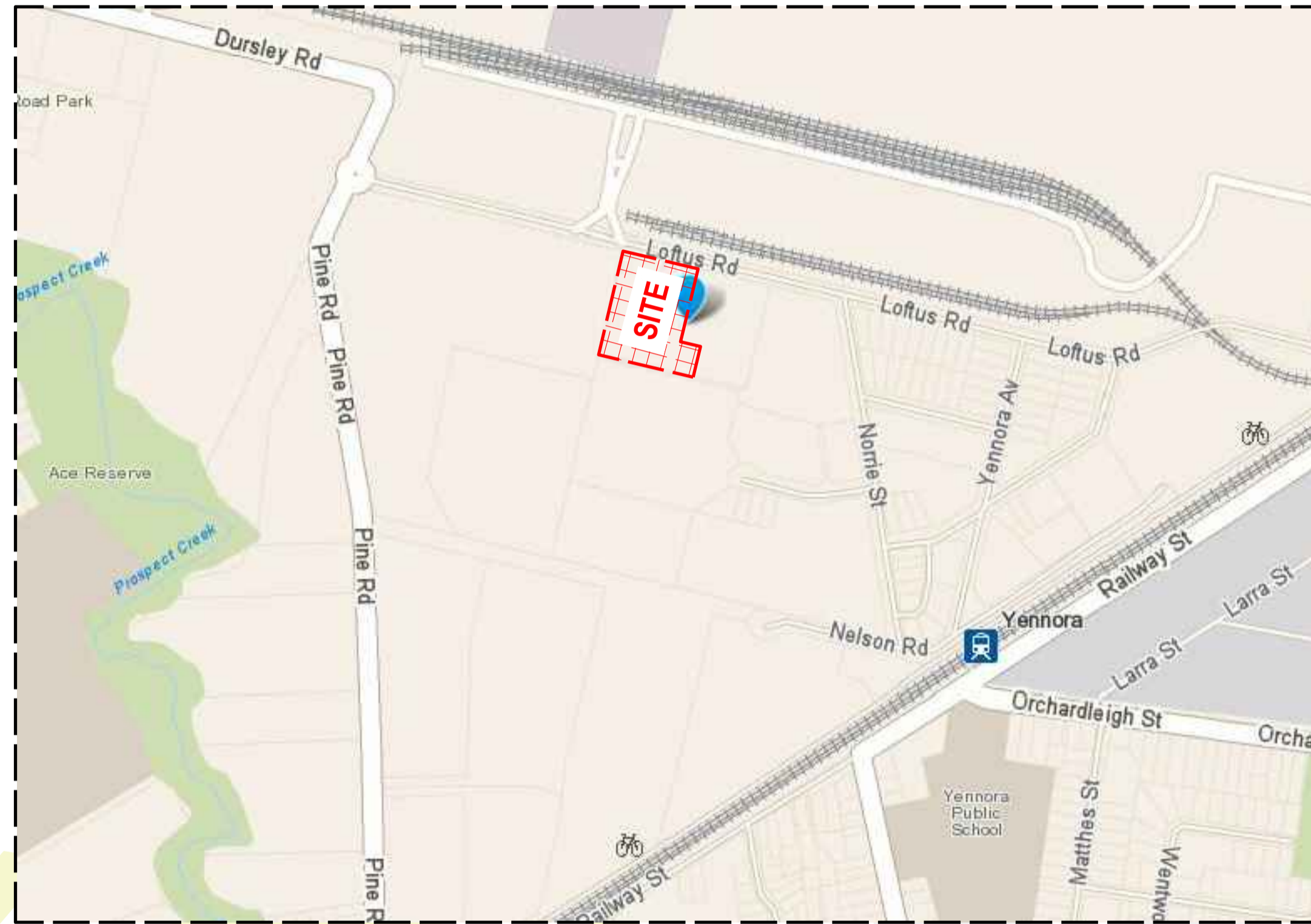


# PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT 30 LOFTUS ROAD YENNORA NSW FOR APPROVAL

CIVIL SERVICES



LOCALITY PLAN

DRAWING SCHEDULE		
DRAWING NUMBER	DRAWING TITLE	DRAWING SCALE
C-0000	Cover Sheet	N.T.S
C-0001	General Notes and Legend	N.T.S
C-1001	Erosion and Sediment Control Plan	1:400
C-1011	Erosion and Sediment Control Details & Notes	N.T.S
C-4001	Stormwater Management Plan	1:400
C-4011	Roof Drainage Plan	1:400
C-4101	Stormwater Catchment Plan	1:400
C-4201	Stormwater Longitudinal Sections	As Noted
C-4301	Stormwater Management Detail	As Noted
C-4401	Water Quality Detail and Catchment Plan	As Noted

FOR APPROVAL

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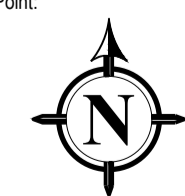
Issue	Date	Amendment	Int. S.S.	App. A.A.	COORDINATED REFERENCE DRAWINGS	ISSUE	DATE
01	25/06/2021	PRELIMINARY ISSUE	S.S.	A.A.	SERVICE		
02	21/07/2021	FOR EIS APPROVAL	S.S.	A.A.	ARCH		
					MECH		
					STRUCT		
					ELEC		
					CIVIL		

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Project:  
PROPOSED RESOURCE RECOVERY  
FACILITY DEVELOPMENT  
30 LOFTUS ROAD  
YENNORA NSW

Drawing Title:  
COVER SHEET

North Point:



Job No: P630200

Scale: N.T.S.  
(A1)

Dwg No: C-0000

Issue: 02

**CIVIL SERVICES**

## GENERAL NOTES

- REFER TO CUMBERLAND CITY COUNCIL'S WORKS SPECIFICATION - CIVIL, AND ENGINEERING GUIDE FOR DEVELOPMENT FOR STANDARD DETAILS AND ENGINEERING SPECIFICATION. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THIS CODE UNO.
- ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS IN m AHD UNO.
  - NO DIMENSIONS ARE TO BE OBTAINED BY SCALING FROM DRAWINGS.
  - THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANT'S DRAWINGS AND SPECIFICATIONS.
  - IN PREPARING THESE DRAWINGS WE HAVE RELIED ON THE ACCURACY AND COMPLETENESS OF INFORMATION PROVIDED BY THE UTILITY PROVIDERS AND SURVEYORS REGARDING ONSITE LOCATION OF ASSETS. WE ACCEPT NO LIABILITY FOR ANY ERROR OR OMISSION IN THESE DRAWINGS TO THE EXTENT THE SAME RESULTS FROM ERROR OR OMISSION IN THE INFORMATION PROVIDED.
  - ANY DISCREPANCIES OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE SUPERINTENDENT PRIOR TO PROCEEDING WITH THE WORKS.
  - THE CONTRACTOR SHALL OBTAIN ALL LEVELS FROM ESTABLISHED BENCH MARKS ONLY AS SUPPLIED BY A REGISTERED SURVEYOR.
  - THE CONTRACTOR MUST VERIFY ALL DIMENSIONS, EXISTING LEVELS AND PROPOSED SET-OUT ON SITE PRIOR TO THE COMMENCEMENT OF WORKS. ANY DISCREPANCIES OR OMISSIONS ARE TO BE REPORTED TO THE SUPERINTENDENT.
  - THE SUPERINTENDENT IS TO BE GIVEN 48 HOURS NOTICE OF ANY INSPECTION REQUESTS.
  - ALL EXISTING STRUCTURES, SERVICES AND UTILITIES ARE TO BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS. THE LOCATION OF EXISTING SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. THE RESPONSIBILITY FOR LOCATING, AVOIDANCE AND WHERE NECESSARY, TEMPORARY PROTECTION OF THESE EXISTING SERVICES IS THAT OF THE CONTRACTOR. ANY DAMAGE TO EXISTING STRUCTURES, SERVICES AND UTILITIES IS TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.
  - ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND CODES OF PRACTICE EXCEPT WHERE VARIED BY THE DRAWINGS. THE APPLICABLE STANDARDS SHALL BE THE REFERENCED STANDARDS CURRENT AT DATE OF DRAWING ISSUE.
  - WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED OUT BY OTHERS, (e.g. ADJUSTMENT OF SERVICES) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF ANY THIRD PARTY WORKS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE WORKS AND SURROUNDING AREA UNTIL PROJECT COMPLETION AND SHALL ENSURE THAT NO PART OF THE WORKS ARE OVERSTRESSED BY CONSTRUCTION LOADING.
  - ALL TESTING IS TO BE CARRIED OUT BY A NATA REGISTERED LABORATORY. TESTING METHODS ARE TO BE IN ACCORDANCE WITH THE APPLICABLE AUSTRALIAN STANDARD.
  - ON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AN AS-CONSTRUCTED SURVEY OF THE SITE.
  - WHERE PROPRIETARY PRODUCTS ARE SPECIFIED ON THE DRAWING, THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE PRODUCT TO THE SUPERINTENDENT FOR APPROVAL. THE CONTRACTOR SHALL PROVIDE SUFFICIENT INFORMATION TO DEMONSTRATE TO THE SUPERINTENDENT'S SATISFACTION THAT THE ALTERNATIVE PROPOSED IS OF EQUIVALENT QUALITY TO THE PRODUCT SPECIFIED.
  - EXISTING SERVICES ARE SHOWN AS PER SITE SURVEY COMPLETED BY INTRAX LAND SURVEYOR. LOCATIONS ARE INDICATIVE ONLY AND MAY NOT BE EXHAUSTIVE. PRESENCE AND LOCATIONS OF SERVICES TO BE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION.
  - ALL SERVICE PIT COVERS TO BE RECESSED AND IN-FILLED WITH PAVERS TO SUIT SURROUNDING FINISH. EXISTING DAMAGED PAVERS TO BE REPLACED.
  - SUBGRADE DENSITY TESTS WILL BE REQUIRED DURING PUBLIC DOMAIN CONSTRUCTION WORKS. REFER TO THE PUBLIC DOMAIN OFFICER AT PRELIMINARY PUBLIC DOMAIN WORKS SITE MEETING FOR QUANTITY AND LOCATIONS OF TESTING REQUIRED.

## ROADWORKS GENERAL

- THE SUB-CONTRACTOR SHALL OBTAIN ALL LEVELS FROM ESTABLISHED BENCH MARKS ONLY AS SUPPLIED BY THE APPOINTED SURVEYORS.
- SERVICES SHOWN ON THESE PLANS ARE LOCATED FROM INFORMATION SUPPLIED BY THE RELEVANT AUTHORITIES AND FIELD INVESTIGATIONS AND ARE NOT GUARANTEED COMPLETE OR CORRECT. ALL SERVICE LOCATIONS ARE TO BE VERIFIED BY THE SUB-CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL REMOVING, DIVERSION AND PROTECTION WORKS RELATED TO EXISTING SERVICES NEED TO BE VERIFIED AND APPROVED BY RELATIVE AUTHORITIES.
- NO WORK TO BE CARRIED OUT ON ADJOINING PROPERTIES WITHOUT THE WRITTEN PERMISSION FROM THE OWNER.
- VEHICULAR ACCESS AND ALL SERVICES ARE TO BE MAINTAINED AT ALL TIMES TO AREAS AFFECTED BY CONSTRUCTION UNLESS OTHERWISE AGREED.

## PAVEMENT GENERAL

- SUBGRADE, SUBBASE AND BASE COURSES ARE TO BE COMPACTED TO THE REQUIREMENTS OF THE SPECIFICATION AND SHALL BE REVIEWED BY THE GEOTECHNICAL INSPECTION AND TESTING AUTHORITY.
- TRANSITION KERB FROM KO TO K&G AT KERB RETURN T.P OVER A LENGTH OF 1m.
- ALL EXISTING STRUCTURES, SERVICES AND UTILITIES ARE TO BE LOCATED BY THE SUB-CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS. THE LOCATION OF EXISTING SERVICES SHOWN ON PLANS ARE INDICATIVE ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT. THE RESPONSIBILITY FOR LOCATING, AVOIDANCE AND WHERE NECESSARY, TEMPORARY PROTECTION OF THESE EXISTING SERVICES IS THAT OF THE SUB-CONTRACTOR. ANY DAMAGE TO EXISTING STRUCTURES, SERVICES AND UTILITIES IS TO BE REPORTED TO THE SUPERINTENDENT IMMEDIATELY.

## DRAINAGE NOTES

- ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED.
- 100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE.
- MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm.
- ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS.
- BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL.
- HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFIC AREAS.
- PIT GRATE TO BE TYPE WELDOCK OR APPROVED EQUIVALENT.
- ALL PITS SHALL BE PROVIDED WITH LOCKING CLIP.
- ALL PITS SHALL BE MAINTAINED REGULARLY.
- TOP OF BENCHING SHALL BE TO THE HALF OF THE OUTLET PIPE DIAMETER.
- Ø100mm SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES.
- COMPRESSIVE STRENGTH  $f_c$  FOR CAST IN-SITU CONCRETE TO BE MINIMUM OF 20MPa AT 28 DAYS.
- PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS.
- ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS.
- ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm.
- STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL.

## DEMOLITION

- ALL DEMOLITION WORK IS TO BE UNDERTKEN IN ACCORDANCE WITH REQUIREMENTS OF AUSTRALIAN STANDARDS AS2601 - 1991 - "THE DEMOLITION OF STRUCTURES".
- HAZARDOUS MATERIALS (INCLUDING ASBESTOS) ARE TO BE HANDLED, STORED, TREATED, TRANSPORTED AND DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF THE WORK HEALTH & SAFETY ACT 2011 AND ANY RELEVANT REQUIREMENTS OF THE WORK COVER AUTHORITY OF NSW.

## SURVEY GENERAL NOTES

- THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN. THE INFORMATION SHOWN ON THIS PLAN OR IN THE ASSOCIATED CAD FILE IS SUPPLIED ON THE CONDITION THAT THESE GENERAL NOTES ARE ALWAYS SHOWN/KEPT ON ANY COPY OR EXTRACT OF THE HARD COPY/DATA FILE.
- INFORMATION SHOWN ON THE SUPPLIED HARD COPIES TAKES PRECEDENCE OVER ANY DIGITAL OR ELECTRONIC DATA. ETC.
- THIS PLAN HAS BEEN PREPARED FOR FEATURE & LEVEL PURPOSES ONLY OVER THE SUBJECT SURVEY AREA.
- LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD), THE ORIGIN OF WHICH IS SSM 154508 RL 15.55 AHD (SOURCE: SCIMS 29-03-2020).
- THE LOCATION OF PROPERTY BOUNDARIES ARE INDICATIVE. BOUNDARIES HAVE BEEN COMPILED FROM SURVEY MEASUREMENTS & REGISTERED PLANS OBTAINED FROM NSW LAND REGISTRY SERVICES AND REPRESENT TITLE DIMENSIONS.
- ANY CONSTRUCTION OR WORKS RELYING ON CRITICAL SETBACKS FROM BOUNDARIES WILL REQUIRE ADDITIONAL BOUNDARY SURVEY & PLACEMENT OF BOUNDARY/SETOUT MARKS PRIOR TO COMMENCEMENT OF ANY WORKS. REALSERVE WILL NOT BE HELD RESPONSIBLE FOR ANY ISSUES RESULTING FROM NON COMPLIANCE WITH THIS ADVICE.
- THE LOCATION OF EASEMENTS HAVE BEEN COMPILED FROM PLANS & RECORDS OBTAINED FROM N.S.W. LRS AND ARE SUBJECT TO ADDITIONAL SURVEY IF LOCATION IS CRITICAL CADASTRAL SURVEY.
- THE LOCATION & LEVELS OF BUILDING RIDGES AND ROOF FEATURES HAVE BEEN DETERMINED BY INDIRECT METHODS (WHERE VISIBLE) & ACCURATE TO APPROXIMATELY  $\pm 0.02m$ .
- THE LOCATION OF ADJOINING BUILDING FEATURES HAVE BEEN OBTAINED WHERE VISIBLE FROM THE SUBJECT PROPERTY ANY ADDITIONAL SURVEY & ACCESS BEING GRANTED TO ADJOINING PROPERTIES.
- THE RECORDS OF THE SERVICE AUTHORITIES HAVE NOT BEEN INVESTIGATED. ONLY THOSE SERVICES VISIBLE / APPARENT AT THE TIME OF SURVEY HAVE BEEN SHOWN.

## EASEMENT (S) - ENCUMBRANCE(S) AFFECTING SUBJECT PROPERTY

- (A) - EASEMENT FOR PADMOUNT SUBSTATION 2.75m WIDE (VIDE DP 1258374)  
 (B) - RESTRICTION ON USE OF LAND (VIDE DP 1258374)  
 (I) - EASEMENT TO DRAIN WATER 10.675 AND 15.24m WIDE (VIDE DP 53333)  
 (F2) - EASEMENT FOR FLOOD MITIGATION WORKS 5m WIDE & VARIABLE (VIDE DP 1233715)  
 (P) - EASEMENT TO DRAIN WATER 1.5 & 3m WIDE (VIDE DP 1233715)  
 (R) - RIGHT OF ACCESS 9.6m WIDE & VARIABLE (VIDE DEALING AM754799)  
 (W) - RIGHT OF ACCESS 12.58m WIDE (VIDE DP 1233715)

## LEGEND

### EXISTING FEATURES

	SUBJECT BOUNDARY
	EASEMENT BOUNDARY
	FENCE
	APPROX. LOCATION OVERHEAD POWER SUPPLY
	APPROX. LOCATION UNDERGROUND POWER SUPPLY
	APPROX. LOCATION UNDERGROUND WATER MAINS
	APPROX. LOCATION UNDERGROUND SEWER MAINS
	APPROX. LOCATION UNDERGROUND TELECOMMUNICATIONS LINE
	APPROX. LOCATION UNDERGROUND GAS MAINS
	STORMWATER PIPE
	TOP OF KERB
	LIP OF KERB
	EDGE OF FOOTPATH
	EDGE OF DRIVEWAY
	CROWN OF ROAD FORMATION
	EDGE OF BITUMEN
	EDGE OF CONCRETE
	TOP OF BANK
	BOTTOM OF BANK
	LINEMARK
	GUARDRAIL

	DOWNPIPES
	POWER POLE
	POWER BOX
	HYDRANT
	WATER METER
	TELECOMMUNICATIONS PIT
	KERB INLET STORMWATER PIT
	PHOTO ASPECT
	GUTTER LEVEL
	RIDGE LEVEL
	TREE

## LEGEND

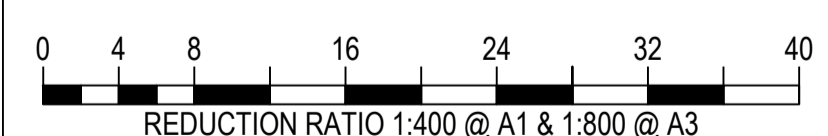
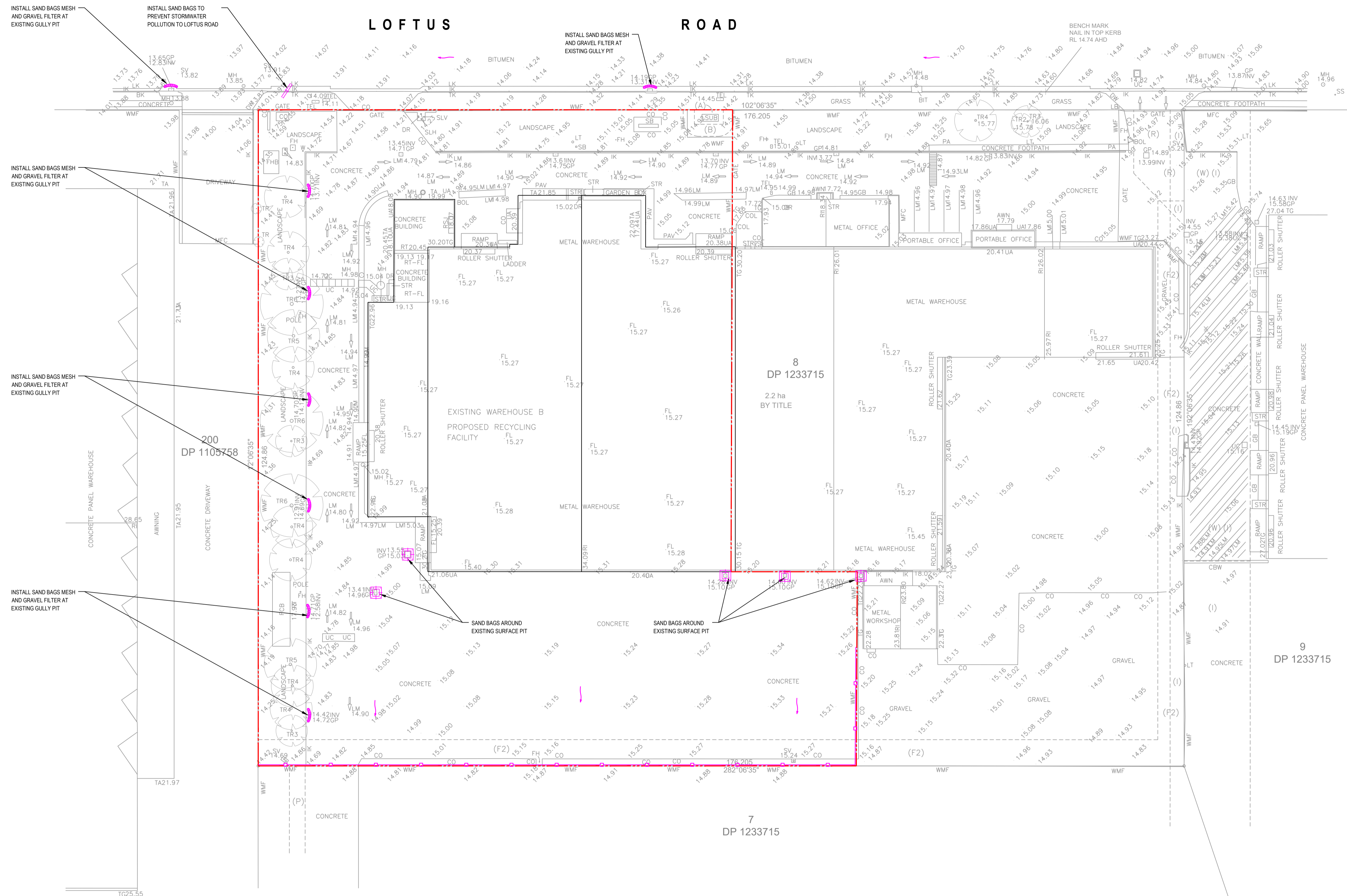
### PROPOSED FEATURES

	BOUNDARY - SITE
	BOUNDARY - EXISTING CASTIN
	CONTOUR - MAJOR
	CONTOUR - MINOR
	DISCONNECTED SERVICE
	FIRE SERVICE
	GAS SERVICE
	GROUND PLANE BOUNDARY
	INSET BORDER
	PLANT LINE
	PROJECT WORKS EXTENTS
	SEWER
	SILT FENCE
	STORMWATER DRAINAGE
	STORMWATER RISING MAIN
	SUBSOIL DRAINAGE
	TREE
	WATER
	OVERFLOW PIPE
	SWALE DRAIN
	STEEL POST FENCE
	STABILIZED SITE ACCESS
	STOCK PILE
	SANDBAGS
	PROPOSED TRENCH DRAIN
	KERB INLET PIT
	STORMWATER PIT - GRATED
	STORMWATER PIT - COVER
	OVERLAND FLOW ARROW
	MESH & GRAVEL INLET FILTER
	TILTING FLOOD GATE
	FLOOD PROTECTION BARRIER
	WATERTAP AND HOSE
	WATERMAIN PATHBOX
	GAS PATHBOX
	SEWER MANHOLE
	RAINWATER TANK
	AC ROAD PAVEMENT
	VEHICULAR LAYBACK PAVEMENT
	FOOTPATH PAVERS TO COUNCIL SPECIFICATIONS
	DRIVEWAY PAVERS TO COUNCIL SPECIFICATIONS
	DRIVEWAY PAVERS TO COUNCIL SPECIFICATIONS
	RIP RAP PROTECTION
	UTILITIES PROTECTION
	TO BE REMOVED/ DEMOLISED
	RETAINING WALL
	TOP OF WALL LEVEL
	PROPOSED GROUND LEVEL
	100 YR FLOOD LEVEL
	DOWNPIPES
	PROPOSED FINISHED FLOOR LEVEL

FOR APPROVAL

NOTE: THIS IS A STANDARD LEGEND. ALL SYMBOLS MAY NOT NECESSARILY BE USED IN THESE DRAWINGS.


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			NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.			THIS DRAWING IS CONFIDENTIAL AND IS NOT TO BE REPRODUCED IN ANY FORM AS A WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN AUTHORITY OF INTRAX PROJECTS. THIS DRAWING IS NOT TO BE USED PREJUDICIAL TO THE INTEREST OF INTRAX PROJECTS. INTRAX PROJECTS © COPYRIGHT ALL RIGHTS RESERVED			ORIGINAL SIZE: A1	



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Architect:  


Issue	Date	Amendment	Int.	App.	COORDINATED REFERENCE DRAWINGS
01	25/06/2021	PRELIMINARY ISSUE	S.S.	A.A.	SERVICE DRAWING NUMBER
02	21/07/2021	FOR EIS APPROVAL	S.S.	S.S.	ARCH
					MECH
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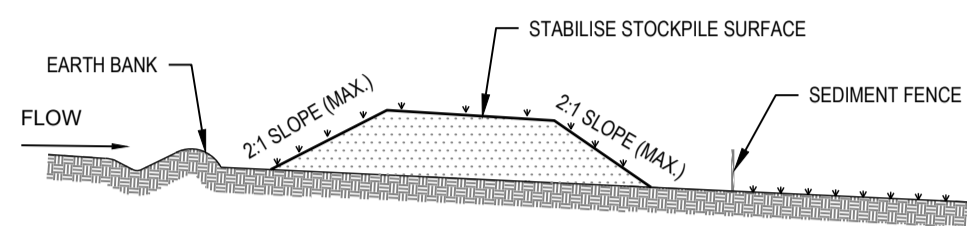
Project
PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT 30 LOFTUS ROAD YENNORA NSW

Drawing Title:
EROSION AND SEDIMENT CONTROL PLAN

North Point:

Job No: <b>P630200</b>
Dwg No: <b>C1001</b>

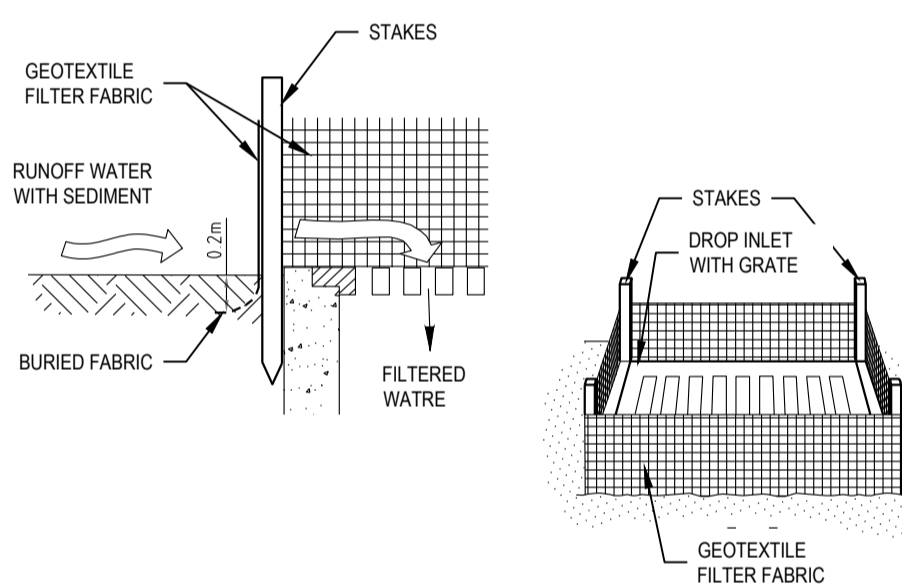
Scale:	Issue:
1:400 (A1)	02

NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.

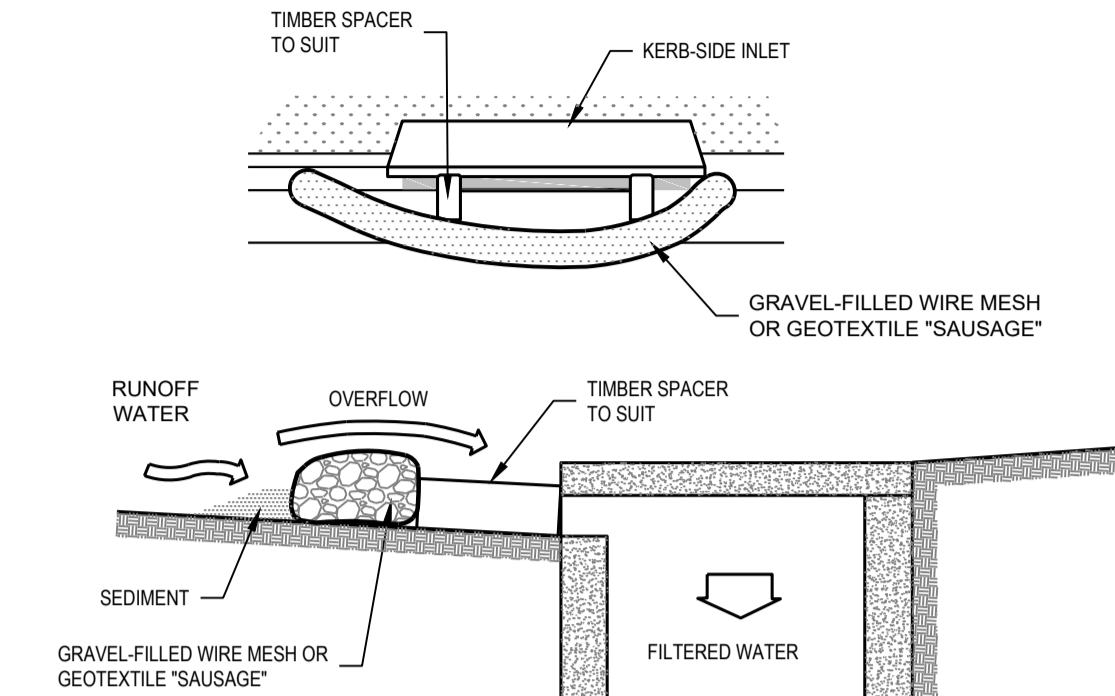


- STOCKPILE CONSTRUCTION NOTES:**
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
  2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
  3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
  4. WHERE THEY ARE TO BE PLACED FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
  5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

**STOCKPILES**  
SCALE N.T.S.

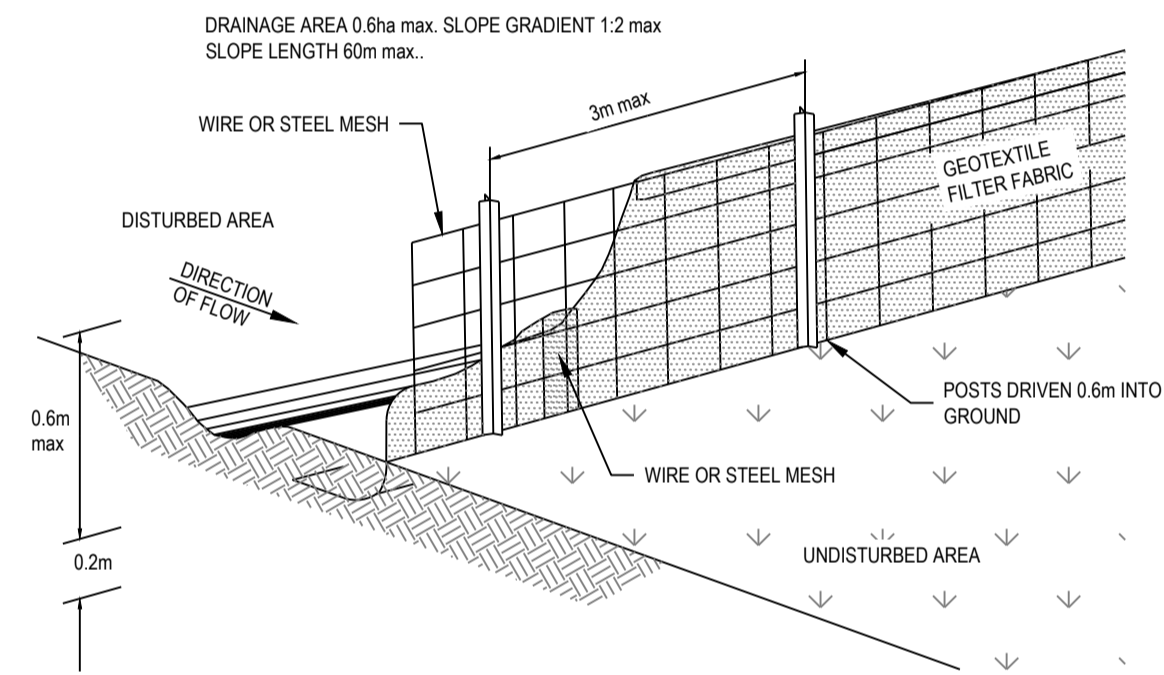


**GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP**  
SCALE N.T.S.

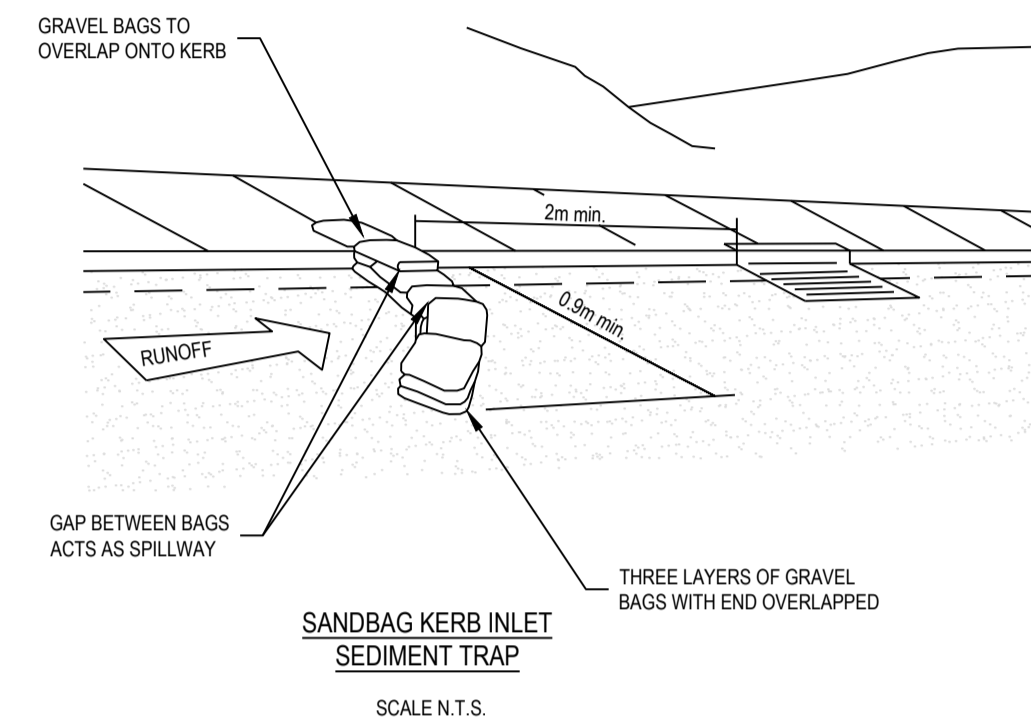


- MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:**
1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
  2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
  3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
  4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
  5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT LADEN WATERS CANNOT PASS BETWEEN.

**MESH & GRAVEL INLET FILTER**  
SCALE N.T.S.



**SEDIMENT FENCE**  
SCALE N.T.S.



**SANDBAG KERB INLET SEDIMENT TRAP**  
SCALE N.T.S.

**NOTES:**

1. FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING NO C-0001.
2. REFER TO DRAWING C-1001 FOR EROSION & SEDIMENT CONTROL PLAN.

**EROSION AND SEDIMENT CONTROL**

1. THE EROSION AND SEDIMENT CONTROL PLAN ADDRESSES THE MANAGEMENT OF ON SITE STORMWATER RUNOFF DURING CONSTRUCTION. IT DOES NOT ADDRESS BASEMENT EXCAVATION, GROUND WATER MANAGEMENT/DEWATERING REQUIREMENTS. IT IS TO BE READ IN CONJUNCTION WITH ALL OTHER GEOTECHNICAL, RAP, ENVIRONMENTAL AND STRUCTURAL DOCUMENTATION.
2. THE PLAN IS CONCEPT ONLY. SITE CONDITIONS AND PHASING OF WORKS ARE LIKELY TO INFLUENCE CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AMENDING THE SCHEME TO SUIT CONDITIONS AT THE TIME OF WORKS AND CONSTRUCTION PROGRAM.
3. THE CONTRACTOR IS TO INFORM ALL BUILDERS AND SUBCONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO ROADWAYS AND WATERWAYS.
4. THE CONTRACTOR IS TO IMPLEMENT AN APPROPRIATE ENVIRONMENTAL MANAGEMENT PLAN INCLUDING SPILL/POLLUTION CONTAINMENT AND TREATMENT PROCEDURES. THE CONTRACTOR IS TO ENSURE THAT ANY SPILL/POLLUTION COLLECTED IN THE STORMWATER SUMP IS IMMEDIATELY TREATED.
5. WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
6. ALL SOIL AND WATER CONTROL MEASURES ARE TO BE PROVIDED IN ACCORDANCE WITH THE GUIDELINES FOR EROSION AND SEDIMENT CONTROL ON ALBURN DEVELOPMENT CONTROL PLAN (2010), LANDCOM SOIL AND CONSTRUCTION MANUAL VOLUME 1, MARCH 2004 (BLUE BOOK) AND THE NSW PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997.
7. STOCKPILE LOCATIONS TO BE DEPENDENT ON THE LOAD OUT LOCATION AND THE POINT OF EXCAVATION. STOCKPILE LOCATIONS TO BE MARKED ON THE SITE PLAN AT THE SITE OFFICE AS THE PROJECT PROGRESSES.
8. SHOULD ANY MATERIAL BE WASHED FROM EQUIPMENT, SUCH AS CONCRETE SLURRIES FROM CONCRETE TRUCKS, A WASHING/CLEANING AREA WITH APPROPRIATE SEDIMENT CONTROL MEASURES IS TO BE SETUP ON A FLAT AREA OF THE SITE.
9. THE CONTRACTOR SHALL MAINTAIN A LOG BOOK DETAILING:
  - RECORDS OF ALL RAINFALL (I.E. DAILY RAINFALL)
  - CONDITION OF SOIL AND WATER MANAGEMENT CONTROL MEASURES ANY ADDITIONAL REMEDIAL WORKS REQUIRED.
 THE LOG BOOK SHALL BE MAINTAINED ON A WEEKLY BASIS AND BE MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. THE ORIGINAL LOG BOOK SHALL BE ISSUED TO THE PROJECT MANAGER AT THE COMPLETION OF THE WORKS.
10. DUST CONTROL MEASURES SHALL BE IMPLEMENTED CONTINUOUSLY DURING CONSTRUCTION WORKS TO THE SATISFACTION OF THE SUPERINTENDENT.
11. CONTROL MEASURES AFFECTED BY WORKS ARE TO BE RE-ESTABLISHED PRIOR TO THE COMPLETION OF EACH DAY'S WORK.
12. ALL CONTROL MEASURES ARE TO BE CLEANED AND MAINTAINED AT LEAST WEEKLY OR AFTER EVERY RAINFALL EVENT.
13. FOLLOWING THE COMPLETION AND RESTORATION OF SITE, THE CONTRACTOR IS TO REMOVE ALL CONTROL MEASURES.
14. PERMANENT DRAINAGE STRUCTURES INCLUDING PIPES AND PITS ARE TO BE HANDED OVER IN A CLEAN CONDITION AT THE COMPLETION OF THE CONTRACT MAINTENANCE PERIOD.
15. TEMPORARY STORMWATER SUMPS (LOCATIONS TO SUIT SITE PHASING).
  - DISCHARGE PUMP NOM. FLOW RATE = 3 l/s
  - RUNOFF COEFFICIENT = 1.00
  - SIZING OF SUMPS BASED ON STORAGE REQUIRED FOR A 3 MONTH ARI STORM EVENT UP TO 12 HOURS IN DURATION INTENSITIES FROM AUSTRALIAN BUREAU OF METEOROLOGY IFD DATA SYSTEM.
16. PRIOR TO DISCHARGING COLLECTED WATER TO INCLUDING THOSE IDENTIFIED IN THE RAP IT IS TO BE TESTED TO ENSURE COMPLIANCE WITH WATER QUALITY REQUIREMENTS. SHOULD TESTING GIVE RESULTS THAT DO NOT COMPLY WITH THE ABOVE, TREATMENT MEASURES (SUCH AS THE APPLICATION OF A pH NEUTRAL FLOCCULANT) AND SUBSEQUENT RETESTING ARE REQUIRED. DOCUMENTARY RESULTS OF WATER QUALITY TESTING PRIOR TO DEWATERING ARE TO BE KEPT. A FILE IS TO BE KEPT ON SITE OF ALL WATER TESTING/DEWATERING EVENTS. FOLLOWING DEWATERING THE SUMP IS TO BE CLEARED OF SEDIMENT AND THE GEOTEXTILE ON THE PUMP WELL IS TO BE REPLACED.
17. ALL STORMWATER PITS TO BE COVERED OR DROP INLET SEDIMENT TRAPS SHALL BE PROVIDED. KERB INLET TRAPS ARE TO BE INSTALLED AFTER COMPLETION OF PAVING.
18. ALL SERVICE TRENCHES MUST BE FILLED IN AND COMPACTED IMMEDIATELY AFTER SERVICES HAVE BEEN LAID.
19. ROADS AND FOOTPATHS AFFECTED BY THE WORKS MUST BE SWEEP CLEAN DAILY. SOILS MUST BE RETAINED BEHIND CONTROL DEVICES.
20. CONTRACTOR MUST ENSURE THAT ALL VEHICLES LEAVING SITE ARE HOSED DOWN (OR SIMILAR) TO REMOVE SEDIMENT.
21. CONTRACTOR SHALL PROVIDE SEDIMENT FENCING MATERIAL DURING CONSTRUCTION TO THE LOW SIDE OF THE WORKS. THE SEDIMENT FENCING MATERIAL TO CYCLOPE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (E.G. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
22. EXISTING DRAINS LOCATED WITHIN THE SITE SHALL ALSO BE ISOLATED BY SEDIMENT FENCING MATERIAL.
23. NO PARKING OR STOCKPIILING OF MATERIALS IS PERMITTED ON THE LOWER SIDE OF THE SEDIMENT FENCE.
24. GRASS VERGES SHALL BE MAINTAINED AS MUCH AS PRACTICAL TO PROVIDE A BUFFER ZONE TO THE CONSTRUCTION SITE.
25. CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXISTING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING & LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

**CLAY SOILS:**

- STORMWATER SYSTEM AT GRANGE ROAD SHALL BE INSTALLED TO EITHER:
1. TRANSPORT STORMWATER RUNOFF WITH SUSPENDED SOILS FROM SITE VIA PUMP TRUCKS
  2. TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOILS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997), AND SHALL BE APPROVED BY LOCAL COUNCIL.

FOR APPROVAL

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Architect:  
  
**CIVIL SERVICES**

Issue	Date	Amendment	Int.	App.	COORDINATED REFERENCE DRAWINGS	ISSUE	DATE
01	25/06/2021	PRELIMINARY ISSUE	S.S.	A.A.	SERVICE DRAWING NUMBER		
02	21/07/2021	FOR EIS APPROVAL	S.S.	A.A.	ARCH		
					MECH		
					STRUCT		
					ELEC		
					CIVIL		

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Project:
PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT 30 LOFTUS ROAD YENNORA NSW

Drawing Title:
EROSION AND SEDIMENT CONTROL DETAILS AND NOTES

North Point:
Job No: <b>P630200</b>
Dwg No: <b>C-1011</b>

Scale: (A1) **N.T.S.**

Issue: **02**

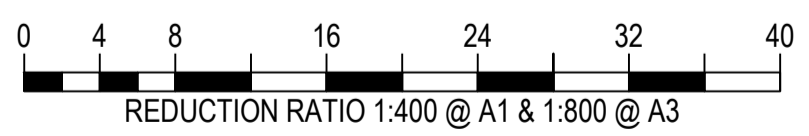
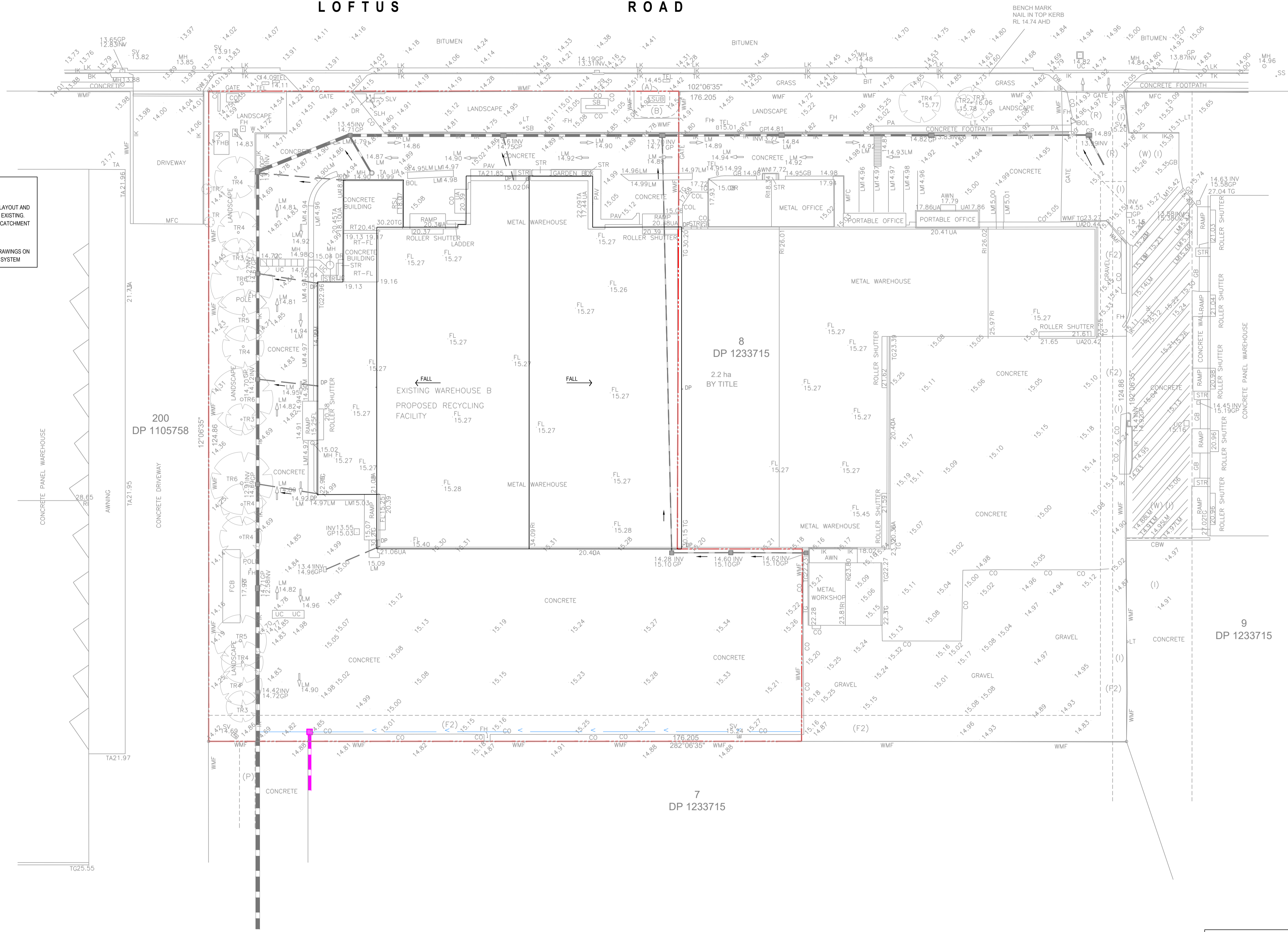
NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.



# LOFTUS ROAD

**DRAINAGE NOTE:**

- ALL EXISTING ROOFTOP DRAINAGE LAYOUT AND DOWNPIPE SYSTEM TO BE MAINTAINED AS EXISTING. THERE IS NO CHANGES ON THE ROOFTOP CATCHMENT PLAN AND CONFIGURATION.
- REFER TO HYDRAULIC ENGINEER DRAWINGS ON THE DETAIL OF THE INTERNAL HYDRAULIC SYSTEM



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 sales@cobrawaste.com.au

Architect:

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Issue	Date	COORDINATED REFERENCE DRAWINGS
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		ARCH
		MECH
		STRUCT
		ELEC
		CIVIL

Project:  
**PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT**  
 30 LOFTUS ROAD  
 YENNORA NSW

Drawing Title:  
**ROOF DRAINAGE PLAN**

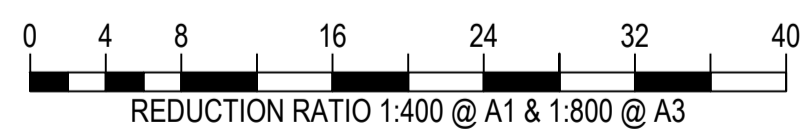
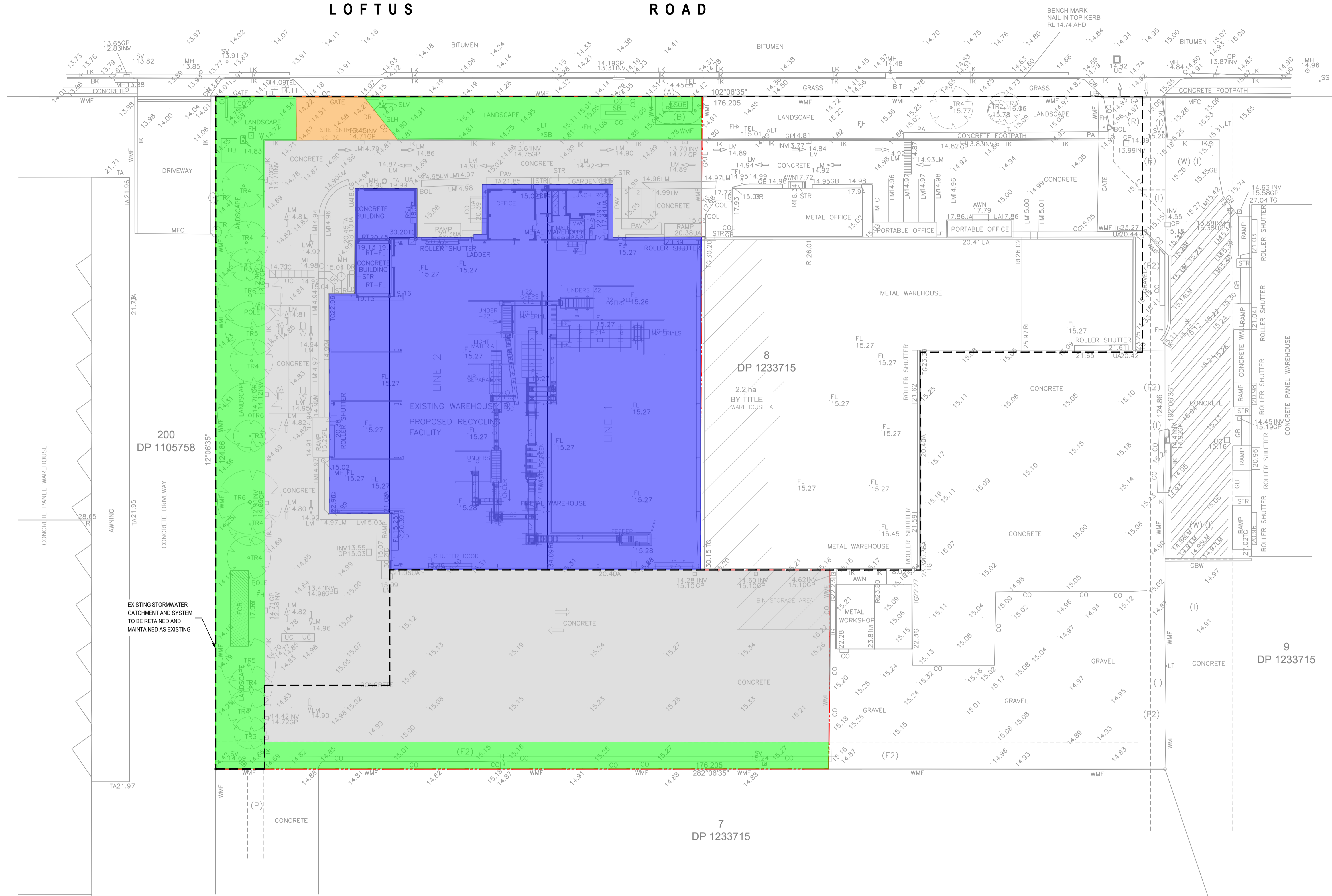
North Point:

ISO 9001:2015  
 Quality Management

ORIGINAL SIZE: A1

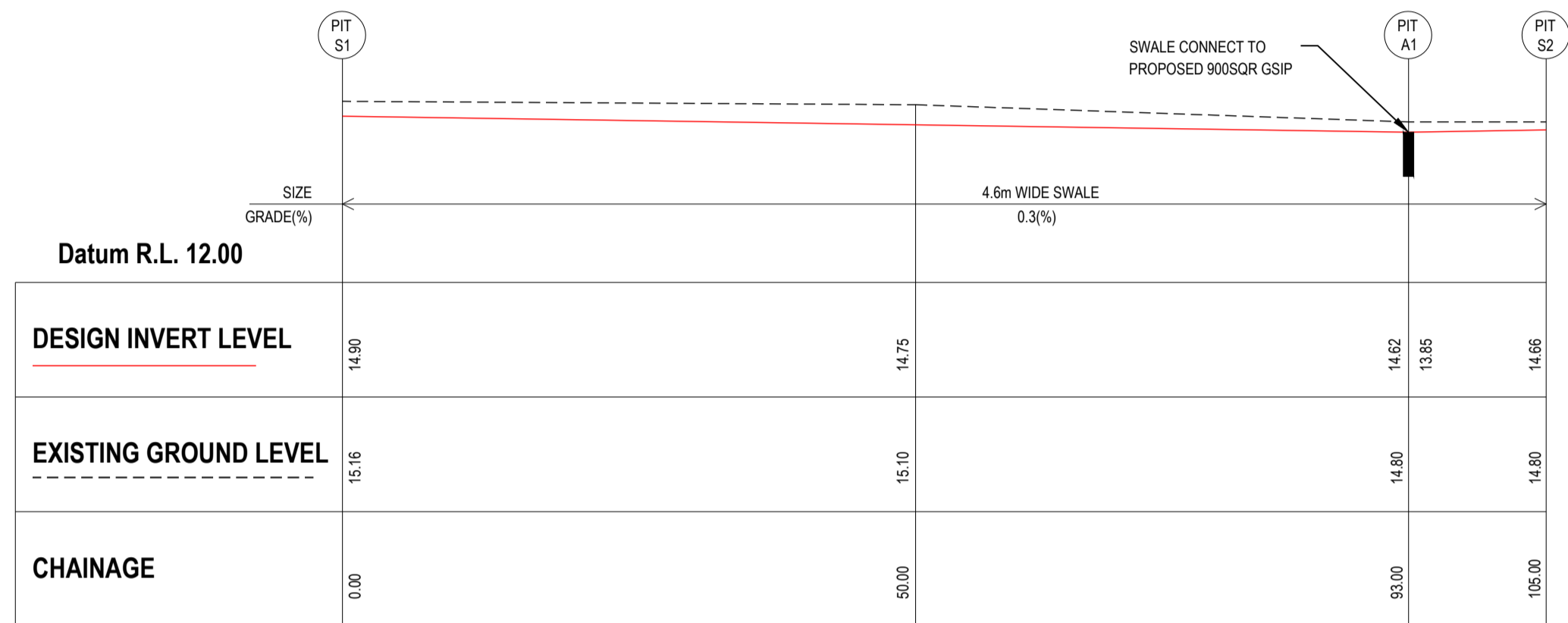
# LOFTUS ROAD

LEGEND	
<span style="display: inline-block; width: 15px; height: 15px; background-color: #0000FF; border: 1px solid black;"></span>	ROOF TOP - 4.430 m <sup>2</sup>
<span style="display: inline-block; width: 15px; height: 15px; background-color: #00FF00; border: 1px solid black;"></span>	LANDSCAPING - 2.190 m <sup>2</sup>
<span style="display: inline-block; width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black;"></span>	SEALED ROAD - 5.380 m <sup>2</sup>
<span style="display: inline-block; width: 15px; height: 15px; background-color: #FFA500; border: 1px solid black;"></span>	BYPASS - 130 m <sup>2</sup>
	<b>SITE TOTAL AREA - 12.130 m<sup>2</sup></b>
--- BOUNDARY - EXISTING --- STORMWATER CATCHMENT --- AND SYSTEM TO BE RETAINED --- AND MAINTAINED AS EXISTING	

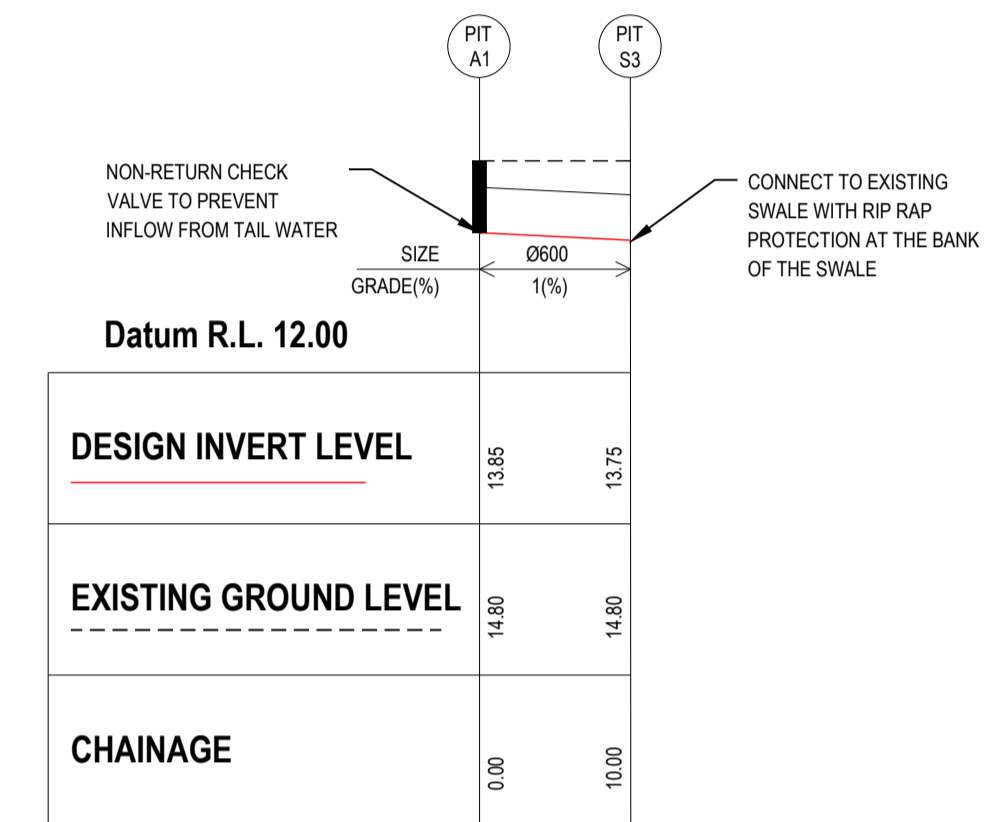


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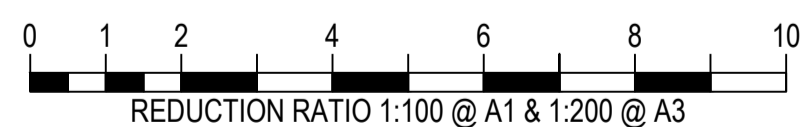
<p>Services Consultant:</p> <p><b>Intrax PROJECTS</b> Suite 1302, Level 13, 44 Market Street, SYDNEY NSW 2000 Ph (02) 8355 1200 www.intrax.com.au VIC   NSW   SA   QLD</p>	<p>Client:</p> <p><b>COBRA WASTE SOLUTIONS</b> Ph +61 300 178 543 sales@www.cobrawaste.com.au</p>	<p>Architect:</p> <p><b>CIVIL SERVICES</b></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Issue</th> <th>Date</th> <th>Amendment</th> <th>Int.</th> <th>App.</th> <th>COORDINATED REFERENCE DRAWINGS</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>25/06/2021</td> <td>PRELIMINARY ISSUE</td> <td>S.S.</td> <td>A.A.</td> <td>SERVICE DRAWING NUMBER</td> </tr> <tr> <td>02</td> <td>21/07/2021</td> <td>FOR BIS APPROVAL</td> <td>S.S.</td> <td>A.A.</td> <td>ARCH</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>MECH</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>STRUCT</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ELEC</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CIVIL</td> </tr> </tbody> </table> <p style="font-size: 8px;">THIS DRAWING IS CONFIDENTIAL AND IS NOT TO BE REPRODUCED IN ANY FORM AS A WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN AUTHORITY OF INTRAX PROJECTS. THIS DRAWING IS NOT TO BE USED PRELIMINARILY TO THE INTEREST OF INTRAX PROJECTS. THIS DRAWING CONTAINS PATENTS PENDING AND INTELLECTUAL PROPERTY OWNED BY INTRAX PROJECTS. © COPYRIGHT ALL RIGHTS RESERVED</p>	Issue	Date	Amendment	Int.	App.	COORDINATED REFERENCE DRAWINGS	01	25/06/2021	PRELIMINARY ISSUE	S.S.	A.A.	SERVICE DRAWING NUMBER	02	21/07/2021	FOR BIS APPROVAL	S.S.	A.A.	ARCH						MECH						STRUCT						ELEC						CIVIL	<p>Project:</p> <p><b>PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT 30 LOFTUS ROAD YENNORA NSW</b></p>	<p>Drawing Title:</p> <p><b>STORMWATER CATCHMENT PLAN</b></p> <p>North Point:</p> <p>Job No: <b>P630200</b> Scale: <b>1:400</b> Dwg No: <b>C-4101</b> Issue: <b>02</b></p> <p>NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.</p>
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**SWALE WITHIN F2 EASEMENT  
LONGITUDINAL SECTION**  
HORIZONTAL SCALE 1:500 @ A1 & 1:1000 @ A3  
VERTICAL SCALE 1:100 @ A1 & 1:200 @ A3



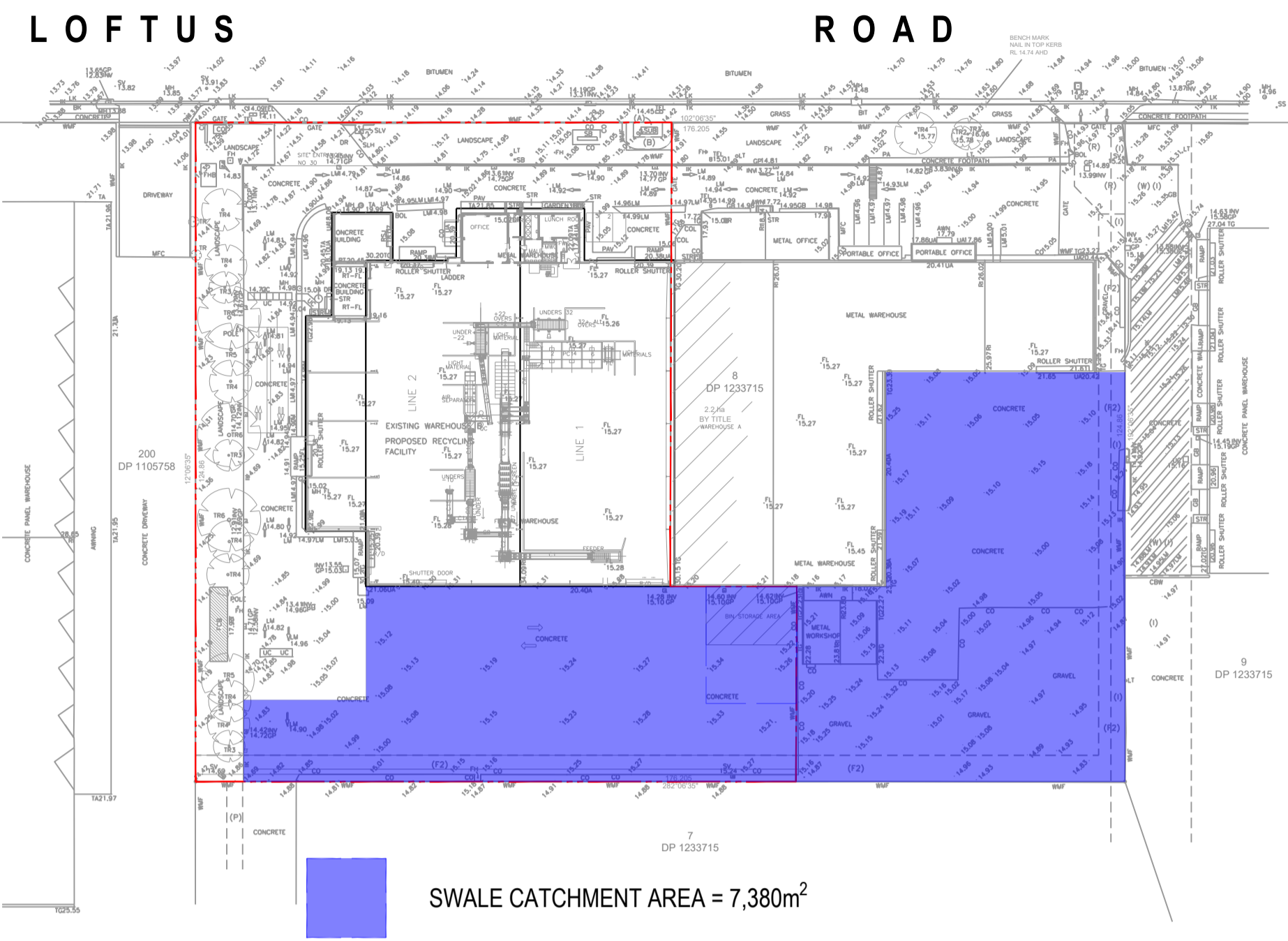
**STORMWATER LONGITUDINAL SECTION**  
HORIZONTAL SCALE 1:500 @ A1 & 1:1000 @ A3  
VERTICAL SCALE 1:100 @ A1 & 1:200 @ A3



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0.382



SWALE CATCHMENT AREA = 7,380m<sup>2</sup>

**SWALE CATCHMENT PLAN**  
SCALE 1:1000 @ A1 & 1:2000 @ A3

**DRAINS MODEL FOR SWALE CATCHMENT**  
SCALE: NTS

**CATCHMENTS RUNOFF CALCULATIONS**

UPSTREAM CATCHMENT AREA TO PROPOSED SWALE = 7,380 m<sup>2</sup>  
OVERLAND FLOW RATE FOR 1% AEP STORM EVENT, Q<sup>100</sup> = 0.382 m<sup>3</sup>/s

**Channel Analysis**

Type: Rectangular

Side Slope 1 (Z1): 0.0 H:1V

Side Slope 2 (Z2): 0.0 H:1V

Channel Width (B): 4.6 (m)

Pipe Diameter (D): 0.0 (m)

Longitudinal Slope: 0.0033 (m/m)

Override Default:

Manning's Roughness: 0.0400

Use Lining:

Lining Type: Woven Paper Net

Enter Flow: 0.427 (cms)

Enter Depth: 0.200 (m)

Calculate

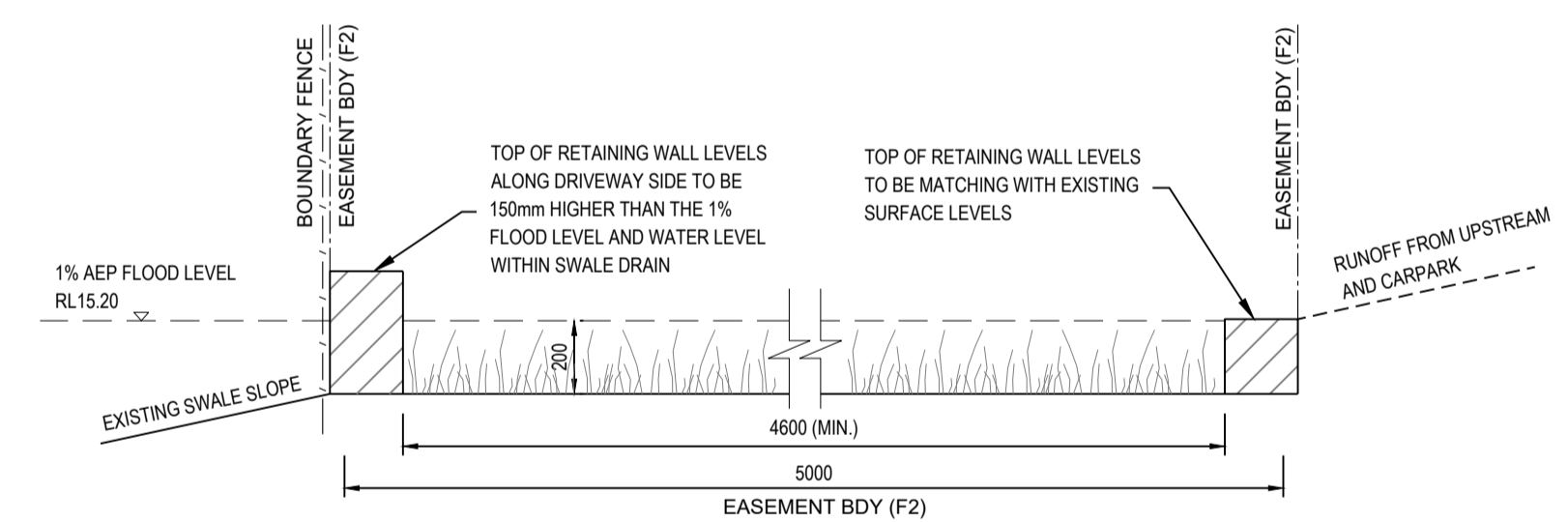
Parameter	Value	Units
Flow	0.427	cms
Depth	0.200	m
Area of Flow	0.920	m <sup>2</sup>
Wetted Perimeter	5.000	m
Hydraulic Radius	0.184	m
Average Velocity	0.465	m/s
Top Width (T)	4.600	m
Froude Number	0.332	
Critical Depth	0.096	m
Critical Velocity	0.970	m/s
Critical Slope	0.036	m/m
Critical Top Width	4.600	m
Calculated Max Shear...	6.469	N/m...
Calculated Avg Shear...	5.952	N/m...

**Rectangular Channel**

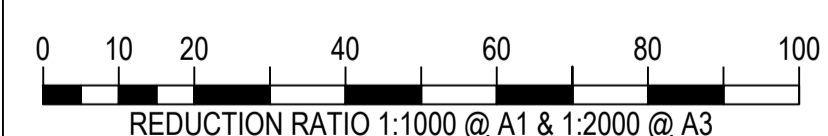
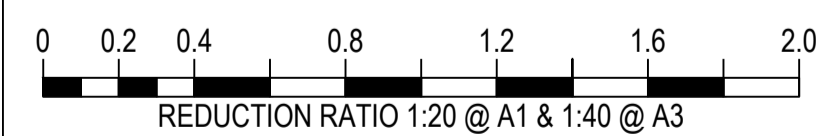
**SWALE CAPACITY DESIGN CHECK**  
SCALE: NTS

**SWALE CAPACITY CALCULATION**

SWALE CAPACITY = 0.427 m<sup>3</sup>/s > Q<sup>100</sup> (0.382 m<sup>3</sup>/s)



**A SWALE DRAIN DETAIL**  
C4001 4.6m WIDE (MIN.) SWALE DRAIN ALONG SOUTHERN SITE BOUNDARY  
SCALE 1:20

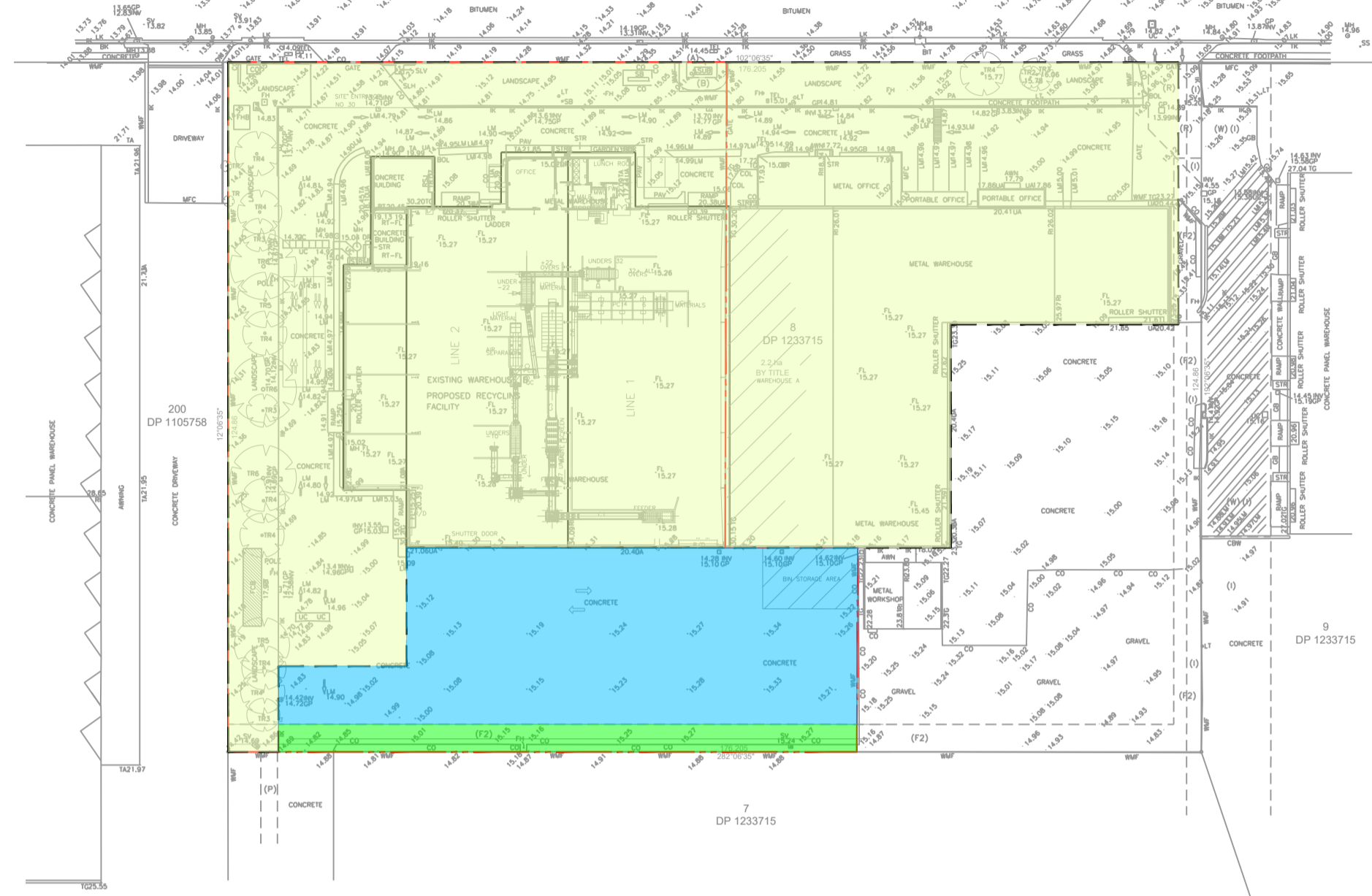


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LOFTUS

ROAD

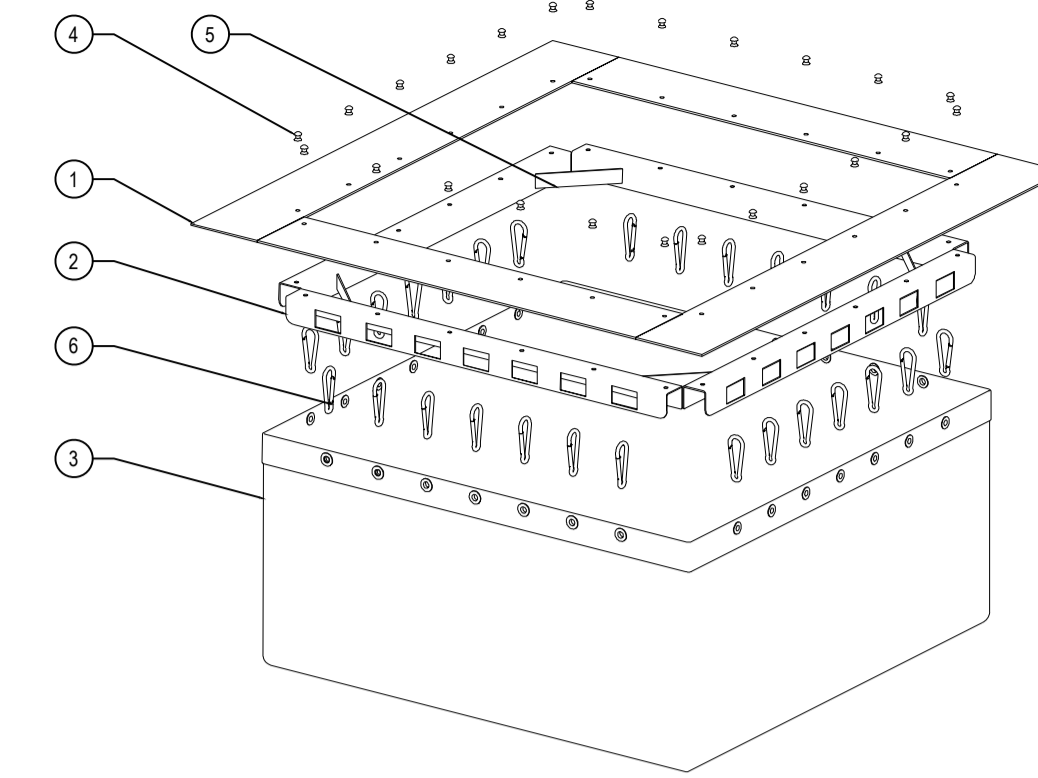


**LEGEND**

- EXISTING STORMWATER CATCHMENT AND SYSTEM TO BE RETAINED AS EXISTING = 14,370 m<sup>2</sup>
- CARPARK CATCHMENT TO SWALE = 2,820 m<sup>2</sup>
- SWALE CATCHMENT TO STORMSACK = 525 m<sup>2</sup>

TOTAL CATCHMENT AREA TO WATER QUALITY TREATMENT = 3,345 m<sup>2</sup>

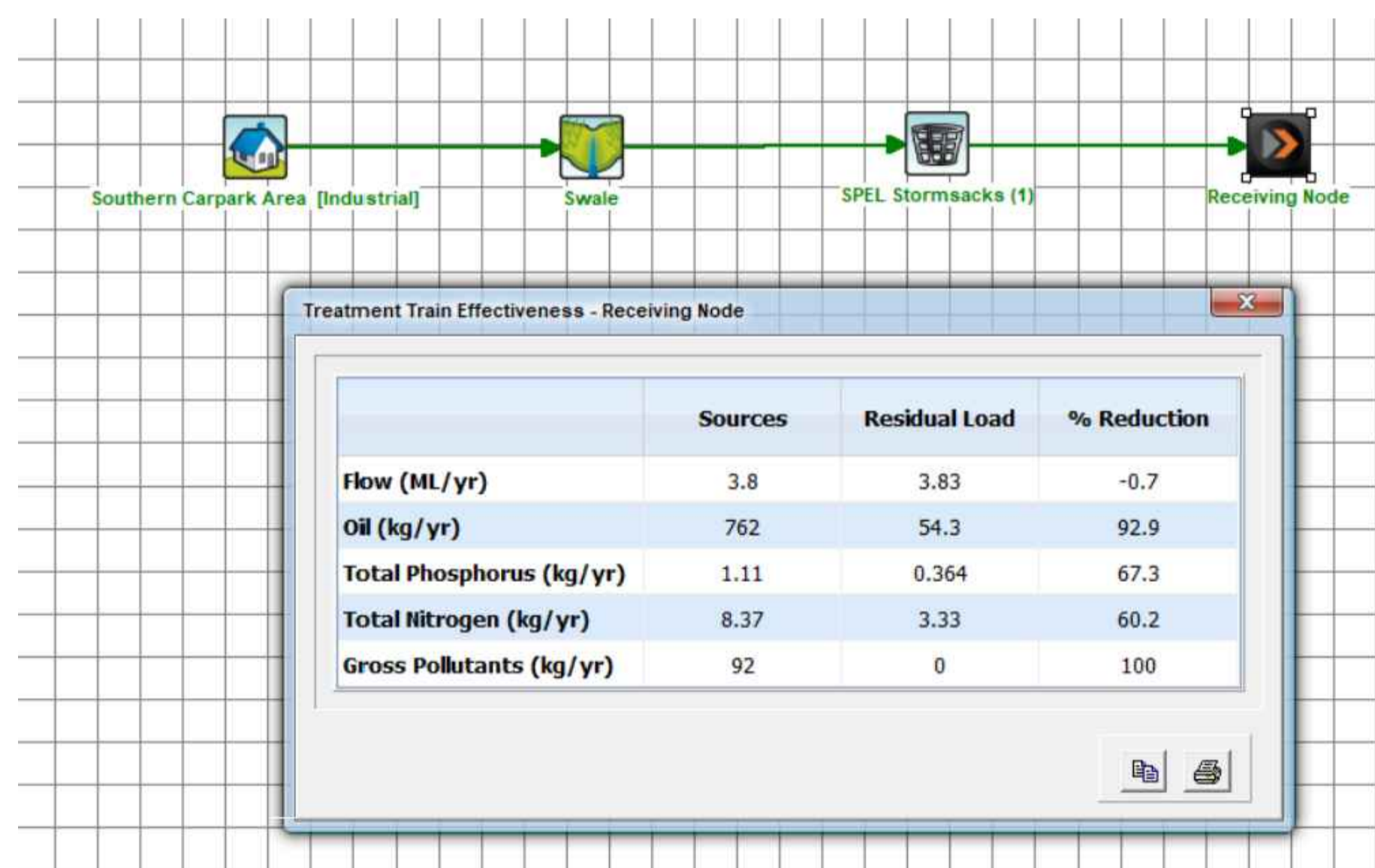
**MUSIC MODEL CATCHMENT PLAN**  
SCALE 1:1000 @ A1 & 1:2000 @ A3



**ISOMETRIC VIEW**  
SCALE N.T.S.

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	PLASTIC SHEETING	HDPE
2	4	SHEET METAL BINDING	STAINLESS STEEL 304
3	1	TEXTILE FABRIC & MESH LINER	HDPE
4	24	BLIND RIVIT 7 DIA.	STAINLESS STEEL 304
5	4	CORNER ESTIFFENER - FLAT BAR 25 x 2 -141 LG	STAINLESS STEEL 304
6	28	CARABINER CLIP 6	ALUMINIUM

**SPEL STORMSACK 900 x 900 DETAIL**

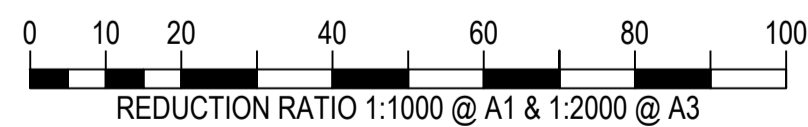


**MUSIC MODEL RESULT**

Development type	Litter	Coarse sediment	Nutrients	Fine particles	Cooking oil & grease	Hydro-carbons
Low density residential subdivision (sites ≤5ha)	YES	YES	YES	NO	NO	NO
Low density residential subdivision (sites >5ha)	YES	NO	NO	YES	NO	YES
Medium & high density residential	YES	NO	NO	YES	NO	YES
Commercial & retail	YES	NO	NO	YES	NO	YES
Industrial	YES	NO	NO	YES	NO	YES
Food & drink premises	YES	YES	NO	NO	YES	NO
Service stations, car washes & other automotive uses	YES	NO	NO	YES	NO	YES

Pollutant	Description	Reduction in Load <sup>1</sup>
Litter e.g. cans, bottles, wrapping materials, food scraps	All anthropogenic materials with a minimum dimension >5mm	70%
Coarse sediment	Coarse sand and soil particles (<0.5mm diameter)	80%
Nutrients	Total phosphorus & nitrogen	45%
Fine particles	Coarse sand and soil particles (<0.05mm diameter)	50%
Cooking oil & grease	Free floating oils that do not emulsify in aqueous solutions	90%
Hydrocarbons inc. motor fuels, oils & greases	Anthropogenic hydrocarbons that can be emulsified	90%

**WATER QUALITY TARGET**  
(REF: CUMBERLAND/HOLROYD DEVELOPMENT CONTROL PLAN 2013, PART A, SECTION 7.5)



FOR APPROVAL

<p>Services Consultant:</p> <p>Suite 1302, Level 13, 44 Market Street, SYDNEY NSW 2000 Ph (02) 8355 1250</p>	<p>Client:</p> <p><b>COBRA WASTE SOLUTIONS</b> Ph +61 300 176 543 sales@www.cobrawaste.com.au</p>	<p>Architect:</p>	<p>Issue Date Amendment</p> <p>01 25/06/2021 PRELIMINARY ISSUE</p> <p>02 21/07/2021 FOR BIS APPROVAL</p>	<p>Int. App.</p> <p>S.S. A.A.</p> <p>S.S. A.A.</p>	<p>COORDINATED REFERENCE DRAWINGS</p> <table border="1"> <thead> <tr> <th>SERVICE</th> <th>DRAWING NUMBER</th> <th>ISSUE</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>ARCH</td> <td></td> <td></td> <td></td> </tr> <tr> <td>MECH</td> <td></td> <td></td> <td></td> </tr> <tr> <td>STRUCT</td> <td></td> <td></td> <td></td> </tr> <tr> <td>ELEC</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	SERVICE	DRAWING NUMBER	ISSUE	DATE	ARCH				MECH				STRUCT				ELEC				<p>Project:</p> <p><b>PROPOSED RESOURCE RECOVERY FACILITY DEVELOPMENT</b> 30 LOFTUS ROAD YENNORA NSW</p>	<p>Drawing Title:</p> <p><b>WATER QUALITY DETAIL AND CATCHMENT PLAN</b></p>	<p>North Point:</p>	
			SERVICE	DRAWING NUMBER	ISSUE	DATE																							
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<p><b>CIVIL SERVICES</b></p>			<p>Issue:</p> <p>02</p>	<p>Scale:</p> <p>AS NOTED</p>	<p>Job No:</p> <p>P630200</p>	<p>Dwg No:</p> <p>C-4401</p>	<p>Issue:</p> <p>02</p>	<p>NOTE: SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE.</p>																					