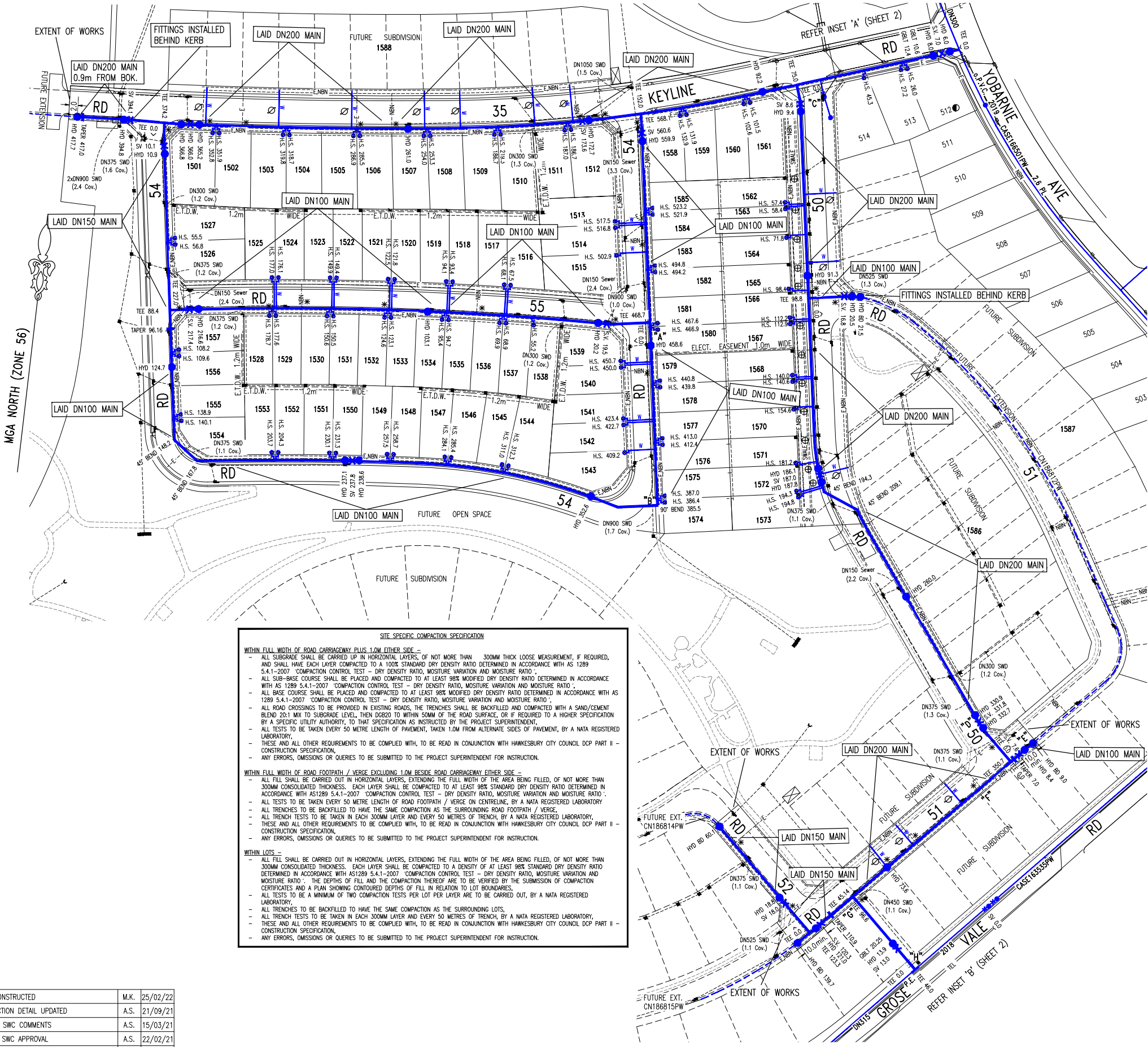


- NOTES :
- WATER SERVICING COORDINATOR AND DESIGNER: CALIBRE PROFESSIONAL SERVICES PTY LTD, P.O BOX 8300, NORWEST BC NSW 2153, Ph: (02) 8808 5000
 - FOR: REDBANK COMMUNITIES, 76 ARTHUR PHILLIP DRIVE, NORTH RICHMOND NSW 2754
 - EXISTING AND PROPOSED SERVICES WERE INDICATIVE ONLY. CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING & PROPOSED SERVICES PRIORITIZED TO THE COMMENCEMENT OF WORK & APPROPRIATE PROCEDURES, PRECAUTIONS AND CARE WAS TAKEN BY THE CONTRACTOR WHEN WORKING IN CLOSE PROXIMITY TO ALL SERVICES DURING CONSTRUCTION AND NO DAMAGE TO EXISTING SERVICES WAS RECTIFIED AT THE CONSTRUCTORS EXPENSE.
 - MAIN LAID GENERALLY 2.6m P.L. AT 0.8m COVER TO TOP OF MAIN. EXCEPT WHERE OTHERWISE SHOWN. WHERE REQUIRED, LOCALLY RAISED MAIN TO STANDARD COVER TO ACHIEVE THE REQUIRED VERTICAL CLEARANCE TO UNDERGROUND SERVICES.
 - MAIN LAYING DID NOT PROCEED PRIOR TO FORMATION OF FOOTWAYS TO FINISHED SURFACE LEVELS.
 - MAIN LAID OVER STORMWATER & SEWER LINES UNLESS OTHERWISE INDICATED.
 - ALL MAINS LAID IN EXISTING OR PROPOSED ROAD CARRIAGEWAYS BACKFILLED WITH 14:1 CEMENT STABILISED SAND- REFER TO SITE SPECIFIC COMPACTION SPECIFICATION (SHEET 2).
 - THRUST/ANCHOR BLOCKS CONSTRUCTED AT ALL BENDS, TEES, TAPERS, FITTINGS & PARTS OF PIPELINE WHERE UNBALANCED THRUST OCCURS. REFER SYDNEY WATER DEEMED TO COMPLY DRAWING DTC-1110 (BENDS), DTC-1111(TYPE 2 BENDS- IF REQUIRED), DTC-1112 (TAPERS), DTC-1113 (TEES), DTC-1114 (HYDRANT BENDS) & DTC-1115 (STOP VALVES).
 - THE ALLOWABLE HORIZONTAL BEARING PRESSURE (AHP) OF UNDISTURBED NATURAL SOIL DETERMINED BY A SUITABLY EXPERIENCED GEOTECHNICAL ENGINEER PRIOR TO CASTING THRUST RESTRAINTS. CERTIFICATION PROVIDED TO W.S.C.
 - THRUST BLOCKS AT CONNECTION POINTS WERE PREPARED AGAINST UNDISTURBED GROUND AND CURED FOR A MINIMUM 7 DAYS BEFORE SUBJECT TO THRUST LOADINGS.
 - TRENCH STOPS WERE USED IN LIEU OF BULKHEADS AT ROAD CROSSINGS. REFER WAT-1209.
 - BURIED FITTINGS & BENDS WERE NOT BACKFILLED UNTIL W.A.C. DETAILS HAD BEEN OBTAINED BY THE DESIGNER AND APPROVAL FOR BACKFILL GIVEN BY THE W.S.C. REFER W.S.C. FOR ALTERNATIVES.
 - AREA COVERED BY TREE PRESERVATION ORDER.
 - THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:
PIPE EMBEDMENT ZONE: - 43 TRENCH FILL ZONE: SEE NOTE 8
TRAFFICABLE: NIL
NON-TRAFFICABLE: - 43
NUMBER OF TESTS VERIFIED BY ACCREDITED FIELD TESTER.
PLEASE REFER TO SITE SPECIFIC COMPACTION SPECIFICATION (SHEET 2).
 - ALL PROPERTY (MAIN TO METER) SERVICES CONSTRUCTED TO SYDNEY WATER'S INSTALLATION REQUIREMENTS BY A LICENSED PLUMBER. THE WORKS INSTALLED IN ACCORDANCE WITH THE CURRENT SYDNEY WATER PROPERTY (MAIN TO METER) SERVICE INSTALLATIONS TECHNICAL REQUIREMENTS, NSW CODE OF PRACTICE FOR PLUMBING AND DRAINAGE AND AS/NZS3500.
 - DICL FITTINGS WRAPPED IN BLUE POLYETHYLENE SLEEVING.
 - PRECAUTIONS TAKEN IN THE VICINITY OF SUB-STATION & OTHER ELECTRICAL EARTHING.
 - PRIOR TO THE USE OF INSULATING BUSHES OR NON CONDUCTIVE PIPE MATERIAL, SENIOR INSULATION INSPECTOR AT AUSGRID (PH: 13 15 25) OR ENDEAVOUR ENERGY (PH: 13 10 81), RE ELECTRICAL EARTHING OF PROPERTIES WAS CONTACTED.
 - ALL SAFETY PRECAUTIONS WERE TAKEN FOR ELECTRICAL EARTHING OF BUILDINGS WHEN DISCONNECTING/CONNECTING WATER PROPERTY CONNECTION SERVICES.
 - SYDNEY WATER REQUIREMENTS FOR CONTRACTOR ELECTRICAL SAFETY DATED 19/12/2011 APPLIED, AND SITE SPECIFIC PROJECT SAFETY PLAN WITH APPROPRIATE WORK METHOD STATEMENT IMPLEMENTED.
 - RED MARKED UP DRAWING SHOWING WORK AS CONSTRUCTED DETAILS PROVIDED TO W.S.C.
 - SUBSURFACE CONDITIONS, INCLUDING GROUNDWATER, CONTAMINATION, UNRECORDED BURIED MATERIAL OR OBJECTS AND ARCHAEOLOGICALLY SIGNIFICANT ITEMS NOT ENCOUNTERED DURING CONSTRUCTION.
 - MINIMUM CLEARANCES BETWEEN THE PROPOSED WATERMANS & OTHER UNDERGROUND SERVICES COMPLIED WITH THE WATER SUPPLY CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014, TABLE 5.5 (PAGE 108).
 - MAIN GRADE EXCEEDS 5% BETWEEN "A"- "B", "C"- "D", "E"- "F" & "G"- "H". TRENCHSTOPS CONSTRUCTED AT 12.5m INTERVALS BETWEEN "A"- "B", 14.3 INTERVALS BETWEEN "C"- "D", 20.0 INTERVALS BETWEEN "E"- "F" AND 11.1m INTERVALS BETWEEN "G"- "H", IN ACCORDANCE WITH TABLE 7.5 OF THE WATER SUPPLY CODE OF AUSTRALIA (SYDNEY WATER EDITION) (WSA 03-2011-3.1, 2014) AND DRG NO. WAT-1209.
 - DISCONNECTED APPROX. 82.2m OF DN100 oPVC (2019) BETWEEN "W"- "X"- "Y". TRANSFER SERVICES AND RECOVER EXISTING SURFACE FITTINGS AS REQUIRED.
 - DISCONNECTED APPROX. 14.4m OF DN100 oPVC (2019) BETWEEN "X" TO "Z". TRANSFER SERVICES AND RECOVER EXISTING SURFACE FITTINGS AS REQUIRED.
 - LIGHT DUTY STEEL SURFACE BOXES USED FOR HYDRANTS & STOP VALVES LOCATED IN CONCRETE PATHS.
 - WHERE A FITTING WAS LOCATED IN A TRAFFICABLE AREA, INSTALL TRAFFICABLE SURFACE BOX AS PER THE WATER SUPPLY CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014 VERSION 3.1, DRG. NO. WAT-1303-V TO WAT-1306-V.
 - EXISTING PROPERTY SERVICE CONNECTION FOR LOT 512 WAS DISCONNECTED BY A LICENSED PLUMBER. TEMPORARY SERVICE SUPPLIED OFF DN300 MAIN IN YOBBARNE AVE. PROPERTY WAS RECONNECTED TO DN200 MAIN AT COMPLETION OF WORK.
 - MAPPING DATUM GDA 2020, MGA NORTH (ZONE 56).



SITE SPECIFIC COMPACTION SPECIFICATION

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

- ALL SUBGRADE SHALL BE CARRIED UP 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 DG820 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 UP 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 UP 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.

05	WORK AS CONSTRUCTED	M.K.	25/02/22
04	GVR CONNECTION DETAIL UPDATED	A.S.	21/09/21
03	UPDATED TO SWC COMMENTS	A.S.	15/03/21
02	ISSUED FOR SWC APPROVAL	A.S.	22/02/21
01	FOR DISCUSSION	A.S.	18/12/20

No.	AMENDMENT DESCRIPTION	BY	DATE
PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION			
EX. SEWER: S	S	15/03/19	CALIBRE
EX. WATER: Water	Water	02/05/19	CALIBRE/HYDRO
EX. NBW: NBW	NBW	15/11/18	D.J.T./D.B/D
EX. ELECTRICAL: E	E	27/10/18	E.P.D.
EX. STORMWATER: SWD	SWD	02/12/20	J.W.P.
EX. TELSTRA: TEL	TEL	15/11/18	D.B/D

UTILITIES			
TYPE	DATE	REF.	
PROP. STORMWATER: SWD	02/12/20	J.W.P.	
PROP. SEWER: S	15/12/20	CALIBRE	
PROP. ELECTRICAL: E	25/01/21	E.P.D.	
PROP. NBW: NBW	22/01/21	D.I.T.	

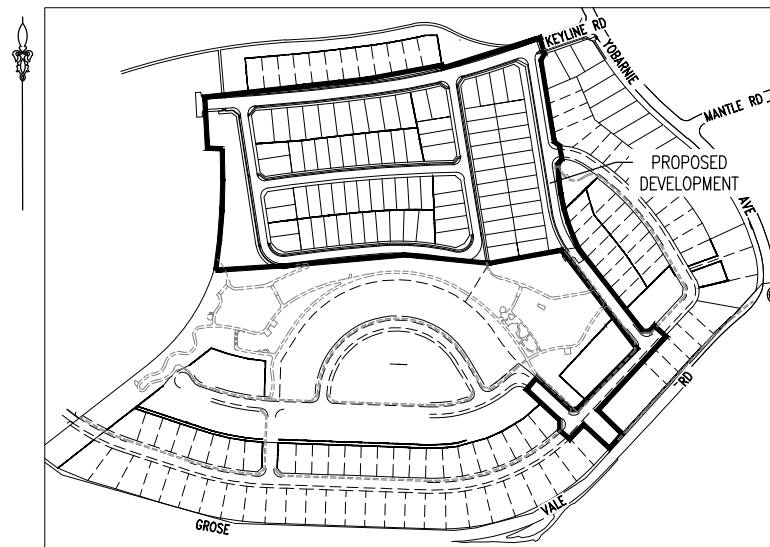
WORK AS CONSTRUCTED CERTIFICATION			
DEVELOPER	WATER SERVICE CO-ORDINATOR	CONSTRUCTOR	COMPLETED
REDBANK COMMUNITIES 76 ARTHUR PHILLIP DRIVE	CALIBRE PROFESSIONAL SERVICES PTY LTD	C. J. DOYLE CONTRACTING SERVICES PTY LTD	15/11/2021
W.A.C. PREPARED 25/02/2022			
DESIGNER	CALIBRE PROFESSIONAL SERVICES PTY LTD		
I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.			

PIPE SCHEDULE	
SIZE DN	TYPE CLASS LENGTH PIPE JOINING METHOD/NOTES
200	o.P.V.C. PN16 833.3 RUBBER RING
150	o.P.V.C. PN16 185.06 RUBBER RING
100	o.P.V.C. PN16 729.44 RUBBER RING
200	D.I.C.L. PN35 6.2 RUBBER RING
250	P.E. PN16 6.0 BW/FW WELD

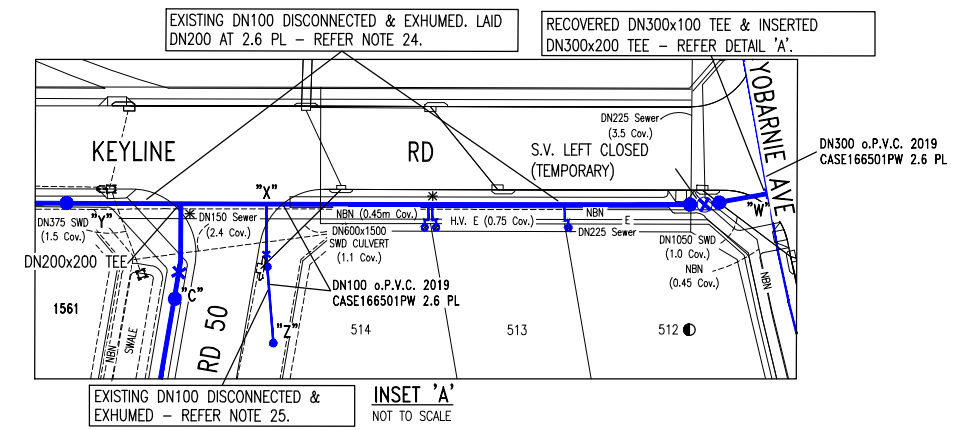
AUSTRALIAN HEIGHT DATUM	
SCALES	
PLAN 1:1000	SECTION { HOR. VERT. }
CROSS SECTIONS	NATURAL
LENGTHS, DEPTHS & LEVELS ARE IN METRES.	

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.	SYDNEY WATER CORPORATION Case No. 186811PW WATERMAIN EXTENSION KEYLINE RD NORTH RICHMOND HAWKESBURY
U.B. DIRECTORY MAP 63, H16 (41st EDITION)	
SHEET . . . OF . . . 2 . . .	File No. N/A

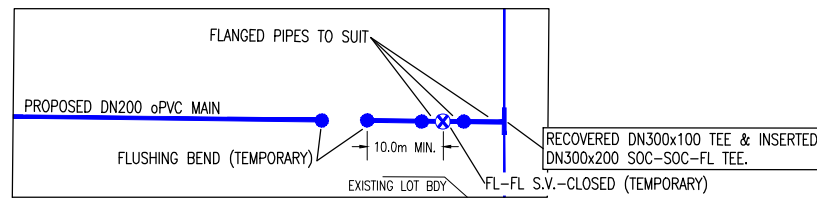
PLAN DRAWN DATE: 25/02/2022
VERSION: 05
SHEET 1 OF 2
SHEETS



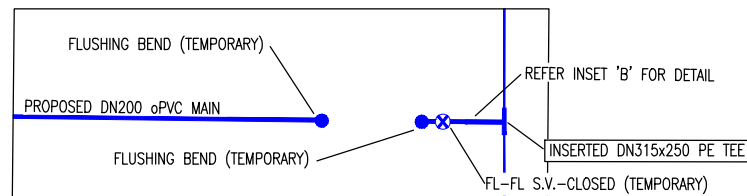
LOCALITY PLAN
(NOT TO SCALE)



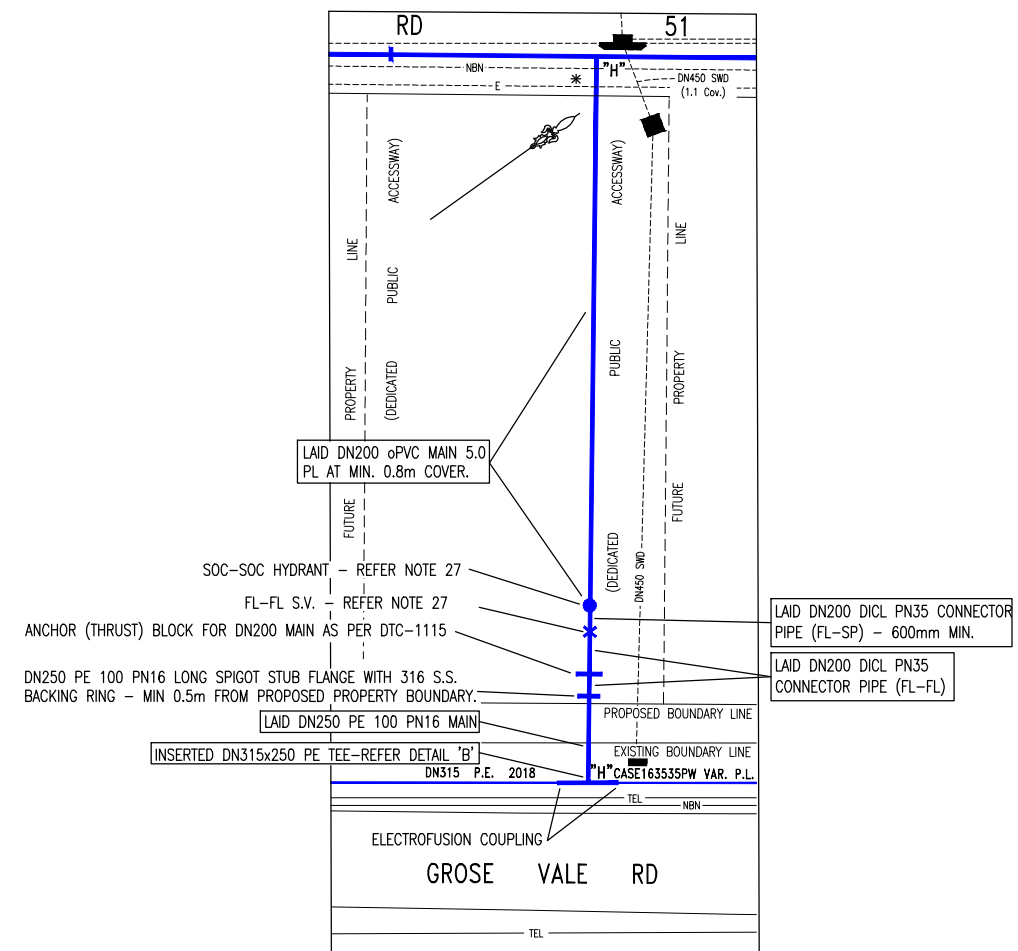
INSET 'A'
NOT TO SCALE



DETAIL 'A' - YOBARNIE AVE
UPFRONT CUT-IN
NOT TO SCALE



DETAIL 'B' - GROSE VALE RD
UPFRONT CUT-IN
NOT TO SCALE



INSET 'B'
NOT TO SCALE

- REFER NOTE 28.
- * WATERMAIN LAID OVER ETG AT 0.8m COVER. ETG LAID TO ACCOMMODATE WATERMAIN AT 0.8m COVER.

REDBANK PROMENADE

WORK AS CONSTRUCTED CERTIFICATION		SYDNEY WATER CORPORATION	
DEVELOPER	REDBANK COMMUNITIES		
W.S.C.	CALIBRE PROFESSIONAL SERVICES P/L		
CONSTRUCTOR	C.J. DOYLE CONTRACTING SERVICES P/L	Case No. 186811PW	SHT 2 OF 2 SHTS.
COMPLETED	15/11/2021		
W.A.C. PREPARED	24/02/2022		
DESIGNER	CALIBRE PROFESSIONAL SERVICES P/L	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	