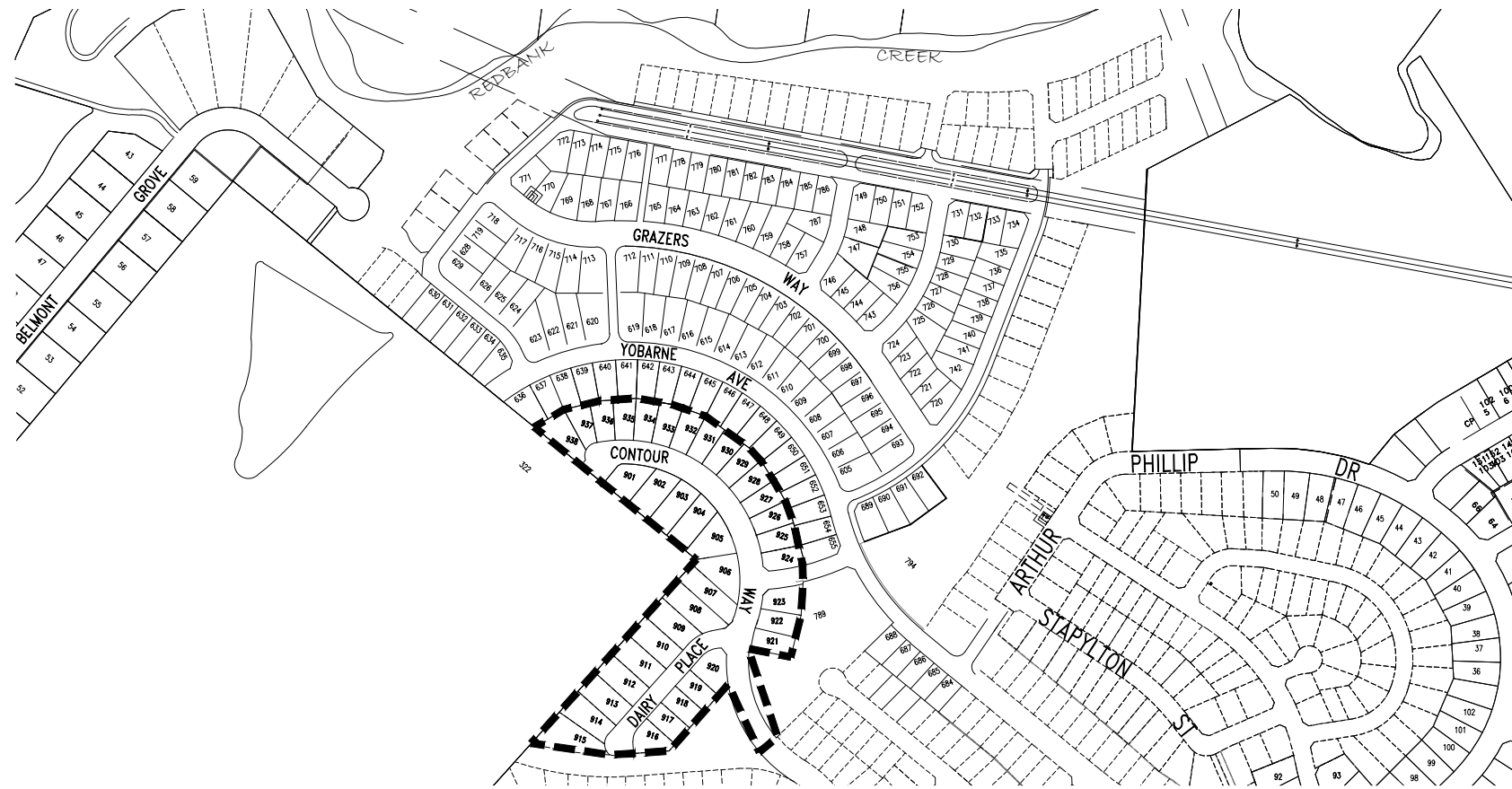


NOTES :

- WATER SERVICING COORDINATOR AND DESIGNER:
CALIBRE PROFESSIONAL SERVICES PTY LTD
P.O BOX 8300 Baulkham Hills BC NSW 2153
Ph: (02) 8808 5000
- FOR:
REDBANK COMMUNITIES
76 ARTHUR PHILLIP DRIVE
NORTH RICHMOND NSW 2754
- MAIN LAID GENERALLY 2.6m P.L. AT 0.8m COVER TO TOP OF MAIN EXCEPT WHERE OTHERWISE SHOWN. WHERE REQUIRED, THE MAIN WAS LOCALLY RAISED 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.
- 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 (TAPER), DTC-1113 (TEES), DTC-1114 (HYDRANT BENDS) & DTC-1115 (STOP VALVES).
- THRUST BLOCKS AT CONNECTION POINTS PREPOURED AGAINST UNDISTURBED GROUND AND WAS 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.
- AREA COVERED BY TREE PRESERVATION ORDER.
- ALL PROPERTY (MAIN TO METER) SERVICES WERE 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.
- THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:
PIPE EMBEDMENT ZONE: - 13 TRENCH FILL ZONE: SEE NOTE 5
- TRAFFICABLE: NIL
- NON-TRAFFICABLE: - 39

NUMBER OF WERE TESTS VERIFIED BY ACCREDITED FILED TESTER. NUMBERS GIVEN ABOVE USED AS A GUIDE ONLY. PLEASE REFER TO SITE SPECIFIC COMPACTION SPECIFICATION.

- DICL PIPES & FITTINGS WRAPPED IN BLUE POLYETHYLENE SLEEVING.
- DICL PIPES CLASS PN35 RRJ MAY BE USED IN LIEU OF PVC-O.
- RED MARKED UP DRAWING SHOWING WORK AS CONSTRUCTED DETAILS PROVIDED TO W.S.C.
- MINIMUM CLEARANCES BETWEEN THE PROPOSED WATERMANS & OTHER UNDERGROUND SERVICES COMPLY WITH THE WATER RETICULATION CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014, TABLE 5.5.
- APPROX. 3m of DN150 O.P.V.C. MAIN "A" TO "B" DISUSED AND EXHUMED. RECOVERED SURFACE FITTINGS AND TRANSFERRED SERVICES AS REQUIRED.
- APPROX. 43m of DN100 O.P.V.C. MAIN "C" TO "D" DISUSED AND EXHUMED. RECOVERED SURFACE FITTINGS AND TRANSFERRED SERVICES AS REQUIRED.
- APPROX. 7m of DN250 O.P.V.C. MAIN "E" TO "F" DISUSED AND EXHUMED. RECOVERED SURFACE FITTINGS AND TRANSFERRED SERVICES AS REQUIRED.



LOCALITY SKETCH
N.T.S.

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 D820 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 AS1289 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 AS1289 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.
- 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.

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 MINIMISE DISTURBANCE AND DAMAGE TO EXISTING ROAD, KERB & GUTTER, FOOTPATH AND VEGETATION ETC, WITH ALL REPAIR AND RECTIFICATION 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 LOGGING THEIR PROJECT COMPLETION PACKAGE (PCP) WITH THE WATER SERVICE CO-ORDINATOR, WITH THIS ROLE UNDERTAKEN BY CALIBRE CONSULTING. CALIBRE CONSULTING 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

CONSTRUCTION NOTES

THE PROPOSED WORKS AS DETAILED HEREON WERE CONSTRUCTED IN ACCORDANCE WITH THE WATER RETICULATION CODE OF AUSTRALIA - WSA 03-2011-3.1 SYDNEY WATER EDITION 2014 AND SYDNEY WATER 'DEEMED TO COMPLY' DRAWINGS INCLUDING DTC-1110 (ISS. A, 31/01/12) (DTC-1111 (ISS. B, 29/02/12) IF REQUIRED), DTC-1112 (ISS. B, 29/02/12), DTC-1113 (ISS. B, 29/02/12), DTC-1114 (ISS. A, 31/01/12) & DTC-1115 (ISS. B, 29/02/12) - SITE SPECIFIC COMPACTION SPECIFICATION.

| | | | |
|-----|-----------------------------------|------|----------|
| 06 | WORK AS-CONSTRUCTED | T.W. | 19/03/20 |
| 05 | PRELIMINARY WORK AS-CONSTRUCTED | T.W. | 17/01/20 |
| 04 | AMENDED TO SUIT DN150 EXTENSION | T.W. | 14/11/19 |
| 03 | MAIN ADJUSTMENT & INSET 'A' ADDED | A.S. | 18/09/19 |
| 02 | ISSUE FOR SYDNEY WATER APPROVAL | T.W. | 12/04/19 |
| 01 | ISSUE FOR REVIEW | J.H. | 27/03/19 |
| No. | AMENDMENT DESCRIPTION | BY | DATE |

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS SYDNEY WATER CORPORATION

PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :

DIAL BEFORE YOU DIG Ph: 1100
ELECTRICITY/ENDEAVOUR ENERGY Ph:131 003
GAS VEMENA GAS Ph:1300 880 906
TELECOMMUNICATIONS TELSTRA Ph:1800 114 818
SYDNEY WATER Ph:132 092
GIVING AT LEAST 48 HOURS NOTICE.

| UTILITIES | | | |
|----------------------|----------|---------|--|
| TYPE | DATE | REF. | |
| PROP SEWER: S | 30.03.17 | CALIBRE | |
| PROP STORMWATER: SWD | 01.08.18 | JWP | |
| TELECOM: TEL | 03.07.18 | NBN | |
| ELECTRICAL: E | 17.11.17 | JWP | |
| GAS: G | 04/09/19 | DRYD | |

| WORK AS CONSTRUCTED CERTIFICATION | | | |
|---|------|------|----------------------------|
| DEVELOPER | DATE | REF. | |
| NORTH RICHMOND JOINT VENTURE | | | |
| WATER SERVICE CO-ORDINATOR CALIBRE PROFESSIONAL SERVICES PTY LTD | | | |
| CONTRACTOR JONSHAN PTY LTD | | | |
| COMPLETED 14/02/2020 | | | W.A.C. PREPARED 19/03/2020 |
| 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 |
| 100 | O.P.V.C. | PN16 | 380 |
| 150 | O.P.V.C. | PN16 | 279 |
| 250 | O.P.V.C. | PN16 | 33 |

PIPE JOINING METHOD / NOTES
RUBBER RING
RUBBER RING
RUBBER RING

BOUNDARY TRAPS REQUIRED.

DESIGN HEAD 120 m

| AUSTRALIAN HEIGHT DATUM | |
|--|---------------|
| PLAN | SECTION |
| 1:1000 | HOR. |
| | VERT. |
| CROSS SECTIONS NATURAL | |
| LENGTH, 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 63/J14 (41st ED)

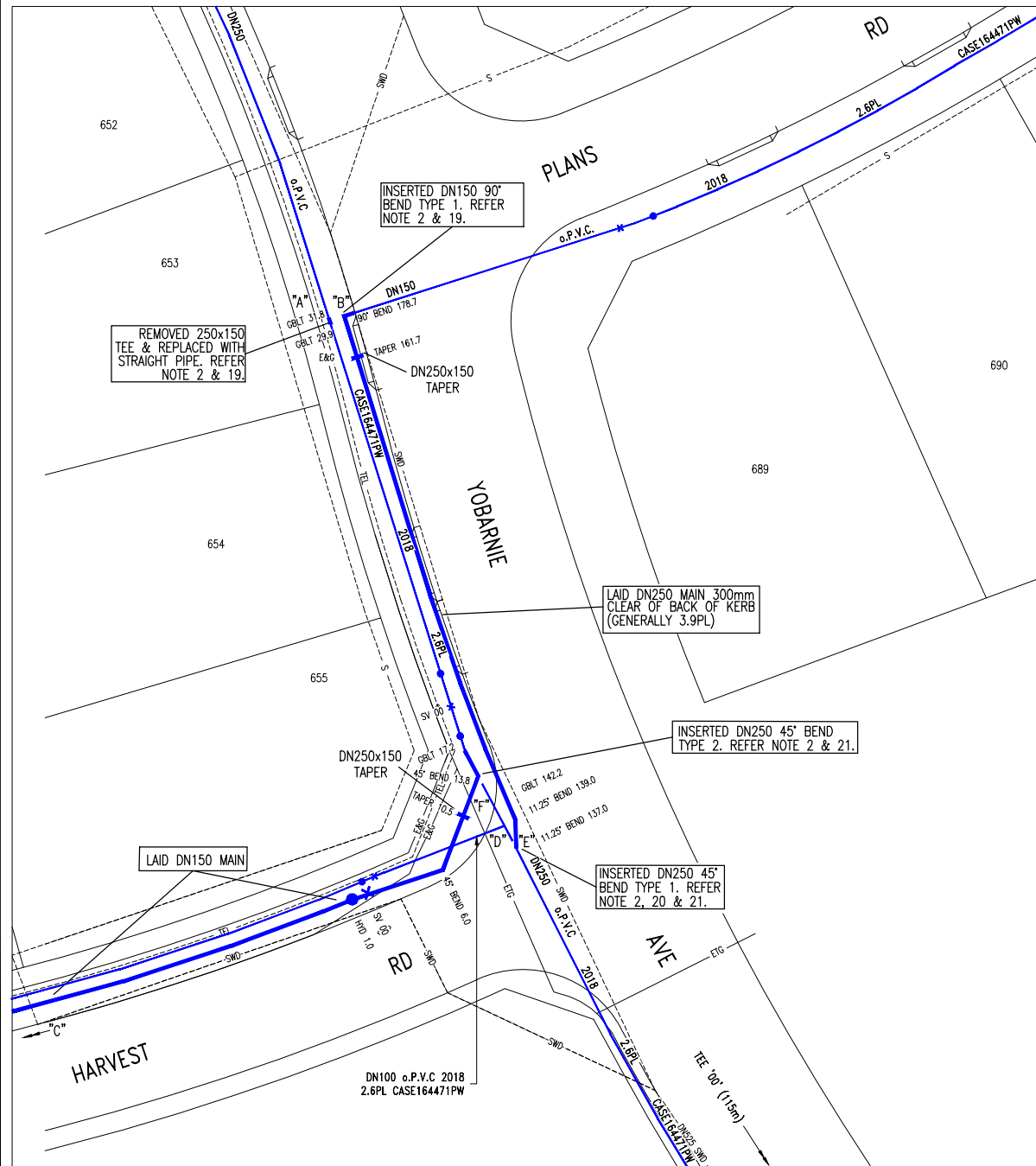
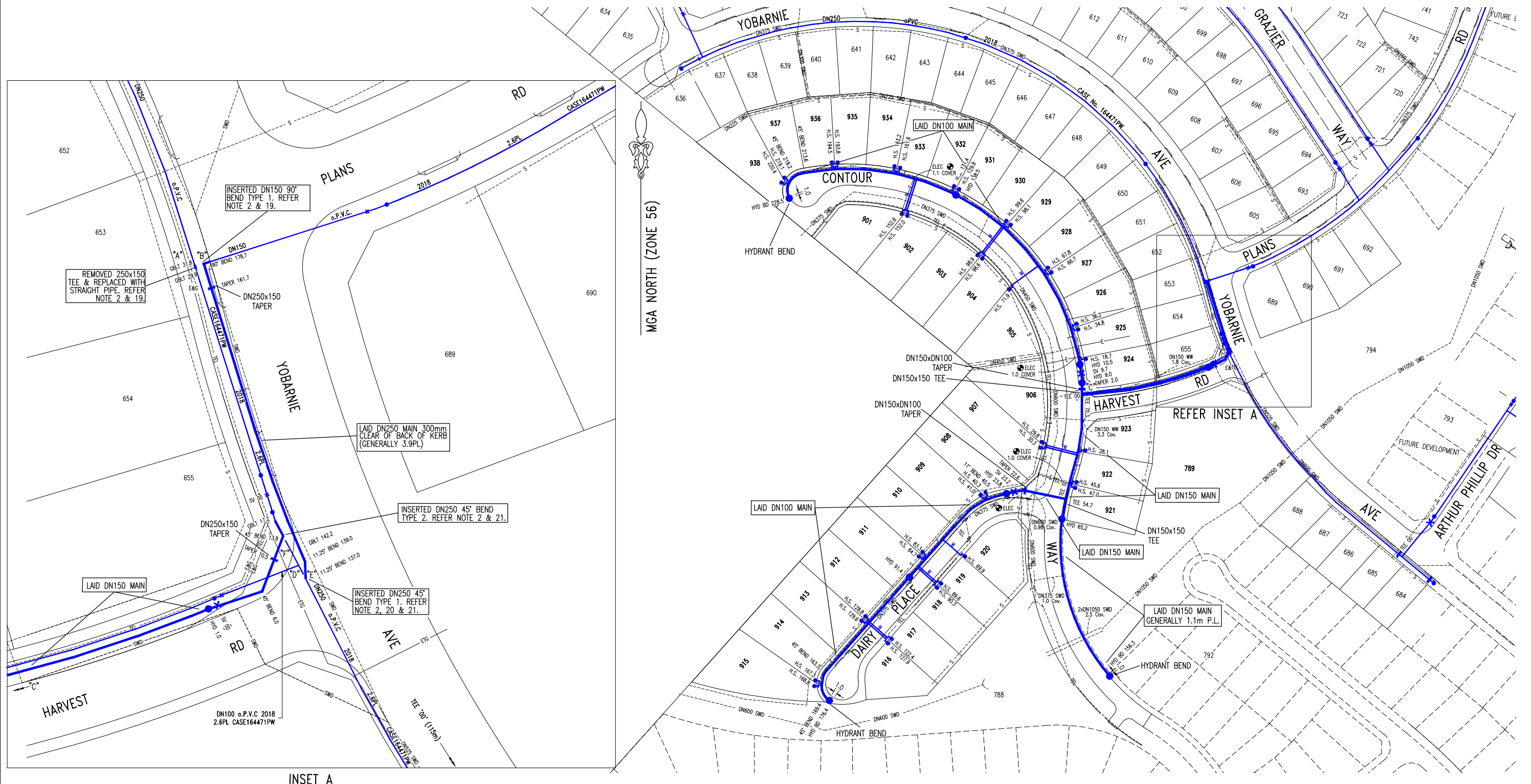
SHEET . 1 . OF . 2 . File No. N/A

STAGE 3
REDBANK YEOMANS NORTH

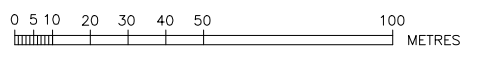
Sydney WATER SYDNEY WATER CORPORATION

Case No. 175609PW

WATERMAIN EXTENSION
CONTOUR WAY
NORTH RICHMOND HAWKESBURY



● SIZE AND LOCATION OF UNDERGROUND SERVICE CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION (REFER NOTE 18 ON SHEET 1).



PLAN DRAWN DATE: 19/03/2020 VERSION: 06 SHEET 2 OF 2 SHEETS

STAGE 3
REDBANK YEOMANS NORTH

| | | | |
|--|---------------------------------------|-------------------------------------|-----------------|
| WORK AS CONSTRUCTED CERTIFICATION | | SYDNEY WATER CORPORATION | |
| DEVELOPER | NORTH RICHMOND JOINT VENTURE | | SHT 2 OF 2 SHTS |
| W.S.C. | CALIBRE PROFESSIONAL SERVICES PTY LTD | | |
| CONSTRUCTOR | JONISHAN PTY LTD | Case No. 175609PW | |
| COMPLETED | 14/02/2020 | | |
| W.A.C. PREPARED | 19/03/2020 | | |
| DESIGNER | CALIBRE PROFESSIONAL SERVICES 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 | |