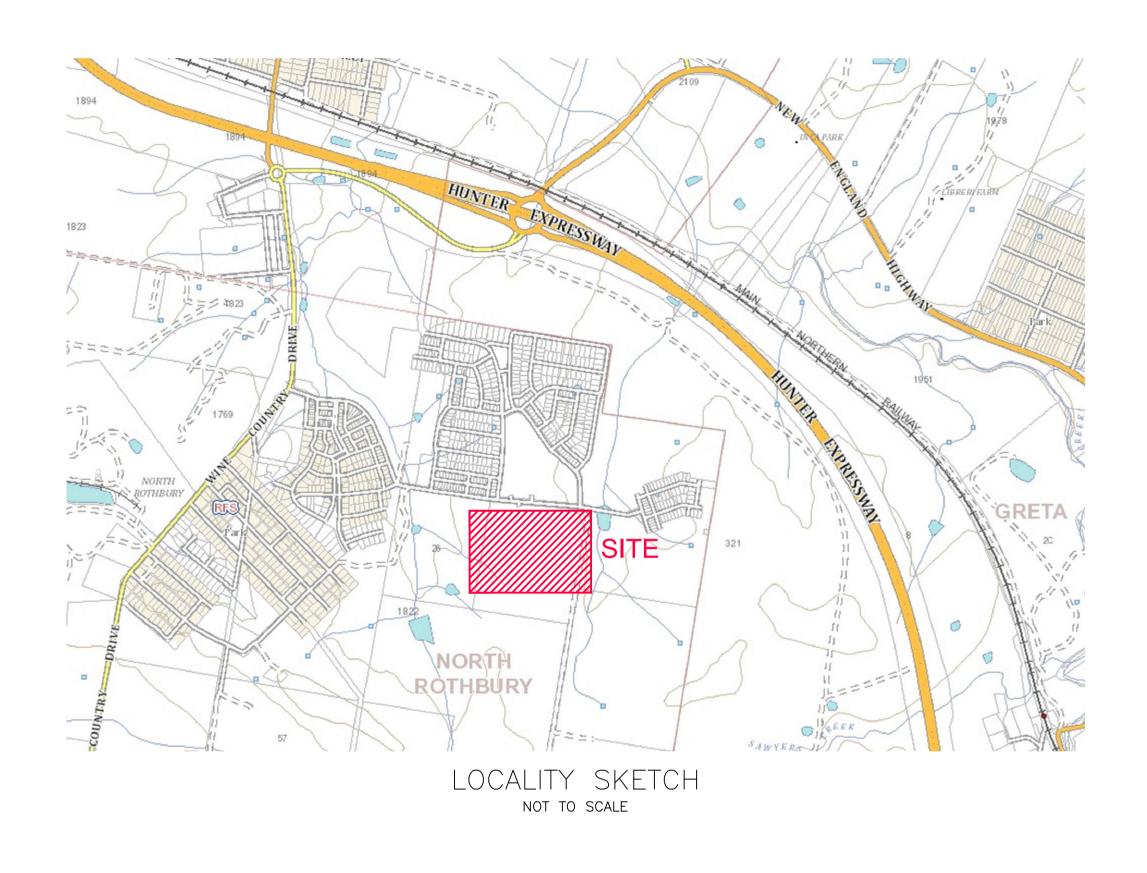


PROPOSED SUBDIVISION STAGE 18 FERRY PARADE, HUNTLEE



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240037(18)-WAC-024	THRUST BLOCK DETAILS
240037(18)-WAC-025	WAC SERVICE POINTS DETAILS

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY: ADW JOHNSON PTY LTD

NAME: MATHEW DAVID LONDON

SIGNEDDATE 16/02/2021

REGISTERED SURVEYOR

COMPANY

NAME

SIGNED

NAMEDATE/....

CONSTRUCTION MANAGER

WORK AS CONSTRUCTED

DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT POTABLE WATER, RECYCLED WATER AND PROPERTY DESCRIPTION J.N. C.B. J.N. C.B. J.N. C.B. J.N. C.B. T.S. C.B. T.S. C.B. G.S. M.L. **Hunter Office** PRESSURE SEWER RETICULATION PRELIMINARY ISSUE J.N. J.N. J.N. J.N. J.N. C.B. C.B. C.B. C.B. C.B. M.L. Unit 7/335 Hillsborough Rd AMENDED ISSUE - CLIENT COMMENTS PROPOSED SUBDIVISION PLAN TITLE AMENDED ISSUE 28.08.2020 Warners Bay N.S.W. 2282 PLAN OF WORKS AS CONSTRUCTED CONSTRUCTION ISSUE LOTS 1831 & 1837 PAD LEVEL AMENDED 03.09.2020 Phone: (02) 4978 5100 POTABLE WATER, RECYCLED WATER & FERRY PARADE, HUNTLEE Fax: (02) 4978 5199 29.10.2020 LOT 1837 PAD LEVEL AMENDED PRESSURE SEWER WORKS AS CONSTRUCTED email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED PROJECT No. DISCIPLINE ABN 62 129 445 398 240072(18) - WAC -ADW Johnson A.H.D. DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCALI Plotted By: glenns Plot Date: 18/02/21 - 11:28 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC- 001 to 003.dwg

PRESSURE SEWER NOTES:

- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA, PRESSURE SEWERAGE CODE OF AUSTRALIA – WSA 07-2007 VERSION 1.1 AND POLYETHYLENE PIPELINE CODE WSA 01-2004.
- ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS. BUTT FUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE GEORG FISCHER PIPING SYSTEMS BUTT FUSION PRODUCT RANGE. ELECTROFUSION FITTINGS DENOTED HEREWITH HAVE BEEN DERIVED FROM THE PLASSON "POLYETHYLENE PIPING SYSTEMS"PRODUCT RANGE.
- ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY
- CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
- PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA.
- ALL POLYETHYLENE MAINS ≤ DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS
- ALL POLYETHYLENE MAINS ≥ DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
- MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS.
- INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS.
- MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS AND 1000mm IN ROADWAYS.
- MAXIMUM PIPE COVER SHALL GENERALLY BE 1500mm. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1500mm BUT LESS THAN 2500mm THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND.
- THE CONTRACTOR SHALL ENSURE THAT ALL PRESSURE SEWER AND RECYCLED WATER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS PER THE CLEARANCE TABLE ADJACENT.
- MAINS CROSSING UNDER EXISTING DRIVEWAYS (SEALED, PAVED OR DECORATIVE) SHALL BE CONDUCTED BY UNDER BORING ONLY UNLESS PERMISSION IS GRANTED BY THE AFFECTED PROPERTY OWNER.
- MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE HUNTLEE WATER REPRESENTATIVE).
- 3. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
- 0. ALL BENDS SHALL BE <u>ELECTROFUSION OR BUTT WELD SWEEP BENDS</u>. FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT
- MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (i.e. DN400 : R8.0m, DN250 : R5.0m, DN200: R4.0m, DN160: R3.2m, DN125: R2.5m, DN90: R1.8m, DN75: R1.5m, DN63: R1.3m, DN50 : R1.0m, DN40 : R0.8m).
- 2. ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
- 3. FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION.
- SMALL MAINS (≤ DN110)
- http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017A-FS.pdf LARGE MAINS (> DN110)
- http://information.altogethergroup.com.au/governance/Land_Housing/PSS-1017B-FS.pdf
- 4. LOCALISED DEEPENING OF MAINS MAY BE REQUIRED TO FACILITATE AIR VALVE INSTALLATION.
- THE CONTRACTOR SHALL ENSURE THAT THE AIR VALVE OFFTAKE IS LOCATED AT A HIGH POINT (NATURAL OR ARTIFICIAL) IN THE MAIN (i.e. MAIN SHALL GRADE DOWNWARDS EITHER SIDE OF THE AIR VALVE).
- 5. DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE
- ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- 7. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 8. ALL VALVES SHALL BE RESILIENT SEATED SLUICE VALVES (CLOCKWISE CLOSING), SHALL BE RESTRAINED IN ACCORDANCE WITH WAT–1207 AND SHALL COMPLY WITH ALTOGETHER STANDARD DRAWING PSS-1015-FS.
- 9. ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
- 20. FOR LOTS WITH TANKS IN THE REAR.
- 1 x Ø25mm INSTRUMENTATION CONDUIT (ORANGE) AND 1 x Ø25mm ELECTRICAL CONDUIT (ORANGE)(WITH DRAW WIRES) SHALL BE INSTALLED FROM THE COLLECTION TANK TO WATER METERS. THE CONDUITS SHALL BE LAID IN A COMMON TRENCH WITH THE SEWERAGE AND MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 400mm. (REFER TO ALTOGETHER STANDARD DRAWINGS FOR SETOUT DIMENSIONS).
- THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE. CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE HUNTLEE WATER REPRESENTATIVE.
- 22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- 23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE
- 24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE HUNTLEE THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED
- THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 21.3.4) ARE:
- PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING.

FITTINGS.

- NON-TRAFFICABLE
- PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE.

27. ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa.

- 26. BOUNDARY KITS (COMPLETE) SHALL BE NOV SUPPLIED (NOV PSS-BK4).
- e one COLLECTION TANK (ESD 20-0032/ESD 20-0033) SHALL BE INSTALLED WITH BOUNDARY KIT (REFER ALTOGETHER STANDARD DRAWINGS PSS-1112-FS AND PSS-1113-FS). PUMP TO BE INSTALLED BY OTHERS.
- ALL LINES FROM THE WASTEWATER COLLECTION TANK TO THE MANUAL ISOLATION VALVE WITHIN THE BOUNDARY KIT TO BE PRESSURE

28. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.

- 29. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO HUNTLEE WATER REQUIREMENTS.
- 30. ROPE OFF ALL PRESSURE SEWER UNITS AND FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- 31. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER
- 32. WORK-AS-

POTABLE WATER AND RECYCLED WATER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA AND WSA 03-2011-3.1 (SYDNEY WATER EDITION 2014).
- 2. POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
- ALL EQUIPMENT, MATERIALS AND ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM TO THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS AND SHALL COMPLY WITH ALTOGETHER REQUIREMENTS.
- 4. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH AND SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS AND LOCATIONS OF ALL EXISTING SERVICES IN THE VICINITY OF THE CONSTRUCTION SITE AND ANY CONSTRUCTED STRUCTURES FOR PROPOSED SERVICES, SUCH AS DUCTING FOR WATER OR ELECTRICITY WITHIN THE SUBDIVISION. THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.
- 5. THE CONSTRUCTOR SHALL VERIFY WITH THE SITE SUPERVISOR THE POSITION AND LEVEL OF ALL EXISTING AND PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
- MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS.
- INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED
- 600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER AND WATER MAINS. MINIMUM PIPE COVER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-V) AND 800mm IN ROADWAYS (TYPE L EMBEDMENT: WAT-1204-V).
- MAXIMUM PIPE COVER SHALL GENERALLY BE 1500mm. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1500mm BUT LESS THAN 2500mm THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. THE CONTRACTOR SHALL ENSURE THAT ALL RECYCLED WATER MAINS AND PRESSURE SEWER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS
- PER THE CLEARANCE TABLE ADJACENT.
- ALL POTABLE WATERMAINS TO BE BLUE PVC-M (PN16).
 - ALL RECYCLED WATERMAINS SHALL BE LILAC PVC-M (PN16). DIFFERENTIATION OF POTABLE AND RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATER MAINS.
- RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE WATER MAINS. 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER AND RECYCLED WATER MAINS SHALL BE PROVIDED.
- 8. MAXIMUM JOINT DEFLECTIONS TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 9. LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL BE ACHIEVED OVER A NUMBER OF PIPE LENGTHS EITHER SIDE OF VALVES TO ELIMINATE ANY SHARP DEFLECTIONS.
- 10. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION PS-350, 368 AND 369. GEOTECHNICAL CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE HUNTLEE WATER REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCHFILL TYPE AND THE NED FOR TRENCH DRAINAGE/BULKHEADS.
- 11. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 12. HYDRANTS , STOP VALVES AND ALL OTHER FITTINGS TO BE THE SAME SIZE AS THE THROUGH WATER MAIN AND ANTI CLOCKWISE CLOSING.
- 13. HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS AND WATER SERVICES SHALL BE NOMINALLY AT LEAST 5.0m FROM EACH BOUNDARY OR ON BOUNDARIES. WHERE POSSIBLE, FITTINGS SHALL BE LOCATED BEHIND KERB INLET PITS.
- 14. THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
- 15. ALL PROPERTY (MAIN TO METER) SERVICE CONNECTIONS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH ALTOGETHER REQUIREMENTS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION.
 - <u>http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1854-FS.pdf</u> http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1855-FS.pdf
- 16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE HUNTLEE WATER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- 17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc. SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- ALL MAINS SHALL BE PRESSURE TESTED TO 1500kPa IN ACCORDANCE WITH CLAUSE 19.4 OF WSA03-2011 (SYDNEY WATER EDITION 2014).
- 19. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- 20. WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1(SYDNEY WATER EDITION-2014, CLAUSE 19.7).
- 21. THE CONSTRUCTOR SHALL PROVIDE HUNTLEE WATER WITH MINIMUM OF 7 DAYS NOTICE IN WRITING OF INTENT TO CONNECT NEW MAINS TO EXISTING INFRASTRUCTURE . CONNECTIONS ARE NOT PERMITTED UNTIL COMPLIANT TEST RESULTS HAVE BEEN PROVIDED AND CONFIRMATION IS PROVIDED BY THE HUNTLEE WATER REPRESENTATIVE.
- 22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION HAT EXISTED PRIOR TO COMMENCEMENT OF WORKS.
- 23. PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE
- 24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE HUNTLEE THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED
- 25. MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY WSA03-2011 (SYDNEY WATER EDITION 2014) (CLAUSE 19.3.5) :
 - **TRAFFICABLE** PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST/300mm LAYER OF FILL AT EACH ROAD CROSSING.
- NON-TRAFFICABLE TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE. PIPE EMBEDMENT ZONE: NIL PROPERTY SERVICES
- TEST 1 OF EVERY 5 PROPERTY SERVICE TRENCHES. TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 AND 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA.

26. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO HUNTLEE WATER REQUIREMENTS.

EDITION 2014.

- 27. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER REQUIREMENTS.
- 28. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A.
- 29. WHERE THE PIPE GRADE EXCEEDS 5%, TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF WHERE PIPE GRADES EXCEED 15%, CONCRETE BULKHEADS WILL BE CONSTRUCTED AT SPACING AS PER TABLE 7.5 OF WSA03-2001 SYDNEY WATER
- ALTOGETHER STANDARD DRAWINGS CAN BE FOUND AT THE FOLLOWING ADDRESS: https://askus.altogethergroup.com.au/hc/en-us/articles/900004827263-Standard-drawings-for-land-developers-

GENERAL NOTES:

- 1. THIS DRAWING SET SHALL BE READ IN CONJUNCTION WITH CESSNOCK CITY COUNCIL STANDARDS, ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA AND OTHER ASSOCIATED DRAWINGS AND TECHNICAL SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL LOCATE AND IDENTIFY ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORK AND SHALL REPAIR ANY DAMAGE CAUSED TO SUCH SERVICES DURING THE COURSE OF WORKS. ANY SERVICE LOCATIONS SHOWN IN THIS DRAWING SET ARE INDICATIVE ONLY.
- MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENT AND FOOTPATHS) TO P.C.A. AND SUPERINTENDENT'S REQUIREMENTS.
- 4. SUITABLE PROTECTION TO EXISTING ROAD PAVEMENT, KERB AND GUTTER, FOOTPATHS AND ANY EXISTING FEATURES SHALL BE PROVIDED UNTIL THE CONSTRUCTION WORKS ARE COMPLETED.



CLEARANCES BETWEEN PIPELINES AND UNDERGROUND SERVICES

UTILITY	MINIMUM HORIZONTAL CLEARANCE (mm)		MINIMUM VERTICAL	
(EXISTING OR PROPOSED SERVICE)	NEW MAIN SIZE		CLEARANCE (mm)	
	≤ DN200	≥ DN200		
WATER MAINS > DN375	600	60	300	
WATER MAINS < DN375	300 4	600	150	
GAS MAINS	300 4	600	150	
TELECOMMUNICATION CONDUITS AND CABLES	300 4	600	150	
ELECTRICITY CONDUITS AND CONDUITS	200	1000	225 ⁸	
STORMWATER DRAINS	300 4	600	150 °	
SEWERS (GRAVITY)	1000 ° / 600	1000 ⁶ / 600	500 °	
SEWERS (PRESSURE AND VACUUM)	600	600	300 9	
KERBS	150	600 ⁵	150 (WHERE POSSIBLE)	

1. VERTICAL CLEARANCES APPLY WHERE PIPELINES CROSS OTHER UTILITY SERVICES, EXCEPT IN THE CASE OF WATER/SEWER MAINS WHEN A VERTICAL SEPARATION SHALL ALWAYS BE MAINTAINED. EVEN WHEN THE PRESSURE SEWER AND WATER MAIN ARE PARALLEL. THE PRESSURE SEWER SHOULD ALWAYS BE LOCATED BELOW THE WATER MAIN TO MINIMISE THE POSSIBILITY OF BACKFLOW CONTAMINATION IN THE EVENT

- OF A PRESSURE MAIN BREAK. 2. WATER MAINS INCLUDES MAINS SUPPLYING BOTH POTABLE AND RECYCLED WATER. 3. FOR AREAS WITH EXISTING WATER RETICULATION, CLEARANCES CAN BE FURTHER REDUCED TO 600mm WITH THE APPROVAL OF THE WATER
- 4. CLEARANCES CAN BE FURTHER REDUCED TO 150mm FOR DISTANCES UP TO 2.0m WHEN PASSING INSTALLATIONS SUCH AS POLES, PITS, AND SMALL STRUCTURES. PROVIDING THE STRUCTURE IS NOT DE-STABILISED IN THE PROCESS.
- CLEARANCES FROM KERBS SHALL BE MEASURED FROM THE NEAREST POINT OF THE KERB. FOR WATER/SEWER DN 375, CLEARANCES FROM KERBS CAN BE PROGRESSIVELY REDUCED UNTIL THE MINIMUM OF 150mm IS REACHED FOR WATER/SEWER < DN200.
- 6. WHERE A PARALLEL SEWER IS AT MINIMUM VERTICAL CLEARANCE LOWER THAN THE WATER MAIN (500mm), MAINTAIN A MINIMUM HORIZONTAL
- OF 1000mm. THIS MINIMUM CLEARANCE CAN BE PROGRESSIVELY REDUCED TO 600mm AS THE VERTICAL CLEARANCE IS INCREASED TO 750mm. FOR PRESSURE SEWER LATERALS, MINIMUM VERTICAL CLEARANCES MAY BE REDUCED TO 150mm PROVIDING THERE IS NO JOINT IN THE LATERAL WITHIN 500mm OF EITHER SIDE OF THE SERVICE BEING CROSSED.
- 8. AN ADDITIONAL CLEARANCE FROM HIGH VOLTAGE ELECTRICAL INSTALLATIONS SHOULD BE MAINTAINED ABOVE THE CONDUITS OR CABLES TO ALLOW FOR A PROTECTIVE BARRIER AND MARKING TO BE PROVIDED.
- WATER MAINS SHOULD ALWAYS CROSS OVER SEWERS AND STORMWATER DRAINS. FOR CASES WHERE THERE IS NO ALTERNATIVE AND THE MAIN MUST CROSS UNDER THE SEWER, THE DESIGN SHALL NOMINATE AN APPROPRIATE PROTECTION TREATMENT (JOINT-FREE IN THE VICINITY

SHOULD THE RECOMMENDED CLEARANCES NOT BE ACHIEVED, NOTIFICATION SHALL BE CONVEYED TO THE HUNTLEE WATER REPRESENTATIVE IN WRITING.

WORK AS CONSTRUCTED THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED. BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY. COMPANY: ADW JOHNSON PTY LTD COMPANY NAME: MATHEW DAVID LONDON NAMEDATE/...../.. CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS PM 20029 Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675

	R REQUIREMENTS.										WORK AS CONSTRUCTED
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$\exists I$	B 11.08.2020 C 28.08.2020	AMENDED ISSUE — CLIENT COMMENTS AMENDED ISSUE	J.N. C.B. J.N. C.B. J.N. C.B.	Unit 7/335 Hillsborough Ro Warners Bay N.S.W. 2282		PROPOSED	SUBDIVISION	PLAN TITLE	PLAN OF WORKS AS		
	0 03.09.2020	CONSTRUCTION ISSUE	J.N. C.B. J.N. C.B.	Phone: (02) 4978 5100	Huntles (1) \/\/ater	STA	GE 18		CONSTRUCTED POTABLE	=	
11		LOTS 1831 & 1837 PAD LEVEL AMENDED LOT 1837 PAD LEVEL AMENDED	T.S. C.B. J.N. C.B. T.S. C.B. J.N. C.B.	Fax: (02) 4978 5199	Huntlee Water	FERRY PARA	ADE, HUNTLEE	V	ATER, RECYCLED WATER	₹ &	
41	3 16.02.2021	WORKS AS CONSTRUCTED	G.S. M.L. – M.L.	email: hunter@adwjohnson.com.au					PRESSURE SEWER		
∄L				www.adwjohnson.com.au		SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
₃[DESIGN FILE N:\		ALL DIMENSIONS ARE IN METRES	s. DO NOT SCALE JOHNSON ABN 62 129 445 398		ADW Johnson	A.H.D.	240072(18	3) - WAC -	002	3





WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY: ADW JOHNSON PTY LTD COMP

NAME: MATHEW DAVID LONDON NAME

SIGNEDDATE 16/02/2021 SIGNEDDATE/....

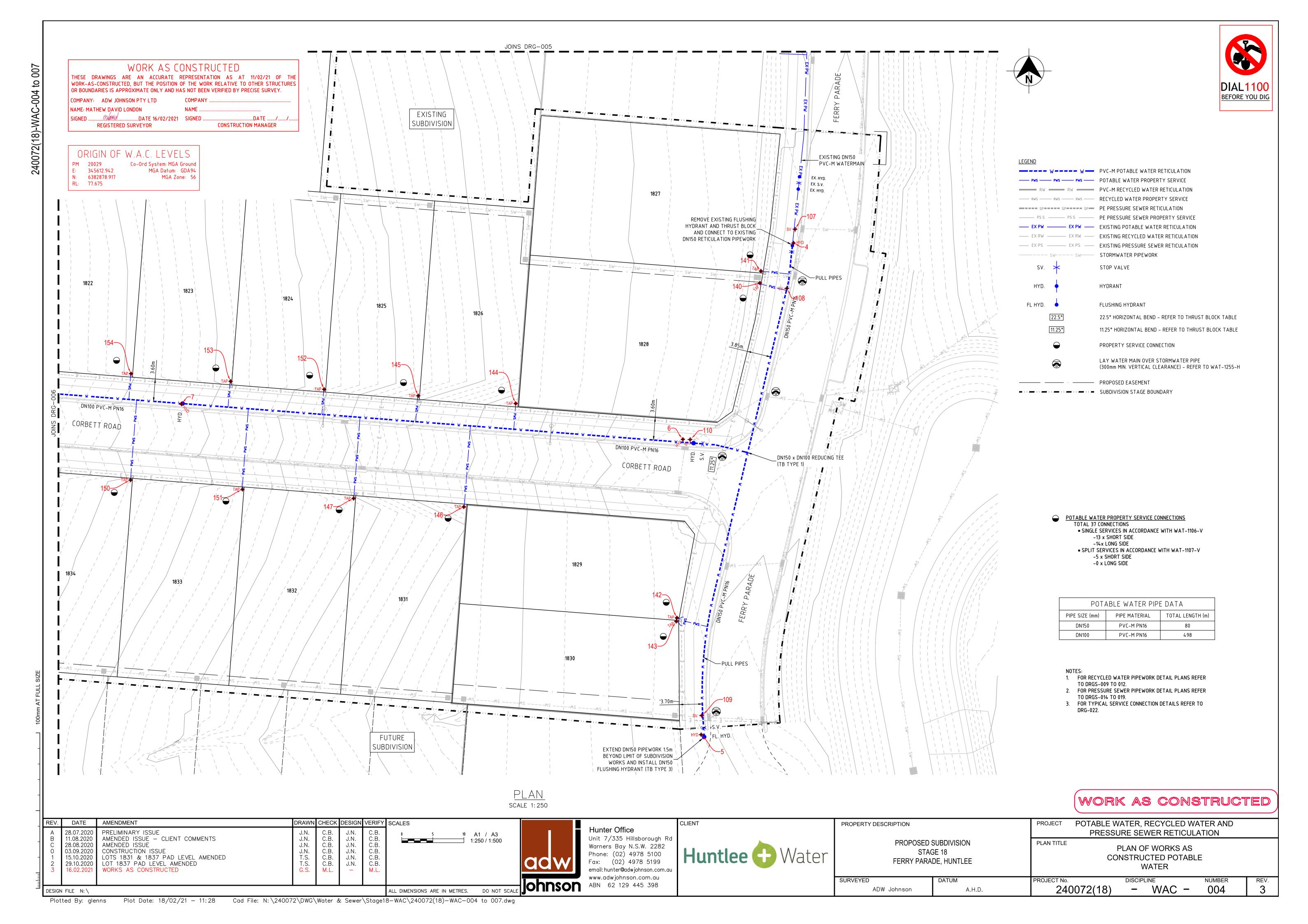
REGISTERED SURVEYOR CONSTRUCTION MANAGER

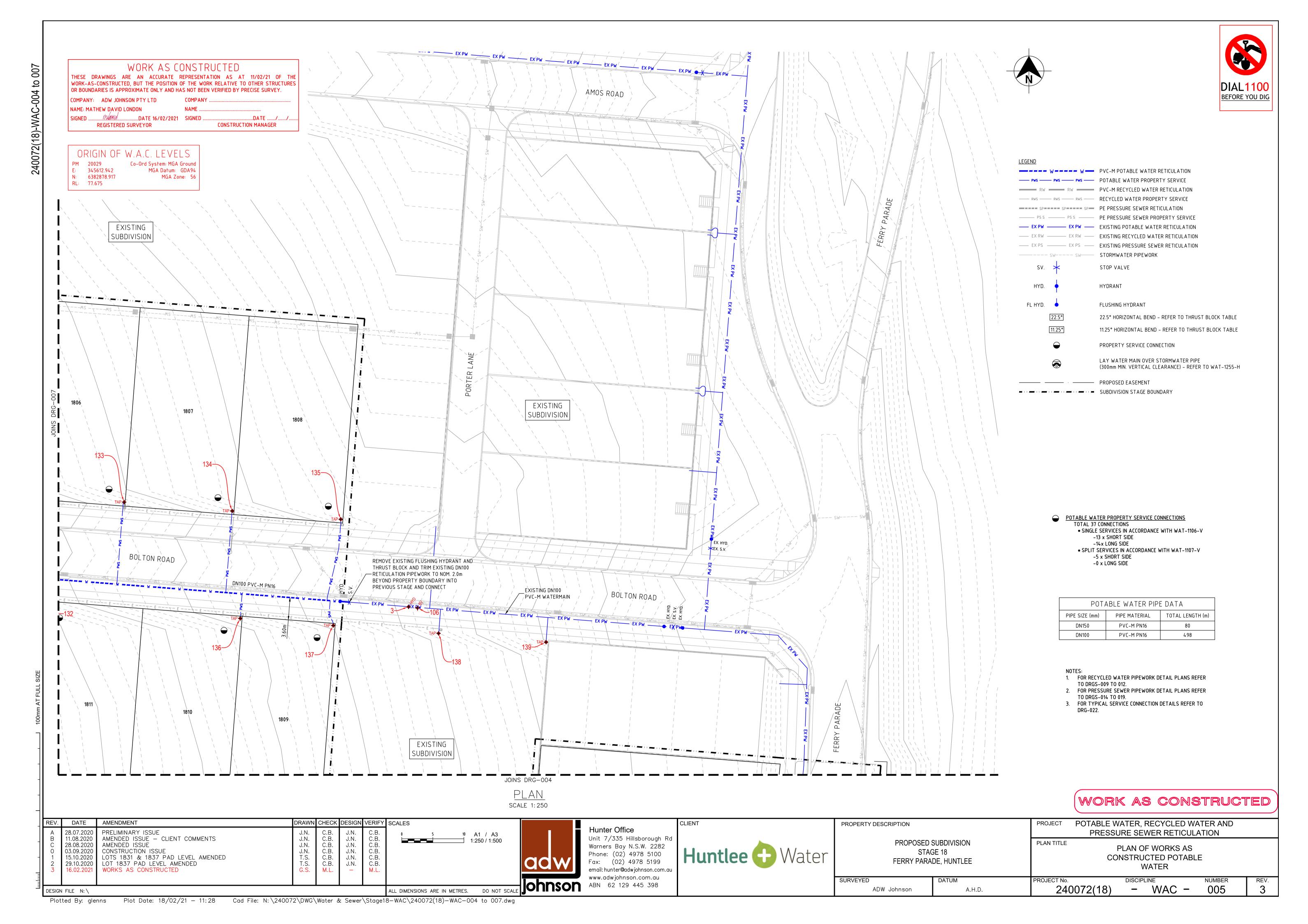
ORIGIN OF W.A.C. LEVELS

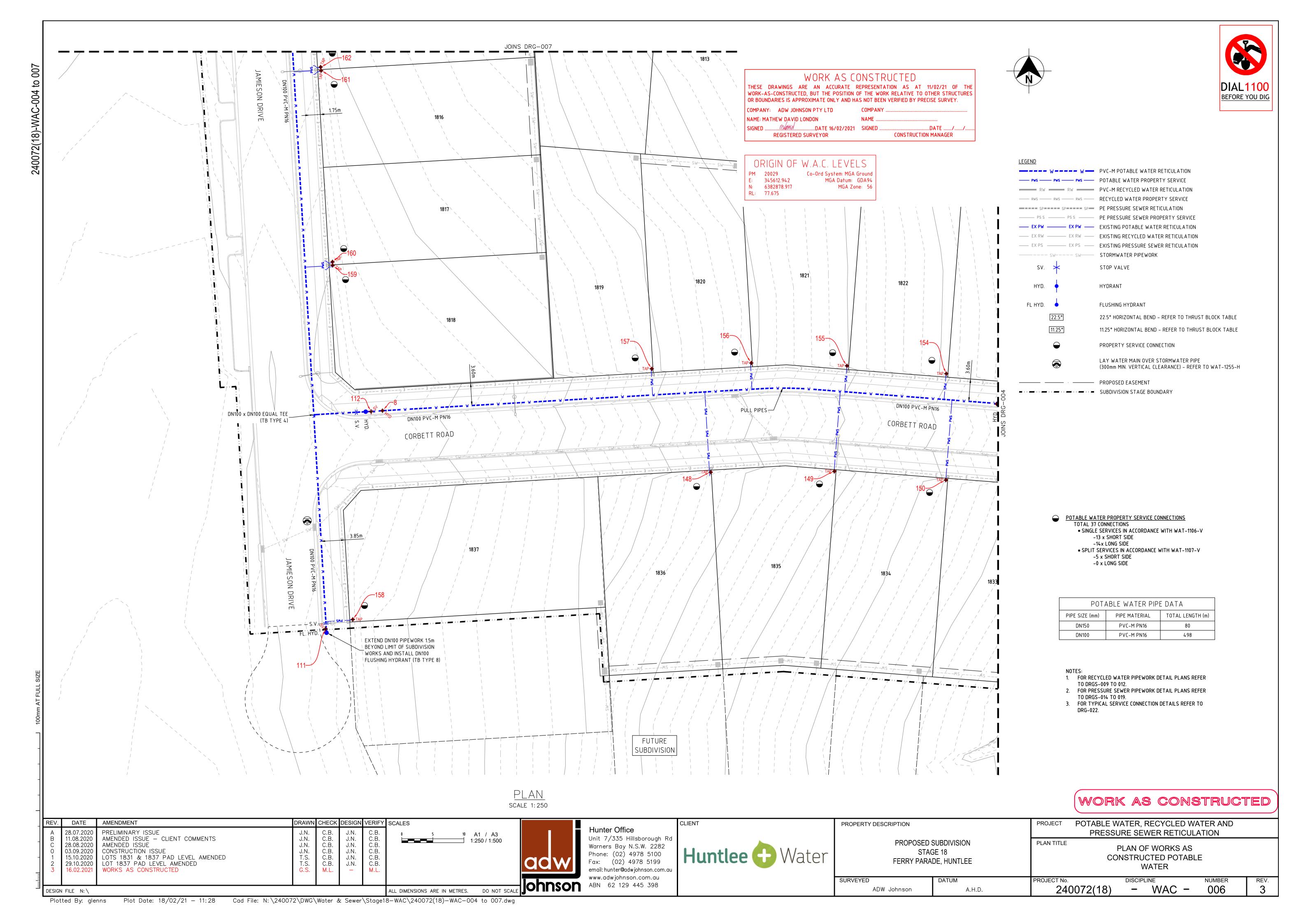
PM 20029 Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675

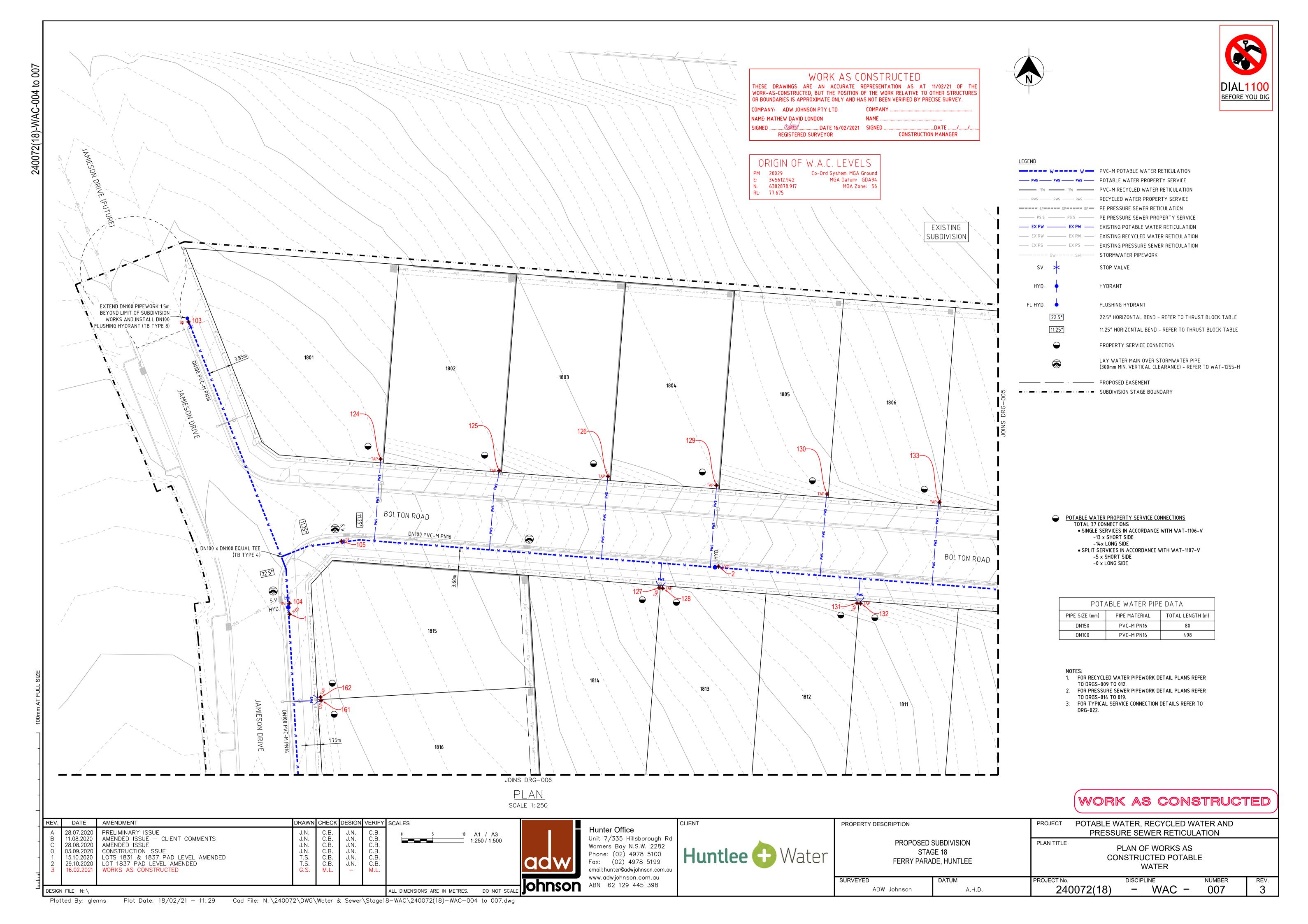
WORK AS CONSTRUCTED

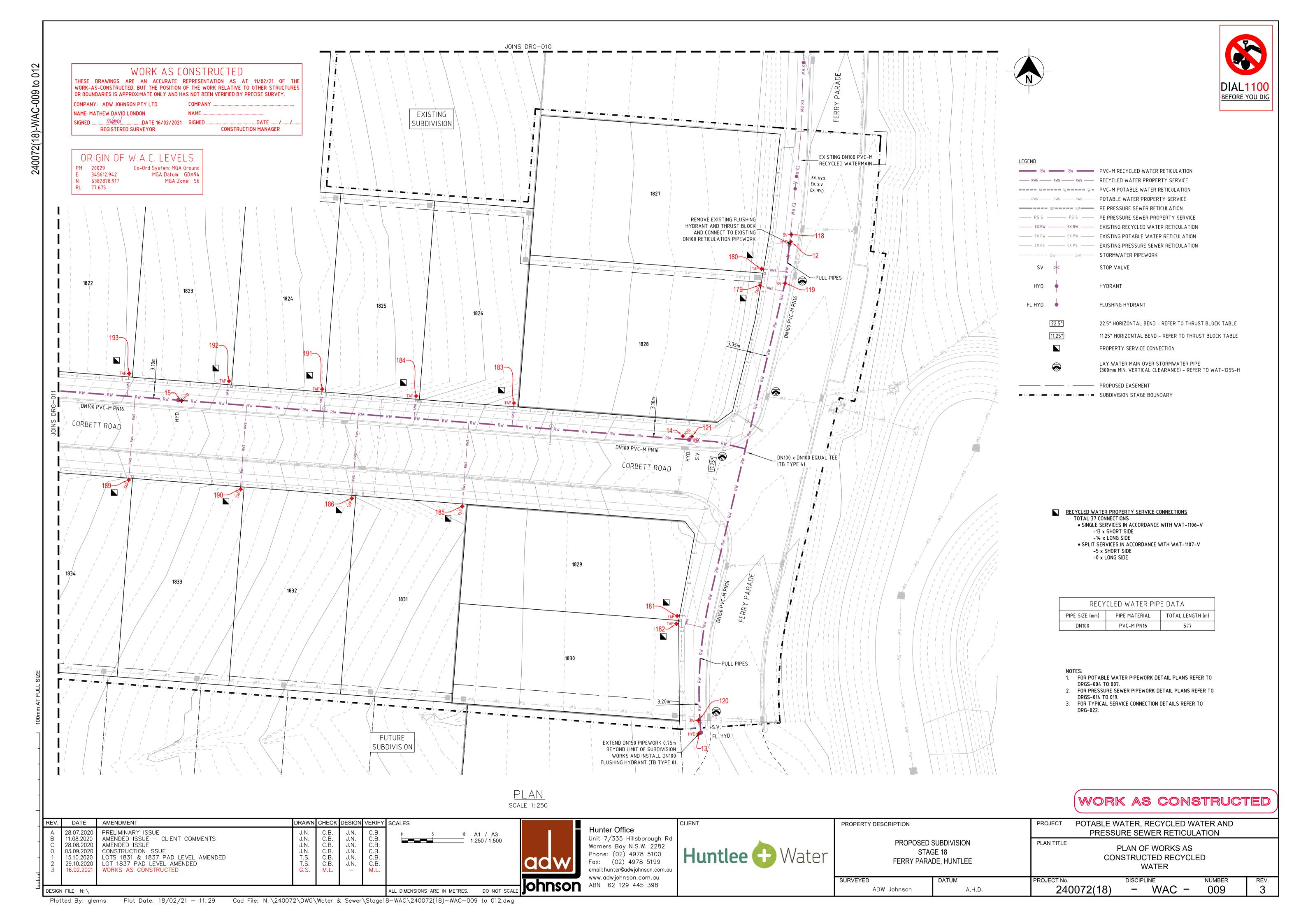
DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT DATE PROPERTY DESCRIPTION POTABLE WATER, RECYCLED WATER AND **Hunter Office** J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. T.S. C.B. J.N. T.S. C.B. J.N. G.S. M.L. — PRESSURE SEWER RETICULATION PRELIMINARY ISSUE 10 20 30 40 A1 / A3 Unit 7/335 Hillsborough Rd AMENDED ISSUE - CLIENT COMMENTS 11.08.2020 1:1000 / 1:2000 PROPOSED SUBDIVISION PLAN TITLE PLAN OF WORKS AS C.B. C.B. C.B. C.B. M.L. 28.08.2020 AMENDED ISSUE Warners Bay N.S.W. 2282 03.09.2020 CONSTRUCTION ISSUE STAGE 18 Phone: (02) 4978 5100 CONSTRUCTED POTABLE LOTS 1831 & 1837 PAD LEVEL AMENDED 15.10.2020 FERRY PARADE, HUNTLEE WATER, RECYCLED WATER & Fax: (02) 4978 5199 29.10.2020 LOT 1837 PAD LEVEL AMENDED email: hunter@adwjohnson.com.au 16.02.2021 WORKS AS CONSTRUCTED PRESSURE SEWER www.adwjohnson.com.au SURVEYED DATUM PROJECT No. DISCIPLINE REV. ABN 62 129 445 398 johnson 240072(18) - WAC -003 ADW Johnson A.H.D. DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCALI Plotted By: glenns Plot Date: 18/02/21 - 11:28 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC- 001 to 003.dwg

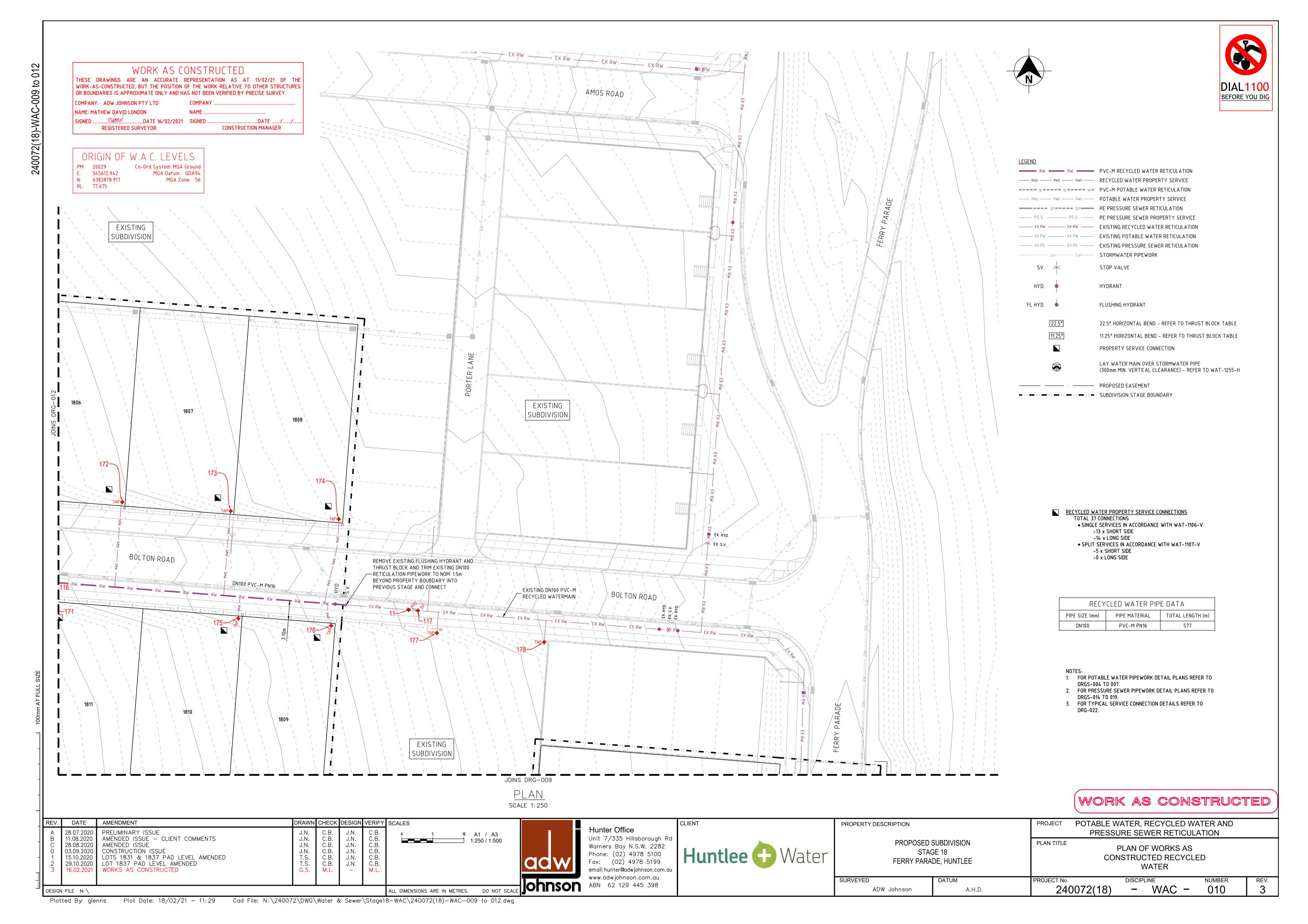


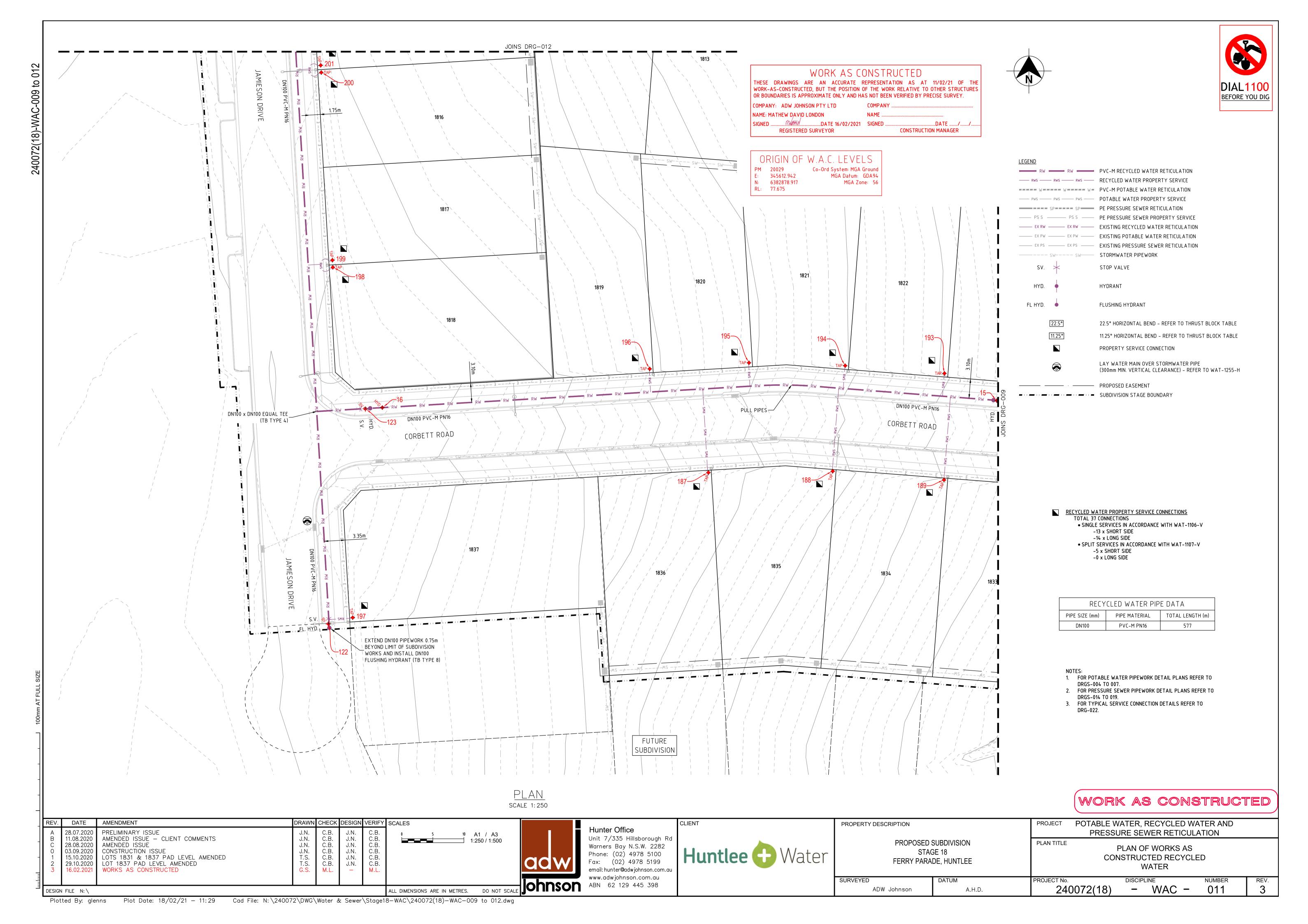


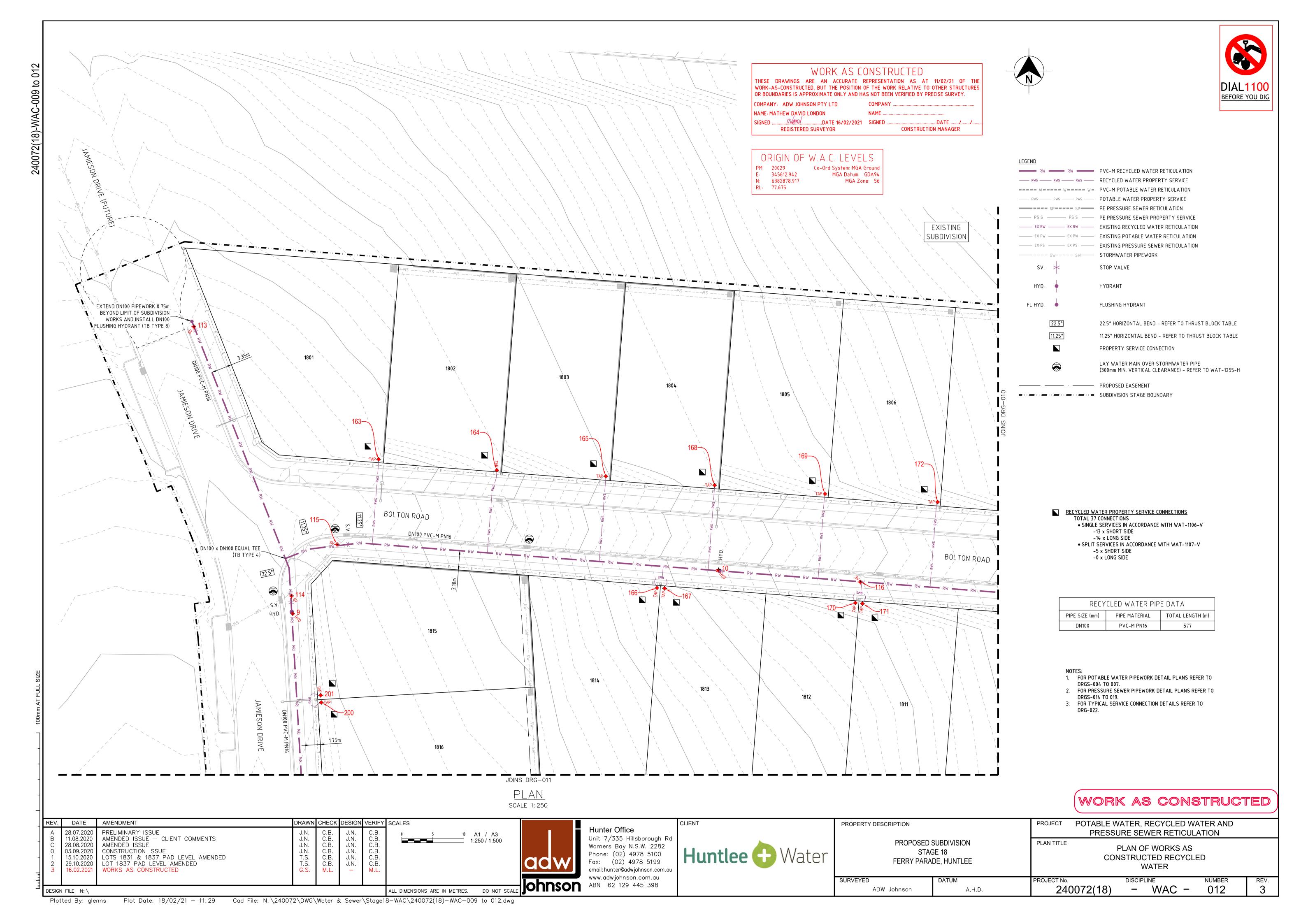


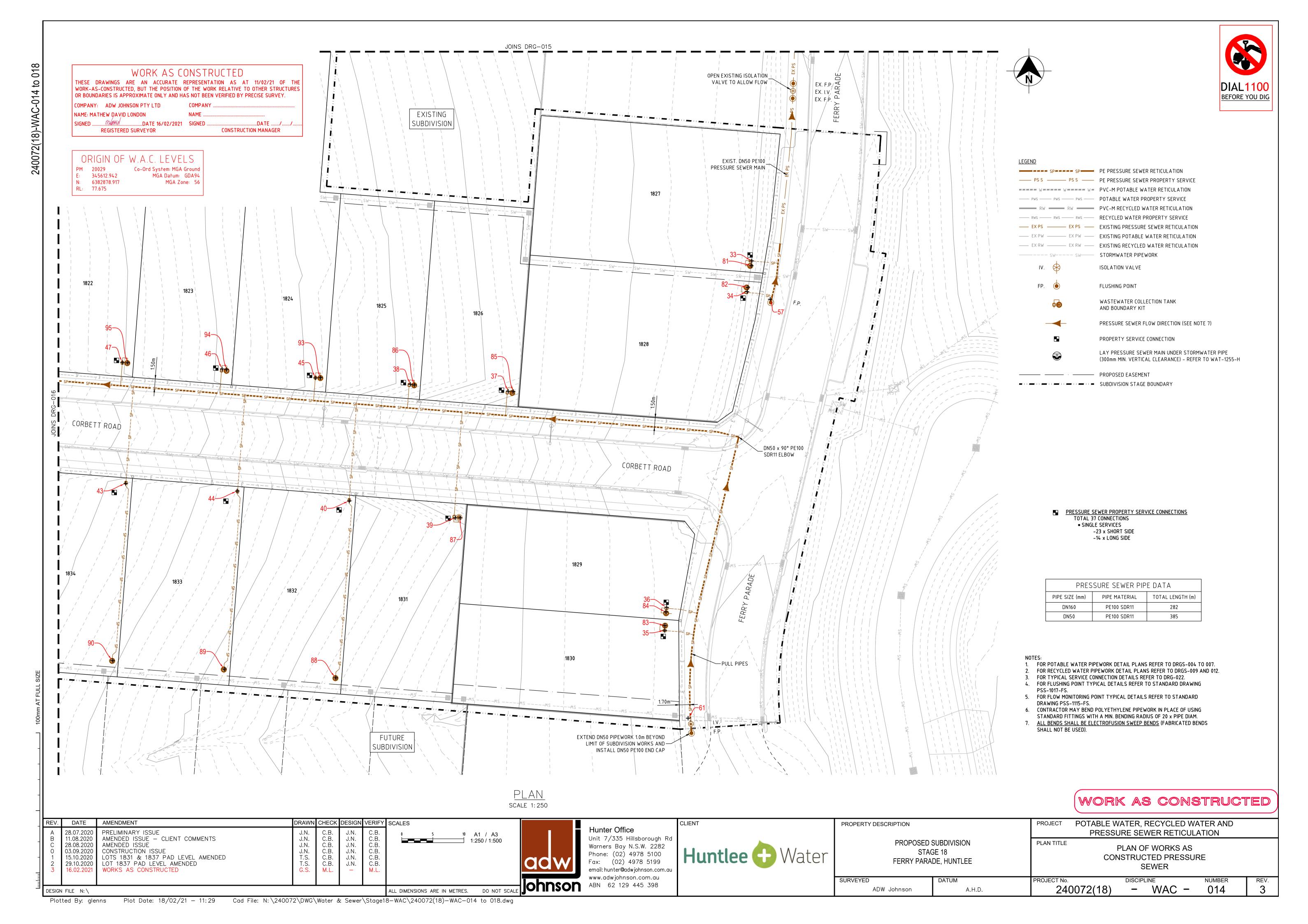


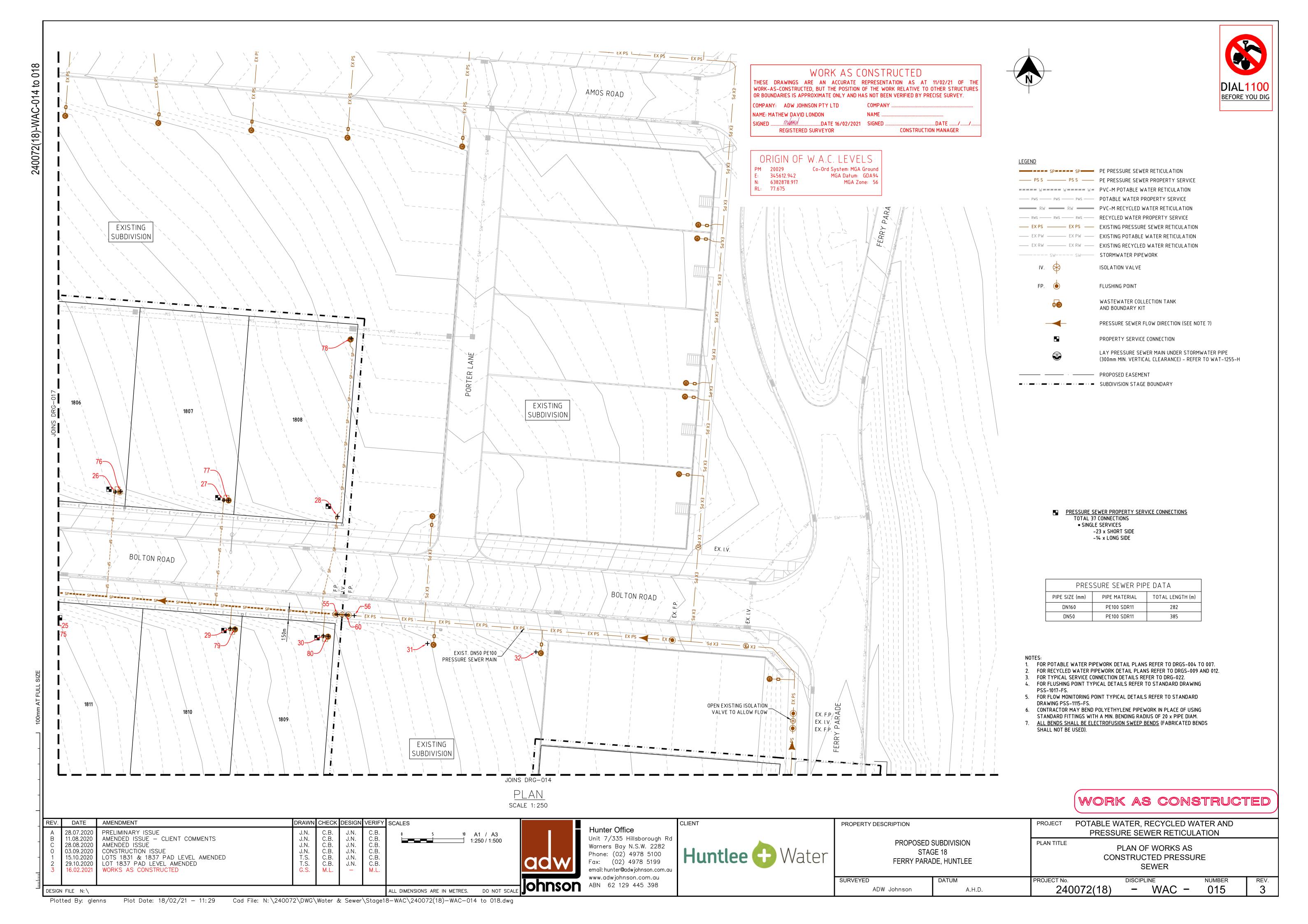


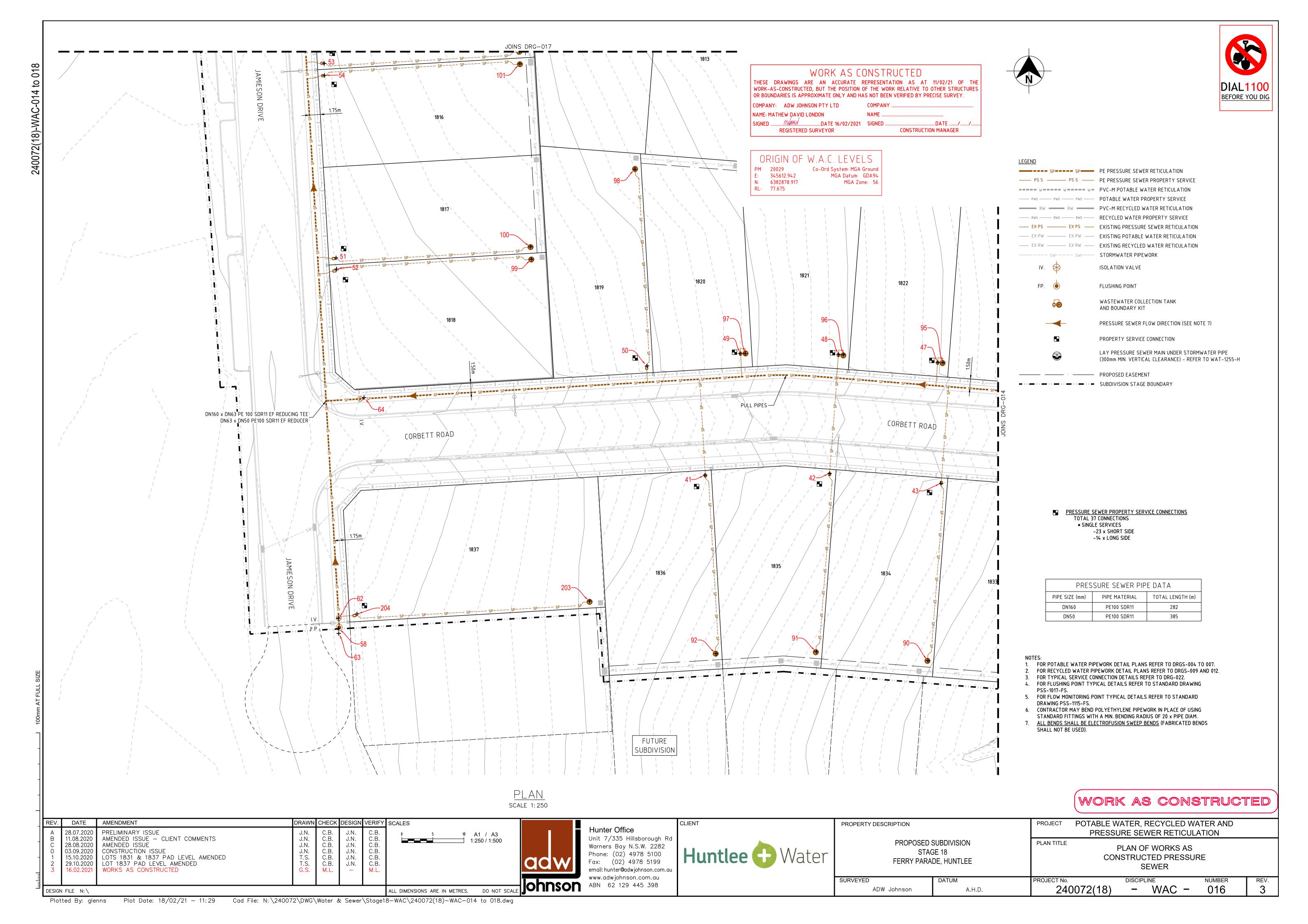


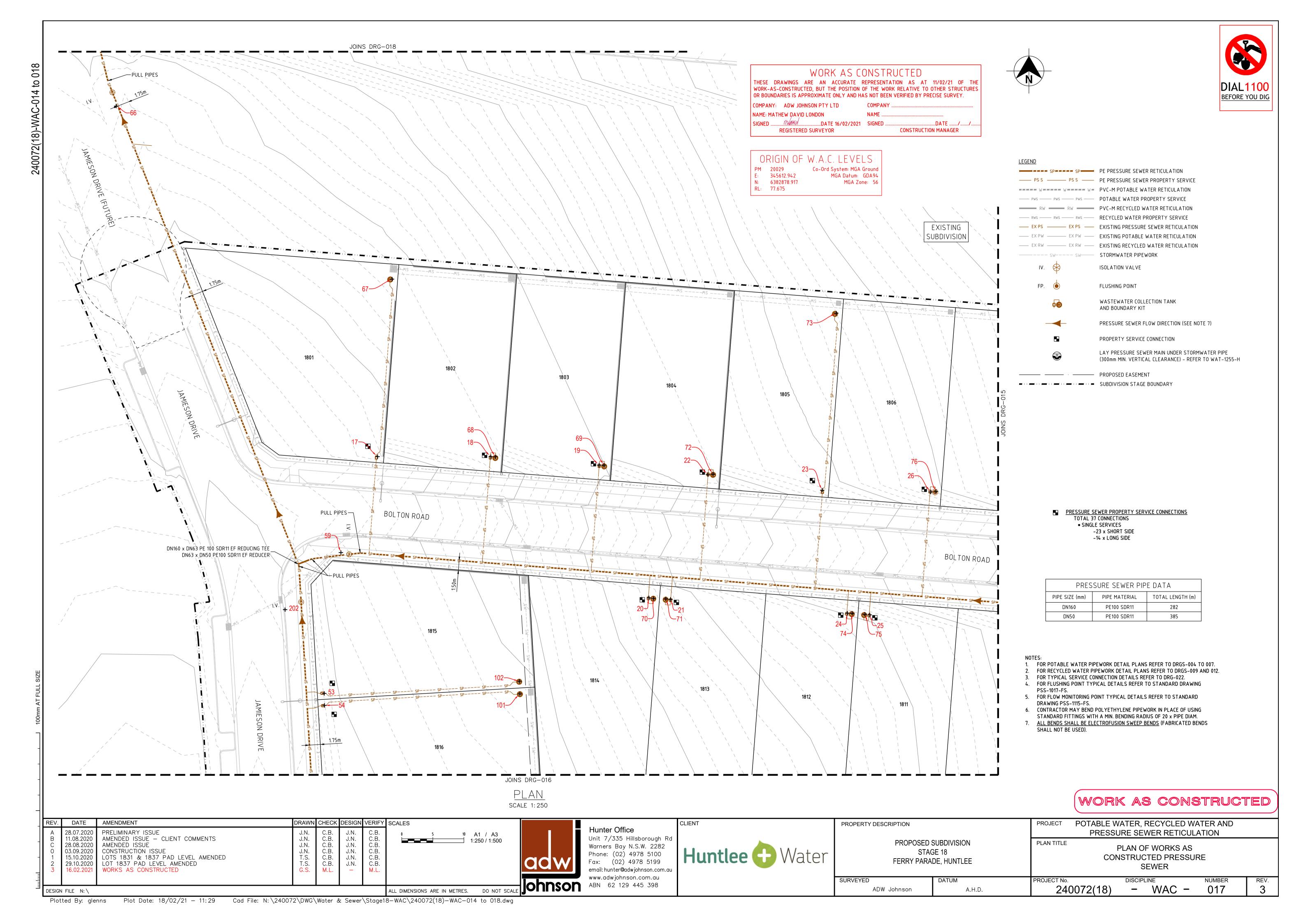


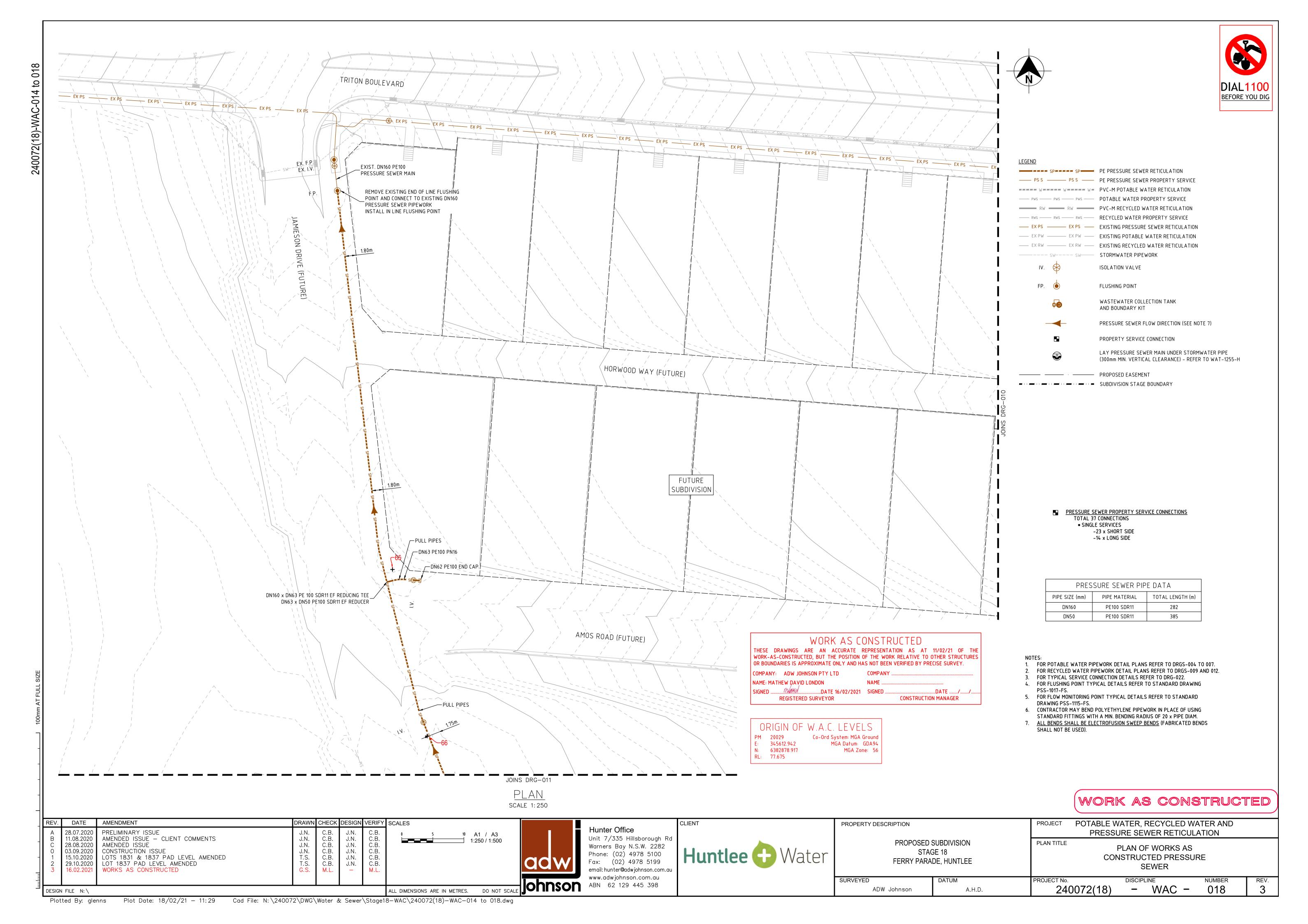




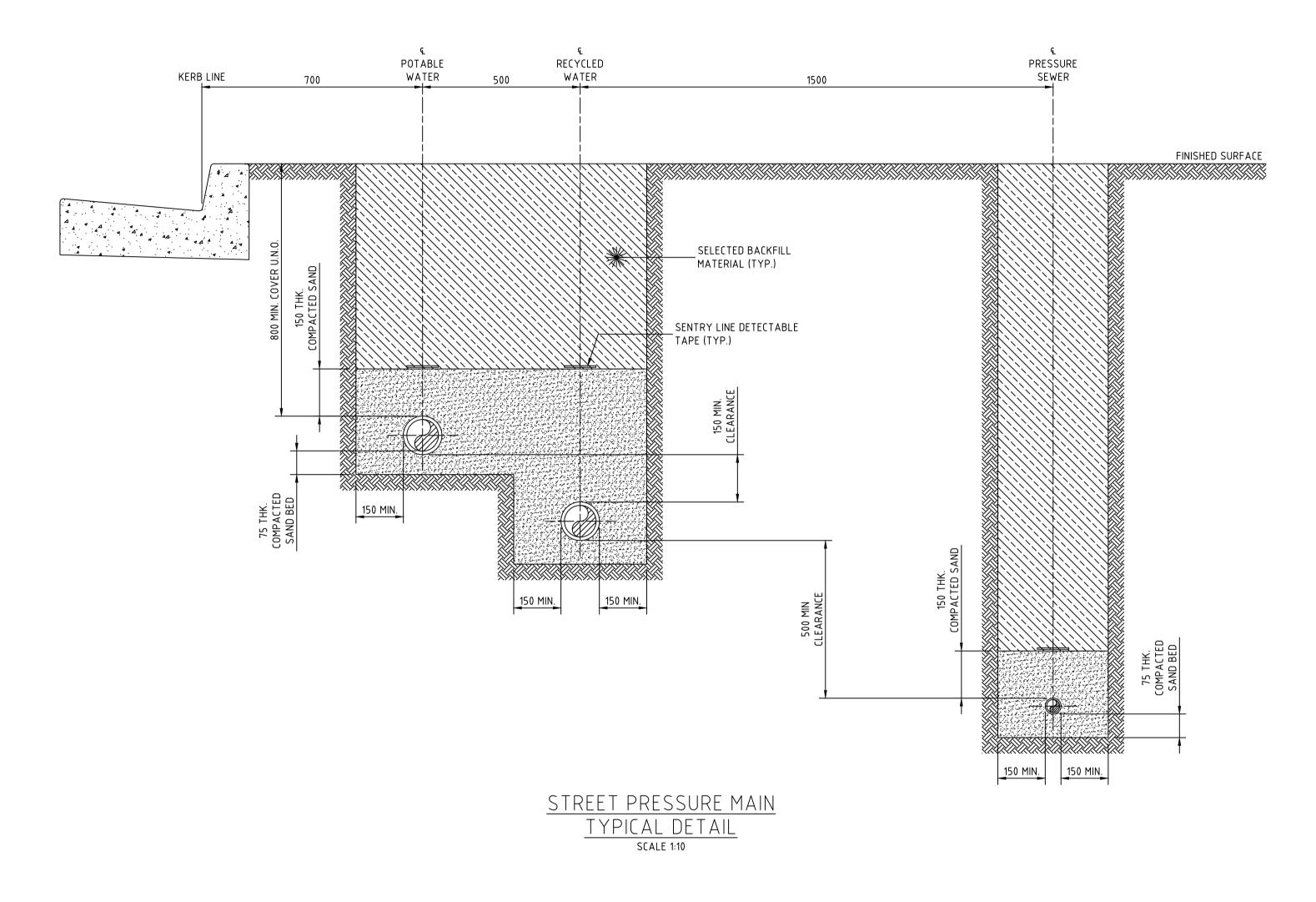












WORK AS CONSTRUCTED

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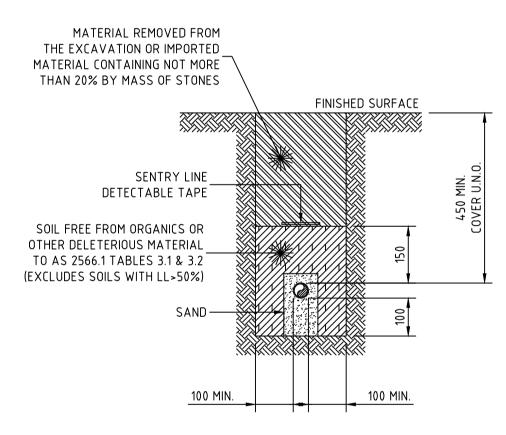
COMPANY: ADW JOHNSON PTY LTD

COMPANY:

ORIGIN OF W.A.C. LEVELS

20029 Co-Ord System: MGA Ground
345612.942 MGA Datum: GDA94

E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675



PRIVATE PROPERTY PRESSURE MAIN

TYPICAL DETAIL

SCALE 1-10

NOTES:

1. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.

WORK AS CONSTRUCTED

DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT POTABLE WATER, RECYCLED WATER AND DATE PROPERTY DESCRIPTION **Hunter Office** J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. T.S. C.B. J.N. T.S. C.B. J.N. G.S. M.L. — PRESSURE SEWER RETICULATION PRELIMINARY ISSUE 0.1 0.2 0.3 0.4 A1 / A3 Unit 7/335 Hillsborough Rd AMENDED ISSUE - CLIENT COMMENTS 11.08.2020 1:10 / 1:20 PROPOSED SUBDIVISION PLAN TITLE C.B. C.B. C.B. C.B. M.L. 28.08.2020 AMENDED ISSUE Warners Bay N.S.W. 2282 03.09.2020 CONSTRUCTION ISSUE 15.10.2020 LOTS 1831 & 1837 PAD LEVEL AMENDED 29.10.2020 LOT 1837 PAD LEVEL AMENDED STAGE 18 TYPICAL PIPEWORK Phone: (02) 4978 5100 FERRY PARADE, HUNTLEE TRENCHING DETAIL Fax: (02) 4978 5199 16.02.2021 WORKS AS CONSTRUCTED email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED DATUM PROJECT No. DISCIPLINE johnson ABN 62 129 445 398 240072(18) - WAC -020 3 ADW Johnson A.H.D. DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCAL Plotted By: glenns Plot Date: 18/02/21 - 11:29 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-020 to 023.dwg

AMENDMENT

PRELIMINARY ISSUE

CONSTRUCTION ISSUE

29.10.2020 LOT 1837 PAD LEVEL AMENDED

WORKS AS CONSTRUCTED

15.10.2020 LOTS 1831 & 1837 PAD LEVEL AMENDED

AMENDED ISSUE

AMENDED ISSUE - CLIENT COMMENTS

DATE

11.08.2020

28.08.2020

03.09.2020

16.02.2021

WORK AS CONSTRUCTED

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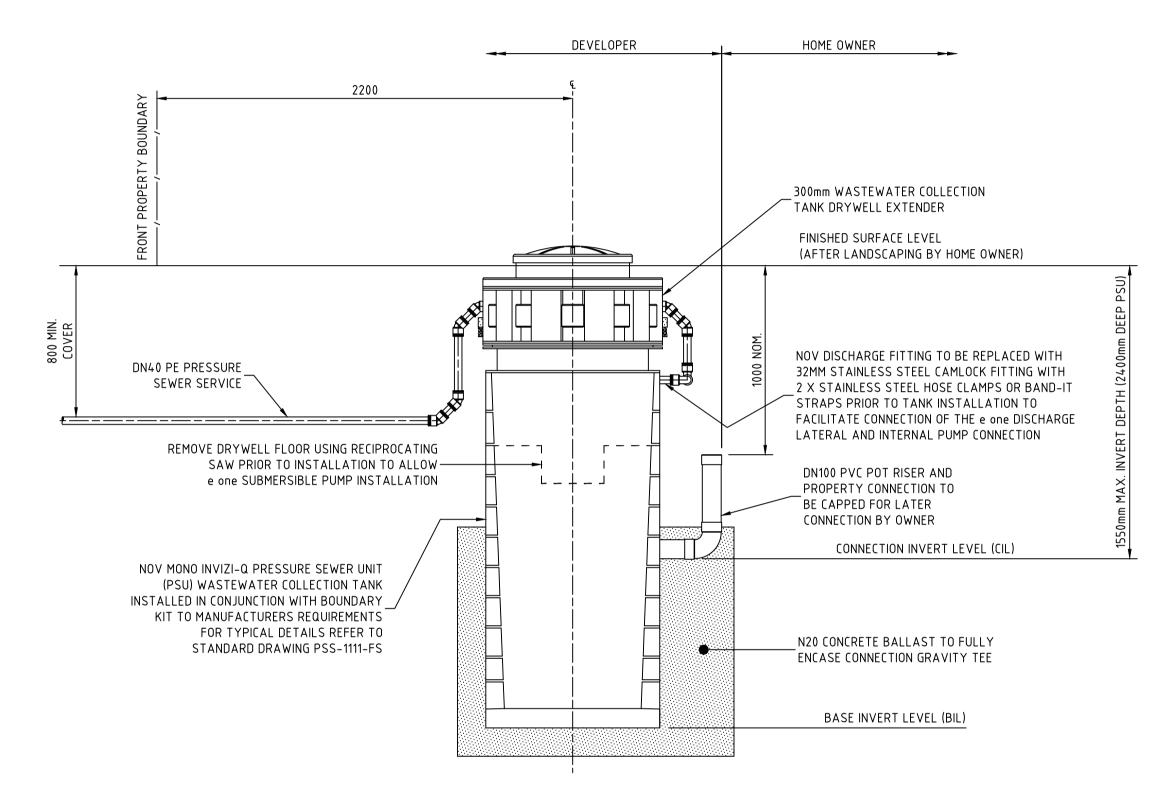
NAME: MATHEW DAVID LONDON SIGNEDDATE 16/02/2021 SIGNED ... REGISTERED SURVEYOR

NAMEDATE/...../.... CONSTRUCTION MANAGER

BEFORE YOU DIG

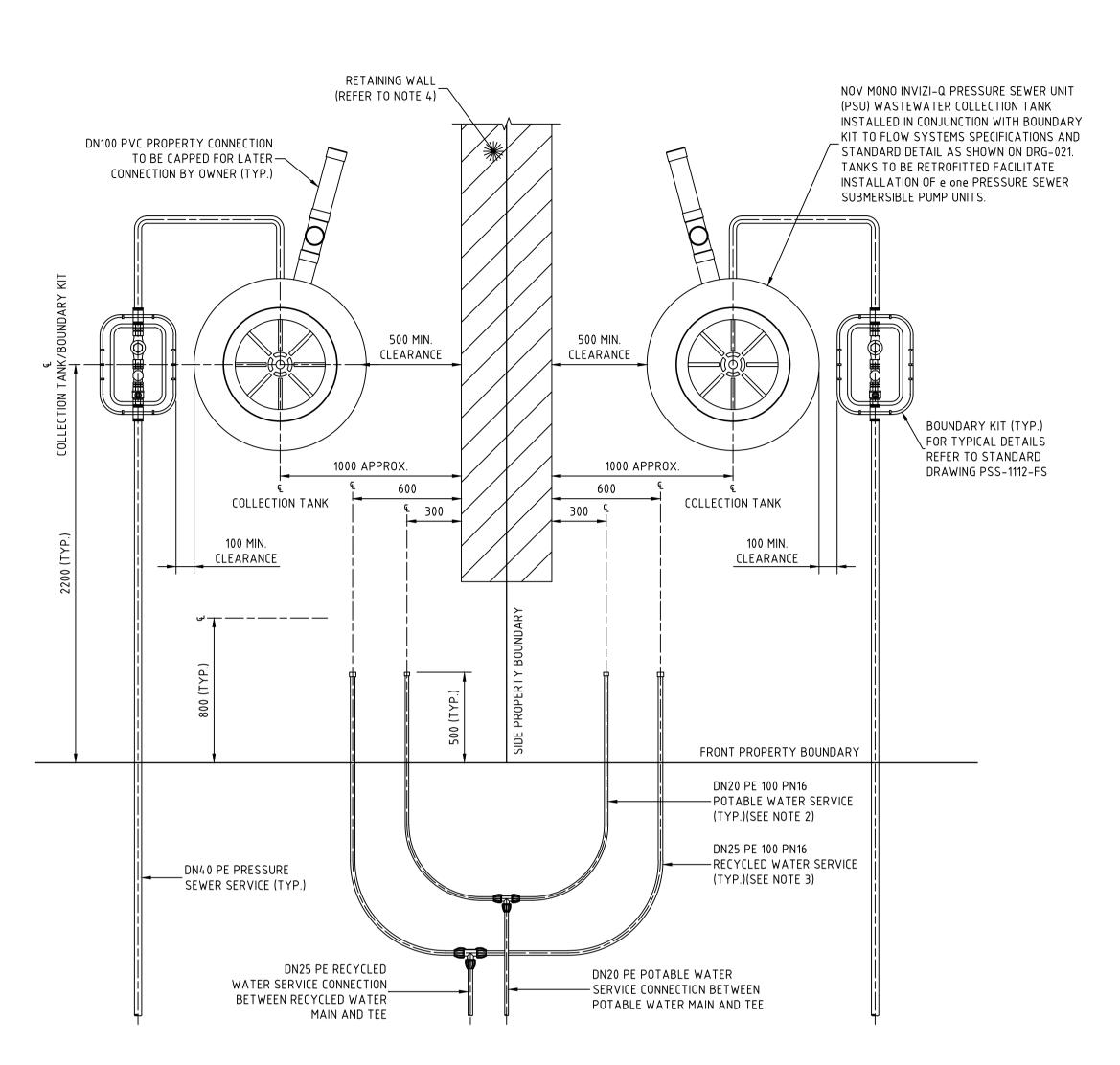
ORIGIN OF W.A.C. LEVELS

Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 N: 6382878.917 MGA Zone: 56 RL: 77.675



PRESSURE SEWER SERVICE CONNECTION TYPICAL SECTIONAL ELEVATION

SCALE 1:20 (FRONT OF LOT SERVICE CONNECTION WITH 1 DRYWELL EXTENDER)



TYPICAL PROPERTY CONNECTION DETAIL

NOTES:

BOUNDARY.

- 1. PROPERTY SERVICE CONNECTIONS SHALL BE IN ACCORDANCE WITH WSA STANDARD DRAWINGS FOR DUAL WATER SUPPLY SYSTEMS (SYDNEY WATER VERSION)(SUPPLEMENT TO WSA 03-2011).
- 2. DN20 PE100 PN16 POTABLE WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 3. DN25 PE100 PN16 RECYCLED WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 4. FOR PROPERTY CONNECTIONS WHERE A RETAINING WALL IS NOT PRESENT, SERVICES ARE TO BE OFFSET FROM THE PROPERTY
- 5. WHERE SERVICE CONNECTIONS ARE LOCATED ADJACENT TO TELSTRA PITS/ELECTRICAL PILLARS, A MINIMUM CLEARANCE OF
- 200mm BETWEEN PITS AND SERVICE PIPEWORK IS TO BE MAINTAINED. 6. MINIMUM BENDING RADIUS FOR PE PIPEWORK IS TO BE 20 x PIPE DIAMETER.
- 7. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.
- 8. PRESSURE SEWER UNIT (PSU) IS TO HAVE 2150mm CLEARANCE FROM BUILDING STRUCTURES.
- 9. \$\phi 25 ELECTRICAL CONDUIT IS TO EXTEND FROM CONNECTION WITH PRESSURE SEWER UNIT (PSU) TO NOM. 500mm INSIDE FRONT PROPERTY BOUNDARY AND BE CAPPED. ELECTRICAL CONDUIT IS TO BE HEAVY DUTY ORANGE.
- ALL CONDUIT BENDS ARE TO BE LARGE RADIUS SWEEP BENDS.
- 10. FOR MORE INFORMATION REFER TO FLOW SYSTEMS STANDARD DRAWING FSI-1000-FS.

J.N. C.B. J.N. C.B. J.N. C.B. J.N. C.B. T.S. C.B. T.S. C.B. G.S. M.L.

11. FOR ALTERNATE TANK AND BOUNDARY CONFIGURATIONS, AND DETAILS FOR TANKS INSTALLED ON PROPERTIES WITH BATTERS AND RETAINING WALLS, REFER TO FLOW SYSTEMS STANDARD DRAWINGS FSI-SK03A-FS AND FSI-SK03B-FS.

C.B.

C.B. C.B.

C.B.

DRAWN CHECK DESIGN VERIFY SCALES

J.N.

J.N.

J.N. J.N. J.N.

0.8 A1 / A3 1:20 / 1:40 ALL DIMENSIONS ARE IN METRES. DO NOT SCAL

Hunter Office

Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398



		WORK AS CONSTRUCT
PROPERTY DESCRIPTION	PROJECT	POTABLE WATER, RECYCLED WATER AND
		PRESSURE SEWER RETICULATION
PROPOSED SUBDIVISION	PLAN TITLE	

TYPICAL CONNECTION SERVICE DETAILS STAGE 18 FERRY PARADE, HUNTLEE - NOV MONO INVIZI-Q

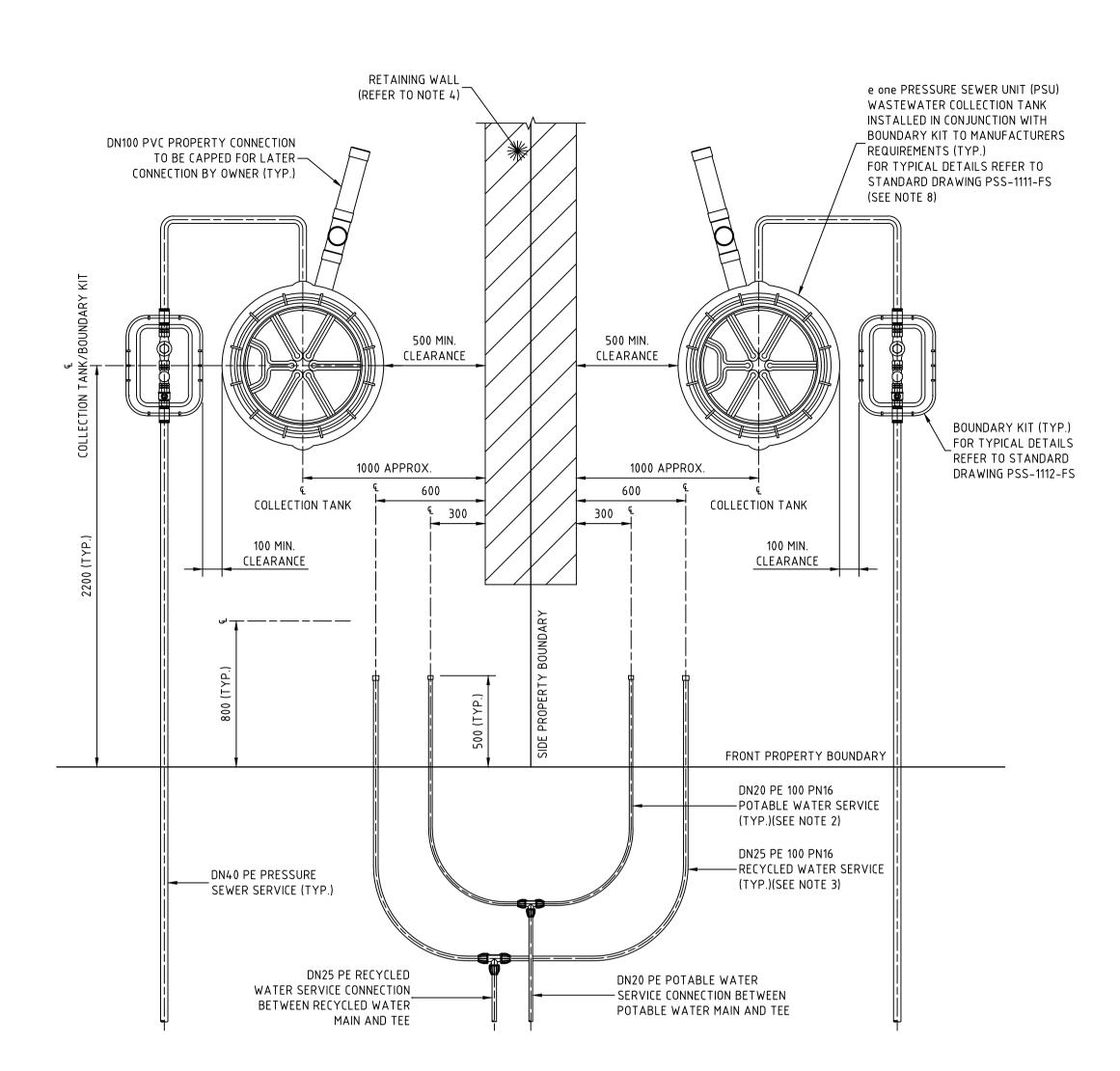
SURVEYED DATUM PROJECT No. 240072(18) - WAC -ADW Johnson A.H.D.

DESIGN FILE N: \ Plotted By: glenns Plot Date: 18/02/21 - 11:29 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-020 to 023.dwg

TYPICAL PROPERTY CONNECTION DETAIL

(PRESSURE SEWER UNIT AT REAR)

SCALE 1:20



TYPICAL PROPERTY CONNECTION DETAIL SCALE 1:20

NOTES:

- 1. PROPERTY SERVICE CONNECTIONS SHALL BE IN ACCORDANCE WITH WSA STANDARD DRAWINGS FOR DUAL WATER SUPPLY SYSTEMS (SYDNEY WATER VERSION)(SUPPLEMENT TO WSA 03-2011).
- 2. DN20 PE100 PN16 POTABLE WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 3. DN25 PE100 PN16 RECYCLED WATER SERVICE TO EXTEND 500mm BEYOND PROPERTY BOUNDARY AND BE CAPPED FOR LATER CONNECTION BY PROPERTY OWNER.
- 4. FOR PROPERTY CONNECTIONS WHERE A RETAINING WALL IS NOT PRESENT, SERVICES ARE TO BE OFFSET FROM THE PROPERTY
- 5. WHERE SERVICE CONNECTIONS ARE LOCATED ADJACENT TO TELSTRA PITS/ELECTRICAL PILLARS, A MINIMUM CLEARANCE OF
- 200mm BETWEEN PITS AND SERVICE PIPEWORK IS TO BE MAINTAINED. 6. MINIMUM BENDING RADIUS FOR PE PIPEWORK IS TO BE 20 x PIPE DIAMETER.
- 7. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.
- 8. PRESSURE SEWER UNIT (PSU) IS TO HAVE 500mm CLEARANCE FROM INTER ALLOTMENT DRAINAGE EASEMENT (IF PRESENT), REAR PROPERTY BOUNDARY RETAINING WALL (IF PRESENT) OR REAR PROPERTY BOUNDARY. PRESSURE SEWER UNIT (PSU) IS TO HAVE 2150mm CLEARANCE FROM BUILDING STRUCTURES.
- 9. ϕ 25 ELECTRICAL CONDUIT IS TO EXTEND FROM CONNECTION WITH PRESSURE SEWER UNIT (PSU) TO NOM. 500mm INSIDE FRONT PROPERTY BOUNDARY AND BE CAPPED. ELECTRICAL CONDUIT IS TO BE HEAVY DUTY ORANGE.
- 10. FOR MORE INFORMATION REFER TO FLOW SYSTEMS STANDARD DRAWING FSI-1000-FS.

ALL CONDUIT BENDS ARE TO BE LARGE RADIUS SWEEP BENDS.

11. FOR ALTERNATE TANK AND BOUNDARY CONFIGURATIONS, AND DETAILS FOR TANKS INSTALLED ON PROPERTIES WITH BATTERS AND RETAINING WALLS, REFER TO FLOW SYSTEMS STANDARD DRAWINGS FSI-SK03A-FS AND FSI-SK03B-FS.

SURVEYED

WORK AS CONSTRUCTED

BEFORE YOU DIG

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.

COMPANY: ADW JOHNSON PTY LTD COMPANY ... NAME .. NAME: MATHEW DAVID LONDON

SIGNEDDATE 16/02/2021 SIGNEDDATE/...../... CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground PM 20029 MGA Datum: GDA94 E: 345612.942 N: 6382878.917 MGA Zone: 56

WORK AS CONSTRUCTED

DRAWN CHECK DESIGN VERIFY SCALES DATE AMENDMENT PRELIMINARY ISSUE 0.1 0.2 0.3 0.4 A1 / A3 J.N. C.B. J.N. C.B. J.N. C.B. J.N. C.B. T.S. C.B. T.S. C.B. G.S. M.L. AMENDED ISSUE - CLIENT COMMENTS 11.08.2020 1:10 / 1:20 AMENDED ISSUE C.B. 28.08.2020 J.N. J.N. J.N. J.N. C.B. C.B. 0.8 A1 / A3 03.09.2020 CONSTRUCTION ISSUE LOTS 1831 & 1837 PAD LEVEL AMENDED 15.10.2020 1:20 / 1:40 LOT 1837 PAD LEVEL AMENDED C.B. 29.10.2020 WORKS AS CONSTRUCTED 16.02.2021 DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCAL

DN25 PE RECYCLED

MAIN AND TEE

WATER SERVICE CONNECTION

BETWEEN RECYCLED WATER

johnson ABN 62 129 445 398

DN40 PE PRESSURE

SEWER SERVICE (TYP.)

DN20 PE POTABLE WATER

- SERVICE CONNECTION BETWEEN

POTABLE WATER MAIN AND TEE

Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au



PROPERTY DESCRIPTION PROPOSED SUBDIVISION STAGE 18 FERRY PARADE, HUNTLEE

ADW Johnson

DATUM

A.H.D.

POTABLE WATER, RECYCLED WATER AND PLAN TITLE

PROJECT No.

240072(18)

RL: 77.675

TYPICAL SERVICE CONNECTION DETAILS

PRESSURE SEWER RETICULATION

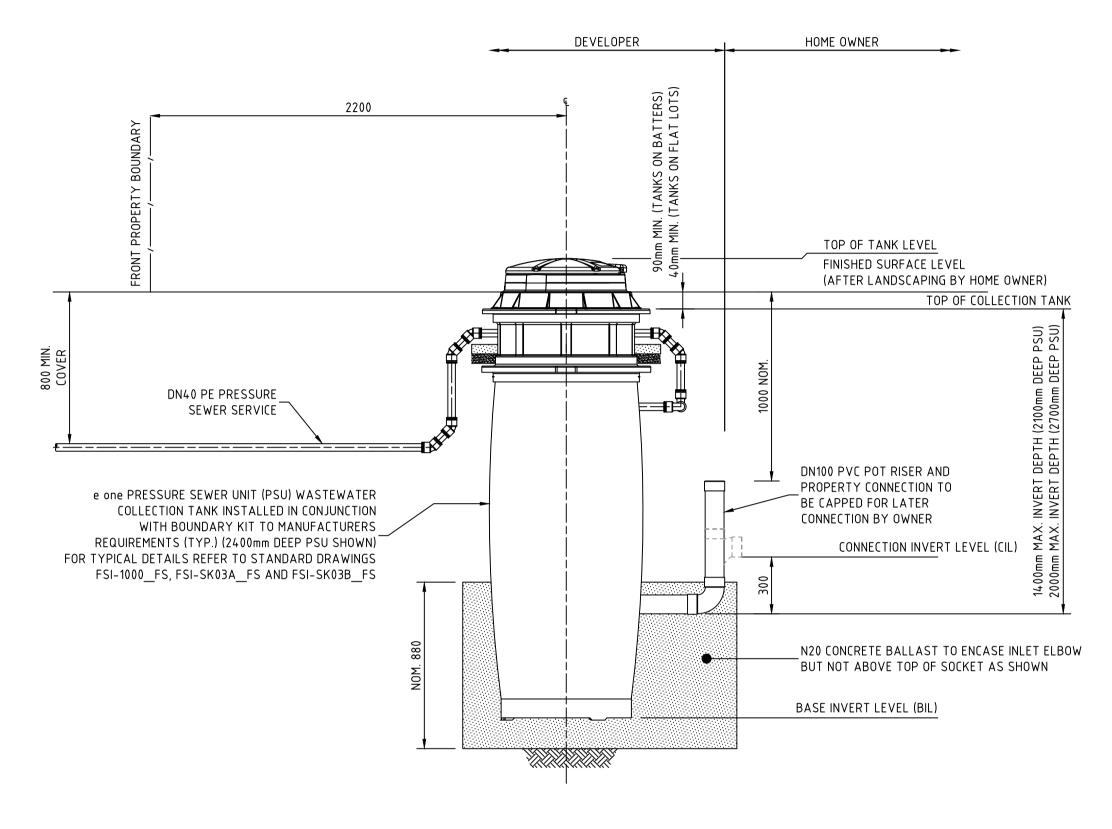
DISCIPLINE 022 - WAC -

Plotted By: glenns Plot Date: 18/02/21 - 11:29 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-020 to 023.dwg



LOT NUMBER LEVEL IFSLI LEVEL (IBL) LEV	ULATED (DRAINAGE T LEVEL COMPARISON 0.22 0.20 0.91 0.18
1802 67.30 65.13 65.73 24.00 800 L FRONT 34.6457.99 638296.16 67.48 67.4	5.91 0.18
1803	
## 1804 64.80 62.63 63.23 24.00 800 L FRONT 34.64.92,8 638298.45 64.90 65.00 1805 63.42 61.55 62.15 2100 650 L REAR 34.651.25 63800.932 62.50 62.60 1807 61.12 58.90 59.50 24.00 800 L FRONT BATTER 34.653.96 83800.79 62.26 66.80 1807 61.12 58.90 59.50 24.00 800 L FRONT BATTER 34.653.96 63800.79 34 61.23 59.80 1809 59.70 57.83 58.43 2100 650 L REAR 34.656.17 638297.93 4 61.23 59.80 1809 61.11 59.19 59.79 2100 650 L FRONT BATTER 34.655.14 638297.93 4 61.23 59.80 1800 62.04 60.12 60.72 2100 650 L FRONT BATTER 34.655.14 638295.14 582.80 1800 62.04 60.12 60.72 2100 650 L FRONT BATTER 34.655.14 638295.14 582.80 1800 62.04 60.12 60.72 2100 650 L FRONT BATTER 34.655.12 638296.01 62.20 6.80 1811 63.17 63.83 61.91 62.51 2100 650 L FRONT BATTER 34.651.28 638296.01 63.83 61.91 62.51 2100 650 L FRONT BATTER 34.651.28 638296.01 63.83 61.91 62.51 2100 650 L FRONT BATTER 34.651.28 638296.01 63.83 61.91 62.51 2100 650 L FRONT BATTER 34.651.28 638296.01 63.83 61.91 62.51 2100 650 L FRONT BATTER 34.651.28 638296.01 63.83 61.91 62.91 63.	
## 1805 63.42 61.55 62.15 2100 650 L REAR 346512.59 6383009.32 62.50 66.88 62.10 59.88 60.55 2700 - FRONT BATTER 34653.08 6383007.92 62.26 66.88 62.10 62.10 650 L 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.23 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 61.13 638207.94 62.20 63.84 63.	73 0.10
## 1806 62.10 59.88 60.55 2700 - FRONT BATTER 346530.58 6383007.92 62.26 6 6381007.92 10.00 10.0	0.10
1807	.24 -0.91
1807	.49 -0.06
1809	0.16
1810 62.04 60.12 60.72 2100 650 L FRONT BATTER 34.6547.19 6382958.60 62.20 66.21 1811 63.72 61.50 62.10 24.00 800 L FRONT BATTER 34.6517.28 6382960.91 63.83 61.81 62.10 650 L FRONT BATTER 34.6517.28 6382960.91 63.83 61.81 65.29 63.42 64.02 21.00 650 L FRONT BATTER 34.6515.28 6382961.07 63.91 63.81 65.29 63.42 64.02 21.00 650 L FRONT 34.64.83.38 6382961.07 63.91 66.10 65.44 63.57 64.17 21.00 650 L FRONT 34.64.83.38 6382963.53 65.38 65.38 65.38 65.39 65.49 66.19 66.79 21.00 650 L REAR 34.64.61.83 6382950.19 68.20 66.18 66.19 66.79 21.00 650 L REAR 34.64.61.84 6382950.19 68.20 66.18 66.19 66.79 21.00 650 L REAR 34.64.61.94 638294.82.0 68.26 66.18 66.80 66.81 67.41 21.00 650 L REAR 34.64.63.65 6382918.81 68.86 66.81 67.41 21.00 650 L REAR 34.64.63.65 6382918.81 68.86 66.81 67.41 21.00 650 L REAR 34.64.63.67 6382918.81 68.87 66.88 66.81 67.41 21.00 650 L REAR 34.64.63.67 6382918.81 68.87 66.88 66.81 67.41 21.00 650 L REAR 34.64.63.65 6382918.81 68.87 66.88 66.81 67.41 21.00 650 L REAR 34.64.82.22 6382901.08 66.78	0.19
1811 63.72	0.09
1812 63 83 61 91 62.51 2100 650 L FRONT BATTER 346515.28 6382961.07 63.91 6 1813 65.29 63.42 64.02 2100 650 L FRONT 346485.37 6382963.38 65.38 6 1814 65.44 63.57 64.17 2100 650 L FRONT 346483.38 6382963.53 65.49 6 1815 68.06 66.19 66.79 2100 650 L REAR 34646183 6382950.19 68.20 68.20 1816 68.10 66.23 66.83 2100 650 L REAR 346461.84 6382918.81 68.26 68.27 68.29 68.27 68.29 68.27	0.22
1813 65.29 63.42 64.02 2100 650 L FRONT 346485.37 6382963.38 65.38 1814 65.44 63.57 64.17 2100 650 L FRONT 346483.38 6382963.53 65.49 66.49 1815 68.06 66.19 66.79 2100 650 L REAR 34646.183 6382950.19 68.20 68.20 1816 68.10 66.23 66.83 2100 650 L REAR 34646.194 6382948.20 68.26 66.26 66.21 66.81 67.38 2100 650 L REAR 34646.365 6382918.81 68.86 68.86 66.81 67.41 2100 650 L REAR 346463.77 6382918.81 68.86 68.86 66.81 67.41 2100 650 L REAR 346463.77 6382916.81 68.87 68.87 68.87 68.87 68.87 68.87 68.87 68.88 66.78 66.74 70.00 650 L REAR 34648.22 6382901.	2.26 0.16
1814 65.44 63.57 64.17 2100 650 L FRONT 346483.38 6382963.53 65.49 6 1815 68.06 66.19 66.79 2100 650 L REAR 346461.83 6382950.19 68.20 6 1816 68.10 66.23 66.83 2100 650 L REAR 346461.94 6382948.20 68.26 6 1817 68.65 66.78 67.38 2100 650 L REAR 346463.65 6382918.81 68.86 6 1818 68.68 66.81 67.41 2100 650 L REAR 346463.65 6382918.81 68.86 6 1819 66.60 64.73 65.33 2100 650 L REAR 346463.77 6382910.81 68.87 6 1820 66.12 63.95 64.55 2400 800 L FRONT 346498.19 6382900.01 66.26 6 1821 65.03 62.86 63.46 2400	2.65 0.14
1815 68.06 66.19 66.79 2100 650 L REAR 346461.83 6382950.19 68.20 68.20 1816 68.10 66.23 66.83 2100 650 L REAR 346461.94 6382948.20 68.26 66.21 1817 68.65 66.78 67.38 2100 650 L REAR 346463.65 6382918.81 68.86 68.86 68.86 66.81 67.41 2100 650 L REAR 346463.77 6382916.81 68.87	+.12
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1817 68.65 66.78 67.38 2100 650 L REAR 346463.65 6382918.81 68.86 6.81 67.41 2100 650 L REAR 346463.77 6382916.81 68.87 6.887 6.887 6.887 6.887 6.887 6.887 6.887 6.887 6.887 6.887 6.888 6.887 6.888 6.887 6.888 6.887 6.888 6.887 6.887 6.888 6.887 6.888 6.881 6.741 2100 650 L REAR 346463.77 6382901.81 68.87 6.888 6.78 6.889 6.88	0.14
1818 68.68 66.81 67.41 2100 650 L REAR 346463.77 6382916.81 68.87 6 1819 66.60 64.73 65.33 2100 650 L REAR 346482.22 6382901.08 66.78 6 1820 66.12 63.95 64.55 2400 800 L FRONT 346498.19 6382902.01 66.26 6 1821 65.03 62.86 63.46 2400 800 L FRONT 346513.92 6382901.39 65.18 6 1822 63.95 61.78 62.38 2400 800 L FRONT 346529.87 6382901.39 65.18 6 1823 62.84 60.67 61.27 2400 800 L FRONT 346545.83 6382898.92 62.98 6 1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400	0.16
1819 66.60 64.73 65.33 2100 650 L REAR 34.6482.22 6382901.08 66.78 6 1820 66.12 63.95 64.55 2400 800 L FRONT 34.6498.19 6382902.01 66.26 6 1821 65.03 62.86 63.46 2400 800 L FRONT 34.6513.92 6382901.39 65.18 6 1822 63.95 61.78 62.38 2400 800 L FRONT 34.6529.87 6382900.19 65.18 6 1823 62.84 60.67 61.27 2400 800 L FRONT 34.6545.83 6382990.16 64.10 6 1824 61.80 59.63 60.23 2400 800 L FRONT 34.6545.83 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 34.6575.99 6382895.37 59.30 5 1826 59.20 57.28 57.88	0.22
1820 66.12 63.95 64.55 2400 800 L FRONT 346498.19 6382902.01 66.26 6 1821 65.03 62.86 63.46 2400 800 L FRONT 346513.92 6382901.39 65.18 6 1822 63.95 61.78 62.38 2400 800 L FRONT 346529.87 6382900.16 64.10 6 1823 62.84 60.67 61.27 2400 800 L FRONT 346545.83 6382898.92 62.98 6 1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 346575.99 6382896.59 60.85 5 1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62	7.60 0.19
1821 65.03 62.86 63.46 2400 800 L FRONT 346513.92 6382901.39 65.18 6 1822 63.95 61.78 62.38 2400 800 L FRONT 346529.87 6382900.16 64.10 6 1823 62.84 60.67 61.27 2400 800 L FRONT 346545.83 6382898.92 62.98 6 1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 346591.75 6382896.59 60.85 5 1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	5.51 0.18
1822 63.95 61.78 62.38 2400 800 L FRONT 346529.87 6382900.16 64.10 6 1823 62.84 60.67 61.27 2400 800 L FRONT 346545.83 6382898.92 62.98 6 1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 346575.99 6382896.59 60.85 5 1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	69 0.14
1823 62.84 60.67 61.27 2400 800 L FRONT 346545.83 6382898.92 62.98 62.98 1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 60.93 60.93 60.93 60.94 60.94 59.07 2400 800 L FRONT BATTER 346575.99 6382896.59 60.85 50.94 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 50.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 57.10 50.94	3.61 0.15
1824 61.80 59.63 60.23 2400 800 L FRONT 346560.91 6382897.76 61.93 6 1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 346575.99 6382896.59 60.85 5 1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	2.54 0.16
1825 60.69 58.47 59.07 2400 800 L FRONT BATTER 346575.99 6382896.59 60.85 5 1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	.42 0.15
1826 59.20 57.28 57.88 2100 650 L FRONT BATTER 346591.75 6382895.37 59.30 5 1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	0.14
1827 56.94 55.02 55.62 2100 650 L FRONT BATTER 346630.00 6382915.78 57.10 5	0.28 0.21
	0.16
1828 56.98 55.06 55.66 2100 650 L FRONT BATTER 346629.43 6382912.31 57.10 5	0.84
	0.17
	5.19 0.13
	5.21 0.14
	0.21
	0.26
	0.64
	1.91 0.11
	0.08
	22 0.12
1837 67.93 66.06 66.66 2100 650 L REAR 346473.15 6382861.79 68.10 6	

DENOTES NOV MONO INVIZI-Q PRESSURE SEWER UNIT
(PSU) WASTEWATER COLLECTION TANK TO BE INSTALLED
REFER TO DRG-021 FOR TYPICAL DETAILS



PRESSURE SEWER SERVICE CONNECTION TYPICAL SECTIONAL ELEVATION SCALE 1:20

WORK AS CONSTRUCTED THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY. COMPANY: ADW JOHNSON PTY LTD COMPANY: MATHEW DAVID LONDON NAME: MATHEW DAVID LONDON NAME: MATHEW DAVID LONDON DATE 16/02/2021 SIGNED DATE // // CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029 Co-Ord System: MGA Ground
E: 345612.942 MGA Datum: GDA94
N: 6382878.917 MGA Zone: 56
RL: 77.675

WORK AS CONSTRUCTED

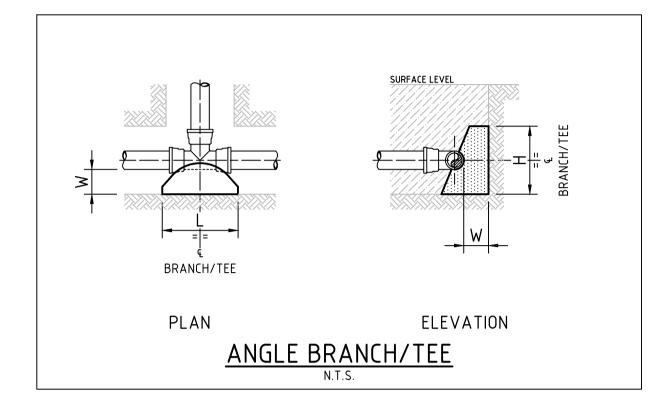
DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT DATE PROPERTY DESCRIPTION POTABLE WATER, RECYCLED WATER AND J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. T.S. C.B. J.N. T.S. C.B. J.N. G.S. M.L. — **Hunter Office** PRESSURE SEWER RETICULATION PRELIMINARY ISSUE 0.8 A1 / A3 C.B. C.B. C.B. C.B. C.B. Unit 7/335 Hillsborough Rd AMENDED ISSUE - CLIENT COMMENTS 11.08.2020 1:20 / 1:40 PROPOSED SUBDIVISION PLAN TITLE Warners Bay N.S.W. 2282 28.08.2020 AMENDED ISSUE 03.09.2020 CONSTRUCTION ISSUE STAGE 18 WASTE WATER COLLECTION Phone: (02) 4978 5100 15.10.2020 LOTS 1831 & 1837 PAD LEVEL AMENDED FERRY PARADE, HUNTLEE Fax: (02) 4978 5199 TANK LEVEL DETAILS 29.10.2020 LOT 1837 PAD LEVEL AMENDED 16.02.2021 WORKS AS CONSTRUCTED email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED DATUM PROJECT No. DISCIPLINE Johnson ABN 62 129 445 398 240072(18) - WAC -023 3 ADW Johnson A.H.D. DESIGN FILE N:\ ALL DIMENSIONS ARE IN METRES. DO NOT SCALI Plotted By: glenns Plot Date: 18/02/21 - 11:30 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-020 to 023.dwg

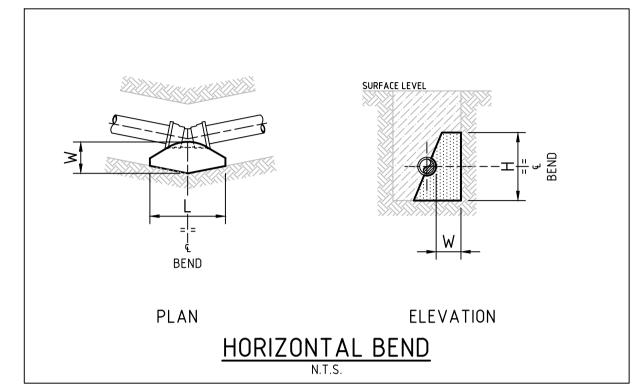


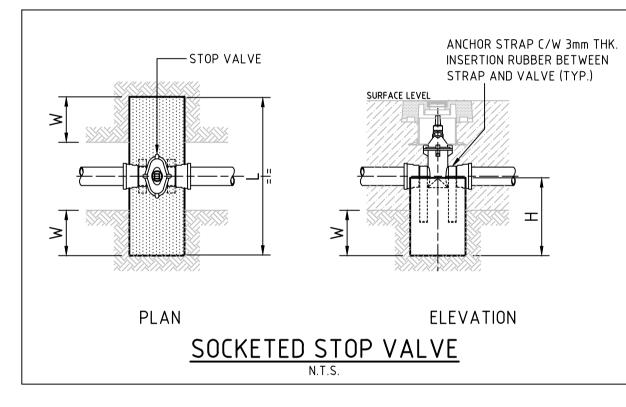
THRUST BLOCK NOTES:

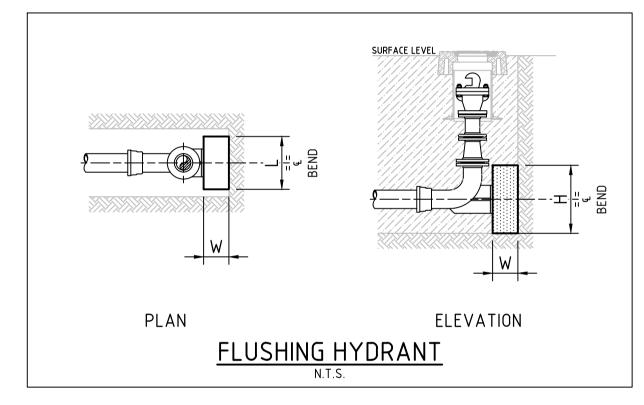
- 1. "N" DENOTES NOMINAL THRUST AREA TO BE ACHIEVED BY POURING CONCRETE THE FULL LENGTH OF THE FITTING AND EXTENDING FROM THE FLOOR OF THE TRENCH TO NOM. 100mm ABOVE THE FITTING.
- 2. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
- 3. THRUST BLOCK DIMENSIONS ARE BASED ON THE MINIMUM ALLOWABLE HORIZONTAL BEARING PRESSURES OF THE SOIL AS SHOWN. IF GROUND CONDITIONS ENCOUNTERED INDICATE THAT THESE BEARING PRESSURES MAY NOT BE ACHIEVED, THRUST BLOCK DESIGN IS TO BE REVISED.
- 4. THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
- 5. FINISH THRUST BLOCKS APPROXIMATELY 100mm ABOVE THE TOP OF THE FITTING OR BEARING PAD AND EXTEND TO THE FLOOR OF THE TRENCH OR DEEPER IF NECESSARY TO ACHIEVE THE REQUIRED THRUST AREA. MAXIMUM ENCASEMENT TO BE 180°.
- 6. CONCRETE FOR THE THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS3972. CONCRETE TO BE MECHANICALLY VIBRATED.
- 7. CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
- 8. REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
- 9. REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.
- 10. THRUST BLOCK TO EXTEND 300mm MINIMUM INTO BASE AND SIDE WALLS OF TRENCH.
- 11. PROVIDE 3mm THK. INSERTION RUBBER BETWEEN ANCHOR STRAP AND PIPE BARREL

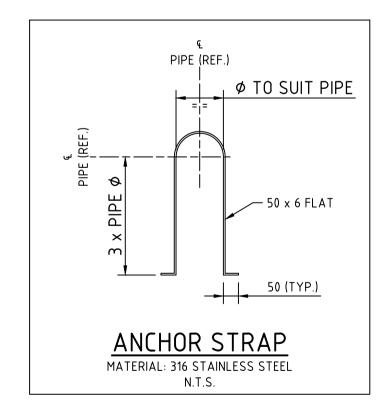
TYPE	FITTING	SOIL AHBP (kPa)	DESIGN STP (kPa)	THRUST	T A (m²)	LENGTH (L)	HEIGHT (H)	WIDTH (W)
1	DN150 x DN100 REDUCING TEE	100	1000	12.00	0.12	0.40	0.30	0.30
2	DN150 SOCKETED STOP VALVE	100	1000	25.00	0.25	1.05	0.46	0.30
3	DN150 FLUSHING HYDRANT	100	1000	25.00	0.25	0.50	0.50	0.30
4	DN100 x DN100 EQUAL TEE	100	1000	12.00	0.12	0.40	0.30	0.30
5	DN100 x 22.5° HORIZONTAL BEND	100	1000	5.00	0.05	N	Z	0.30
6	DN100 x 11.25° HORIZONTAL BEND	100	1000	5.00	0.05	N	Ν	0.30
7	DN100 SOCKETED STOP VALVE	100	1000	12.00	0.12	1.05	0.44	0.30
8	DN100 FLUSHING HYDRANT	100	1000	12.00	0.12	0.40	0.30	0.30











WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF THE WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURES OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY. COMPANY: ADW JOHNSON PTY LTD NAME: MATHEW DAVID LONDON SIGNED DATE 16/02/2021 SIGNEDDATE/..../.. CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 MGA Zone: 56 N: 6382878.917 RL: 77.675

WORK AS CONSTRUCTED

DRAWN CHECK DESIGN VERIFY SCALES DATE AMENDMENT J.N. C.B. J.N.
J.N. C.B. J.N.
J.N. C.B. J.N.
J.N. C.B. J.N.
T.S. C.B. J.N.
T.S. C.B. J.N.
G.S. M.L. — PRELIMINARY ISSUE C.B. C.B. C.B. C.B. C.B. M.L. AMENDED ISSUE - CLIENT COMMENTS 11.08.2020 AMENDED ISSUE 28.08.2020 CONSTRUCTION ISSUE LOTS 1831 & 1837 PAD LEVEL AMENDED 03.09.2020 15.10.2020 29.10.2020 LOT 1837 PAD LEVEL AMENDED 16.02.2021 WORKS AS CONSTRUCTED DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCAL

johnson ABN 62 129 445 398

Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au

Huntlee 🔂 Water

	PROPERTY DESCRIPTION		PROJECT POTABI	LE WATER, RECYCLED V	WATER AND	
			PRE	ESSURE SEWER RETICL	JLATION	
	PROPOSED S	SUBDIVISION	PLAN TITLE			
-	STAC	GE 18		THRUST BLOCK		
	FERRY PARAI	DE, HUNTLEE		DETAILS		
	SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
	ADW Johnson	A.H.D.	240072(1	8) - WAC -	024	3

Plotted By: glenns Plot Date: 18/02/21 - 11:30 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-024.dwg

DESIGN FILE N: \



	Service	s Points T	able	
Point #	Eastings	Northings	Levels	Codes
1	346424.93	6382961.05	69.30	HYD
2	346493.86	6382968.71	64.43	HYD
3	346575.08	6382962.24	59.83	HYD
4	346636.96	6382919.46	56.32	HYD
5	346622.12	6382840.44	57.38	HYD
6	346619.18	6382887.91	56.61	HYD
7	346538.58	6382893.59	63.37	HYD
8	346439.85	6382892.51	69.42	HYD
9	346425.43	6382961.12	69.30	HYDR
10	346493.86	6382968.20	64.46	HYDR
11	346575.09	6382961.75	59.87	HYDR
12	346636.52	6382919.66	56.33	HYDR
13	346621.69	6382840.55	57.38	HYDR
14	346619.18	6382888.43	56.63	HYDR
15	346538.60	6382894.13	63.37	HYDR
16	346439.83	6382893.01	69.43	HYDR
17	346439.07	6382986.38	68.19	BDYKIT
18	346457.26	6382986.37	67.38	BDYKIT
19	346474.68	6382985.02	66.19	BDYKIT
20	346482.68	6382963.68	65.39	BDYKIT
21	346486.16	6382963.44	65.27	BDYKIT
22	346492.16	6382983.49	64.78	BDYKIT
23	346510.53	6382980.98	63.55	BDYKIT
24	346514.58	6382961.20	63.82	BDYKIT
25	346518.17	6382960.95	63.73	BDYKIT
26	346527.97	6382980.70	62.21	BDYKIT
27	346545.40	6382979.38	61.10	BDYKIT
28	346563.70	6382976.77	60.68	BDYKIT
29	346546.43	6382958.79	62.06	BDYKIT
30	346561.41	6382957.57	61.04	BDYKIT
31	346578.13	6382956.34	59.99	BDYKIT
32	346595.56	6382954.99	58.79	BDYKIT
33	346630.26	6382916.59	56.99	BDYKIT
34	346629.51	6382911.64	56.97	BDYKIT
35	346616.25	6382857.19	57.35	BDYKIT
36	346616.58	6382860.90	57.33	BDYKIT
37	346591.10	6382895.65	59.18	BDYKIT
38	346575.38	6382896.76	60.70	BDYKIT
39	346582.61	6382875.31	60.01	BDYKIT
40	346565.56	6382878.00	61.14	BDYKIT
41	346491.70	6382882.14	66.57	BDYKIT
42	346511.73	6382882.42	65.10	BDYKIT
43	346529.62	6382880.81	63.90	BDYKIT
44	346547.56	6382879.59	62.52	BDYKIT
45	346560.13	6382897.79	61.83	BDYKIT
46	346545.11	6382899.22	62.87	BDYKIT
47	346529.10	6382900.27	64.00	BDYKIT
48	346513.15	6382901.54	65.06	BDYKIT
49	346497.37	6382901.70	66.13	BDYKIT
50	346482.38	6382899.72	67.07	BDYKIT
51	346432.39	6382917.08	69.86	BDYKIT
52	346432.47	6382915.28	69.85	BDYKIT

	Servic	es Points	Table	
Point #	Eastings	Northings	Levels	Codes
54	346430.53	6382946.39	69.34	BDYKIT
55	346563.64	6382961.00	60.68	FP
56	346566.36	6382960.83	60.60	FP
57	346633.21	6382910.42	56.49	FP
58	346432.76	6382857.51	69.69	FP
59	346433.17	6382970.96	68.68	SV
60	346565.04	6382960.96	60.76	SV
61	346620.02	6382843.09	57.39	SV
62	346432.76	6382859.15	69.71	SV
63	346432.82	6382856.71	69.69	SV
64	346436.89	6382894.61	69.61	SV
65	346391.46	6383069.49	66.68	SV
66	346397.05	6383042.72	67.29	SV
67	346441.39	6383014.91	67.48	TANK1801
68	346458.03	6382986.35	67.48	TANK1802
69	346475.46	6382984.99	66.30	TANK1803
70	346483.41	6382963.57	65.49	TANK1814
71	346485.40	6382963.51	65.38	T A N K 1813
72	346492.99	6382983.55	64.90	TANK1804
73	346512.79	6383009.44	62.50	TANK1805
74	346515.36	6382961.18	63.91	T A N K 1812
75	346517.39	6382961.04	63.83	TANK 1811
76	346528.82	6382980.79	62.26	TANK1806
77	346546.15	6382979.37	61.23	TANK1807
78	346565.91	6383005.37	59.88	TANK1808
79	346547.21	6382958.74	62.20	TANK 1810
80	346562.17	6382957.50	61.15	TANK1809
81	346630.18	6382915.84	57.10	TANK1827
82	346629.63	6382912.35	57.10	TANK1828
83	346616.29	6382857.99	57.48	TANK1830
84	346616.46	6382860.16	57.46	TANK1829
85	346591.91	6382895.61	59.30	TANK1826
86	346576.03	6382896.65	60.85	TANK1825
87	346583.40	6382875.29	60.09	TANK1831
88	346563.39	6382849.58	60.53	TANK1832
89	346545.51	6382850.99	61.91	TANK1833
90	346527.53	6382852.35	63.17	TANK1834
91	346509.59	6382853.80	64.35	TANK1835
92	346493.47	6382853.47	65.49	TANK1836
93	346560.92	6382897.82	61.93	TANK1824
94	346545.85	6382899.13	62.98	TANK1823
95	346529.95	6382900.22	64.10	TANK1822
96	346513.96	6382901.52	65.18	TANK1821
97	346498.17	6382901.71	66.26	TANK1820
98	346480.44	6382931.32	66.78	TANK 1820
99	346463.79	6382916.85	68.87	TANK 1818
100	346463.65	6382918.85	68.86	TANK 1817
101	346463.65	6382918.85	68.26	TANK 1817
101			68.20	TANK 1815
102	34.64.08.67	6382950.26	68.37	SV
IVD	346408.67	6383008.03		
107	2/4/0/04	L 7 0000 0 1	4 4 4 7 7 7 7	I
104 105	346424.91 346433.25	6382962.83	69.26	SV

Point #	Eastings	Northings	Levels	Codes
107	346637.22	6382921.69		SV
			56.23	
108	346635.90	6382912.17	56.36	SV
109	346622.23	6382843.54	57.35	SV
110	346620.36	6382887.88	56.59	SV
111	346430.70	6382857.45	69.62	SV
112	346438.03	6382892.38	69.51	SV
113	346409.55	6383007.26	68.37	SVR
114	346425.25	6382963.99	69.25	SVR
115	346432.56	6382972.28	68.71	SVR
116	346516.65	6382966.24	63.11	SVR
117	346576.60	6382961.63	59.67	SVR
118	346636.61	6382920.81	56.24	SVR
119	346635.61	6382913.00	56.38	SVR
120	346621.66	6382842.75	57.37	SVR
121	346620.63	6382888.34	56.61	SVR
122	346431.15	6382858.25	69.64	SVR
123	346437.11	6382892.82	69.54	SVR
124	346439.55	6382985.99	68.13	TAP
125	346458.60	6382984.11	67.16	TAP
126	346476.08	6382983.21	65.77	TAP
127	346484.31	6382965.27	65.14	TAP
128	346484.89	6382965.21	65.13	TAP
129	346493.53	6382981.75	64.46	TAP
130	346511.31	6382980.37	63.46	TAP
131	346516.12	6382962.83	63.27	TAP
132	346516.69	6382962.78	63.24	TAP
133	346529.38	6382979.06	62.51	TAP
134	346546.74	6382977.64	61.44	TAP
135	346564.19	6382976.30	60.50	TAP
136	346548.04	6382960.37	61.62	TAP
137	346562.98	6382959.23	60.86	TAP
138	346579.91	6382957.97	59.60	TAP
139	346597.19	6382956.56	58.01	TAP
140	346631.57	6382913.02	56.53	TAP
141	346631.73	6382914.95	56.42	TAP
142	346618.23	6382859.22	57.05	TAP
143	346618.12	6382858.66	57.07	TAP
144	346592.31	6382893.67	58.47	TAP
145	346576.65	6382894.91	60.04	TAP
146	346583.97	6382877.05	59.28	TAP
147	346566.26	6382878.41	61.02	TAP
148	346492.61	6382882.63	66.50	TAP
149	346512.49	6382882.77	64.91	TAP
150	346530.41	6382881.37	63.83	TAP
151	346548.39	6382879.86	62.45	TAP
152	346561.52	6382895.94	61.48	TAP
153	346546.49	6382897.23	62.76	TAP
154	346530.48	6382898.46	63.85	TAP
155	346514.51	6382899.72	65.00	TAP
156	346499.14	6382900.17	66.00	TAP
157	346483.14	6382899.24	67.12	TAP
158	346435.08	6382858.96	69.68	TAP
٥٠,	J + U + J J , U U	6382915.87	69.95	'^!

Point #	Eastings	Northings	Levels	Codes
160	346431.82	6382916.43	69.95	TAP
161	346429.99	6382947.16	69.47	TAP
162	346429.91	6382947.74	69.42	TAP
163	346439.22	6382985.95	68.13	TAPR
164	346458.23	6382984.20	67.21	TAPR
165	346475.76	6382983.22	65.76	TAPR
166	346483.98	6382965.27	65.15	TAPR
167	346485.20	6382965.20	65.09	TAPR
168	346493.24	6382981.78	64.46	TAPR
169	346510.98	6382980.39	63.47	TAPR
170	346515.85	6382962.86	63.28	TAPR
171	346517.00	6382962.74	63.22	TAPR
172	346529.08	6382979.08	62.52	TAPR
173	346546.50	6382977.63	61.40	TAPR
174	346563.86	6382976.33	60.46	TAPR
175	346547.72	6382960.37	61.65	TAPR
176	346562.66	6382959.21	60.88	TAPR
177	346579.63	6382958.04	59.63	TAPR
178	346596.88	6382956.55	58.06	TAPR
179	346631.58	6382912.68	56.53	TAPR
180	346631.82	6382915.31	56.42	TAPR
181	346618.25	6382859.53	57.05	TAPR
182	346618.12	6382858.26	57.08	TAPR
183	346592.03	6382893.74	58.53	TAPR
184	346576.30	6382894.86	60.04	TAPR
185	346583.72	6382877.13	59.34	TAPR
186	346565.97	6382878.43	61.06	TAPR
187	346492.24	6382882.56	66.49	TAPR
188	346512.22	6382882.78	64.93	TAPR
189	346530.11	6382881.38	63.85	TAPR
190	346548.10	6382879.89	62.49	TAPR
191	346561.20	6382895.97	61.51	TAPR
192	346546.23	6382897.26	62.74	TAPR
193	346530.18	6382898.50	63.87	TAPR
194	346514.22	6382899.74	65.02	TAPR
195	346498.76	6382900.21	66.02	TAPR
196	346482.80	6382899.23	67.07	TAPR
197	346435.07	6382859.25	69.65	TAPR
198	346431.87	6382915.55	69.94	TAPR
199	346431.81	6382916.70	69.94	TAPR
200	346430.01	6382946.86	69.46	TAPR
201	346429.92	6382948.02	69.43	TAPR
202	346424.20	6382961.78	69.25	SV
203	346473.14	6382861.90	68.10	TANK1836
204	346435.77	6382859.86	69.77	BDYKIT

Services Points Table

6382881.38	63.85	TAPR	
6382879.89	62.49	TAPR	
6382895.97	61.51	TAPR	
6382897.26	62.74	TAPR	
6382898.50	63.87	TAPR	
6382899.74	65.02	TAPR	
6382900.21	66.02	TAPR	
6382899.23	67.07	TAPR	
6382859.25	69.65	TAPR	
6382915.55	69.94	TAPR	
6382916.70	69.94	TAPR	
5382946.86	69.46	TAPR	
5382948.02	69.43	TAPR	
6382961.78	69.25	SV	
6382861.90	68.10	TANK1836	
6382859.86	69.77	BDYKIT	
			WORK AS CONSTRUCTED THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 11/02/21 OF TH WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURE OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.
			COMPANY: ADW JOHNSON PTY LTD COMPANY
			NAME: MATHEW DAVID LONDON NAME
			SIGNEDDATE 16/02/2021 SIGNEDDATE/DATE/ REGISTERED SURVEYOR CONSTRUCTION MANAGER
			ORIGIN OF W.A.C. LEVELS PM 20029 Co-Ord System: MGA Ground E: 345612.942 MGA Datum: GDA94 N: 6382878 917 MGA Zono: 56

WORK AS CONSTRUCTED

- WAC -

REV.

3

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DRAWN CHECK DESIGN VERIFY SCALES DATE AMENDMENT J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. J.N. C.B. J.N. T.S. C.B. J.N. T.S. C.B. J.N. T.S. C.B. J.N. G.S. M.L. — C.B. C.B. C.B. C.B. C.B. M.L. PRELIMINARY ISSUE AMENDED ISSUE — CLIENT COMMENTS 11.08.2020 28.08.2020 AMENDED ISSUE 03.09.2020 CONSTRUCTION ISSUE 15.10.2020 LOTS 1831 & 1837 PAD LEVEL AMENDED 29.10.2020 LOT 1837 PAD LEVEL AMENDED 16.02.2021 WORKS AS CONSTRUCTED



Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199

PROPERTY DESCRIPTION PROPOSED SUBDIVISION STAGE 18 FERRY PARADE, HUNTLEE

ADW Johnson

A.H.D.

POTABLE WATER, RECYCLED WATER AND PROJECT PRESSURE SEWER RETICULATION

PLAN TITLE WAC SERVICE POINTS DETAILS

MGA Zone: 56

SURVEYED DATUM PROJECT No. DISCIPLINE

240072(18)

N: 6382878.917

RL: 77.675

ALL DIMENSIONS ARE IN METRES. DO NOT SCALI

Plotted By: glenns Plot Date: 18/02/21 - 11:30 Cad File: N:\240072\DWG\Water & Sewer\Stage18-WAC\240072(18)-WAC-025.dwg