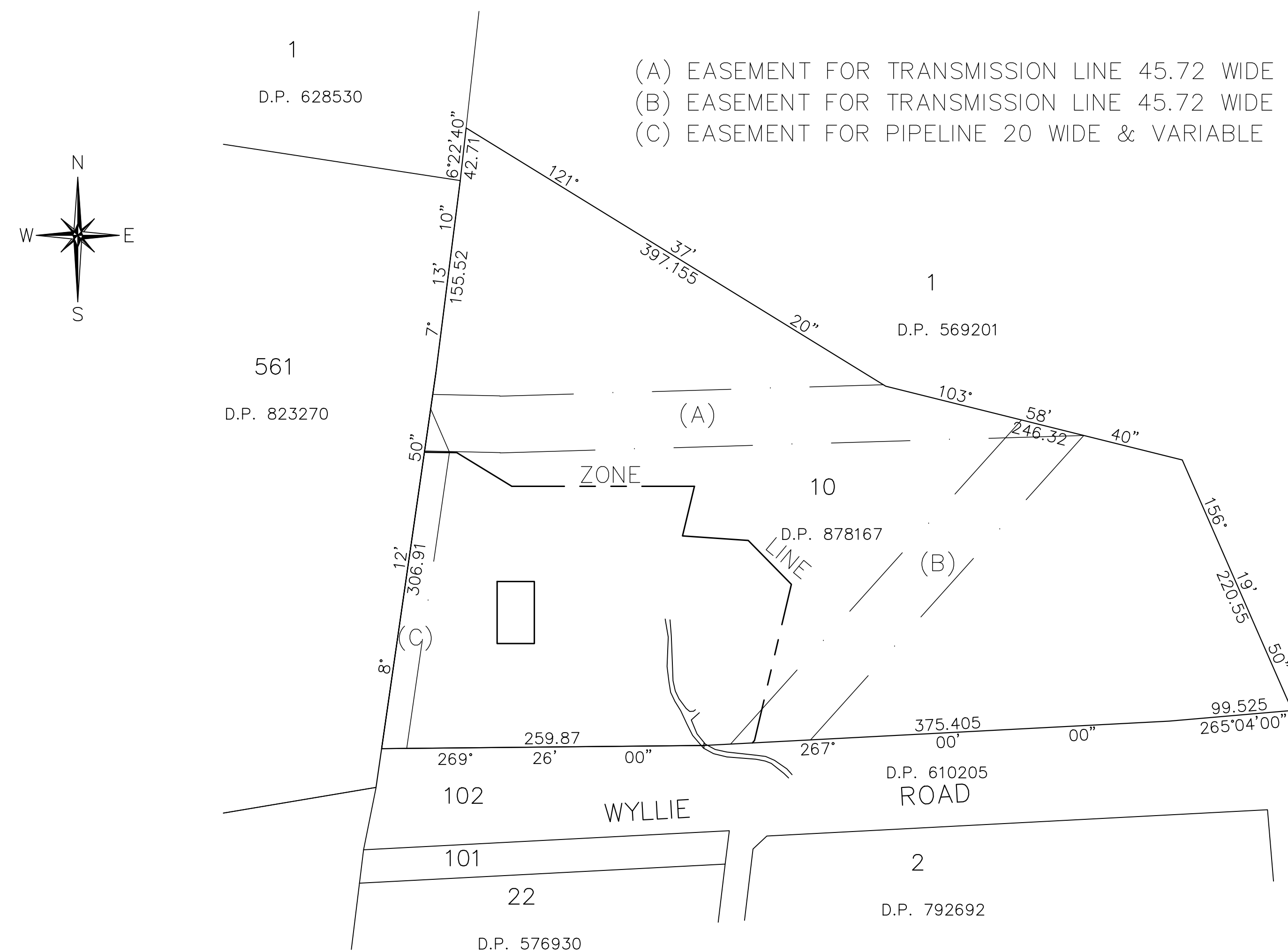


PROPOSED INDUSTRIAL DEVELOPMENT WYLLIE ROAD, KEMBLA GRANGE CONSTRUCTION CERTIFICATE



SITE PLAN
NTS

INDEX OF SHEETS

C300	COVER SHEET
C301 Rev-E	OVERALL PLAN
C302 Rev -C	CUT AND FILL PLAN
C303 Rev-D	PAVEMENT PLAN
C304 Rev-B	PAVEMENT AND CAR PARK
C305 Rev-D	TURNING SWEEP PATH PLAN
C306 Rev-B	SITE SECTIONS
C307 Rev-B	POND DETAILS
C308 Rev-B	USAGE AREAS
C309 Rev-B	SHREDDING AREA DETAIL
C310 Rev-C	LEACHATE CONTROL PLAN
C311 Rev-C	RAINWATER HARVESTING PLAN
C312 Rev-C	CATCHMENT PLAN
C313 Rev-C	DRAINAGE PLAN
C314 Rev-B	DRAINAGE LONGITUDINAL SECTIONS
C315 Rev-B	DRAINAGE DETAILS
C316	DRAINS OUTPUT
C317	HUMESCEPTOR DETAILS
C318 Rev-C	SOIL AND WATER MANAGEMENT PLAN
C319 Rev-B	SOIL AND WATER MANAGEMENT DETAILS
C320 Rev-C	WEIGHBRIDGE DETAILS

DRAINAGE NOTES

1. RAINWATER TANKS TO HAVE FIRST FLUSH BYPASS SYSTEM
2. 2 x 100,000 LITRE TANKS WILL PROVIDE APPROXIMATELY 82% OF DAILY DEMAND OF 500 LITRES/DAY
3. PRIOR TO COMMENCING CONSTRUCTION WORK, THE OWNER/CONTRACTOR SHALL ENGAGE A REGISTERED SURVEYOR TO ACCURATELY DELINEATE THE GAS PIPELINE BOUNDARY. IN ORDER TO PREVENT CONSTRUCTION PLANT FROM ENCRANCHING ONTO THE GAS PIPELINE EASEMENT, THE OWNER/CONTRACTOR SHALL INSTALL A HIGH VISIBILITY ORANGE PARA-WEB FENCING OR 1.8M HIGH CHAINWIRE FENCE TO CLEARLY DELINEATE THE LIMIT OF WORK. THE FENCE SHALL NOT ENCRANCH UPON THE GAS PIPELINE EASEMENT AND SHALL BE INSTALLED 0.15 M OFF THE EASEMENT BOUNDARY.
4. WATER QUALITY/RECYCLING POND EMBANKMENT IS TO BE COMPACTED TO 100% MOD COMPACTION UNDER LEVEL 2 GEOTECHNICAL CONTROL
5. DUST CONTROL TO BE ACHIEVED USING WATER CART. DEMAND ESTIMATED AT 40,000 L/DAY
6. LEACHATE COLLECTION TANKS PUMPED OUT BY SERVICE TANKER
7. BYPASS CONTROL PIT TO DIVERT 220 l/sec TO WATER QUALITY POND. DISCHARGE EXCEEDING 230 l/sec TO DRAIN DIRECT TO DETENTION BASIN.
8. DETENTION BASIN TO HAVE 1953m³ STORAGE WITH 675mm DIA PIPE OUTLET. WEIR RL @ APPROX. 18.85m.
9. WATER QUALITY/RECYCLING POND TO HAVE PERMANENT VOLUME OF 3428 m³ WITH 673 m³ EXTENDED STORAGE. OVERFLOW PIPE TO BE 100mm DIA PIPE. OVERFLOW PIPE TO DISCHARGE TO DETENTION BASIN.
10. SHREDDING RUNOFF POND. SHREDDING RUNOFF POND TO HAVE VOLUME OF 781m³. OVERFLOW PIPE TO BE DISCHARGED TO WATER QUALITY POND. OVERFLOW PIPE TO BE 100mm DIA.
11. NO STORAGE OF BUOYANT MATERIAL IN PMF INUNDATION AREA. MINIMUM CRUSHED AGGREGATE SIZE IN PMF INUNDATION AREA TO BE 75mm
12. GREEN WASTE TO BE COVERED BY TARPULIN TO PREVENT INFILTRATION OF RAINWATER WHEN STOCKPILE TO BE IN PLACE LONGER THAN 21 DAYS.
13. SEPTIC TANK SERVICING OFFICE COMPLEX SHALL BE SERVICED/PUMPED OUT WEEKLY UNDER SERVICE CONTRACT

LEGEND

- DENOTES PROPOSED BUILDING
- DENOTES EXISTING CONTOURS
- DENOTES PROPOSED SURFACE LEVELS
- DENOTES PROPOSED BATTER (1 IN 2) TO BE LANDSCAPED
- DENOTES PROPOSED LANDSCAPING/BATTER PROTECTION
- DENOTES 10m BUFFER LINE FROM TOP BANK
- DENOTES 1% AEP FLOOD LIMIT
- DENOTES SUBSOIL DRAINAGE
- DENOTES CATCH DRAIN
- DENOTES DIRECTION OF TRAFFIC FLOW
- DENOTES STORMWATER FLOW
- DENOTES HUMCEPTOR DOWNSTREAM DEFLECTOR BLOCKS OR BOULDERS WITH MIN. MASS OF 900kg MAY BE USED
- DENOTES BOLLARD & SIGNAGE
- DENOTES STORMWATER PITS AND PIPE
- DENOTES STAGE 1 LIMITS
- DENOTES FUTURE STAGE LIMITS
- DENOTES PROPOSED SUB SOIL LINE



SIGN - ARR-104

Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
E	AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
D	AMENDED AS PER CLOUDS	21/6/2018	AM	W.M.
C	1% AEP FLOOD EXTENT SHOWN	24 APRIL 2017	WM	WM
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	13.01.2017	B.M.	W.M.



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Surveyor DENNIS SMITH	Date APRIL 2016
Date of Survey	Drawn B.MIDDLETON
Height Datum AHD	Designed W.MULLANY
Origin	Checked
Horiz. Datum	Approved

Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE SITE PLAN		Project No. KF110816
Scale 1:500 @ A1 1:1000 @ A3		Drawing No. C301
Drawing Status ISSUED FOR SSD5300 MOD2 CC		Sheet 2 Of 20
		Revision E

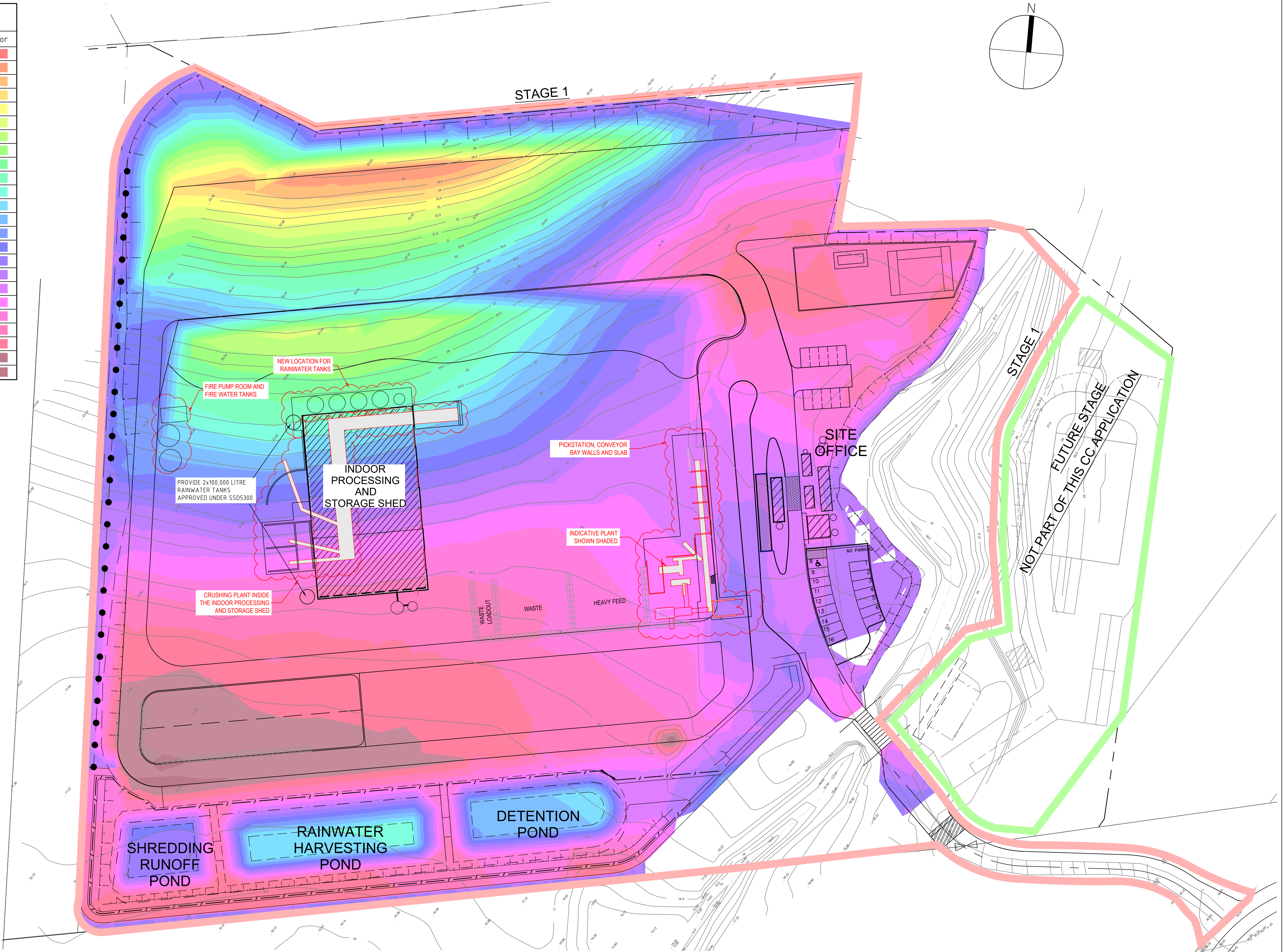
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PLOTTED BY: Jdo

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-7.733	-7.500	
2	-7.500	-7.000	
3	-7.000	-6.500	
4	-6.500	-6.000	
5	-6.000	-5.500	
6	-5.500	-5.000	
7	-5.000	-4.500	
8	-4.500	-4.000	
9	-4.000	-3.500	
10	-3.500	-3.000	
11	-3.000	-2.500	
12	-2.500	-2.000	
13	-2.000	-1.500	
14	-1.500	-1.000	
15	-1.000	-0.500	
16	-0.500	0.000	
17	0.000	0.500	
18	0.500	1.000	
19	1.000	1.500	
20	1.500	2.000	
21	2.000	2.500	
22	2.500	3.000	
23	3.000	3.500	
24	3.500	3.922	

EARTHWORKS VOLUMES:

TOTAL CUT = 43228m³

TOTAL FILL = 43191m³



C	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2017	B.M.	W.M.
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



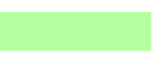
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Surveyor	DENNIS SMITH	Date	APRIL 2016
Date of Survey		Drawn	B.MIDDLETON
Height Datum	AHD	Designed	W.MULLANY
Origin		Checked	
Horiz. Datum		Approved	

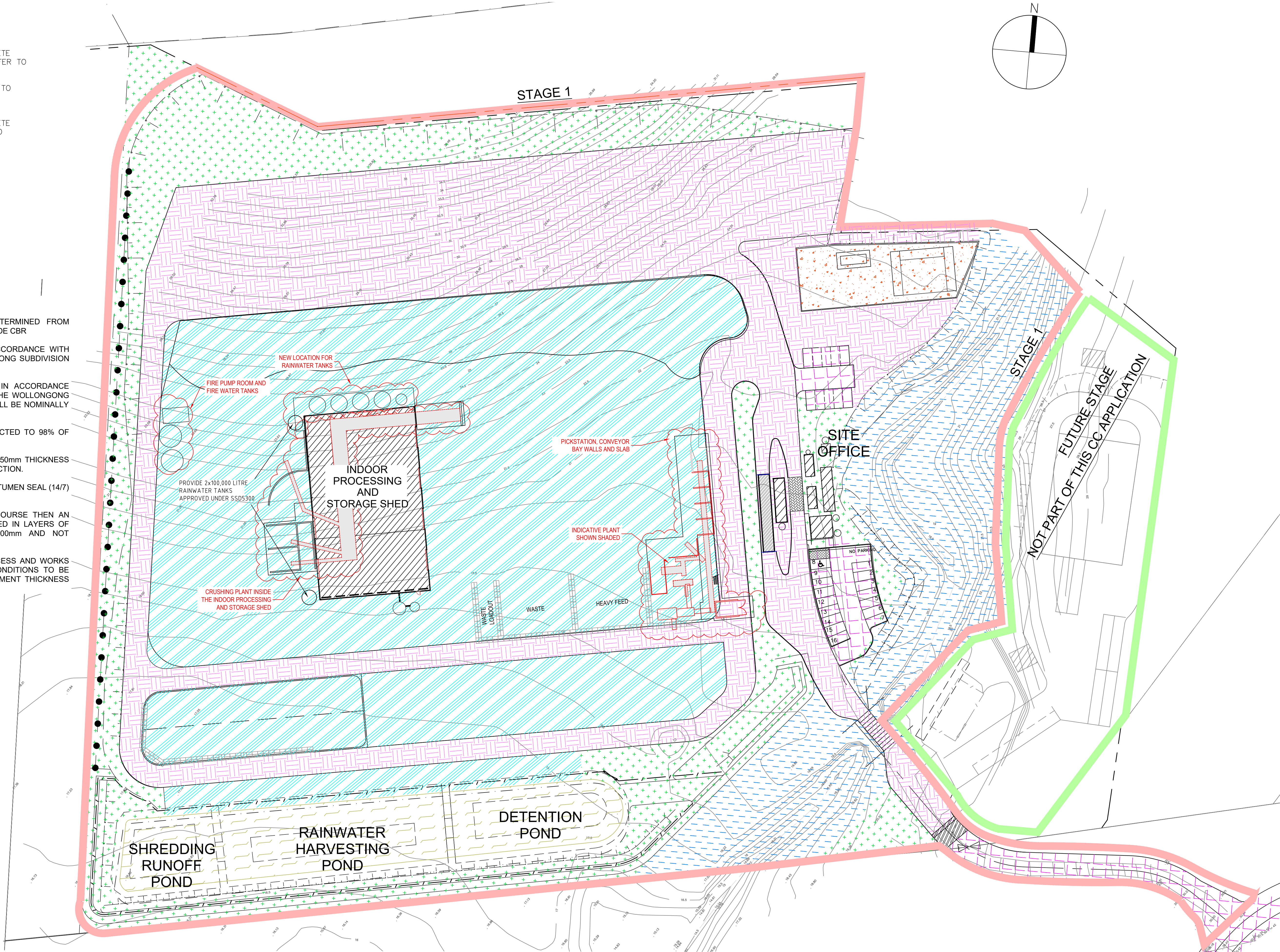
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PROPOSED INDUSTRIAL DEVELOPMENT		KF110816	
LOT 10 DP 878167		Drawing No.	
WYLLIE ROAD, KEMBLA GRANGE		C302	
CUT AND FILL PLAN		Sheet	Revision
Scale 1:500 @ A1 1:1000 @ A3		3 Of 20	C
Drawing Status		ISSUED FOR SSD5300 MOD2 CC	

LEGEND:

-  DENOTES CONCRETE SLAB
-  DENOTES RECYCLED CRUSHED CONCRETE PAVEMENT ACCESS 400mm THICK REFER TO DETAIL C304
-  DENOTES BITUMEN SEAL AC40 REFER TO DETAIL C304
-  DENOTES RECYCLED CRUSHED CONCRETE WORKS AREA 400mm THICK REFER TO DETAIL C304
-  DENOTES GRASS AREA
-  DENOTES RIPARIAN AREA
-  DENOTES PONDS
-  DENOTES STAGE 1 LIMITS
-  DENOTES FUTURE STAGE LIMITS

PAVEMENT NOTES

1. THE FINAL PAVEMENT THICKNESS SHALL BE DETERMINED FROM GEOTECHNICAL TESTING TO ESTABLISH THE SUBGRADE CBR
2. PAVEMENT SHALL BE DESIGNED GENERALLY IN ACCORDANCE WITH SECTION D2 'PAVEMENT DESIGN' OF THE WOLLONGONG SUBDIVISION CODE 2008
3. PAVEMENT SHALL BE CONSTRUCTED GENERALLY IN ACCORDANCE WITH SECTION C242.27 'FLEXIBLE PAVEMENTS' OF THE WOLLONGONG SUBDIVISION CODE 2008. PAVEMENT THICKNESS SHALL BE NOMINALLY AS FOLLOWS:
 - a. BASE COURSE 150mm LAYER OF DGB20 COMPACTED TO 98% OF MODIFIED COMPACTION
 - b. SUB BASE COURSE SHALL BE NOT LESS THAN 150mm THICKNESS OF DGS40 COMPACTED TO 95% MODIFIED COMPACTION.
4. PAVEMENT SEAL SHALL BE EITHER TWO COAT HOT BITUMEN SEAL (14/7) OR 40mm THICKNESS OF AC14
5. IF CBR VALUES WARRANT A THICKER SUB-BASE COURSE THEN AN ADDITIONAL THICKNESS OF DGS40 SHALL BE PLACED IN LAYERS OF COMPACTED THICKNESS OF NOT LESS THAN 100mm AND NOT EXCEEDING 200mm THICKNESS (refer C242.27).
6. NOMINAL CRUSHED CONCRETE PAVEMENT FOR ACCESS AND WORKS AREA SHALL BE MIN. 400mm THICK. SUBGRADE CONDITIONS TO BE CONFIRMED BY GEOTECHNICAL TESTING AND PAVEMENT THICKNESS ADJUSTED ACCORDINGLY



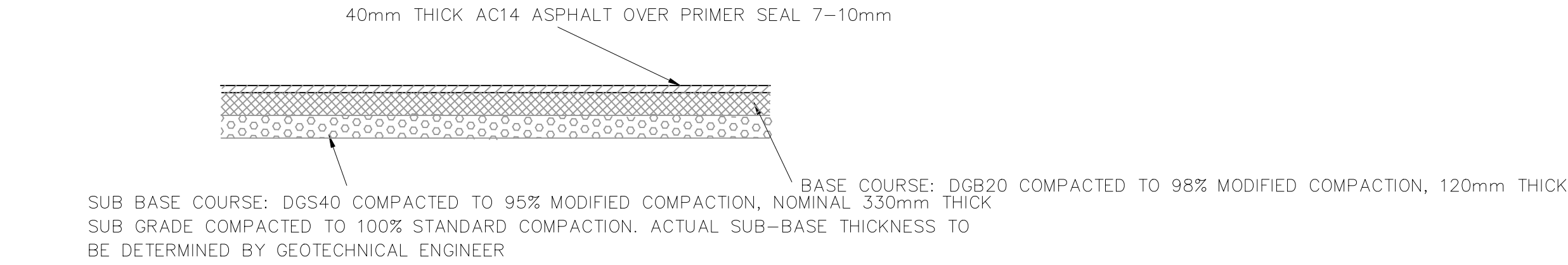
D	AMENDED SITE LAYOUT AS PER DEWCAPE	09.10.2018	J.D.	W.M.
C	SURFACE PLAN UPDATED TO SUIT NEW WEIGH BRIDGE			
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE AMENDED	13.01.2017	B.M	W.M
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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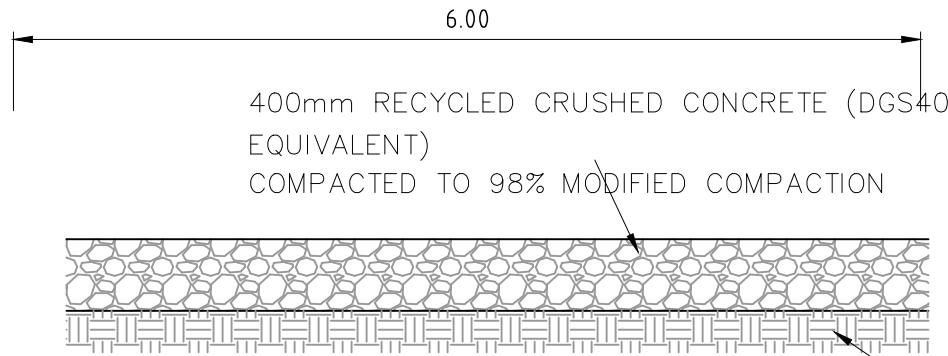
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Surveyor DENNIS SMITH	Date APRIL 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE PAVEMENT PLAN		Project No. KF110816	
Date of Survey 24 APRIL 2017	Drawn B.MIDDLETON			Drawing No. C303	
Height Datum WM	Designed W.MULLANY RE: Grad Dip. LGE (ME/JH/MS) ME/JH/MS CP/NG NPER	Scale 1:500 @ A1 1:1000 @ A3		Sheet 4 Of 20	Revision D
Origin WM	Checked			Drawing Status ISSUED FOR SSD5300 MOD2 CC	
Horiz. Datum	Approved				



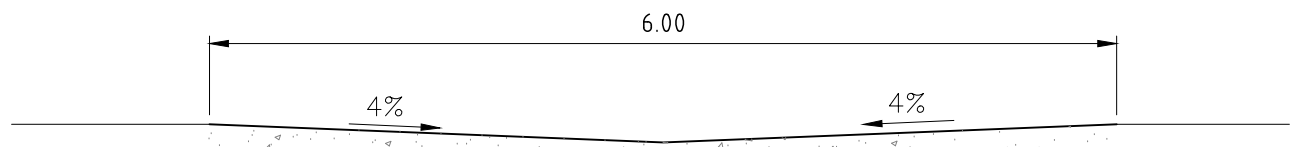
BITUMEN SEAL TYPICAL PAVEMENT DETAIL

NTS



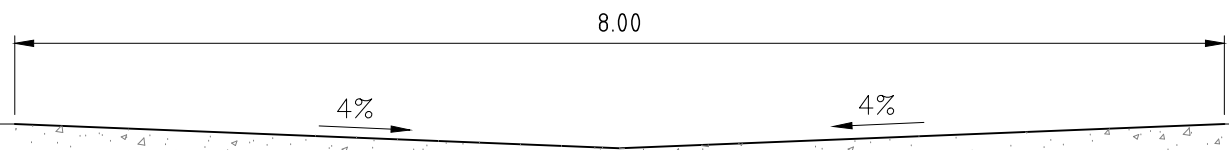
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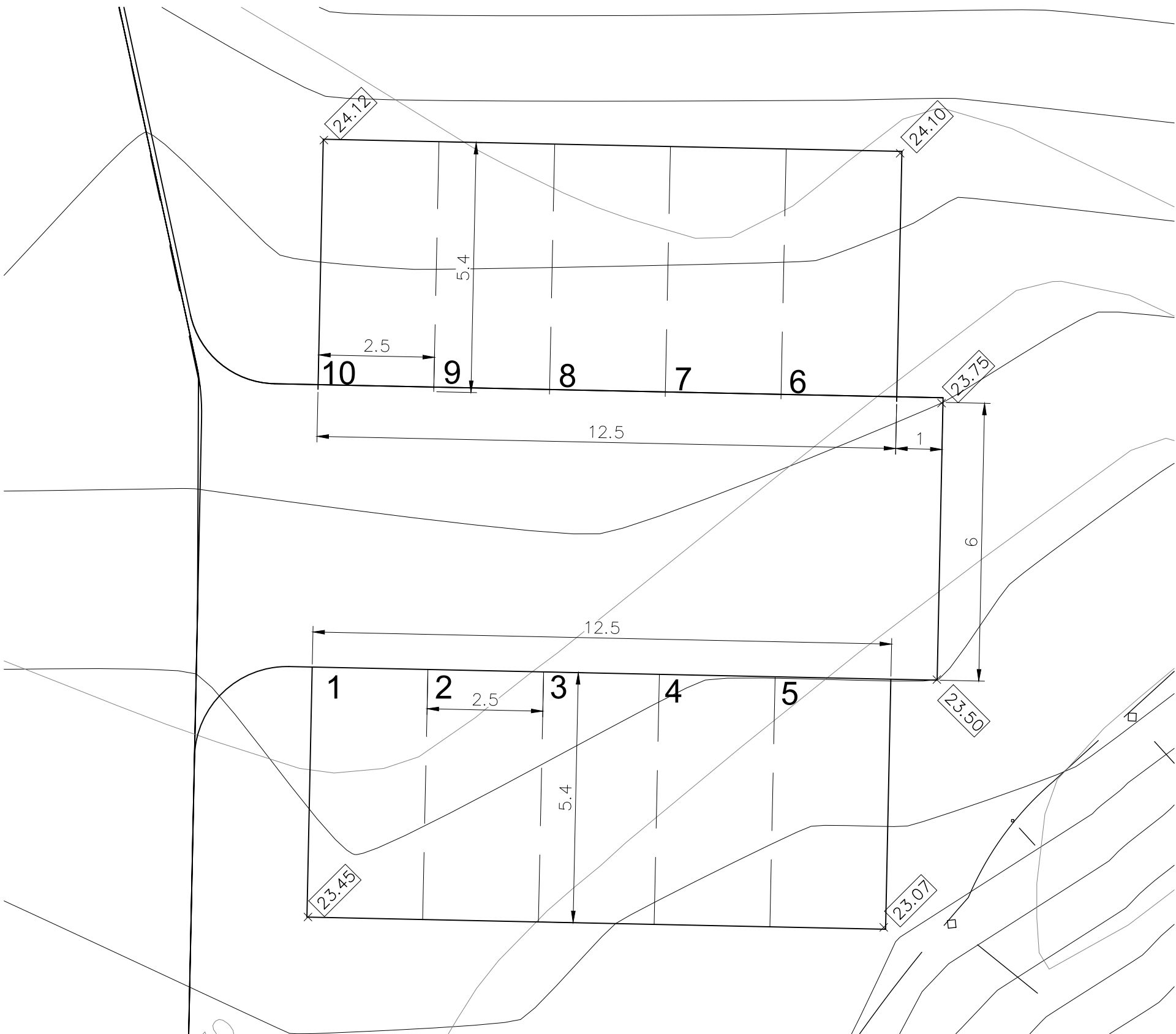
SECTION G-G / C301
SECTION J-J / C301
SECTION K-K / C301

SCALE: 1:50 @ A1



SECTION H-H / C301

SCALE: 1:50 @ A1



PLAN STAFF CARPARK (10 SPACES)

SCALE: 1:100 @ A1

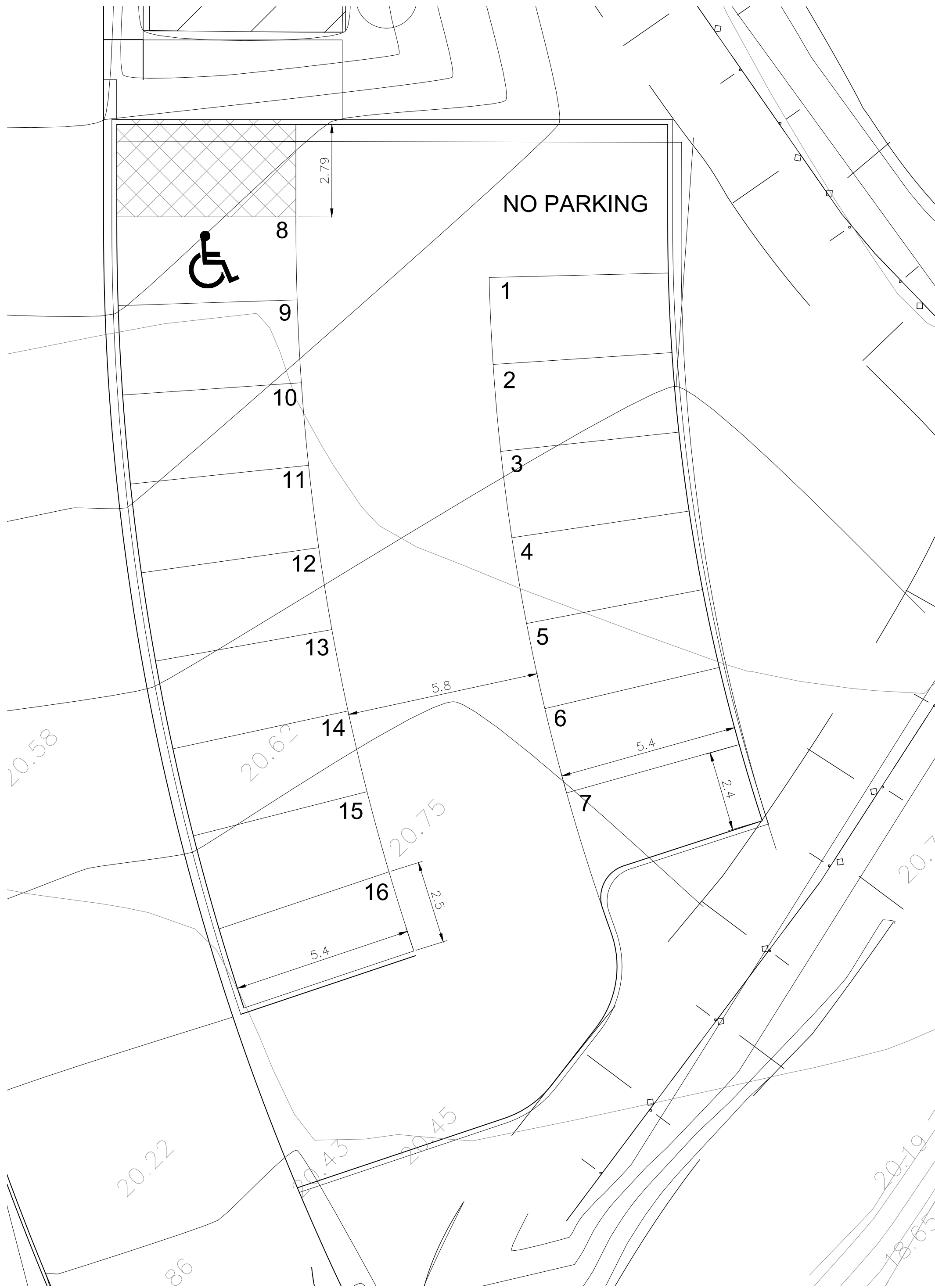
CAR PARKING PAVEMENT

(ONLY FOR CAR PARKING AREA)

SEAL : 25mm AC10 OR HOT BITUMEN SPRAY SEAL

BASE: 100mm DGB20 COMPACTED TO 98% MODIFIED

SUB BASE: 150mm DGS40 COMPACTED TO 100%
STANDARD COMPACTION



PLAN CARPARK (16 SPACES)

SCALE: 1:100 @ A1

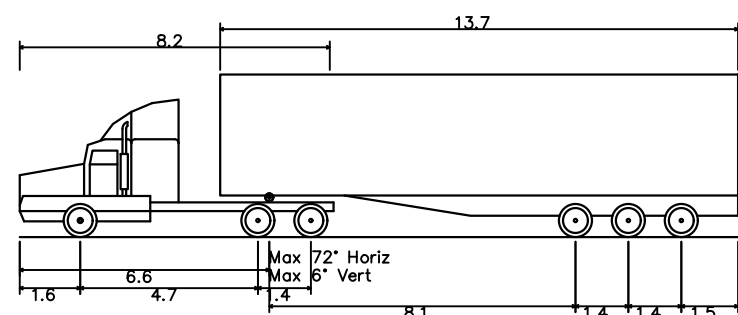
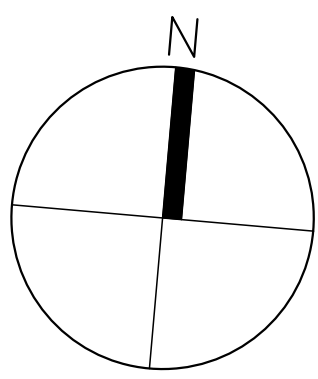
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Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



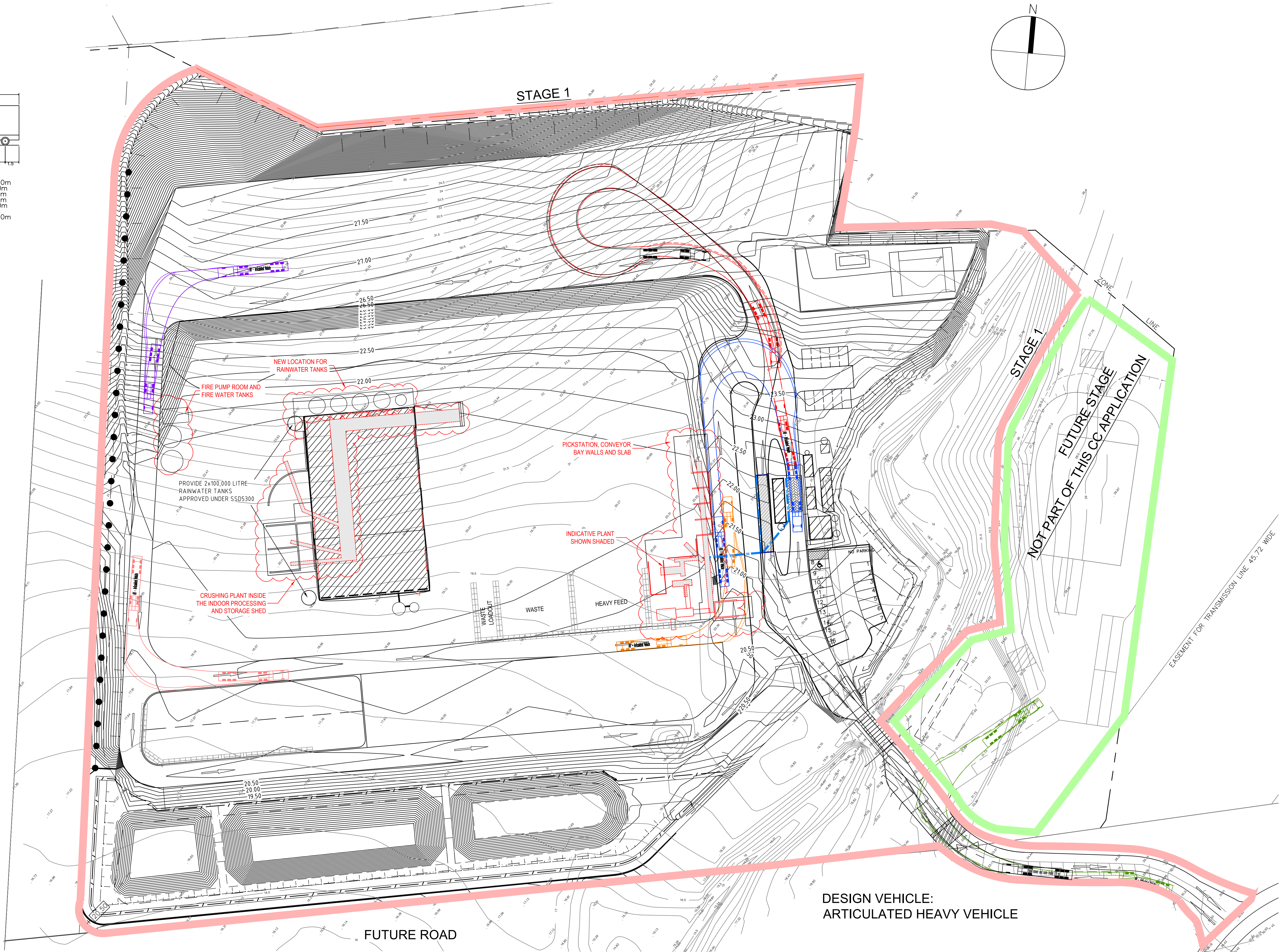
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Surveyor DENNIS SMITH	Date APRIL 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE PAVEMENT AND CARPARK DETAILS	Project No. KF110816	
Date of Survey	Drawn B.MIDDLETON		Drawing No. C304	
Height Datum AHD	Designed W.MULLANY SEE GRID TOP LIDE (MSE/STATION) MISE/AXIAL C/P ENG NP/EN		Sheet 5 Of 20	Revision B
Origin	Checked			
Horiz. Datum	Approved	Scale AS @ A1 SHOW @ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC	



AV - Articulated Vehicle
Overall Length 19.00m
Overall Width 2.50m
Overall Body Height 4.30m
Min Body Ground Clearance 0.41m
Track Width 2.50m
Lock-to-lock time 6.00s
Curb to curb turning radius 12.50m



DESIGN VEHICLE:
ARTICULATED HEAVY VEHICLE

Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
D	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
C	ADDITIONAL SWEEP PATH SHOWN FOR ENTRY ONTO NEW WEIGHBRIDGE	24 APRIL 2017	BM	WM
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2017	B.M	W.M



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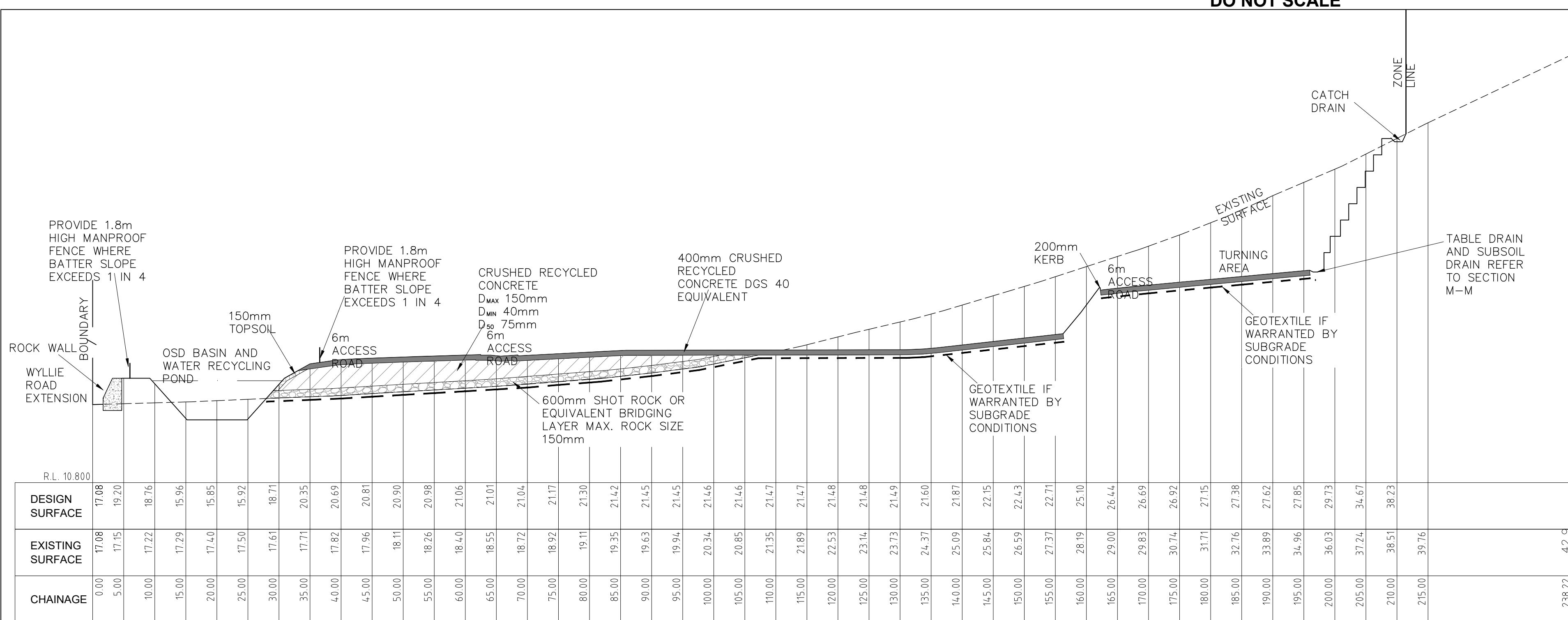
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Surveyor DENNIS SMITH	Date APRIL 2016
Date of Survey	Drawn B.MIDDLETON
Height Datum AHD	Designed W.MULLANY
Origin	Checked
Horiz. Datum	Approved

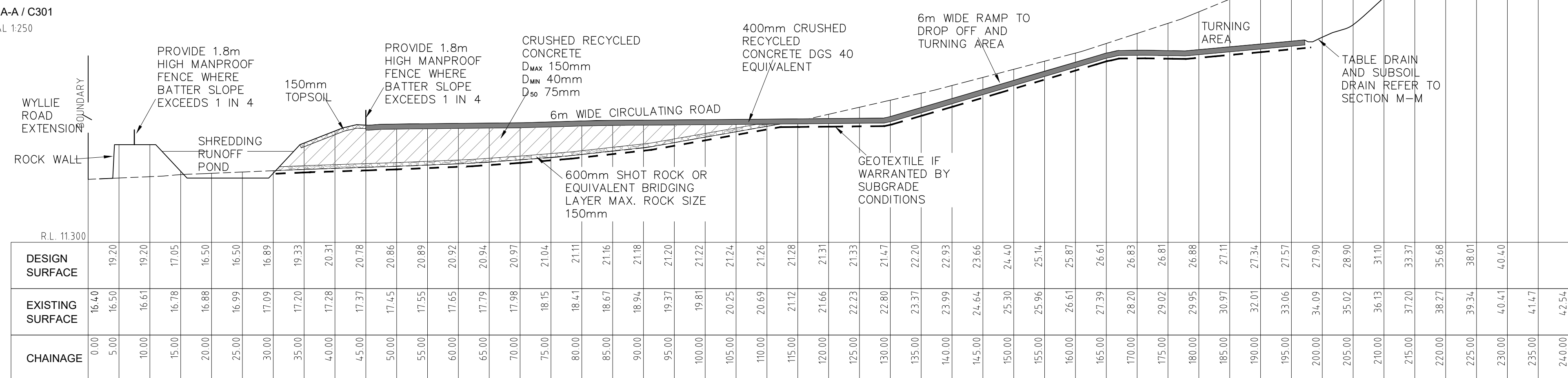
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Scale 1:500 @ A1 1:1000 @ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC

Sheet 6 Of 20	Revision D
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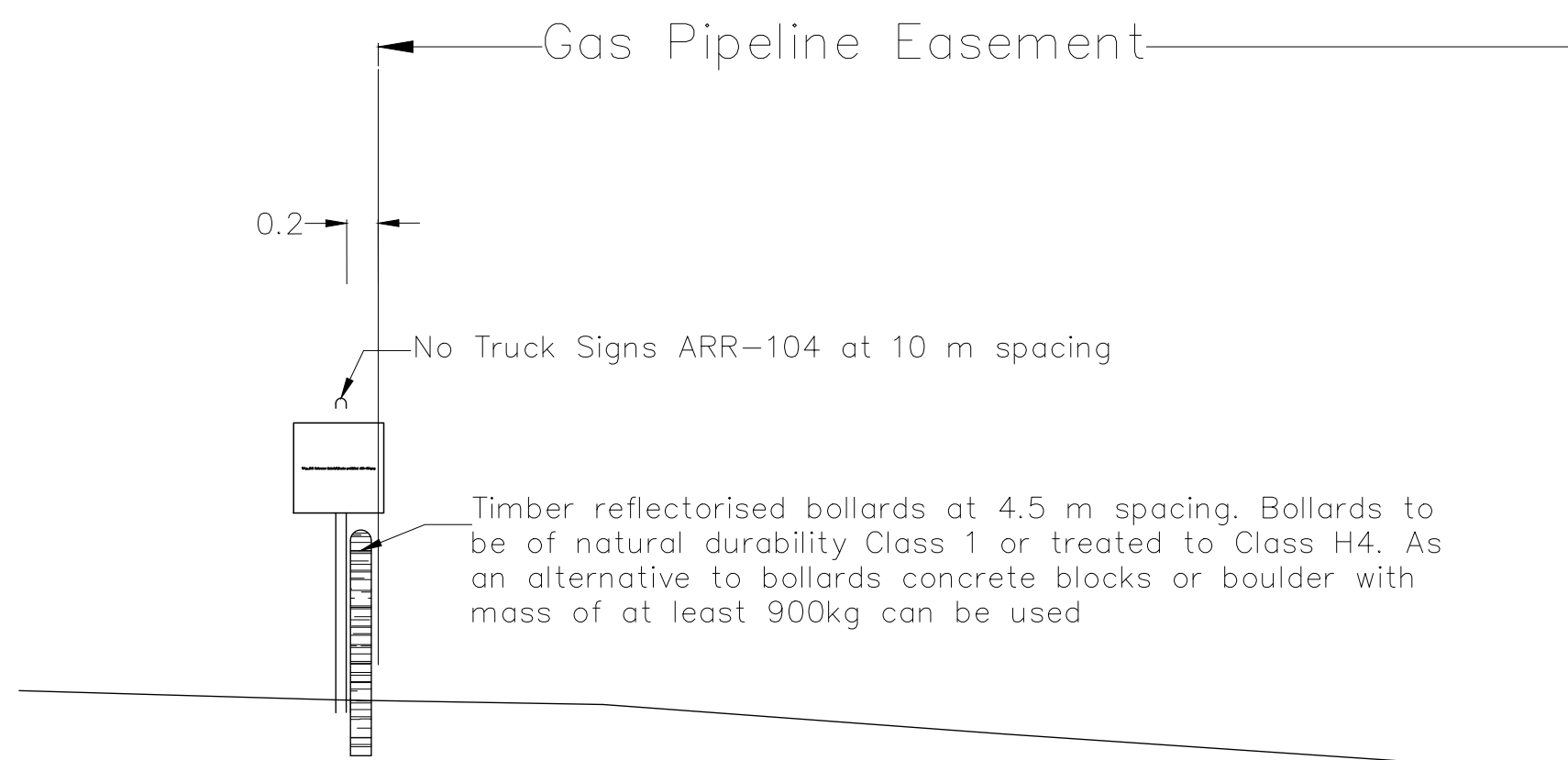
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LONGITUDINAL SECTION SECTION A-A / C301
 SCALES: HORIZONTAL 1:500 VERTICAL 1:250



LONGITUDINAL SECTION B-B / C301
 SCALES: HORIZONTAL 1:500 VERTICAL 1:250

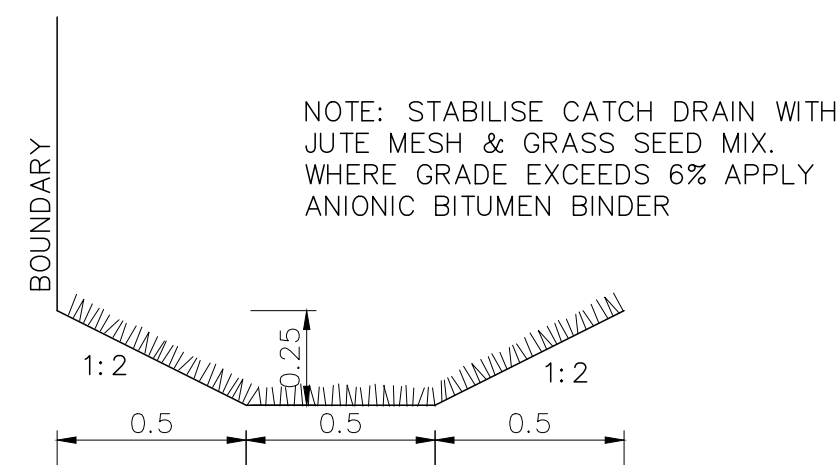


TYPICAL DETAIL - BOLLARD

NTS

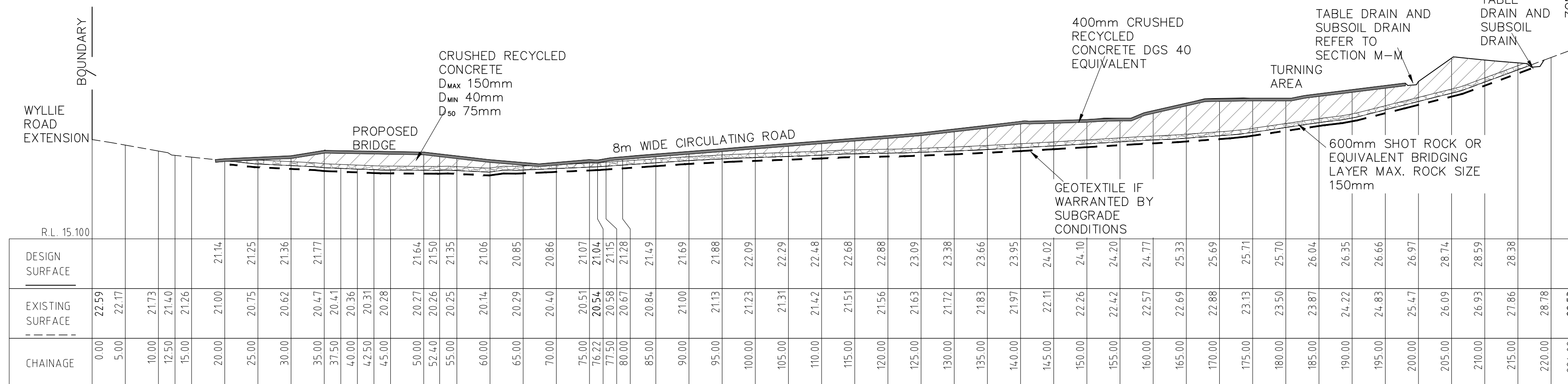
NOTES

1. CONSTRUCT STACKED ROCK WALL WHERE BATTER SLOPE IS STEEPER THAN 1V:2h. TOP OF RETAINING WALL TO BE WHOLLY WITHIN THE ZONE BOUNDARY.
2. RETAINING WALL TO BE GENERALLY HAVE A 1m RISE AND 1m SLOPE.
3. CONSTRUCT CATCH DRAIN AT TOP OF RETAINING WALL.
4. CATCH DRAIN TO INTERCEPT Q_{90} AND DIVERT TO EXISTING WATER COURSE. PROVIDE SHEET PILE OR CATCH DRAIN DETAIL.
5. PAD MATERIAL TO BE VENM, ENM OR RECYCLING EXEMPT MATERIAL (CONCRETE, ROCK, BRICK, ETC.) AS PER APPROVED SDS 5000 CONSIST.



SECTION F-F/C301 - CATCH DRAIN

SCALE 1:20



LONGITUDINAL SECTION C-C / C301
 SCALES: HORIZONTAL 1:500 VERTICAL 1:250

GEO/TECH ENGINEER ONSITE.				
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	MATERIALS ADDED TO SECTIONS	24.08.2016	B.M	W.M
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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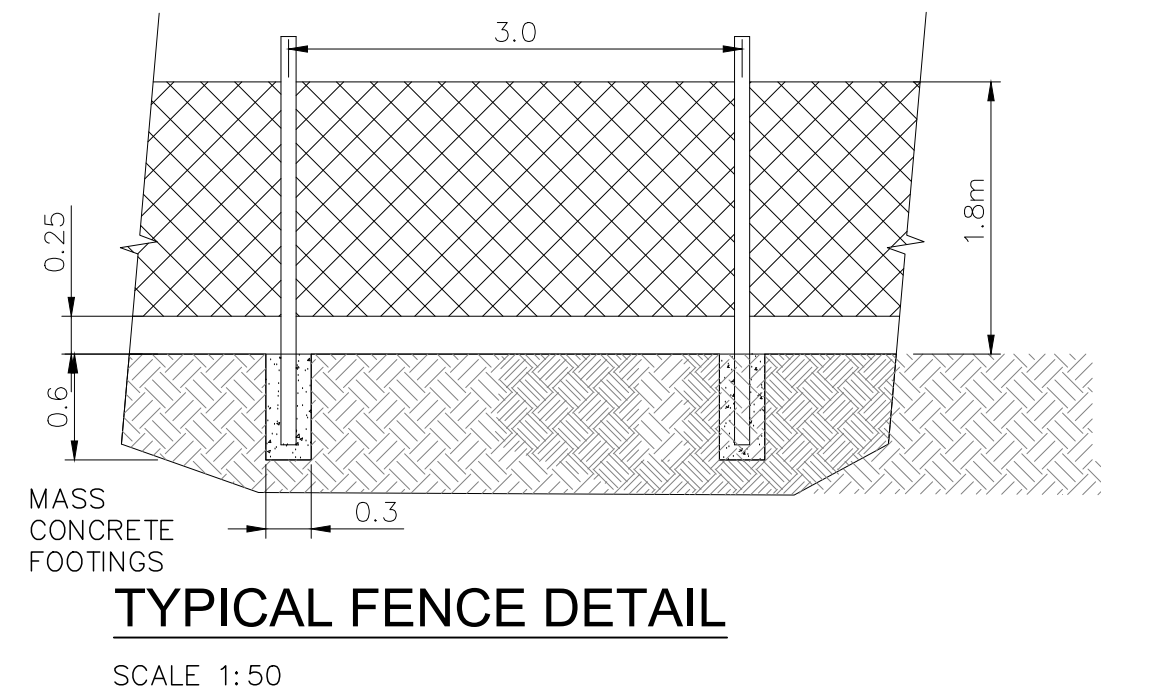
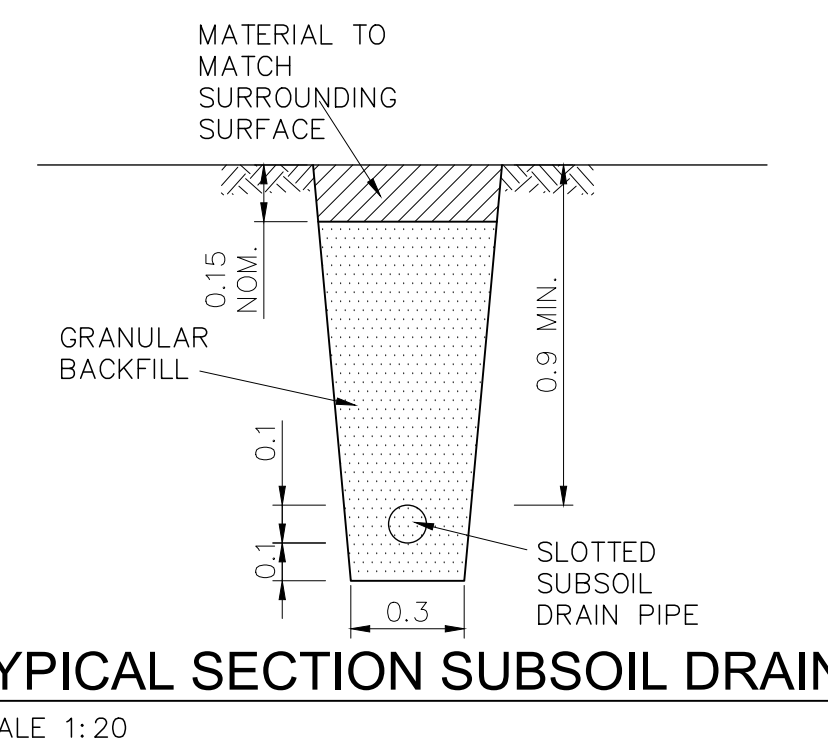
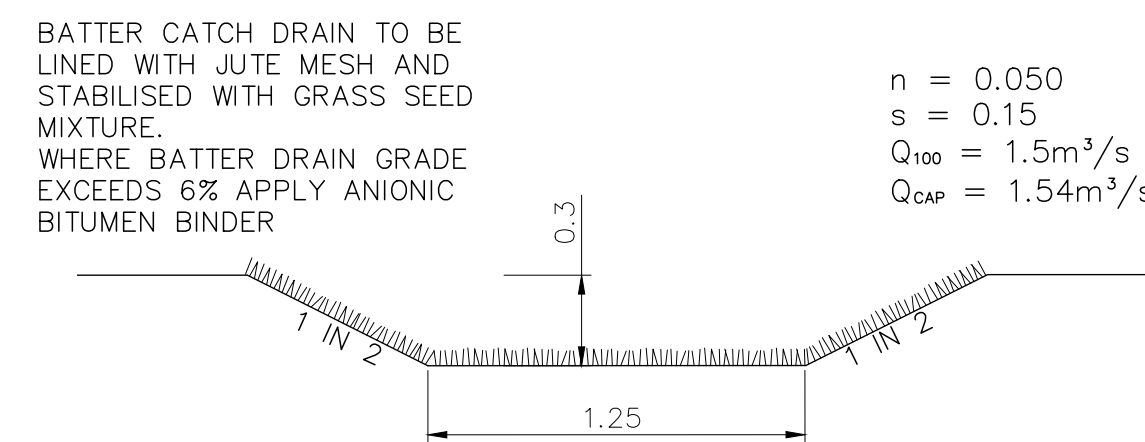
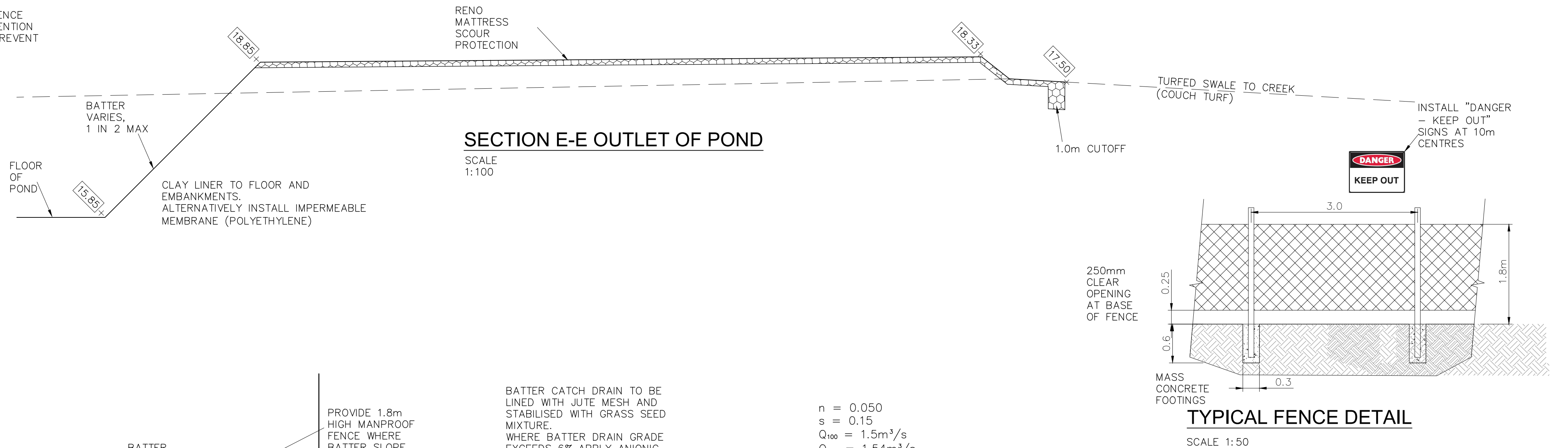
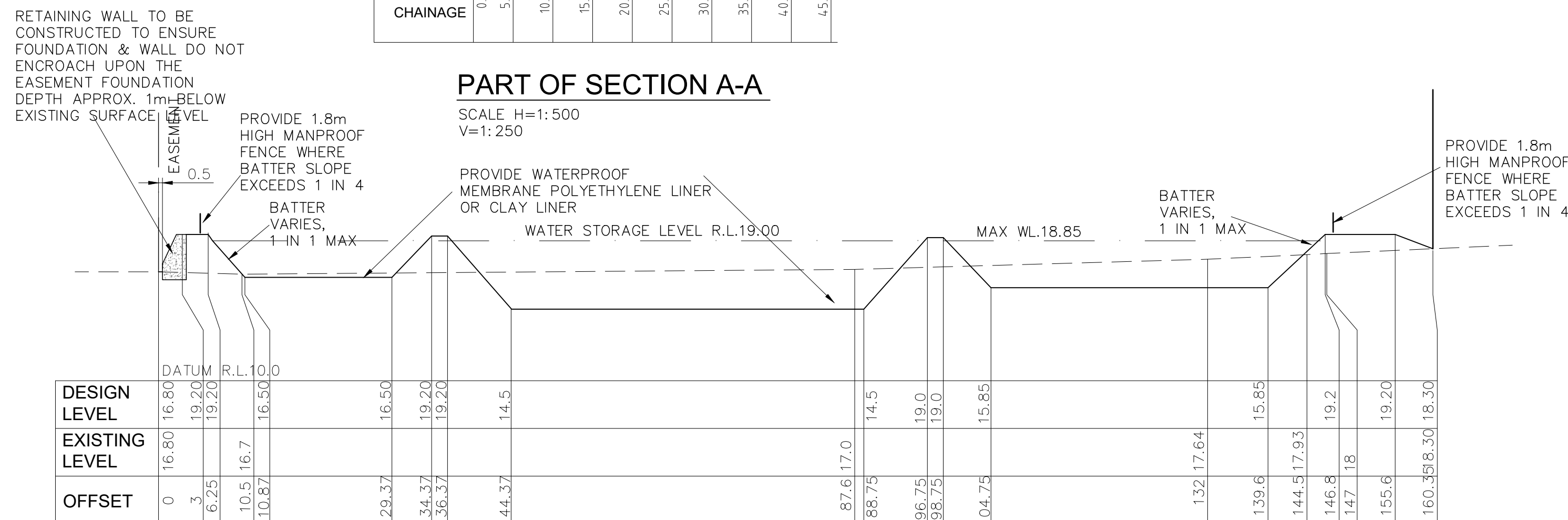
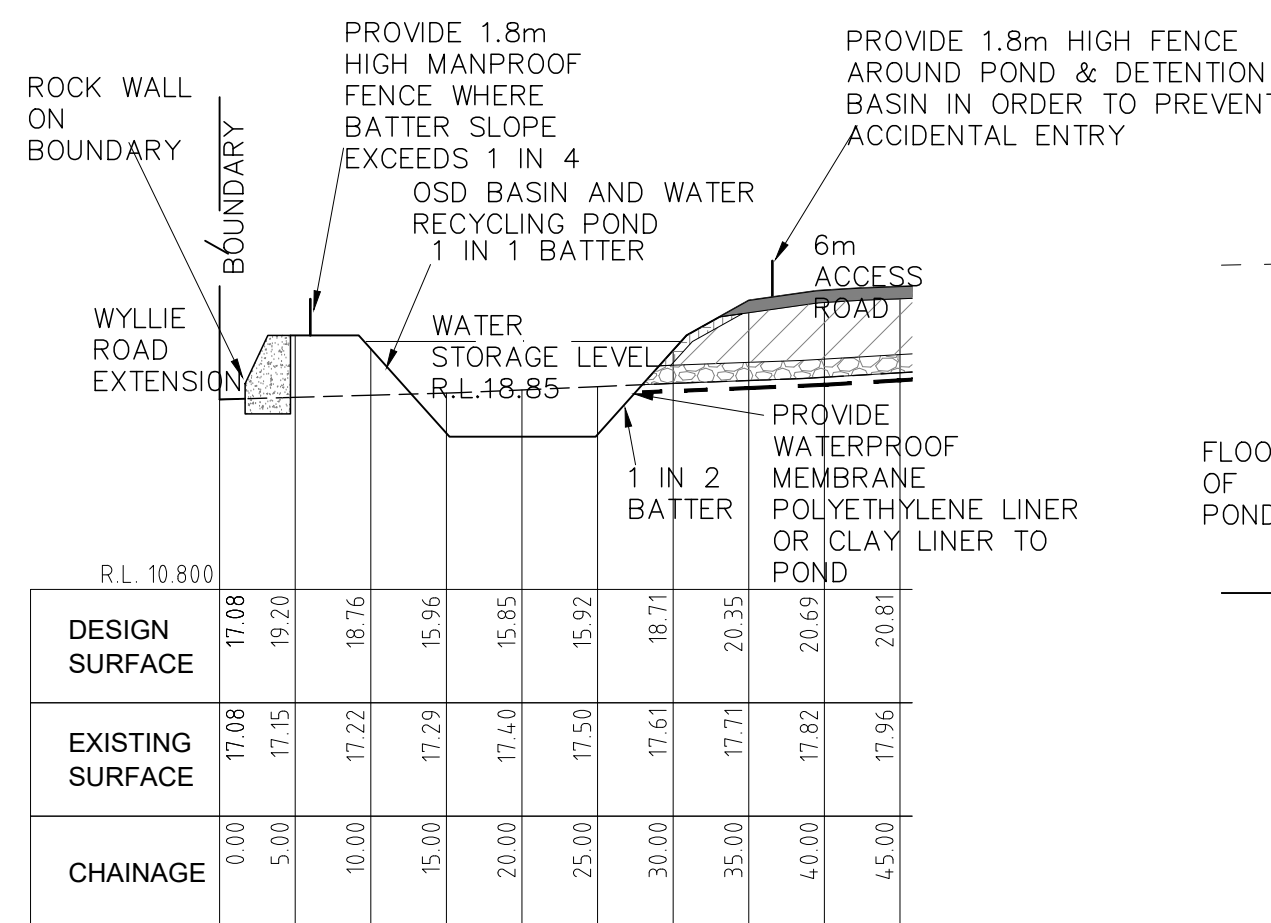
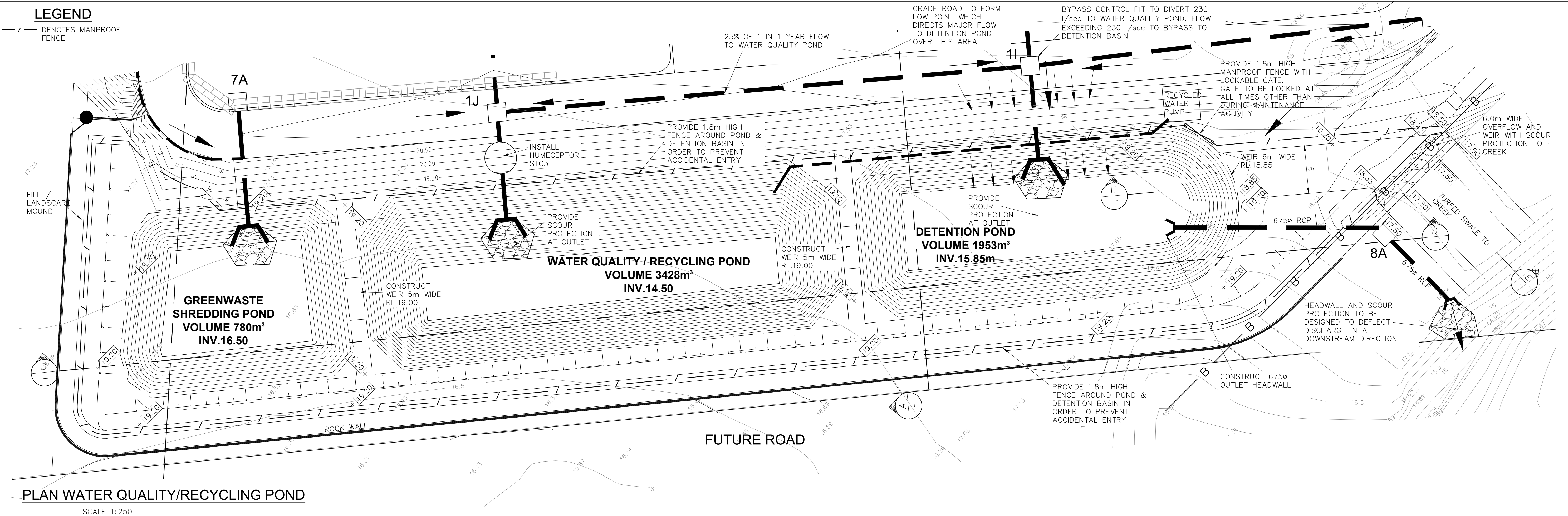
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Surveyor DENNIS SMITH	Date APRIL 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE SITE SECTIONS		Project No. KF110816	
Date of Survey	Drawn B.MIDDLETON			Drawing No. C306	
Height Datum AHD	Designed W.MULLANY BE Great Dip LGE Melbourne MRE Aust CPDRg RFD			Sheet 7 Of 20	
Origin	Checked			Revision B	
Horiz. Datum	Approved	Scale 1:500 @ A1 1:1000@ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC		

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LEGEND

— / — DENOTES MANPROOF
FENCE



- SUBSOIL NOTES

1. SUBSOIL DRAIN PIPE TO BE 100mm DIAM SLOTTED POLYETHYLENE FITTED WITH FILTER SOCK. UNDER HEAVILY TRAFFICKED AREA THE SUBSOIL DRAIN IS TO BE SLOTTED uPVC.
2. TRENCH TO BE MINIMUM 300mm WIDE
3. BACKFILL TO BE CLEAN GRANULAR MATERIAL COMPACTED TO Df 80
4. MINIMUM GRADE OF TRENCH/SUBSOIL DRAIN PIPE IS TO BE 0.5%

		V=1:250			
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.	
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised	



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Surveyor DENNIS SMITH	Date APRIL 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE POND DETAILS		Project No. KF110816	
Date of Survey	Drawn B.MIDDLETON			Drawing No. C307	
Height Datum AHD	Designed W.MULLANY BE Civil Engr LGCE MEIRIKHMS MEASURD CPDNG RFD			Sheet 8 Of 20	Revision B
Origin	Checked				
Horiz. Datum	Approved	Scale 1:250 @ A1 1:500 @ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC		

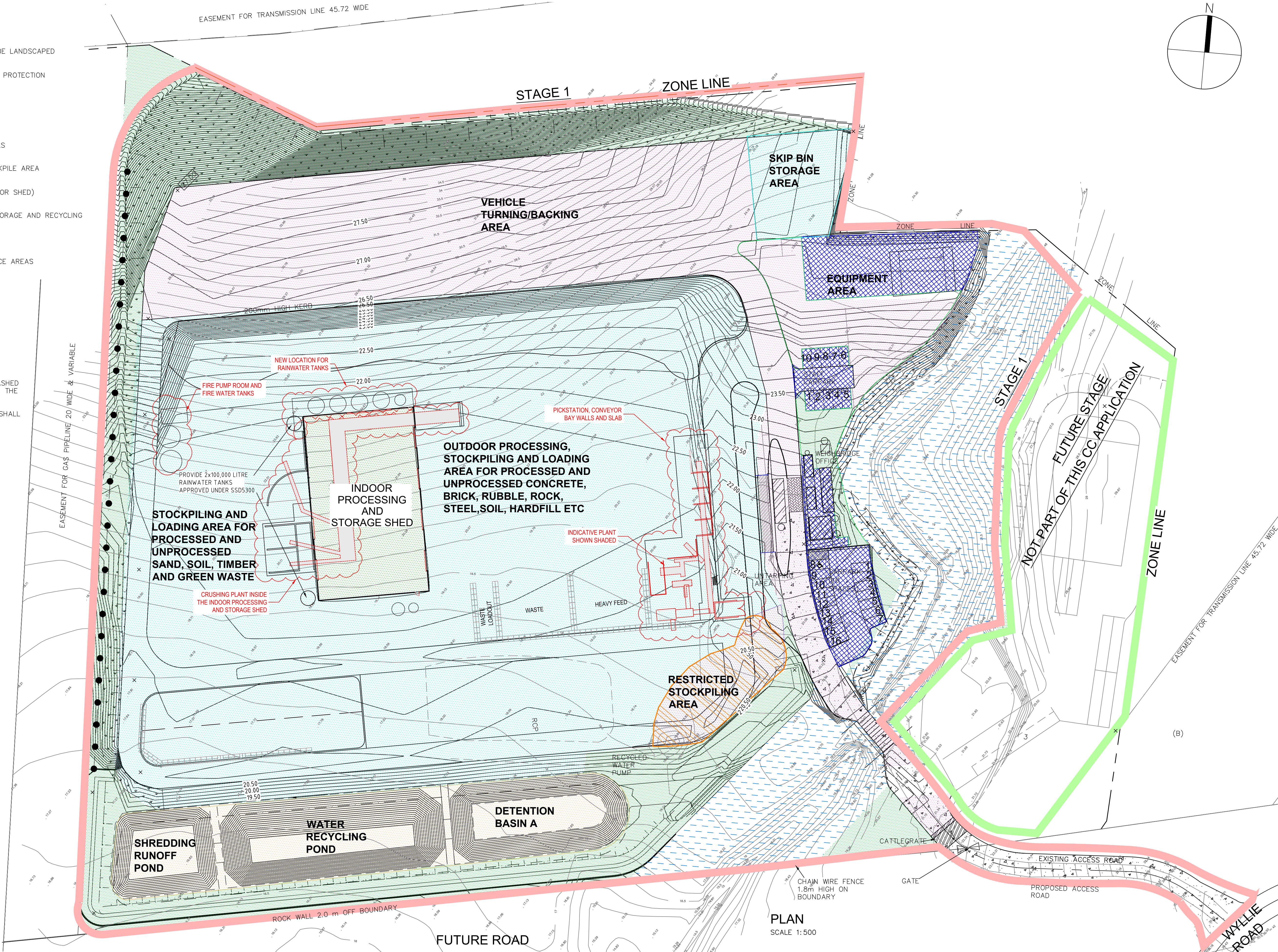
LEGEND

- DENOTES PROPOSED BATTER (1 IN 2) TO BE LANDSCAPED
- DENOTES PROPOSED LANDSCAPING/BATTER PROTECTION
- DENOTES RIPARIAN CORRIDOR
- DENOTES GRASSED/LANDSCAPED AREA
- DENOTES ACCESS AND MANOEUVRING AREAS
- DENOTES GENERAL PROCESSING AND STOCKPILE AREA
- DENOTES PROCESSING AND STORAGE (INDOOR SHED)
- DENOTES OSD STORAGE BASIN, RUNOFF STORAGE AND RECYCLING
- DENOTES RESTRICTED STOCKPILING AREAS
- DENOTES ADMINISTRATION AND MAINTENANCE AREAS
- DENOTES PROPOSED ROAD UPGRADING
- DENOTES STAGE 1 LIMITS
- DENOTES FUTURE STAGE LIMITS

NOTES:

1. MATERIALS WHICH ARE LIABLE TO BE BUOYANT AND WASHED OFF THE SITE DURING A PMF SHALL NOT BE STORED IN THE RESTRICTED STOCKPILING AREA.

2. ONLY NON-BUOYANT DURABLE AND DENSE MATERIALS SHALL BE STORED IN THE RESTRICTED STORAGE AREA



PLAN
SCALE 1:500

B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.	
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2017	B.M.	W.M.	
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised	

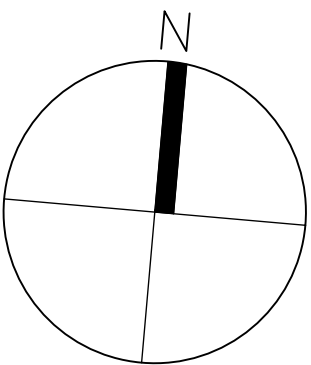
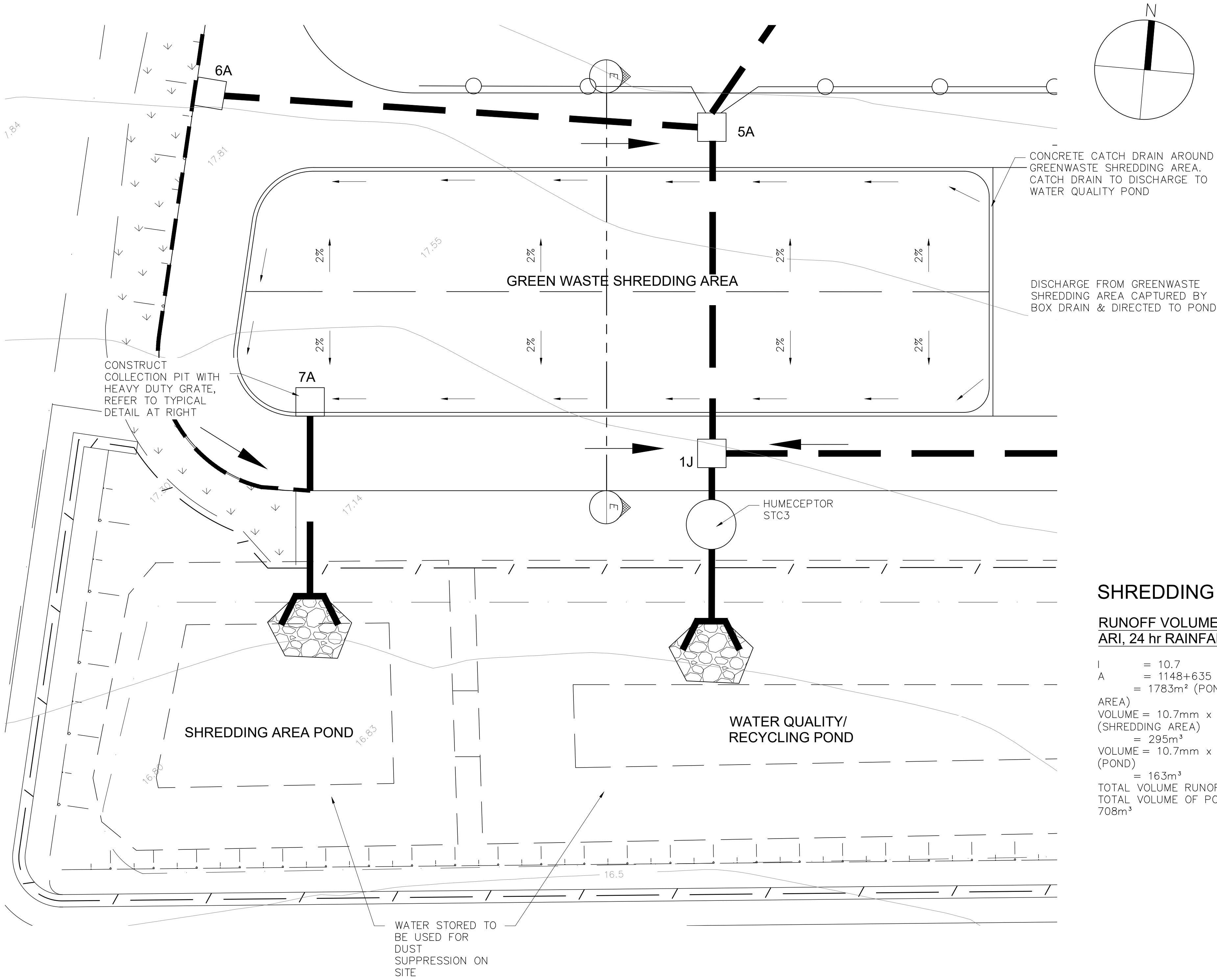


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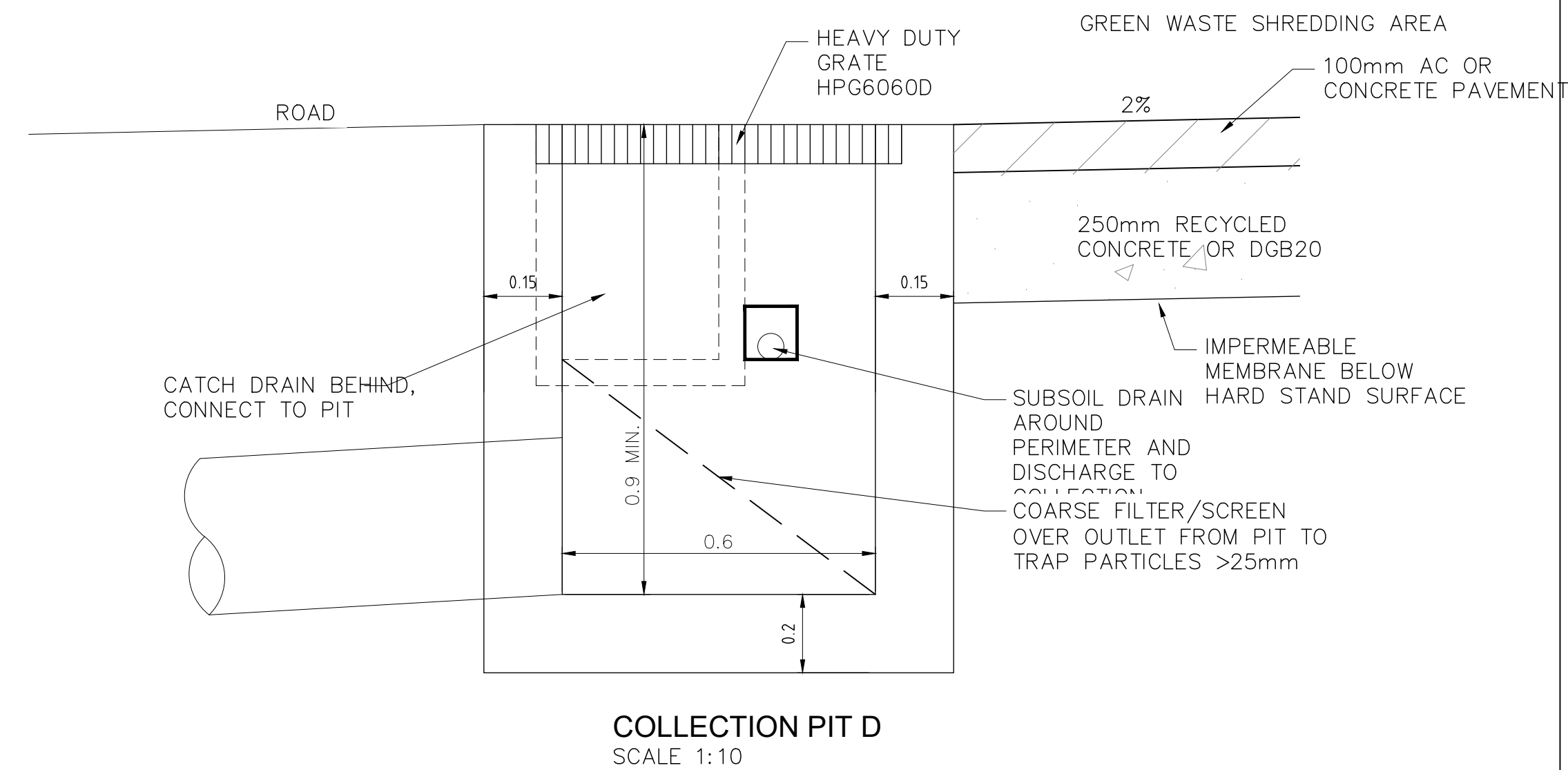
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Surveyor	DENNIS SMITH	Date	APRIL 2016
Date of Survey		Drawn	B.MIDDLETON
Height Datum	AHD	Designed	W.MULLANY
Origin		Checked	
Horiz. Datum		Approved	

Drawing Title		Project No.	
PROPOSED INDUSTRIAL DEVELOPMENT		KF110816	
LOT 10 DP 878167		Drawing No.	
WYLLIE ROAD, KEMBLA GRANGE		C308	
SITE PLAN - USAGE AREAS		Sheet	Revision
Scale 1:500 @ A1 1:1000 @ A3		9 Of 20	B
Drawing Status		ISSUED FOR SSD5300 MOD2 CC	



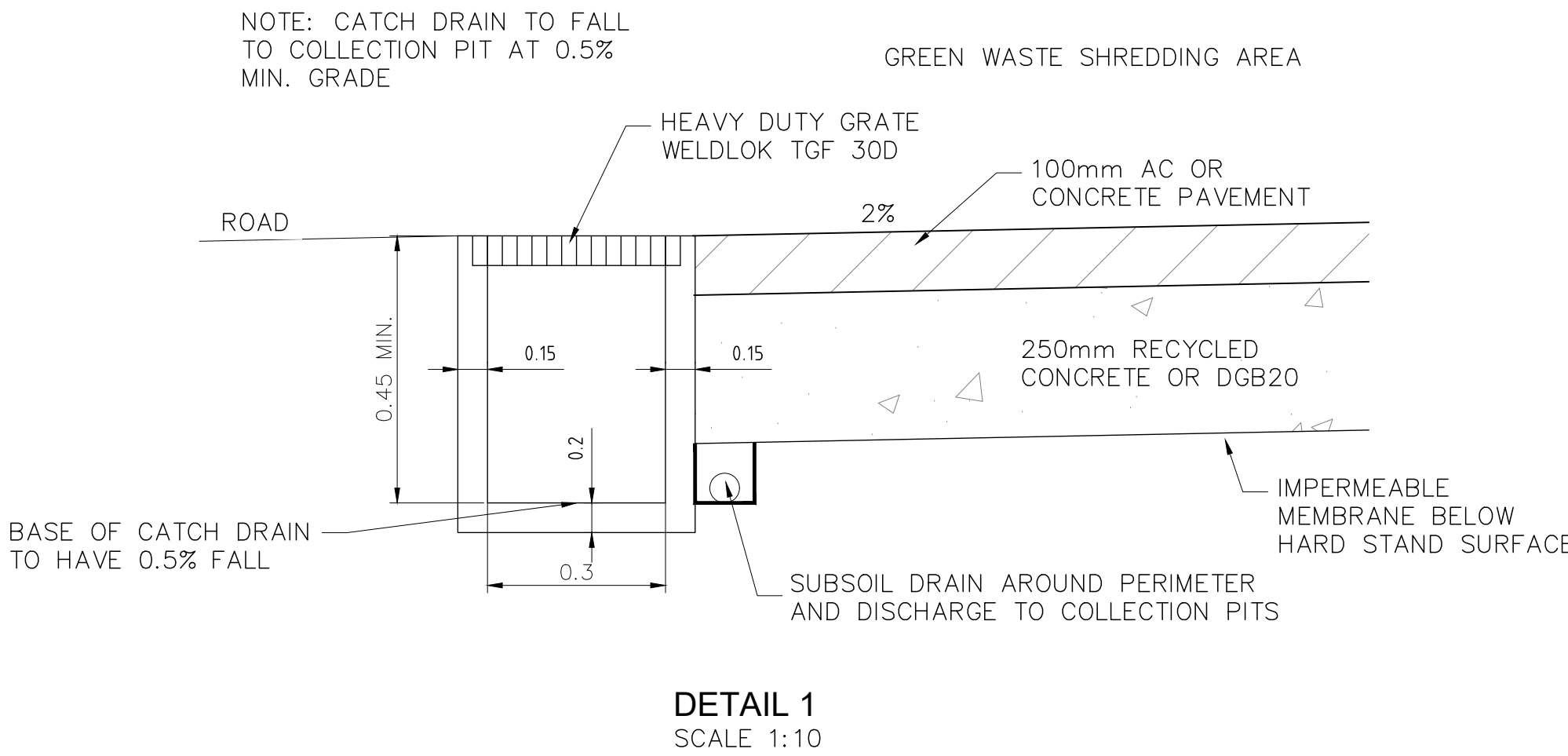
- NOTE:**
1. AFTER SHREDDING, GREEN WASTE IS TO BE MOVED TO PROCESSING SHED FOR COMPOSTING.
 2. COMPOSTING PROCESS TO BE UNDER COVER IN PROCESSING SHED.
 3. COMPOSTING EFFLUENT TO BE DRAINED TO SEPTIC TANK.
 4. WATER RETAINED IN SHREDDING POND TO BE USED FOR DUST SUPPRESSION ON SITE.
 5. PERIMETER GRATES AND DRAINS TO BE MAINTAINED IN SERVICEABLE CONDITION AT ALL TIMES. NO BUILD UP OF GREEN WASTE SHALL OCCUR.
 6. MAINTENANCE SHALL BE PERFORMED TWICE WEEKLY AS MINIMUM.



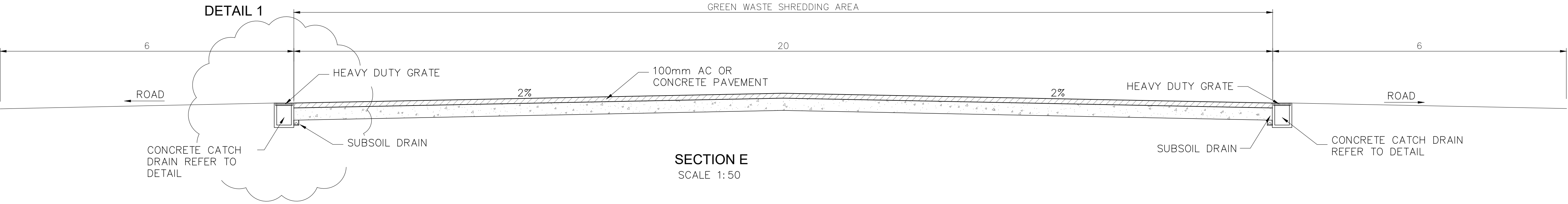
SHREDDING POND VOLUME

**RUNOFF VOLUME FROM 1 IN 10_{YR}
ARI, 24 hr RAINFALL BURST**

I = 10.7
A = 1148+635
= 1783m² (POND + SHREDDING AREA)
VOLUME = 10.7mm x 24 hr x 1148m² (SHREDDING AREA) = 295m³
VOLUME = 10.7mm x 24 hr x 635m² (POND) = 163m³
TOTAL VOLUME RUNOFF = 458m³
TOTAL VOLUME OF POND STORAGE = 708m³



NOTE:
CATCH DRAIN TO BE REINFORCED WITH SL82 CENTRALLY PLACED IN FLOOR AND WALLS



B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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Surveyor	DENNIS SMITH	Date	May 2016
Date of Survey		Drawn	B.MIDDLETON
Height Datum	AHD	Designed	W.MULLANY
Origin		Checked	
Horiz. Datum		Approved	

Drawing Title	PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE SHREDDING AREA DETAIL		
Scale	AS @ A1 SHOW@ A3	Drawing Status	ISSUED FOR SSD5300 MOD2 CC

Project No.	KF110816		
Drawing No.	C309		
Sheet	10 Of 20	Revision	B

LEACHATE CONTROL NOTES

1. Working surfaces
EPA Goal
To ensure storage areas, active composting surfaces, and associated access roads are constructed to prevent the pollution by leachate of subsoil, groundwater and surface water bodies and to allow all-weather vehicular access to any part of the processing site that needs to be reached by vehicles.

Minimum Design Requirement is met as follows:

The green waste shredding area will have an impervious concrete or asphalt concrete layer to prevent infiltration from the shredding surface.

The green waste shredding area has a penmeter drain to collect and direct runoff to the green waste runoff collection pond.

Composting and storage will be undertaken in a weatherproof shed which will have a concrete floor.

2. Leachate barrier system
EPA Goal
To prevent the pollution by leachate of subsoil, groundwater and surface water bodies over the period of time that raw organics or products remain on the premises, beyond the closure of the facility, and until the premises has ceased to pose potential environmental threats.

Minimum Design Requirement is met as follows:

The green waste shredding area has an impervious layer to prevent infiltration from the shredding surface. The impervious layer will be concrete or asphalt cement (AC) pad of a thickness of at least 100 mm is to be constructed

The concrete or AC pavement will be designed for a traffic loading of 1 x 105 E5A. Assuming a CBR of 5, the pavement thickness will be in the order of 340 mm including a minimum of 100 mm concrete of AC thickness.

A 100mm concrete or AC layer will withstand the loads from all machines, vehicles and equipment that are required to operate the facility.

3. Leachate collection system
EPA Goal
To ensure that leachate is collected efficiently at the composting and related processing facility for further management, thereby avoiding water pollution and/or odour problems.

Minimum Design Requirement is met as follows:

The composting process will occur under cover in a weather-proof building and will produce no or at worst a small volume of leachate.

The composting process shed will have a concrete floor underlain by a polyethylene membrane in order to prevent leachate infiltration into the groundwater.

The compost process leachate collection system will consist of the following:

- A primary concrete tank with a volume of 5,000 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

- A secondary concrete tank with a volume of 2,500 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

- The secondary tank will be connected to the primary tank at the level where the primary tank is at 4,000 litre storage (80%) capacity.

- The primary collection tank will be fitted with a sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste tanker and disposed of at an appropriate treatment facility.

4. Leachate storage system
Goal
To ensure that leachate is stored efficiently at the composting and related processing facility for further management, thereby avoiding water pollution and/or odour problems.

Minimum Design Requirement is met as follows:

The compost process leachate collection and storage system will consist of the following:

- A primary concrete tank with a volume of 5,000 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

- A secondary concrete tank with a volume of 2,500 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

- The secondary tank will be connected to the primary tank at the level where the primary tank is at 4,000 litre storage (80%) capacity.

- The primary collection tank will be fitted with a storage level sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste

tanker and disposed of at an appropriate treatment facility.

A weekly inspection of the level in the leachate storage tank is to be performed.

Six monthly testing of the storage level sensor is to be performed.

It is noted that above ground tanks are preferred, however underground tanks are proposed in this case because the composting area is within a weather proof shed which will mean that the generation of leachate will be nil or very small.

The composting process will be undertaken in a weatherproof shed. There will therefore be no need to make provision for rainwater inflow to the leachate storage system. It is noted that rainwater from the weatherproof shed will be harvested for use on site for dust suppression.

5. Surface water controls
Goal
To avoid the generation of excessive leachate and to prevent any sediment or pollutants from being carried off the premises.

Minimum Design Requirement is met as follows:
The surface water controls must at least meet the following requirements:

For composting and storage;
prevention of surface water mixing with organics will achieved by undertaking the composting process within a weatherproof building. The building will effectively prevent surface water mixing with the composting material.

For green waste shredding;
prevention of surface water mixing with organics will be achieved by:

- elevating the green waste shredding area above the internal road system in order to ensure that surface water does not run onto the green waste shredding area.
- the internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central V drain in order to ensure that surface water runs away from the shredding area.

For composting;
contamination of runoff will be prevented by undertaking the composting process and storage within a weatherproof building. The building will effectively prevent surface water mixing with the composting material.

For green waste shredding handling;
treatment of runoff from the shredding area will be achieved by:

- elevating the green waste shredding area above the internal road system in order to ensure that surface water does not run onto the green waste shredding area.
- the internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central dish-drain in order to ensure that surface water runs away from the shredding area.

For composting;
management of surface water generated from the design of a 1-in-10 year, 24-hour-period storm event will not be required because the composting operations are within a weatherproof building. The building will effectively prevent surface water mixing with the composting material.

For green waste shredding;
management of surface water generated from the design of a 1-in-10 year, 24-hour-period storm event will be achieved by minimising the area of green waste exposed to rainfall and ensuring the shredding pond has sufficient volume. As runoff will not be heavily loaded with organic matter, water retained in the green waste shredding pond may be used a supplementary supply for dust suppression on site.

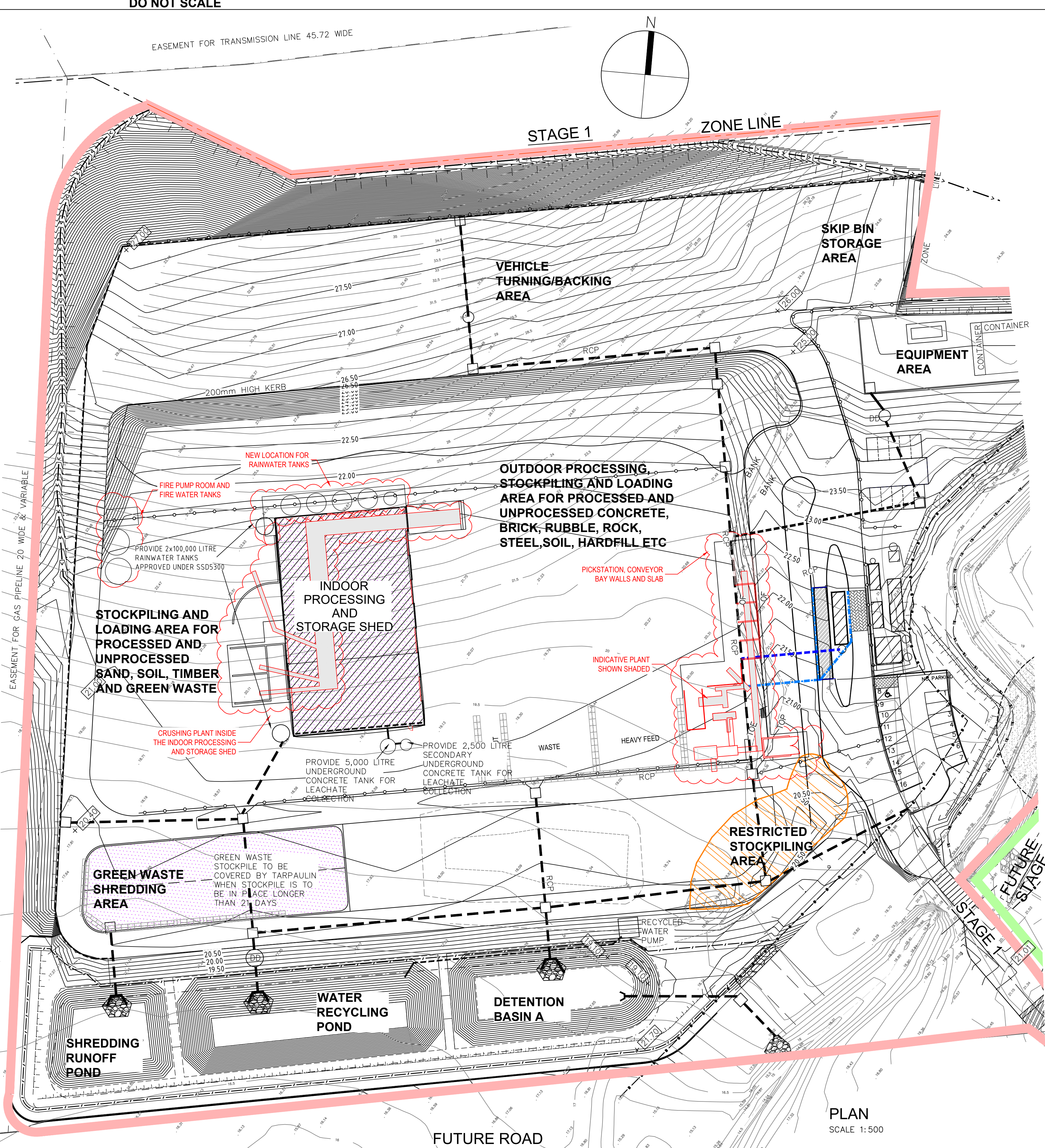
The internal road and stormwater system is designed to collect and divert surface water away from the green waste shredding area. The internal road has a central V drain in order to ensure that surface water runs away from the shredding area.

LEGEND

- Denotes proposed building
- Denotes existing contours
- Denotes proposed surface levels
- Denotes Humeceptor downstream defender
- Composting and storage shed, concrete floor, drain to underground leachate collection tanks
- Green waste shredding area, concrete or asphalt surface, refer to drawing KF110816/C17
- Detention pond
- Denotes stormwater pits and pipes
- Denotes stage 1 limits
- Denotes future stage limits

NOTE:

COMPOSTING OPERATIONS APPROVED UNDER SSD5300 IN SHED ARE TO BE REPLACED BY PROPOSED SORTING AND CRUSHING PLANT.



LEGEND

- DENOTES EXISTING CONTOURS
- DENOTES PROPOSED SURFACE LEVELS
- DENOTES STORMWATER SURFACE FLOW/DIRECTION OF V DRAINS
- DD DENOTES HUMECEPTOR DOWNSTREAM DEFENDER
- DENOTES ROOF AREAS TO RAINWATER TANKS
- SURFACE AREA RUNOFF TO WATER QUALITY POND THROUGH HUMECEPTOR
- DETENTION POND--DOES NOT RETAIN WATER
- DENOTES STORMWATER PITS AND PIPES WITH DIRECTION OF FLOW
- DENOTES STAGE 1 LIMIT
- DENOTES STAGE 2 LIMIT

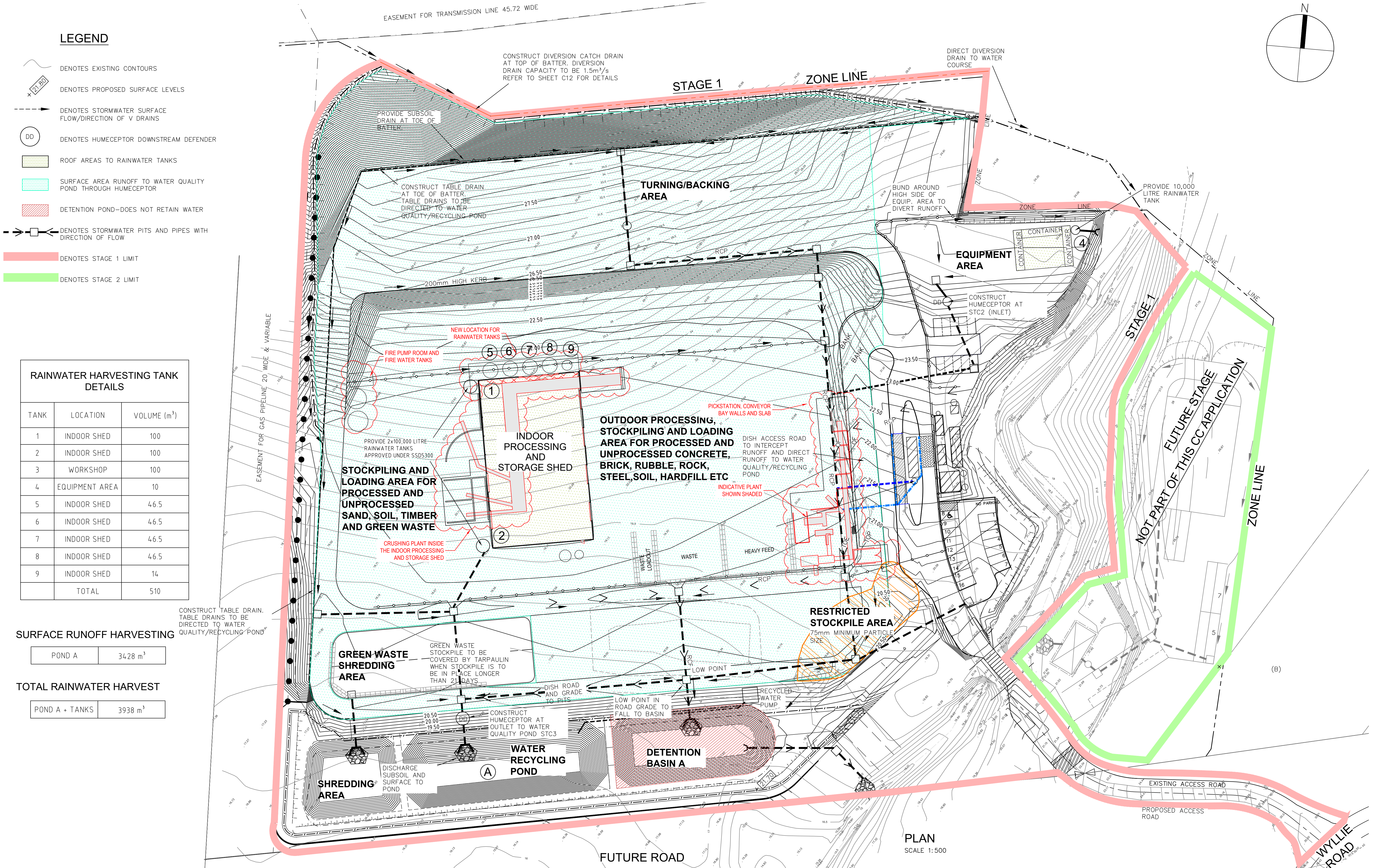
RAINWATER HARVESTING TANK DETAILS		
TANK	LOCATION	VOLUME (m³)
1	INDOOR SHED	100
2	INDOOR SHED	100
3	WORKSHOP	100
4	EQUIPMENT AREA	10
5	INDOOR SHED	46.5
6	INDOOR SHED	46.5
7	INDOOR SHED	46.5
8	INDOOR SHED	46.5
9	INDOOR SHED	14
TOTAL		510

SURFACE RUNOFF HARVESTING

POND A	3428 m³
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TOTAL RAINWATER HARVEST

POND A + TANKS	3938 m³
----------------	---------



Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
C	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2016	B.M.	W.M.



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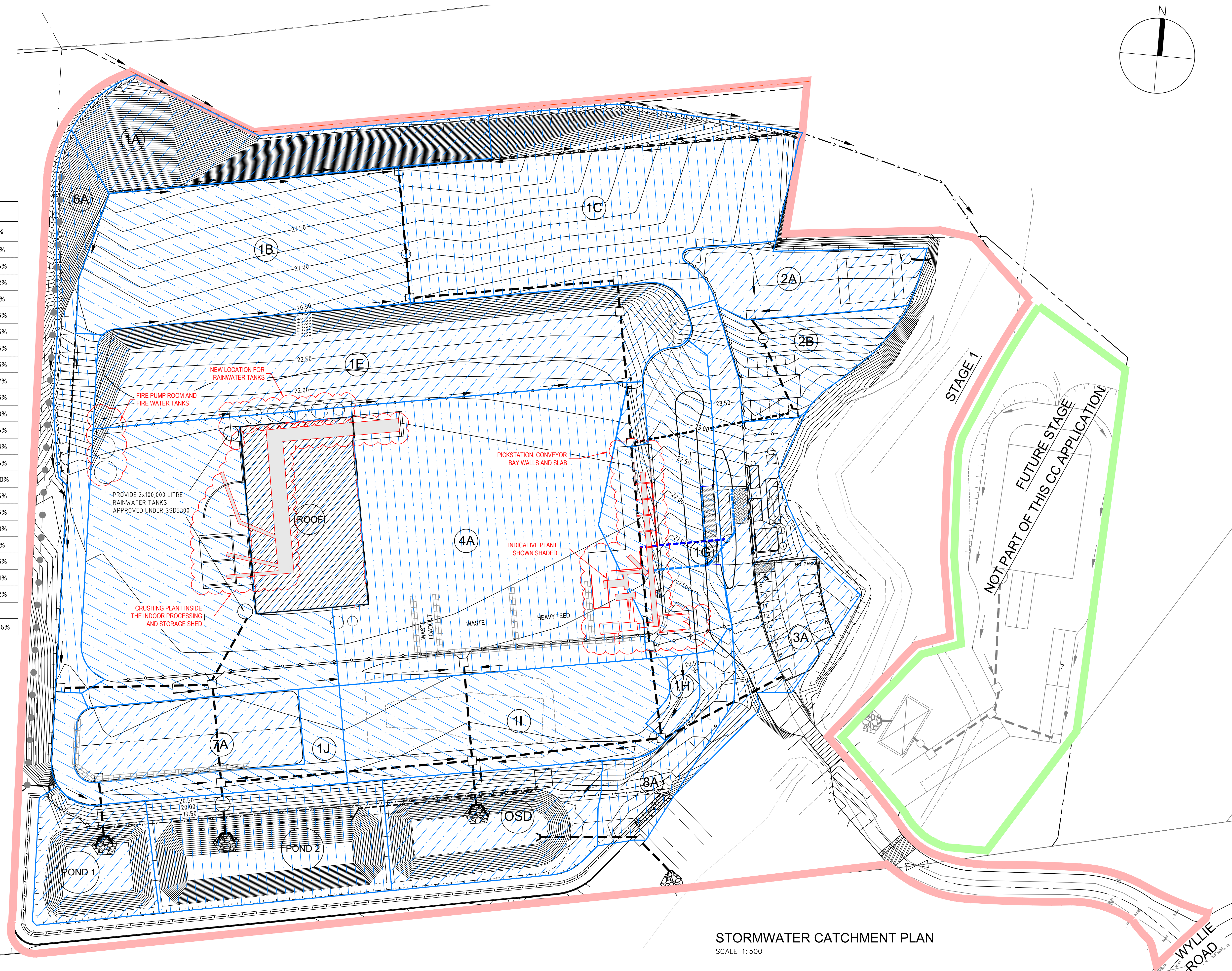
Surveyor DENNIS SMITH	Date MAY 2016
Date of Survey	Drawn B.MIDDLETON
Height Datum AHD	Designed W.MULLANY
Origin	Checked
Horiz. Datum	Approved

Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE RAINWATER HARVESTING PLAN		Project No. KF110816
Scale 1:500 @ A1 1:1000 @ A3		Drawing No. C311
Drawing Status ISSUED FOR SSD5300 MOD2 CC		Sheet 12 Of 20
		Revision C

 DENOTES STORMWATER SURFACE FLOW/DIRECTION OF V DRAINS
 DENOTES HUMCEPTOR DOWNSTREAM
 DENOTES STORMWATER PITS AND PIPES WITH DIRECTION OF FLOW

Catchment	Area		Non-impervious	Impervious	
	(m ²)	(ha)	(m ²)	(m ²)	%
1A	1774.0	0.1774	1774.0	0.0	0%
1B	3077.0	0.3077	0.0	2615.5	85%
1C	4272.0	0.4272	675.0	3057.5	72%
1D	0.0	0.0000	0.0	0.0	0%
1E	3999.5	0.4000	0.0	3399.6	85%
1F	106.0	0.0106	0.0	90.1	85%
1G	1958.0	0.1958	470.1	1487.9	76%
1H	182.0	0.0182	0.0	154.7	85%
1I	2210.0	0.2210	200.0	1708.5	77%
1J	830.0	0.0830	0.0	705.5	85%
2A	997.0	0.0997	204.0	793.0	80%
2B	910.0	0.0910	225.0	685.0	75%
3A	2065.0	0.2065	340.0	1725.0	84%
4A	5313.0	0.5313	0.0	4516.1	85%
ROOF	1500.0	0.1500	0.0	1500.0	100%
5A	3691.6	0.3692	0.0	3137.9	85%
6A	1223.0	0.1223	570.0	555.1	45%
7A	1197.0	0.1197	0.0	1077.3	90%
8A	736.0	0.0736	736.0	0.0	0%
POND 1	988.8	0.0989	838.8	150.0	15%
POND 2	1872.9	0.1873	1602.9	270.0	14%
OSD	1633.3	0.1633	1443.3	190.0	12%
TOTAL	40536.1	4.054	9079.1	27818.4	
				AVERAGE	68.6%

CATCHMENT 1G WAS 58% IMPERVIOUS NOW 76%. INCREASE OF 357m² AND AN OVERALL INCREASE OF 0.9%



STORMWATER CATCHMENT PLAN
SCALE 1:500

C	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2017	B.M	W.M
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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Surveyor DENNIS SMITH	Date April 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE STORMWATER CATCHMENT PLAN		Project No. KF110816	
Date of Survey	Drawn C. Roberts			Drawing No. C312	
Height Datum AHD	Designed C. Roberts BE(Civil) GradEng Aust			Sheet 13 Of 20 Revision C	
Origin	Checked W. Mullany BE Genl Dp LGE (ME/RS) ME Aust CPENG RFD				
Horiz. Datum	Approved				
		Scale 1:500 @ A1 1:1000 @ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC		

LEGEND

- ~ DENOTES EXISTING CONTOURS
- +27.80 DENOTES PROPOSED SURFACE LEVELS
- > DENOTES STORMWATER SURFACE FLOW/DIRECTION OF V DRAINS
- DD DENOTES HUMCEPTOR
- - -> DENOTES STORMWATER PITS AND PIPES WITH DIRECTION OF FLOW
- DENOTES SUBSOIL DRAINAGE

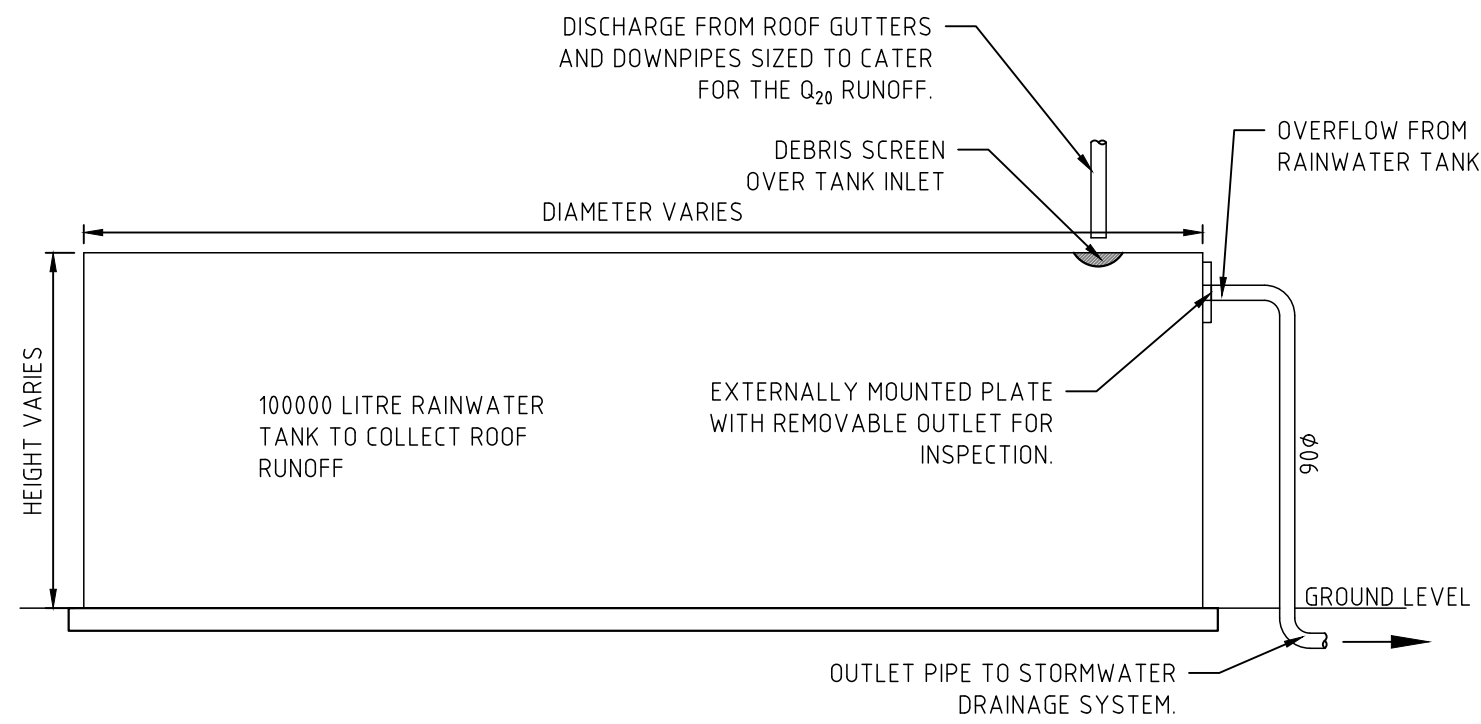
SURFACE RUNOFF HARVESTING

POND A	3428 m ³
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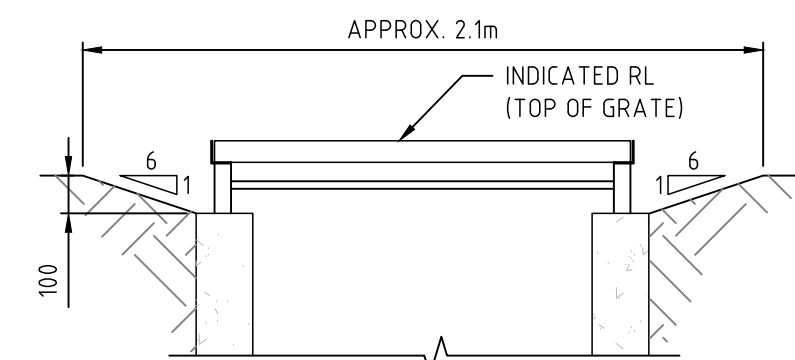
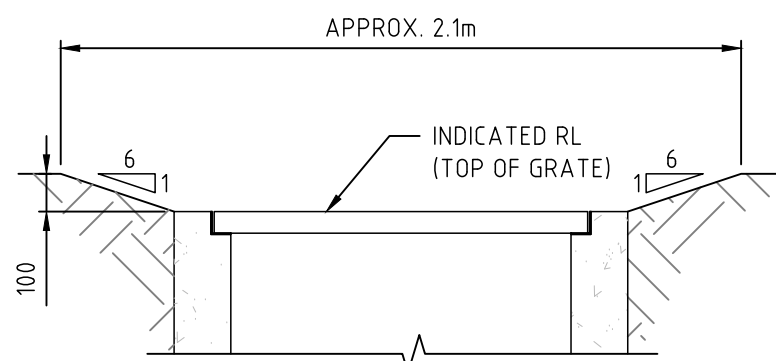
TOTAL RAINWATER HARVEST

POND A + TANKS	3938 m ³
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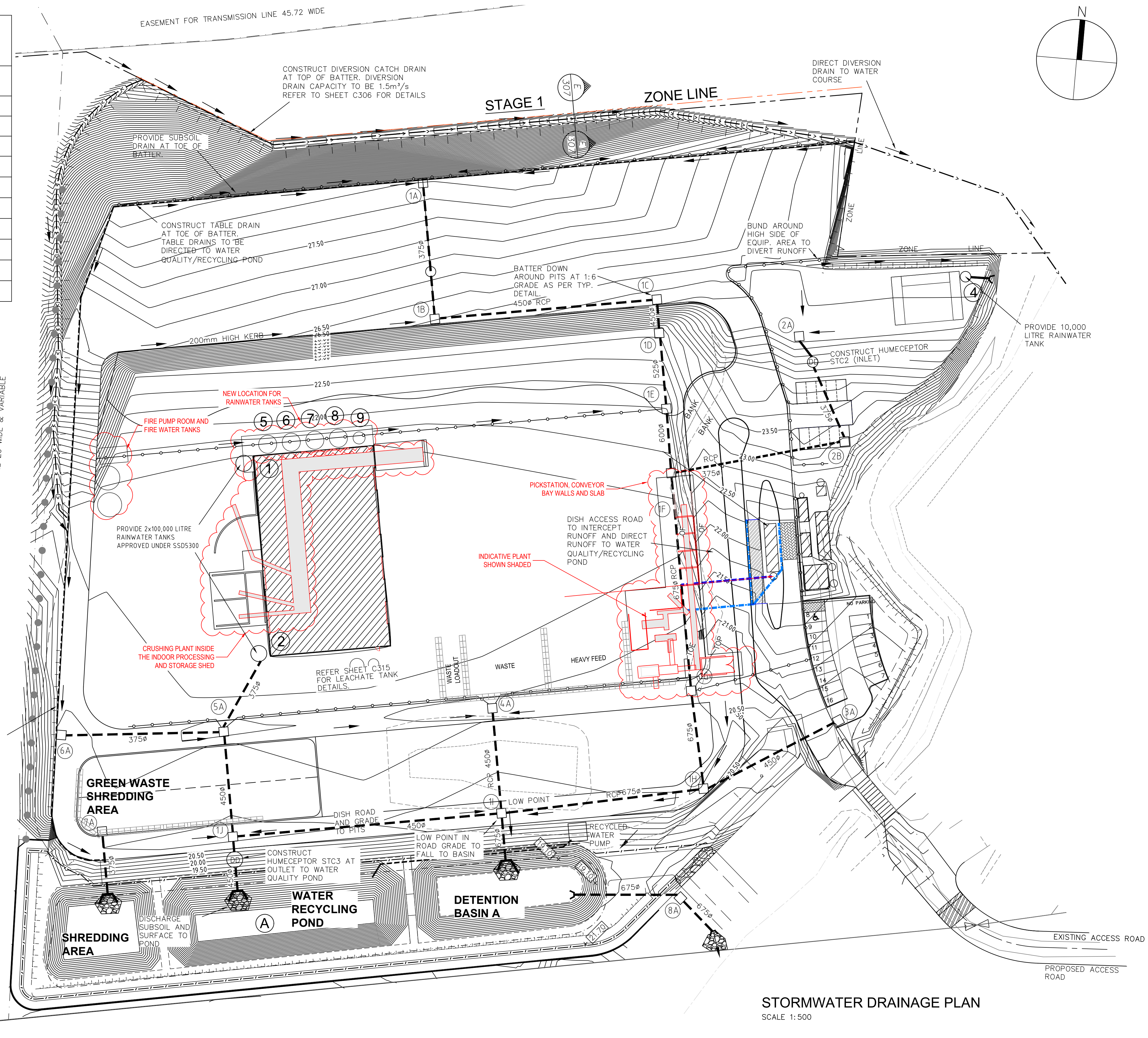
RAINWATER HARVESTING TANK DETAILS		
TANK	LOCATION	VOLUME (m ³)
1	INDOOR SHED	100
2	INDOOR SHED	100
3	WORKSHOP	100
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5	INDOOR SHED	46.5
6	INDOOR SHED	46.5
7	INDOOR SHED	46.5
8	INDOOR SHED	46.5
9	INDOOR SHED	14
TOTAL		510



RESUSE RAINWATER TANK NTS



CONSTRUCT TABLE DRAIN. TABLE DRAINS TO BE DIRECTED TO WATER QUALITY/RECYCLING POND



STORMWATER DRAINAGE PLAN
SCALE 1:500

Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
C	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
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Surveyor DENNIS SMITH	Date April 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE STORMWATER DRAINAGE PLAN	Project No. KF110816
Date of Survey	Drawn C. Roberts	Scale 1:500 @ A1 1:1000 @ A3	Drawing No. C313
Height Datum AHD	Designed C. Roberts BE(Civil) Grad(E) Aust	Drawing Status ISSUED FOR SSD5300 MOD2 CC	Sheet 14 Of 20
Origin	Checked W. Mullany BE(Civil) Grad(E) Aust		Revision C
Horiz. Datum	Approved		

NOTES:

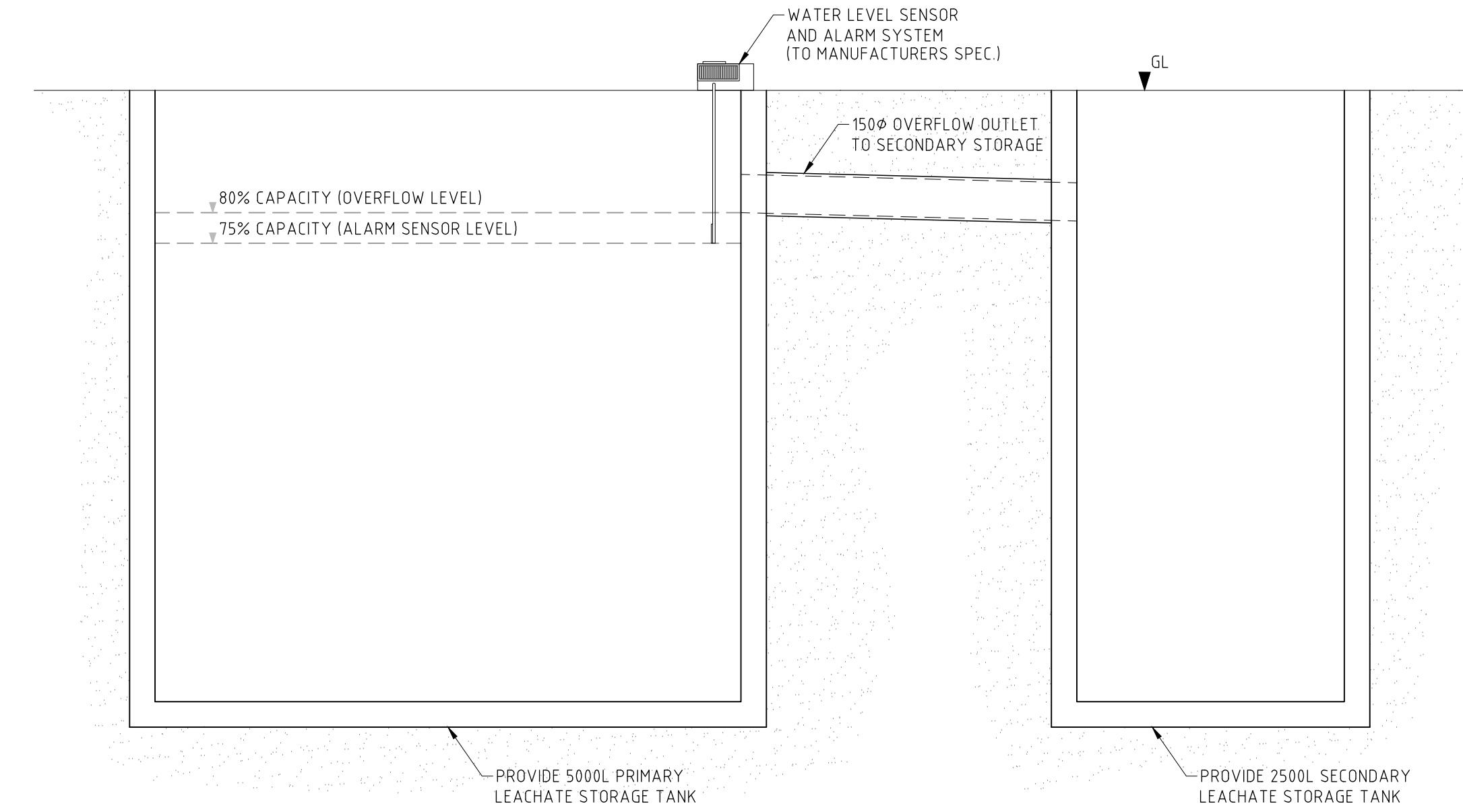
1. A primary concrete tank with a volume of 5,000 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

2. A secondary concrete tank with a volume of 2,500 litres. The concrete tank will be fitted with a watertight lid and internally sealed with an epoxy coating to ensure watertightness.

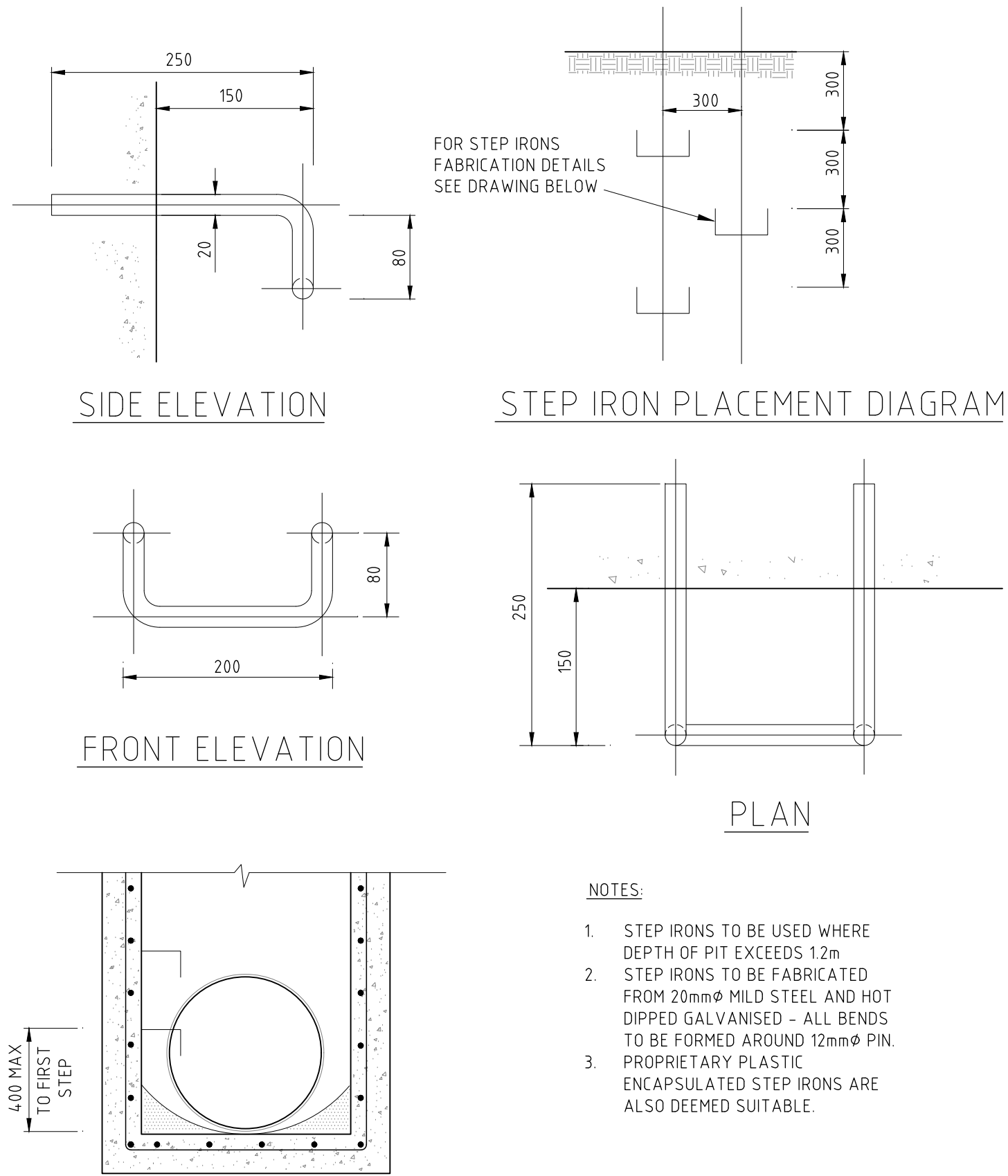
3. The secondary tank will be connected to the primary tank at the level where the primary tank is at 4,000 litre storage (80%) capacity.
4. The primary collection tank will be fitted with a storage level sensor to indicate 75% capacity (ie 3,750 litres. At this point the site manager shall arrange to have the primary tank pumped out by a liquid waste tanker and disposed of at an appropriate treatment facility.

5. A weekly inspection of the level in the leachate storage tank is to be performed.

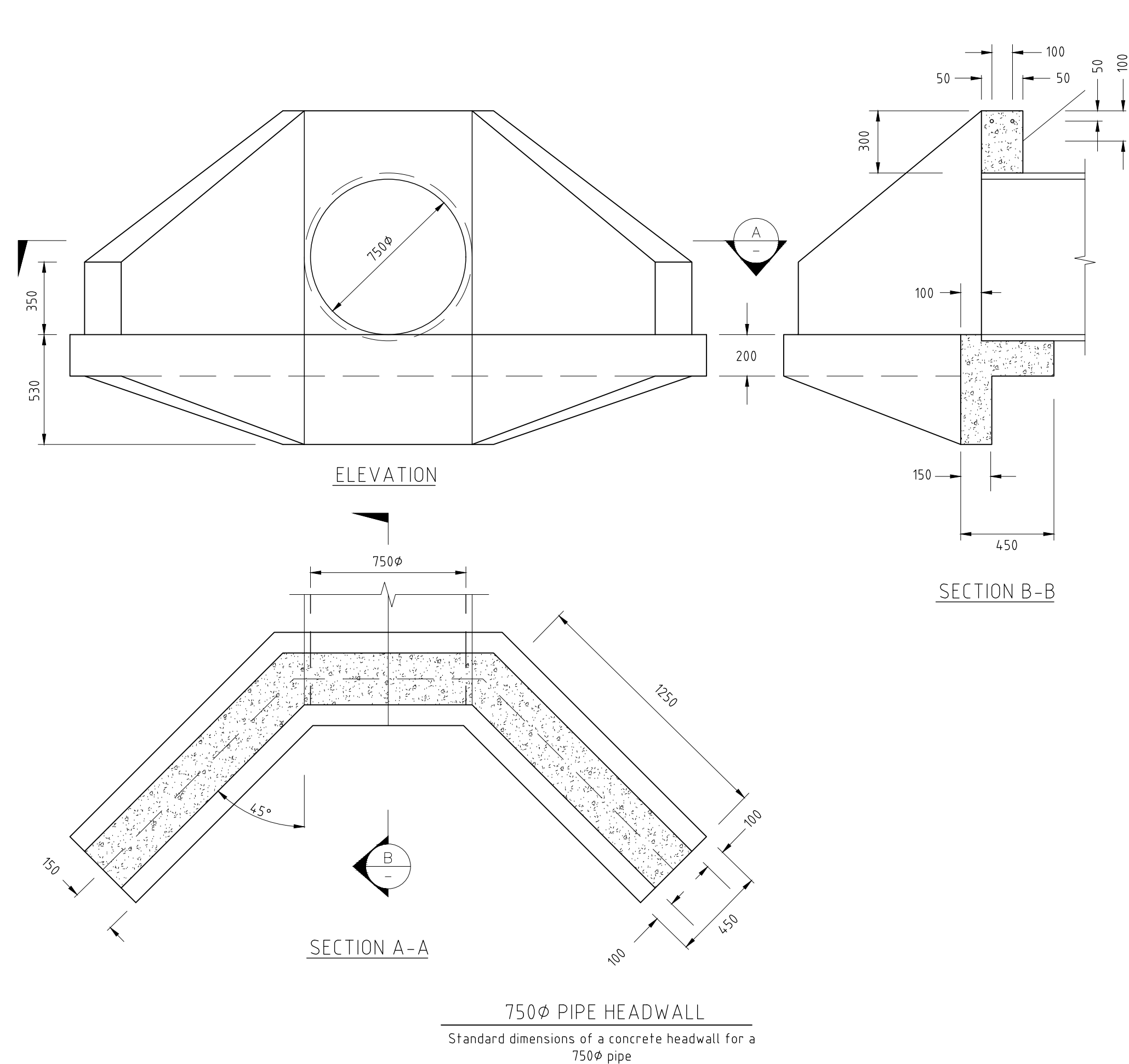
6. Six monthly testing of the storage level sensor is to be performed.



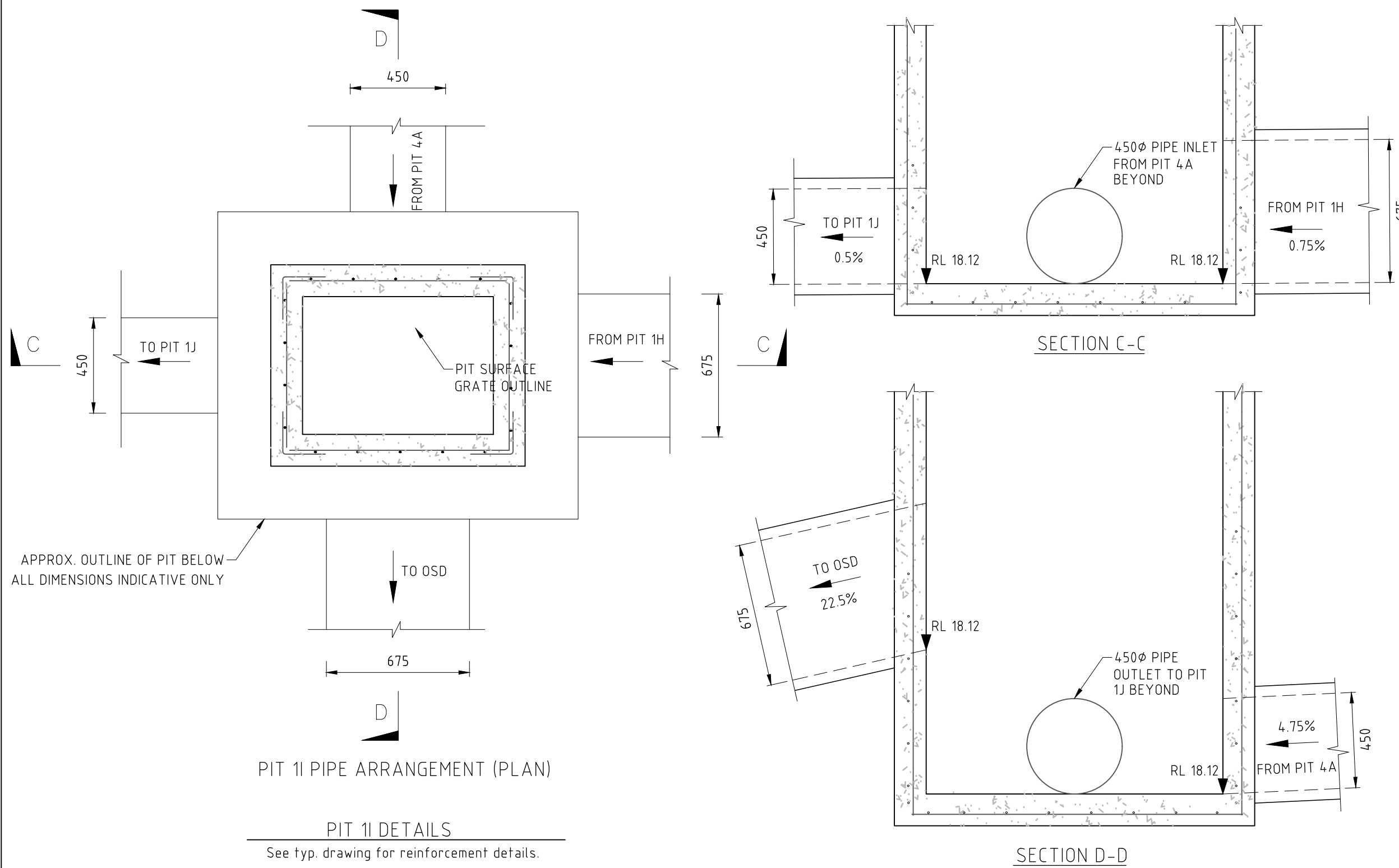
LEACHATE STORAGE TANKS
(To manufacturers specifications)



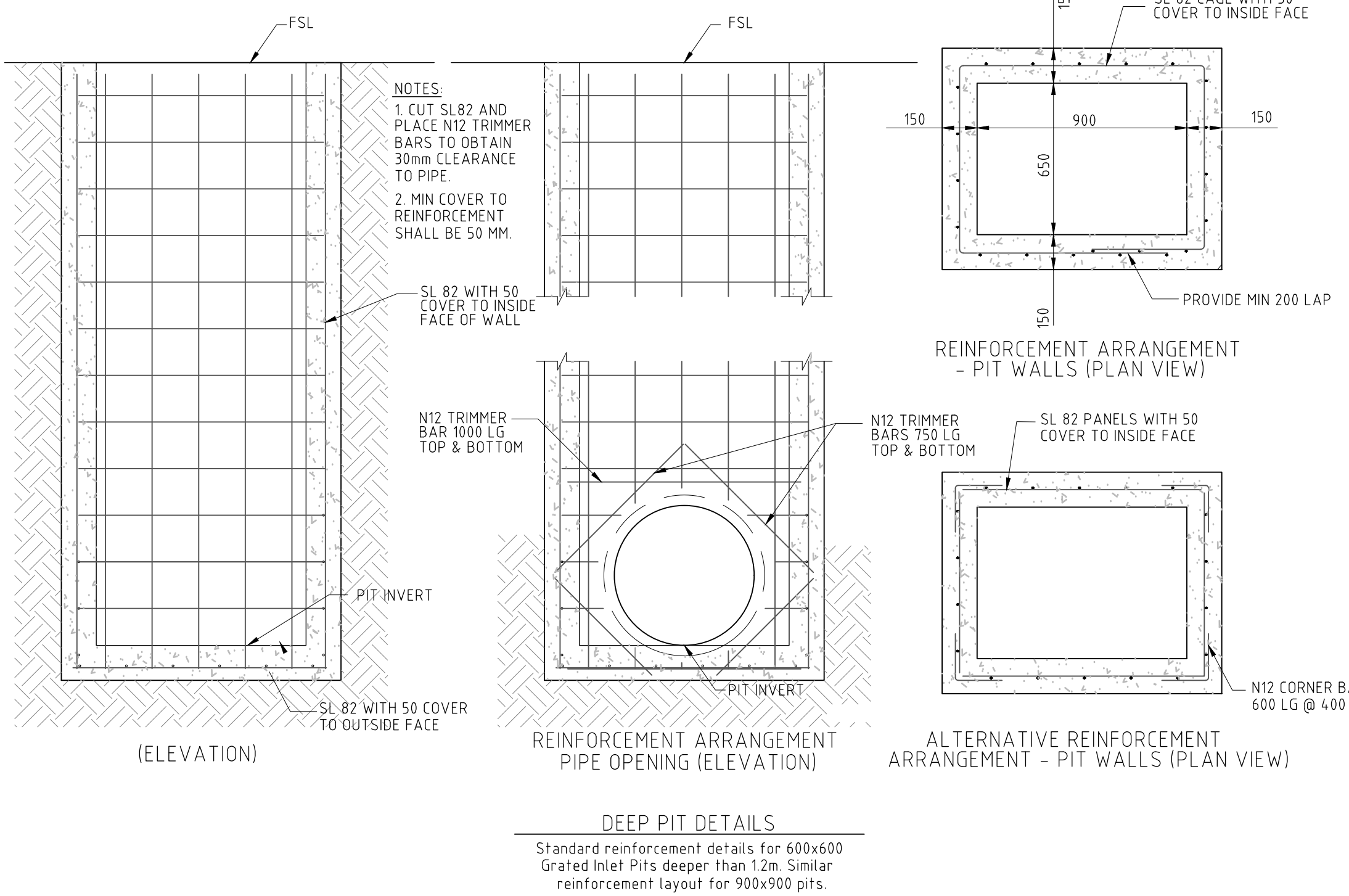
STEP IRON DETAILS
Step iron details and layout for pits deeper than 1.2m



750Ø PIPE HEADWALL
Standard dimensions of a concrete headwall for a 750Ø pipe



PIT SCHEDULE					
Pit	Lid/Pit Type	Surface Level (m AHD)	Invert Level (m AHD)	Depth (m)	Remark
1A	SPC99	27.966	26.57	1.396	Sag pit, 0.1m depression
1B	SPC99	26.274	24.24	2.034	Sag pit, 0.1m depression
1C	HPG9090	25.816	23.84	1.976	Sag pit, 0.1m depression
1D	SPC99	22.79	21.69	1.1	Sag pit, 0.1m depression
1E	HPG9090	22.007	20.8	1.207	Sag pit, 0.1m depression
1F	HPG9090	21.651	19.08	2.571	Sag pit, 0.1m depression
1G	SPC99	20.8	18.56	2.24	Sag pit, 0.1m depression
1H	HPG9090	20.7	18.41	2.29	Sag pit, 0.1m depression
1I	HPG9090	20.5	18.12	2.38	Sag pit, 0.2m depression
1J	HPG9090	20.6	17.8	2.8	Sag pit, 0.2m depression
2A	HPG9090	25.532	24.51	1.022	Sag pit, 0.1m depression
2B	HPG9090	23.074	22.05	1.024	Sag pit, 0.1m depression
3A	HPG9090	20.86	19.83	1.03	Sag pit, 0.1m depression
4A	HPG9090	20.75	19.25	1.5	Sag pit, 0.1m depression
WT	-	21.397	20.37	1.027	Rainwater tanks
5A	HPG9090	20.93	18.16	2.77	Sag pit, 0.1m depression
6A	HPG9091	20.97	19.58	1.39	Sag pit, 0.1m depression
7A	HPG9089	20.865	19.84	1.025	Sag pit, 0.1m depression
8A	HPG9090	18.379	15.722	2.657	OSD 3 outlet to creek



DEEP PIT DETAILS
Standard reinforcement details for 600x600 Grated Inlet Pits deeper than 1.2m. Similar reinforcement layout for 900x900 pits.

B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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Surveyor DENNIS SMITH	Date April 2016	Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE DRAINAGE DETAILS			Project No. KF110816	
Date of Survey	Drawn C. Roberts				Drawing No. C315	
Height Datum AHD	Designed C. Roberts BE(Civil) GradIEAust	Drawing Status ISSUED FOR SSD5300 MOD2 CC			Sheet 16 Of 20	Revision B
Origin	Checked W. Mullany BE Grad Eng (Civil) MEAust CP Eng RFD					
Horiz. Datum	Approved	Scale - @ A1 - @ A3				

NOTE:

DUST CONTROL TO BE ACHIEVED USING WATER CART. DEMAND ESTIMATED AT 40,000 L/DAY

SITE WATER STORAGE

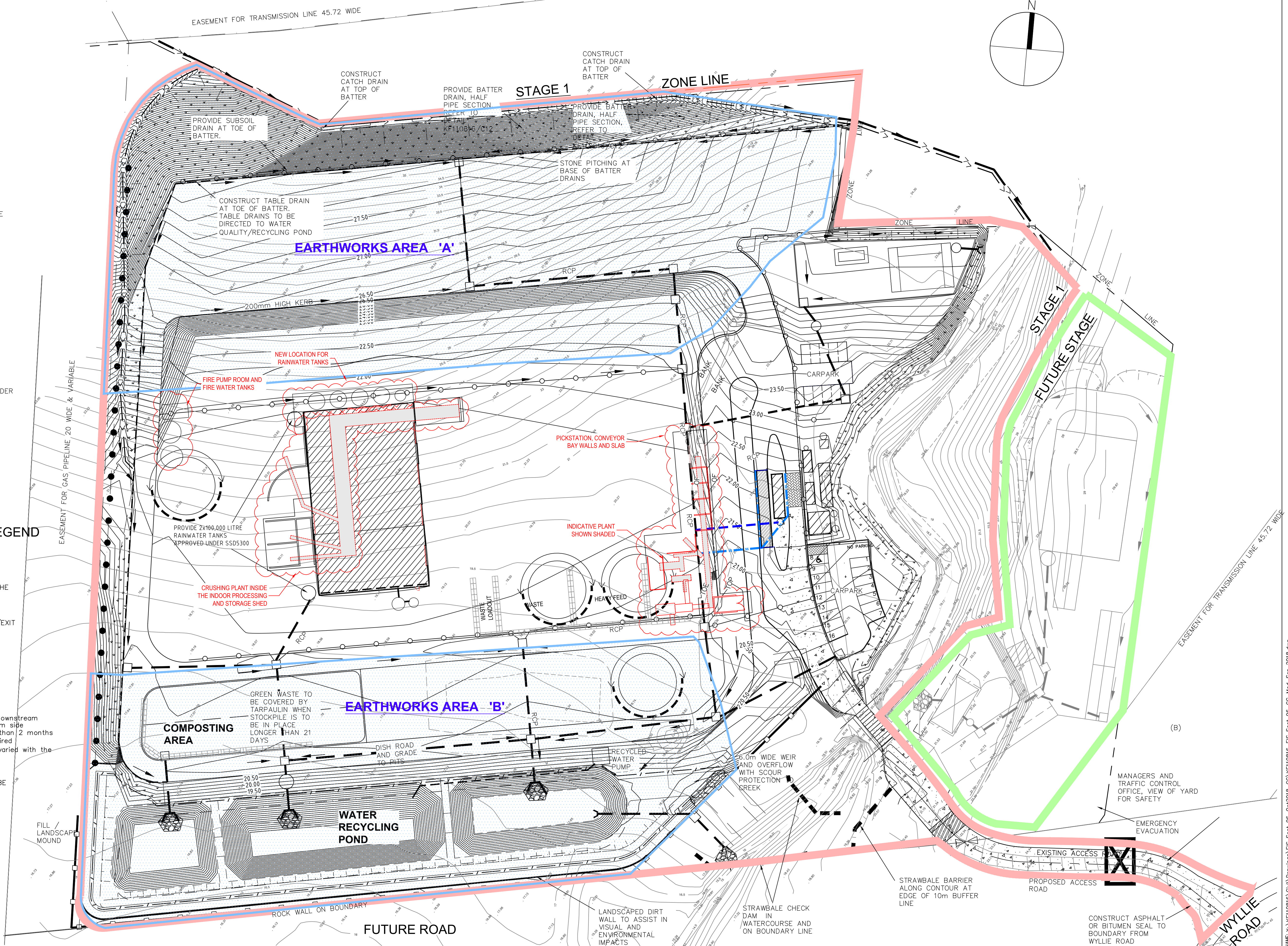
RAINWATER TANK = 300m³
POND = 5500
TOTAL = 5800m³

LEGEND

- DENOTES PROPOSED BUILDING
- DENOTES EXISTING CONTOURS
- DENOTES PROPOSED SURFACE LEVELS
- DENOTES PROPOSED BATTER (1 IN 2) TO BE LANDSCAPED
- DENOTES PROPOSED LANDSCAPING/BATTER PROTECTION
- DENOTES 1% AEP FLOOD LIMIT
- DENOTES SUBSOIL DRAINAGE
- DENOTES CATCH DRAIN
- DENOTES DIRECTION OF TRAFFIC FLOW
- DENOTES STORMWATER SURFACE FLOW
- DENOTES HUMCEPTOR DOWNSTREAM DEFENDER
- DENOTES BOLLARD & SIGNAGE
- DENOTES STORMWATER PIPES AND PITS
- DENOTES STAGE 1 LIMITS
- DENOTES FUTURE STAGE LIMITS

SOL AND EROSION CONTROL LEGEND

- STRAW BALE DAMS
- SILT STOP FENCE AND DIVERSION DRAINS TO BE MAINTAINED UNTIL THE FINISH OF CONSTRUCTION.
- TEMPORARY CONSTRUCTION ENTRY/EXIT
- STRAW BALE CHECK BARRIER
- CLEAN WATER DIVERSION DRAIN
- TOPSOIL STOCKPILE AREA
Provide silt stop fence barrier on downstream side and diversion bank on upstream side. If stockpile is to be left for more than 2 months temporary revegetation will be required. NOTE Stockpile areas can only be varied with the approval of supervising engineer. REFER TO SHEET C14 FOR DETAILS OF TEMPORARY VEGETATION. ALTERNATIVELY, STOCKPILE SHALL BE COVERED BY TARPULINS



Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised
C	SITE LAYOUT AMENDED AS PER DEWCAPE	09.10.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE LOCATION AMENDED	24.01.2017	B.M.	W.M.



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Surveyor DENNIS SMITH	Date APRIL 2016
Date of Survey	Drawn B.MIDDLETON
Height Datum AHD	Designed W.MULLANY
Origin	Checked
Horiz. Datum	Approved

Drawing Title PROPOSED INDUSTRIAL DEVELOPMENT LOT 10 DP 878167 WYLLIE ROAD, KEMBLA GRANGE SOIL AND WATER MANAGEMENT PLAN	Scale 1:500 @ A1 1:1000 @ A3	Drawing Status ISSUED FOR SSD5300 MOD2 CC
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Project No. KF110816	Drawing No. C318
Sheet 19 Of 20	Revision C

SEQUENCE OF OPERATIONS

STEP 1
PROVIDE TEMPORARY CONSTRUCTION ENTRY/EXIST SHAKER PAD AND SILT STOP FENCING ALONG BOUNDARY AS SHOWN. INSTALL STRAWBALE CHECK DAMS IN THE WATERCOURSE BELOW THE BRIDGE AS SHOWN. INSTALL STRAWBALE BARRIERS ON THE EASTERN SIDE OF THE WATERCOURSE ADJACENT TO THE BRIDGE AS SHOWN

STEP 2
CONSTRUCT CLEAN WATER DIVERSION DRAIN AT THE NORTHERN END OF THE SITE ABOVE THE PROPOSED BATTER. DRAIN TO THE NEAREST SECTION OF THE WATERCOURSE

STEP 3
CONSTRUCT THE PROPOSED OSD, WATER QUALITY POND, SHREDDING AREA RUNOFF POND AND LANDSCAPING MOUND. THE PONDS WILL BE TEMPORARY SEDIMENT PONDS DURING CONSTRUCTION, UNTIL SITE IS STABILISED, AND THE MOUND WILL DIVERT DIRTY WATER TO THE PONDS

STEP 4
EXCAVATE FOR BULK EARTHWORKS AND REVEGETATE BATTERS

STEP 5
CONSTRUCT BUILDINGS, ROADS AND DRAINAGE LINES

STEP 6
CONSTRUCT BRIDGE WORKS

STEP 7
MAINTAIN SOIL AND WATER MANAGEMENT FEATURES THROUGH OUT THE CONSTRUCTION PERIOD.

STEP 8
DUST SUPPRESSION TO BE CONDUCTED THROUGHOUT CONSTRUCTION PHASE. A WATER CART TO BE ON SITE AND AVAILABLE AT ALL TIMES, APPROX. 40,000 LITRES/DAY.

STEP 9
CLEAR OUT ALL PIPEWORK PRIOR TO REMOVAL OF SOIL AND WATER MANAGEMENT DEVICES

STEP 10
CLEAR OUT OSD BASIN AND COMPLETE CONSTRUCTION OF BASIN INFRASTRUCTURE.

STATEMENT OF SOIL MANAGEMENT

- ALL TOPSOIL IS TO BE STOCKPILED IN AREAS DESIGNATED ON PLAN.
- ALL FORMED EMBANKMENTS (CUT & FILL) ARE TO BE LANDSCAPED WITHIN 7 DAYS.
- ALL DISTURBED AREAS, INCLUDING ANY CONTROLLED FILL ARE TO BE TOPSOILED & SEEDED PRIOR TO COMPLETION OF WORKS. ALL DISTURBED AREAS THAT WILL NOT BE STABILIZED WITHIN 2 MONTHS MUST BE TEMPORARILY REVEGETATED WITHIN 7 DAYS OF CLEARING. AREAS THAT FAIL TO ESTABLISH MUST BE RESOWN IMMEDIATELY.
- THE GROUND SHALL BE TYNED / SCARIFIED TO A MIN DEPTH 100mm PRIOR TO SEEDING.
- ANY SEEDED AREAS WHICH FAIL TO GERMINATE OR WHERE GERMINATION IS SPARSE AFTER 21 DAYS FROM INITIAL SEEDING AREA MUST BE RESEEDED.
- FOR TEMPORARY REVEGETATION PURPOSES, THE REVEGETATION MIXTURE SHOULD INCLUDE THE FOLLOWING SPECIES FOR BOTH AUTUMN & SPRING SOWINGS – DURATURF PARK BLEND (Wright Stephenson Seed Mix) THOROUGHBRED TURF TALL FESCUE (15kg/ha) UNHULLED COUCH (4kg/ha) PERENNIAL RYEGRASS (37kg/ha) CHEWINGS FESCUE (5kg/ha) MULTIGROW / ENRICH FERTILIZER AT 500kg/ha
- REVEGETATION AND STABILIZATION WILL NOT BE CONSIDERED SATISFACTORY UNLESS A MIN 70% GROUND COVER, AT LEAST 100mm HIGH IS ACHIEVED OVER ALL DISTURBED AREAS
- ALL GULLY PITS ARE TO BE PROVIDED WITH SEDIMENT FILTER BARRIERS SUCH AS SANDBAGS OR FILTER SOCKS.
- TRENCHES FOR DRAINAGE LINES ARE TO BE REINSTATED WITH TOPSOIL FOLLOWING PIPE INSTALLATION & BACKFILLING & IMMEDIATELY SEEDED/FERTILIZED.
- DESIGNATED PLANT AND MACHINERY ACCESSWAYS TO BE DEFINED ONSITE BY THE INSTALLATION OF PARAWEBBING FENCING TO MINIMIZE UNNECESSARY SITE DISTURBANCE.

MAINTENANCE PROCEDURES DURING CONSTRUCTION

- ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AT ALL TIMES SO THAT THOSE MEASURES ARE FULLY FUNCTIONAL / OPERATIONAL DURING THE CURRENCY OF WORKS. ALL SUCH CONTROLS MUST ALSO BE FULLY FUNCTIONAL / OPERATIONAL SHOULD WORK OPERATIONS CEASE TEMPORARILY, (e.g WEEKENDS, ROSTERED DAYS OFF, etc.)
- RESREAD MATERIAL GAINED DURING MAINTENANCE OPERATION OR ALTERNATIVELY PLACE ON STOCKPILES.

SITE MANAGEMENT DETAILS

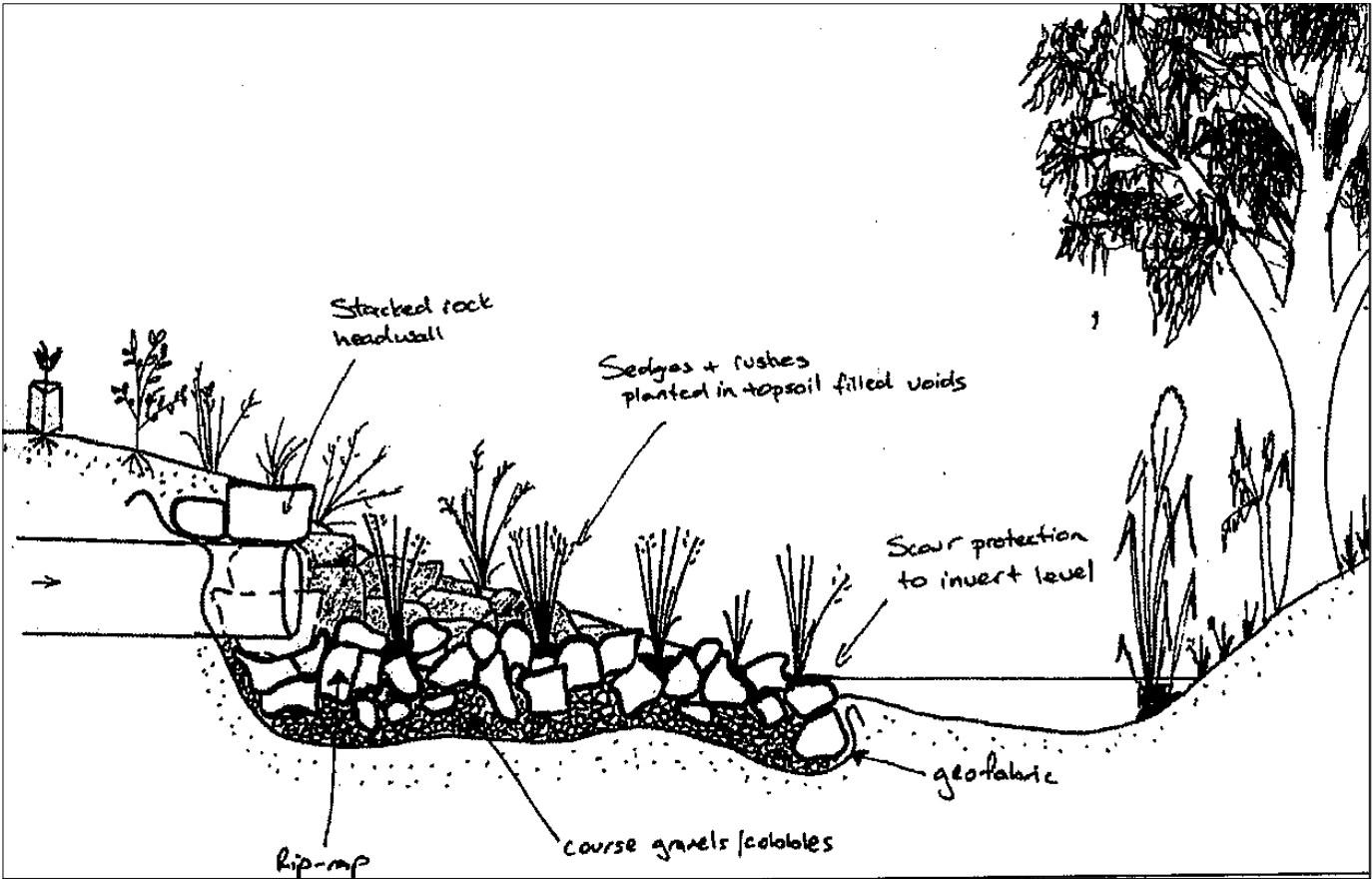
THE MAJORITY OF SITE MANAGEMENT DETAILS ARE SHOWN ON THE SOIL AND EROSION CONTROL MANAGEMENT PLAN. PLEASE NOTE:

- ACCESS TO THE SITE WILL BE VIA WYLLIE ROAD. ANY DAMAGE TO THIS ROADWAY IS TO BE RESTORED.
- CONSTRUCTION MACHINERY & MATERIALS ARE TO BE LOADED AND UNLOADED WITHIN THE SITE.
- STORAGE AREAS ARE INDICATED ON THE SOIL & EROSION CONTROL PLAN.
- SOIL AND EROSION CONTROL PLAN ALSO INDICATED THE PROPOSED EXIT CONTROL DEVICES.

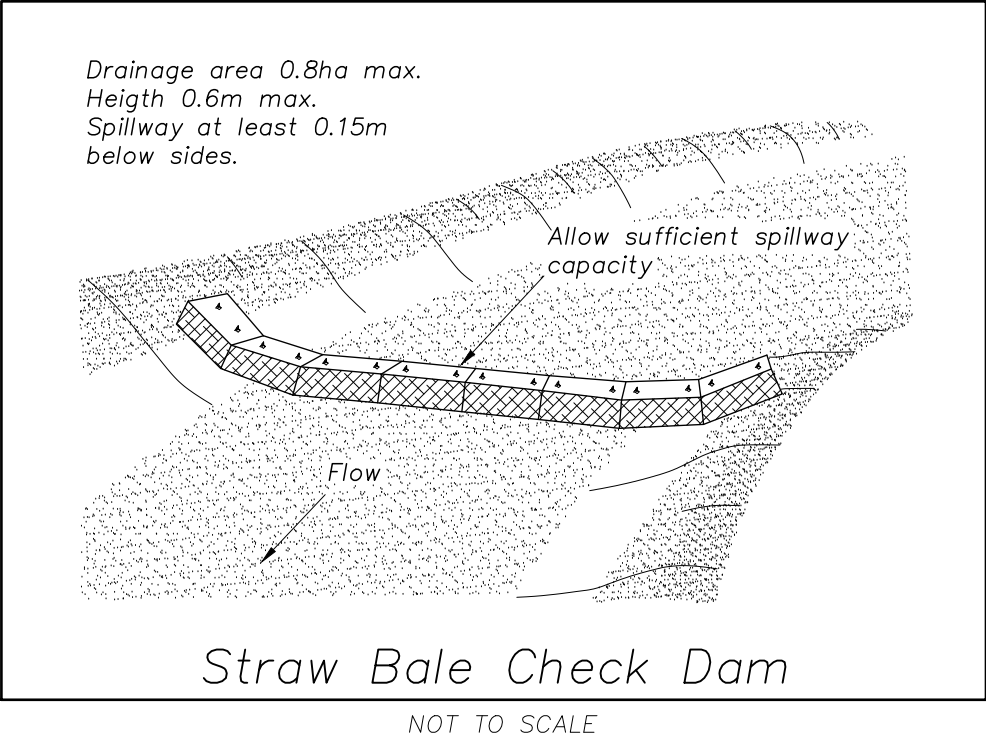
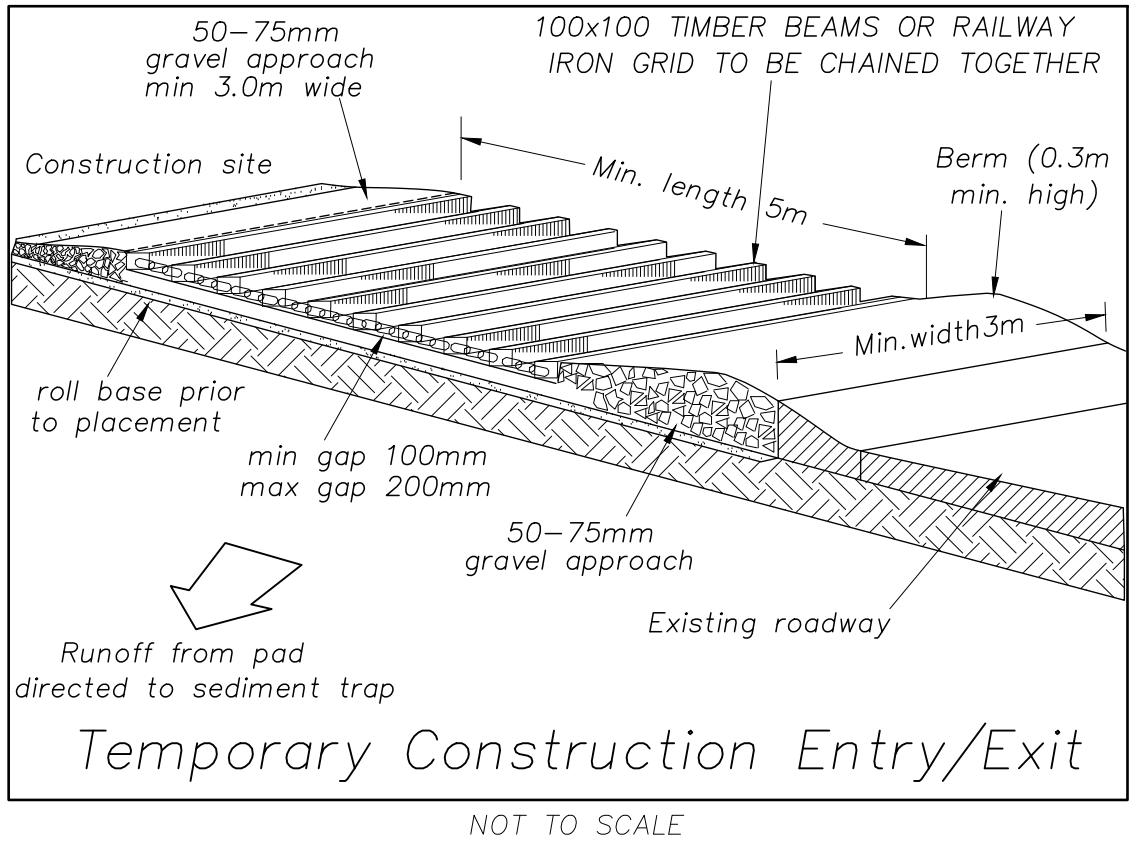
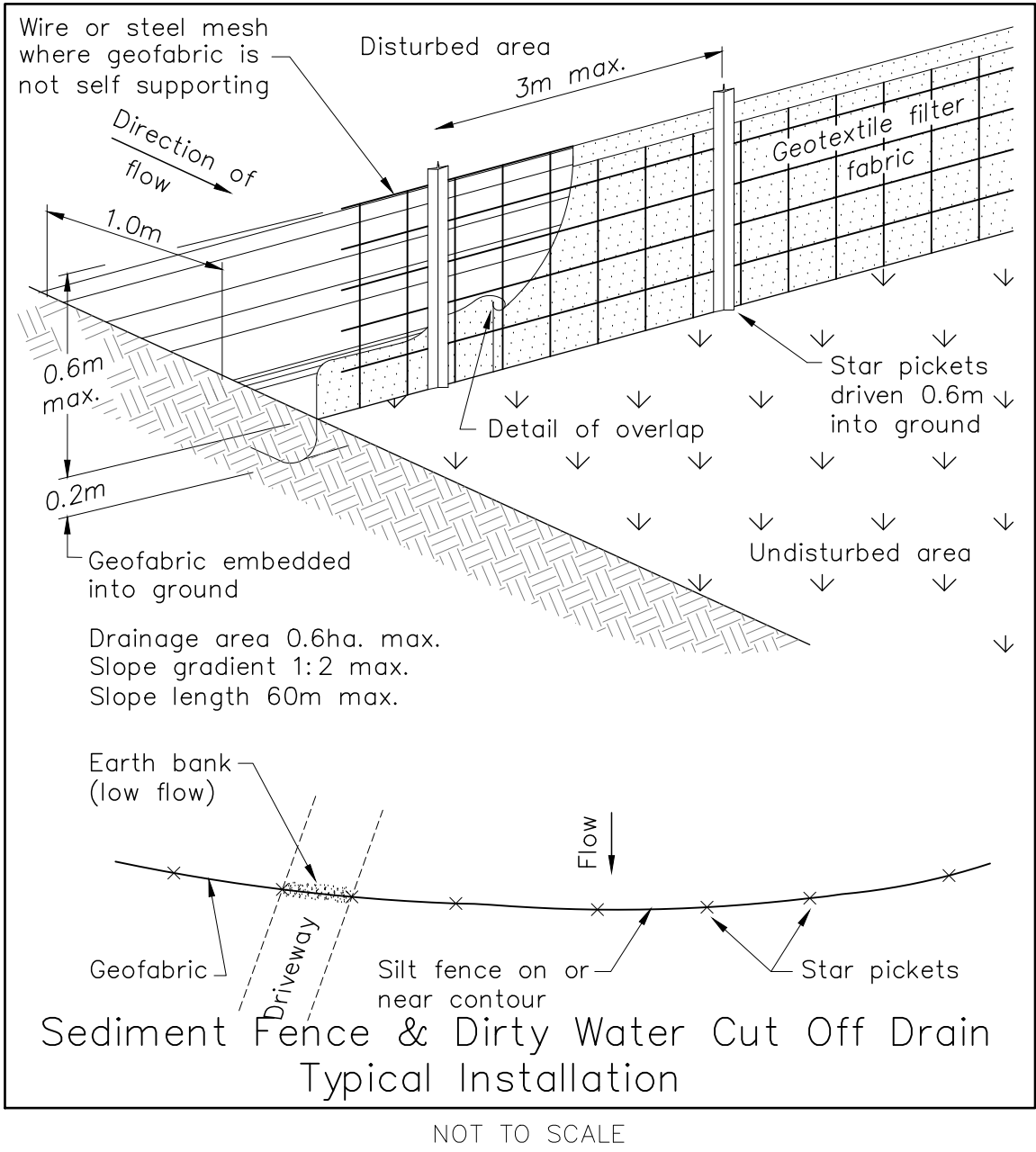
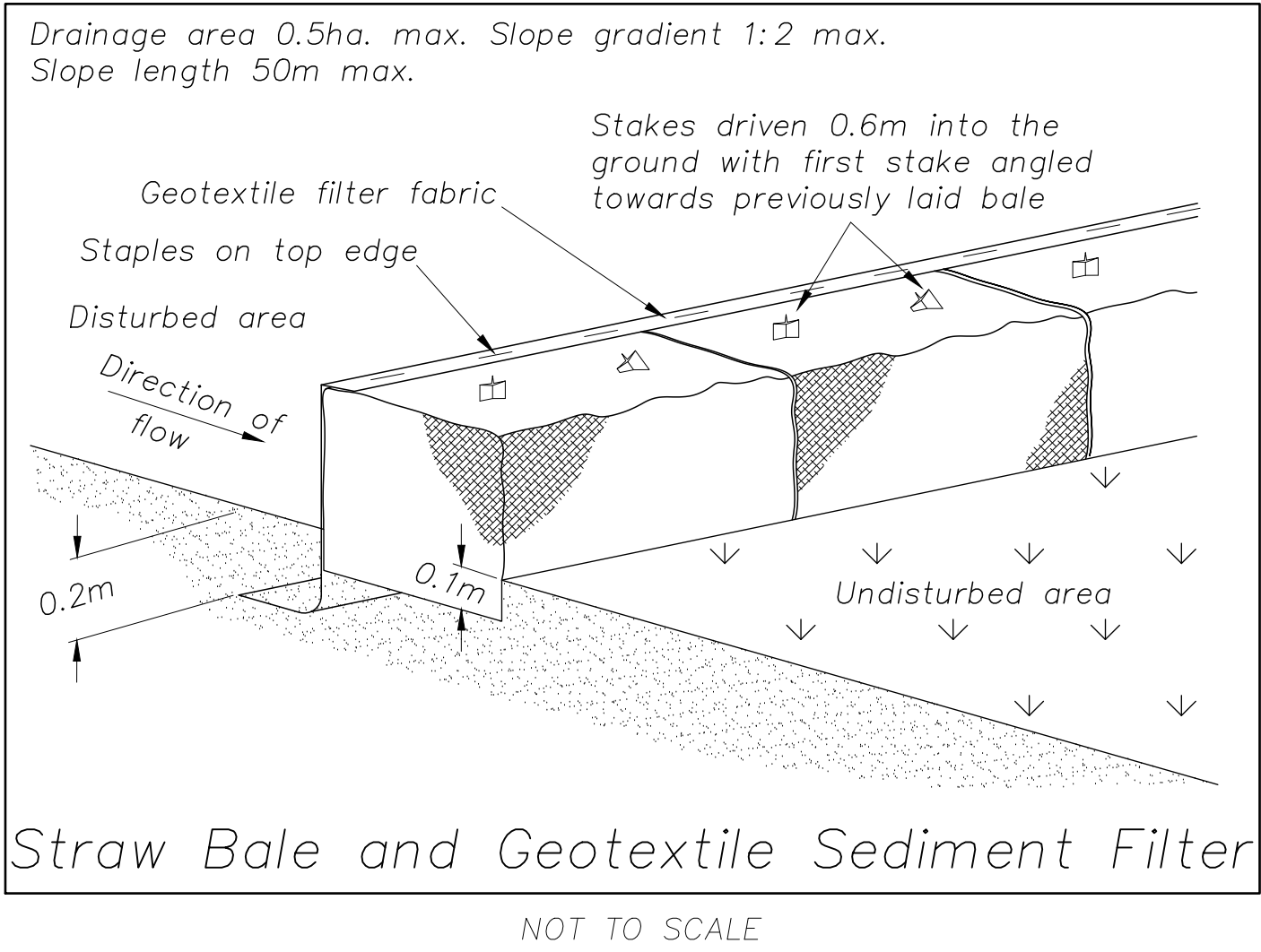
MATERIAL STORAGE VOLUMES

Material	Volume Stored on Site (litre)	Method of Storage	Spill Tray Volume (litre)	Spill Tray Type	Comments
Petrol	20	20 Litre Drum	22	Steel Tray	Transtank T 20 SS
Diesel	9,000	On site tank bulk tank	9,900	Steel Tray	Transtank T 20 SS
Libricants	1,000	5 x 200 litre drum	500	Steel Tray	Transtank T 20 SS
Solvents	100	5 x 20 litre drum	25	Steel Tray	Transtank T 20 SS
Liquid Waste	0	N/A	N/A	N/A	N/A
	10120				

Notes:
Oils, Fuel and Solvents will be stored in a Transtank T 20 SS



SCOUR PROTECTION HEADWALL



B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised

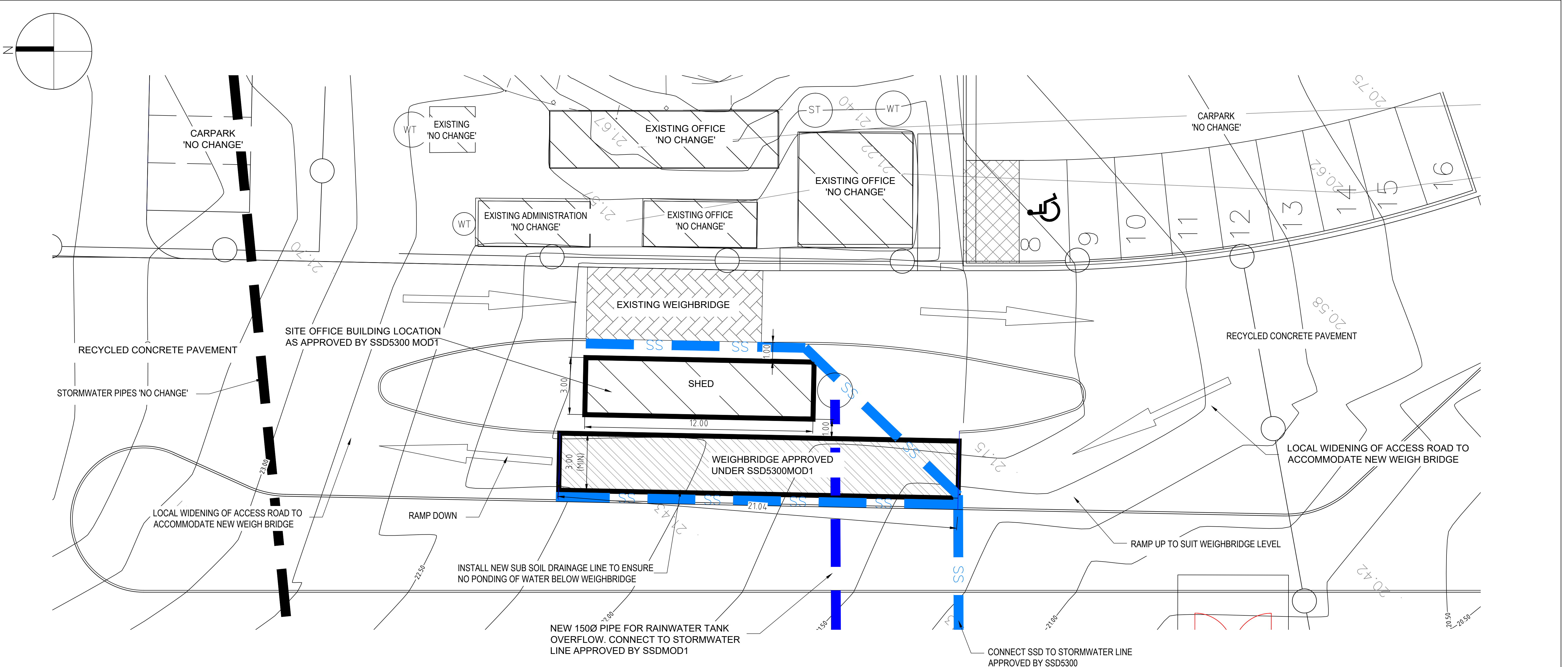


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Surveyor	DENNIS SMITH	Date	APRIL 2016
Date of Survey		Drawn	B.MIDDLETON
Height Datum	AHD	Designed	W.MULLANY BE Grad Dip LGE (ME)/Hons MEng Aust CPEng RPE
Origin		Checked	
Horiz. Datum		Approved	

Drawing Title		Project No.	
PROPOSED INDUSTRIAL DEVELOPMENT		KF110816	
LOT 10 DP 878167		Drawing No.	
WYLLIE ROAD, KEMBLA GRANGE		C319	
SOIL AND WATER MANAGEMENT DETAILS		Sheet	Revision
Scale 1:500 @ A1 1:1000 @ A3		20 Of 20	B
Drawing Status		ISSUED FOR SSD5300 MOD2 CC	



LEGEND

- SS DENOTES PROPOSED SUBSOIL LINE (100mm SLOTTED PE PIPE WITH FILTER SOCK)
- WT DENOTES EXISTING WATER TANK
- ST DENOTES EXISTING SEPTIC TANK

NOTES:

- PAVEMENT FOR WEIGHBRIDGE APPROACH TO BE 400mm RECYCLED CONCRETE PAVEMENT.
- THIS PAVEMENT TYPE WAS APPROVED UNDER SSD-5300
- REFER TO SHEET C303 REV.A
- NO CHANGES PROPOSED TO EXISTING ADMIN/OFFICE BUILDING AND CARPARKING AREAS

C	NOTATION UPDATED	06.11.2018	J.D.	W.M.
B	ADDITIONAL WEIGHBRIDGE NOTATIONS ADDED	31.03.2017	C.R.	W.M.
A	WEIGHBRIDGE OFFICE DETAIL SOWN. ADDITIONAL HATCHING ADDED FOR CLARITY			
Revision	Amendment or reason for issue	Issue date	Drawn by	Authorised



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Surveyor	DENNIS SMITH	Date	13.01.2017
Date of Survey	Drawn	B.MIDDLETON	
Height Datum	AHD	Designed	W.MULLANY
Origin	Checked		
Horiz. Datum	Approved		

Drawing Title		Project No.	
PROPOSED INDUSTRIAL DEVELOPMENT		KF110816	
LOT 10 DP 878167		Drawing No.	
WYLLIE ROAD, KEMBLA GRANGE		C320	
APPROVED WEIGHBRIDGE UNDER SSDMOD1		Sheet	Revision
		1 Of 1	C
Scale	1:100 @ A1 1:200 @ A3	Drawing Status	ISSUED FOR SSD5300 MOD1 CC