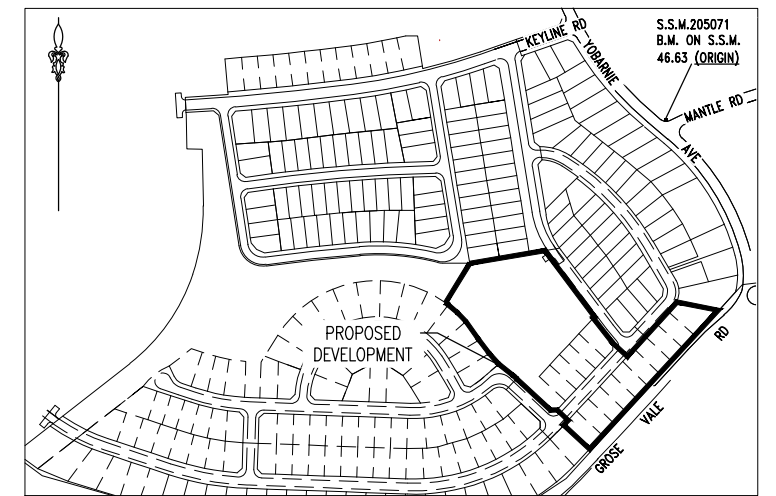
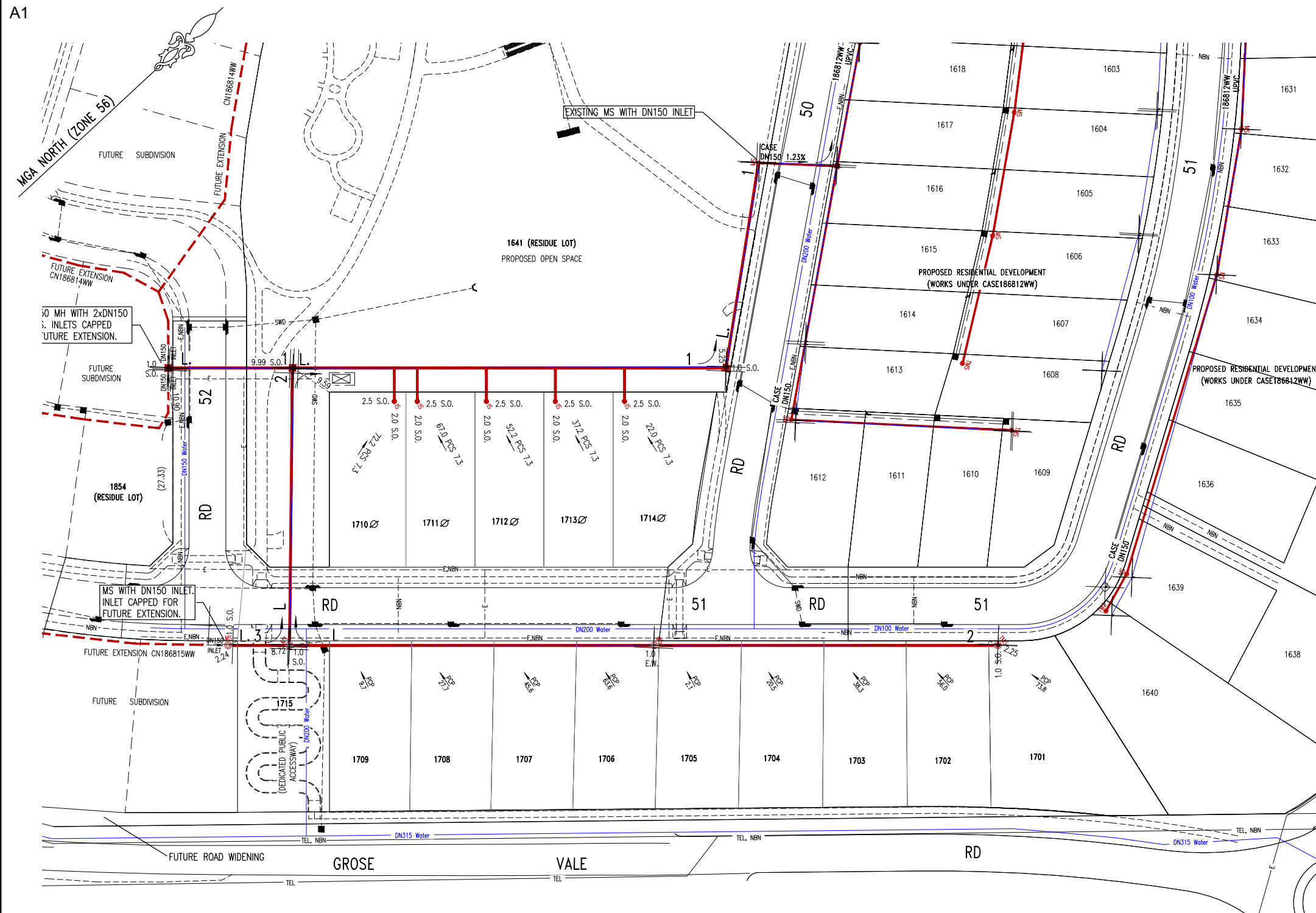


NOTES :

- WATER SERVICING COORDINATOR & DESIGNER
CALIBRE PROFESSIONAL SERVICES PTY LTD
P.O. BOX 8300 NORWEST BC NSW 2153
Ph: (02) 8808 5000

FOR:
REDBANK COMMUNITIES
76 ARTHUR PHILLIP DRIVE
NORTH RICHMOND NSW 2754
- THE WORKS AND MATERIALS ARE IN ACCORDANCE WITH THE SEWERAGE CODE OF AUSTRALIA (WSA 02-2002-2.2 SYDNEY WATER EDITION VERSION 4-2017).
- ALL LOTS WERE VACANT AT TIME OF SURVEY.
- ALL STRUCTURES CONSTRUCTED TO PROPOSED FINISHED SURFACE LEVELS, AS THE P.F.S.L.'S SHOWN ON THIS PLAN SUBJECT TO CHANGE, THE CONSTRUCTOR LAISED WITH THE SITE SUPERINTENDENT TO VERIFY ALL FINAL LEVELS AT TIME OF CONSTRUCTION.
- PIPES CONCRETE ENCASED SHOWN ACCORDINGLY: ALL ENCASED SUPPORT TYPE 12U
- AREAS HATCHED THUS NOT DRAINED:
- DRAINAGE LIMITS WERE TO PROPOSED FINISHED SURFACE LEVELS.
- ALL LEVELS ELECTRONICALLY GENERATED. NO LEVEL BOOK AVAILABLE.
- ALL MAINS LAID IN EXISTING, PROPOSED OR FUTURE ROAD CARRIAGEWAYS - SEE SITE SPECIFIC COMPACTION SPECIFICATION (SHEET 2).
- CONCRETE BULKHEADS CONSTRUCTED AT REAR OF KERB FOR ALL ROAD CROSSINGS. REFER STD DWG SEW-1206 & SEW-1207-V.
- EXISTING AND PROPOSED SERVICES ARE INDICATIVE ONLY. CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING & PROPOSED SERVICES PRIORITIZED TO THE COMMENCEMENT OF WORK & APPROPRIATE PROCEDURES, PRECAUTIONS AND CARE NEED WAS TAKEN BY THE CONSTRUCTOR WHEN WORKING IN CLOSE PROXIMITY TO SERVICES DURING CONSTRUCTION.
- THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA (CLAUSE 22.3.4.4) ARE:
PIPE EMBEDMENT ZONE: - NIL TRENCH FILL ZONE - TRAFFICABLE: NIL (SEE NOTE 9)
(SEE NOTE 18) TRENCH FILL ZONE - NON-TRAFFICABLE: 16
M.H. & M.S. ZONE: 20

(PLEASE REFER TO SITE SPECIFIC COMPACTION SPECIFICATION - SHEET 2).
- ALL PROPERTY CONNECTION SEWERS CONSTRUCTED AS DETAILED IN DTC-2120 (Iss. A, 18/03/15).
- PRECAUTIONS ARE NECESSARY IN THE VICINITY OF SUB-STATION & OTHER ELECTRICAL EARTHING.
- CONSTRUCTOR PROVIDED WSC WITH CERTIFIED RED MARKED UP WAC DRAWINGS SHOWING ACCURATE DISTANCES OF PCS'S TO CENTER OF DOWNSTREAM STRUCTURES, ACCURATE DISTANCES OF PCP ALONG PCS AND CHAINAGES OF CONCRETE ENCASED SECTIONS.
- LOCATION OF SEWER LINES MARKED BY A REGISTERED LAND SURVEYOR PRIOR TO CONSTRUCTION.
- INVERT LEVEL OF EXISTING SEWER AT CH 0.0 (L1) CONFIRMED BY SURVEY PRIOR TO COMMENCEMENT OF CONSTRUCTION. WSC ADVISED.
- EMBEDMENT COMPACTION TESTING AS PER SITE SPECIFIC COMPACTION SPECIFICATION (SHEET 2) AND SUBJECT TO CLAUSE 22.3.3.1 OF SEWERAGE CODE OF AUSTRALIA. SELF-COMPACTING METAL GRANULAR EMBEDMENT MAY HAD BEEN USED.
- WHERE MAINTENANCE SHAFTS HAD A DEFLECTION GREATER THAN 30 DEGREES, INSTALL 'POO PIT' TYPE OR APPROVED EQUIVALENT. THE DEFLECTION ANGLE (D.A.) FOR EACH MAINTENANCE SHAFT IS SHOWN ON THE MAINTENANCE STRUCTURE SCHEDULE (SHEET 2).
- ALL M.H.'S CONSTRUCTED IN ACCORDANCE WITH SYDNEY WATER'S DEEMED TO COMPLY DRAWING DTC-2203 (Iss. B, 18/03/15).
- SUBSURFACE CONDITIONS, INCLUDING GROUNDWATER, CONTAMINATION, UNRECORDED BURIED MATERIAL OR OBJECTS AND ARCHAEOLOGICALLY SIGNIFICANT ITEMS NOT ENCOUNTERED DURING CONSTRUCTION.
- MINIMUM ALLOWABLE BEARING PRESSURE OF FOUNDATION MATERIAL FOR ALL MAINTENANCE HOLES 100kPa. FOUNDATION MATERIAL INSPECTED BY A SUITABLY EXPERIENCED GEOTECHNICAL ENGINEER PRIOR TO PLACING BLINDING CONCRETE & CERTIFICATION PROVIDED TO WSC.
- ALL MAINTENANCE STRUCTURES LOCATED WITHIN THE ROAD RESERVE & PROPOSED DRIVEWAYS FITTED WITH CLASS 'D' TRAFFICABLE LID.



CONSTRUCTION NOTES

THE PROPOSED WORKS AS DETAILED HEREON CONSTRUCTED IN ACCORDANCE WITH:

- THE SEWERAGE CODE OF AUSTRALIA - WSA 02-2002-2.2 SYDNEY WATER EDITION VERSION 4-2017;
- SYDNEY WATER'S DEEMED TO COMPLY DWG DTC-2000 (Iss. C, 18/03/15), DTC-2120 (Iss. A, 18/03/15), DTC-2203 (Iss. B, 18/03/15), DTC-2220 (Iss. D, 18/03/15), DTC-2221 (Iss. B, 1/03/13) & DTC-2222 (Iss. C, 18/03/15).
- SITE SPECIFIC COMPACTION TESTS - SHEET 2.

THE CONSTRUCTOR HAD A COPY OF THESE DOCUMENTS ON SITE AT ALL TIMES.

SITE SPECIFIC CONSTRUCTION NOTE

IT IS ACKNOWLEDGED THAT THERE IS RECENTLY CONSTRUCTED / COMPLETED INFRASTRUCTURE THROUGHOUT THE AREA OF PROPOSED WORKS, WITH OWNERSHIP SPREAD ACROSS SYDNEY WATER, COUNCIL AND REDBANK COMMUNITIES. THE CONTRACTOR IS AT ALL TIMES, TO UNDERTAKE WHATEVER TASKS NECESSARY TO MINIMIZE DISTURBANCE AND DAMAGE TO EXISTING ROAD, KERB & GUTTER, FOOTPATH AND VEGETATION ETC, WITH ALL REPAIR AND REIFICATION TO MATCH THAT WHICH EXISTED PRIOR TO THE WORKS BEING UNDERTAKEN. PHOTOS OF EXISTING CONDITION WILL BE SUPPLIED TO BOTH THE PRINCIPLE CIVIL CONTRACTOR, SYDNEY WATER ACCREDITED SUBCONTRACTOR AND SUPERINTENDENT, TO CONFIRM THE PRE-WORKS CONDITION.

SYDNEY WATER ACCREDITED SUBCONTRACTOR AT ALL TIMES, IS TO CONSULT WITH THE PRINCIPLE CIVIL CONTRACTOR, TO ENSURE THAT THE DEVELOPER, REDBANK COMMUNITIES IS ADVISED AND APPROVES THE EXTENT OF REQUIRED DISTURBANCE PRE-WORKS, IS ADVISED AND APPROVES OF ANY CHANGES TO THIS EXTENT DURING THE WORKS, AND INSPECTS AND ACCEPTS THE COMPLETED WORKS, PRIOR TO THE SYDNEY WATER ACCREDITED SUBCONTRACTOR LODGING THEIR PROJECT COMPLETION PACKAGE (PCP) WITH THE WATER SERVICE CO-ORDINATOR, WITH THIS ROLE UNDERTAKEN BY CALIBRE PROFESSIONAL SERVICES. CALIBRE PROFESSIONAL SERVICES ARE TO ONLY ACCEPT THE PCP FOR PROCESSING, PROVIDED THIS INSPECTION AND ACCEPTANCE BY REDBANK COMMUNITIES HAS BEEN RECEIVED IN WRITING WITH THE PCP.

CONTACT DIAL BEFORE YOU DIG

PLEASE NOTE SITE SPECIFIC COMPACTION SPECIFICATION - SHEET 2

02	WORK AS CONSTRUCTED	M.K.	03/03/22
01	FOR SWC APPROVAL	A.S.	13/05/21
No.	AMENDMENT DESCRIPTION	BY	DATE

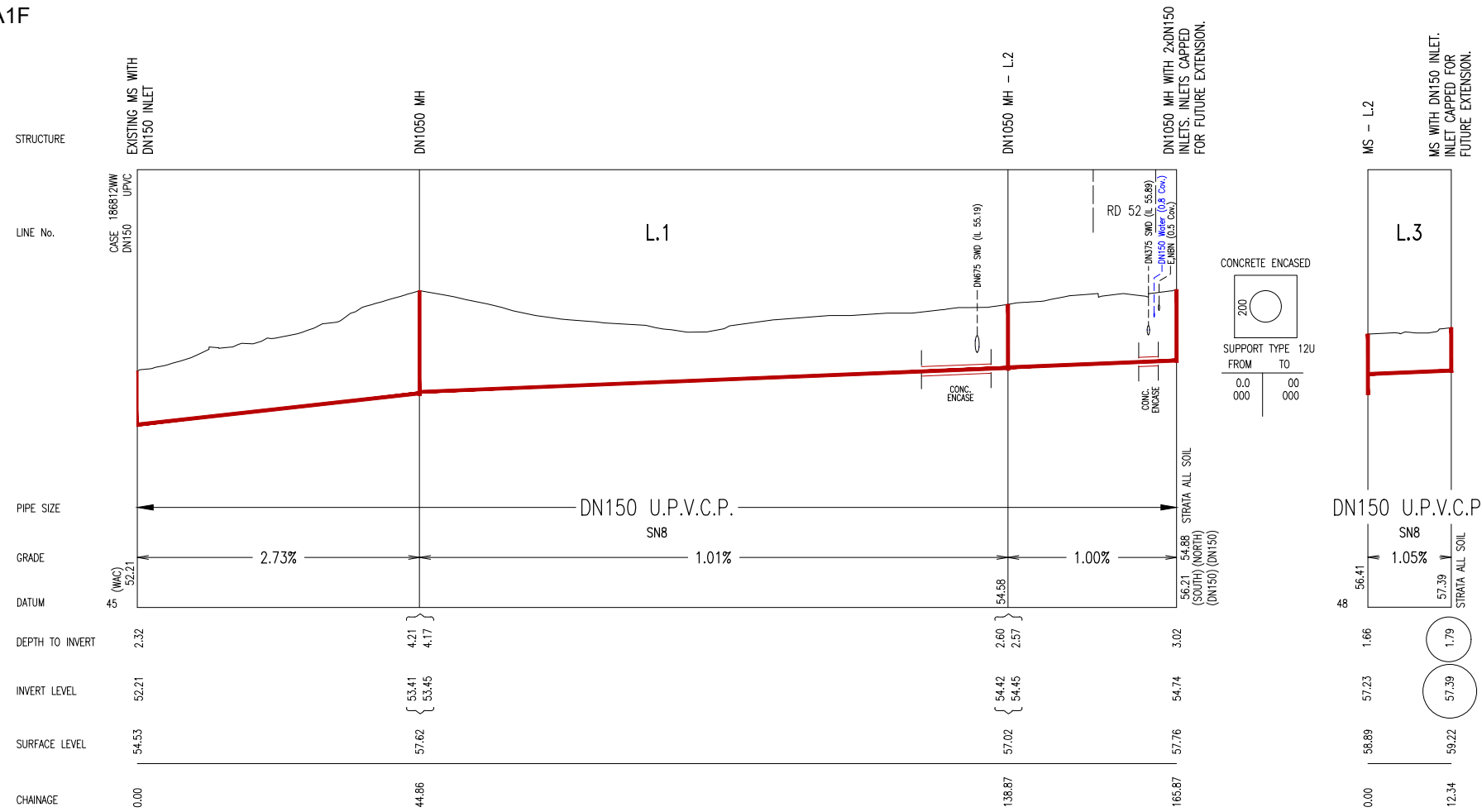
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION	UTILITIES					
	TYPE	DATE	REF.	TYPE	DATE	REF.
PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT - DIAL BEFORE YOU DIG ELECTRICITY, ENDEAVOUR ENERGY . . . Ph. 131 003 GAS . . . JEMENA GAS . . . Ph. 1300 880 908 TELECOMMUNICATIONS . . . TELSTRA . . . Ph. 1800 114 919 SYDNEY WATER . . . Ph. 132 092 GIVING AT LEAST 48 HOURS NOTICE.	SEWER: S	23/02/21	CALIBRE	PROP ELECTRICAL: E	25/01/21	E.P.D.
	WATER: W	15/03/21	CALIBRE	PROP NBN: NBN	22/01/21	D.I.T.
	TELSTRA: TEL	22/04/21	D.B.Y.D.	PROP STORMWATER: SWD	26/04/21	REDBANK
	ELECTRICAL: E	22/04/21	D.B.Y.D.			
	NBN: NBN	22/04/21	D.B.Y.D.			
	STORMWATER: SWD	26/04/21	REDBANK			

WORK AS CONSTRUCTED CERTIFICATION	
DEVELOPER	REDBANK COMMUNITIES
WATER SERVICE CO-ORDINATOR	CALIBRE PROFESSIONAL SERVICES P/L
CONSTRUCTOR	C.J. DOYLE CONTRACTING SERVICES P/L
COMPLETED	07/10/2021
	W.A.C. PREPARED 03/03/2022
DESIGNER	CALIBRE PROFESSIONAL SERVICES P/L
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.	

PIPE SCHEDULE			
SIZE DN	TYPE	CLASS	LENGTH
100	U.P.V.C	SN8	36.25
150	U.P.V.C	SN8	393.74

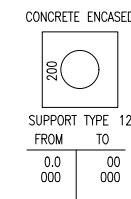
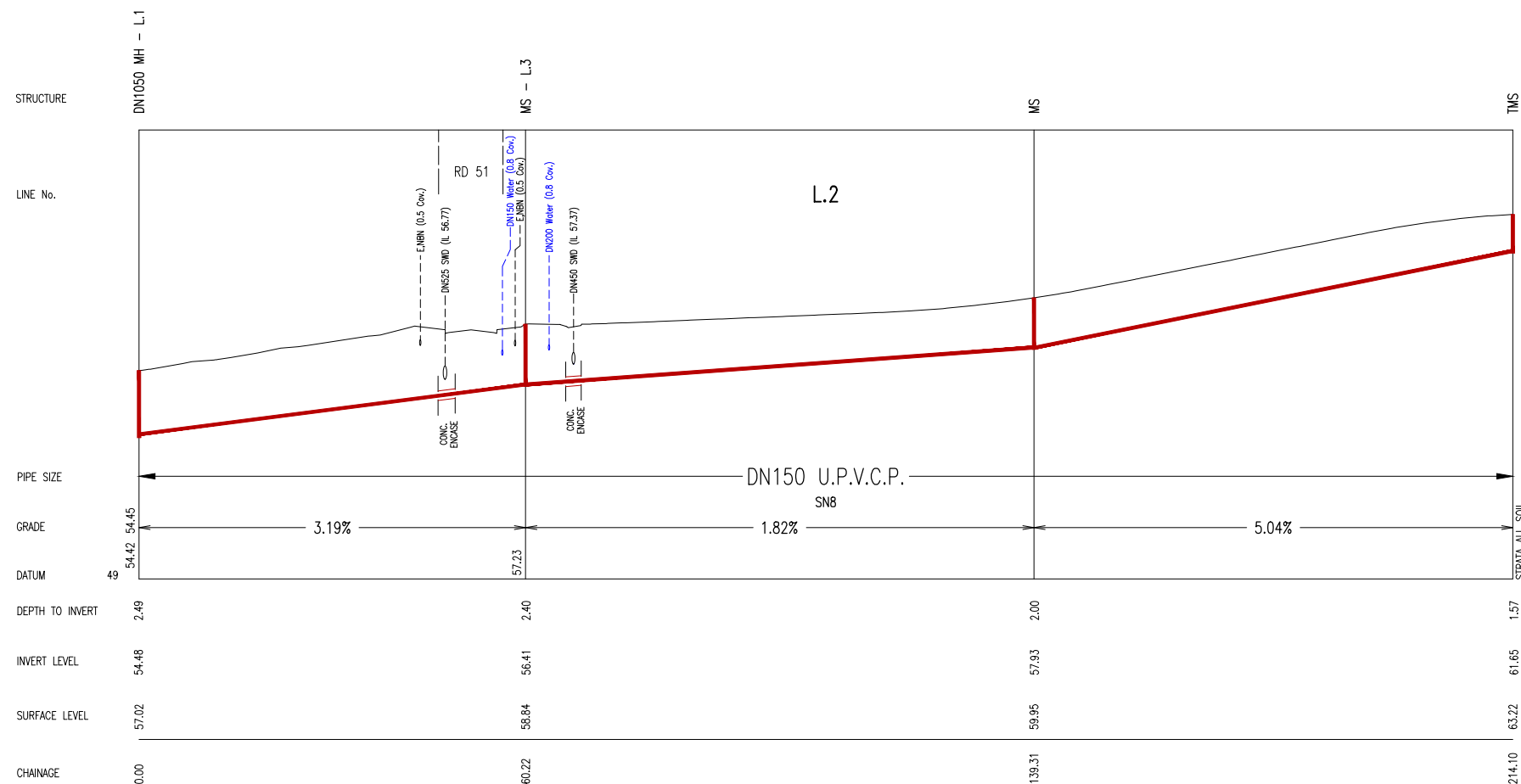
AUSTRALIAN HEIGHT DATUM	
PLAN	1:500
SECTION	VERT. 1:125
CROSS SECTIONS	NATURAL
LENGTHS, DEPTHS & LEVELS ARE IN METRES.	

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.	
U.B. DIRECTORY . . . MAP 83, J1 (41st Edition)	SYDNEY WATER CORPORATION
Case No. 186813WW	
HAWKESBURY SEWERAGE DRAINS TO NORTH RICHMOND S.T.W.	
SHEET . 1 . OF . 3 .	File No. N/A



MAINTENANCE STRUCTURE SCHEDULE							
LINE NO	CHAINAGE	TYPE	DN RISER	COVER CLASS	MATERIAL (PVC, CAST IN-SITU, ETC)	MS DEFLECTION ANGLE	COMMENTS (BRAND, DTC, MS DEF. ANGLES, OTHER INFO)
1	0.00	EXISTING MS	0.225	D	UPVC	N/A	REFER CN186812WW
1	44.86	MH	1.050	D	CAST-IN-SITU	N/A	DTC-2203
1/2	138.87/0.0	MH	1.050	D	CAST-IN-SITU	N/A	DTC-2203
1	165.87	MH	1.050	D	CAST-IN-SITU	N/A	DTC-2203
2/3	60.22/0.0	MS	0.300	D	UPVC	90	'POO PIT' TYPE OR EQUIV.
2	139.31	MS	0.225	B	UPVC	0	'AM'ROO' TYPE OR EQUIV.
2	214.10	TMS	0.225	D	UPVC	N/A	'AM'ROO' TYPE OR EQUIV.
3	12.34	MS	0.225	D	UPVC	0	'AM'ROO' TYPE OR EQUIV.

⊙ M.S. WITH HIGH LEVEL CONNECTION



SITE SPECIFIC COMPACTION SPECIFICATION

WITHIN FULL WIDTH OF ROAD CARRIAGEWAY PLUS 1.0M EITHER SIDE -

- ALL SUBGRADE SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, OF NOT MORE THAN 300MM THICK LOOSE MEASUREMENT, IF REQUIRED, AND SHALL HAVE EACH LAYER COMPACTED TO A 100% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL SUB-BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL BASE COURSE SHALL BE PLACED AND COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL ROAD CROSSINGS TO BE PROVIDED IN EXISTING ROADS, THE TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH A SAND/CEMENT BLEND 20:1 MIX TO SUBGRADE LEVEL THEN D6820 TO WITHIN 50MM OF THE ROAD SURFACE, OR IF REQUIRED TO A HIGHER SPECIFICATION BY A SPECIFIC UTILITY AUTHORITY, TO THAT SPECIFICATION AS INSTRUCTED BY THE PROJECT SUPERINTENDENT.
- ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF PAVEMENT, TAKEN 1.0M FROM ALTERNATE SIDES OF PAVEMENT, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

WITHIN FULL WIDTH OF ROAD FOOTPATH / VERGE EXCLUDING 1.0M BESIDE ROAD CARRIAGEWAY EITHER SIDE -

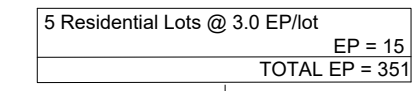
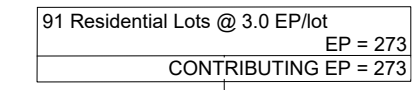
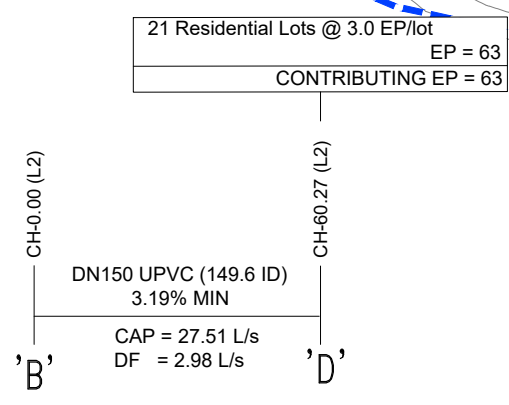
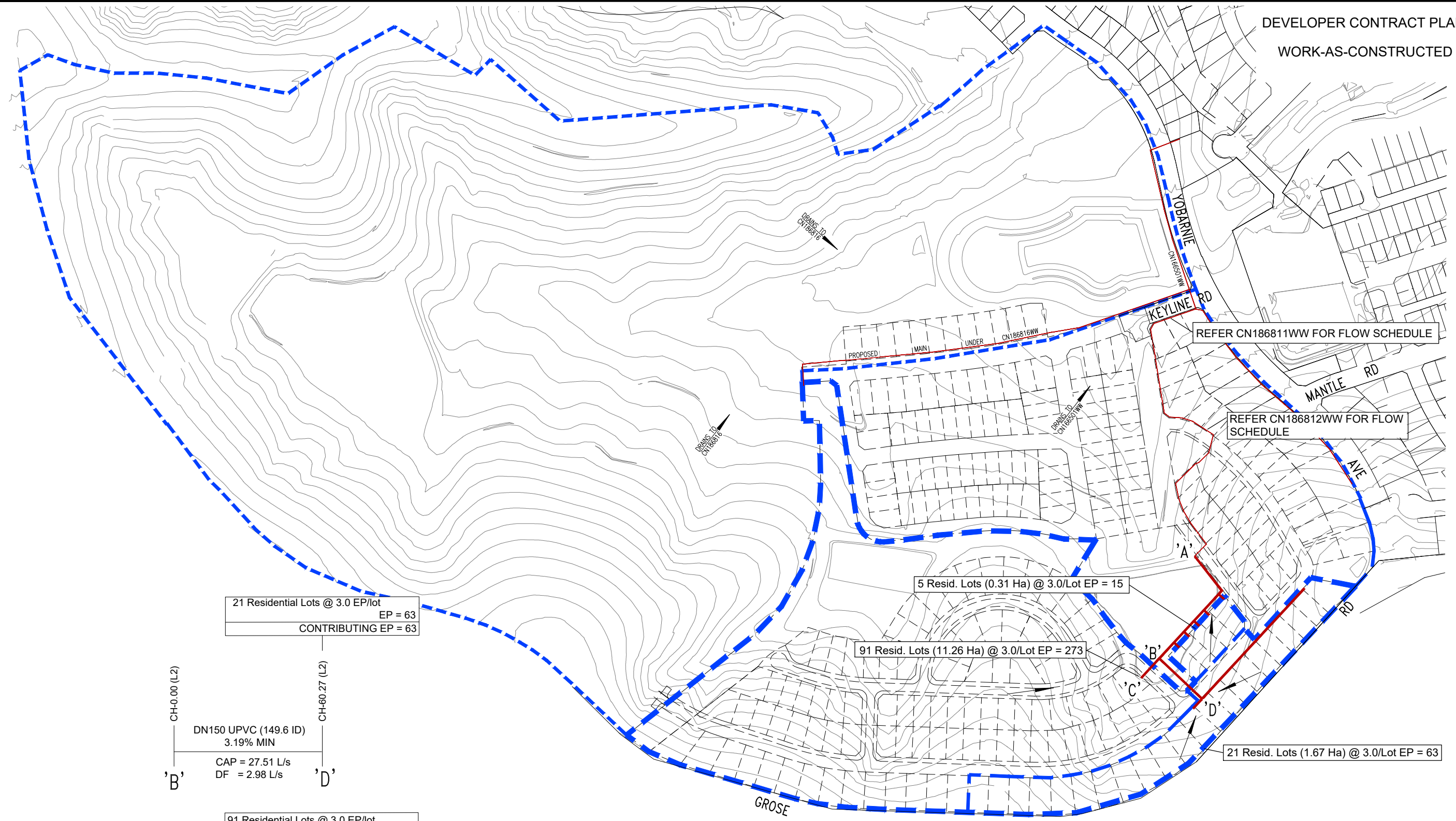
- ALL FILL SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, EXTENDING THE FULL WIDTH OF THE AREA BEING FILLED, OF NOT MORE THAN 300MM CONSOLIDATED THICKNESS. EACH LAYER SHALL BE COMPACTED TO AT LEAST 98% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'.
- ALL TESTS TO BE TAKEN EVERY 50 METRE LENGTH OF ROAD FOOTPATH / VERGE ON CENTRELINE, BY A NATA REGISTERED LABORATORY.
- ALL TRENCHES TO BE BACKFILLED TO HAVE THE SAME COMPACTION AS THE SURROUNDING ROAD FOOTPATH / VERGE.
- ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

WITHIN LOTS -

- ALL FILL SHALL BE CARRIED OUT IN HORIZONTAL LAYERS, EXTENDING THE FULL WIDTH OF THE AREA BEING FILLED, OF NOT MORE THAN 300MM CONSOLIDATED THICKNESS. EACH LAYER SHALL BE COMPACTED TO A DENSITY OF AT LEAST 98% STANDARD DRY DENSITY RATIO DETERMINED IN ACCORDANCE WITH AS 1289 5.4.1-2007 'COMPACTION CONTROL TEST - DRY DENSITY RATIO, MOISTURE VARIATION AND MOISTURE RATIO'. THE DEPTHS OF FILL AND THE COMPACTION THEREOF ARE TO BE VERIFIED BY THE SUBMISSION OF COMPACTION CERTIFICATES AND A PLAN SHOWING CONTOURED DEPTHS OF FILL IN RELATION TO LOT BOUNDARIES.
- ALL TESTS TO BE A MINIMUM OF TWO COMPACTION TESTS PER LOT PER LAYER ARE TO BE CARRIED OUT, BY A NATA REGISTERED LABORATORY.
- ALL TRENCHES TO BE BACKFILLED TO HAVE THE SAME COMPACTION AS THE SURROUNDING LOTS.
- ALL TRENCH TESTS TO BE TAKEN IN EACH 300MM LAYER AND EVERY 50 METRES OF TRENCH, BY A NATA REGISTERED LABORATORY.
- THESE AND ALL OTHER REQUIREMENTS TO BE COMPLIED WITH, TO BE READ IN CONJUNCTION WITH HAWKESBURY CITY COUNCIL DCP PART II - CONSTRUCTION SPECIFICATION.
- ANY ERRORS, OMISSIONS OR QUERIES TO BE SUBMITTED TO THE PROJECT SUPERINTENDENT FOR INSTRUCTION.

REDBANK SOUTHERN HEIGHTS II

WORK AS CONSTRUCTED CERTIFICATION		Sydney WATER SYDNEY WATER CORPORATION	
DEVELOPER	REDBANK COMMUNITIES	Case No.186813WW	SHT 2 OF 3 SHTS.
W.S.C.	CALIBRE PROFESSIONAL SERVICES P/L		
CONSTRUCTOR	C.J. DOYLE CONTRACTING SERVICES P/L		
COMPLETED	07/10/2021		
W.A.C. PREPARED	03/03/2022		
DESIGNER	CALIBRE PROFESSIONAL SERVICES P/L		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		SYDNEY WATER CORPORATION FOR DETAILS OF SERVICES SEE SHEET 1	



FLOW DIAGRAM

SEWER CATCHMENT PLAN
NTS

REDBANK SOUTHERN HEIGHTS II

WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	REDBANK COMMUNITIES		Case No.186813WW SHT 3 OF 3 SHTS.
W.S.C.	CALIBRE PROFESSIONAL SERVICES P/L		
CONSTRUCTOR	C.J. DOYLE CONTRACTING SERVICES P/L	COMPLETED 07/10/2021	
W.A.C. PREPARED 03/03/2022		DESIGNER CALIBRE PROFESSIONAL SERVICES P/L	
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS		FOR DETAILS OF SERVICES SEE SHEET 1	