

M.G.A.



Issued under the Environmental Planning and Assessment Act 1979

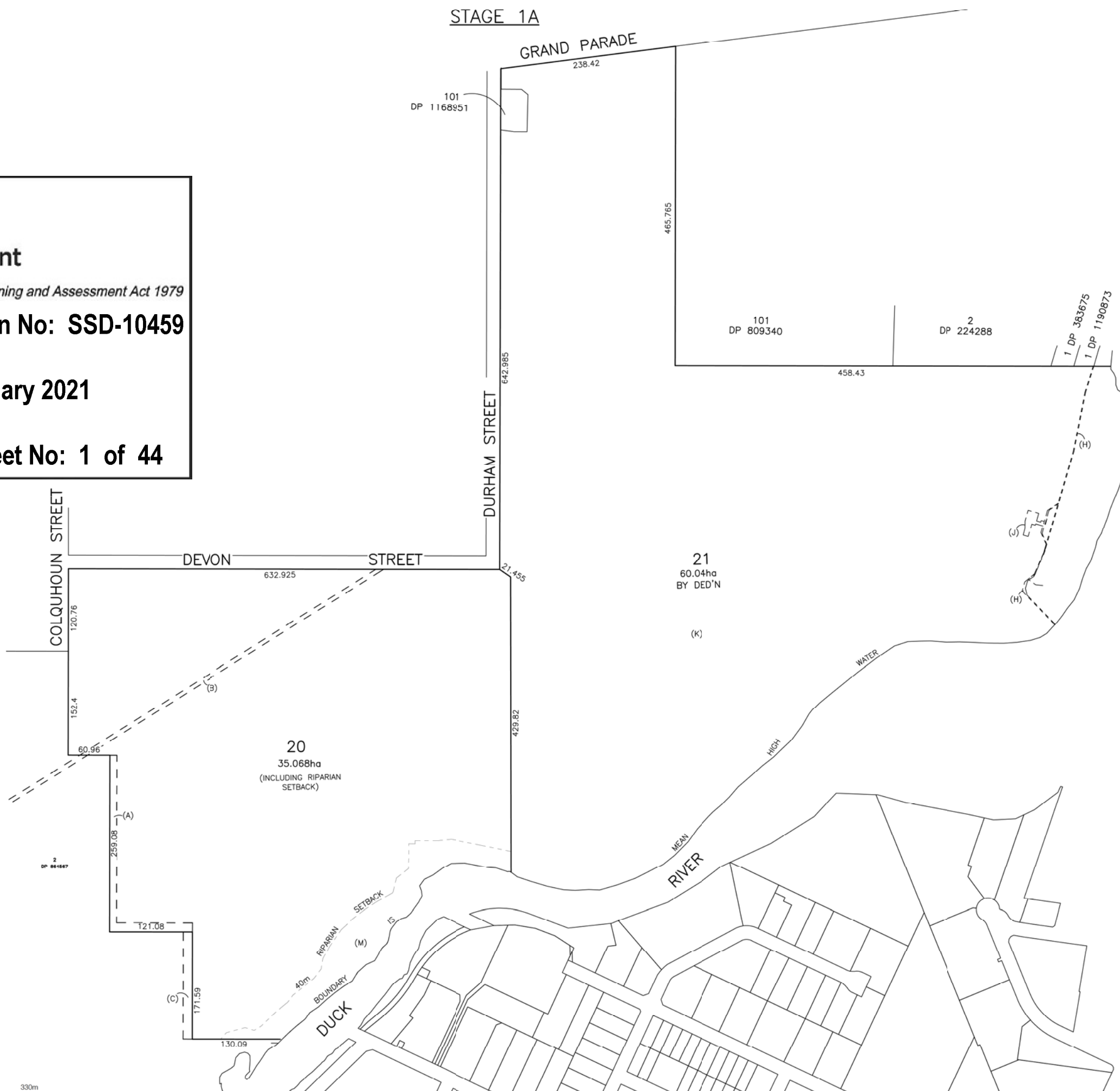
Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF Sheet No: 1 of 44

NOTES:
1. ALL DIMENSIONS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY
2. NO CADASTRAL SURVEY HAS BEEN UNDERTAKEN

- (A) EASEMENT TO DRAIN WATER 10.2 & 13.4 WIDE (AC 421785)
- (B) EASEMENT 6.095 WIDE (B309159) - SYDNEY WATER PIPELINE
- (C) EASEMENT TO DRAIN WATER 13.4 WIDE (AC424784)
- (H) PIPELINE EASEMENT (V540637 & V540638)
- (J) PIPELINE EASEMENT (V22813)
- (K) PIPELINE EASEMENT WHOLE OF LOT (R297864)
- (M) EASEMENT FOR PEDESTRIAN ACCESS 40 WIDE & VARIABLE WIDTH



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VE PROPERTY PTY LTD

PROJECT
PLAN OF PROPOSED SUBDIVISION OF LOT 100 IN DP 1168951 STAGE 1A

NOTES
The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.
Services shown hereon have been located where possible by field survey. If not able to be so located, services have been plotted from the records of relevant authorities where available and have been noted accordingly on the plan. Where such records do not exist or are inadequate a notation has been made hereon.
Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

REV	DATE	DESCRIPTION
5	GKO 11/11/2020	AMEND RIPARIAN SETBACK
4A	GKO 13/10/2020	SY074707.000.11.4 VER A
4	GKO 06/08/2020	APPROX AUSGRID LINE ADDED
3	GKO 23/07/2020	EASEMENTS ADDED
2	GKO 16/07/2020	LOT 6 DIMENSION AND AREA AMENDED
1	GKO 22/06/2020	INITIAL ISSUE

SYM CODE	DESCRIPTION	SYM CODE	DESCRIPTION
BN	BENCH MARK	OFM	OPTICAL FIBRE MARKER
BM	BENCH MARK	OPF	OPTICAL FIBRE PIT
BO	BOLLARD	TM	TREES
DM	DRAINAGE MANHOLE	SE	SEAT
EFP	ELECT FUSE BOX	TS	SHRUB
ELP	ELECT GARDEN LIGHT	TCA	TELSTRA PIT
EL	ELECT GREEN PILLAR	SLH	SEWER LAMP HOLE
LP	ELECT LIGHT POLE	SMH	SEWER MANHOLE
EP	ELECT SINGLE PIT	SWP	SEWER VENT PIPE
SPL	ELECT STAY POLE	SI	SIGN
PP	ELECT POWER POLE	BS	BUS STOP SIGN
ELP	ELECT POLE LIGHT	T	TREE
THAN	ELECT POLE TRANSFORM	SCL	TRAFFIC LIGHT
FD	FUEL DISP	SCT	TRAFFIC CONTROLLER
GM	GAS MANN	SJX	TRAFFIC JUNCTION BOX
GM	GAS METER	US	UNKNOWN SERVICE
GV	GAS VALVE	WAV	WATER AIR VALVE
AG	GATE	WMP	WATER METER
GP	GULLY PIT	WEP	WATER PUMP
HYD	HYDRANT	WSP	WATER STOP VALVE
BP	BORHPOLE	WTE	WATER TAP

Symbols shown are indicative only. The symbol size and orientation does not necessarily represent the real size or orientation of the feature.

DRAINAGE PIPE U/G	---
DRAIN	---
ELECT CABLE A/G	---
ELECT CABLE U/G	---
GAS PIPE	---
FENCE LINE	---
SEWERAGE PIPE	---
TELSTRA CABLE	---
WATER PIPE	---

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HEIGHT DATUM	AHD	LOCAL AUTHORITY	CITY OF PARRAMATTA
HEIGHT ORIGIN	N/A	SCALE	1:3000(A1)
MERIDIAN	56	CONTOUR INTERVAL	N/A
COORD SYSTEM	MGA	SURVEYOR	N/A
DATE OF SURVEY		DATE OF SURVEY	
CAD FILE	74707 ver 9 final subdivision	DRAWN	SF/CLP
DATE	11/11/2020	DATE	11/11/2020
AUTOCAD FILE	SY074707.000.11A.5	CHECKED	GKO
DATE	11/11/2020	DATE	11/11/2020
ARCHIVE FILE	SY074707.000.11.4_A	APPROVED	GKO
DATE	11/11/2020	DATE	11/11/2020
PLAN NUMBER	SY074707.000.11A.5	SHEET 1 OF 1	

M.G.A.

STAGE 1B

GRAND PARADE



Issued under the Environmental Planning and Assessment Act 1979

Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF Sheet No: 2 of 44

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PROJECT
PLAN OF PROPOSED SUBDIVISION OF LOT 100 IN DP 1168951 STAGE 1B

NOTES

The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.

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Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed locations of all services.

6	GKO	11/11/2020	AMEND RIPARIAN SETBACK
5B	GKO	02/11/2020	LANDSCAPE SETBACK REMOVED
4B	GKO	13/10/2020	SY074707 11.4 VER B
4	GKO	06/08/2020	APPROX AUSGRID LINE ADDED
3	GKO	23/07/2020	EASEMENTS ADDED
2	GKO	16/07/2020	LOT 6 DIMENSION AND AREA AMENDED
1	GKO	22/06/2020	INITIAL ISSUE

SYM CODE	DESCRIPTION	SYM CODE	DESCRIPTION
BN	BN BENCH MARK	OFM	OPTICAL FIBRE MARKER
BM	BENCH MARK	OFP	OPTICAL FIBRE PIT
BO	BOLLARD	TM	PALM TREE
DM	DRAINAGE MANHOLE	SE	SEAT
EFP	ELEC FUSE BOX	TS	SHRUB
ELP	ELEC GARDEN LIGHT	TCA	TELSTRA PIT
EL	ELEC GREEN PILLAR	SLH	SEWER LAMP HOLE
LP	ELEC LIGHT POLE	SMH	SEWER MANHOLE
EP	ELECT SINGLE PIT	SWP	SEWER VENT PIPE
SPL	ELEC STAY POLE	SI	SIGN
PP	ELEC POWER POLE	BS	BUS STOP SIGN
ELP	ELEC POLE/LIGHT	T	TREE
HTM	ELE POLE/TRANSFORM	SCL	TRAFFIC LIGHT
FD	FUEL D/P	SCC	TRAFFIC CONTROLLER
GM	GAS MAIN	SJX	TRAFFIC JUNCTION BOX
GMR	GAS METER	US	UNKNOWN SERVICE
GV	GAS VALVE	WAV	WATER AIR VALVE
AG	GATE	WMP	WATER METER
GUL	GULLY PIT	WEP	WATER PUMP
HYD	HYDRANT	WSP	WATER STOP VALVE
BDP	BODYPOLE	WTE	WATER TAP

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DRAINAGE PIPE U/G	---
DRAIN	---
ELECT CABLE A/G	---
ELECT CABLE U/G	---
GAS PIPE	---
FENCE LINE	---
SEWERAGE PIPE	---
TELSTRA CABLE	---
WATER PIPE	---

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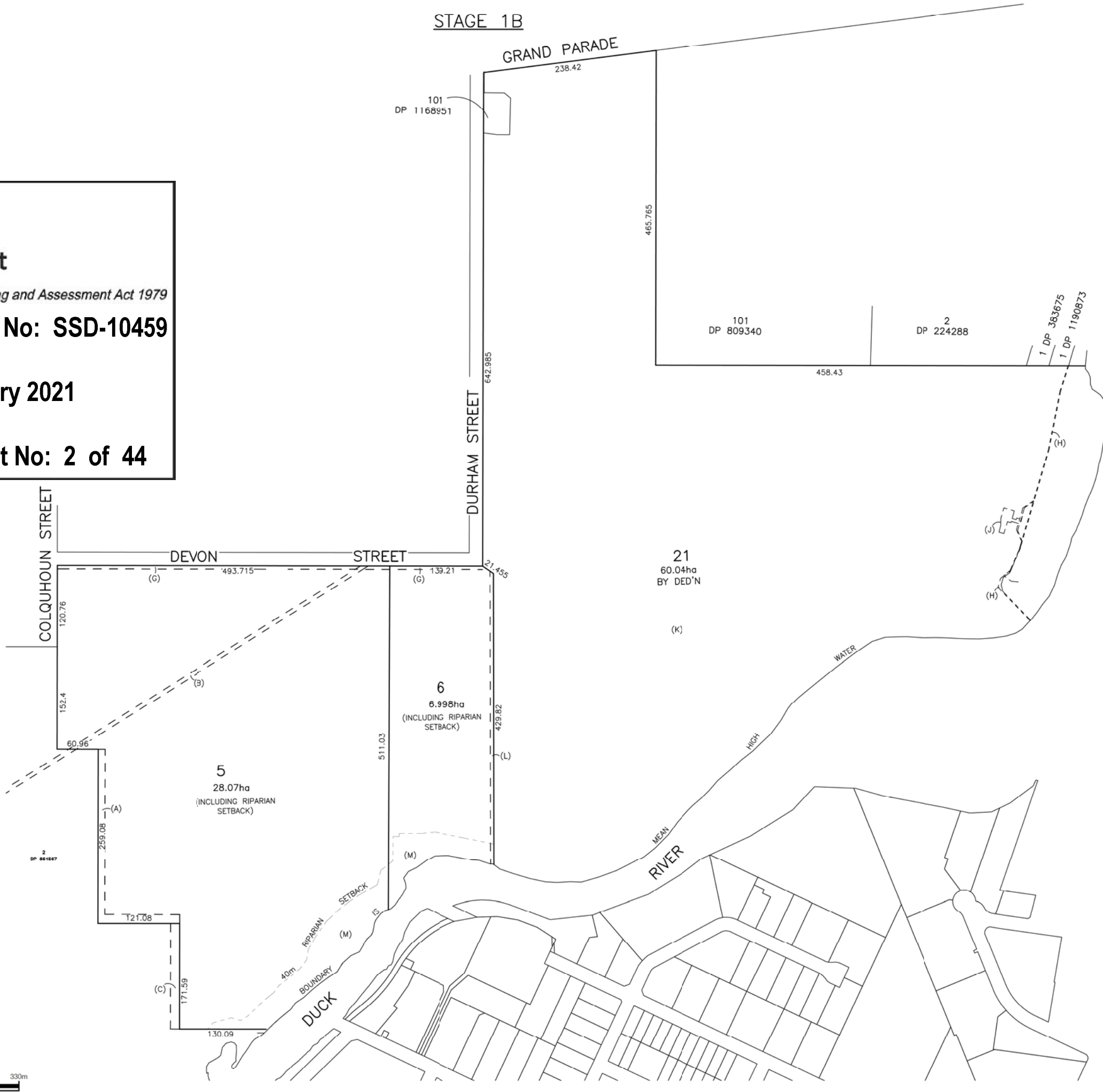
(02) 9833 2000
info@landpartners.com.au
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HEIGHT DATUM	AHD	LOCAL AUTHORITY	CITY OF PARRAMATTA
HEIGHT ORIGIN	N/A	SCALE	1:3000(A1)
MERIDIAN	56	CONTOUR INTERVAL	N/A
COORD SYSTEM	MGA	SURVEYOR	N/A
DATE OF SURVEY			
DCAD FILE	74707 ver 9 final subdivision	DRAWN	SF/CLP
DATE	11/11/2020		
AUTOCAD FILE	SY074707.000.11B.6	CHECKED	GKO
DATE	11/11/2020		
ARCHIVE FILE	SY074707.000.11.5B	APPROVED	GKO
DATE	11/11/2020		
PLAN NUMBER	SY074707.000.11B.6	SHEET 1 OF 1	

NOTES:

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- (B) EASEMENT 6.095 WIDE (B309159) - SYDNEY WATER PIPELINE
- (C) EASEMENT TO DRAIN WATER 13.4 WIDE (AC424784)
- (G) PROPOSED EASEMENT FOR SERVICES 5 WIDE
- (H) PIPELINE EASEMENT (V540637 & V540638)
- (J) PIPELINE EASEMENT (V22813)
- (K) PIPELINE EASEMENT WHOLE OF LOT (R297864)
- (L) EASEMENT FOR OVERLAND FLOW 5 WIDE
- (M) EASEMENT FOR PEDESTRIAN ACCESS 40 WIDE & VARIABLE WIDTH



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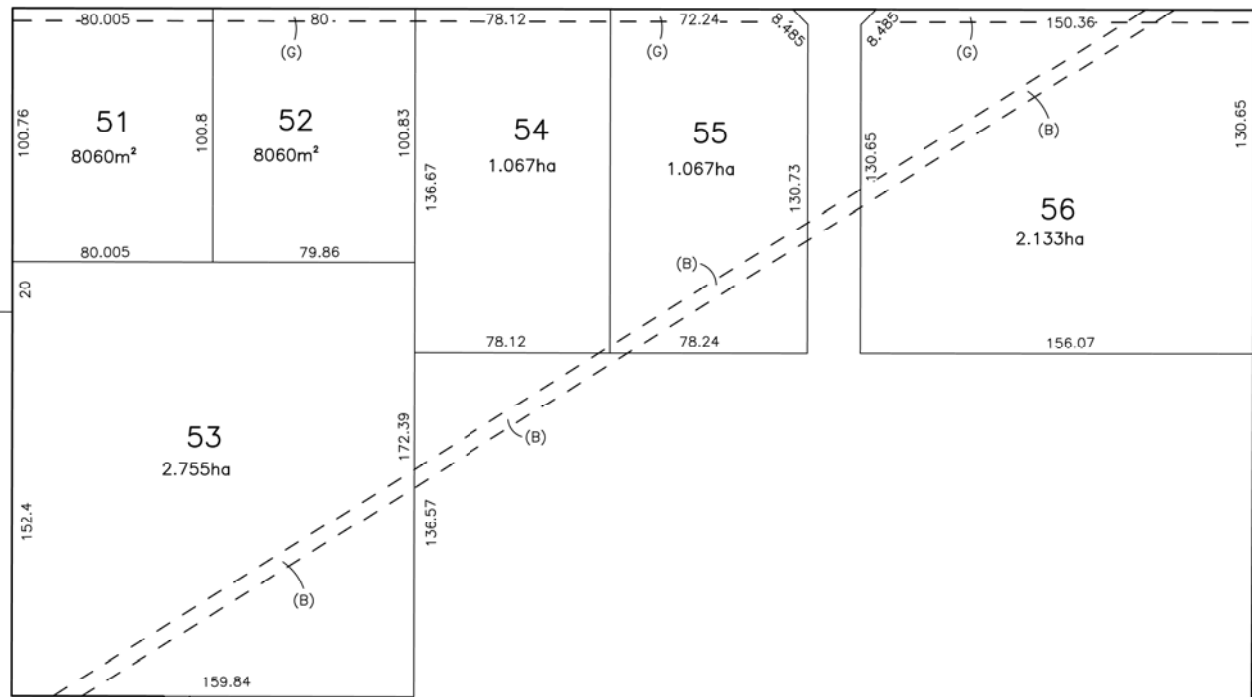
STAGE 2

DEVON

STREET

UNWIN STREET

COLQUHOUN STREET



6
STAGE 1
SUBDIVISION

21

RESIDUE LOT
57
19.44ha

2
DP 864567

(M)
WATER
RIVER

DUCK
CARNARVAN STREET

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PROJECT
PLAN OF PROPOSED SUBDIVISION OF LOT 5 OF STAGE 1 OF SUBDIVISION OF LOT 100 IN DP1168951 STAGE 2

NOTES
The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.
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7	GKO	11/11/2020	AMEND RIPARIAN SETBACK
6	GKO	02/11/2020	LANDSCAPE SETBACK REMOVED
5	GKO	19/10/2020	LOT BOUNDARIES AMENDED
4	GKO	19/08/2020	SMALL LOT 3 REMOVED
3	GKO	24/07/2020	EASEMENTS DETAIL ADDED
2	GKO	17/07/2020	EASEMENT AMENDED
1	GKO	22/06/2020	INITIAL ISSUE

SYM CODE	DESCRIPTION	SYM CODE	DESCRIPTION
BN	BENCH MARK	OFM	OPTICAL FIBRE MARKER
BM	BENCH MARK	OFP	OPTICAL FIBRE PIT
BO	BOLLARD	TM	PALM TREE
DM	DRAINAGE MANHOLE	SE	SEAT
EFP	ELEC FUSE BOX	TS	SHRUB
ELP	ELEC GARDEN LIGHT	TCA	TELSTRA PIT
EL	ELEC GREEN PILLAR	SLH	SEWER LAMP HOLE
LP	ELEC LIGHT POLE	SMH	SEWER MANHOLE
EP	ELECT SINGLE PIT	SWP	SEWER VENT PIPE
SPL	ELEC STAY POLE	SI	SIGN
PP	ELEC POWER POLE	BS	BUS STOP SIGN
ELP	ELEC POLE LIGHT	T	TREE
HP	ELEC POLE TRANSFORM	SGL	TRAFFIC LIGHT
FD	FUEL DISP	SCL	TRAFFIC CONTROLLER
GM	GAS MAIN	SJX	TRAFFIC JUNCTION BOX
GM	GAS METER	US	UNKNOWN SERVICE
GV	GAS VALVE	WAV	WATER AIR VALVE
AG	GATE	WMP	WATER METER
GUL	GULLY PIT	WEP	WATER PUMP
HYD	HYDRANT	WSV	WATER STOP VALVE
BDP	BODYPOLE	WTE	WATER TAP

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DRAINAGE PIPE U/G	---
DRAIN	---
ELECT CABLE A/G	---
ELECT CABLE U/G	---
GAS PIPE	---
FENCE LINE	---
SEWERAGE PIPE	---
TELSTRA CABLE	---
WATER PIPE	---

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HEIGHT DATUM	AHD	LOCAL AUTHORITY	CITY OF PARRAMATTA
HEIGHT ORIGIN	N/A	SCALE	1:1500 (A1)
MERIDIAN	56	CONTOUR INTERVAL	N/A
COORD SYSTEM	MGA	SURVEYOR	N/A
DATE OF SURVEY	-	DATE OF SURVEY	-
DCAD FILE	74707 ver 9 final subdivision	DRAWN	SF/CLP
DATE	2/11/2020	DATE	2/11/2020
AUTOCAD FILE	SY074707.000.12.7	CHECKED	GKO
DATE	2/11/2020	DATE	2/11/2020
ARCHIVE FILE	SY074707.000.12.6	APPROVED	GKO
DATE	2/11/2020	DATE	2/11/2020
PLAN NUMBER	SY074707.000.12.7	SHEET 1 OF 1	

NSW GOVERNMENT | **Planning, Industry & Environment**

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Approved Application No: SSD-10459

Granted on: 31 January 2021

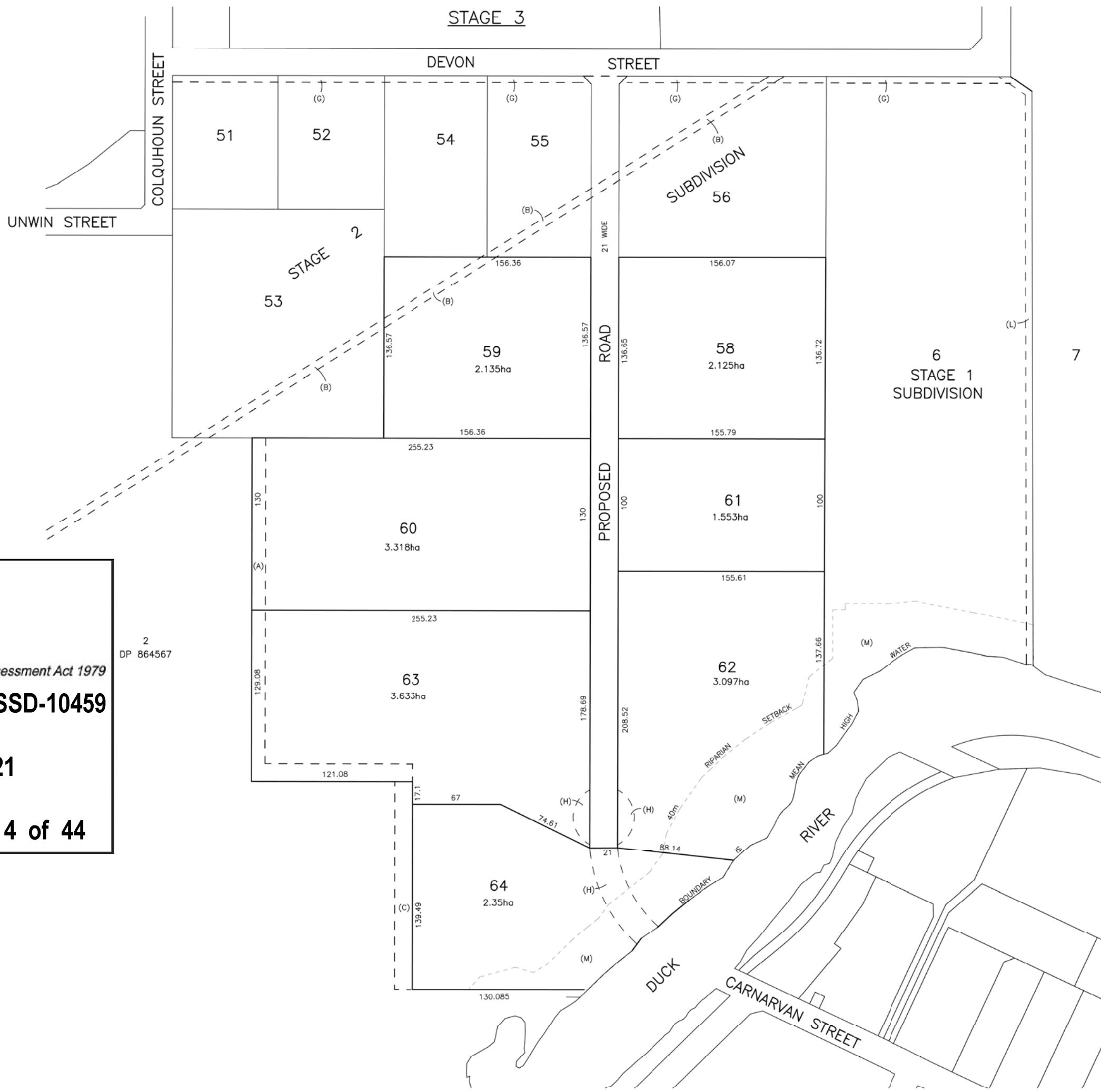
Signed: JF **Sheet No: 3 of 44**

NOTES
1. ALL DIMENSIONS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY
2. NO CADASTRAL SURVEY HAS BEEN UNDERTAKEN

- (A) EASEMENT TO DRAIN WATER 10.2 & 13.4 WIDE (AC 424785)
- (B) EASEMENT 6.095 WIDE (B309159) - SYDNEY WATER PIPELINE
- (C) EASEMENT TO DRAIN WATER 13.4 WIDE (AC424784)
- (G) PROPOSED EASEMENT FOR SERVICES 5 WIDE
- (L) EASEMENT FOR OVERLAND FLOW 5 WIDE
- (M) EASEMENT FOR PEDESTRIAN ACCESS 40 WIDE & VARIABLE WIDTH



M.G.A.



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PROJECT
PLAN OF PROPOSED SUBDIVISION OF LOT 57 OF STAGE 2 OF SUBDIVISION OF LOT 100 IN DP1168951 STAGE 3

NOTES
The title boundaries shown hereon were not marked at the time of survey and have been determined by plan dimensions only and not by field survey.
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8	GKD	23/11/2020	LOT 51 & 62 AMENDED
7	GKD	11/11/2020	AMEND RIPARIAN SETBACK & (H)
6	GKD	09/11/2020	LANDSCAPE SETBACK REMOVED
5	GKD	29/10/2020	PLAN AMENDED
4	GKD	20/10/2020	LOT BOUNDARIES AMENDED
3	GKD	24/07/2020	EASEMENTS DETAIL ADDED
2	GKD	17/07/2020	EASEMENT AMENDED
1	GKD	22/06/2020	INITIAL ISSUE

SYM CODE	DESCRIPTION	SYM CODE	DESCRIPTION
BN	BENCH MARK	OFM	OPTICAL FIBRE MARKER
BM	BENCH MARK	OPF	OPTICAL FIBRE PIT
BD	BOLLARD	TM	PALM TREE
DM	DRAINAGE MANHOLE	SE	SEAT
EFB	ELEC FUSE BOX	TS	SHRUB
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EL	ELEC GREEN PILLAR	SLH	SEWER LAMP HOLE
LP	ELEC LIGHT POLE	SMH	SEWER MANHOLE
EP	ELEC SINGLE PIT	SWP	SEWER VENT PIPE
SPL	ELEC STAY POLE	SI	SIGN
PP	ELEC POWER POLE	BS	BUS STOP SIGN
ELP	ELEC POLE LIGHT	T	TREE
HTM	ELEC POLE TRANSFORM	SSL	TRAFFIC LIGHT
FD	FUEL DISP	SCL	TRAFFIC CONTROLLER
GM	GAS MAIN	JXB	TRAFFIC JUNCTION BOX
GMR	GAS METER	US	UNKNOWN SERVICE
GV	GAS VALVE	WAV	WATER AIR VALVE
AG	GATE	WMP	WATER METER
GL	GULLY PIT	WEP	WATER PUMP
HYD	HYDRANT	WSV	WATER STOP VALVE
BP	BORHPOLE	WTE	WATER TAP

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DRAINAGE PIPE U/G	---
DRAIN	---
ELECT CABLE A/G	---
ELEC CABLE U/G	---
GAS PIPE	---
FENCE LINE	---
SEWERAGE PIPE	---
TELSTRA CABLE	---
WATER PIPE	---

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Dundalk NSW 2117

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SYDNEY OFFICE
19/09/20

HEIGHT DATUM	LOCAL AUTHORITY
AHD	CITY OF PARRAMATTA
HEIGHT ORIGIN	SCALE
N/A	1:1500 (A1)
MERIDIAN	CONTOUR INTERVAL
N/A	N/A
COORD SYSTEM	SURVEYOR
N/A	-
DATE	DATE OF SURVEY
74707 ver 9 final subdivision	23/11/2020
AUTOCAD FILE	CHECKED
SY074707.000.13.8	GKD
DATE	DATE
23/11/2020	23/11/2020
ARCHIVE FILE	APPROVED
SY074707.000.13.6	GKD
DATE	DATE
23/11/2020	23/11/2020
PLAN NUMBER	SHEET 1 OF 1
SY074707.000.13.8	

Planning, Industry & Environment

Issued under the Environmental Planning and Assessment Act 1979

Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF Sheet No: 4 of 44

NOTES:
1. ALL DIMENSIONS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY
2. NO CADASTRAL SURVEY HAS BEEN UNDERTAKEN

(A) EASEMENT TO DRAIN WATER 10.2 & 13.4 WIDE (AC 424785)
(B) EASEMENT 6.095 WIDE (B309159) - SYDNEY WATER PIPELINE
(C) EASEMENT TO DRAIN WATER 13.4 WIDE (AC424784)
(G) PROPOSED EASEMENT FOR SERVICES 5 WIDE
(H) RIGHT OF ACCESS 21 WIDE AND VARIABLE WIDTH
(L) EASEMENT FOR OVERLAND FLOW 5 WIDE
(M) EASEMENT FOR PEDESTRIAN ACCESS 40 WIDE & VARIABLE WIDTH



PROPOSED CENTRAL SYDNEY INDUSTRIAL ESTATE INCORPORATING NEW DOWNER SUSTAINABLE ROAD RESOURCE CENTRE.

9 DEVON STREET, CLYDE NSW 2142
PART LOT 100 DP1168951
CIVIL PACKAGE - SSD 10459

DRAWING LIST:

DRAWING NO.	DRAWING TITLE
CO13919.01-DA10	DRAWING LIST & GENERAL NOTES
CO13919.01-DA15	SERVICES ARRANGEMENT PLAN
CO13919.01-DA21	EROSION AND SEDIMENT CONTROL PLAN- PHASE 1
CO13919.01-DA22	EROSION AND SEDIMENT CONTROL PLAN- PHASE 2
CO13919.01-DA23	EROSION AND SEDIMENT CONTROL PLAN- FINAL STAGE
CO13919.01-DA25	EROSION AND SEDIMENT CONTROL DETAILS
CO13919.01-DA31	BULK EARTHWORKS PLAN - PHASE 1
CO13919.00-DA32	BULK EARTHWORKS PLAN - PHASE 2
CO13919.00-DA35	BULK EARTHWORKS SECTIONS
CO13919.00-DA41	STORMWATER DRAINAGE PLAN - PHASE 1
CO13919.00-DA42	STORMWATER DRAINAGE PLAN - PHASE 2
CO13919.00-DA45	STORMWATER DRAINAGE DETAILS - SHEET 1
CO13919.00-DA46	STORMWATER DRAINAGE DETAILS - SHEET 2
CO13919.00-DA51	FINISHED LEVELS PLAN - PHASE 1
CO13919.00-DA60	PROPOSED PUBLIC ACCESS ROAD & TYPICAL SECTION

ELECTRONIC INFORMATION NOTES:

- THE ISSUED DRAWINGS IN HARD COPY OR PDF FORMAT TAKE PRECEDENCE OVER ANY ELECTRONICALLY ISSUED INFORMATION, LAYOUTS OR DESIGN MODELS.
- THE CONTRACTOR'S DIRECT AMENDMENT OR MANIPULATION OF THE DATA OR INFORMATION THAT MIGHT BE CONTAINED WITHIN AN ENGINEER-SUPPLIED DIGITAL TERRAIN MODEL AND ITS SUBSEQUENT USE TO UNDERTAKE THE WORKS WILL BE SOLELY AT THE DISCRETION OF AND THE RISK OF THE CONTRACTOR.
- THE CONTRACTOR IS REQUIRED TO HIGHLIGHT ANY DISCREPANCIES BETWEEN THE DIGITAL TERRAIN MODEL AND INFORMATION PROVIDED IN THE CONTRACT AND/OR DRAWINGS AND IS REQUIRED TO SEEK CLARIFICATION FROM THE SUPERINTENDENT.
- THE ENGINEER WILL NOT BE LIABLE OR RESPONSIBLE FOR THE POSSIBLE ON-GOING NEED TO UPDATE THE DIGITAL TERRAIN MODEL, SHOULD THERE BE ANY AMENDMENTS OR CHANGES TO THE DRAWINGS OR CONTRACT INITIATED BY THE CONTRACTOR.

GENERAL NOTES:

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT STANDARDS AUSTRALIA CODES AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
- ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ENGINEER'S DRAWINGS ISSUED IN ANY ELECTRONIC FORMAT MUST NOT BE USED FOR DIMENSIONAL SETOUT. REFER TO THE ARCHITECT'S DRAWINGS FOR ALL DIMENSIONAL SETOUT INFORMATION.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.
- ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH ACCEPTABLE SAFETY STANDARDS & APPROPRIATE SAFETY SIGNS SHALL BE INSTALLED AT ALL TIMES DURING THE PROGRESS OF THE JOB.
- ALL SERVICES ARE BASED ON 'DIAL BEFORE YOU DIG' INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL SERVICES ARE IDENTIFIED PRIOR TO THE COMMENCEMENT OF ANY WORKS.

SITE PREPARATION NOTES:

- ALL EARTHWORKS SHALL BE COMPLETED GENERALLY IN ACCORDANCE WITH THE GUIDELINES SPECIFIED BY THE GEOTECHNICAL REPORT.
- EXISTING LEVELS ARE BASED ON INFORMATION PROVIDED BY LANDPARTNERS TITLED AS 2005 Clyde BE 200620 TIN DATED 08/07/20.
- STRIP ANY TOP SOIL OR DELETERIOUS MATERIAL AND DISPOSE OF FROM SITE OR STORE AS DIRECTED.
- COMPLETE CUT TO FILL EARTHWORKS TO ACHIEVE THE REQUIRED LEVELS AS INDICATED ON THE DRAWINGS WITHIN A TOLERANCE OF +0mm/-10mm THROUGH BUILDING PADS/PAVEMENTS AND +0mm/-20mm ELSEWHERE. PREPARE STEEP BATTERS TO RECEIVE FILL BY CONSTRUCTING BENCHING TO FACILITATE FILL PLACEMENT AND COMPACTION.
- AREAS TO RECEIVE FILL (THAT ARE NOT ON BENCHED BATTERS) AND AREAS IN CUT SHALL BE PROOF ROLLED TO IDENTIFY ANY SOFT HEAVING MATERIAL. SOFT MATERIAL SHALL BE BOXED OUT AND REMOVED PRIOR TO FILL PLACEMENT. PROOF ROLLING TO BE INSPECTED BY A GEOTECHNICAL ENGINEER OR THE EARTHWORKS DESIGNER.
- SITE WON FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HALF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HALF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET.
- IMPORTED FILL SHALL BE COMPACTED IN MAXIMUM 300mm LAYERS AND TO DRY OR HALF DENSITY RATIOS (STANDARD COMPACTION) OF BETWEEN 98% AND 103%. THE PLACEMENT MOISTURE VARIATION OR HALF MOISTURE VARIATION SHALL BE CONTROLLED TO BE BETWEEN 2% DRY AND 2% WET.
- ALL ENGINEERED FILL PARTICLES SHALL BE ABLE TO BE INCORPORATED WITHIN A SINGLE LAYER. FURTHER, LESS THAN 30% OF PARTICLES SHALL BE RETAINED ON THE 37.5 MM SIEVE. ENGINEERED FILL SHALL BE ABLE TO BE TESTED IN ACCORDANCE WITH THE STANDARD COMPACTION METHOD (AS1289.5.4.1) OR HALF TEST METHOD (AS1289.5.7.1). THESE METHODS REQUIRE LESS THAN 20% RETAINED ON THE 37.5 MM SIEVE. WHERE BETWEEN 20% AND 30% OF PARTICLES ARE RETAINED ON THE 37.5 MM SIEVE THE ABOVE TEST METHODS SHALL STILL BE ADOPTED AND TEST REPORTS ANNOTATED APPROPRIATELY. THESE REQUIREMENTS SHOULD BE MET BY THE MATERIAL AFTER PLACEMENT AND COMPACTION.
- ALL THE EARTHWORKS UNDERTAKEN AND THE SUBGRADE CONDITION IN THE CUT AREAS (IN THE STATED PERIOD) ARE DOCUMENTED IN THE REPORTS AND HAVE BEEN UNDERTAKEN IN ACCORDANCE WITH THE SPECIFICATION.
- PRIOR TO ANY EARTHWORKS, EROSION CONTROL AS OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE COMPLETED. EXISTING ROCK, IF ANY, SHALL BE REMOVED BY HEAVY ROCK BREAKING OR RIPPING.
- MATCH EXISTING LEVELS AT BATTER INTERFACE.
- CONTRACTOR TO MATCH EXISTING LEVELS AT THE INTERFACE OF EARTHWORKS AND EXISTING SURFACE AT BATTER LOCATIONS OR WHERE NO RETAINING WALLS ARE PRESENT, ANY DISCREPANCY BETWEEN DESIGN AND EXISTING LEVELS TO BE REFERRED TO THE ENGINEER FOR DIRECTION OR ADJUSTMENTS TO DESIGN LEVELS.
- DURING EARTHWORKS THE CONTRACTOR IS TO ENSURE ALL AREAS ARE FREE DRAINING & WILL NOT RETAIN WATER DURING RAINFALL. PROVIDE TEMPORARY MEASURES AS REQUIRED TO ENSURE FREE FLOWING RUNOFF THROUGH MANAGED DRAINAGE PATHS, DIVERSION DRAINS OR OTHER SUITABLE DISPOSAL METHOD AS AGREED DURING THE WORKS. REFER ANY CONCERNS TO THE ENGINEER. REFER TO EROSION AND SEDIMENT CONTROL DRAWINGS AND NOTES.

STORMWATER DRAINAGE NOTES:

- ALL STORMWATER WORKS TO BE COMPLETED IN ACCORDANCE WITH AUSTRALIAN STANDARD AS3500.3:2003 PLUMBING AND DRAINAGE, PART 3: STORMWATER DRAINAGE.
- THE MINOR (PIPED) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 20 YEAR ARI STORM EVENT AND THE MAJOR (OVERLAND) SYSTEM HAS BEEN DESIGNED FOR THE 1 IN 100 YEAR ARI STORM EVENT.
- ALL FINISHED PAVEMENT LEVELS SHALL BE AS INDICATED ON FINISHED LEVELS PLANS CO13730.00-CS1 TO CS3.
- PIT SIZES SHALL BE AS INDICATED IN THE SCHEDULE WHILE PIPE SIZES AND DETAILS ARE PROVIDED ON PLAN.
- EXISTING STORMWATER PIT LOCATIONS AND INVERT LEVELS TO BE CONFIRMED BY SURVEY PRIOR TO COMMENCING WORKS ON SITE.
- ALL STORMWATER PIPES Ø375 OR GREATER SHALL BE CLASS 2 (WITH HS2 SUPPORT) REINFORCED CONCRETE WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
- ALL PIPES UP TO AND INCLUDING Ø300 TO BE UPVC GRADE S88 UNO.
- PIPE CLASS NOMINATED ARE FOR IN-SERVICE LOADING CONDITIONS ONLY. CONTRACTOR IS TO MAKE ANY NECESSARY ADJUSTMENTS REQUIRED FOR CONSTRUCTION CONDITIONS.
- ALL CONCRETE PITS GREATER THAN 1000mm DEEP SHALL BE REINFORCED USING N12-200 EACH WAY CENTERED IN WALL AND BASE. LAP MINIMUM 300mm WHERE REQUIRED. ALL CONCRETE FOR PITS SHALL BE F'c 25 MPA. PRECAST PITS MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
- IN ADDITION TO ITEM 6 ABOVE, ALL CONCRETE PITS GREATER THAN 3000mm DEEP SHALL HAVE WALLS AND BASE THICKNESS INCREASED TO 200mm.
- PIPES SHALL BE LAID AS PER PIPE LAYING DETAILS. PARTICULAR CARE SHALL BE TAKEN TO ENSURE THAT THE PIPE IS FULLY AND EVENLY SUPPORTED, RAMP AND PACK FILLING AROUND AND UNDER BACK OF PIPES AND PIPE FAUCETS, WITH NARROW EDGED RAMMERS OR OTHER SUITABLE TAMPING DETAILS.
- CONCRETE PIPES UNDER OR WITHIN THE ZONE OF INFLUENCE OF PAVED AREAS SHALL BE LAID USING HS2 TYPE SUPPORT, AS A MINIMUM, IN ACCORDANCE WITH AS 3725. AGGREGATE BACKFILL SHALL NOT BE USED FOR PIPE BEDDING AND OR HAUNCH/SIDE SUPPORT.
- WHERE PIPE LINES ENTER PITS, PROVIDE 2m LENGTH OF STOCKING WRAPPED SLOTTED Ø100 UPVC TO EACH SIDE OF PIPE.
- ALL SUBSOIL DRAINAGE LINES SHALL BE Ø100 SLOTTED UPVC WITH APPROVED FILTER WRAP LAID IN 300mm WIDE GRANULAR FILTER UNLESS NOTED OTHERWISE. LAY SUBSOIL LINES TO MATCH FALLS OF LAND AND/OR 1 IN 200 MINIMUM. PROVIDE CAPPED CLEANING EYE (RODDING POINT) AT UPSTREAM END OF LINE AND AT 30m MAX. CTS. PROVIDE SUBSOIL LINES TO ALL PAVEMENT/LANDSCAPED INTERFACES, TO REAR OF RETAINING WALLS (AS NOMINATED BY STRUCTURAL ENGINEER) AND AS SHOWN ON PLAN.
- ALL PIPE GRADES 1 IN 200 MINIMUM UNO.
- PROVIDE STEP IRONS IN PITS DEEPER THAN 1000mm.
- MIN 600 COVER TO PIPE OBVERT BENEATH ROADS & MIN 400 COVER BENEATH LANDSCAPED AND PEDESTRIAN AREAS.
- PIT COVERS IN TRAFFICABLE PAVEMENT SHALL BE CLASS D 'HEAVY DUTY'. THOSE LOCATED IN NON-TRAFFICABLE AREAS SHALL BE CLASS D 'MEDIUM DUTY' UNO.
- PROVIDE CLEANING EYES (RODDING POINTS) TO PIPES AT ALL CORNERS AND T-JUNCTIONS WHERE NO PITS ARE PRESENT.
- DOWN PIPES (DP) TO BE AS PER HYDRAULIC ENGINEERS DETAILS WITH CONNECTOR TO MATCH DP SIZE UNO. ON PLAN. PROVIDE CLEANING EYE AT GROUND LEVEL.
- PIPE LENGTHS NOMINATED ON PLAN OR LONGSECTIONS ARE MEASURED FROM CENTER OF PITS TO THE NEAREST 0.5m AND DO NOT REPRESENT ACTUAL LENGTH. THE CONTRACTOR IS TO ALLOW FOR THIS.

EROSION CONTROL NOTES:

- ALL CONTROL WORK INCLUDING DIVERSION BANKS AND CATCH DRAINS, V-DRAINS AND SILT FENCES SHALL BE COMPLETED DIRECTLY FOLLOWING THE COMPLETION OF THE EARTHWORKS.
- SILT FENCES AND SILT FENCE RETURNS SHALL BE ERECTED CONVEX TO THE CONTOUR TO POND WATER.
- HAY BALE BARRIERS AND GEOTEXTILE FENCES ARE TO BE CONSTRUCTED TO TOE OF BATTER, PRIOR TO COMMENCEMENT OF EARTHWORKS, IMMEDIATELY AFTER CLEARING OF VEGETATION AND BEFORE REMOVAL OF TOP SOIL.
- ALL TEMPORARY EARTH BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED AND MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- CLEAR WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO THE DRAINAGE SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND PROVIDING ONGOING ADJUSTMENT TO EROSION CONTROL MEASURES AS REQUIRED DURING CONSTRUCTION.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE, APPROVED LOCATION.
- ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE MAINTAINED UNTIL THE END OF THE DEFECTS LIABILITY PERIOD.
- ALL EARTHWORKS AREAS SHALL BE ROLLED ON A REGULAR BASIS TO SEAL THE EARTHWORKS.
- ALL FILL AREAS ARE TO BE LEFT WITH A BUND AT THE TOP OF THE SLOPE AT THE END OF EACH DAY'S EARTHWORKS. THE HEIGHT OF THE BUND SHALL BE A MINIMUM OF 200mm.
- ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND HYDROMULCHED WITHIN 10 DAYS OF COMPLETION OF FORMATION.
- AFTER REVEGETATION OF THE SITE IS COMPLETE AND THE SITE IS STABLE IN THE OPINION OF A SUITABLY QUALIFIED PERSON ALL TEMPORARY WORK SUCH AS SILT FENCE, DIVERSION DRAINS ETC SHALL BE REMOVED.
- ALL TOPSOIL STOCKPILES ARE TO BE SUITABLY COVERED TO THE SATISFACTION OF THE SITE MANAGER TO PREVENT WIND AND WATER EROSION.
- ANY AREA THAT IS NOT APPROVED BY THE CONTRACT ADMINISTRATOR FOR CLEARING OR DISTURBANCE BY THE CONTRACTOR'S ACTIVITIES SHALL BE CLEARLY MARKED AND SIGN POSTED, FENCED OFF OR OTHERWISE APPROPRIATELY PROTECTED AGAINST ANY SUCH DISTURBANCE.
- ALL STOCKPILE SITES SHALL BE SITUATED IN AREAS APPROVED FOR SUCH USE BY THE SITE MANAGER. A 6m BUFFER ZONE SHALL EXIST BETWEEN STOCKPILE SITES AND ANY STREAM OR FLOW PATH. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM EROSION AND CONTAMINATION OF THE SURROUNDING AREA BY USE OF THE MEASURES APPROVED IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
- ACCESS AND EXIT AREAS SHALL INCLUDE SHAKE-DOWN OR OTHER METHODS APPROVED BY THE SITE MANAGER FOR THE REMOVAL OF SOIL MATERIALS FROM MOTOR VEHICLES.
- THE CONTRACTOR IS TO ENSURE RUNOFF FROM ALL AREAS WHERE THE NATURAL SURFACE IS DISTURBED BY CONSTRUCTION, INCLUDING ACCESS ROADS, DEPOT AND STOCKPILE SITES, SHALL BE FREE OF POLLUTANTS BEFORE IT IS EITHER DISPERSED TO STABLE AREAS OR DIRECTED TO NATURAL WATERCOURSES.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SLOPES, CROWNS AND DRAINS ON ALL EXCAVATIONS AND EMBANKMENTS TO ENSURE SATISFACTORY DRAINAGE AT ALL TIMES. WATER SHALL NOT BE ALLOWED TO POND ON THE WORKS UNLESS SUCH PONDING IS PART OF AN APPROVED ESCP / SWMP.



LOCALITY PLAN
NOT TO SCALE



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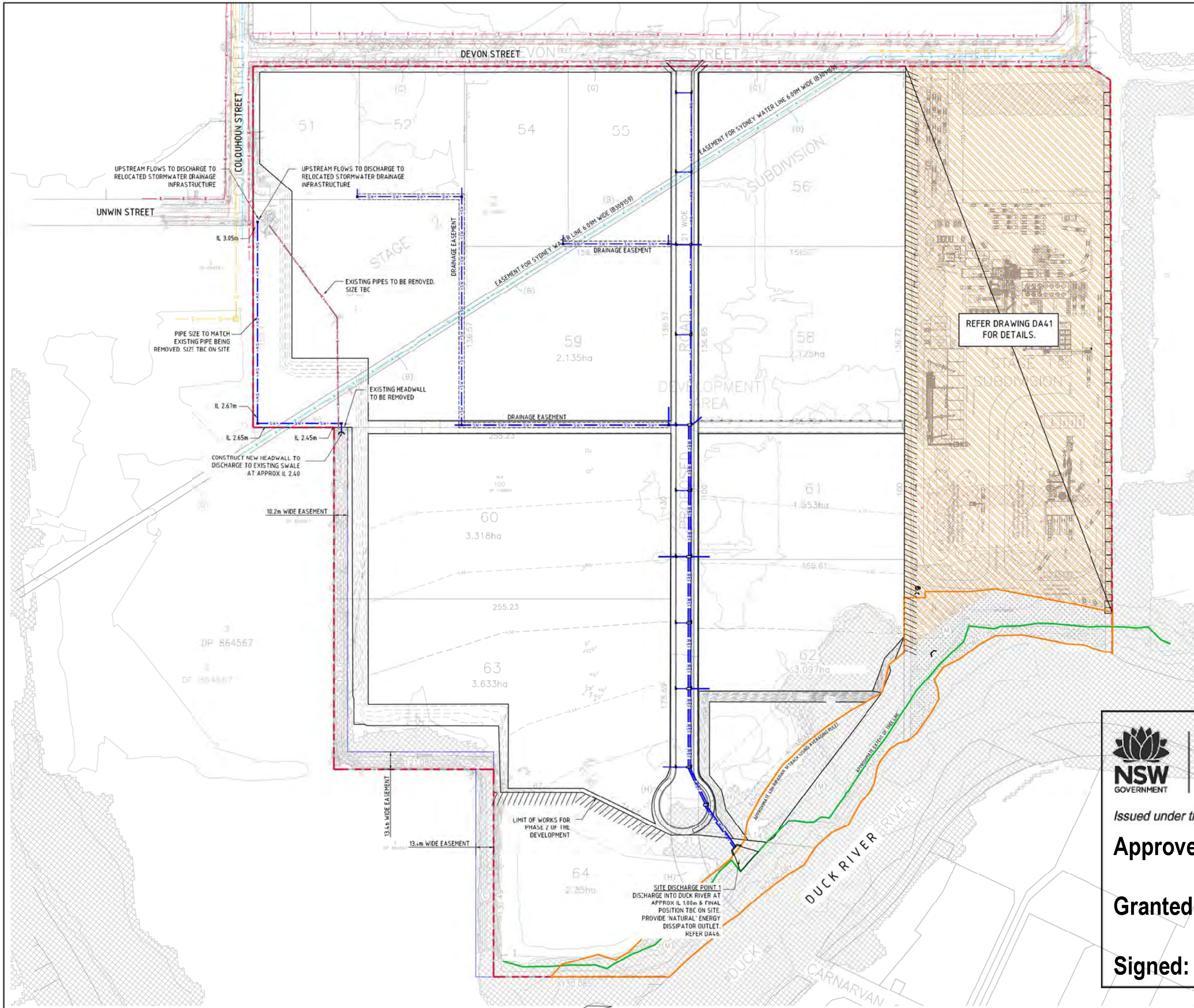
Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF Sheet No: 5 of 44

FOR INFORMATION

ISSUED FOR INFORMATION	12.08.20	C	ARCHITECT	CLIENT	PROJECT	Costin Roe Consulting Pty Ltd.	PRECISION COMMUNICATION ACCOUNTABILITY	DRAWING TITLE
REVISED AS CLOUED	21.07.20	B			SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1)	Costin Roe Consulting Pty Ltd. Level 4, 4 Macquarie Street Wahbi, Bay, Sydney NSW 2000 Tel: (61) 902-1088 Fax: (61) 902-0752 Email: info@costinroe.com.au		DRAWING LIST & GENERAL NOTES
ISSUED FOR INFORMATION	08.07.20	A			9 DEVON STREET, CLYDE NSW			CO13919.01-DA10
AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE			



LEGEND:
LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS TITLED A50205 Clyde_BE_210620 TIN DATED 08/07/20.

- - SINGLE GRATED GULLY PIT (SGGP)
- (blue) — - PROPOSED DRAINAGE LINE
- (grey) — - EXISTING DRAINAGE LINE
- (red) — - EXISTING DRAINAGE LINE TO BE REMOVED
- (black) — - SUPER LOT BOUNDARY
- (pink) — - EXISTING ELECTRICAL LINE
- (cyan) — - EXISTING WATER LINE
- (yellow) — - EXISTING SEWER LINE
- (orange) — - SEWER RISING MAIN
- (purple) — - 105kPa GAS MAIN
- ▨ (grey) - Q100 FLOOD EXTENT
- (green) — - APPROXIMATE EXTENT OF TREE LINE
- (orange) — - RIPARIAN SETBACK

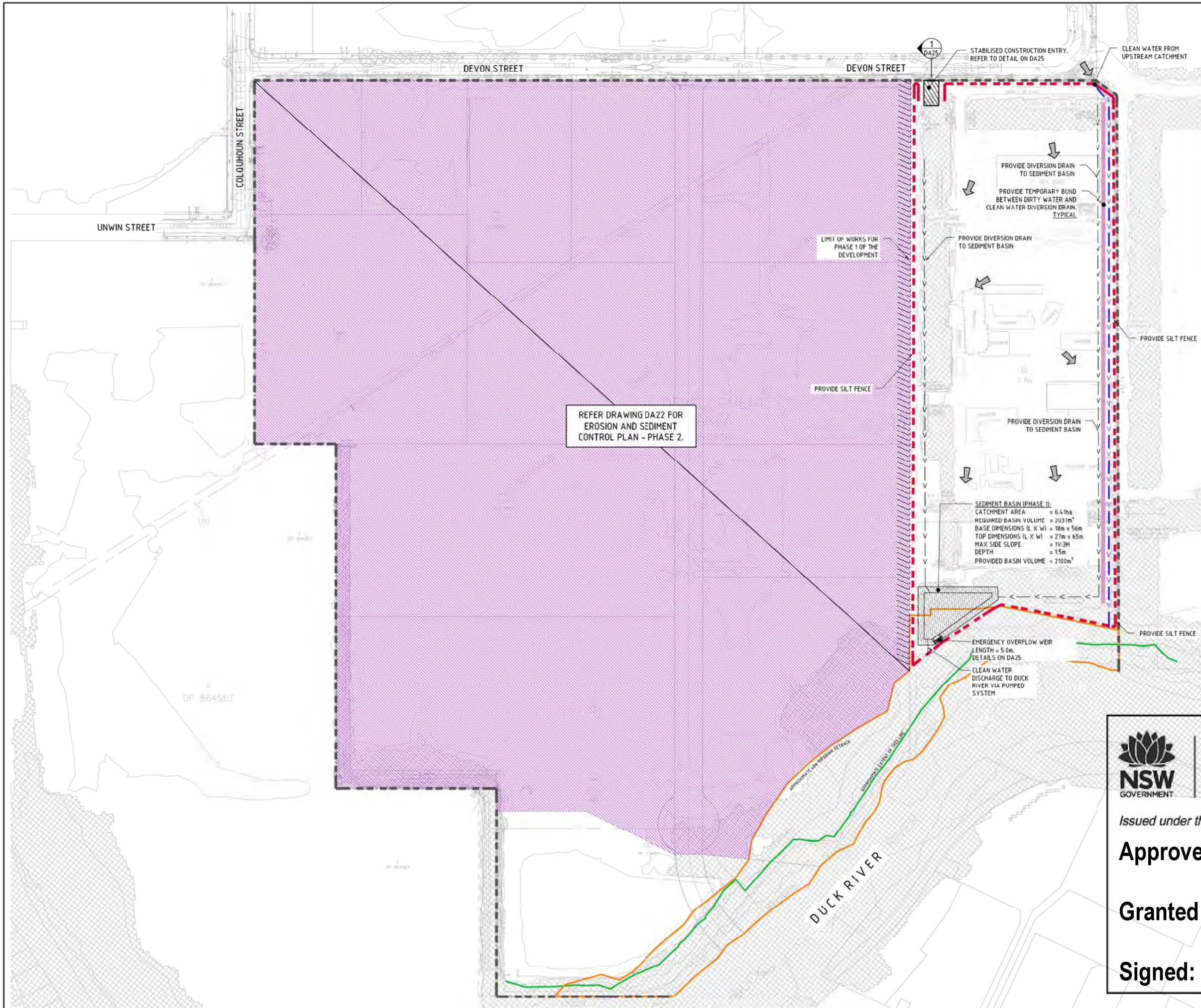
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Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 6 of 44**



SEDIMENTATION BASIN NOTE:

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING C013919.01-DA25.

SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER - THE BLUE BOOK'. CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY (33.1mm).

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO COUNCIL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:

1. ASSUME TYPE D SOIL (CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS, TYPICAL (N.S.D.?)

- - - SILT FENCE ONLY
- - - SITE BOUNDARY
- > > DIVERSION DRAIN
- > > CLEAN WATER DIVERSION DRAIN
- ➔ OVERLAND FLOW DIRECTION
- - - APPROXIMATE EXTENT OF TREE LINE
- - - RIPARIAN SETBACK

EROSION & SEDIMENT CONTROL NOTE:

REFER TO DA0 FOR EROSION & SEDIMENT CONTROL NOTES

SEDIMENT BASIN (PHASE 1):

CATCHMENT AREA = 6.41ha
 REQUIRED BASIN VOLUME = 2037m³
 BASE DIMENSIONS (L X W) = 18m x 56m
 TOP DIMENSIONS (L X W) = 27m x 65m
 MAX SIDE SLOPE = 1V:3H
 DEPTH = 1.5m
 PROVIDED BASIN VOLUME = 2100m³

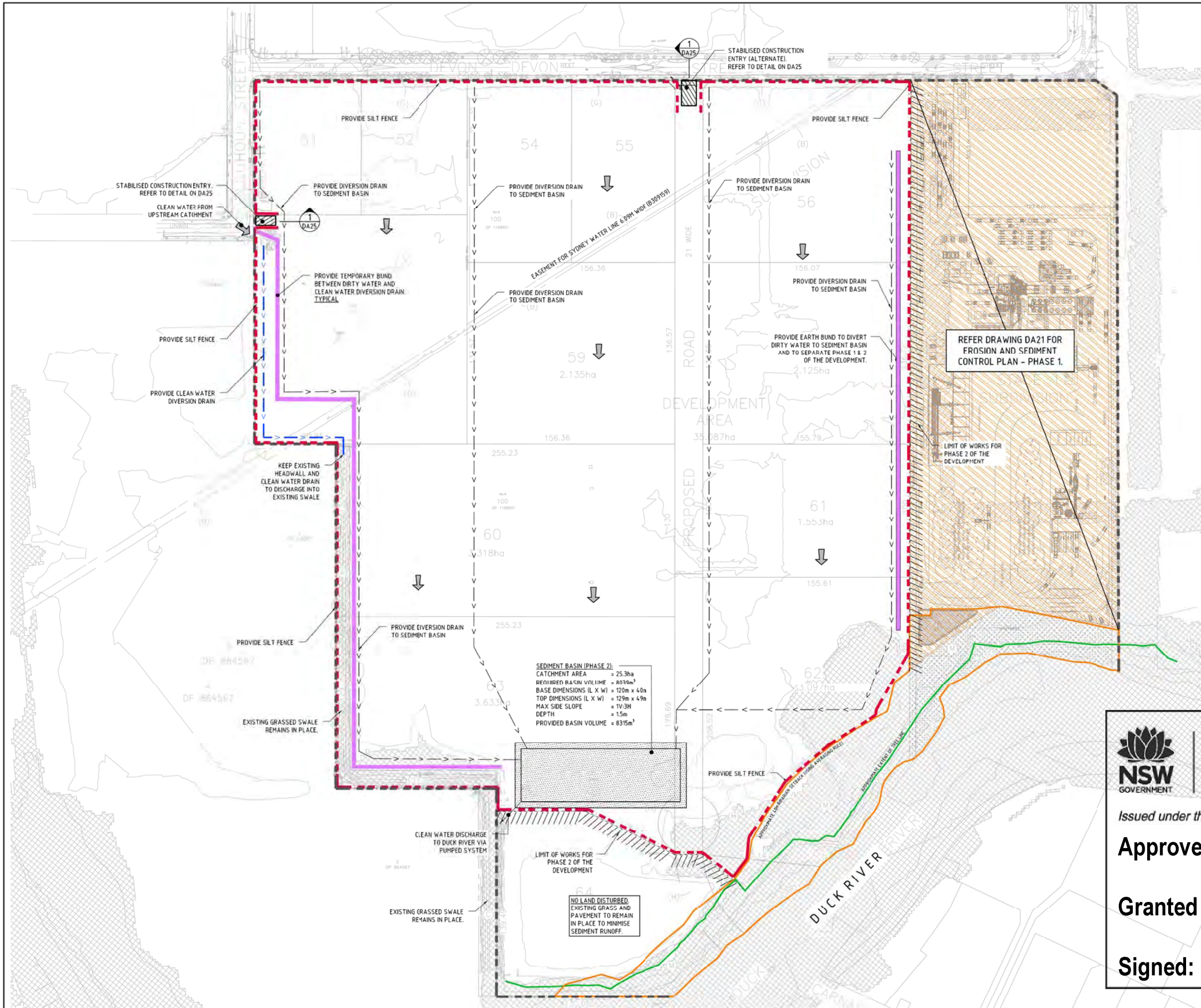
NSW GOVERNMENT | **Planning, Industry & Environment**

Issued under the Environmental Planning and Assessment Act 1979

Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 7 of 44**



SEDIMENTATION BASIN NOTE:

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EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:

1. ASSUME TYPE D SOIL (CLAY)
2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS. TYPICAL (N.S.D.?)

- - - SILT FENCE ONLY
- - - SITE BOUNDARY
- > > - DIVERSION DRAIN
- > > - CLEAN WATER DIVERSION DRAIN
- ➔ - OVERLAND FLOW DIRECTION
- - - APPROXIMATE EXTENT OF TREE LINE
- - - RIPARIAN SETBACK

EROSION & SEDIMENT CONTROL NOTE:

REFER TO DA10 FOR EROSION & SEDIMENT CONTROL NOTES

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Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 8 of 44**

SEDIMENTATION BASIN NOTE:

FOR SEDIMENT & EROSION CONTROL DETAILS REFER TO DRAWING C013919.01-DA25.

SEDIMENTATION BASIN SIZING BASED ON RECOMMENDATIONS OF 'SOILS AND CONSTRUCTION, MANAGING URBAN STORMWATER - THE BLUE BOOK'. CAPACITY BASED UPON 5 DAY RAINFALL DEPTH AT 85th PERCENTILE INTENSITY (33.1mm).

SEDIMENTATION BASINS TO COLLECT RUN-OFF IN EXTREME RAINFALL EVENTS. COLLECTED RUN-OFF TO BE ASSESSED BY A QUALIFIED LABORATORY FOR DOUSING RATES OF ALUM OR GYPSUM TO ENSURE COAGULATION OF SEDIMENTS PRIOR TO WATER BEING DISCHARGED TO LOCAL STORMWATER SYSTEM.

EACH BASIN IS TO HAVE A MARKER PLACED AS PER THE DETAIL TO INDICATE WHEN SEDIMENT IS TO BE REMOVED. REMOVED SEDIMENT IS TO BE CLASSED AND DEWATERED PRIOR TO REMOVAL FROM SITE.

ALLOWANCE TO BE MADE DURING BENCHING OF SITE TO ENSURE RUN-OFF IS DIRECTED TO SEDIMENTATION BASINS.

NOTES:
 1. ASSUME TYPE U SOIL (CLAY)
 2. ASSUME GROUP D SOIL (HIGH PLASTICITY AND SHRINK/SWELL PROPERTIES)

LEGEND:

PROVIDE 1m RETURNS TO SILT FENCE AT 30m MAX. INTERVALS. TYPICAL (N.S.O.P.)

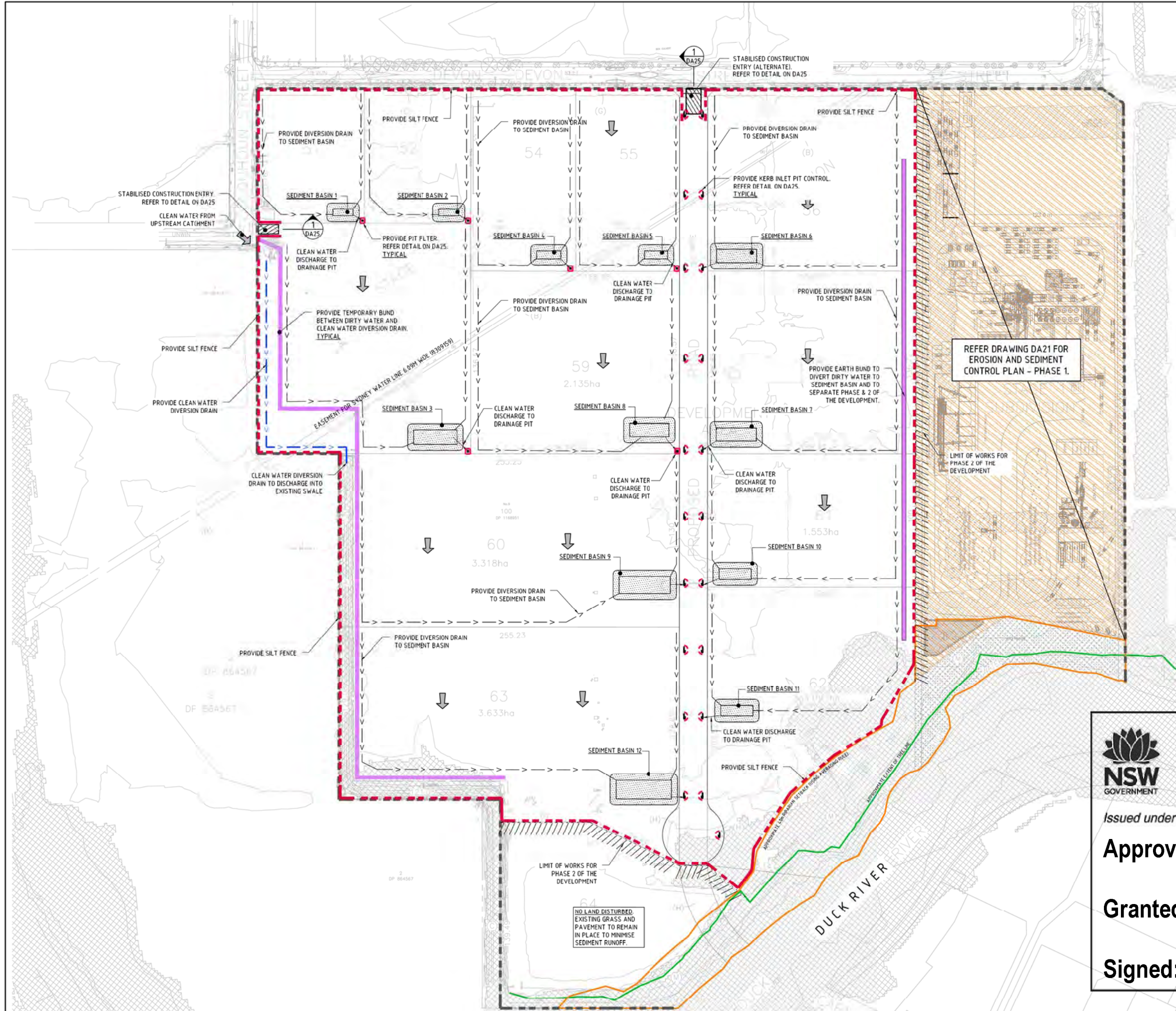
- - - - - SILT FENCE ONLY
- - - - - SITE BOUNDARY
- - - - - DIVERSION DRAIN
- - - - - CLEAN WATER DIVERSION DRAIN
- OVERLAND FLOW DIRECTION
- APPROXIMATE EXTENT OF TREE LINE
- RIPARIAN SETBACK

EROSION & SEDIMENT CONTROL NOTE:

REFER TO DA10 FOR EROSION & SEDIMENT CONTROL NOTES

SEDIMENT BASIN SCHEDULE

BASIN No.	CATCHMENT AREA (Ha)	REQUIRED BASIN VOLUME	BASE DIMENSIONS (LxW)	TOP DIMENSIONS (LxW)	MAX SLIDE SLOPE	DEPTH	PROVIDED BASIN VOLUME
SEDIMENT BASIN 1	0.77	24m³	15mX5m	24mX14m	1V:3H	1.5m	285m³
SEDIMENT BASIN 2	0.77	24m³	15mX5m	24mX14m	1V:3H	1.5m	285m³
SEDIMENT BASIN 3	2.76	876m³	33mX11m	42mX20m	1V:3H	1.5m	878m³
SEDIMENT BASIN 4	1.03	327m³	18mX6m	27mX15m	1V:3H	1.5m	361m³
SEDIMENT BASIN 5	1.03	327m³	18mX6m	27mX15m	1V:3H	1.5m	361m³
SEDIMENT BASIN 6	2.06	654m³	30mX10m	39mX19m	1V:3H	1.5m	756m³
SEDIMENT BASIN 7	2.13	675m³	30mX10m	39mX19m	1V:3H	1.5m	756m³
SEDIMENT BASIN 8	2.14	678m³	30mX10m	39mX19m	1V:3H	1.5m	756m³
SEDIMENT BASIN 9	3.32	1054m³	39mX13m	48mX22m	1V:3H	1.5m	1147m³
SEDIMENT BASIN 10	1.55	493m³	24mX8m	33mX17m	1V:3H	1.5m	541m³
SEDIMENT BASIN 11	1.50	477m³	24mX8m	33mX17m	1V:3H	1.5m	541m³
SEDIMENT BASIN 12	3.63	1154m³	42mX14m	51mX23m	1V:3H	1.5m	1296m³



REFER DRAWING DA21 FOR EROSION AND SEDIMENT CONTROL PLAN - PHASE 1.

LIMIT OF WORKS FOR PHASE 2 OF THE DEVELOPMENT

EROSION & SEDIMENT CONTROL PLAN - FINAL STAGE
SCALE 1:1000

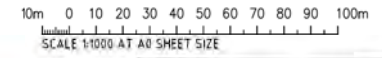
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Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 9 of 44**



REVISION	DATE	ISSUE	AMENDMENTS
REVISED PER NEW SITE PLAN	30.11.20	F	
REVISED PER CLIENT COMMENTS	20.11.20	E	
REVISED PER NEW SITE PLAN	16.11.20	D	
ISSUED FOR INFORMATION	12.08.20	C	
REVISED AS CLOUSED	21.07.20	B	
ISSUED FOR INFORMATION	08.07.20	A	

DATE	ISSUE	AMENDMENTS	DATE	ISSUE

PROJECT	CLIENT
SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW	

DESIGNED	CHECKED	DATE	SCALE	CAD REF.
XC	HL	MAY 20	A3, SHOWN	E013919.01-DA23

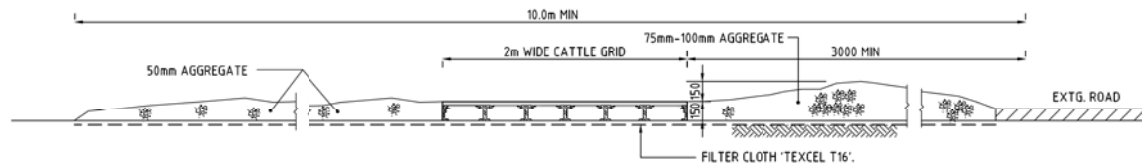
FOR INFORMATION

Costin Roe Consulting Pty Ltd
 Costin Roe Consulting Engineers
 Level 2, 6 Macquarie Street
 Walsh Bay, Sydney NSW 2000
 Tel: (61) 02-922-1088 Fax: (61) 02-922-0732
 email: costin@costinroe.com.au

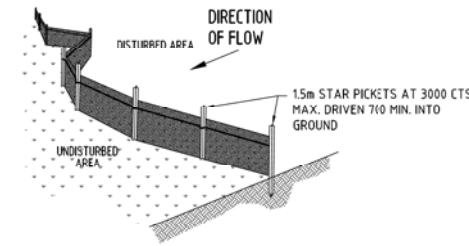
Costin Roe Consulting

PRECISION | COMMUNICATION | ACCOUNTABILITY

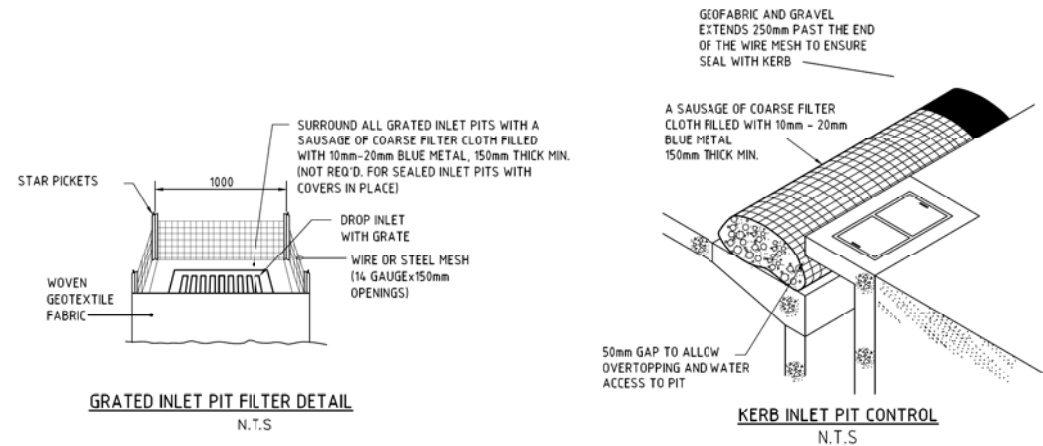
DRAWING TITLE	PROJECT NO.
EROSION & SEDIMENT CONTROL PLAN - FINAL STAGE	C013919.01-DA23



SECTION 1:20 (1) DA25 : STABILISED CONSTRUCTION ENTRANCE 'TRUCK SHAKER'



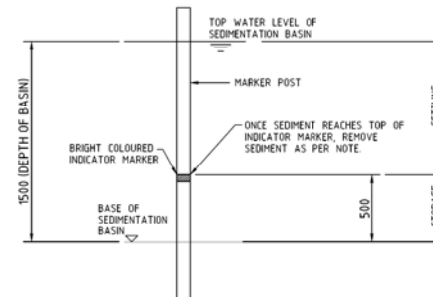
TYPICAL SILT FENCE DETAIL
N.T.S.
PROVIDE 1m RETURNS AT 30m INTERVALS.
TYPICAL



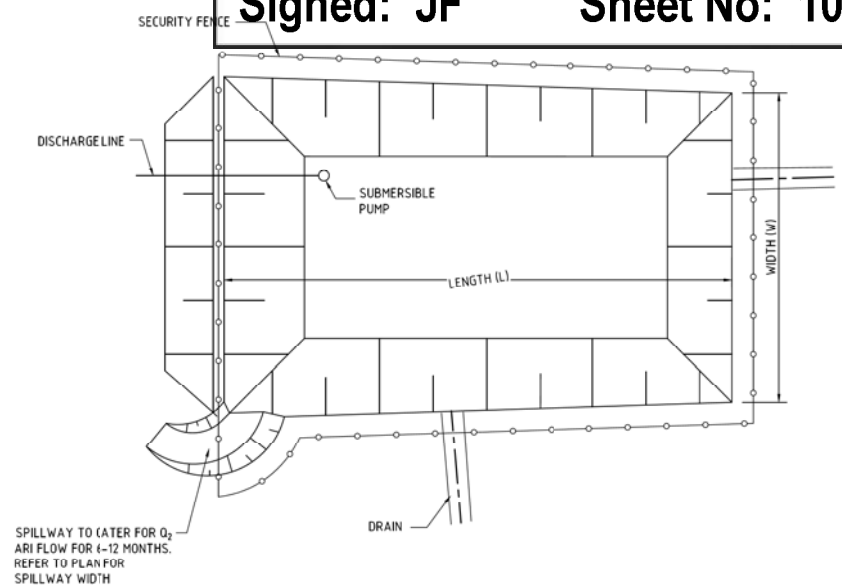
GRATED INLET PIT FILTER DETAIL
N.T.S.

KERB INLET PIT CONTROL
N.T.S.

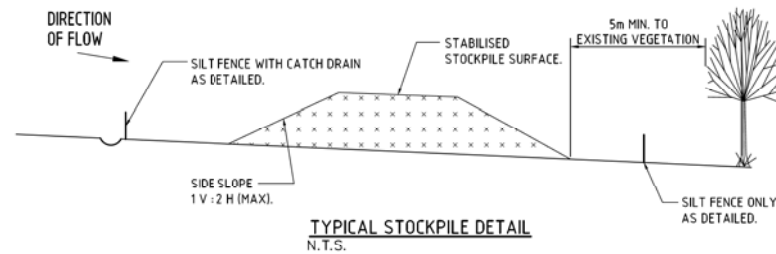
NOTE: ADOPT ABOVE DETAILS AROUND ALL PITS WITHIN AREA ENCOMPASSED BY SILT FENCE & PITS ON THE ROAD ADJACENT TO SITE BOUNDARY.



SEDIMENT STORAGE MARKER
SCALE 1:20

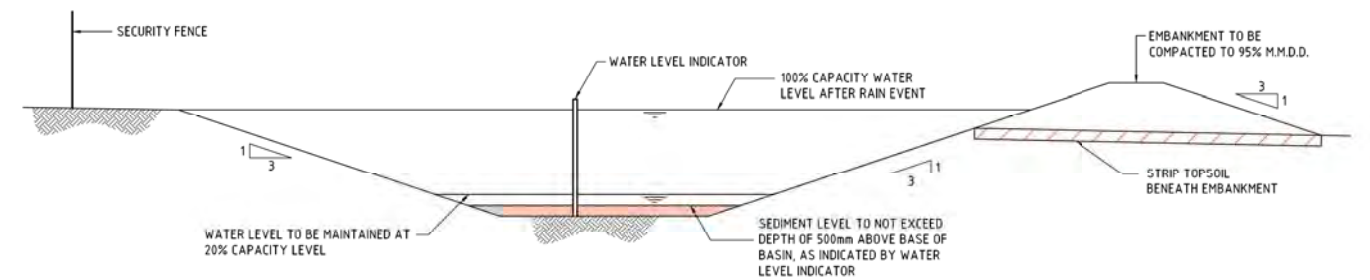


TYPICAL SEDIMENT CONTROL POND PLAN
SCALE 1:250

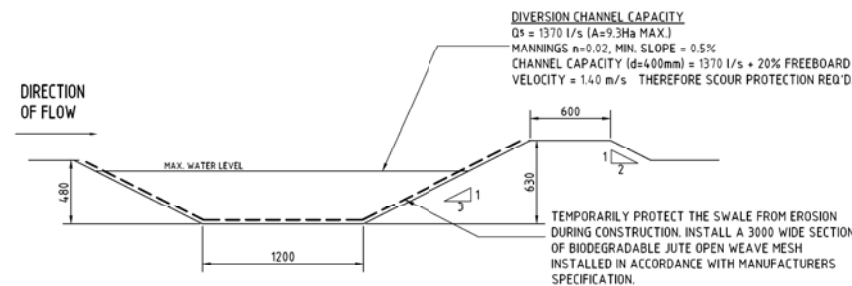


TYPICAL STOCKPILE DETAIL
N.T.S.

STOCKPILE NOTES
1. PLACE ALL STOCKPILES IN LOCATIONS MORE THAN 5m FROM EXISTING VEGETATION, ROADS & HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT ELONGATED MOUNDS. SIDE SLOPE TO BE 1V:2H MAX.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
4. WHERE STOCKPILES ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE USING WOOD CHIP MULCH - 15 TONNE/Ha.
5. CONSTRUCT SILT FENCE WITH CATCH DRAIN ON UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES & SILT FENCE ONLY 1 TO 2m DOWNSLOPE AS SHOWN.



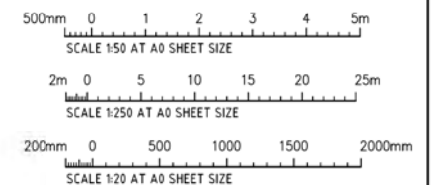
TYPICAL SEDIMENT CONTROL BASIN SECTION
SCALE 1:50



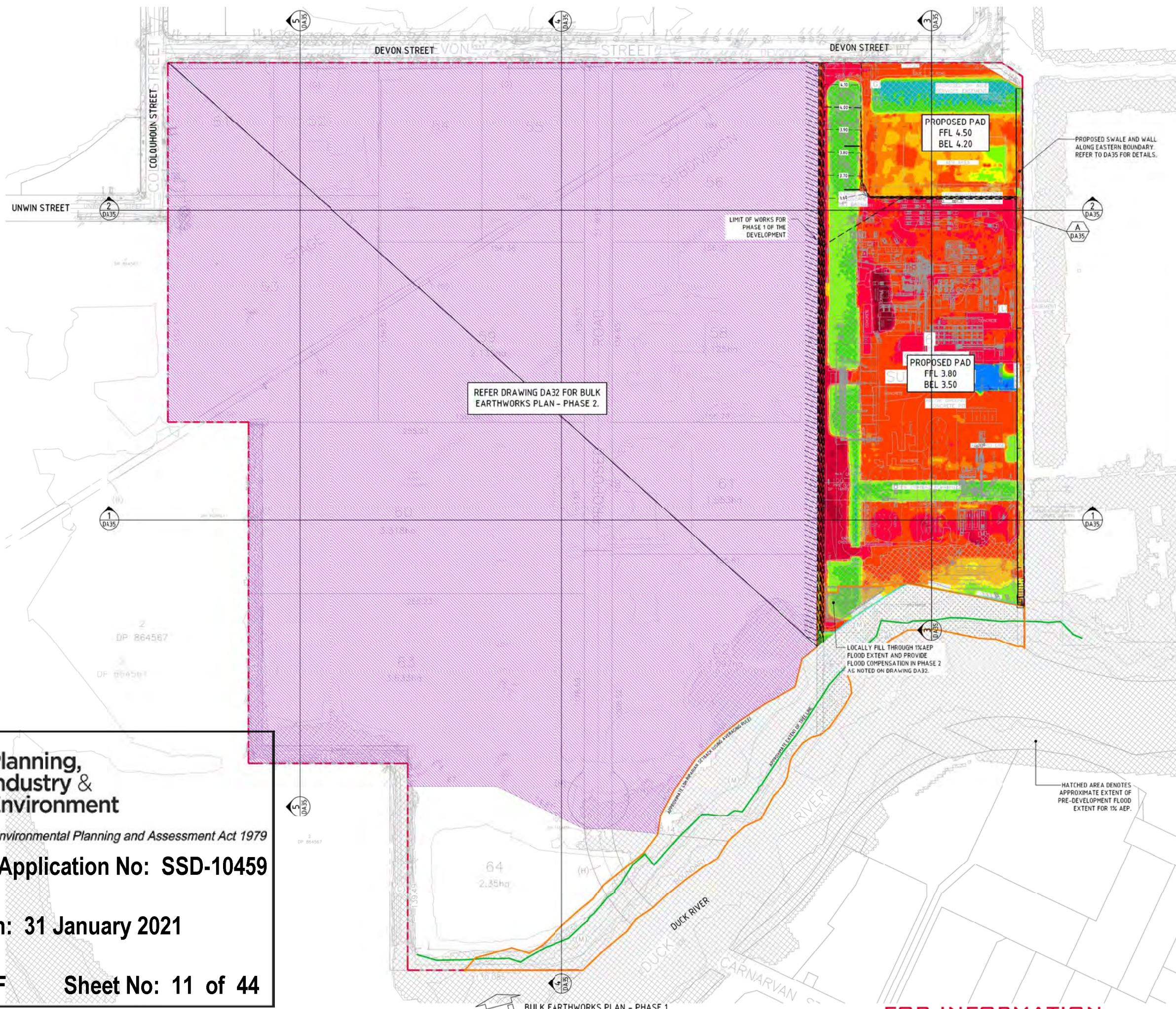
DIVERSION DRAIN SECTION
SCALE 1:20

DIVERSION CHANNEL CAPACITY
Qs = 1370 l/s (A=9.3Ha MAX.)
MANNINGS n=0.02, MIN. SLOPE = 0.5%
CHANNEL CAPACITY (d=400mm) = 1370 l/s + 20% FREEBOARD
VELOCITY = 1.40 m/s THEREFORE SCOUR PROTECTION REQ'D.

TEMPORARILY PROTECT THE SWALE FROM EROSION DURING CONSTRUCTION. INSTALL A 3000 WIDE SECTION OF BIODEGRADABLE JUTE OPEN WEAVE MESH INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION.



FOR INFORMATION



LEGEND

LEVELS DATUM IS AHD.

- DESIGN CONTOUR (MAJOR 0.5m)
- DESIGN CONTOUR (MINOR 0.1m)
- EXISTING CONTOUR (0.25m INTERVALS)
- APPROXIMATE EXTENT OF TREE LINE
- RIPARIAN SETBACK

PAVEMENT DETAIL (LOT 6)
N.T.S.

PRELIMINARY BULK EARTHWORKS VOLUMES

PHASE 1 - DOWNER PAD (LOT 6) BULK EARTHWORKS VOLUME

CUT	= - 17,800 m ³
FILL	= + 17,800 m ³
BALANCE	= NIL

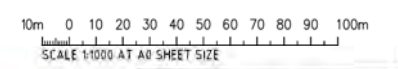
IMPORT ALLOWANCE = + 10,000 m³ (MAX.)
(FOR SITE PRESENTATION & GENERAL FILLING OF REMEDIATED WORKS)

NO ALLOWANCE HAS BEEN MADE FOR DELETERIOUS MATERIAL, UNCONTROLLED FILL MATERIAL TO BE REWORKED, EROSION AND SEDIMENT CONTROL, BULKING OR COMPACTION OF FILLED SOILS OR TOPSOIL BLENDING.

NOTE:
FILLING LEVELS ARE APPROXIMATE ONLY. LEVELS ARE BASED ON AN ANTICIPATED MASTERPLAN LAYOUT TO SUIT GENERAL INDUSTRIAL DEVELOPMENTS. CHANGES MAY BE REQUIRED TO SUIT FUTURE DESIGN OF THE ESTATE AND FUTURE WAREHOUSE FACILITY ARRANGEMENT.

LEVELS NOTE:
LEVELS TO BE ±200mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO MINOR VARIATIONS TO SUIT DETAILED DESIGN.

FILL DEPTH RANGE			
No.	FROM DEPTH	TO DEPTH	COLOUR
1	-3.00m	-2.50m	Dark Red
2	-2.50m	-2.00m	Red
3	-2.00m	-1.50m	Light Red
4	-1.50m	-1.00m	Orange
5	-1.00m	-0.50m	Light Orange
6	-0.50m	0.00m	Yellow
7	0.00m	0.50m	Light Green
8	0.50m	1.00m	Green
9	1.00m	1.50m	Light Blue
10	1.50m	2.00m	Blue
11	2.00m	2.50m	Dark Blue
12	2.50m	3.00m	Very Dark Blue
13	3.00m	3.50m	Black



NSW GOVERNMENT | **Planning, Industry & Environment**

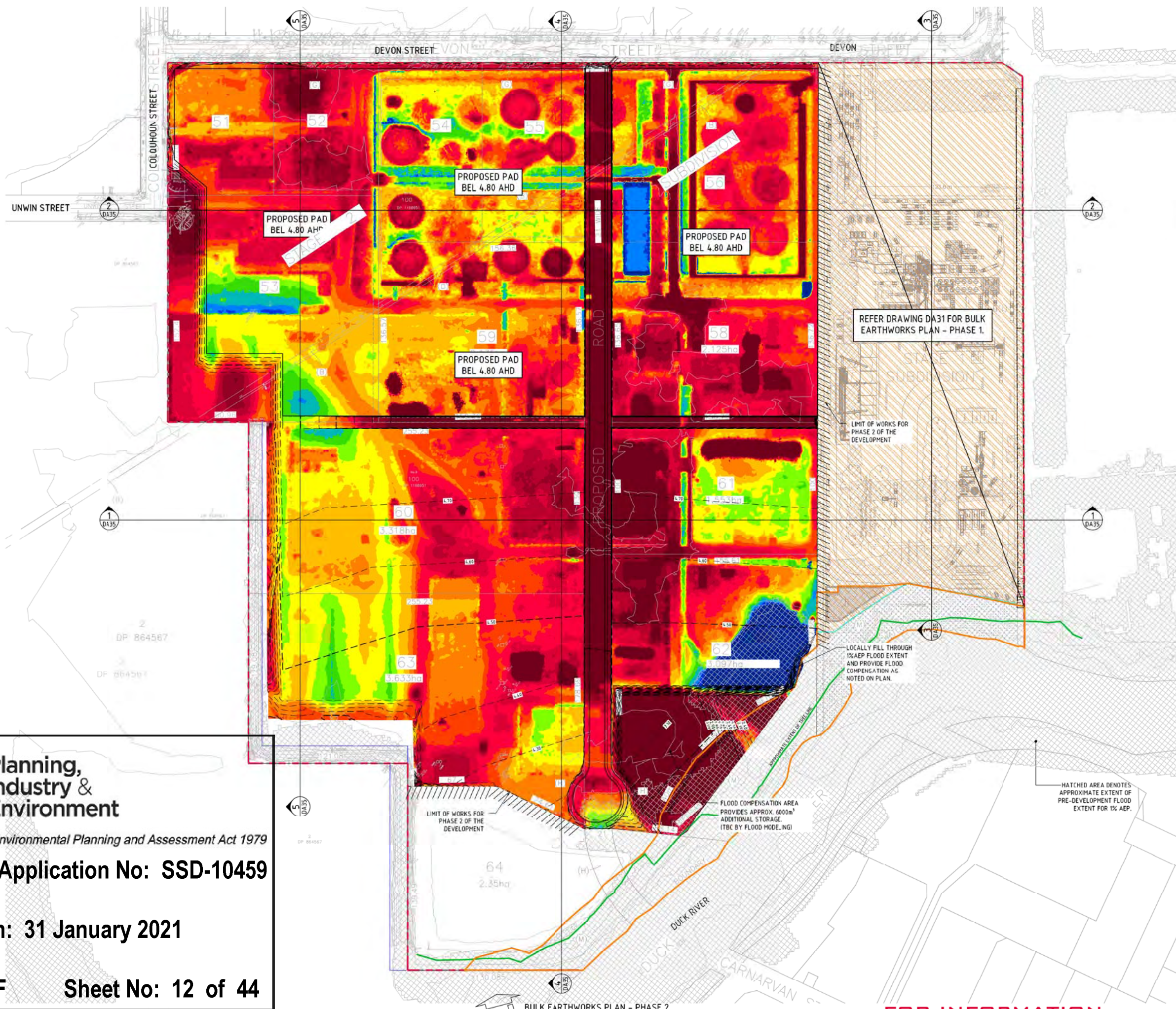
Issued under the Environmental Planning and Assessment Act 1979

Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 11 of 44**

REVISIONS: REVISED PER CLIENT COMMENTS: 20.11.20 F REVISED PER NEW SITE PLAN: 19.11.20 E ISSUED FOR INFORMATION: 12.08.20 D REVISED AS CLODGED: 18.08.20 C REVISED AS CLODGED: 21.07.20 B ISSUED FOR INFORMATION: 08.07.20 A AMENDMENTS:	ARCHITECT: [Blank] CLIENT: [Blank]	PROJECT: SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW	Costin Roe Consulting Pty Ltd. Consulting Engineers Level 2, 4 Macquarie Street Wauchope, Sydney NSW 2000 Tel: (02) 9623-1000 Fax: (02) 9623-0732 email: info@costinroe.com.au	Costin Roe Consulting PRECISION COMMUNICATION ACCOUNTABILITY	DRAWING TITLE: BULK EARTHWORKS PLAN - PHASE 1 DRAWING NO: C013919.01-DA31
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LEGEND

LEVELS DATUM IS AHD.

- DESIGN CONTOUR (MAJOR 0.5m)
- DESIGN CONTOUR (MINOR 0.1m)
- EXISTING CONTOUR (0.25m INTERVALS)
- APPROXIMATE EXTENT OF TREE LINE
- RIPARIAN SETBACK

PAVEMENT DETAIL (LOT 6)
N.T.S.

PRELIMINARY BULK EARTHWORKS VOLUMES

PHASE 2 - LOT 1-7 BULK EARTHWORKS VOLUME

CUT = - 33,000 m³

FILL = + 33,000 m³

BALANCE = NIL

IMPORT ALLOWANCE = + 20,000 m³ (MAX.)
(FOR SITE PRESENTATION & GENERAL FILLING OF REMEDIATED WORKS)

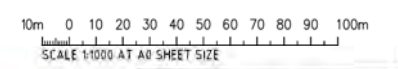
EARTHWORKS VOLUME MAY CHANGE DEPENDING ON QUALITY OF SOURCE MATERIAL. NO ALLOWANCE HAS BEEN MADE FOR DELETERIOUS MATERIAL, UNCONTROLLED FILL MATERIAL TO BE REWORKED, EROSION AND SEDIMENT CONTROL, BULKING OR COMPACTION OF FILLED SOILS OR TOPSOIL BLENDING. ALLOW FOR CIRCA +20,000 m³ IMPORT FOR PAD.

NOTE:
FILLING LEVELS ARE APPROXIMATE ONLY. LEVELS ARE BASED ON AN ANTICIPATED MASTERPLAN LAYOUT TO SUIT GENERAL INDUSTRIAL DEVELOPMENTS. CHANGES MAY BE REQUIRED TO SUIT FUTURE DESIGN OF THE ESTATE AND FUTURE WAREHOUSE FACILITY ARRANGEMENT.

LEVELS NOTE:
LEVELS TO BE ±200mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO MINOR VARIATIONS TO SUIT DETAILED DESIGN.

FILL DEPTH RANGE

No.	FROM DEPTH	TO DEPTH	COLOUR
1	-0.00m	-0.50m	Red
2	-0.50m	-0.40m	Red
3	-0.40m	-0.30m	Red
4	-0.30m	-0.20m	Red
5	-0.20m	-0.10m	Red
6	-0.10m	0.00m	Red
7	0.00m	0.10m	Orange
8	0.10m	0.20m	Yellow
9	0.20m	0.30m	Yellow
10	0.30m	0.40m	Yellow
11	0.40m	0.50m	Yellow
12	0.50m	0.60m	Yellow
13	0.60m	0.70m	Yellow
14	0.70m	0.80m	Yellow
15	0.80m	3.00m	Blue



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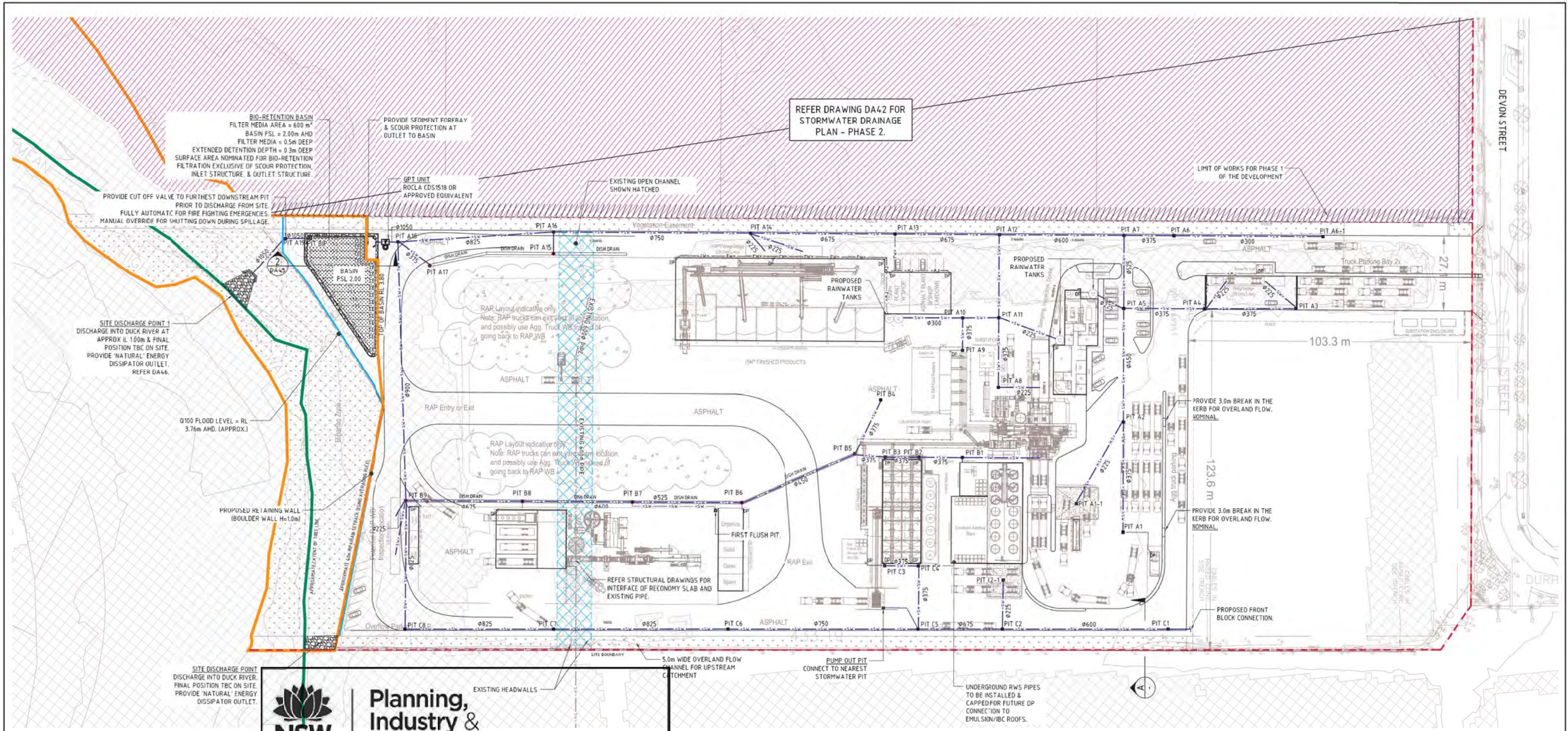
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Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 12 of 44**

REVISIONS: 20.11.20 F 19.11.20 E 18.09.20 D 18.09.20 C 21.07.20 B 08.07.20 A AMENDMENTS:	PROJECT: SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW	CLIENT: Costin Roe Consulting Pty Ltd. Consulting Engineers Level 2, 4 Macquarie Street Wollongong, Sydney NSW 2500 Tel: (02) 9022-7000 Fax: (02) 9022-0722 email: sales@costinroe.com.au	DRAWING TITLE: BULK EARTHWORKS PLAN - PHASE 2	DRAWING NO: C013919.01-DA32
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Approved Application No: SSD-10459

Granted on: 31 January 2021

Signed: JF **Sheet No: 14 of 44**

PIT SCHEDULE - NETWORK A

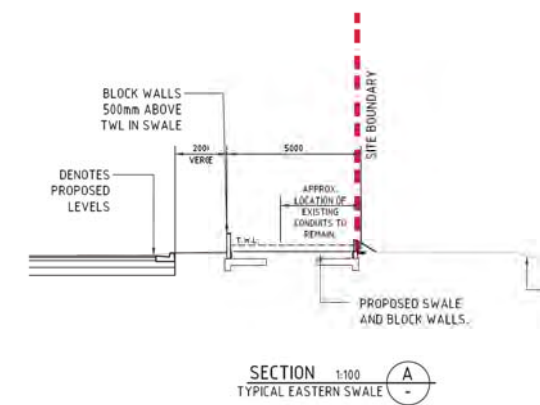
PIT No.	GRATE RL	TYPE	LID SIZE	COMMENT
PIT A01	3.80	SGGP	900X900	
PIT A02	3.80	SGGP	900X900	
PIT A02-1	3.70	SGGP	900X900	
PIT A03	3.93	SGGP	900X900	
PIT A04	3.93	SGGP	900X900	
PIT A5	3.80	SGGP	900X900	
PIT A6	3.82	SGGP	900X900	
PIT A6-1	3.90	SGGP	900X900	
PIT A7	3.80	SGGP	900X900	
PIT A8	3.80	SGGP	900X900	
PIT A9	3.80	SGGP	900X900	
PIT A10	3.80	SGGP	900X900	
PIT A11	3.80	SGGP	900X900	
PIT A12	3.75	SGGP	900X900	
PIT A13	3.80	SGGP	900X900	
PIT A14	3.80	SGGP	900X900	
PIT A15	3.70	SGGP	900X900	WITH PIT INSERT
PIT A16	3.70	SGGP	900X900	
PIT A17	3.70	SGGP	900X900	WITH PIT INSERT
PIT A18	3.75	SGGP	900X900	
PIT A19	3.80	SGGP	900X900	

PIT SCHEDULE - NETWORK B

PIT No.	GRATE RL	TYPE	LID SIZE	COMMENT
PIT B01	4.00	SGGP	900X900	
PIT B02	4.10	SGGP	900X900	
PIT B03	4.10	SGGP	900X900	
PIT B04	3.90	SGGP	900X900	
PIT B05	3.70	SGGP	900X900	WITH PIT INSERT
PIT B06	3.70	SGGP	900X900	WITH PIT INSERT
PIT B07	3.70	SGGP	900X900	WITH PIT INSERT
PIT B08	3.70	SGGP	900X900	WITH PIT INSERT
PIT B09	3.70	SGGP	900X900	WITH PIT INSERT

PIT SCHEDULE - NETWORK C

PIT No.	GRATE RL	TYPE	LID SIZE	COMMENT
PIT C01	3.90	SGGP	900X900	
PIT C02	3.90	SGGP	900X900	
PIT C02-1	3.90	SGGP	900X900	
PIT C03	4.10	SGGP	900X900	
PIT C04	4.10	SGGP	900X900	
PIT C5	3.90	SGGP	900X900	
PIT C6	3.90	SGGP	900X900	
PIT C7	3.80	SGGP	900X900	
PIT C8	3.80	SGGP	900X900	



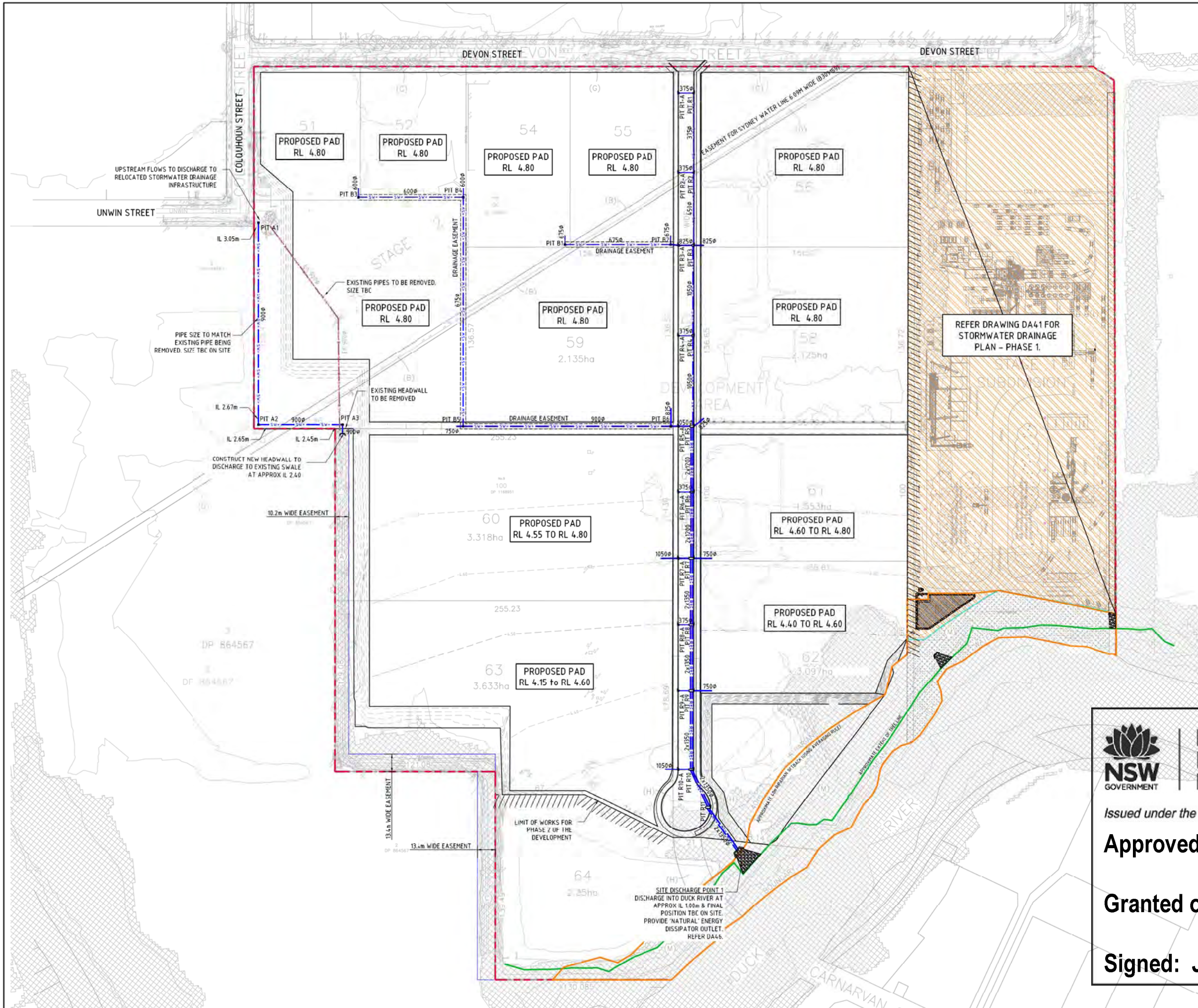
LEGEND:
LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS TITLED AS0205 Clyde_BE_230620 TIN DATED 08/07/20.

- - SINGLE GRATED GULLY PIT (SGGP)
- - SGGP WITH PIT INSERT OR SILT MESH
- GD, GRATED DRAIN (300W x 225D UNO)
- DP - ROOFWATER DOWNPIPE (INDICATIVE)
- ROOFWATER LINE
- DISH DRAIN
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- EXISTING DRAINAGE LINE TO BE REMOVED
- SUPER LOT BOUNDARY
- Q100 FLOOD EXTENT
- APPROXIMATE EXTENT OF TREE LINE
- RIPARIAN SETBACK

LEVELS NOTE:
LEVELS TO BE ±500mm FROM THOSE SHOWN. FINAL LEVELS SUBJECT TO MINOR VARIATIONS TO SWIT DETAILED DESIGN.





LEGEND:
LEVELS DATUM IS AHD.

EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS TITLED AS0205 Clyde_BE_210620 TIN DATED 08/07/20.

- SINGLE GRATED GULLY PIT (SGGP)
- PROPOSED DRAINAGE LINE
- EXISTING DRAINAGE LINE
- EXISTING DRAINAGE LINE TO BE REMOVED
- SUPER LOT BOUNDARY
- Ø100 FLOOD EXTENT
- APPROXIMATE EXTENT OF TREE LINE
- RIPARIAN SETBACK

PIT SCHEDULE

PIT No.	GRATE RL	TYPE	SIZE	COMMENT
PIT A1	4.60	S.G.G.P.	1200x1200	
PIT A2	4.50	S.G.G.P.	1200x1200	
PIT A3	4.15	S.G.G.P.	1200x1200	
PIT B1	4.80	S.G.G.P.	1200x1200	
PIT B2	4.80	S.G.G.P.	1200x1200	
PIT B3	4.80	S.G.G.P.	1200x1200	
PIT B4	4.80	S.G.G.P.	1200x1200	
PIT B5	4.80	S.G.G.P.	1200x1200	
PIT B6	4.80	S.G.G.P.	1500x1500	
PIT R1	4.19	K.I.P.	900x900	
PIT R1-A	4.19	K.I.P.	900x900	
PIT R2	4.17	K.I.P.	900x900	
PIT R2-A	4.17	K.I.P.	900x900	
PIT R3	4.15	K.I.P.	1500x1500	
PIT R3-A	4.15	K.I.P.	1200x1200	
PIT R4	4.13	K.I.P.	1500x1500	
PIT R4-A	4.13	K.I.P.	900x900	
PIT R5	4.10	K.I.P.	3000x1500	
PIT R5-A	4.10	K.I.P.	1500x900	
PIT R6	4.07	K.I.P.	3000x900	
PIT R6-A	4.07	K.I.P.	900x900	
PIT R7	4.05	K.I.P.	3600x1500	
PIT R7-A	4.05	K.I.P.	1500x900	
PIT R8	4.03	K.I.P.	3600x1200	
PIT R8-A	4.03	K.I.P.	900x900	
PIT R9	4.00	K.I.P.	3600x1500	
PIT R9-A	4.00	K.I.P.	900x900	
PIT R10	3.96	K.I.P.	3600x1500	
PIT R10-A	3.96	K.I.P.	1500x900	
PIT R11	3.92	K.I.P.	3600x1500	

STORMWATER DRAINAGE NOTES:
REFER TO DA10 FOR STORMWATER NOTES.

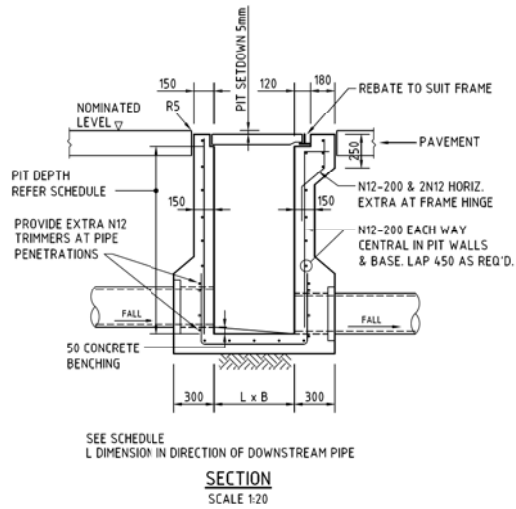
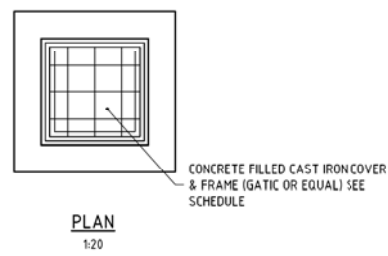
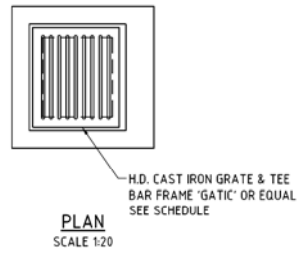
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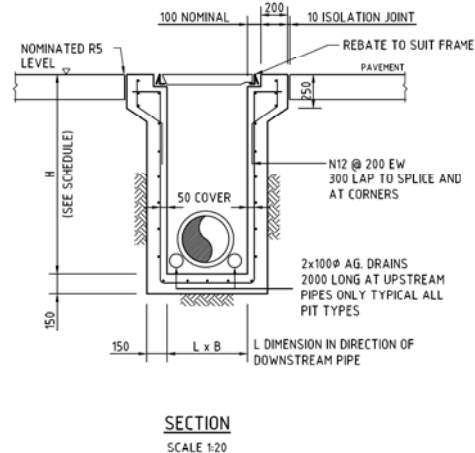
Approved Application No: SSD-10459

Granted on: 31 January 2021

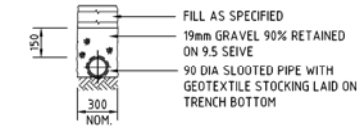
Signed: JF Sheet No: 15 of 44



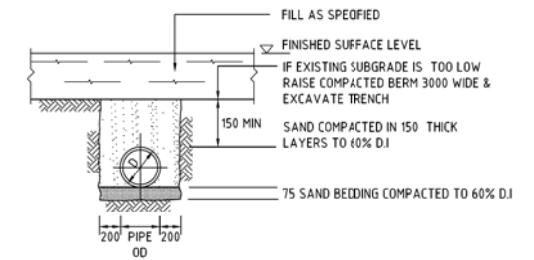
SINGLE GRATED GULLY PIT - SGGP



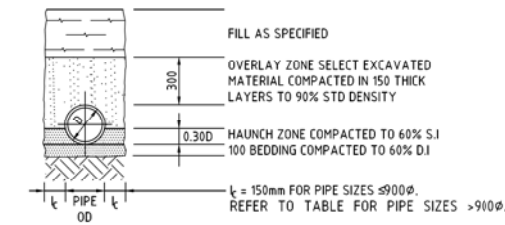
SEALED JUNCTION PIT - SJP



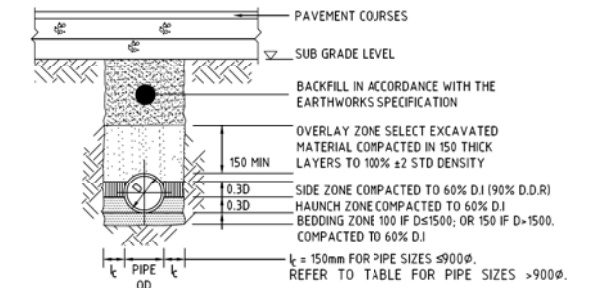
SUPPORT TO AG DRAIN



SUPPORT TO uPVC PIPES



TYPE H1 SUPPORT TO CONCRETE PIPES AT LANDSCAPED AREAS



TYPE HS2 SUPPORT TO CONCRETE PIPES UNDER PAVEMENT

US 1350, MAX FILL = 4.0m
D> 1350, MAX FILL = 3.0m

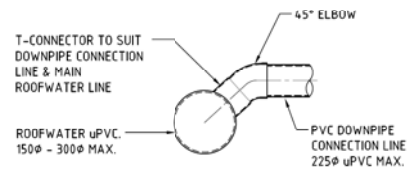
BEDDING & HAUNCH MATERIAL GRADING	
SIEVE SIZE	WEIGHT PASSING(%)
19	100
2.36	100 TO 50
0.60	90 TO 20
0.30	60 TO 10
0.15	25 TO 0
0.075	10 TO 0

SIDE ZONE MATERIAL GRADING	
SIEVE SIZE	WEIGHT PASSING(%)
75	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

SELECT FILL MATERIAL IN ACCORDANCE WITH TABLE 1 AS 3125

SIDE ZONE WIDTH	
PIPE SIZE	L _c (mm)
$\le 900\phi$	150
1050ϕ	175
1200ϕ	200
1350ϕ	225
1500ϕ	250
1650ϕ	275
1800ϕ	300

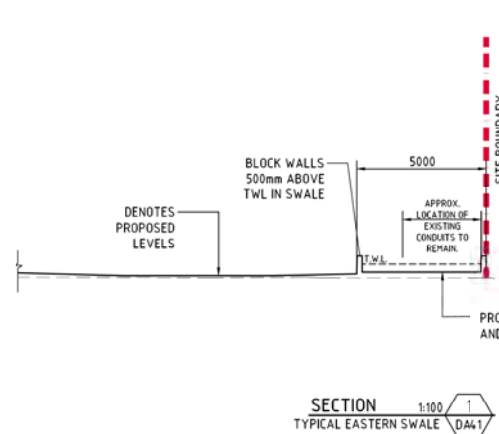
REFER TO ENGINEER FOR TRENCH WIDTHS FOR PIPE SIZES GREATER THAN 1800ϕ



DOWN PIPE CONNECTION TO uPVC PIPE

- PROPRIETARY T-PIECE CONNECTORS SHALL BE USED TO WHERE DIRECT CONNECTIONS ARE REQUIRED TO uPVC PIPES.
- ALL JOINTS TO BE SEALED WITH SOLVENT WELDED JOINTS.
- THE PVC PIPE SHALL NOT PROTRUDE BEYOND THE INNER SURFACE OF THE STORMWATER PIPE.

DOWNPIPE CONNECTION DETAILS
SCALE 1:20





Planning, Industry & Environment

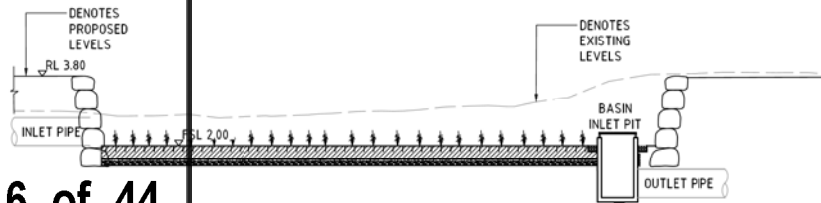
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Approved Application No: SSD-10459

Granted on: 31 January 2021

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PIPE LAYING DETAILS
SCALE 1:20

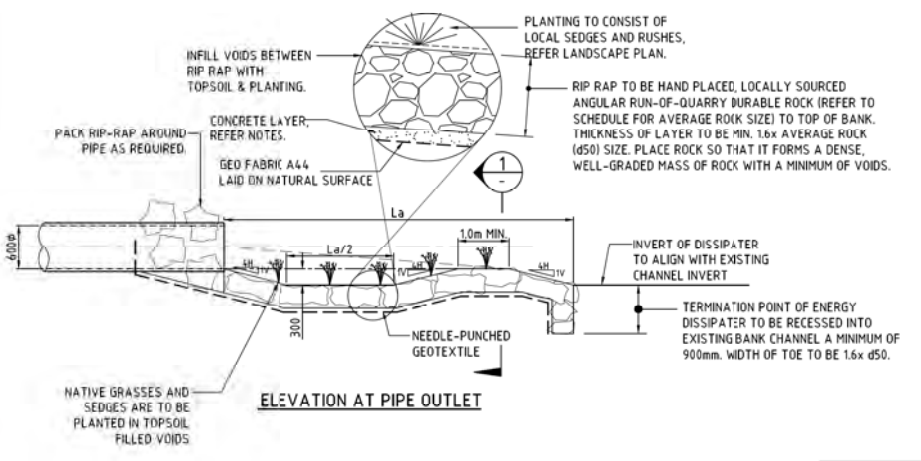
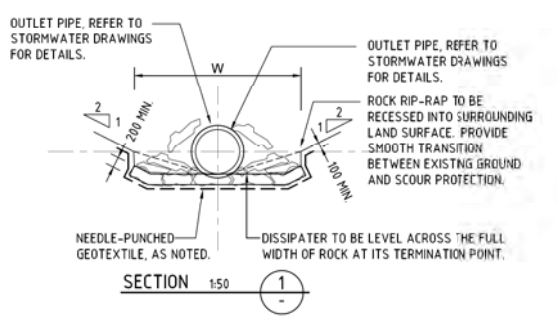
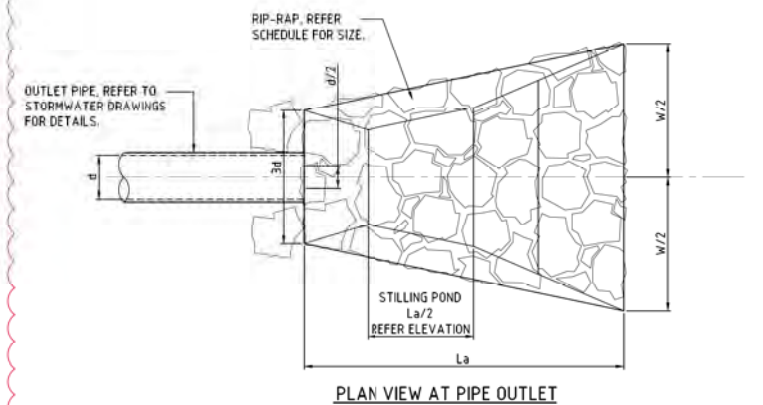


SECTION 1:100 DA41

FOR INFORMATION



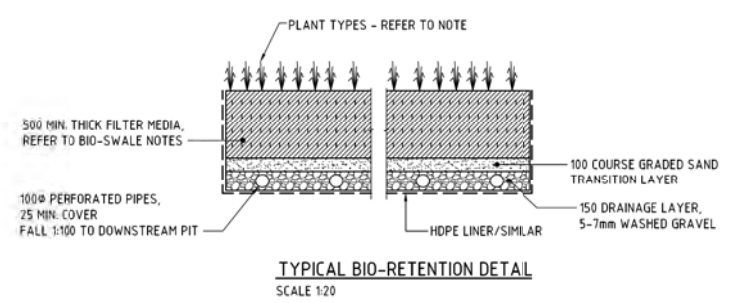
ISSUED FOR INFORMATION		12.08.20	B	ARCHITECT		CLIENT		PROJECT		SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW		Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 4 Macquarie Street Wahli Bay, Sydney NSW 2000 Tel: (61) 02-9393-1000 Fax: (61) 02-9393-0752 email: info@costinroe.com.au		PRECISION COMMUNICATION ACCOUNTABILITY		DRAWING TITLE CONCEPT STORMWATER DRAINAGE DETAILS - SHEET 1			
AMENDMENTS		DATE	ISSUE	AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	DESIGNED	XC	CHECKED	BY	SCALE	AS SHOWN	CAD REF:	ED0519 B&A	DRAWING NO. C013919.01-DA45	



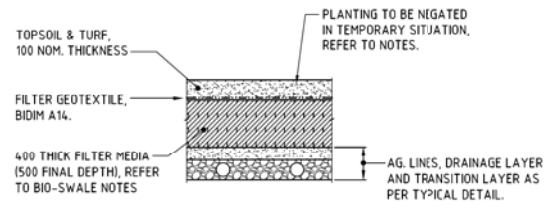
- DISSIPATER NOTES:**
- ALIGN STRUCTURE EVENLY WITH BANK.
 - LOCATE STRUCTURE AT INVERT LEVEL OF STREAM AND POINT IN A DOWNSTREAM DIRECTION.
 - PIPE TO REST ON, AND BE PACKED IN, BY RIP-RAP (SIZE AS NOTED) DISCHARGE INTO STREAM WHERE BEDROCK IS PRESENT. OTHERWISE SCOUR PROTECT AS REQUIRED.
 - SCOUR PROTECT THE OPPOSITE BANK AS REQUIRED. SCOUR PROTECTION TO BE PROVIDED WHERE OPPOSITE BANK IS WITHIN 12-14 TIMES THE PIPE DIAMETER.
 - RIP-RAP TO CONSIST OF ANGULAR RUN-OF-QUARRY ROCK (d50= 150mm MINIMUM) AS NOTED IN THE SCHEDULE RIP-RAP TO BE MINIMUM THICKNESS OF RIP-RAP LAYER TO BE 1.6x AVERAGE ROCK SIZE (d50). RIP-RAP IS TO BE PLACED OVER A 200mm LAYER OF MASS CONCRETE OVER NEEDLE-PUNCHED GEOTEXTILE A44.
 - PLACE ROCK SO THAT IT FORMS A DENSE, WELL-GRADED MASS OF ROCK WITH A MINIMUM OF VOIDS. THE FINISHED RIP-RAP SURFACE SHOULD BE FREE OF POCKETS OF SMALL ROCK OR CLUSTERS OF LARGE ROCKS.
 - GAPS IN RIP-RAP TO BE HAND PACKED WITH TOPSOIL & PLANTED WITH NATIVE SEDGES & RUSHES TO PROVIDE. THE INTENT IS FOR THERE TO BE NO VOIDS BETWEEN RIP-RAP BOULDERS.
 - ENSURE THE FINISHED ROCK SURFACE BLENDS WITH THE SURROUNDING GROUND LEVELS. NO OVERFALL OR PROTRUSION OF ROCK SHOULD BE APPARENT.
 - ENSURE THAT STORMWATER FROM SURROUNDING GROUND IS FREE TO ENTER THE STRUCTURE WITHOUT CAUSING UNDESIRABLE PONDING OR SCOUR.

OUTLET	PIPE Ø	La	W	d ₅₀	Q ₁		Q ₂₀	
					FLOW	VELOCITY	FLOW	VELOCITY
OUTLET 1 (DOWNER)	1050Ø	10m	12m	0.8m	0.86m ³ /s	0.30m/s	1.90m ³ /s	0.50m/s
OUTLET 2 (ESTATE)	2x1350Ø	15m	20m	1.0m	2.73m ³ /s	0.40m/s	6.18m ³ /s	0.60m/s

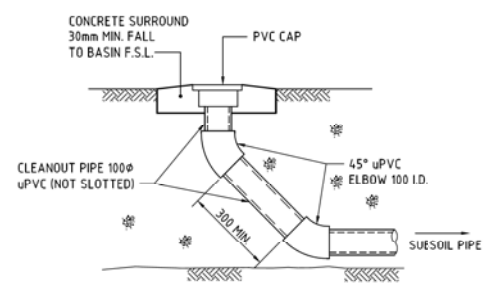
OUTLET STRUCTURES
SCALE 1:50



TYPICAL BIO-RETENTION DETAIL
SCALE 1:20

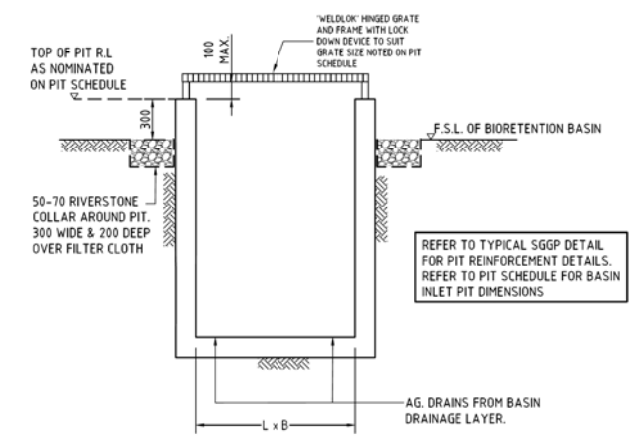


TEMPORARY BIO-RETENTION PROTECTION DETAIL
SCALE 1:20
TEMPORARY CONSTRUCTION REQUIREMENT DETAIL - REFER TO NOTES FOR IMPLEMENTATION PERIODS.

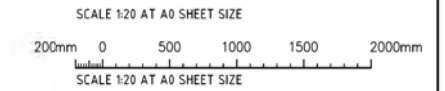


BIORETENTION CLEANOUT EYE ELEVATION
SCALE 1:20
DENOTED C.E. ON PLAN

BIO-RETENTION BASIN DETAILS



BASIN INLET PIT - BIP
SECTION SCALE 1:20



BIO-RETENTION NOTES :

FILTER MEDIA TO BE LOAMY SAND WITH A PERMEABILITY NOT LESS THAN 700mm/hr. FILTER MEDIA TO BE FREE OF RUBBISH, DELETED/USUAL MATERIAL, TOXICANTS, DECLARED PLANTS AND LOCAL WEEDS, AND IS TO NOT BE HYDROPHOBIC.

FILTER MEDIA TO HAVE THE FOLLOWING COMPOSITION RANGE:

CLAY & SILT (<0.075mm)	-3%
VERY FINE SAND (0.075-0.15mm)	5-30%
FINE SAND (0.15-0.25mm)	10-30%
MEDIUM TO COARSE SAND (0.25-1.00mm)	40-60%
COARSE SAND (1.0-2.0mm)	7-10%
FINE GRAVEL (2.0-3.4mm)	-3%

FILTER MEDIA THAT DOES NOT MEET THE FOLLOWING CRITERIA SHALL BE REJECTED:

- ORGANIC MATTER CONTENT TO BE IDEALLY WITHIN 1% TO 3% (W/W) AND TO BE NO GREATER THAN 5% (W/W).
- PH TO BE BETWEEN 5.5 AND 7.5
- PHOSPHOROUS CONTENT TO BE NO GREATER THAN 35mg/kg

FILTER MEDIA TO BE ASSESSED BY QUALIFIED HORTICULTURALIST TO ENSURE CAPABILITY OF SUPPORTING PLANT LIFE.

DRAINAGE LAYER TO BE CLEAN GRAVEL 5-7mm.

PLANTS TO BE IN ACCORDANCE WITH PARRAMATTA CITY COUNCIL.

PROVIDE 100mm TOPSOIL AND TEMPORARY EROSION PROTECTION (JUTEMASTER OR EQUIV) TO SWALE BATTER SLOPES AND ADJACENT LANDSCAPED AREAS. NOTE THAT NO TOPSOIL IS TO BE PLACED OVER FILTRATION MEDIA. PROVIDE SILT FENCE TO TOP OF BANK UNTIL SUCH TIME AS THIS STABILISING AND VEGETATION HAS BEEN COMPLETED.

BIO-RETENTION TO BE PARTIALLY INSTALLED, FOLLOWING COMPLETION OF THE ROAD, WITH THE TOP 75-100mm OF FILTER MEDIA REPLACED WITH A FINE TO COARSE SAND UNDERLAIN WITH A GEOTEXTILE LAYER (REFER TO DETAIL). FOLLOWING COMPLETION OF THE UPSTREAM DEVELOPMENT AND SITE STABILISATION, THE SAND IS TO BE REMOVED, REPLACED WITH FILTER MATERIAL AND PLANTED OUT. REFER TO TEMPORARY BIO-BASIN DETAIL.

PRIOR TO PLANTING, THE TOP 100mm OF THE BIORETENTION FILTER MEDIA IS TO BE AMELIORATED WITH APPROPRIATE ORGANIC MATTER, FERTILISER AND TRACE ELEMENTS TO AID PLANT ESTABLISHMENT AS PER THE TABLE BELOW:

TABLE: RECIPE FOR AMELIORATING TOP 100mm OF BIORETENTION FILTER MEDIA	
COST/TONNE	QUANTITY (SQM OF FILTER AREA)
GRANULATED POLYETHYLENE FINES	50
SUPERPHOSPHATE	2
MAGNESIUM SULPHATE	2
POTASSIUM SULPHATE	2
TRACE ELEMENT MIX	1
FERTILISER (NPK 4:1:1)	4
LIME	20



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Granted on: 31 January 2021

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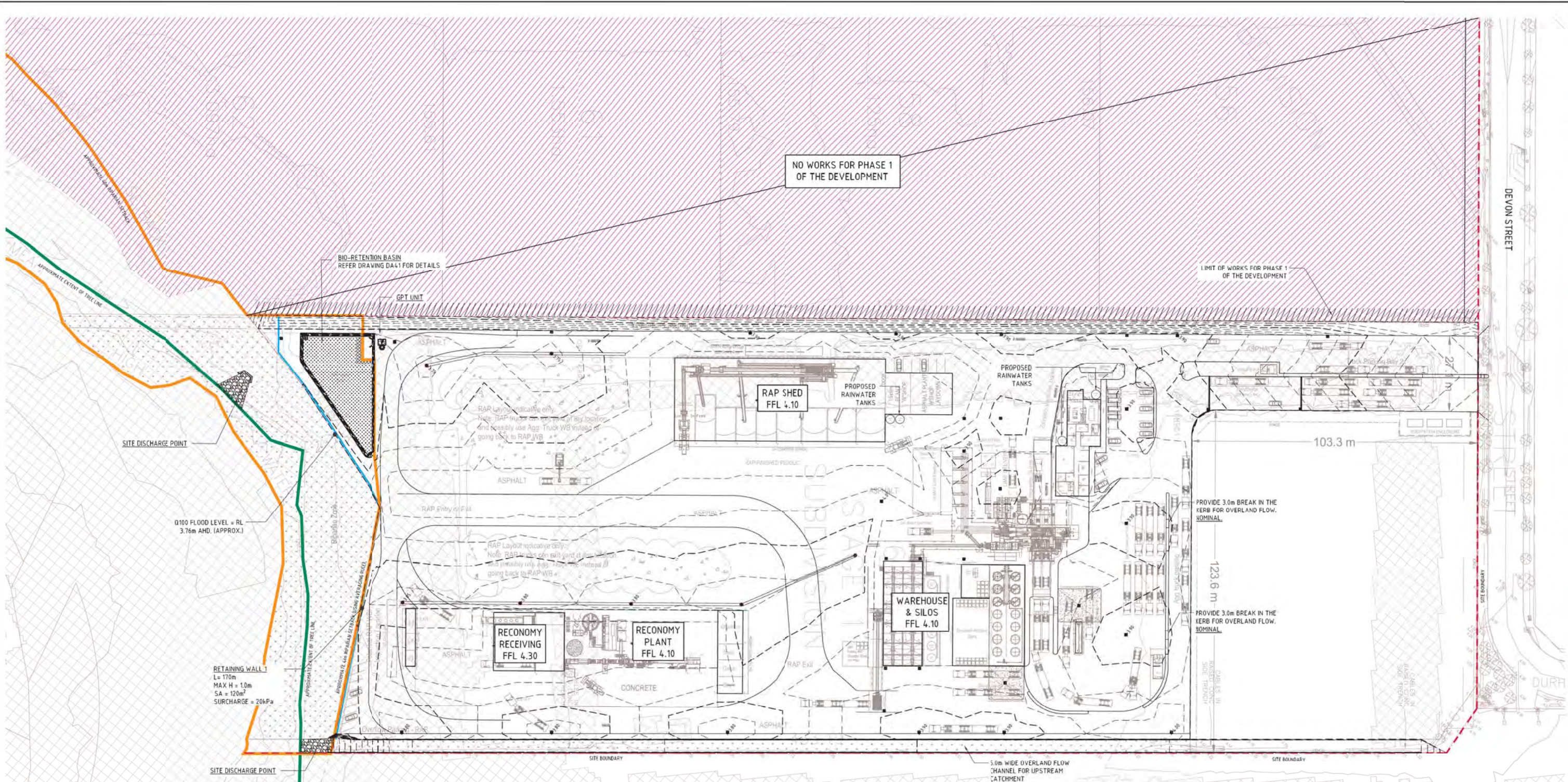
FOR INFORMATION

REVISION	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	AMENDMENTS	DATE	ISSUE	AMENDMENTS
REVISED AS CLOUED	18.11.20	C													
ISSUED FOR INFORMATION	12.08.20	B													
ISSUED FOR INFORMATION	21.07.20	A													

DESIGNED	CHKD	DATE	DATE	SCALE	SCALE	CAD REF	EDITS/1/01-DAA
XC	HL	18.11.20	18.11.20	A3	A3		

PROJECT	SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1)	CLIENT	Costin Roe Consulting Pty Ltd.
ADDRESS	9 DEVON STREET, CLYDE NSW	CONTACT	Costin Roe Consulting Pty Ltd. 100/110 Devon Street, Clyde NSW 2071. Tel: (61) 02-925-1088 Fax: (61) 02-925-0752 Email: info@costinroecol.com.au

DRAWING TITLE	CONCEPT STORMWATER DRAINAGE DETAILS - SHEET 2
DRAWING NO.	C013919.01-DA46



CONCEPT FINISHED LEVELS PLAN - PHASE 1
SCALE 1:500

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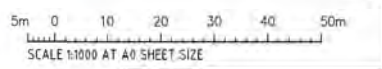
Granted on: 31 January 2021

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LEGEND:
LEVELS DATUM IS AHD.

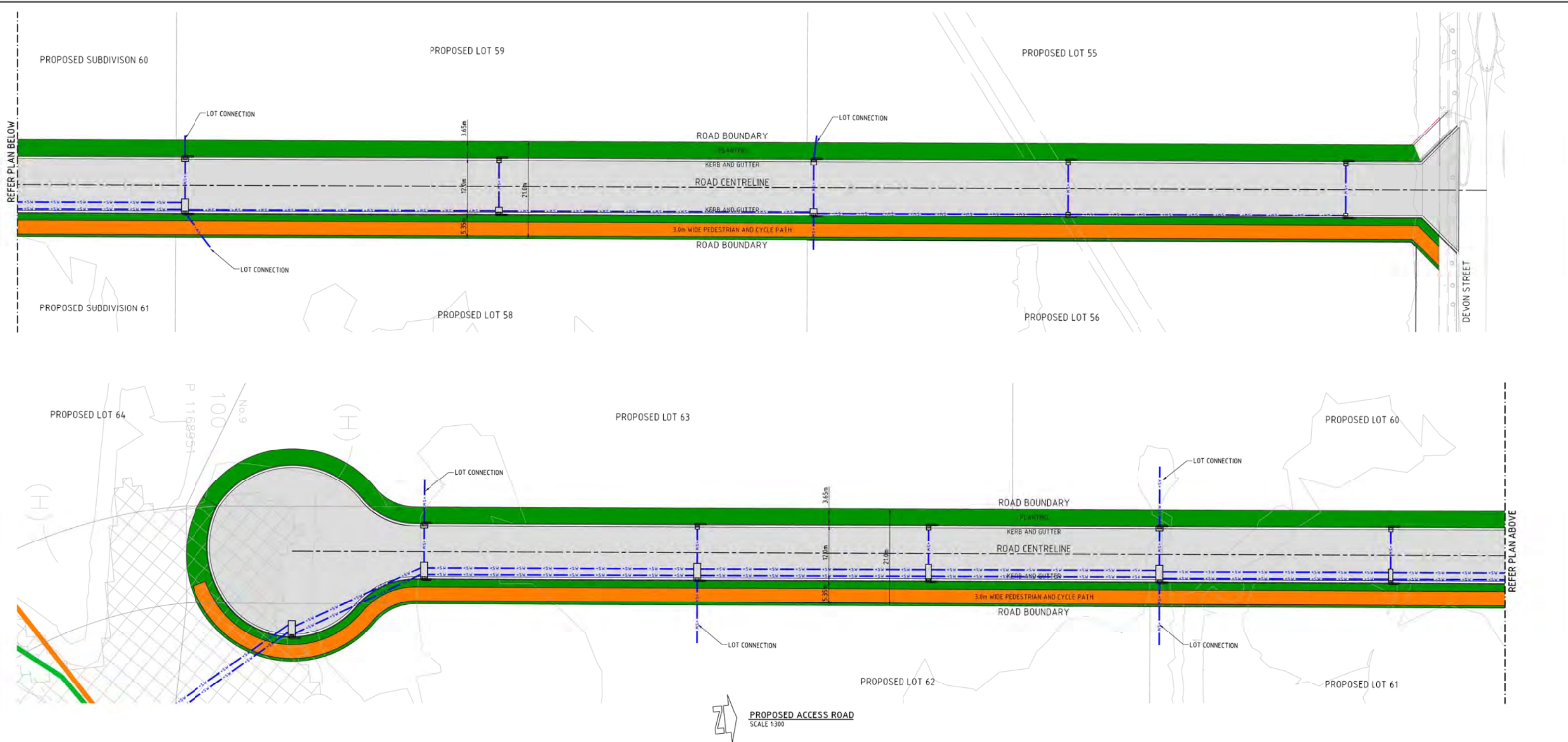
EXISTING SITE LEVELS AND DETAILS BASED ON SURVEY INFORMATION PROVIDED BY LANDPARTNERS TITLED AS0205 Clyde_BE_200620 TIN DATED 08/07/20.

- - - - - DESIGN CONTOUR (MAJOR 0.5m)
- - - - - DESIGN CONTOUR (MINOR 0.1m)
- - - - - EXISTING CONTOUR (0.25m INTERVALS)
- - SINGLE GRATED GULLY PIT (SGGP)
- ▨ - Q100 FLOOD EXTENT
- - - - - APPROXIMATE EXTENT OF TREE LINE
- - - - - RIPARIAN SETBACK

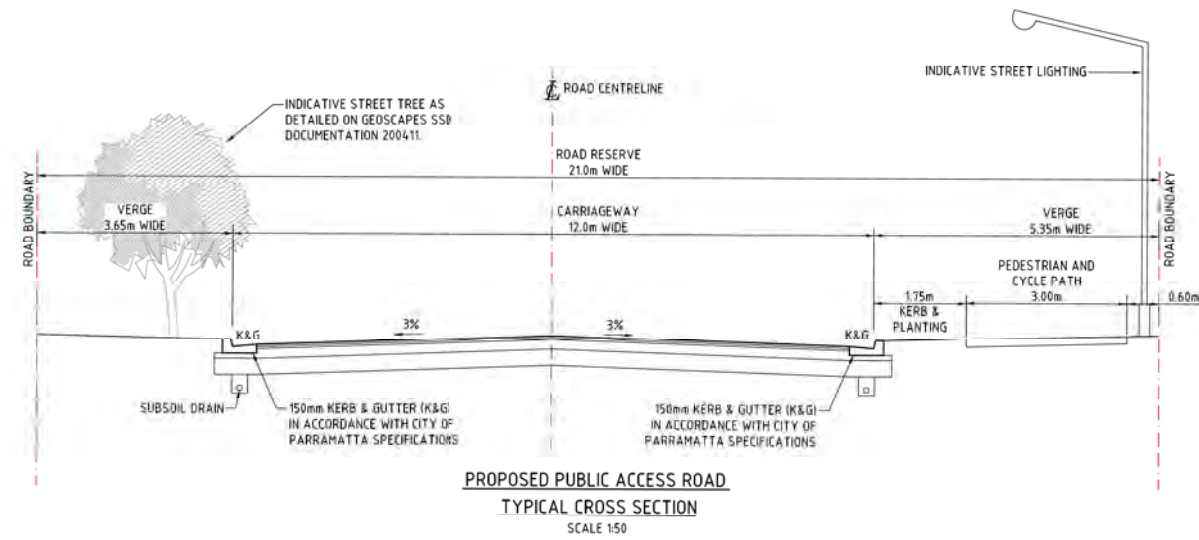


FOR INFORMATION

<table border="1"> <tr> <td>REVISED PER NEW SITE PLAN</td> <td>30.11.20</td> <td>E</td> </tr> <tr> <td>REVISED PER NEW SITE PLAN</td> <td>28.11.20</td> <td>D</td> </tr> <tr> <td>ISSUED FOR APPROVAL</td> <td>12.03.20</td> <td>C</td> </tr> <tr> <td>REVISED AS CLOSED</td> <td>17.01.20</td> <td>B</td> </tr> <tr> <td>ISSUED FOR INFORMATION</td> <td>08.07.20</td> <td>A</td> </tr> </table>	REVISED PER NEW SITE PLAN	30.11.20	E	REVISED PER NEW SITE PLAN	28.11.20	D	ISSUED FOR APPROVAL	12.03.20	C	REVISED AS CLOSED	17.01.20	B	ISSUED FOR INFORMATION	08.07.20	A	<table border="1"> <tr> <td>ARCHITECT</td> <td>CLIENT</td> <td>PROJECT</td> <td> SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW </td> <td> Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 10 Macquarie Street North Sydney, Sydney NSW 2060 Tel: (02) 8211-7000 Fax: (02) 8211-7722 Email: costin@costinroe.com.au </td> <td> Drawing Title CONCEPT FINISHED LEVELS PLAN - PHASE 1 </td> </tr> <tr> <td>DESIGNED</td> <td>DRAWN</td> <td>CHECKED</td> <td>SCALE</td> <td>DATE</td> <td> PRECISION COMMUNICATION ACCOUNTABILITY </td> </tr> <tr> <td>RE</td> <td>RE</td> <td>RE</td> <td>A0 AS SHOWN</td> <td>MAY 20</td> <td> Drawing No C013919.01-DA51 </td> </tr> </table>	ARCHITECT	CLIENT	PROJECT	SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW	Costin Roe Consulting Pty Ltd. Consulting Engineers Level 1, 10 Macquarie Street North Sydney, Sydney NSW 2060 Tel: (02) 8211-7000 Fax: (02) 8211-7722 Email: costin@costinroe.com.au	Drawing Title CONCEPT FINISHED LEVELS PLAN - PHASE 1	DESIGNED	DRAWN	CHECKED	SCALE	DATE	PRECISION COMMUNICATION ACCOUNTABILITY	RE	RE	RE	A0 AS SHOWN	MAY 20	Drawing No C013919.01-DA51
REVISED PER NEW SITE PLAN	30.11.20	E																																
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DESIGNED: [] DRAWN: [] CHECKED: [] DATE: [] SCALE: [] SHEET: []	PROJECT: SUSTAINABLE ROAD RESOURCE CENTRE (PHASE 1) 9 DEVON STREET, CLYDE NSW	CLIENT: Costin Roe Consulting Pty Ltd. Consulting Engineers Level 2, 9 Macquarie Street Wollongong, Sydney NSW 2500 Tel: (02) 9525-1000 Fax: (02) 9525-0752 email: info@costinroe.com.au	DRAWING TITLE: PROPOSED PUBLIC ACCESS ROAD AND TYPICAL SECTION
AMENDMENTS:			DRAWING NO.: C013919.01-DA60

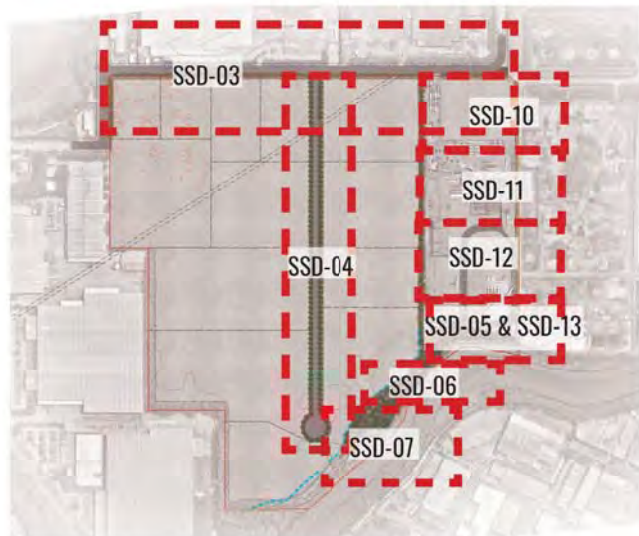
Costin Roe Consulting
 PRECISION | COMMUNICATION | ACCOUNTABILITY

SSD - CENTRAL SYDNEY INDUSTRIAL ESTATE - 9 DEVON STREET, ROSEHILL, NSW 2142

Landscape Documentation for State Significant Development Application



 SUBDIVISION BOUNDARY
 EXTENT OF RIPARIAN WORKS
 EXTENT OF STAGE 1 (LOT 6) WORKS
 IMAGE TAKEN FROM NEARMAP 2020



 KEY PLAN - SHEET LAYOUTS
 SCALE 1:6000



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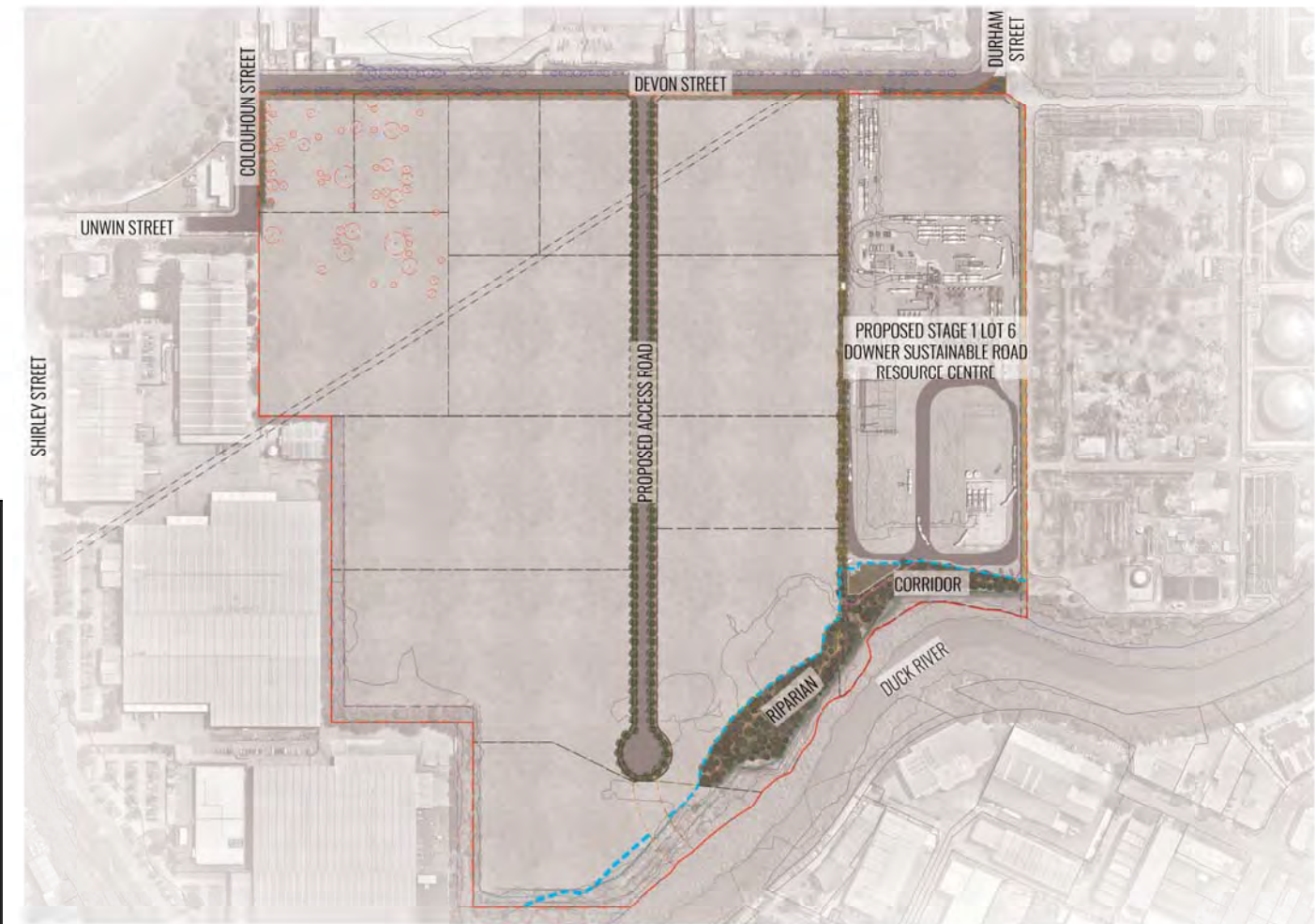
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Signed: JF Sheet No: 20 of 44

Drawing Register

Dwg No.	Drawing Name
SSD-00	Cover Sheet
SSD-01	Overall Master Plan
SSD-02	Temporary Erosion Control Plan
SSD-03	Streetscape Plan - Devon Street
SSD-04	Streetscape Plan - Proposed Access Road
SSD-05	Riparian Corridor Detail Plan - 1
SSD-06	Riparian Corridor Detail Plan - 2
SSD-07	Riparian Corridor Detail Plan - 3
SSD-08	Riparian Corridor Section A-A
SSD-09	Riparian Corridor Section B-B
SSD-10	Stage 1 Lot 6 (Downer) Detail Plan - 1
SSD-11	Stage 1 Lot 6 (Downer) Detail Plan - 2
SSD-12	Stage 1 Lot 6 (Downer) Detail Plan - 3
SSD-13	Stage 1 Lot 6 (Downer) Detail Plan - 4
SSD-14	Stage 1 Lot 6 (Downer) Section CC
SSD-15	Stage 1 Lot 6 (Downer) Section DD & EE
SSD-16	Specifications & Typical Details
SSD-17	Plant Schedules & Imagery




 SITE PLAN
 SCALE 1:3000

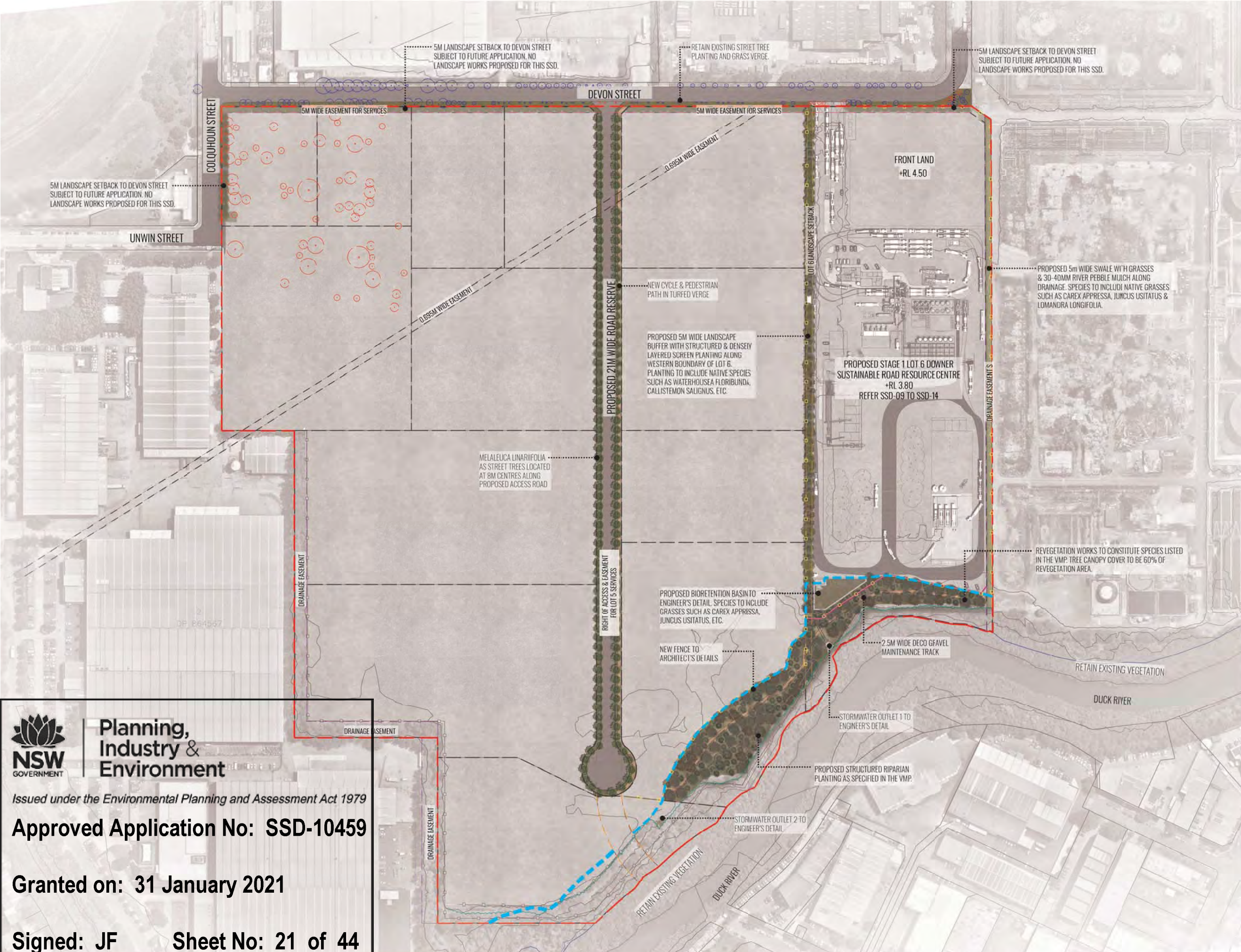
Drawing Title:
Cover Sheet
 DWG No:
SSD-00


 Suite 215, 284 Victoria Ave, Chatswood NSW 2067 Ph. (02) 9411 1485
 www.geoscapes.com.au
 ABN 84 620 205 781 ACN 620 205 781

Project Manager:
 Element Environment
 Pty. Ltd.

Client:
VE PROPERTY
 LEVEL 16, 720 BOURKE STREET
 DICKLANDS VIC 3008
 PF: (03) 8823 444

Scale:	Date:	Job Number:	North:	Revision		FOR SSD APPLICATION		
As shown @ A1	26.11.2020	200411		Rev	Date	Description	Drawn	Checked
Project: SSD - Central Syney Industrial Estate 9 Devon Street, Rosehill, NSW 2142				H	09.09.20	UPDATED FOR SSD	SB	BG
				I	11.09.20	UPDATED FOR SSD	SB	BG
				J	11.11.20	UPDATED FOR RTS	PT	BG
				K	26.11.20	UPDATED FOR RTS	PT	BG



LEGEND

- - - SITE BOUNDARY
- - - LOT BOUNDARIES
- EASEMENT TO DRAIN WATER. REFER TO SURVEY DRAWINGS.
- EASEMENT 6.095M WIDE FOR SYDNEY WATER. REFER TO SURVEY DRAWINGS.
- RIGHT OF ACCESS & EASEMENT FOR LOT 5 SERVICES. REFER TO SURVEY DRAWINGS.
- 5M WIDE EASEMENT FOR SERVICES. REFER TO SURVEY DRAWINGS.
- 5M WIDE LANDSCAPE SETBACK. REFER TO LOT 6 DETAIL PLANS SSD-09 TO SSD-12.
- EXISTING VEGETATION TO BE RETAINED.
- EXISTING VEGETATION TO BE REMOVED.
- PROPOSED TREES.
- PROPOSED MASS HEDGE PLANTING & SHRUBS.
- PROPOSED GROUNDCOVERS
- PROPOSED SWALE. REFER TO ENGINEER'S DRAWINGS.
- 40M AVERAGE RIPARIAN CORRIDOR. REFER TO VMP FOR DETAILS.
- MEAN HIGH WATER LEVEL OF DUCK RIVER. REFER TO CIVIL DRAWINGS.
- APPROXIMATE EXTENT OF EXISTING TREE CANOPY TO BE RETAINED
- NEW FENCE TO ARCHITECT'S DETAIL. REFER SSD-03 TO SSD-14 FOR DETAILS.
- EXISTING FENCE REFER TO CIVIL ENGINEER'S DRAWINGS
- PROPOSED SITE CONTOURS TO ENGINEER'S DETAILS
- DECO GRAVEL MAINTENANCE TRACK. REFER TO SSD-05 & SSD-06.
- HARDSTAND
- FOOTPATH & TURFED VERGE
- ROAD
- RETAINING WALL TO ENGINEER'S DETAIL. REFER TO CIVIL DRAWINGS.

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Approved Application No: SSD-10459

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Drawing Title:
Overall Master Plan

DWG No:
SSD-01

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LANDSCAPE ARCHITECTS

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Project Manager:
element Element Environment Pty. Ltd.

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Pf: (03) 8823 444

Scale: 1:1500 @ A1
1:3000 @ A3

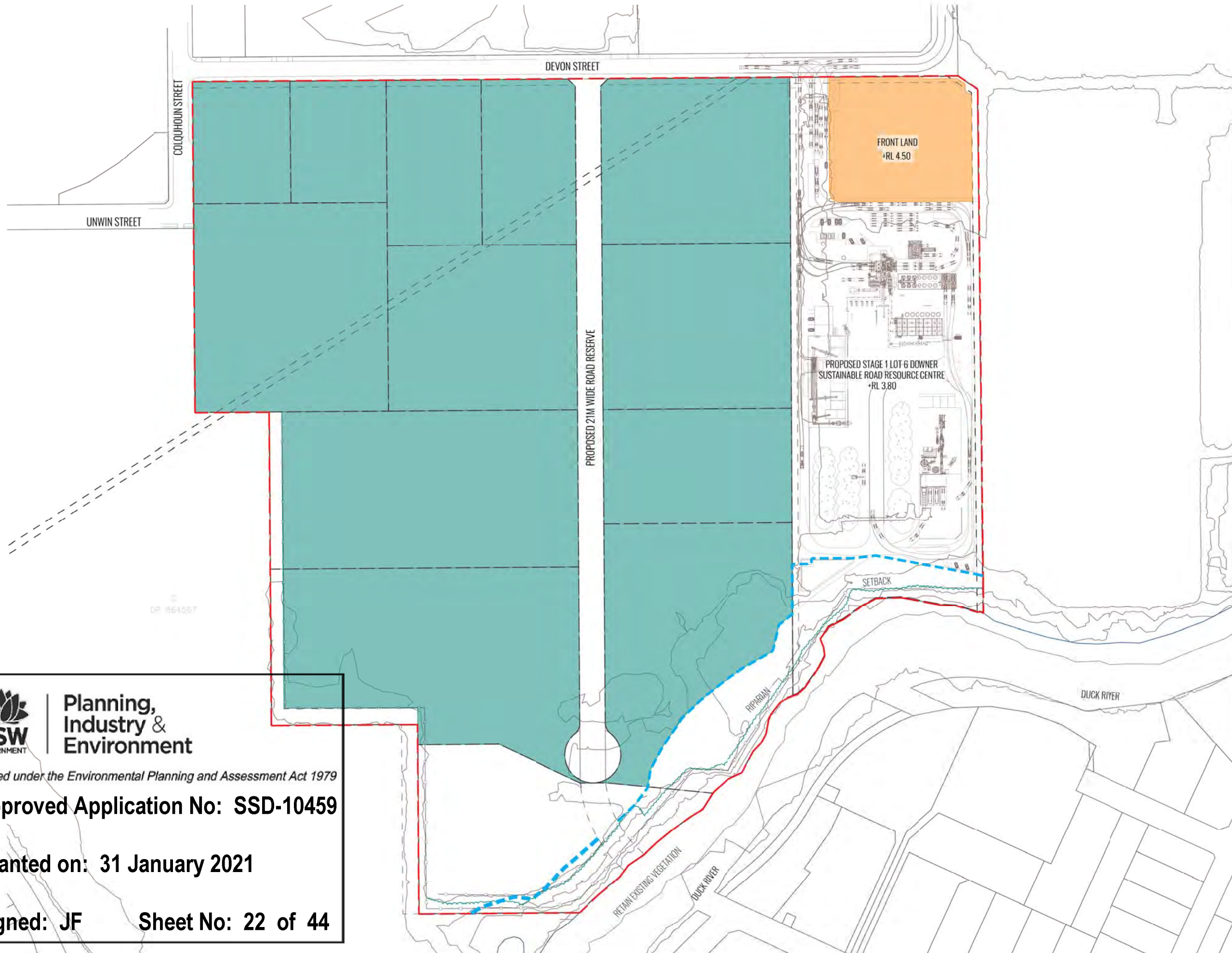
Date: 26.11.2020

Job Number: 200411

North:

Project: **SSD - Central Syney Industrial Estate**
9 Devon Street, Rosehill, NSW 2142

Revision			FOR SSD APPLICATION	
Rev	Date	Description	Drawn	Checked
H	09.09.20	UPDATED FOR SSD	SB	BG
I	11.09.20	UPDATED FOR SSD	SB	BG
J	11.11.20	UPDATED FOR RTS	PT	BG
K	26.11.20	UPDATED FOR RTS	PT	BG



LEGEND

- SITE BOUNDARY
- LOT BOUNDARY
- AREAS TO BE HYDROSEED OR SUBJECTED TO TACKIFIER FOR SOIL STABILISATION (23.25 ha). REFER TO CIVIL DRAWINGS.
- CONSTRUCTION STAGING AREA (1.2 ha). POST CONSTRUCTION TREATED WITH GRAVEL OR HYDROSEED FOR SHORT TERM PARKING AS REQUIRED. FUTURE USE SUBJECT TO FUTURE DA.
- APPROXIMATE EXTENT OF EXISTING TREE CANOPY TO BE RETAINED
- 40M AVERAGE RIPARIAN CORRIDOR EXTENT. REFER TO VMP FOR DETAILS.
- MEAN HIGH WATER LEVEL OF DUCK RIVER. REFER TO CIVIL DRAWINGS.
- EXISTING FENCE REFER TO CIVIL ENG'S DRAWINGS
- PROPOSED SITE CONTOURS. REFER TO CIVIL ENGINEER'S DRAWINGS.

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Drawing Title:
Temporary Erosion Control Plan

DWG No:
SSD-02

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LANDSCAPE ARCHITECTS

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DICKLANDS VIC 3008
PF: (03) 8823 444

Scale: 1:1500 @ A1
1:3000 @ A3

Date: 26.11.2020

Job Number: 200411

North:

Project: **SSD - Central Syney Industrial Estate**
9 Devon Street, Rosehill, NSW 2142

Revision			FOR SSD APPLICATION	
Rev	Date	Description	Drawn	Checked
H	09.09.20	UPDATED FOR SSD	SB	BG
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