

15. PIPES CONCRETE ENCASED SHOWN ACCORDINGLY:  REFER TO SEW-1205-V
ALL CONCRETE ENCASEMENT STRENGTH ARE 40MPa -REFER TO LONG SECTIONS ON SHEET 4&5
16. AREAS HATCHED THUS NOT DRAINED:- 



2	UPDATED CATCHMENT,ADDRESSED SWC COMMENTS	RA	26.03.24	5	WORK AS CONSTRUCTED	RA	16.12.24
1	ISSUE TO TENDER	RA	29.11.23	4	AMENDED PROP SWD TO SUIT CLEARANCE TO EXISTING SEWER MAIN	RA	03.06.24
No.	AMENDMENT DESCRIPTION	BY	DATE	3	CONCRETE ENCASEMENT ADDED TO EXISTING MAIN	RA	29.04.24

WORK AS CONSTRUCTED CERTIFICATION			
DEVELOPER	MIRVAC HOMES. (NSW). PTY LTD		
WATER SERVICE CO-ORDINATOR	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	CAREY CONSTRUCTION PTY LTD		
COMPLETED	21.11.2024	W.A.C. PREPARED	16.12.2024
DESIGNER	ORION CONSULTING ENGINEERS PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.			

GDA 2020
AUSTRALIAN HEIGHT DATUM

SCALES

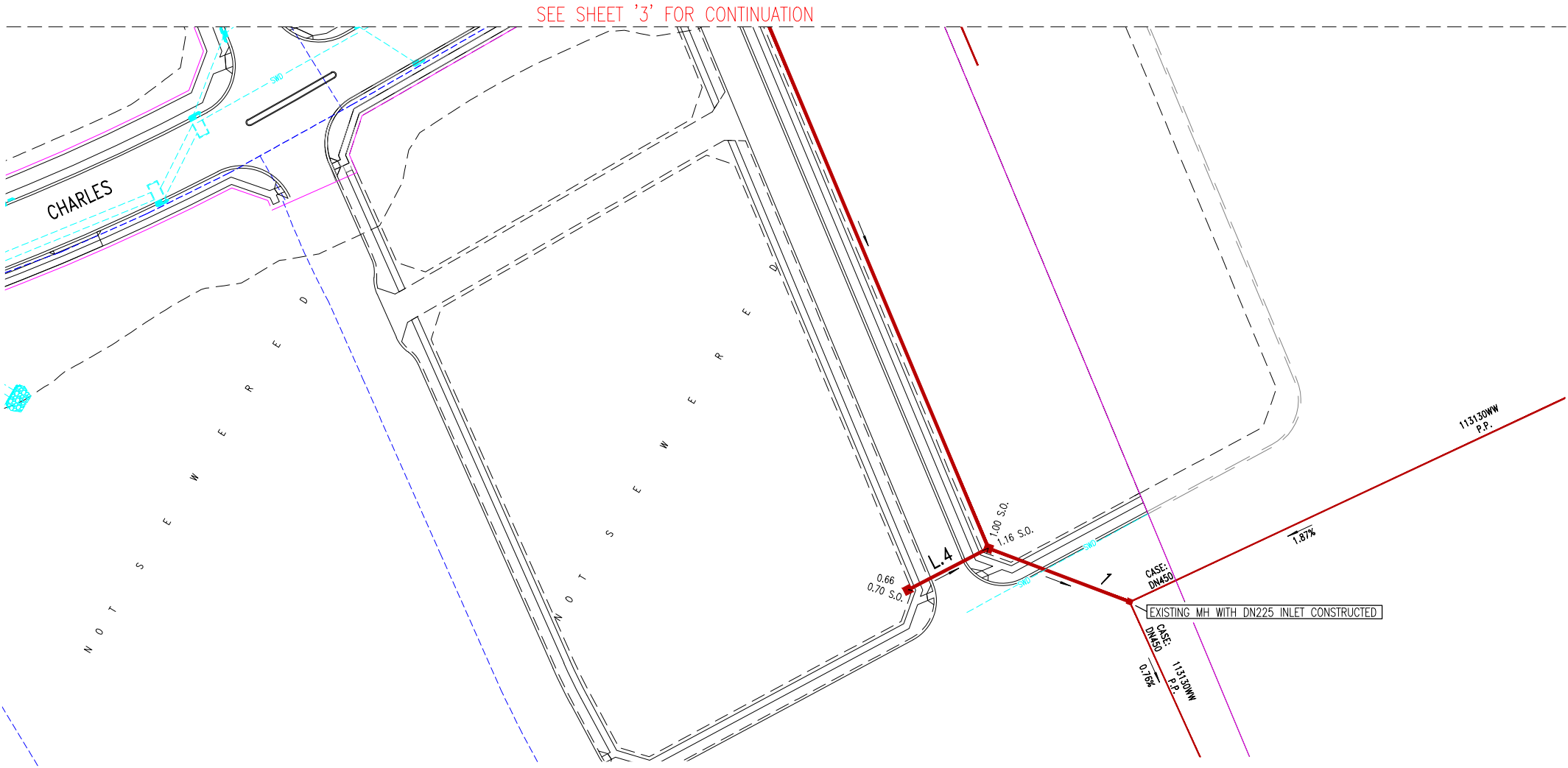
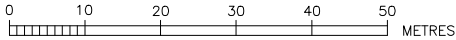
PLAN 1:500 SECTION $\left\{ \begin{array}{l} \text{HOR.} \quad 1:500 \\ \text{VERT.} \quad 1:125 \end{array} \right.$

CROSS SECTIONS NATURAL

LENGTHS, DEPTHS & LEVELS ARE IN METRES.

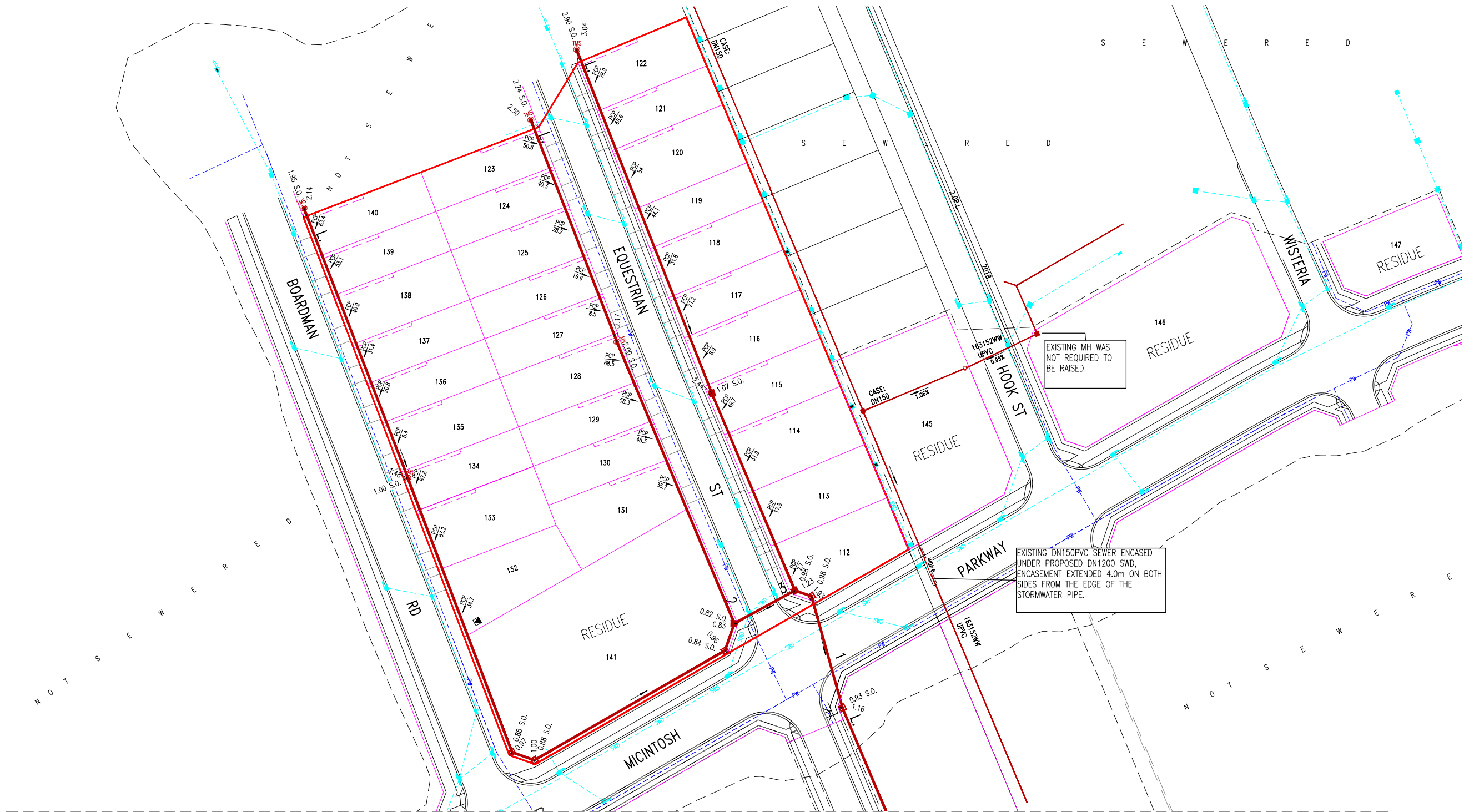
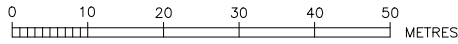
	SYDNEY WATER CORPORATION
Case No. 206861WW	
WEST CAMDEN SEWERAGE DRAINS TO WEST CAMDEN STP VIA SP1161 AND SP0673	





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WORK AS CONSTRUCTED CERTIFICATION				Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	MORVAC HOMES (NSW) PTY LTD			Case No. 206861WW SHT 2 OF 7 SHTS.	SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD.				
CONSTRUCTOR	CAREY CONSTRUCTION PTY LTD				
COMPLETED	21.11.2024				
W.A.C. PREPARED	16.12.2024				
DESIGNER	ORION CONSULTING ENGINEERS PTY LTD.				
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS					

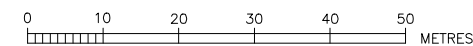
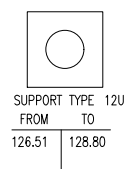


SEE SHEET '2' FOR CONTINUATION

EASEMENT FOR SUBSTATION 2.75 WIDE

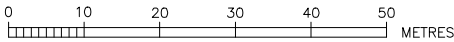
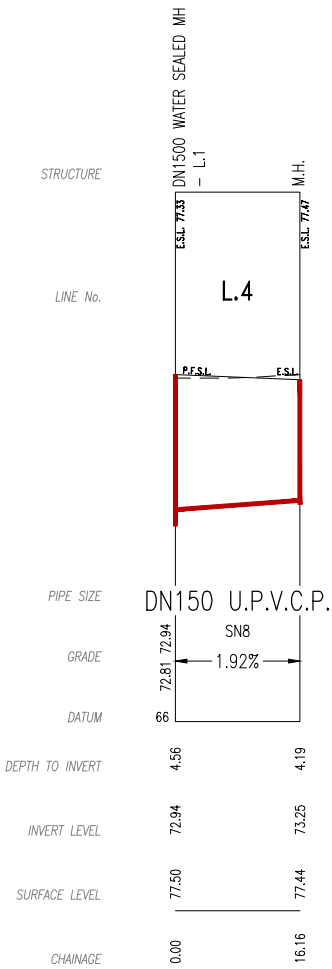
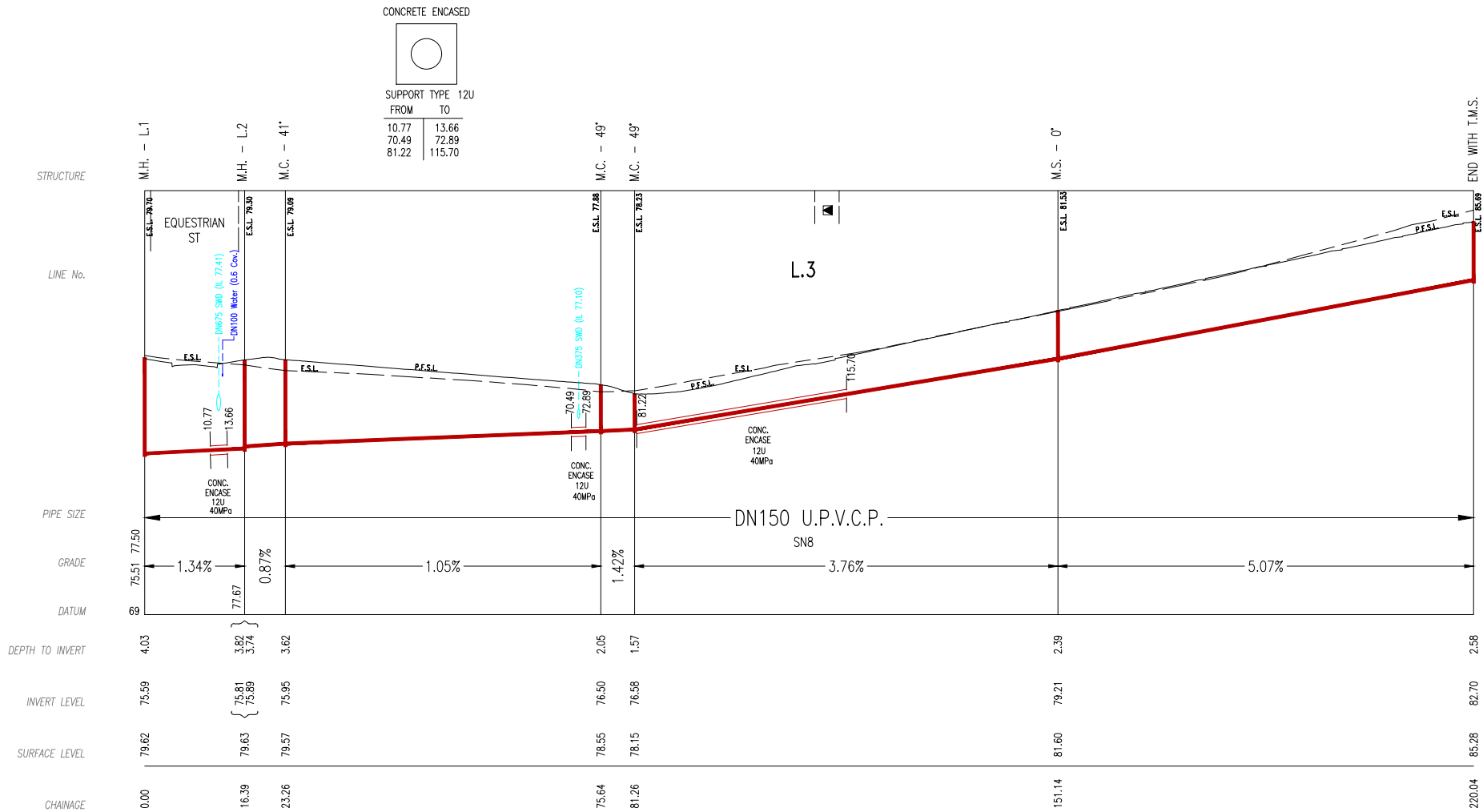
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WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	MIRVAC HOMES (NSW) PTY LTD	 Case No. 206861WW SHT 3 OF 7 SHTS.	
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	CAREY CONSTRUCTION PTY LTD		
COMPLETED	21.11.2024		
W.A.C. PREPARED	16.12.2024		
DESIGNER . . .	ORION CONSULTING ENGINEERS PTY LTD	SYDNEY WATER CORPORATION	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	



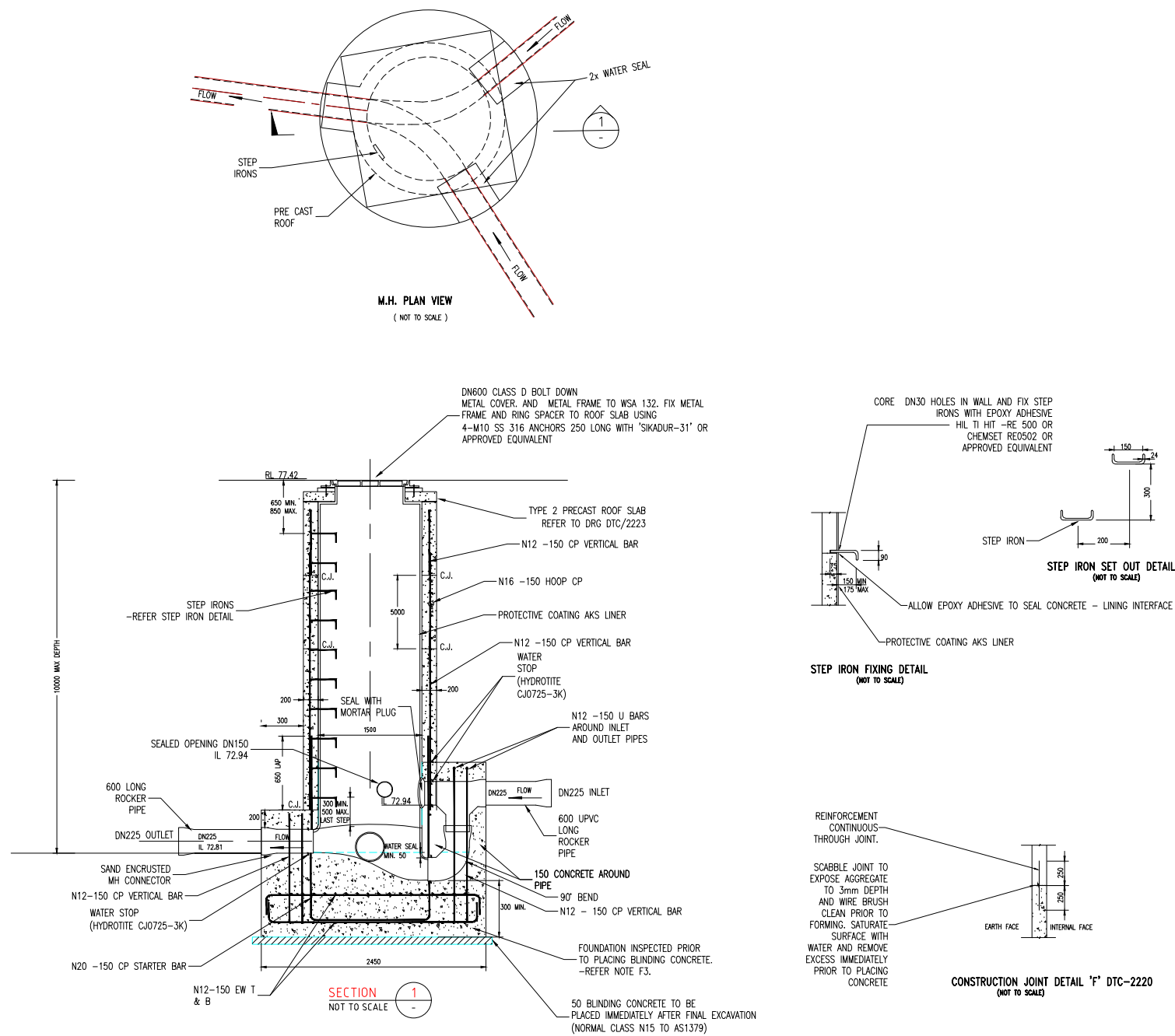
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DEVELOPER	MIRVAC HOMES (NSW) PTY LTD.	Case No. 206861WW	SHT 4 OF 7 SHTS.
W.S.C.	ORCON CONSULTING ENGINEERS PTY LTD.		
CONSTRUCTOR	CARBY CONSTRUCTION PTY. LD.		
COMPLETED	21-11-2024		
W.A.C. PREPARED	16.12.2024		
DESIGNER . . . ORCON CONSULTING ENGINEERS PTY. LTD. I CERTIFY THAT THE WORK HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	



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DEVELOPER	MORAN HOMES (NSW) PTY LTD	Case No. 206861WW SHT 5 OF 7 SHTS.	
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	CARDY CONSTRUCTION PTY LTD		
COMPLETED	21.11.2024		
W.A.C. PREPARED	16.12.2024		
DESIGNER . . .	ORION CONSULTING ENGINEERS PTY LTD	SYDNEY WATER CORPORATION	
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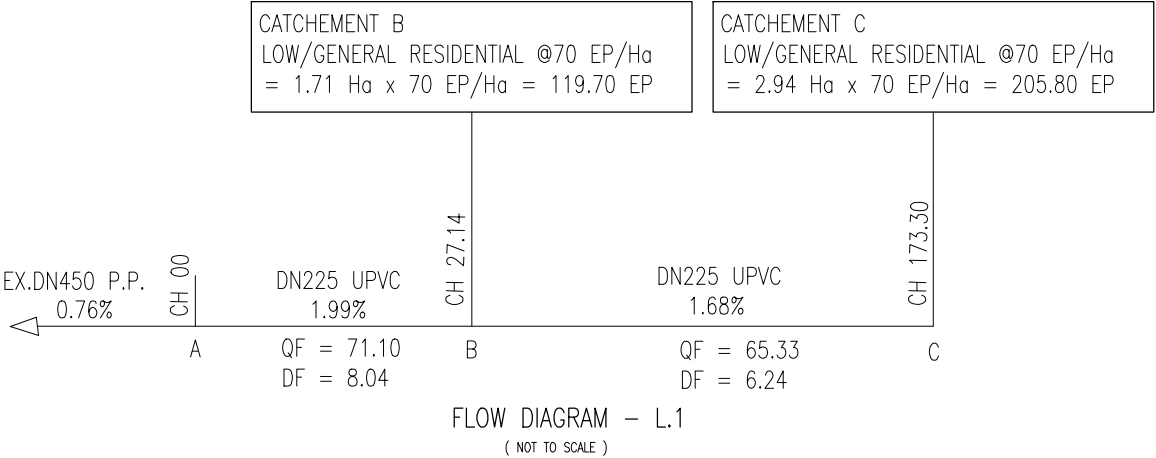
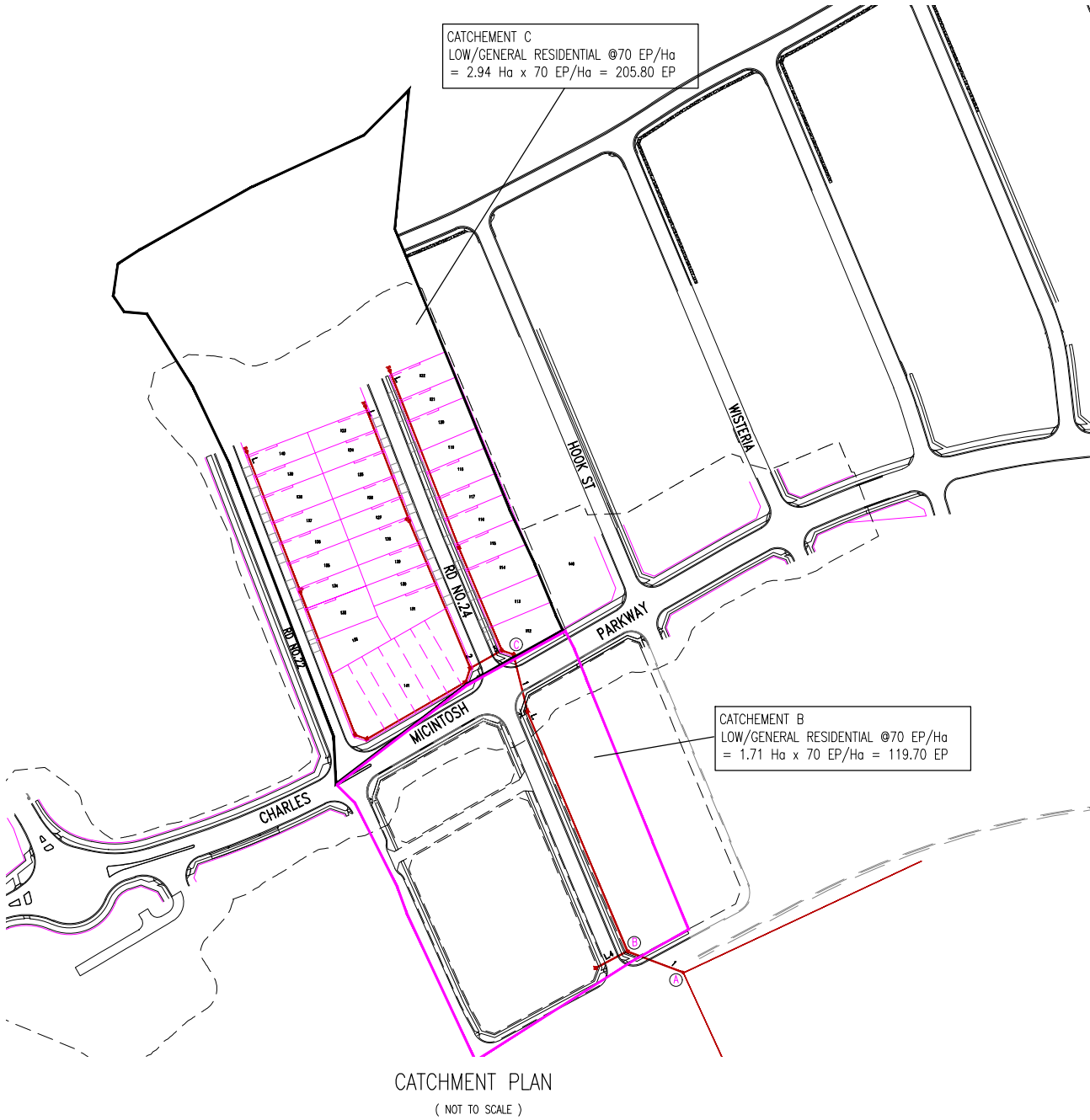


SCHEMATIC WATER SEALED M.H.
(NOT TO SCALE)

- STRUCTURAL NOTES:
1. DEPTH OF MH NOT EXCEEDED 10.0m MEASURED FROM TOP OF THE LID TO INVERT OF THE MH
 2. THIS DESIGN IS SUITABLE FOR TRAFFICABLE AND NON TRAFFICABLE AREAS
 3. MINIMUM ALLOWABLE BEARING PRESSURE FOR MH SHALL BE 250kPa (FOR 10m DEEP MH AND 100kPa FOR MH<= 6m DEEP)
 4. CONCRETE EXPOSURE CLASSIFICATION D (AS 3735)
 5. FORMWORK AND CONCRETE FINISHES ARE IN ACCORDANCE WITH AS 3610 SURFACE EXPOSED TO VIEW - CLASS 2, SURFACE NOT EXPOSED TO VIEW - CLASS 4
 6. CONCRETE ACHIEVED A MINIMUM COMPRESSIVE STRENGTH OF 25MPa PRIOR TO STRIPPING OF FORMWORK
 7. CONCRETE DIMENSIONS SHOWN DO NOT INCLUDE THICKNESS OF APPLIED FINISHES
 8. CONCRETE IS A SPECIAL CLASS SCC40 TO WSA 114-2002 (MINIMUM F'c AT 28 DAYS TO BE 40MPa)
 9. CLEAR COVER TO REINFORCEMENT IS 60mm (AS 3735 TABLE 4.3 RIGID FORMWORK AND INTENSE COMPACTION TO BE USED)
 10. CURING OF ALL CONCRETE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 7 DAYS, POLYETHYLENE SHEETING OR WET HESSIAN MAY BE USED; POLYETHYLENE AND HESSIAN ADEQUATELY SECURED TO RESIST WIND AND TRAFFIC FORCES, ALTERNATIVE CURING ACHIEVED BY APPLYING SIKA ANTISOL WB CURING COMPOUND OR APPROVED EQUIVALENT TO ALL SURFACES IN ACCORDANCE WITH THE MANUFACTURE REQUIREMENTS FOR A PERIOD OF 14 DAYS
 11. CONCRETE ACHIEVED A MINIMUM COMPRESSIVE STRENGTH OF 32MPa PRIOR TO BACKFILLING OF STRUCTURES. BACKFILL PLACED AND COMPACTED EVENLY AROUND MAINTENANCE HOLES IN LAYERS NOT EXCEEDING 300mm LOOSE THICKNESS
 12. STEEL REINFORCING MATERIAL TO AS/ZS 4671 SHAPE=D, STRENGTH GRADE = 500MPa, DUCTILITY CLASS = N
 13. WELDING OF REINFORCEMENT WAS NOT PERMITTED
 14. ALL DIMENSIONS IN mm UNO
 15. DIMENSIONS NOT TO BE SCALED OFF THE PLAN
 16. MAX LENGTH OF LAP PROPOSED IS 5000
 17. ALL INTERNAL SURFACES, INCLUDING THE UNDERSIDE OF THE ROOF SLAB, WALLS, SPACER RING, BUT EXCLUDING BENCHES AND CHANNEL ARE ADEQUATELY PROTECTED CONFIRMING TO 'WSA 201 MANUAL FOR SELECTION AND APPLICATION OF PROTECTIVE COATING' INCLUDING SWC'S SUPPLEMENT, PROTECTION TO CONSIST OF AKS LINER WHICH IS A HDPE LINER. APPLICATION AND SURFACE PREPARATION DONE TO MANUFACTURER'S RECOMMENDATION. CONTACT DETAILS AND QUALIFICATION OF PERSONNEL APPLYING AND WELDING THE LINER SENT TO THE WSC PRIOR TO UNDERTAKING ANY LINING OF THE MH'S AND ESPECIALLY FOR THE WELDING OF THE LINER. CONSTRUCTOR WAS RESPONSIBLE TO PROVIDE QA DOCUMENTATION FOR THE APPLICATION OF THE LINER AS PER WSA-201. THIS QA DOCUMENTATION FORMS PART OF THE FINAL POP DOCUMENTATION TO SWC

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DEVELOPER	MIRAC HOMES (NSW) PTY LTD		Case No. 206861WW SHT 6 OF 7 SHTS.
W.S.C.	ORION CONSULTING ENGINEERS PTY LTD		
CONSTRUCTOR	CAREY CONSTRUCTION PTY LTD		
COMPLETED	21.11.2024		
W.A.C. PREPARED	16.12.2024		
DESIGNER ORION CONSULTING ENGINEERS PTY LTD		SYDNEY WATER CORPORATION	
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FLOW SCHEDULE

SUMMARY																					
Section	Line No	Chainage	Pipe Status	Total Area Ha	Total Gravity EP	Total Grav + Pump EP	Pipe Material	Pipe Size mm	Pipe Size (ID) mm	Pipe Grade %	Design Flow (DF) L/s	Actual PDWF L/s	Qf (Capacity) L/s	Velocity @ Qf m/s	Velocity @ PDWF m/s	SHEAR STRESS Pa	Grade Check	Max EP Check for dia <=300	Self Cleansing	Slime Control	Capacity Check
C-B	L1	173.30-27.14	NEW	3.29	230	230	PVC SN8	225	234	1.68	6.24	2.08	65.33	1.52	0.69	2.95		RETIC #131EP MAX	Self Cleansing OK	NA - Reticulation	Capacity OK
B-A	L.1	27.14-00	NEW	5	350	350	PVC SN8	225	234	1.99	8.04	2.68	71.10	1.66	0.81	3.69		RETIC #131EP MAX	Self Cleansing OK	NA - Reticulation	Capacity OK

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DEVELOPER	MIRVAC HOMES (NSW) PTY LTD	Case No. 206861WW SHT 7 OF 7 SHTS.	SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1
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CONSTRUCTOR	CAREY CONSTRUCTION PTY LTD		
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