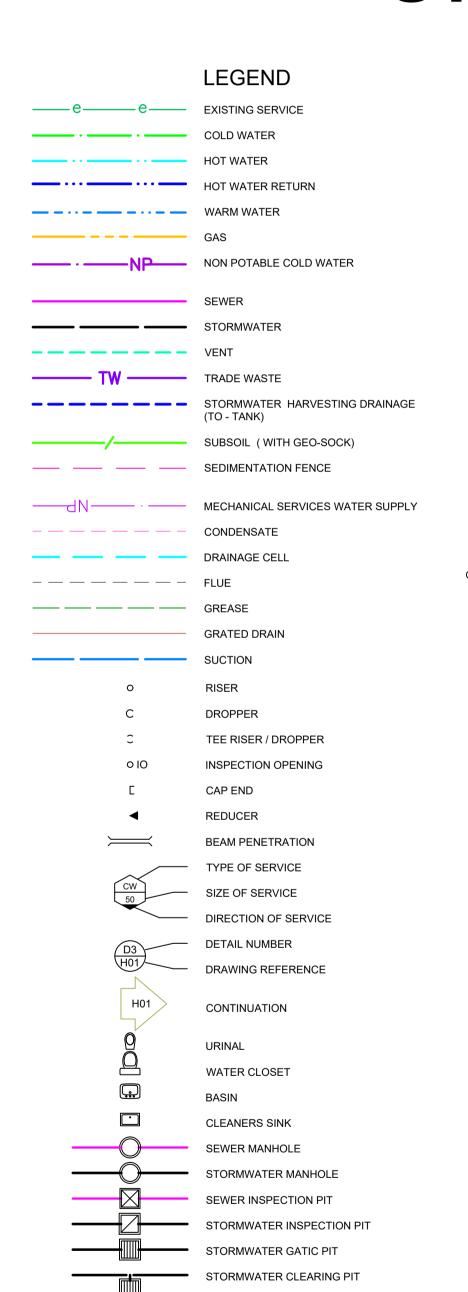
# BARROWS HILLSIDE 80 HILLSIDE PARADE ELIZABETH BEACH LOT:4246 DP:1285824

LGA - MID COAST COUNCIL

## STORMWATER DRAINAGE SERVICES



Ø	PIPE DIAMETER	AAV	AIR ADMITTANCE VALVE
0	CLEAR OUT	В	BASIN
0	FLOOR WASTE	BSK	BAR SINK
†	HOSE TAP	втн	BATH
$\bowtie$	STOP VALVE	ВТ	BOUNDARY TRAP
Ζ	CHECK VALVE	BTFW	BASKET TRAP FLOOR WASTE
$\Theta$	STOP VALVE IN PATH BOX	BWU	BOILING WATER UNIT
	BALANCING VALVE	CO	CLEAR OUT
Ø	BALL VALVE	CS	CLEANERS SINK
	SOLENOID VALVE	CV	CONTROL VALVE
	PRESSURE RELIEF VALVE	CW	COLD WATER
hi	STRAINER	CWU	CHILLED WATER UNIT
	OVERFLOW GULLY	DG	DISCO GULLY
×	INDUCT PIPE MICA FLAP	DP	DOWN PIPE
¤	BOUNDARY TRAP	DTU	DRAINAGE TURN UP
<b></b>	FLOW DIRECTION	DW	DISH WASHER
囯	FIRE HOSE REEL	е	EXISTING
Ø	FIRE HYDRANT	EJ	EXPANSION JOINT
Ø-Ø	DOUBLE HEADED PILLAR HYDRANT	FH	FIRE HYDRANT
CALIM	FIRE HYDRANT BOOSTER VALVE	FHR	FIRE HOSE REEL
	HOT WATER UNIT	FS	FLUSHERETTE SERVICE
	METER	FW	FLOOR WASTE
Δ	TUNDISH	G	GAS
	PUMP	GAPO	GREASE ARRESTOR PUMP OUT
8	TEMPERING VALVE	GO	GUTTER OUTLET
凶	THERMOSTATIC MIXING VALVE	GR	GAS RISER
	BASKET TRAP FLOOR WASTE	GVP	GREASE VENT PIPE
ROW	RAINWATER OUTLET	HL	HIGH LEVEL
Ø PBO	PLANTER BOX OUTLET	HT	HOSE TAP
Ø SD	SPOON DRAIN OUTLET	HW	HOT WATER
7	REDUCED PRESSURE ZONE DEVICE	HWU	HOT WATER UNIT
$\Rightarrow$	OVERLAND FLOW PATH	IL	INVERT LEVEL

NODE POINT FOR CALCULATIONS

NOTE THIS IS A STANDARD LEGEND. ALL

SYMBOLS MAY NOT NECESSARILY BE USED

IN THESE DRAWINGS.

IPMF INDUCT PIPE MICA FLAP **INSPECTION OPENING** I AUNDRY TUB **OVER FLOW** OFG OVER FLOW GULLY REDUCED LEVEL RPZD REDUCED PRESSURE ZONE DEVICE RWO RAIN WATER OUTLET RWH RAIN WATER HEAD SEW SEWER DRAINAGE SFW SEALED FLOOR WASTE SEWER INSPECTION PI SEWER MANHOLE STACK SWS STORMWATER SUMP / PIT SWRM STORMWATER RISING MAIN TMV THERMOSTATIC MIXING VALVE TRADE WASTE VENT PIPE VFD VOID FLOOR DRAIN WATER CLOSET WASHING MACHINE



ICE MACHINE

ICE WELL



WVP WASTE VENT PIPE

#### STORMWATER NOTES

1. ORIGIN OF LEVELS SHOWN ARE TO AUSTRALIAN HEIGHT DATUM (AHD) AS OBTAINED FROM SURVEY INFORMATION PROVIDED, ALL LEVELS TO BE CONFIRMED

2. ALL LEVELS TO BE CONFIRMED WITH ARCHITECTURAL DRAWINGS, SURVEY DRAWING AND SITE LAYOUT.

3. CARE TO BE TAKEN WITH LEVELS ON STORMWATER LINES, AS GRADES SHOWN ARE NOT TO BE REDUCED. LEVELS ARE NOT TO BE ALTERED WITHOUT THE APPROVAL OF THE DESIGNER.

4. LOCATION OF THE EXISTING SERVICES IS APPROXIMATE ONLY.

5. ALL DISTURBED AREAS SHALL BE REINSTATED TO EXISTING CONDITION BY THE CONTRACTOR AT COMPLETION OF THE WORK.

6. SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED BY COUNCIL SHALL BE CARRIED OUT FOR THE FULL DURATION OF THE WORKS BY THE CONTRACTOR.

7. ALL BATTERS AND DISTURBED AREAS SHALL BE STABILISED OR RE VEGETATED BY GRASS SEEDING WITHIN 7 DAYS OF BECOMING FREE OF FUTURE WORKS.

8. ALL PIPES TO BE UPVC (DWV GRADE) WITH A MINIMUM OF 1% SLOPE UNLESS

9. ALL STORMWATER PITS TO BE PRECAST CONCRETE WITH MEDIUM DUTY GRATED COVERS, GRATE DRAIN TO BE HEAVY DUTY CAST IN SITU 10. ALL STORMWATER DRAINAGE WORK SHALL COMPLY WITH AS/NZS3500.3 AND LOCAL COUNCIL REQUIREMENTS.

11. PIPES 300mm OR MORE IN DIAMETER SHALL BE REINFORCED CONCRETE PIPES TO AS4058, CLASS 2, WITH SPIGOT AND SOCKET AND RUBBER RING JOINTS.

12. BED THE PIPING ON A CONTINUOUS LAYER OF BEDDING MATERIAL AT LEAST 75mm THICK AFTER COMPACTION. GRADE THE UNDERLAY EVENLY TO THE GRADIENT OF THE PIPE LINE. FORM CHASES TO PREVENT FLANGES FROM BEARING ON THE TRENCH

13. PROVIDE EVEN FALLS TO OUTLETS WITH NO PART OF THE PIPE LINE HAVING A FALL OF LESS THAN 1 IN 100 UNLESS NOTED OTHERWISE.

14. TRENCH BACK FILL IN PAVED AREAS SHALL BE SAND OR OTHER APPROVED GRANULAR MATERIAL COMPACTED TO 100% STANDARD MAXIMUM DRY DENSITY IN THE TOP 300mm AND 98% SMDD IN LOWER AREAS.

15. TRENCH BACK FILL IN UNPAVED AREAS SHALL BE ORDINARY FILL COMPACTED TO

16. PROVIDE ALL NECESSARY SITE DISCHARGE CONNECTIONS AS PER PRE DEVELOPMENT CONDITIONS.

17. GIVE SUFFICIENT NOTICE SO THAT INSPECTIONS MAY BE MADE BY THE OWNER'S REPRESENTATIVE AND/OR RELEVANT AUTHORITIES AFTER COMPLETION OF THE PIPE WORK AND PRIOR TO PLACING THE PIPE OVERLAY.

#### **GENERAL**

ALLOWANCES TO BE MADE ON SITE AS REQUIRED. 3. ALL LEVELS AND SET OUT INFORMATION TO BE CONFIRMED PRIOR TO COMMENCEMENT OF WORKS. THESE DOCUMENTS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL INFORMATION. 4. ALL PIPE WORK TO BE INSTALLED AS PER AS3500 AG601 AND LOCAL AUTHORITY REQUIREMENTS. 5. ALLOW TO SUPPLY AND INSTALL MATERIAL EQUAL TO a FIRE HYDRANT SERVICE (ALL SIZES) IN GROUND TYPE B COPPER TUBE AND FITTINGS ABOVE GROUND ROLL GROOVED GALVANISED PIPE OR TYPE B COPPER TUBE AS PER AS2419. b POTABLE WATER SUPPLY (ALL SIZES) TYPE B COPPER TUBE AND FITTINGS. c HOT AND WARM WATER (ALL SIZES) TYPE B COPPER TUBE WITH KEMLAG INSULATION d DRAINAGE PIPE WORK TO EQUAL uPVC DWV PIPE AND FITTINGS ALL SLAB PENETRATIONS SHALL HAVE APPROVED FIRE STOPPING COLLARS AS REQUIRED TO MAINTAIN BUILDING FIRE RATION. 6. PROVIDE ALL NECESSARY CONNECTIONS AS REQUIRED, AND ALLOW TO MAKE APPLICATIONS TO AUTHORITIES AND PAY ALL ASSOCIATED FEES. 7 GIVE SUFFICIENT NOTICE SO THAT INSPECTIONS MAY BE MADE BY THE OWNER'S REPRESENTATIVE AND/OR RELEVANT AUTHORITIES AFTER COMPLETION OF THE

PIPE WORK AND PRIOR TO PLACING THE PIPE OVERLAY.

1. THESE DOCUMENTS DETAIL THE DIAGRAMMATIC

CONTRACTOR SHALL SET OUT ALL WORK TO SUIT AS

DESIGN INTENT OF HYDRAULIC SERVICES. THE

2. SERVICES POSITIONS ARE INDICATIVE AND

REQUIRED FOR SITE CONDITIONS.

#### SPECIFICATION NOTES

. AUTHORITIES AND STANDARD: THE WHOLE OF THE HYDRAULIC SERVICES INSTALLATION SHALL BE CARRIED OUT UNDER THE DIRECT SUPERVISION OF A FULLY LICENSED PLUMBER AND DRAINER IN STRICT ACCORDANCE WITH THE N.S.W. CODES AND TO THE SATISFACTION OF SYDNEY WATER CORPORATION IN ACCORDANCE WITH HYDRAULICS DESIGN DRAWINGS AND SPECIFICATION AS ISSUED. 2. FEES AND CHARGES; THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS, PAY ALL FEES, OBTAIN AND ISSUE TO THE SUPERINTENDENT ALL

REQUIRED CERTIFICATES INDICATING THAT THE WORKS IN THEIR ENTIRETY COMPLY WITH THE CURRENT REGULATIONS AND REQUIREMENTS OF ALL RELEVANT

3. SITE VISIT AND FAMILIARISATION; THE CONTRACTOR SHALL EXAMINE THE SITE AND REFER TO CURRENT CONTRACT DRAWINGS SO AS TO UNDERSTAND AND TO HAVE SATISFIED HIMSELF AS TO THE VISIBLE EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO

4. MATERIALS; SUPPLY AND FIX ALL MATERIALS REQUIRED TO COMPLETE THE WORKS. ALL MATERIALS SHALL BE FIRST QUALITY AND ANY INFERIOR MATERIALS SHALL BE REJECTED. ALL COSTS ASSOCIATED WITH THE REPLACEMENT OF REJECTED MATERIALS SHALL BE BORNE BY THE CONTRACTOR. ALL MATERIALS SHALL CONFORM WITH THE LATEST AUSTRALIAN STANDARD. SPECIFICATION, CODE OR INTERIM CODE, IF NO AUSTRALIAN STANDARD EXISTS THEY SHALL CONFIRM TO THE LATEST BRITISH STANDARD OR THE

TESTING AND MATERIALS IN THAT ORDER. MAKE APPLICATIONS TO AND PAY TO THE RELEVANT AUTHORITIES ALL APPLICABLE FEES AND CHARGES. 5. SET OUT; ALL PIPE WORK SHALL BE CONCEALED WHEREVER POSSIBLE) IN CEILING SPACES AND WALLS OR CHASED IN WALLS. THE PLUMBER SHALL BE RESPONSIBLE FOR SETTING OUT ALL PIPE RUNS BEFORE THE POURING OF CONCRETE, COVERING UP AND

PROVIDING ALL SLEEVES, FIRE COLLARS WHICH MAY BE

NECESSARY 6. PENETRATIONS: FLOORS AND BEAMS SHALL BE CORED. SLEEVED IN A METHOD APPROVED BY THE STRUCTURAL ENGINEER, BUILDING MANAGEMENT. SEAL ALL PENETRATIONS WITH FIRE RATED MATERIAL AND SEAL WITH AN APPROVED EPOXY SEALANT AS REQUIRED TO MAINTAIN THE REQUIRED FRL. PROVIDE FIRE STOP COLLARS AS REQUIRED. ALL CORE HOLES AND PENETRATIONS SHALL BE MADE GOOD AND WATER TIGHT AS REQUIRED. ALL FINAL CORE HOLE LOCATIONS

SHALL BE CO-ORDINATED AND APPROVED BY THE STRUCTURAL ENGINEER, BUILDING MANAGEMENT 7. HOT AND COLD WATER SERVICES; ALL PIPE WORK SHALL BE COPPER TYPE B WITH COPPER AND/OR BRASS FITTINGS. PIPE WORK BUILT INTO WALLS SHALL BE SECURELY FIXED AND LAGGED WITH "KEMLAG" INSULATION, ALL PIPE WORK SHALL BE SECURELY FIXED. ALL PIPE WORK SHALL BE FREE OF WATER HAMMER. ALL HOT, WARM WATER PIPE WORK SHALL BE INSULATED WITH "KEMLAG" INSULATION. COPPER PIPES

AND FITTINGS SHALL: a BE APPROVED BY RELEVANT AUTHORITIES. b CONFIRM WITH AUSTRALIAN STANDARDS c BE TYPE B FOR HOT, WARM AND COLD WATER AND d BE JOINTED WITH SILVER BRAZE CONTAINING NOT LESS THEN 15% SILVER.

e BE TYPE D FOR VENTS f FITTINGS SHALL HAVE A MINIMUM WALL THICKNESS NOT LESS THAN THE TUBE THICKNESS THEY SURVEY 8. EXCAVATION; EXCAVATION LINES AND LEVELS SHALL BE AS REQUIRED FOR SITE CONDITIONS ALL TRENCHING SHALL BE STRAIGHT AND GRADED AS REQUIRED FOR SERVICES INSTALLATION EXCAVATE TRENCHES IN SECTIONS OF SUITABLE LENGTH, LAY AND BED SERVICE PIPE WORK AND BACK FILL TRENCH SECTION, WITH MINIMUM DELAY AND IF POSSIBLE ON THE SAME WORKING DAY, UNLESS OTHERWISE SPECIFIED OR PERMITTED

9. IDENTIFICATION: SERVICES WARNING, IDENTIFICATION TAPE TO BE INSTALLED ABOVE EACH INDIVIDUAL SERVICE PIPE INSTALLED WITHIN TRENCH (FULL LENGTH OF INSTALLATION) 10. TESTING: TEST ALL SERVICES DURING

INSTALLATION AND PRIOR TO CONCEALING, A MINIMUM ANY LEAKS SHALL BE RECTIFIED AND A RE TEST AS PER TEST REQUIREMENTS FLOW TESTING SHALL BE CARRIED OUT AT COMPLETION OF WORKS TO PROVIDE ACTUATE FLOW CAPACITY AVAILABLE. CERTIFICATION INFORMATION TO BE FORWARDED TO SUPERINTENDENT AND/OR REPRESENTATIVE.

11. CERTIFICATION: A PLUMBERS CERTIFICATE SHAL BE PROVIDED TO SYDNEY WATER CO-OPERATION AND OBTAIN CERTIFICATES FROM AUTHORITIES INDICATING SATISFACTORY COMPLETION OF SERVICES AND HAND OVER TO ARCHITECT BEFORE APPLICATION FOR FINAL PAYMENT AND CERTIFICATES OF PRACTICAL 12. WARRANTY AND MAINTENANCE PERIOD: PROVIDE 12

MONTHS WARRANTY AND MAINTENANCE PERIOD FOR MANUFACTURER WARRANTIES AND GUARANTEES AND HAND OVER TO ARCHITECT WITH MAINTENANCE MANUALS WHEN INSTALLATION IS COMPLETE. 13. A SET OF WORK AS EXECUTED DRAWINGS SHALL B KEPT ON SITE AND PROGRESSIVELY MARKED UP BY THE CONTRACTOR AS THE WORK PROCEEDS TO RECORD THE LOCATIONS. INVERTS. FINAL LEVELS AND DETAILS OF ALL INSTALLED SERVICES, EQUIPMENT AND VALVES, THESE SHALL BE MADE AVAILABLE ON REASONABLE

NOTICE FROM THE SUPERINTENDENT 14. HYDRAULIC SERVICES WORK AS EXECUTED CAD (AUTO CAD R2002) DRAFTED DRAWINGS AND MAINTENANCE MANUALS TO BE PROVIDED PRIOR TO COMPLETION.

15. CHECK ALL DIMENSIONS ON SITE PRIOR TO ANY PURCHASE OF EQUIPMENT OR INSTALLATION OF ANY PIPE WORK AND ACCESSORIES. NO CLAIMS WILL BE CONSIDERED REGARDING ITEMS WHICH CANNOT BE INSTALLED DUE TO ERROR RESULTING FROM FAILURE TO CONFIRM DESIGN INTENT ON SITE. 16. WALL CHASING: WRITTEN CONFIRMATION SHALL BE OBTAINED FROM STRUCTURAL ENGINEER PRIOR TO ANY CHASING OF CONCRETE AND/OR BRICK WALLS AS REQUIRED FOR SERVICES INSTALLATION. 17. ALL SANITARY DRAINAGE PIPE WORK ABOVE AND/OR

ADJACENT TO LIVING. SLEEPING AREAS SHALL BE INSULATED WITH ACOUSTIC INSULATION EQUAL TO SOUNDGUARD SOUNDLAG 4525L ACOUSTIC PIPE WRAP **INSTALLED AS PER MANUFACTURERS** RECOMMENDATIONS DISTRIBUTED BY PYROTEK 9631

# A 27/10/25 DA SUBMISSION P1 22/10/25 PRELIMINARY ISSUE No. Date Details

ATTENTION: THIS DRAWING HAS BEEN PRODUCED FOR THE PURPOSE OF INDICATING THE DIAGRAMMATIC DESIGN INTENT AND

SCOPE OF WORKS REQUIRED FOR THE INSTALLATION OF SERVICES AS DETAILED AND SHOULD NOT BE INTERPRETED AS BEING FINAL. THIS DOCUMENT SHOULD BE READ IN CONJUNCTION

SPECIFICATIONS CODES AND STANDARDS. ALL LEVELS AND EXISTING SERVICES SHALL BE INVESTIGATED AND CONFIRMED OF SITE BY THE SUBCONTRACTOR AND/OR BUILDER, PRIOR TO THE COMMENCEMENT OF ANY WORKS. THIS DOCUMENT IS SUBJECT TO COPYRIGHT AND IS NOT TO BE REPRODUCED WITHOUT THE CONSENT OF SCOTT HARRIS & ASSOCIATES PH 0411 512 887

> DRAINAGE PIPE WORK BELOW SLAB AND PRESSURE PIPEWORK AT HIGH LEVEL

WITH THE ARCHITECTURAL DRAWINGS. ASSOCIATED

## DA SUBMISSION

Hydraulic Consultant

## **SCOTT HARRIS &** ASSOCIATES p/I

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Client/Architect

K & M BARROWS



#### BARROWS HILLSIDE

HYDRAULIC SERVICES STORMWATER DRAINAGE COVER SHEET / LEGEND

Project	Drawino	y No.		Revision			
25	5058	H0-00		00	Α		
Scale	N:T:S	Date	15	/05/25			
Drawn	S.H	Sheet	1	of	5	A1	
Designed S.H. BPB C3/C4/C14/C15/C16 Accredited Certifier #BPB3466							

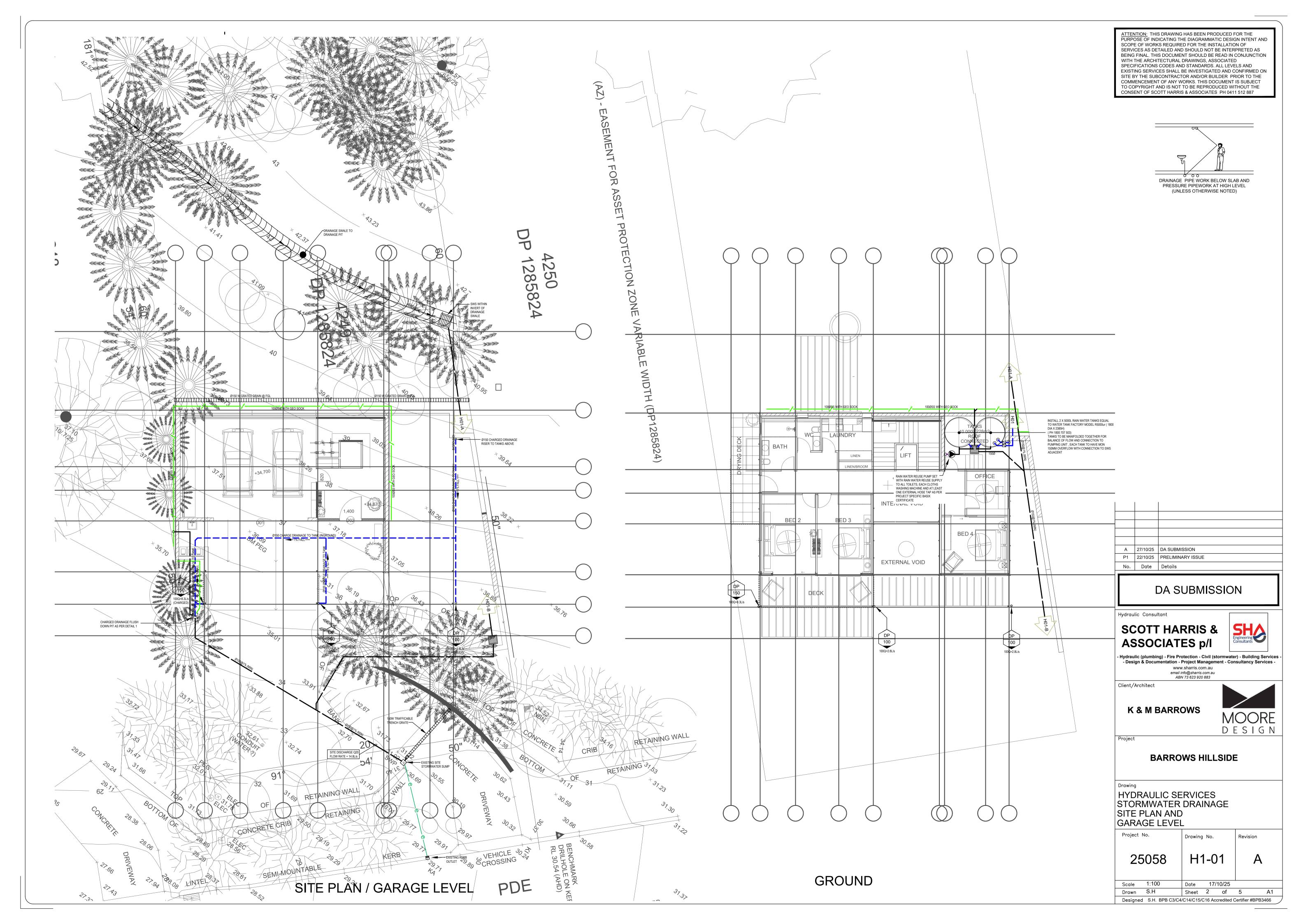
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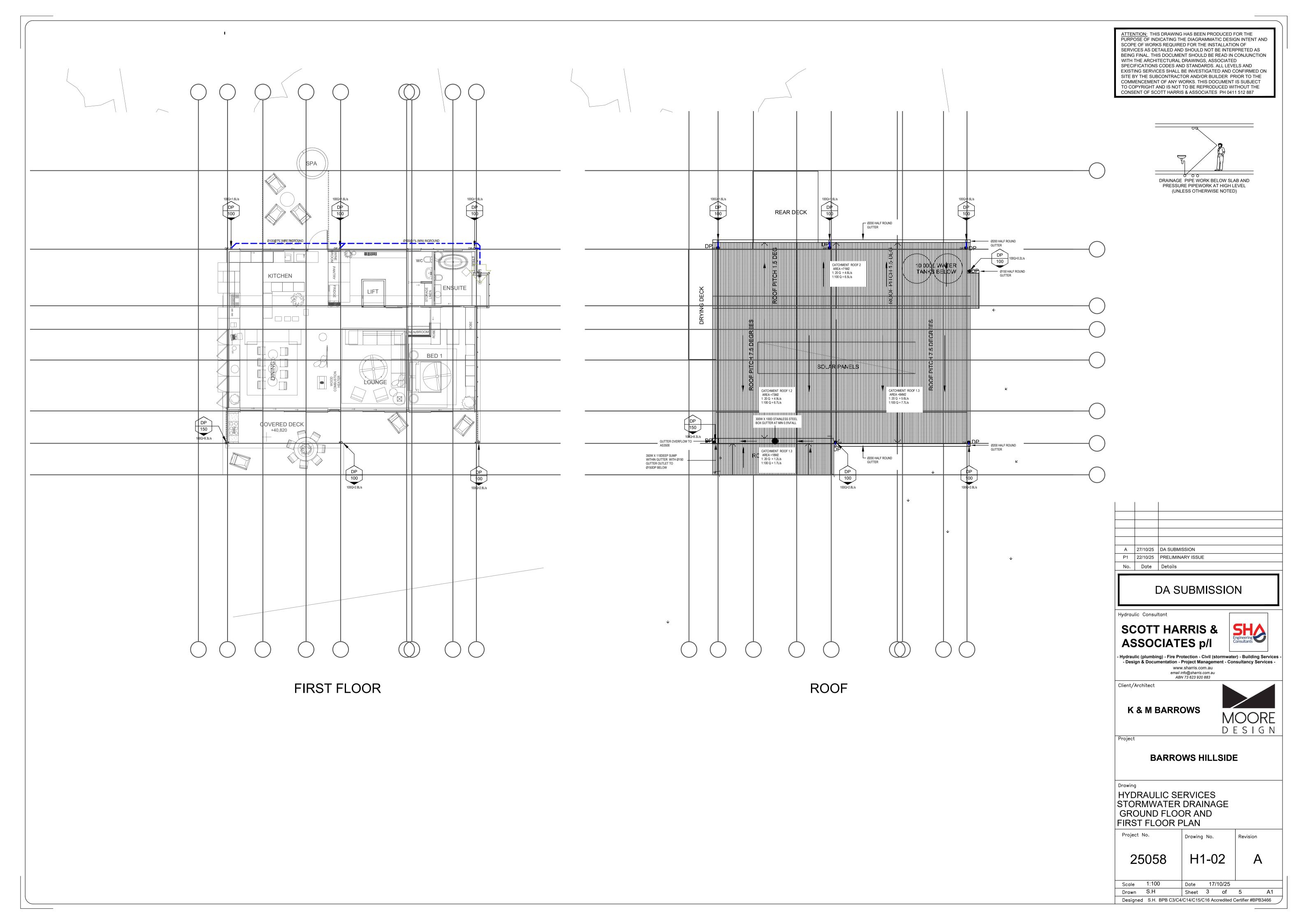
COVER SHEET / SPECIFICATION NOTES

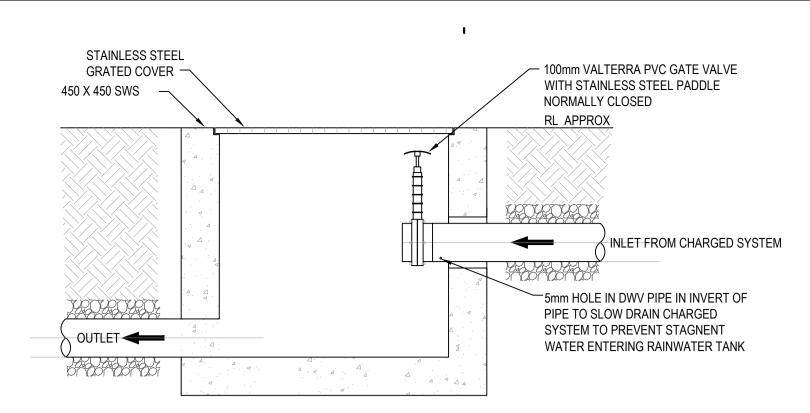
DRAINAGE SERVICES SITE PLAN / GARAGE LEVEL AND GROUND FLOOR LEVEL

DRAINAGE SERVICES FIRST FLOOR LEVEL AND ROOF LEVEL

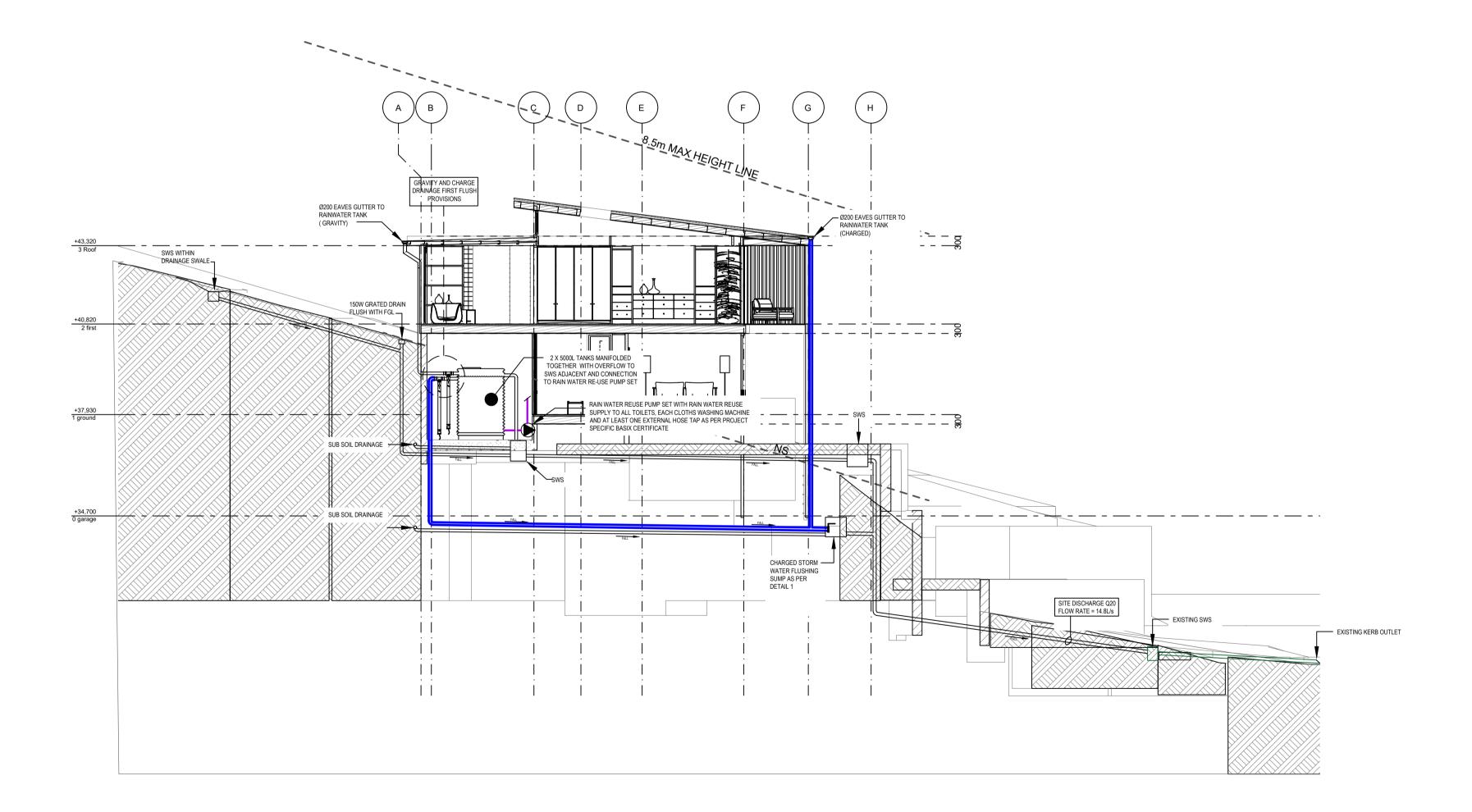
SEDIMENTATION CONTROL PLAN





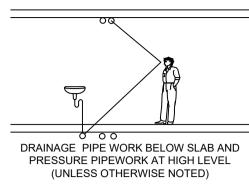


D1 FLUSH DOWN PIT - CHARGED STORMWATER SYSTEM
- NOT TO SCALE



D2 RAIN WATER RE-USE MANAGMENT SCHEME INTENT

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Α	27/10/25	DA SUBMISSION
P1	22/10/25	PRELIMINARY ISSUE
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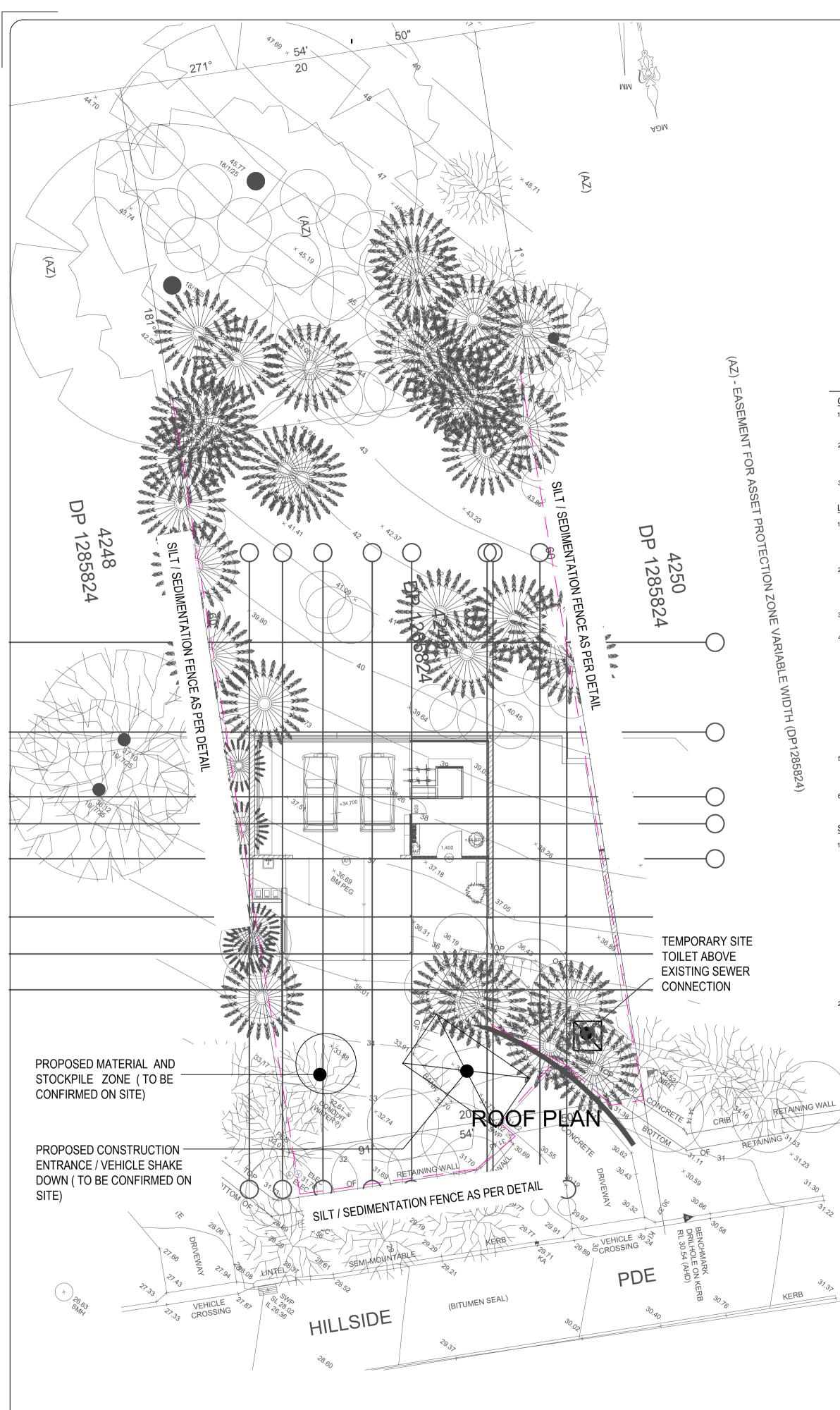
Project

#### **BARROWS HILLSIDE**

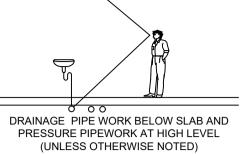
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HYDRAULIC SERVICES STORMWATER DRAINAGE DETAIL SHEET

Project	Drawing	y No.		Revision			
25	5058	H <sup>'</sup>	H1-03		Α		
Scale	1:100	Date	17.	/10/25			
Drawn	S.H	Sheet	4	of	5		A1
Designed S.H. BPB C3/C4/C14/C15/C16 Accredited Certifier #BPB3466							



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#### EROSION AND SEDIMENT CONTROL NOTES

#### GENERAL INSTRUCTIONS

- 1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO THIS DEVELOPMENT, AND COMPLETED IN ACCORDABNCE WITH THE "THE BLUE BOOK"- MANAGING URBAN STORMWATER (MUS) SOILS AND CONSTRUCTION
- 2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 1998 (BLUE BOOK).
- 3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE AREAS.

#### LAND DISTURBANCE INSTRUCTIONS

- 1. DISTURBANCE TO BE NO FURTHER THAN 5 (PREFERABLY 2) METRES FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON APPROVED PLANS. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR
- 2. ACCESS AREAS ARE TO BE LIMITED TO A MAXIMUM WIDTH OF 10 METRES THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON-SITE. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR
- 3. ENTRY TO LANDS NOT REQUIRED FOR CONSTRUCTION OR ACCESS IS PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH.

#### 4. WORKS ARE TO PROCEED IN THE FOLLOWING SEQUENCE:

- a. INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN. b. CONSTRUCT THE STABILISED SITE ACCESS. c. CONSTRUCT DIVERSION DRAINS AS REQUIRED
- d. INSTALL MESH AND GRAVEL INLETS FOR ANY ADJACENT EFFECTED KERB INLETS. e. INSTALL GEOTEXTILE INLET FILTERS AROUND ANY ON-SITE DROP INLET PITS. f. CLEAR SITE AND STRIP AND STOCKPILE TOPSOIL IN LOCATIONS SHOWN ON THE PLAN. g. UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS ENSURING THAT ROOF AND/OR

PAVED AREA STORMWATER SYSTEMS ARE CONNECTED TO PERMANENT DRAINAGE AS

- SOON AS PRACTICABLE. h. GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 20 DAYS OF COMPLETION OF CONSTRUCTION WORKS. i. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED
- 5. ENSURE THAT SLOPE LENGTHS DO NOT EXCEED 80 METRES WHERE PRACTICABLE. SLOPE LENGTHS ARE DETERMINED BY SILTATION FENCING AND CATCH DRAIN SPACING. 6. ON COMPLETION OF MAJOR WORKS LEAVE DISTURBED LANDS WITH A SCARIFIED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH KEYING TOPSOIL LATER.
- 6. CONTRACTOR TO MANAGE THE ALIGNMENT OF CATCH DRAINS ON SITE AND TO ENSURE THAT CATCH DRAINS INTERCEPT THE SITE SURFACE RUNOFF AND DIRECT THE RUNOFF

#### SITE INSPECTION AND MAINTENANCE INSTRUCTIONS

#### 1. THE SITE SUPERINTENDENT WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO:

- a. ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY b. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING
- LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS.
- c. REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED. d. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION
- HAZARD AND TO INITIATE LIPGRADING OR REPAIR AS NECESSARY e. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN. WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECTED TO CHANGES IN
- CONDITIONS ON THE WORK-SITE OR ELSEWHERE IN THE CATCHMENT. f. MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED

#### 2. THE SITE SUPERINTENDENT WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, MMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:

a. THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS.

**IMPORTANT NOTES:** 

CONTRACTORS COST

- b. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS.
- c. THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE. d. THE NEED FOR DUST PREVENTION STRATEGIES. e. ANY REMEDIAL WORKS TO BE UNDERTAKEN. THE LOGBOOK WILL BE KEPT ON-SITE
- AND MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF THE WORKS.

REGULATIONS PERTAINING TO SAFETY AND PROTECTION OF ENVIRONMENT

#### SEDIMENT CONTROL INSTRUCTIONS

- 1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN ON THE PLAN AND ELSEWHERE AT THE DISCRETION OF THE SITE SUPERINTENDENT TO CONTAIN SOIL AS NEAR AS POSSIBLE TO
- 2. SEDIMENT FENCES WILL NOT HAVE CATCHMENT AREAS EXCEEDING 900 SQUARE METRES
- 4. STOCKPILES ARE NOT TO BE LOCATED WITHIN 5 METRES OF HAZARD AREAS INCLUDING
- 5. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM
- 6. ACCESS TO SITES SHOULD BE STABILISED TO REDUCE THE LIKELIHOOD OF VEHICLES

- 1. EARTH BATTERS WILL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO
- a. 2(H):1(V) WHERE SLOPE LENGTH LESS THAN 12 METRES
- 2. ALL WATERWAYS, DRAINS, SPILLWAYS AND THEIR OUTLETS WILL BE CONSTRUCTED TO BE STABLE IN AT LEAST THE 1:20 YEAR ARI, TIME OF CONCENTRATION STORM EVENT.
- CONSTRUCTION ARE TO HAVE A MAXIMUM GROUNDCOVER C-FACTOR OF 0.05 (70% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION. FLOW VELOCITIES ARE TO BE LIMITED TO THOSE SHOWN IN TABLE 5-1 OF "MANAGING URBAN STORMWATER. SOILS AND CONSTRUCTION". DEPT OF HOUSING 1998 (BLUE BOOK), FOOT AND VEHICULAR
- 4. STOCKPILES AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND-COVER C-FACTOR
- 5. ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION ARE TO HAVE
- 6. FOR AREAS OF SHEET FLOW USE THE FOLLOWING GROUND COVER PLANT SPECIES FOR
- 7. PERMANENT REHABILITATION OF LANDS AFTER CONSTRUCTION WILL ACHIEVE A GROUND-COVER C-FACTOR OF LESS THAN 0.1 AND LESS THAN 0.05 WITHIN 60 DAYS. NEWLY PLANTED LANDS WILL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER IS ESTABLISHED
- 8. RE-VEGETATION SHOULD BE AIMED AT RE-ESTABLISHING NATURAL SPECIES. NATURAL SURFACE SOILS SHOULD BE REPLACED AND NON-PERSISTANT ANNUAL COVER CROPS

#### WASTE CONTROL INSTRUCTIONS

- 1. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS. PROVIDED AT LEAST WEEKLY. DISPOSAL OF WASTE WILL BE IN A MANNER APPROVED BT THE
- 3. ALL SITE STAFF AND SUB-CONTACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE
- 4. 4. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS.
- 5. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND MAINTENANCE AREAS WHICH ARE TO

#### **EROSION AND SEDIMENT CONTROL NOTES**

- AND HAVE A STORAGE DEPTH OF AT LEAST 0.6 METRES.
- 3. SEDIMENT REMOVED FROM ANY TRAPPING DEVICES WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS CANNOT OCCUR.
- AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS AND DRIVEWAYS.
- UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR WATER HAS BEEN TREATED BY AN APPROVED DEVICE. 6. TEMPORARY SEDIMENT TRAPS WILL REMAIN IN PLACE UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
- RACKING SOIL MATERIALS ONTO PUBLIC ROADS AND ENSURE ALL-WEATHER ENTRY/EXIT.

#### SOIL EROSION CONTROL INSTRUCTIONS

- STEEPER, UNLESS OTHERWISE NOTED, THAN:
- b. 2.5(H):1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 16 METRES. c. 3(H):1(V) WHERE SLOPE LENGTH BETWEEN 16 AND 20 METRES.
- d. 4(H):1(V) WHERE SLOPE LENGTH GREATER THAN 20 METRES.
- 3. WATERWAYS AND OTHER AREAS SUBJECT TO CONCENTRATED FLOWS AFTER
- TRAFFIC WILL BE PROHIBITED IN THESE AREAS.
- OF 0.1 (60% GROUND-COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION.
- A MAXIMUM GROUND-COVER C-FACTOR OF 0.15 (50% GROUND COVER) WITHIN 20 WORKING DAYS FROM INACTIVITY EVEN THOUGH WORKS MAY CONTINUE LATER.
- TEMPORARY COVER: JAPANESE MILLET 20 KG/HA AND OATS 20 KG/HA.
- APPLIED AS NECESSARY.

EROSION AND SEDIMENT CONTROL NOTES

1. THIS DRAWINGS IS FOR GUIDANCE PURPOSES ONLY - THE SOIL AND EROSION CONTROLS ARE INDICATIVE AND REMAIN SUBJECT TO

CURRENT NSW DEPT OF CONSERVATION AND LAND MANAGEMENT "URBAN EROSION AND SEDIMENT CONTROL" HANDBOOK

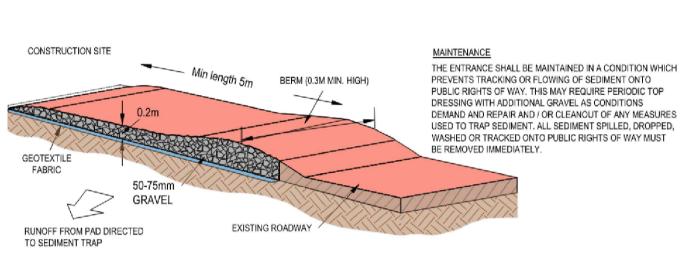
CONSTRUCTION METHODOLOGY - THE CONTRACTOR SHALL AT ALL TIMES REMAIN RESPONSIBLE FOR COMPLIANCE WITH ALL LAWS AND

2. ALL SOIL AND EROSION CONTROLS TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH COUNCIL GUIDELINES AND CONDITIONS AND THE

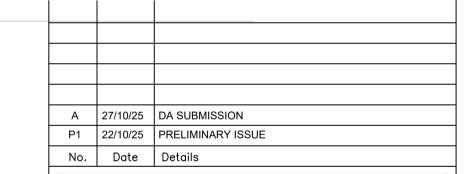
3. CONTRACTOR TO ENSURE THAT SEDIMENT IS NOT ALLOWED TO ENTER ADJACENT LOTS TO DOWNSTREAM STORMWATER SYSTEMS. ANY DAMAGE WHATSOEVER CAUSED THROUGH BREACH OF THIS CONDITION BY THE CONTRACTOR SHALL BE RECTIFIED SOLELY AT THE

- ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE
- 2. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WELL CLEAR OF ANY POORLY DRAINED AREAS, FLOOD PRONE AREAS, STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAINMENT BUNDS.
- WASTE CONTROL FACILITIES PROVIDED.

# SEDIMENT FENCE



TEMPORARY CONSTRUCTION EXIT



#### DA SUBMISSION

Hydraulic Consultant

## SCOTT HARRIS & ASSOCIATES p/I



Hydraulic (plumbing) - Fire Protection - Civil (stormwater) - Building Services - Design & Documentation - Project Management - Consultancy Services www.sharris.com.au email info@sharris.com.au ABN 73 623 920 883

Client/Architect

K & M BARROWS



Revision

#### BARROWS HILLSIDE

Project No.

HYDRAULIC SERVICES STORMWATER DRAINAGE SITE SEDIMENTATION CONTROL PLAN

25058		H2-01			Α		
Scale	1:150	Date	17/	/10/25			
Drawn	S.H	Sheet	5	of	5	A1	
Designed	S.H. BPB C3/C4	/C14/C15/	C16 Ac	credited (	Certifier	#BPB3466	

Drawing No.