STORMWATER DRAINAGE

PROPOSED DUPLEX, DWELLING HOUSE WITH GRANY FLAT

14 AVOCA STREET, YAGOONA NSW 2199

DRAWING REGISTER	
DRAWING NO.	DRAWING TITLE
V250364 - SW000	COVER SHEET
V250364 - SW001	GENERAL NOTES
V250364 - SW100	GROUND FLOOR DRAINAGE PLAN
V250364 - SW101	FIRST FLOOR DRAINAGE PLAN
V250364 - SW102	ROOF DRAINAGE PLAN
V250364 - SW110	POST-DEVELOPMENT CATCHMENT PLAN
V250364 - SW200	STORMWATER DETAILS - SHEET 1
V250364 - SW201	STORMWATER DETAILS - SHEET 2
V250364 - SW300	EROSION & SEDIMENT CONTROL PLAN
V250364 - SW310	EROSION & SEDIMENT CONTROL DETAILS

REVISION	REVISION DETAILS	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	ISSUED FOR DA	29.05.2025	D.D.	M.N.	D.S.	D.S.

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ARCHITECT

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PROJECT MANAGER

SCALE NOT TO SCALE

GRID

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LGA: CANTERBURY-BANKSTOWN COUNCIL

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V250364 - SW000	V250364	A

SITEWORKS NOTES

1. ORIGIN OF LEVELS:- REFER SURVEY NOTES
2. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL GOVERNMENT AUTHORITIES ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS.
3. PRIOR TO THE COMMENCEMENT OF THE WORKS THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO VANGUARD.
4. PRIOR TO THE COMMENCEMENT OF THE WORKS, THE CONTRACTOR IS TO VERIFY THE ALIGNMENT AND LEVELS OF ALL EXISTING SERVICES AT ALL LOCATIONS WHERE THE PROPOSED SERVICES ARE TO CROSS, CONNECT TO OR ARE LOCATED IN CLOSE PROXIMITY TO THE EXISTING SERVICES. ANY DISCREPANCIES TO BE REPORTED TO VANGUARD.
5. CONTRACTOR MUST MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.
6. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
7. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED 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% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289.5.2.1 (OR A DENSITY INDEX OF NOT LESS THAN 75).
8. PROVIDE 10mm WIDE ISOLATION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
9. ASPHALTIC CONCRETE SHALL CONFORM TO THE CURRENT TFNSW SPECIFICATION TS 03283.1 (R116) HEAVY DUTY DENSE GRADED ASPHALT.
10. ALL BASECOURSE AND SUB-BASE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH THE CURRENT TFNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289 5.2.1.
    FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m^2 OF SUB-BASE COURSE MATERIAL PLACED UNLESS OTHERWISED APPROVED BY VANGUARD.
11. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL (IN NOTE 10) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH THE CURRENT TFNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF VANGUARD.
12. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THE CONTRACTOR IS TO SEEK ACCEPTANCE OF THE PRODUCT FROM VANGUARD. THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
13. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (EG. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.
14. ALL WORKS CARRIED OUT ADJACENT TO AND WITHIN SERVICE EASEMENTS ARE TO COMPLY WITH THE RELEVANT SERVICE AUTHORITIES GUIDELINES AND REQUIREMENTS.

EXISTING UNDERGROUND SERVICES NOTES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE. AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.

CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

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BEFORE YOU DIG AUSTRALIA SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE

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STORMWATER DRAINAGE NOTES

GENERAL NOTES

1. STORMWATER DESIGN CRITERIA:
   ANNUAL EXCEEDANCE PROBABILITY:
   MINOR STORM: 5% AEP
   MAJOR STORM: 1% AEP
2. PIPES LESS THAN 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
3. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN DN300.
4. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT AS 3500 3.1 AND AS/NZS 3500 3.2.
5. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
6. ALL DRAINAGE LINES TO PROVIDE A 3.0M LENGTH OF DN100 SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK, ON THE UPSTREAM SIDE OF EACH PIT. ALLOW FOR SECONDARY SUBSOIL FOR PIPES FOR PIPE GRATER THAN DN825.
7. SUBSOIL DRAIN WRAPPED IN APPROVED FILTER SOCK SHALL BE PROVIDED BENEATH ALL KERBLINES WHERE NO DRAINAGE LINES ARE SHOWN ON THE DRAWINGS AND SHALL DISCHARGE INTO DOWNSTREAM PITS.
8. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPES ARE TO BE USED.
9. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL FROM VANGUARD.
10. GRATES AND COVERS SHALL CONFORM TO THE CURRENT AS 3996. CLASS D COVER (MINIMUM) SHALL BE PROVIDED IN TRAFFICKED PAVEMENTS WITH CLASS B (MINIMUM) BEING PROVIDED IN NON-TRAFFICKED AREAS.
11. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFETY PROCEDURES TO PREVENT THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
12. ALL PITS AND PIPES TO BE FOUNDED ON SUITABLE MATERIAL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT ONCE EXCAVATED. A CONCRETE BLINDING LAYER (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED) MAY BE PROVIDED. CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION.
13. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.
14. ALL STORMWATER PITS ARE TO BE CAST IN-SITU IN ACCORDANCE WITH THE STORMWATER DETAILS AND SPECIFICATIONS.
15. ALL PITS MUST BE BENCHED AND STREAMLINED TO DIRECT WATER FROM THE INLET PIPE TO THE OUTLET PIPE.
16. PITS DEEPER THAN 600mm MUST BE FITTED WITH DOUBLE STEP-IRONS IN ACCORDANCE WITH THE CURRENT AS1657. PLASTIC ENCAPSULATED MAY BE USED. STEP-IRONS TO BE PROVIDED ON A SINGLE FACE WHERE POSSIBLE. SHOULD STEP-IRONS REQUIRE TO CHANGE FACE THEN 3 OVERLAPPING STEP IRONS ARE TO BE LOCATED ON EACH FACE.
17. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN 1 TEST PER 2 LAYERS PER 40 LINEAR METERS.

RIGID & SEMI-RIGID PIPE NOTES

18. PIPES 300 DIA. AND LARGER TO BE STEEL REINFORCED CONCRETE CLASS '3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O. ALL ROAD CROSSINGS TO BE CLASS '4' U.N.O. EQUIVALENT STRENGTH FIBRE REINFORCED CONCRETE PIPES MAY BE USED SUBJECT TO APPROVAL BY VANGUARD OR THE LOCAL GOVERNMENT AUTHORITY.
19. REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT AS/NZS 4058.
    FIBRE REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT AS 4139.
    PIPES TO BE INSTALLED WITH TYPE HS3 (ROAD) AND HS2 (LOTS) SUPPORT IN ACCORDANCE WITH THE CURRENT AS/NZS 3725. N ALL CASES BACKFILL EMBEDMENT ZONE WITH SELECT FILL (MINIMUM CBR 15%) 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 THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).

FLEXIBLE PIPE NOTES

20. FLEXIBLE PIPES TO COMPLY WITH THE CURRENT AS/NZS 2566.1.
    PIPES TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT AS/NZS 2566.2. IN ALL CASES BACKFILL EMBEDMENT ZONE WITH GRAVEL OR 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 THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)

PRECAST CONCRETE PIT NOTES

21. PRECAST PIT MAY BE USED WITH THE APPROVAL OF VANGUARD THE SUPERINTENDENT AND THE LOCAL GOVERNMENT AUTHORITY AND SHALL BE INSTALLED TO THE MANUFACTURERS RECOMENDATIONS.
22. ALL PRE-CAST PITS ARE TO BE STRUCTURALLY CERTIFIED TO MEET RELEVANT REQUIREMENTS OF THE CURRENT AS3600 AND AS3996 (2019).
23. PRE-CAST STORMWATER PITS ARE TO BE APPROVED FOR TFNSW CONSTRUCTION (R11) AND ARE TO ARE TO BE DESIGNED AND CUSTOM MADE WITH OPENINGS UP TO A MAXIMUM +50mm OD OF THE STORMWATER PIPES. PITS ARE ALSO TO INCLUDE PENETRATIONS FOR SUBSOIL CONNECTIONS AND DOUBLE STEP-IRONS INSTALLED FOR PITS >0.6m DEEP. DEMOLITION SAWS MAY BE USED PROVIDING A NEAT FULL DEPTH CUT IS APPLIED AND ANY ADDITIONAL PENETRATIONS REQUIRED ARE TO BE CORE DRILLED.
24. SHOP DRAWINGS ARE TO BE PROVIDED FOR REVIEW AND ACCEPTANCE. IT SHOULD BE NOTED THAT THE CONTRACTOR IS TO ENSURE THAT THE STRUCTURAL COMPONENTS OF THE PITS ARE NOT COMPROMISED AND ONLY THE PIPE KNOCKOUTS ARE TO BE REMOVED FOR THE PIPE PENETRATIONS.

STORMWATER DRAINAGE NOTES (CONTINUED)

1. ALL PRECAST PITS TO BE FOUNDED ON CONCRETE BLINDING LAYER (100mm ON AN EARTH FOUNDATION OR 150mm ON A ROCK FORMATION) WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED). CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION.
2. ALL PRE-CAST PIT PENETRATIONS SHALL BE CUT SO THAT IT IS FLUSH WITH THE INTERNAL WALL.
3. ALL PIPE JOINTING, SPARGING, RENDERING, FILLING OF GAPS TO BE FILLED WITH A HIGH STRENGTH NON-SHRINK GROUT WITH A MINIMUM 40MPa COMPRESSIVE STRENGTH AT 28 DAYS. (LANKO DURABED 702 OR SIMILAR).
4. SINGLE UNITS PREFERRED BUT IF REQUIRED MINIMUM RISER DEPTH 600mm PIT INSTALLATION AND JOINTING BETWEEN UNITS SHALL BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. ANY DAMAGE TO THE STRUCTURAL INTEGRITY OF THE PRE-CAST PIT WILL BE REPAIRED AND STRUCTURALLY CERTIFIED AT THE CONTRACTORS EXPENCE TO THE SATISFACTION OF THE VANGUARD, SUPERINTENDENT / LOCAL GOVERNMENT AUTHORITY.

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. VANGUARD CONSULTING ENGINEERS DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT VANGUARD CONSULTING ENGINEERS.

AS3500.3
MINIMUM INTERNAL DIMENSIONS FOR STORMWATER AND INLET PITS

DEPTH TO INVERT OF OUTLET		MINIMUM INTERNAL DIMENSIONS mm		
		RECTANGULAR		CIRCULAR
		WIDTH	LENGTH	DIAMETER
	≤ 600	450	450	600
> 600	≤ 900	600	600	900
> 900	≤ 1200	600	900	1000
> 1200		900	900	1000

AS3500.3
MINIMUM GRADIENT OF SITE STORMWATER DRAINS

NOMINAL SIZE	MINIMUM GRADIENT		NOMINAL SIZE	MINIMUM GRADIENT	
DN	AU	NZ	DN	AU	NZ
90	1:100	1:90	225	1:200	1:350
100	1:100	1:120	300	1:250	1:350
150	1:100	1:200	375	1:300	1:350

AS3500.3
TABLE 7.1: MINIMUM PIPE COVER
(FROM FINISHED SURFACE TO TOP OF PIPE)

LOCATION	CAST IRON, DUCTILE IRON, GALVANIZED STEEL	OTHER AUTHORIZED(*) PRODUCTS
	MINIMUM COVER (millimeters)	
1 NOT SUBJECT TO VEHICULAR LOADING		
(A) WITHOUT PAVEMENT -		
(i) FOR SINGLE DWELLINGS	NIL	100
(ii) FOR OTHER THAN ITEM (i)	NIL	300
(B) WITH PAVEMENT OF BRICK OR UNREINFORCED CONCRETE	NIL (†)	50 (†)
2 SUBJECT TO VEHICULAR LOADING		
(A) OTHER THAN ROADS -		
(i) WITHOUT PAVEMENT	300	450
(ii) WITH PAVEMENT OF -		
(A) REINFORCED CONCRETE FOR HEAVY VEHICULAR LOADING	NIL (†‡)	100 (†‡)
(B) BRICK OR UNREINFORCED CONCRETE FOR LIGHT VEHICULAR LOADING	NIL (†‡)	75 (†‡)
(B) ROADS -		
(i) SEALED	300	500 (†‡)
(ii) UNSEALED	300	500 (†‡)
3 SUBJECT TO CONSTRUCTION EQUIPMENT LOADING OR IN EMBANKMENT CONDITIONS	300	500 (†‡)

(*) INCLUDE OVERLAY ABOVE THE TOP OF THE PIPE OF NOT LESS THAN 50mm THICK.
(†) BELOW THE UNDERSIDE OF THE PAVEMENT.
(‡) SUBJECT TO COMPLIANCE WITH AS1762, AS2033, AS/NZS 2566.1, AS3725 OR AS4060.

LEGEND

DP ●	DOWNPIPE
SW >	STORMWATER LINE
RW >	ROOF WATER LINE
SSD	SUBSOIL DRAINAGE LINE
OF >	OVERFLOW LINE
SWRM SWRM	STORMWATER RISING MAIN
e	EXISTING STORMWATER LINE
SW SW	AUTHORITY STORMWATER LINE
HL HL	HIGH LEVEL STORMWATER LINE
S	AUTHORITY SEWER LINE
W	AUTHORITY WATER LINE
G G	AUTHORITY GAS LINE
E	AUTHORITY ELECTRICITY LINE
FO FO FO	AUTHORITY FIBRE OPTIC LINE
TEL	AUTHORITY COMMS LINE
OH(E)	AUTHORITY OVERHEAD ELECTRICAL LINE
/ /	FENCE LINE
	GRATED SURFACE INLET PIT
	GRATED SURFACE INLET PIT WITH OCEANGUARD BASKET
	JUNCTION PIT
	KERB INLET PIT
	GRATED TRENCH DRAIN
eTEL	EXISTING TELSTRA PIT
eHYD	EXISTING HYDRANT
eSV	EXISTING STOP VALVE
eGAS	EXISTING GAS VALVE
ePP	EXISTING POWER POLE
eBT	EXISTING BOUNDARY TRAP
eSMH	EXISTING SEWER MANHOLE
OFP	OVERLAND FLOW PATH
RWO	RAINWATER OUTLET

LEGEND

CO	CLEAR OUT POINT
DDO	DISH DRAIN OUTLET
PD	PLANTER DRAIN
	CAPPING
FF	FIRST FLUSH
RH	RAINHEAD
	DOWNPIPE DROP
	NON RETURN VALVE
	WALL PENETRATION
SP	DOWNPIPE SPREADER
	WARNING LIGHT
80.00	SPOT LEVELS
	BENCHMARK

ABBREVIATIONS:

Ø or DIA	DIAMETER
CBR	CALIFORNIA BEARING RATIO
CH	CHAINAGE
CL	CENTER LINE
CO	CLEAR OUT
DD	DISH DRAIN
DDO	DISH DRAIN OUTLET
DEJ	DOWELLED EXPANSION JOINT
DGB	DENSE GRADED BASECOURSE
DGS	DENSE GRADED SUB-BASE
DP	DOWNPIPE
e	EXISTING
FFL	FINISHED FLOOR LEVEL
GTD	GRATED TRENCH DRAIN
GSIP	GRATED SURFACE INLET PIT
IJ	ISOLATING JOINT
IK	INTEGRAL KERB
IL	INVERT LEVEL
IP	INTERSECTION POINT
KIP	KERB INLET PIT
KO	KERB ONLY
K&G	KERB & GUTTER
KR	KERB RETURN
NGL	NATURAL GROUND LEVEL
OFP	OVERLAND FLOW PATH
OSD	ON-SITE DETENTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RK	ROLL KERB & GUTTER
RL	REDUCED LEVEL
RW	RETAINING WALL
RWT	RAINWATER TANK
SJ	SAWN CONTROL JOINT
SMH	SEWER MAN HOLE
SWRM	STORMWATER RISING MAIN
TOK	TOP OF KERB
TOW	TOP OF WALL
TWL	TOP WATER LEVEL
TP	TANGENT POINT
UNO	UNLESS NOTED OTHERWISE
WPJ	WEAKENED PLANE JOINT
FF	FIRST FLUSH DEVICE
TYP	TYPICAL
BM	BENCH MARK

LEGEND:

	PROPOSED	EXISTING	FUTURE	TEMPORARY
STORMWATER PIPELINE				
STORMWATER DRAINAGEG PITS				
CONCRETE HEADWALL				
DRAINAGE LABEL	A.05	A.05	A.05	A.05
CATCH DRAIN				

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DESIGN NOTES:

THE SITE IS LOCATED IN CANTERBURY-BANKSTOWN COUNCIL.

SITE AREA = 1226.3m²

IN ACCORDANCE TO COUNCIL GUIDELINES, OSD IS NOT REQUIRED FOR SUBJECT DEVELOPMENT. THIS IS DUE TO THE DEVELOPMENT HAVING AN IMPERVIOUS AREA WHICH IS BELOW 66%.

CONTRACTOR TO INSTALL ABOVE GROUND RAINWATER TANK TO COLLECT REQUIRED ROOF AREA IN ACCORDANCE WITH BASIX CERTIFICATE.

RAINWATER TANK TO BE EQUIPPED WITH FIRST FLUSH AND MOSQUITO PROTECTION DEVICES.

ALL NEW STORMWATER PIPES TO HAVE A MINIMUM OF 100mm CONCRETE OR 300mm TOPSOIL COVER U.N.O.

ALL DOWNPIPES SHOWN ON PLAN ARE Ø100mm uPVC U.N.O.

EROSION & SEDIMENT CONTROL NOTES:

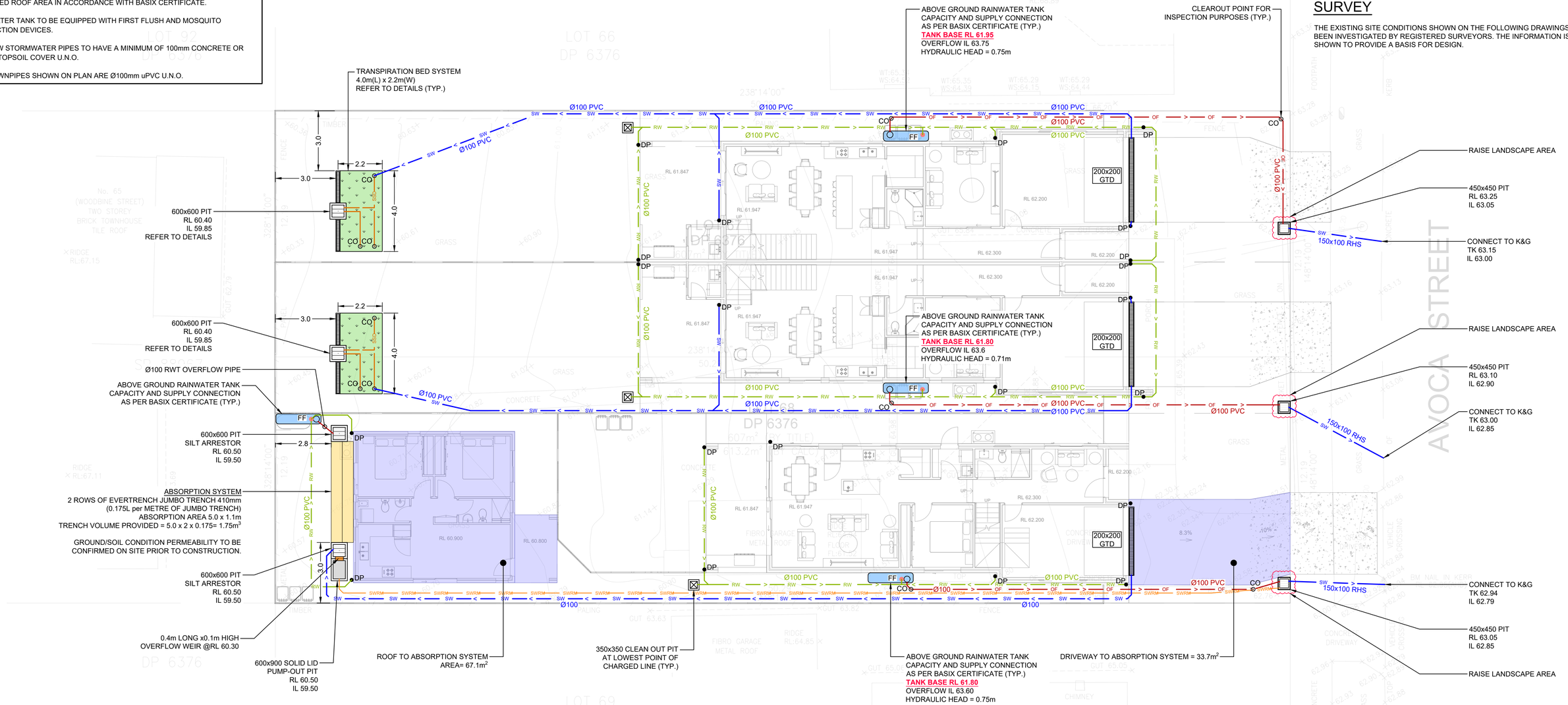
CONTRACTOR TO PROVIDE SILT FENCE/HAY BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS (TYP).

ISOLATE EXISTING STORMWATER PITS WITH HAY BALES TO FILTER ALL INCOMING FLOWS.

DO NOT STOCK PILE EXCAVATED MATERIAL ON THE ROAD WAY.

SURVEY

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN.



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1:100 / 1:200
A1 / A3

0 1 2 3 4m

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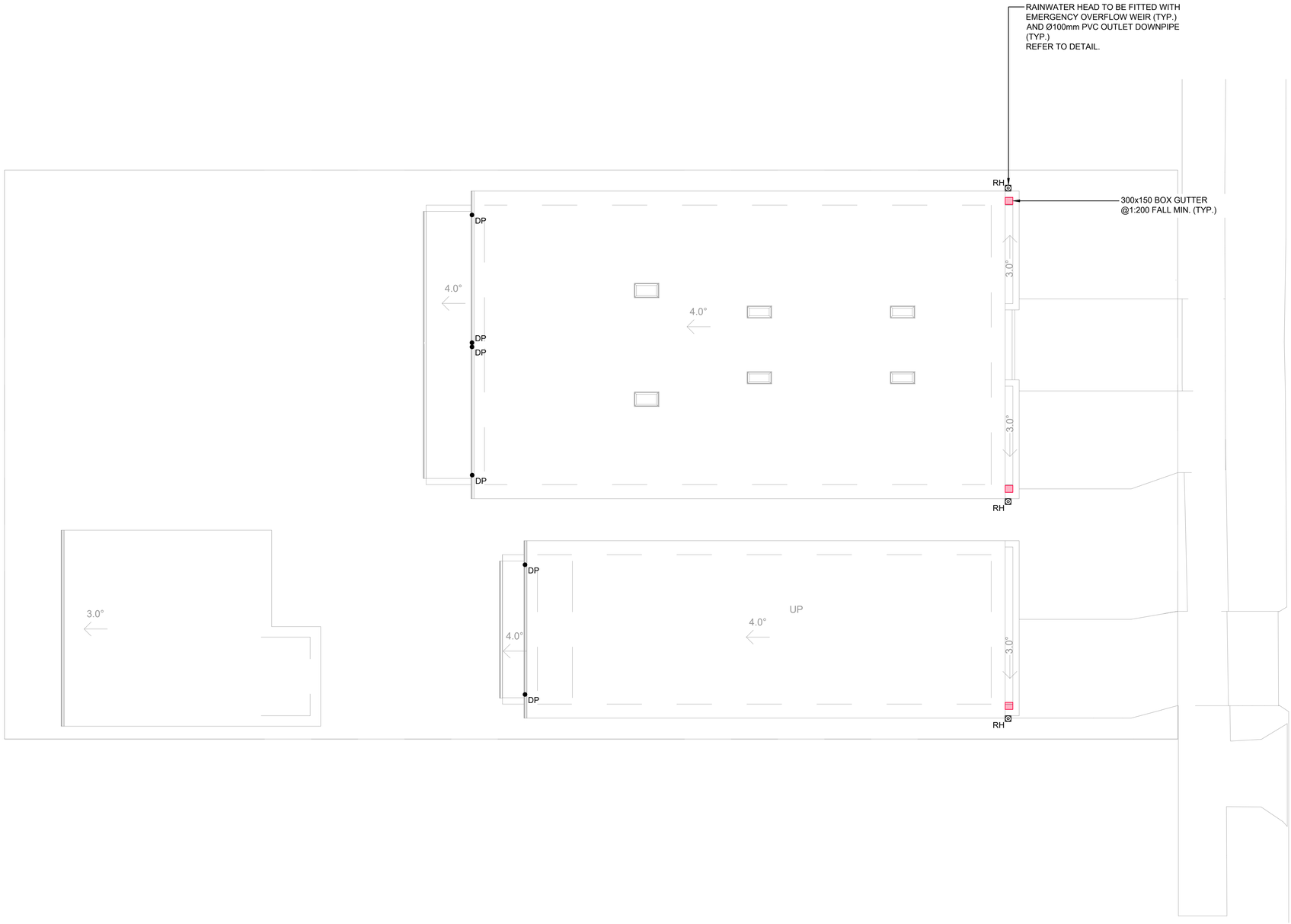

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SCALE

1:100 / 1:200
A1 / A3

0 1 2 3 4m

GRID

HEIGHT DATUM AHD

DRAWING TITLE

ROOF DRAINAGE PLAN

STATUS FOR APPROVAL

NOT TO BE USED FOR CONSTRUCTION PURPOSES

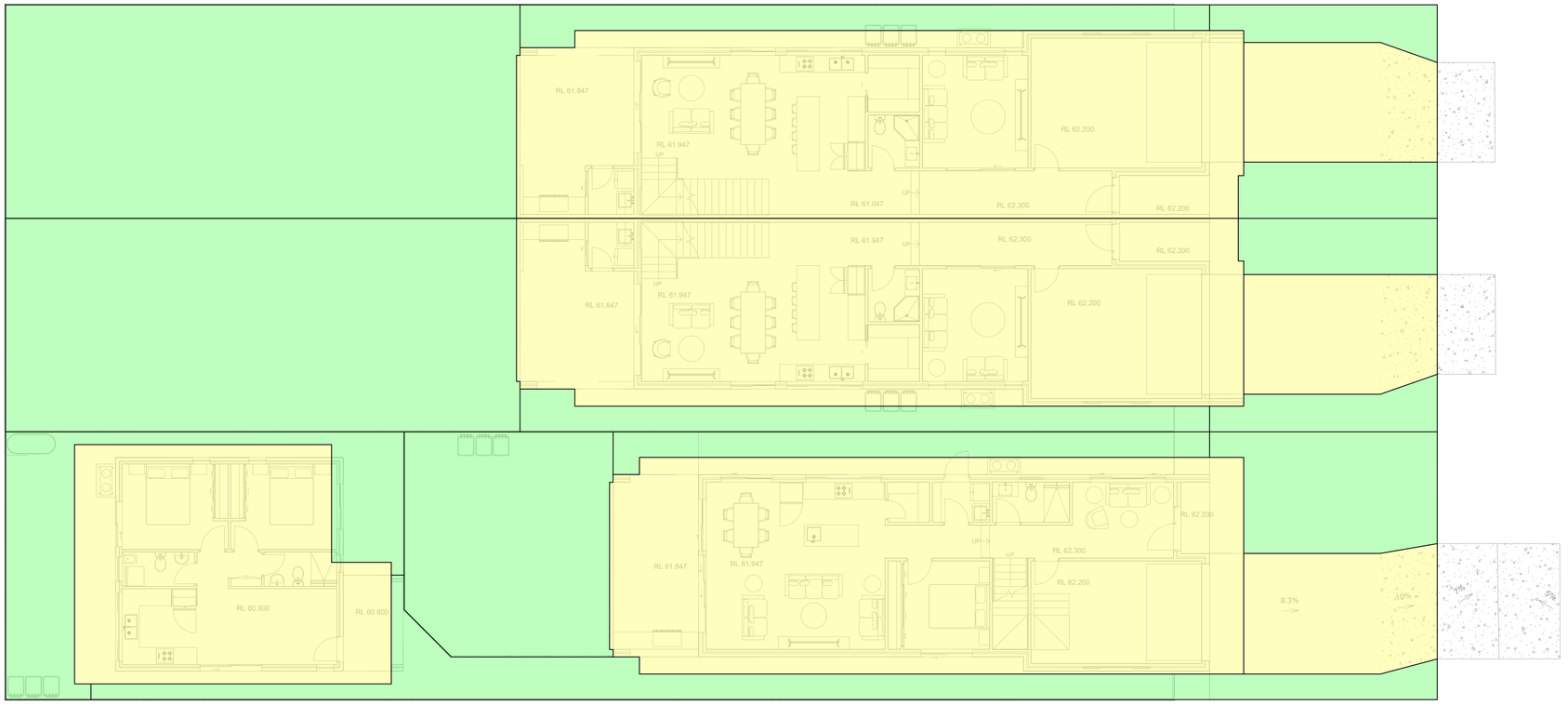
PROJECT

PROPOSED DUPLEX, DWELLING HOUSE WITH GRANY FLAT

14 AVOCA STREET, YAGOONA NSW 2199

LGA: CANTERBURY-BANKSTOWN COUNCIL

DRAWING NUMBER	REFERENCE NUMBER	REVISION
V250364 - SW102	V250364	A



POST-DEVELOPMENT CATCHMENT PLAN

SCALE 1:100

IMPERVIOUS AREA = 670.7m^2

PERVIOUS AREA = 555.6m^2

REVISION	REVISION DETAILS	DATE	DRAWN	DESIGN	CHECK	APPROVED
A	ISSUED FOR DA	29.05.2025	D.D.	M.N.	D.S.	D.S.

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ARCHITECT

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PROJECT MANAGER

SCALE

1:100 / 1:200
A1 / A3

0 1 2 3 4m

GRID

HEIGHT DATUM AHD

DRAWING TITLE

POST DEVELOPMENT CATCHMENT PLAN

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PROJECT

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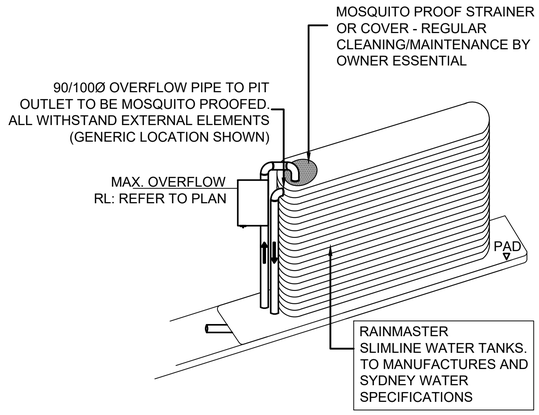
14 AVOCA STREET, YAGOONA NSW 2199

LGA: CANTERBURY-BANKSTOWN COUNCIL

DRAWING NUMBER	REFERENCE NUMBER	REVISION
V250364 - SW110	V250364	A



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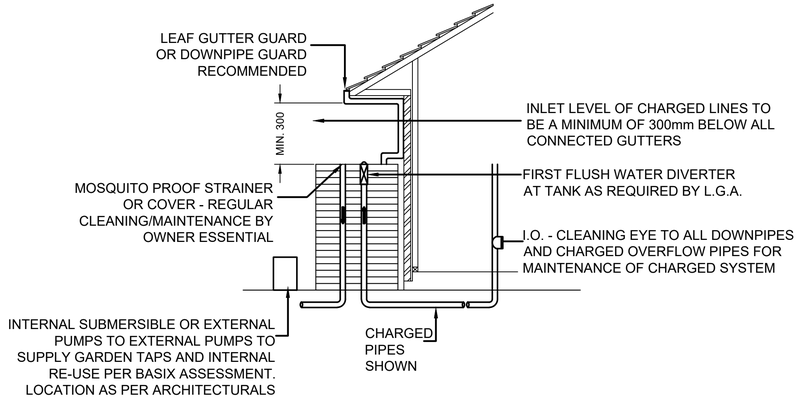

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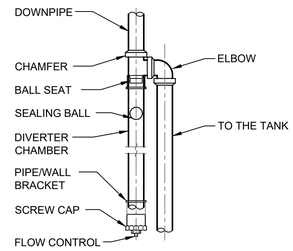


DETAIL 2
FIRST FLUSH DIVERTER
SCALE 1:20

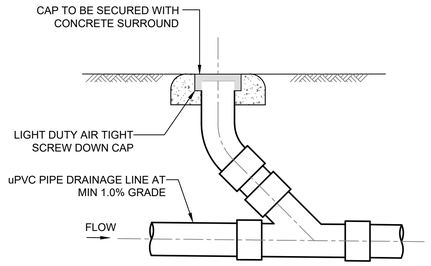
DETAIL 3
RAINWATER SIGN
SCALE 1:10

RAINWATER RECYCLING TANKS

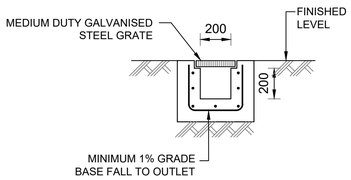
- TANK SHAPE AND DEVICES ARE DIGRAMATIC ONLY
- ANY MODIFICATIONS TO TANK VOLUME, INLET, OUTLET, OR OTHER DETAILS MUST BE APPROVED BY ENGINEER
- STORMWATER LINES FROM DOWNPIPES FROM ROOF AREAS ONLY TO RAINWATER TANKS
- TANK TO COMPLY WITH AS1546.1, AND INSTALLED IN ACCORDANCE WITH MANUFACTURES INSTALLATION
- FIRST FLUSH WATER DIVERTER TO COMPLY WITH SYDNEY WATER & COUNCIL DCP'S. AN APPROVED SWITCH SYSTEM SIMILAR TO "RAINBANK' TO BE USED VIA MAINS. PUMPS TO MANUFACTURES SPECIFICATIONS
- ALL JOINTS TO BE SOLVANT WELDED
- ALL EXPOSED PIPEWORK TO BE PAINTED TO WITHSTAND EXTERNAL ELEMENTS
- CLIENT TO BE RESPONSIBLE FOR MAINTENANCE SYSTEM OF CHARGED PIPELINES
- STRUCTURAL DETAILS FOR TANKS BASE BY QUALIFIED STRUCTURAL ENGINEER, AS REQUIRED BY MANUFACTURER

ENSURE ALL DRAINAGE WORKS ARE AWAY FROM TREE ROOTS

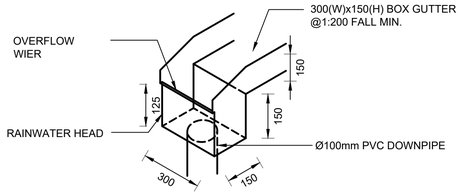
DETAIL 1
TYPICAL ABOVE GROUND RAINWATER TANK
NOT TO SCALE



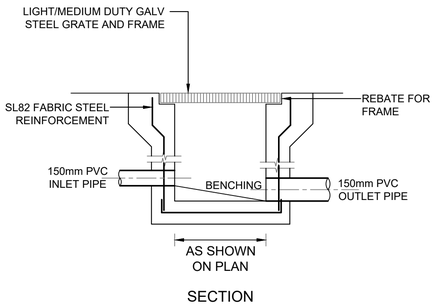
DETAIL 4
CLEANING EYE
SCALE 1:20



DETAIL 5
GRATED DRAIN
SCALE 1:20



DETAIL 6
TYPICAL RAINWATER HEAD SECTION
SCALE NTS



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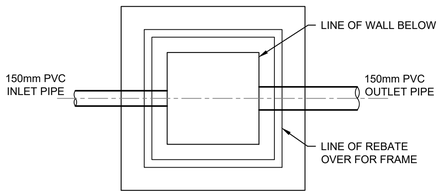
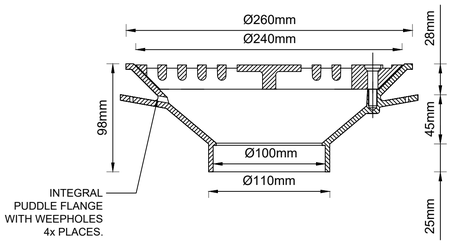
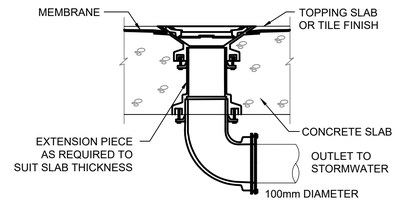


PLAN WITHOUT GRATE

DETAIL 7
STORMWATER PIT
SCALE 1:20





DETAIL 8
TYPE SPS
RAINWATER OUTLET
NOT TO SCALE

REVISION	REVISION DETAILS	DATE	DRAWN	DESIGN	CHECK	APPROVED
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SCALE: AS SHOWN

GRID

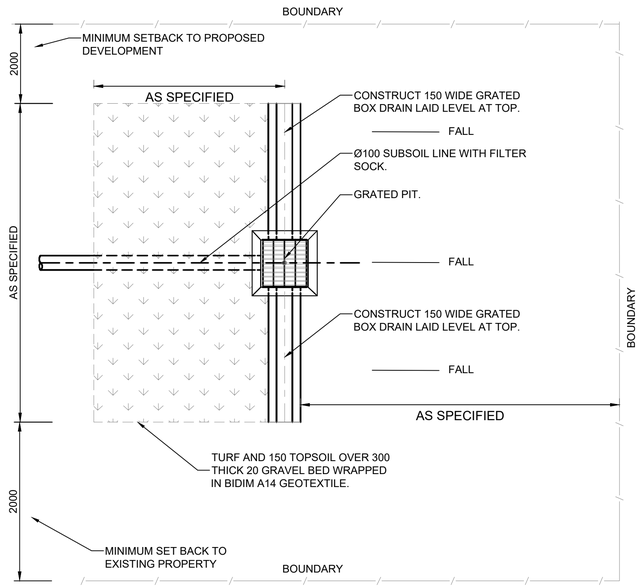
HEIGHT DATUM: AHD

DRAWING TITLE: STORMWATER DETAILS - SHEET 1

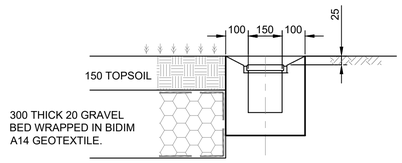
STATUS: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROJECT
PROPOSED DUPLEX, DWELLING HOUSE WITH GRANY FLAT
14 AVOCA STREET, YAGOONA NSW 2199
LGA: CANTERBURY-BANKSTOWN COUNCIL

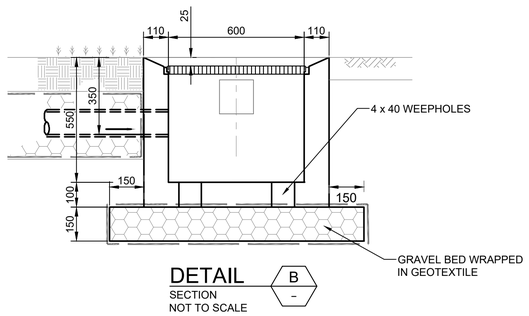
DRAWING NUMBER	REFERENCE NUMBER	REVISION
V250364 - SW200	V250364	A



DETAIL 9
TRANSPIRATION BED PLAN
NOT TO SCALE



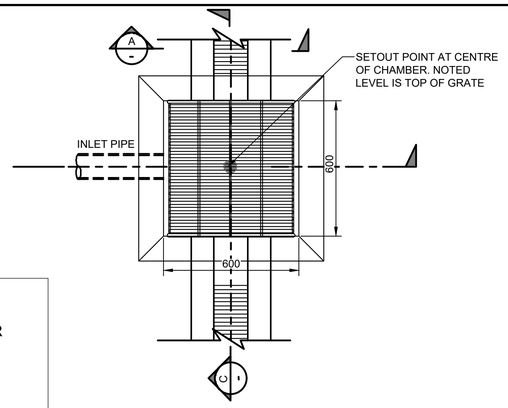
DETAIL A
BOX DRAIN SECTION
NOT TO SCALE



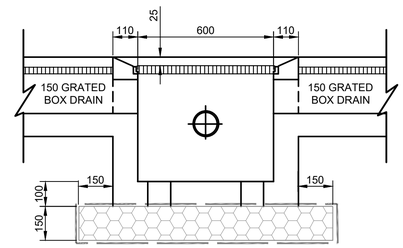
DETAIL B
SECTION
NOT TO SCALE

NOTES:

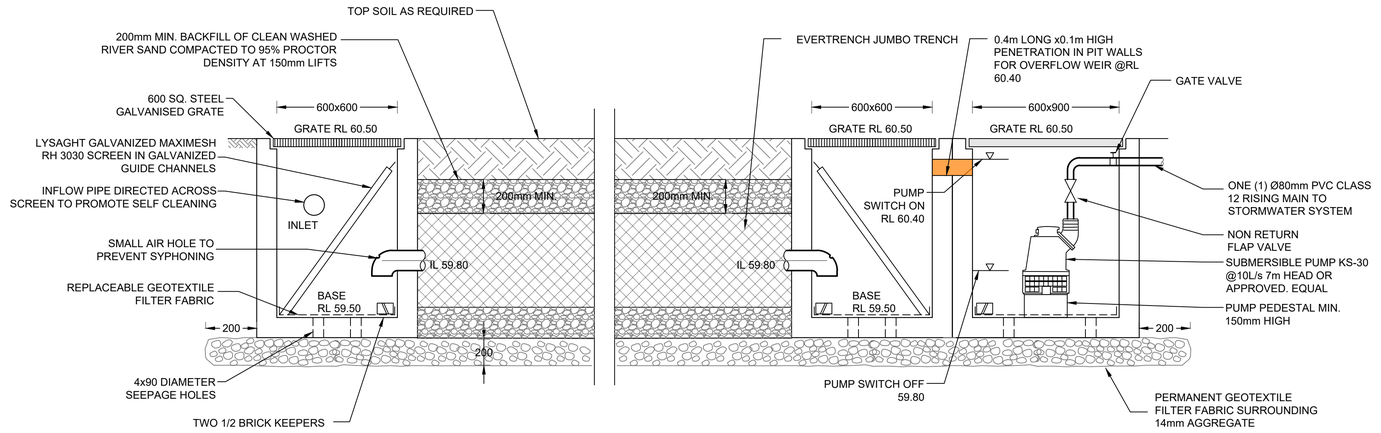
1. GEOTEXTILE IS TO BE BIDIM A14, PROPEX 4550 OR SIMILAR WITH COEFFICIENT OF PERMEABILITTY GREATER THAN 50E-4m/s.
   FOR PIPES >Ø225 USE PROPRIETARY UNIT.
2. ALL DIMENSIONS ARE IN MILLIMETRES.



GRATED PIT PLAN



DETAIL C
SECTION
NOT TO SCALE



DETAIL 10
ABSORPTION SYSTEM
NOT TO SCALE

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SCALE AS SHOWN

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HEIGHT DATUM AHD

DRAWING TITLE
STORMWATER DETAILS - SHEET 2

STATUS FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROJECT
PROPOSED DUPLEX, DWELLING HOUSE WITH GRANY FLAT
14 AVOCA STREET, YAGOONA NSW 2199
LGA: CANTERBURY-BANKSTOWN COUNCIL

DRAWING NUMBER	REFERENCE NUMBER	REVISION
V250364 - SW201	V250364	A

LEGEND

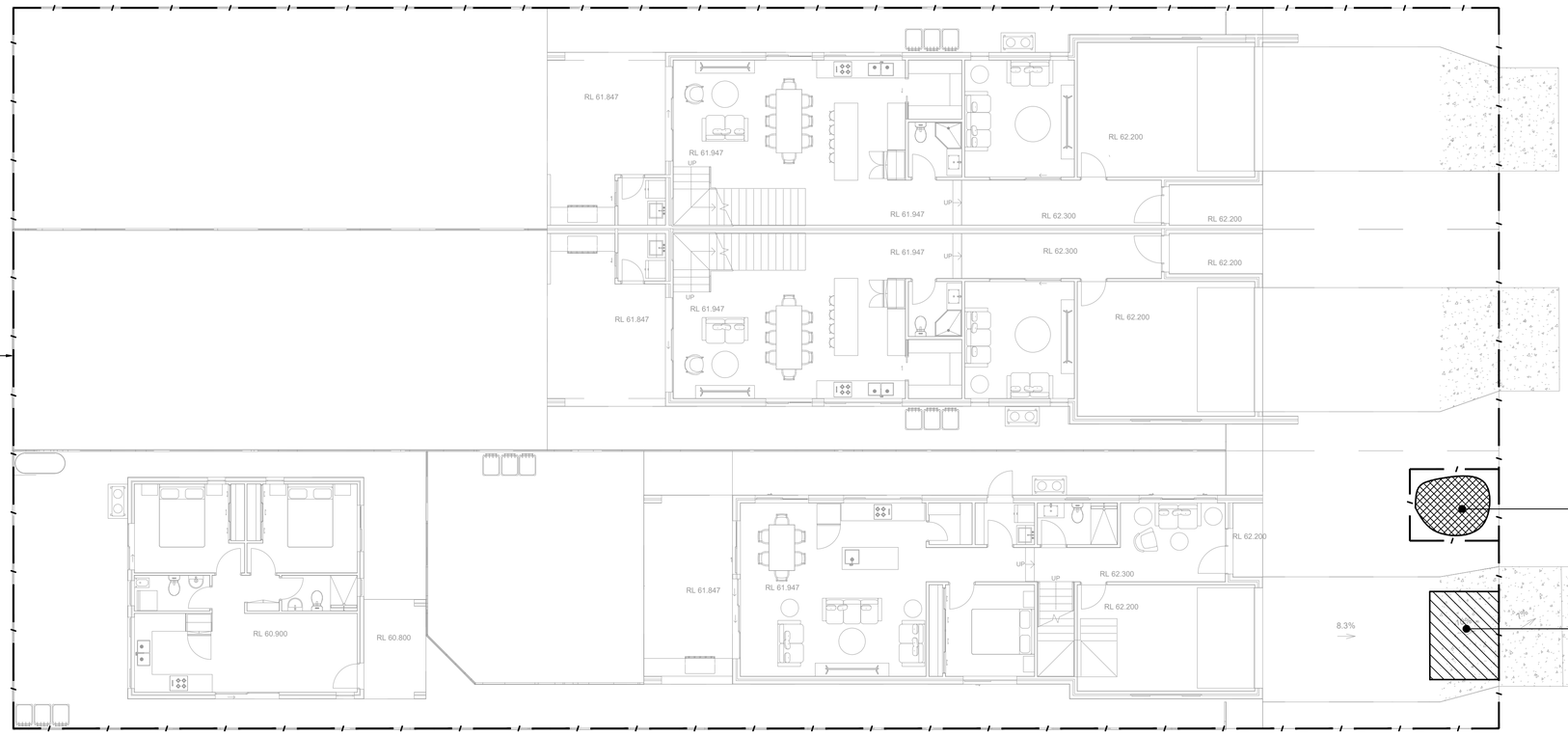
FENCE LINE

STOCK-PILE AREA

RUBBLE ENTRY/EXIT

TREE TO BE REMOVED

CONSTRUCT SEDIMENT FENCE AT THE LOWER SIDES OF PROPERTY BOUNDARY TO PREVENT SITE RUNOFF FROM ENTERING DOWNSTREAM PROPERTIES (TYP).



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SCALE

1:100 / 1:200
A1 / A3

0 1 2 3 4m

GRID

HEIGHT DATUM AHD

DRAWING TITLE

EROSION AND SEDIMENT CONTROL PLAN

STATUS FOR APPROVAL

NOT TO BE USED FOR CONSTRUCTION PURPOSES

PROJECT

PROPOSED DUPLEX, DWELLING HOUSE WITH GRANY FLAT

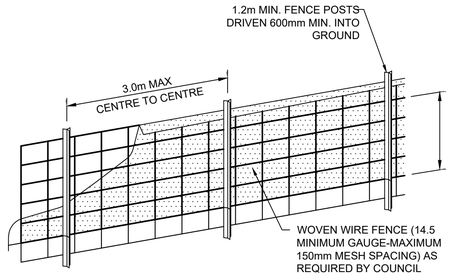
14 AVOCA STREET, YAGOONA NSW 2199

LGA: CANTERBURY-BANKSTOWN COUNCIL

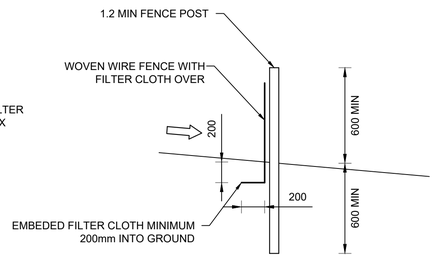
DRAWING NUMBER	REFERENCE NUMBER	REVISION
V250364 - SW300	V250364	A

EROSION & SEDIMENT CONTROL NOTES:

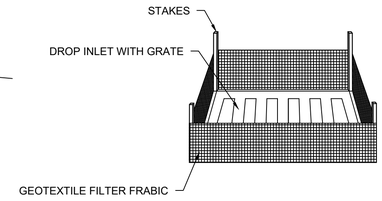
1. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS AND ANY OTHER PLANS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED AND RELATING TO THE DEVELOPMENT AT THE SUBJECT SITE.
2. THE CONTRACTOR MUST ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THIS SPECIFICATION.
3. ALL BUILDERS AND SUB-CONTRACTORS SHALL BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMIZING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWN SLOPE LANDS AND WATERWAYS.
4. DURING WINDY CONDITIONS, LARGE, UNPROTECTED AREAS SHALL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
5. FINAL SITE LANDSCAPING SHALL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
6. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE BY FILTERING THROUGH AN APPROVED STRUCTURE.
7. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING HAVE BEEN REHABILITATED.
8. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER RAINFALL EVENTS TO ENSURE THEY HAVE OPERATED EFFECTIVELY AND REMAIN IN WORKING CONDITION.
9. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH PREVENTS TACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITHIN ADDITIONAL GRAVEL AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS OF WAY MUST BE REMOVED IMMEDIATELY.
10. PROVIDE SILT FENCE/HAY BALE BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS (TYPICAL).
11. ISOLATE EXISTING STORMWATER PITS WITH HAY BALES TO FILTER ALL INCOMING FLOWS.
12. DO NOT STOCK PILE EXCAVATED MATERIAL ON THE ROAD WAY.

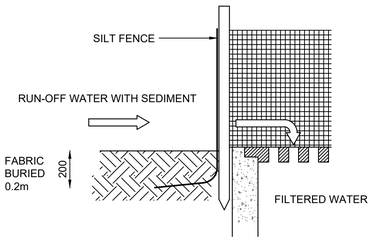


DIAGRAMMATIC VIEW



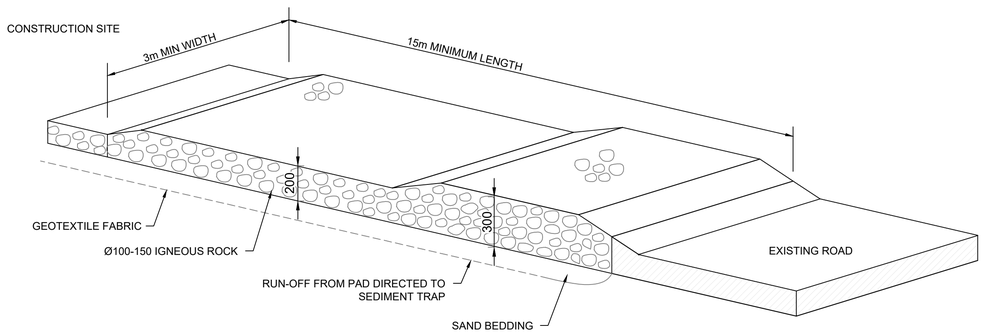
TYPICAL SECTION



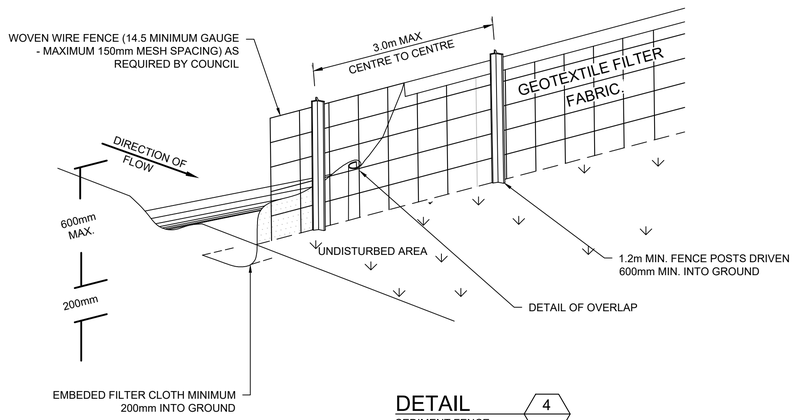


DETAIL 1 / - — SEDIMENT FENCE DETAIL — NOT TO SCALE

DETAIL 2 / - — SUMP SEDIMENT TRAP DETAIL — NOT TO SCALE



DETAIL 3 / - — TEMPORARY CONSTRUCTION EXIT — NOT TO SCALE



DETAIL 4 / - — SEDIMENT FENCE — NOT TO SCALE

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LGA: CANTERBURY-BANKSTOWN COUNCIL

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V250364 - SW310	V250364	A