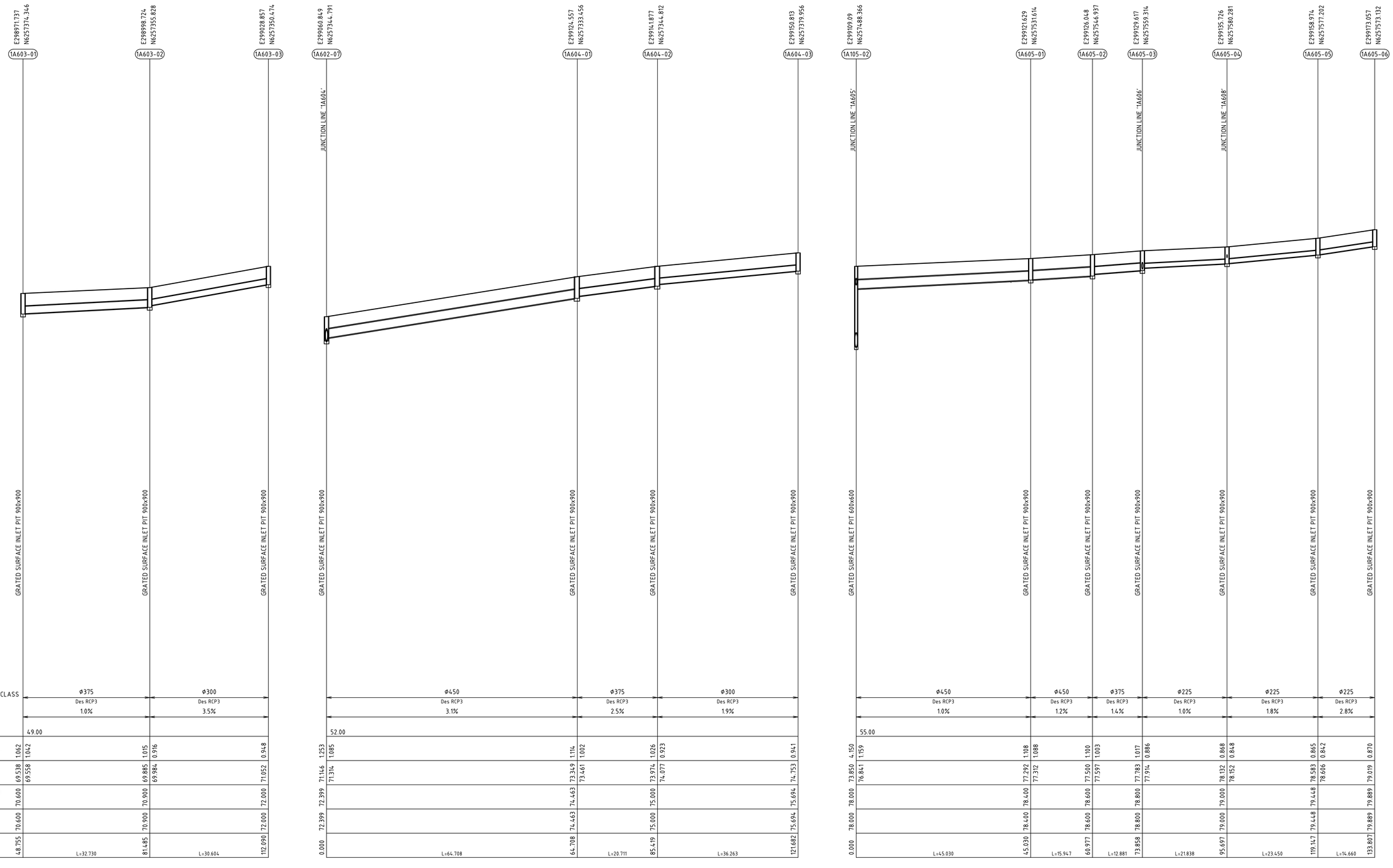
A1 / A3 LANDSCAPE (A1LC_v02.0.01)



LINE 1A603

LINE 1A604

LINE 1A605

NOTE:
- ALL PIPE LEVELS AND CLASSES TO BE CONFIRMED AT DETAILED DESIGN STAGE.

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
B	**MINOR AMENDMENT**	**23/07/2021**	**LL/JS**	**EZ**	**SL**	**JF**
A	INITIAL RELEASE	04/02/2021	LL	SS/LL	SL	JF

SCALE

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

CLIENT: HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

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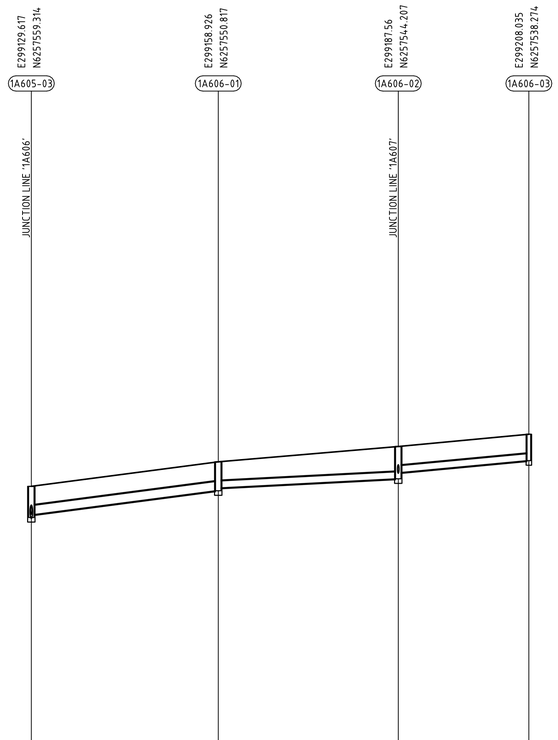
DRAWING TITLE
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 2)

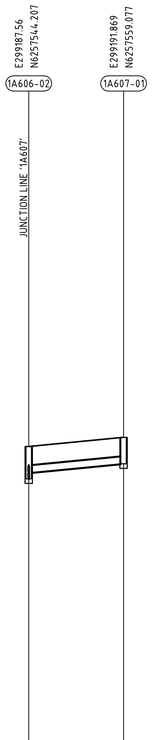
PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E301	B

DRAWING ID: P1806739-PS02-R06-E301



PIPE SIZE & CLASS		ϕ300 Des RCP3		ϕ225 Des RCP3		ϕ225 Des RCP3		
GRADE (%)		2.5%		1.0%		1.8%		
Datum R.L		58.00						
DEPTH TO INVERT	1.017	0.920	0.944	0.848	1.054	0.848	0.862	
INVERT LEVEL	77.783	77.880	78.656	78.752	79.046	79.252	79.638	
PROPOSED LEVEL	78.800		79.600		80.100		80.500	
EXISTING LEVEL	78.800		79.600		80.100		80.500	
CHAINAGE	0.000	L=30.517	30.517	L=29.387	59.904	L=21.317	81.220	

LINE 1A606



PIPE SIZE & CLASS		ϕ225 Des RCP3		
GRADE (%)		1.8%		
Datum R.L		58.00		
DEPTH TO INVERT	1.054	0.847	0.865	
INVERT LEVEL	79.046	79.253	79.535	
PROPOSED LEVEL	80.100		80.400	
EXISTING LEVEL	80.100		80.400	
CHAINAGE	0.000	L=15.481	15.481	

LINE 1A607

NOTE:
- ALL PIPE LEVELS AND CLASSES TO BE CONFIRMED AT DETAILED DESIGN STAGE.

SSDA

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
A	INITIAL RELEASE	23/07/2021	LL/JS	EZ	SL	JF

SCALE

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

CLIENT
HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

martens & Associates Pty Ltd
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Environment
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Suite 201, 20 George St, Hornsby, NSW 2077 Australia Phone: (02) 9476 9999 Fax: (02) 9476 8767
Email: mail@martens.com.au Internet: www.martens.com.au

DRAWING TITLE
DRAINAGE LONGITUDINAL SECTIONS
(SHEET 3)

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E302	A

DRAWING ID: P1806739-PS02-R06-E302

PRINTED: --- USER: JSUAREZ
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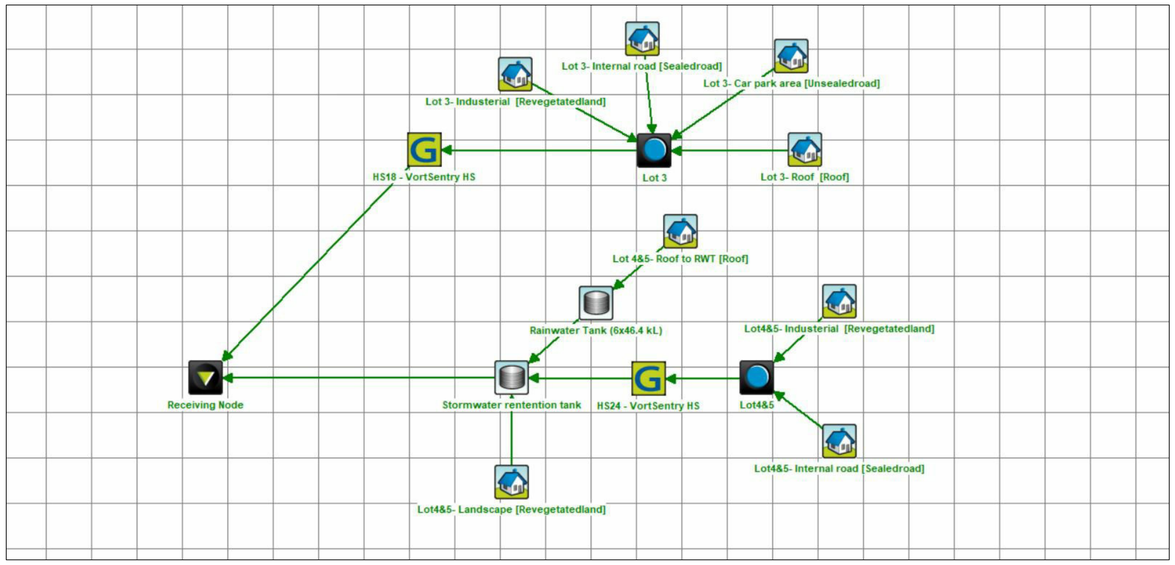
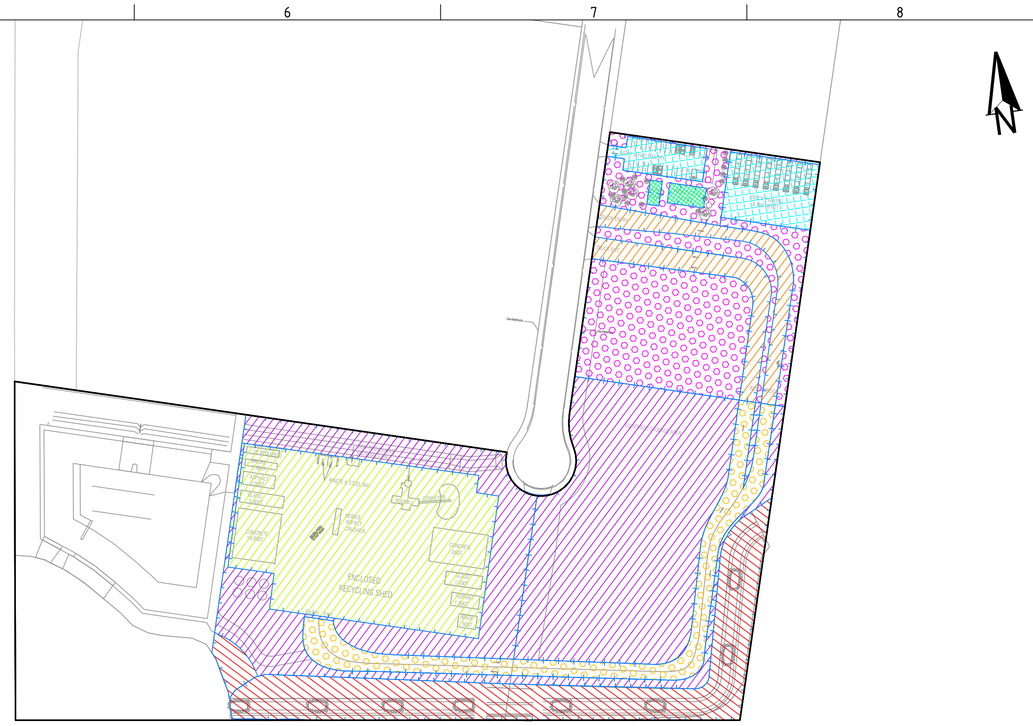


MUSIC MODELLING LAYOUT (P1806739MUS04V01)



MUSIC MODELLING CATCHMENTS FOR THE SITE

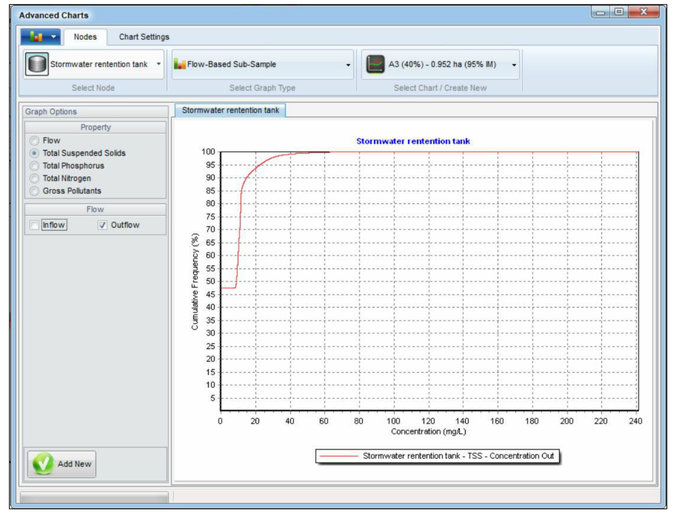
MUSIC CATCHMENTS (P1806739MUS04V01)

THE SITE (LOT 3, 4 $ 5)

KEY	DESCRIPTION	MUSIC NODE TYPE	AREA (ha)	IMPERVIOUS %	MUSIC NODE REFERENCE
	LOT 4&5 - INDUSTRIAL	REVEGETATED LAND	1.841	0%	BLACKTOWN CITY COUNCIL WSUD
	LOT 4&5 - INTERNAL ROAD	SEALED ROAD	0.340	100%	BLACKTOWN CITY COUNCIL WSUD
	LOT 4&5 - ROOF TO RWT	ROOF	0.949	100%	BLACKTOWN CITY COUNCIL WSUD
	LOT 4&5 - LANDSCAPE	REVEGETATED LAND	0.655	0%	BLACKTOWN CITY COUNCIL WSUD
	LOT 3 - INDUSTRIAL	REVEGETATED LAND	0.738	0%	BLACKTOWN CITY COUNCIL WSUD
	LOT 3- INTERBAL ROAD	SEALED ROAD	0.264	100%	BLACKTOWN CITY COUNCIL WSUD
	LOT 3- CAR PARK AREA	UNSEALED ROAD	0.189	100%	BLACKTOWN CITY COUNCIL WSUD
	LOT 3 - ROOF	ROOF	0.025	100%	BLACKTOWN CITY COUNCIL WSUD
TOTAL AREA			5.00	= 100% OF TOTAL AREA	
TOTAL IMPERVIOUS AREA			1.77	= %35 OF TOTAL AREA	
TOTAL PERVIOUS AREA			3.23	= %65 OF TOTAL AREA	

REST OF THE ESTATE (P1806739MUS04V01)

KEY	DESCRIPTION	MUSIC NODE TYPE	AREA (ha)	IMPERVIOUS %	MUSIC NODE REFERENCE
	INDUSTRIAL	UNSEALED ROAD	20.24	90%	BLACKTOWN CITY COUNCIL WSUD
TOTAL AREA			20.24	= 100% OF TOTAL AREA	
TOTAL IMPERVIOUS AREA			18.22	= %90 OF TOTAL AREA	
TOTAL PERVIOUS AREA			2.02	= %10 OF TOTAL AREA	



NOTE:

- MUSIC MODEL IS USED FOR WATER BALANCE ASSESSMENT ONLY. THE EXISTING ESTATE STORMWATER QUALITY TREATMENT SYSTEM (REGIONAL FACILITY) THAT SERVES THE SITE WHICH MEETS THE GROWTH CENTRES POLLUTANT REDUCTION TARGETS OF TSS, TP AND TN. NO FURTHER STORMWATER QUALITY MODELLING IS REQUIRED FOR TSS, TP AND TN. REFER TO MA REPORT P1806739JR03 FOR MORE DETAILS.

- ACCORDING TO AUSTRALIAN GUIDELINE FOR WATER RECYCLING: STORMWATER HARVESTING AND REUSE (2009), THE WATER QUALITY OBJECTIVES FOR REUSE OF STORMWATER FOR DUST SUPPRESSION INCLUDE:
  - TURBITY: <25 NTU (EQUIVALENT TO 8.33 mg/L) (MEDIAN)
    < 100 NTU (EQUIVALENT TO 33.33 mg/L) (95th PERCENTILE)
  - E. COLI: <100 NTU

AS SHOWN IN FIGURE ABOVE, THE WATER QUALITY OBJECTIVES FOR TURBITY IS ACHIEVED.
- TURBITY: 0 < 8.33 mg/L (MEDIAN)
  20< 33.33 mg/L) (95th PERCENTILE)

AS THE WASTEWATER RECYCLING IS NOT PROPOSED FOR THE SITE, THE OBJECTIVE FOR E.COLI IS CONSIDERED ACHIEVED.
THEREFORE, THE STORMWATER COLLECTED IN STORMWATER RETENTION TANK IS FIT FOR REUSE FOR DUST SUPPRESSION.

REV	DESCRIPTION	DATE	DRAWN	DESIGNED	CHECKED	APPRVD
D	**MINOR AMENDMENT**	**23/07/2021**	**LL/JS**	**EZ**	**SL**	**JF**
C	MINOR AMENDMENT	04/02/2021	LL	SS	SL	JF
B	MINOR AMENDMENT	20/11/2020	JS	SS	SL	JF
A	INITIAL RELEASE	03/09/2020	RK	SS	SL	JF

SCALE
0 15 30 45 60 75 90 105 120 135 150 METRES
A1 (A3) 1:1,500 (1:3,000)

GRID	DATUM	PROJECT MANAGER
MGA	mAHD	JF

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CLIENT
HANSON CONSTRUCTION MATERIALS

PROJECT NAME/PLANSET TITLE
HANSON CONCRETE RECYCLING FACILITY
CONCEPT DRAINAGE PLAN
HANSON PLACE, EASTERN CREEK

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DRAWING TITLE
WATER BALANCE CATCHMENT PLAN & MODEL

PROJECT NO.	PLANSET NO.	RELEASE NO.	DRAWING NO.	REVISION
P1806739	PS02	R06	PS02-E700	D

DRAWING ID: P1806739-PS02-R06-E700

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