

GENERAL NOTES

1. ALL WORKS ARE TO BE IN ACCORDANCE WITH BLACKTOWN CITY COUNCIL'S DEVELOPMENT CONTROL PLAN AND THE ENGINEERING GUIDELINES FOR DEVELOPMENT, WHERE DISCREPANCIES OCCUR BETWEEN NOTES PRESENT ON DRAWINGS AND COUNCIL'S NOTES, THE COUNCIL'S NOTES TAKE PRECEDENCE.
2. SURVEY MARKS: -

a. STATE SURVEY MARKS SHOWN THUS  SHALL BE SET IN TOP OF THE KERB AS IT IS BEING LAID, BY THE CONTRACTOR, IN THE INDICATED LOCATIONS. MARKS SHALL BE SUPPLIED BY THE PROJECT SURVEYOR.

b. SURVEY MARKS SHOWN THUS  SHALL BE RETAINED AT ALL TIMES. WHERE RETENTION IS NOT POSSIBLE THE SUPERINTENDENT MUST BE NOTIFIED AND CONSENT RECEIVED PRIOR TO THEIR REMOVAL.
3. THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
4. THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE WRITTEN PERMISSION OF THE OWNERS. TO BE PROVIDED PRIOR TO THE APPROVAL OF THE PLANS.
5. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
6. COUNCIL'S TREE PRESERVATION ORDER MUST BE OBSERVED AND NO TREE SHALL BE FELLED, LOPPED OR REMOVED WITHOUT THE PRIOR APPROVAL OF COUNCIL'S ENGINEER.
7. TREES TO BE RETAINED ON SITE SHALL BE PROTECTED BY SUITABLE STURDY APPROVED PROTECTIVE FENCING PRIOR TO COMMENCEMENT OF SITE WORKS.
8. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES, OUT-HOUSES, CAR BODIES AND DEBRIS ETC.
9. PUBLIC RESERVE AREAS SHALL BE CLEARED OF UNDERGROWTH, IMPROVEMENTS AND FENCES AS DIRECTED BY THE ENGINEER.
10. FILLING IS TO BE FROM A NOMINATED SOURCE, OF SOUND CLEAN MATERIAL, FREE FROM LARGE ROCK, STUMPS, CONTAMINATED MATTER, INDUSTRIAL AND BUILDING WASTE, ORGANIC MATTER AND OTHER DEBRIS. PLACING OF FILLING ON THE PREPARED AREAS SHALL NOT COMMENCE UNTIL THE AUTHORITY TO DO SO HAS BEEN OBTAINED FROM THE COUNCIL.
11. SITE FILL AREAS: - THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
12. ALL SITE FILLING TO BE COMPACTED TO 95% STANDARD COMPACTION AND SHALL BE CONTROLLED BY A REGISTERED SOIL LABORATORY IN ACCORDANCE WITH COUNCIL'S DEVELOPMENT CONTROL PLAN AND THE ENGINEERING GUIDELINE FOR DEVELOPMENT.
13. ALL SITE REGRADING AREAS SHALL BE GRADED AT A MINIMUM 1% TO THE ENGINEERS' REQUIREMENTS.
14. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED BY THE SUPERINTENDENT.
15. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS.
16. DIMENSIONS OF ANY DETAIL SHALL NOT BE SCALED - DIMENSIONS, IF IN DOUBT, SHALL BE VERIFIED BY THE SUPERINTENDENT.

SURVEY SET OUT INFORMATION NOTES:

1. ALL SITE SET OUT AND CONTROL POINTS ARE TO BE CERTIFIED BY A REGISTERED SURVEYOR.
2. THE INFORMATION DETAILED ON THE CERTIFIED CONSTRUCTION CERTIFICATE PLANS TAKES PRECEDENCE OVER ALL ELECTRONIC INFORMATION PROVIDED, THE ORDER OF PRIORITY FOR USE OF ALL INFORMATION PROVIDED IS AS FOLLOWS:

a. CERTIFIED CONSTRUCTION CERTIFICATE DRAWINGS

b. 2D DRAFTING BASE (ELECTRONIC FILE)

c. 3D DTM (ELECTRONIC FILE)
3. ANY DISCREPANCY BETWEEN ANY OF THE INFORMATION CONTAINED WITHIN THESE FILES IS TO BE BROUGHT TO THE ATTENTION OF THE SUPERINTENDENT WHO WILL SEEK CLARIFICATION AND ISSUE INSTRUCTIONS ON THE APPROPRIATE COURSE OF ACTION.

STRUCTURAL NOTES

GENERAL

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 AND OTHER RELEVANT CODES.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

CONCRETE

1. CONCRETE QUALITY:

ELEMENT	AS 3600 F'C	MAX SIZE AGGREGATE	MAX SLUMP	CEMENT TYPE
SLABS	32 MPa	20 mm	75 mm	C
WALLS	32 MPa	20 mm	75 mm	C
BLINDING SLABS	15 MPa	20 mm	75 mm	A
PITS	28 MPa	20mm	75mm	C
KERBS	25 MPa	20mm	75mm	C

2. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY COUNCIL'S ENGINEER.
3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE 50mm TO ALL SURFACES UNLESS NOTED OTHERWISE.
4. CONSTRUCTION JOINTS NOT INDICATED SHALL BE LOCATED AND FORMED TO THE APPROVAL OF COUNCIL'S ENGINEER.
5. A BOND BREAKING MATERIAL IS TO BE PLACED BETWEEN CONTACTING SURFACES AT CONTRACTION JOINTS.
6. NO PENETRATIONS, RECESSES OR CHASES OTHER THAN THOSE INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS UNLESS APPROVED IN WRITING BY COUNCIL'S ENGINEER.
7. UNLESS SHOWN OTHERWISE ALL EXTERNAL AND RE-ENTRANT CORNERS SHALL BE CHAMFERED 25mm.
8. SLABS TO BE CURED AND KEPT MOIST FOR 7 DAYS MINIMUM.
9. NO CONCRETE TO BE POURED WHEN SITE TEMPERATURE EXCEEDS 35° OR FALLS BELOW 5°C.

REINFORCEMENT TYPE	GRADE	SAA CODE	SYMBOL
WELDING GRADE	410	AS 4671	Y
PLAIN ROUND	230	AS 1302	R
FABRIC	450	AS 4671	SL, RL, L

REINFORCEMENT

1. REINFORCEMENT STEEL QUALITY:
2. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.
3. ALL REINFORCEMENT SHALL BE SECURELY TIED AND POSITIONED ACCURATELY BY MEANS OF STEEL OR PLASTIC CHAIRS OR OTHER APPROVED ACCESSORIES. MASONRY BLOCKS WILL NOT BE PERMITTED.
4. PROVIDE COUNCIL'S ENGINEER WITH 24 HOURS NOTICE OF REINFORCEMENT BEING READY FOR INSPECTION. NO CONCRETE IS TO BE POURED WITHOUT APPROVAL OF COUNCIL'S ENGINEER.
5. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITION INDICATED, THE APPROVAL OF COUNCIL'S ENGINEER SHALL BE OBTAINED FOR ANY OTHER SPLICE.
6. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS INDICATED ON THE STRUCTURAL DRAWINGS OR WITH THE WRITTEN APPROVAL OF COUNCIL'S ENGINEER.
7. MINIMUM LAP OF REINFORCEMENT SHALL BE AS SHOWN IN TABLE 13.1.2.2(A) OF AS3600 UNLESS SHOWN OTHERWISE. LAPS FOR MESH SHALL BE 1.5 TIMES THE NORMAL WIRE SPACING OR APPROVED EQUIVALENT.
8. MINIMUM COG LENGTH OF REINFORCEMENT SHALL BE 300mm UNLESS NOTED OTHERWISE.
9. REINFORCEMENT MUST NOT BE CONTINUOUS THROUGH CONTRACTION JOINTS.
10. MINIMUM RADIUS FOR BENDS IN REINFORCEMENT TO BE 4 BAR DIAMETERS (D) UNLESS NOTED OTHERWISE.

STORMWATER NOTES

1. STORMWATER DESIGN CRITERIA:

AVERAGE RECCURRANCE INTERVAL:

1:100 MAJOR SYSTEM
1:20 MINOR SYSTEM

2. PIPES TO BE INSTALLED TO TYPE HS1 SUPPORT IN ACCORDANCE WITH AS 3725 (1989) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
3. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2 (1998).
4. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
5. GRATES AND COVERS SHALL CONFORM TO AS 3996.
6. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
7. DRAINAGE LINES UNDER ROADS SHALL BE BACKFILLED WITH NON-COHESIVE SAND AND HAVE 3m OF SUBSOIL DRAIN WRAPPED IN APPROVED FILTER SOCK, DISCHARGING INTO DOWN STREAM PITS.
8. ALL STORMWATER PIPES WITHIN ROADS TO BE REINFORCED CONCRETE PIPE (RCP) CLASS 2.
9. ALL DRAINAGE LINES SHALL BE LAID AT A MINIMUM GRADE OF 1% UNLESS OTHERWISE INDICATED.
10. DRAINAGE LINES ON PLANS ARE DIAGRAMMATIC ONLY AND PIPE CENTRELINES SHALL ENTER AND EXIT PITS AT THE CENTRE OF THE RESPECTIVE PIT WALLS.
11. PITS ARE DIAGRAMMATIC ONLY. CHAMBER SIZE SHALL BE CONSTRUCTED TO SUIT SIZE OF PIPE SHOWN AND IN ACCORDANCE WITH AUSTRALIAN STANDARDS.
12. SUBSOIL DRAINAGE TO BE PLACED ALONG HIGH SIDE OF PROPOSED EDGE OF CARPARK AND PROPOSED ROADS.
13. MINIMUM 600mm COVER MUST BE ACHIEVED OVER PIPES UNDER PROPOSED ROADS.
14. ALL PITS SHALL BE MINIMUM CLASS C.
15. PIPE SIZES ARE PRELIMINARY ONLY AND WILL BE CONFIRMED AT DETAILED DESIGN. PLAN IS PROVIDED FOR THE PURPOSE OF COSTING AND IS SUBJECT TO CONFIRMATION.



CIVIL DRAWING INDEX

PLAN NO.	PLAN NAME
9297SW01	COVER SHEET AND GENERAL NOTES
9297SW02	STORMWATER DRAINAGE CONCEPT PLAN (WEST)
9297SW03	STORMWATER DRAINAGE CONCEPT PLAN - DETAILS
9297SW04	STORMWATER DRAINAGE CONCEPT PLAN (EAST) - SHEET 1 OF 2
9297SW05	STORMWATER DRAINAGE CONCEPT PLAN (EAST) - SHEET 2 OF 2

THE DRAINAGE LAYOUT SHOWN ON THIS PLAN IS PRELIMINARY ONLY AND IS SUBJECT TO DETAILED DESIGN. PROVIDED FOR THE PURPOSES OF COSTING AND DA

C	ISSUE FOR APPROVAL	CR	CR	PM	PM	31/08/11	
B	ISSUE FOR CLIENT REVIEW	CR	CR	PM	PM	26/08/11	
A	ISSUE FOR TENDER PURPOSES ONLY	CR	CR	PM	PM	04/08/11	
	AMENDMENT	DES	DRN	CKD	APR	DATE	

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AZIMUTH: MGA
DATUM: AHD
ORIGIN:

CLIENT:



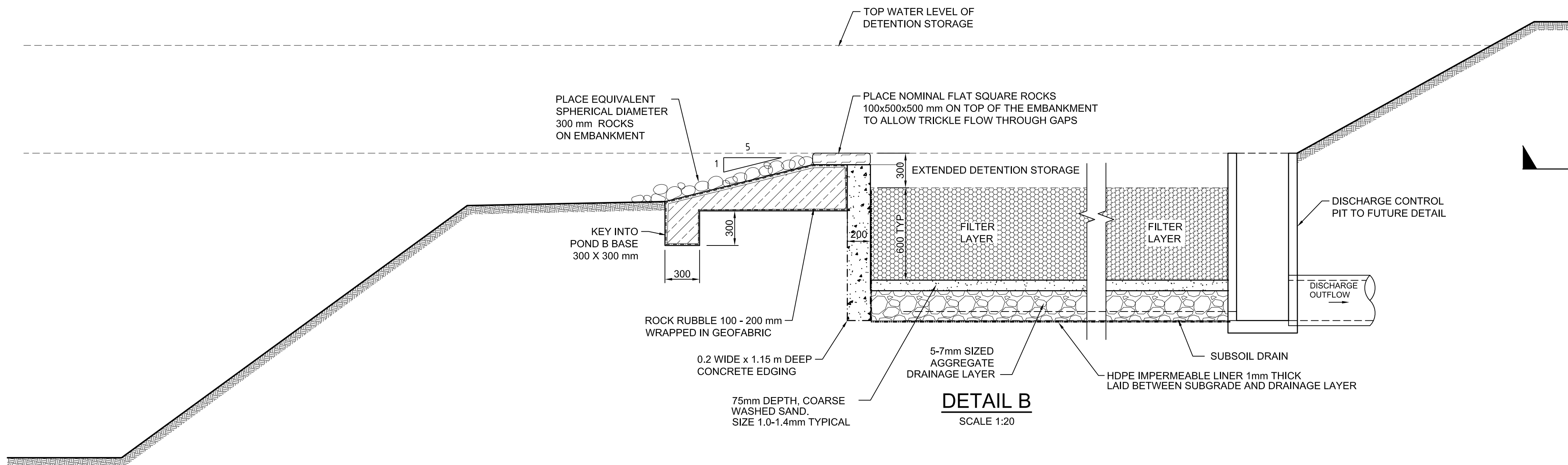
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TENDER ISSUE
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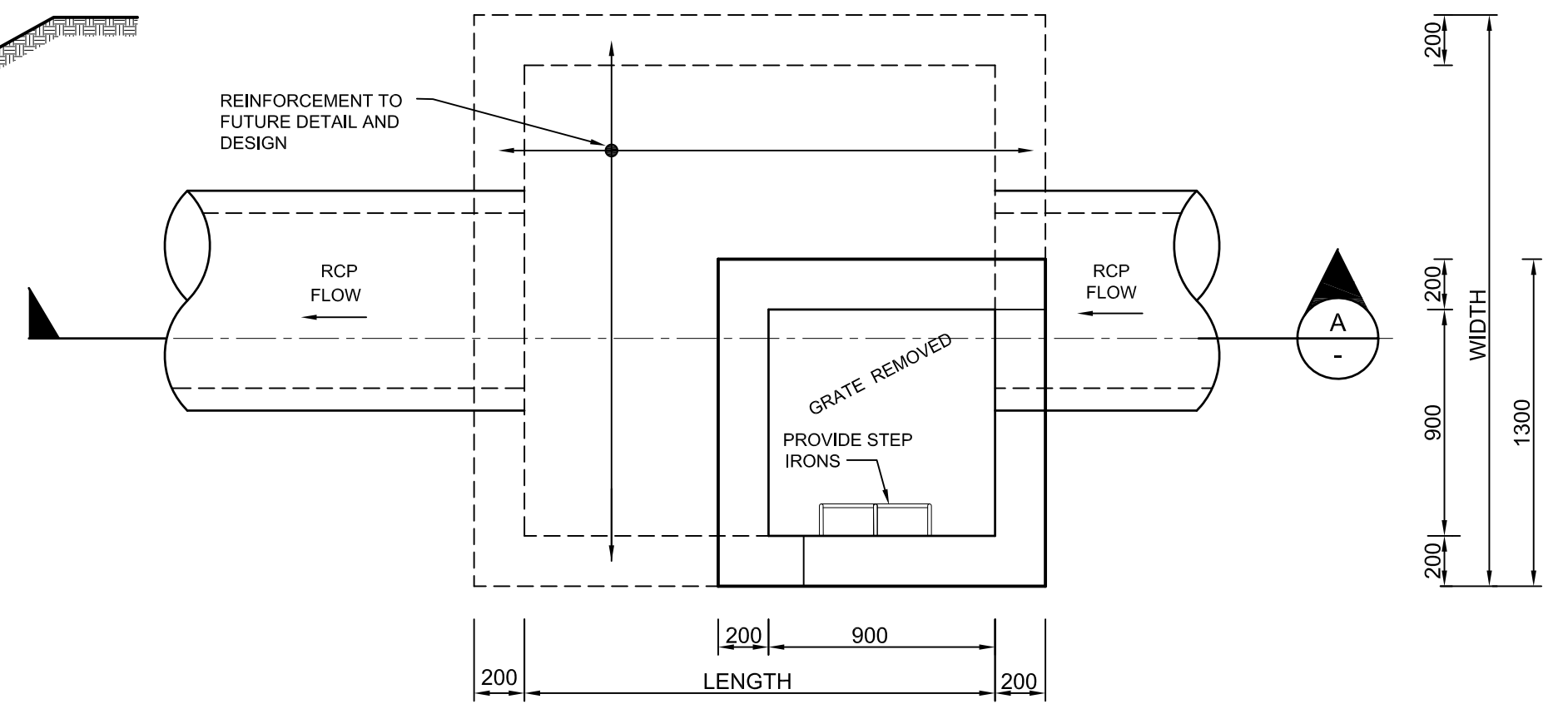
EASTERN CREEK RACEWAY, SYDNEY
SOUTHERN EXTENSION

COVERSHEET AND GENERAL NOTES

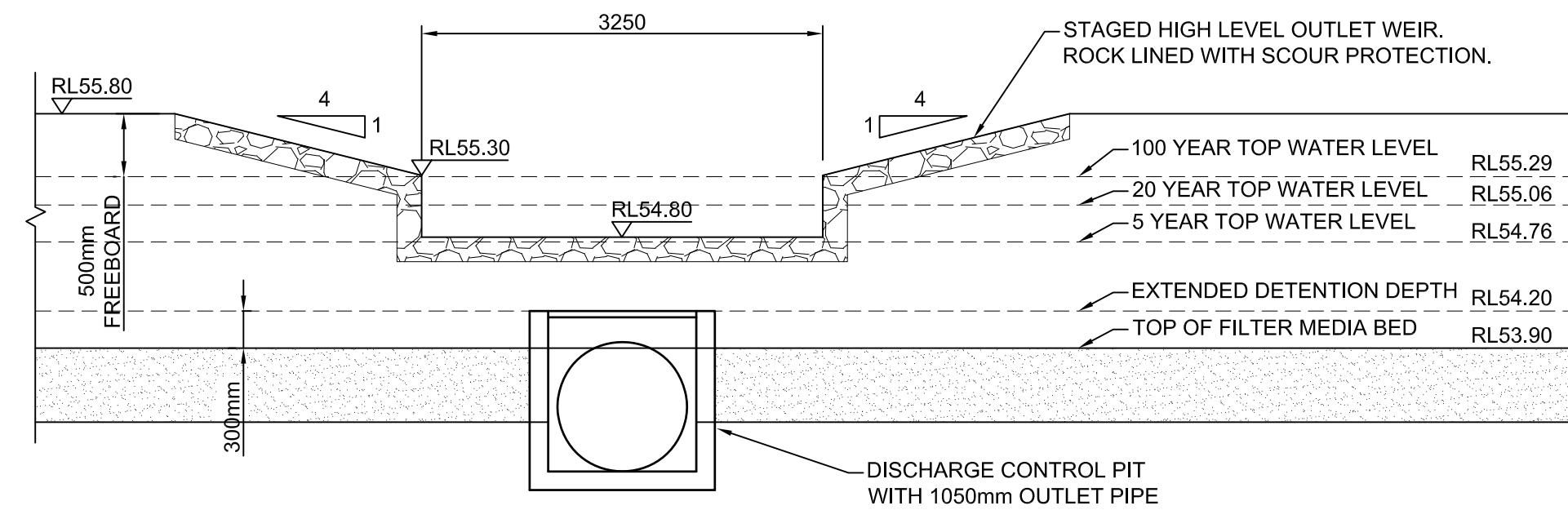
PLAN No:	9297/SW01	C
FILE No:	9297SW01	
SHEET SIZE:	A1 ORIGINAL	



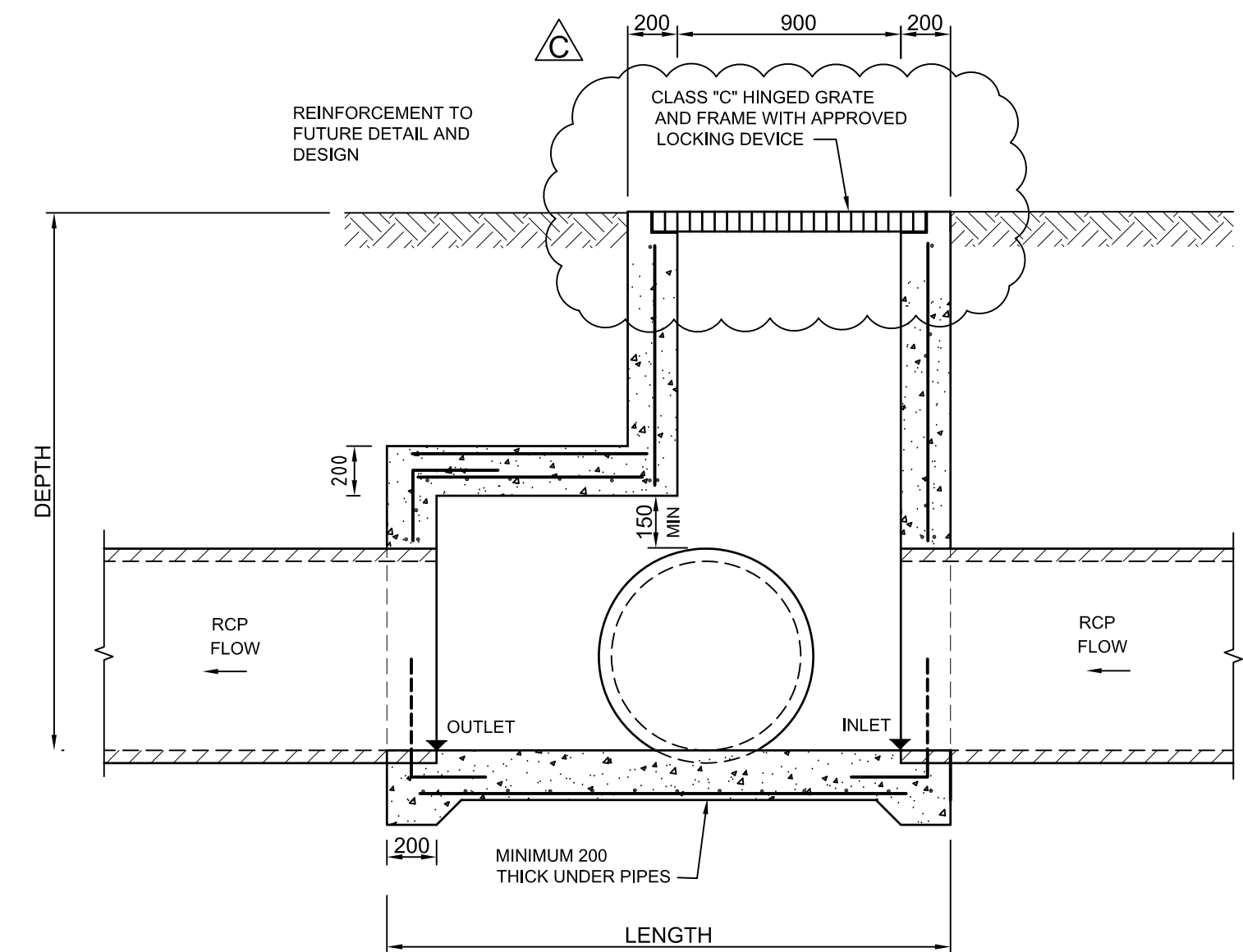
DETAIL B
SCALE 1:20



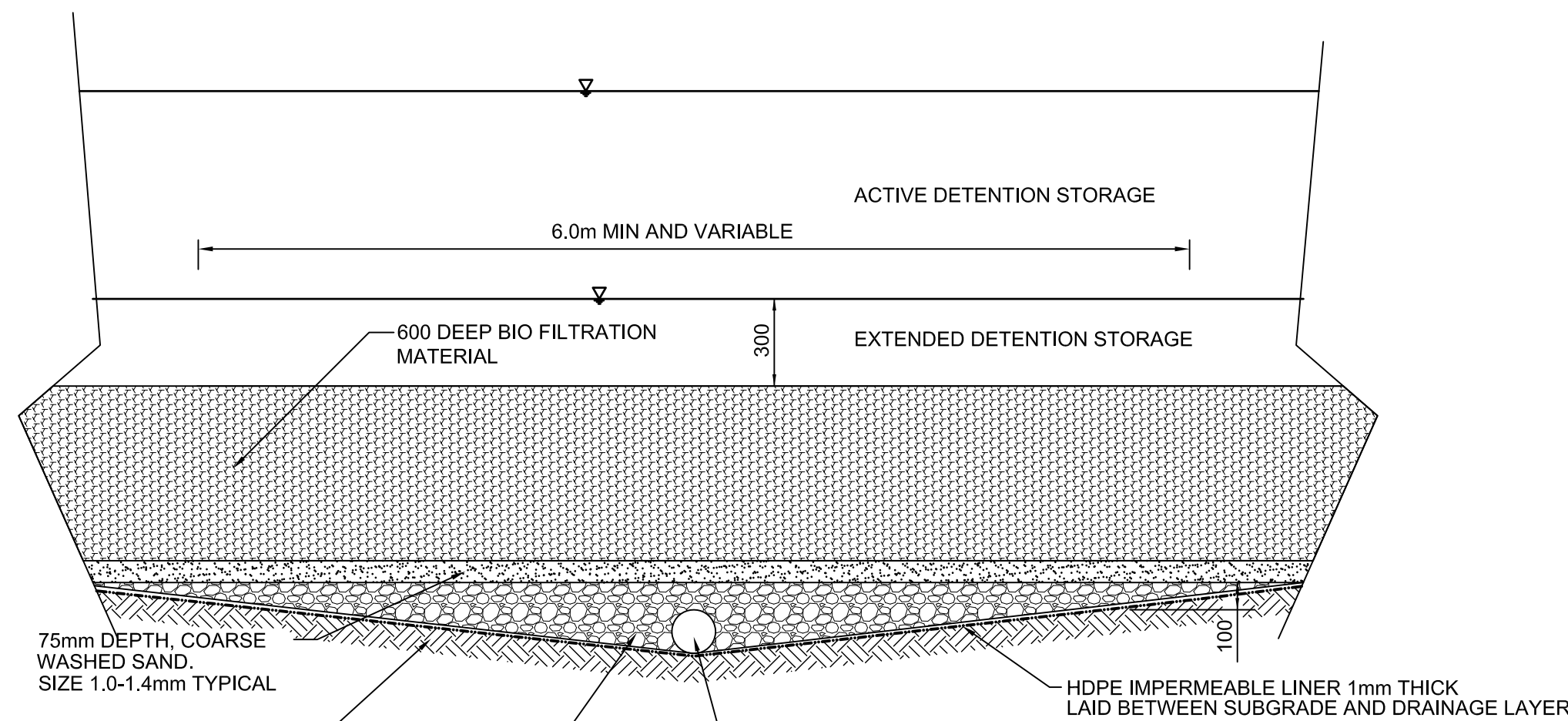
PLAN TYPICAL GRATED SURFACE INLET PIT (PIPES >450Ø)
SCALE 1:20



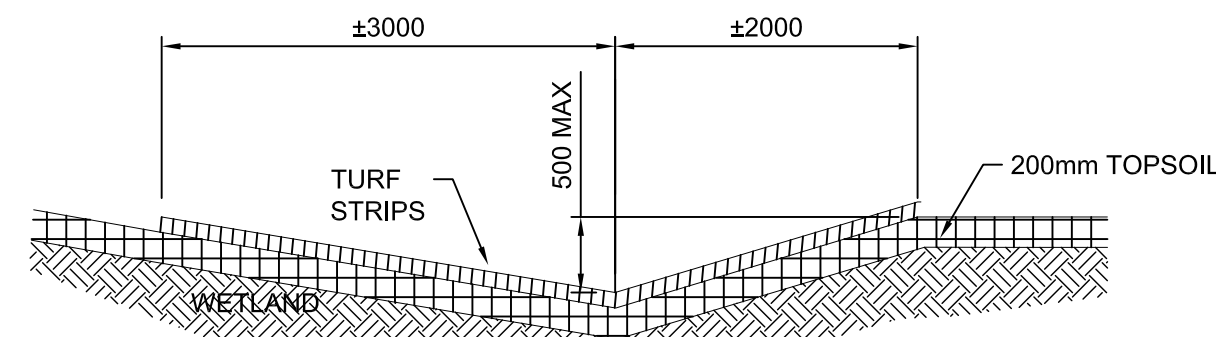
DETENTION BASIN OUTLET ARRANGEMENT TYPICAL SECTION
SCALE 1:50



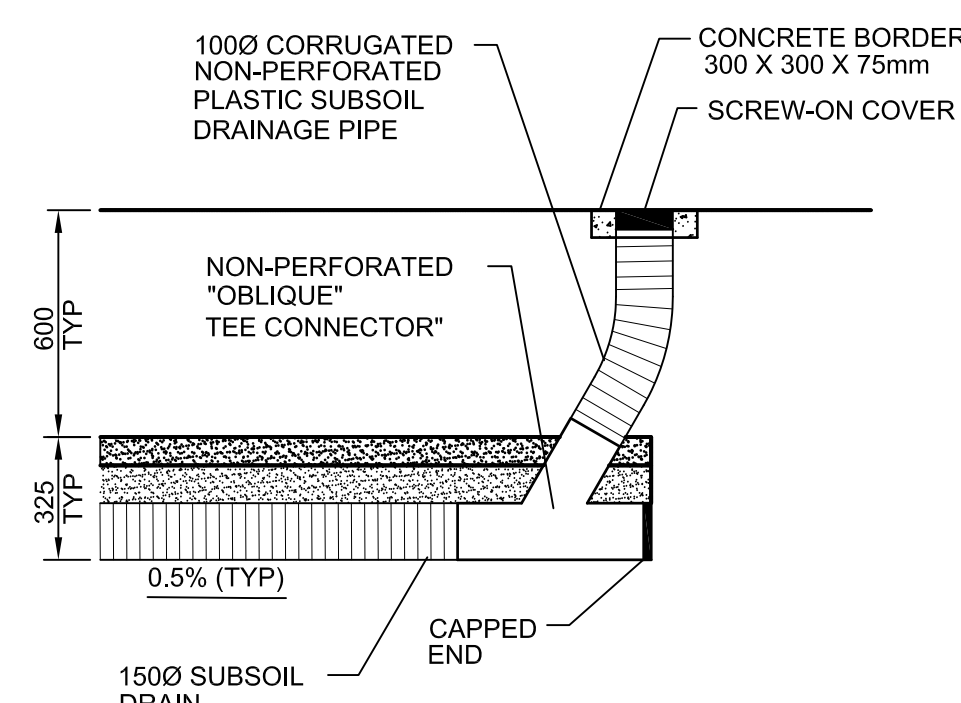
SECTION A
SCALE H 1:20 V 1:20



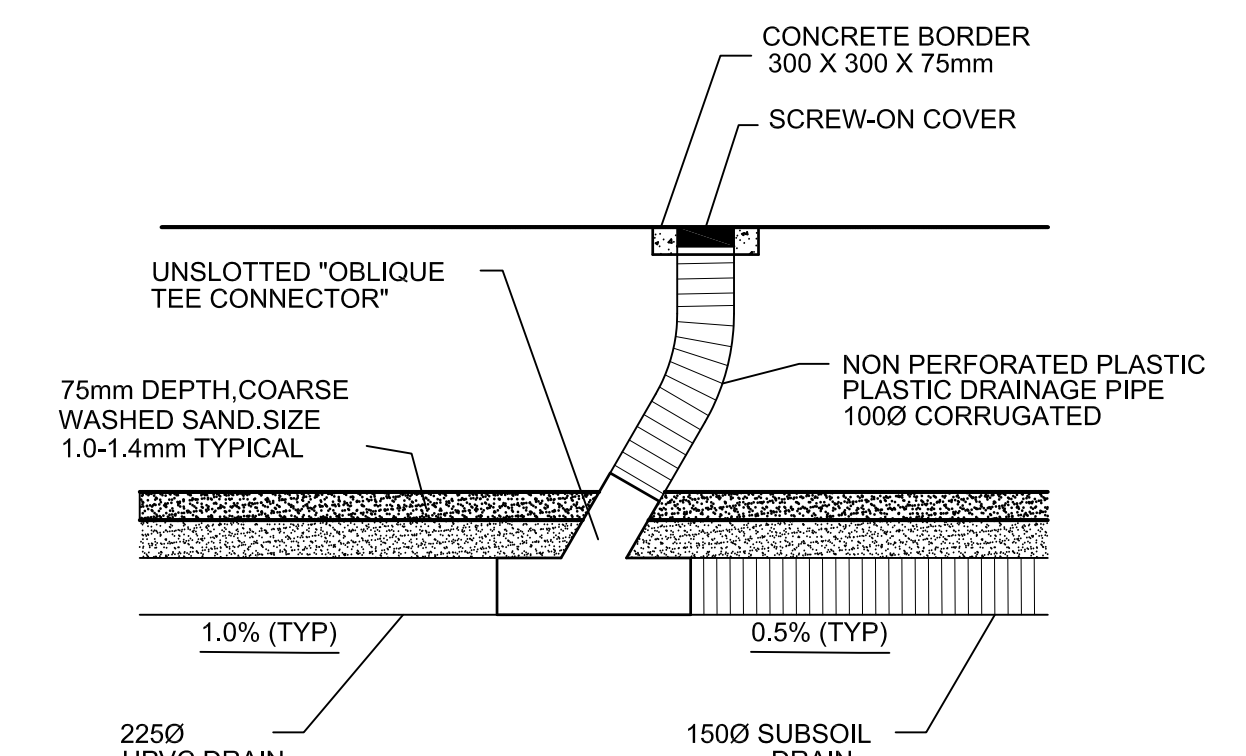
RAINGARDEN MEDIA BED DETAIL
SCALE 1:20



TYPICAL CATCH DRAIN DETAIL
SCALE 1:50



RODDING EYE/SUBSOIL DETAILS
SCALE 1:20



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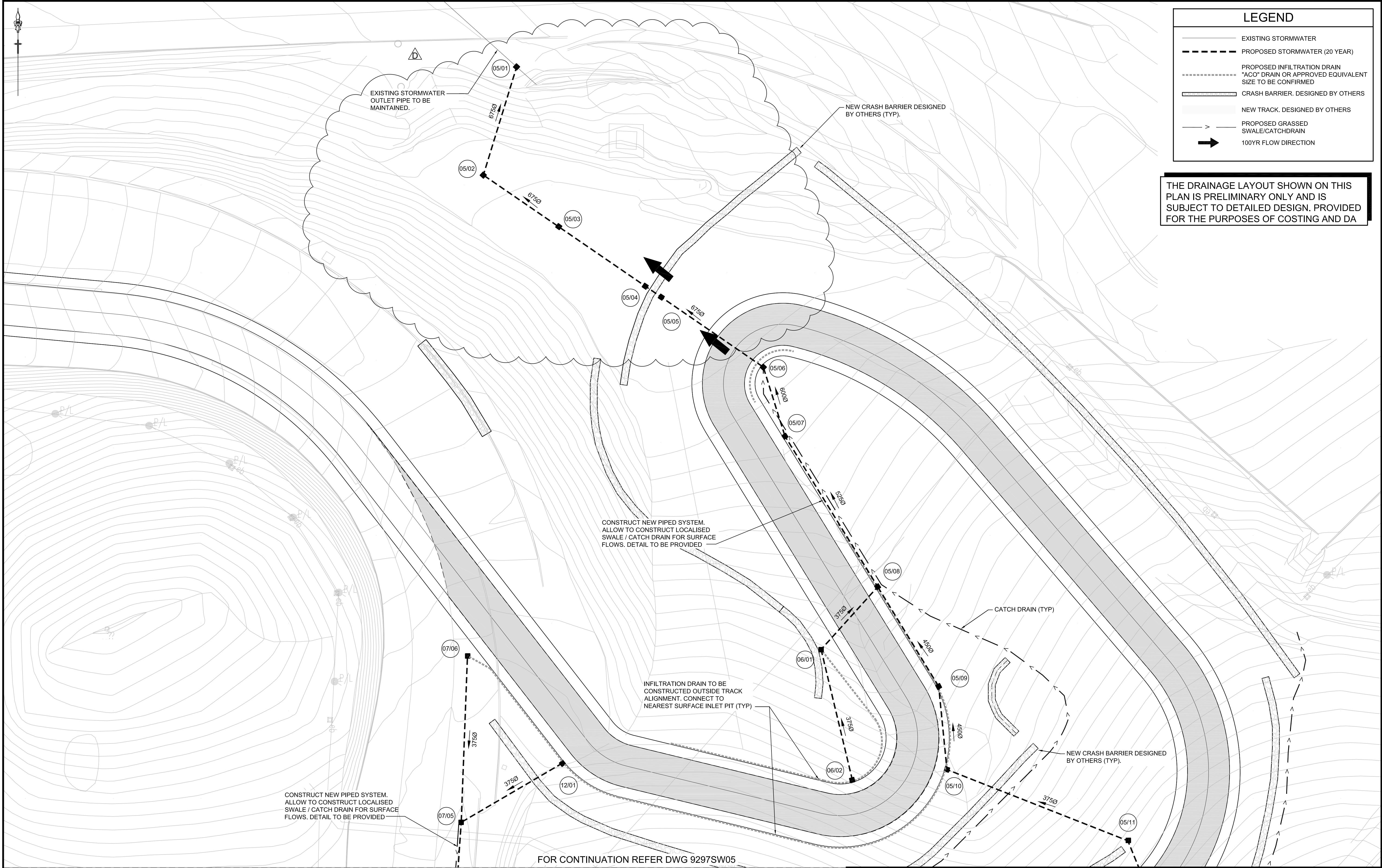
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EASTERN CREEK RACEWAY, SYDNEY SOUTHERN EXTENSION

STORMWATER DRAINAGE CONCEPT PLAN - DETAILS

PLAN No: 9297/SW03 **C**
FILE No: 9297SW03
SHEET SIZE: A1 ORIGINAL



LEGEND

EXISTING STORMWATER

PROPOSED STORMWATER (20 YEAR)

PROPOSED INFILTRATION DRAIN
"ACO" DRAIN OR APPROVED EQUIVALENT
SIZE TO BE CONFIRMED

CRASH BARRIER, DESIGNED BY OTHERS

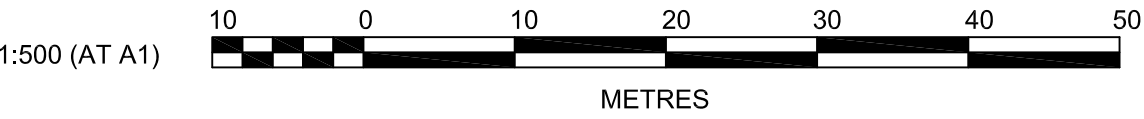
NEW TRACK, DESIGNED BY OTHERS

PROPOSED GRASSED
SWALE/CATCHDRAIN

100YR FLOW DIRECTION

THE DRAINAGE LAYOUT SHOWN ON THIS PLAN IS PRELIMINARY ONLY AND IS SUBJECT TO DETAILED DESIGN. PROVIDED FOR THE PURPOSES OF COSTING AND DA

FOR CONTINUATION REFER DWG 9297SW05



D	ISSUE FOR APPROVAL (MINOR AMENDMENT)	CR	PM	PM	PM	01/09/11
C	ISSUE FOR APPROVAL	CR	CR	PM	PM	31/08/11
B	ISSUE FOR CLIENT REVIEW	CR	CR	PM	PM	26/08/11
A	ISSUE FOR TENDER PURPOSES ONLY	CR	CR	PM	PM	08/08/11
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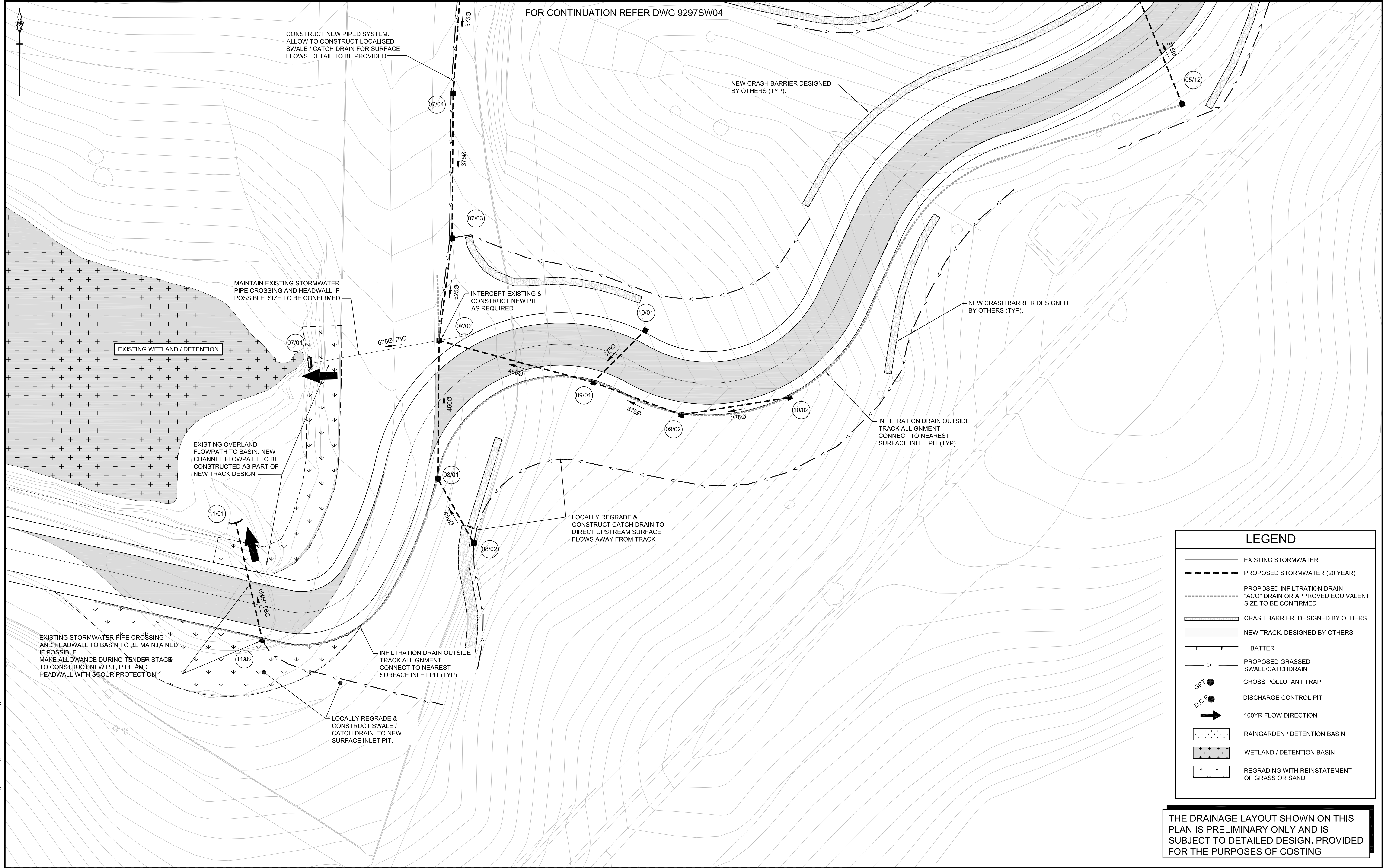
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EASTERN CREEK RACEWAY, SYDNEY
SOUTHERN EXTENSION

STORMWATER DRAINAGE CONCEPT PLAN (EAST)- SHEET 1 OF 2

PLAN No:	9297/SW04	D
FILE No:	9297SW04	
SHEET SIZE:	A1 ORIGINAL	



LEGEND

EXISTING STORMWATER

PROPOSED STORMWATER (20 YEAR)

PROPOSED INFILTRATION DRAIN
"ACO" DRAIN OR APPROVED EQUIVALENT
SIZE TO BE CONFIRMED

CRASH BARRIER, DESIGNED BY OTHERS

NEW TRACK, DESIGNED BY OTHERS

BATTER

PROPOSED GRASSED
SWALE/CATCHDRAIN

G.P.T. ●
GROSS POLLUTANT TRAP

D.C.P. ●
DISCHARGE CONTROL PIT

100YR FLOW DIRECTION

RAINGARDEN / DETENTION BASIN

WETLAND / DETENTION BASIN

REGRAVING WITH REINSTATEMENT
OF GRASS OR SAND

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1:500 (AT A1)

100

0

10

20

30

40

50

METRES

CLIENT:



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AMENDMENT

DES

DRN

CKD

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31/08/11

26/08/11

08/08/11

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EASTERN CREEK RACEWAY, SYDNEY
SOUTHERN EXTENSION

STORMWATER DRAINAGE CONCEPT PLAN (EAST)- SHEET 2 OF 2

PLAN No:
9297/SW05

FILE No: 9297SW05

SHEET SIZE: A1 ORIGINAL