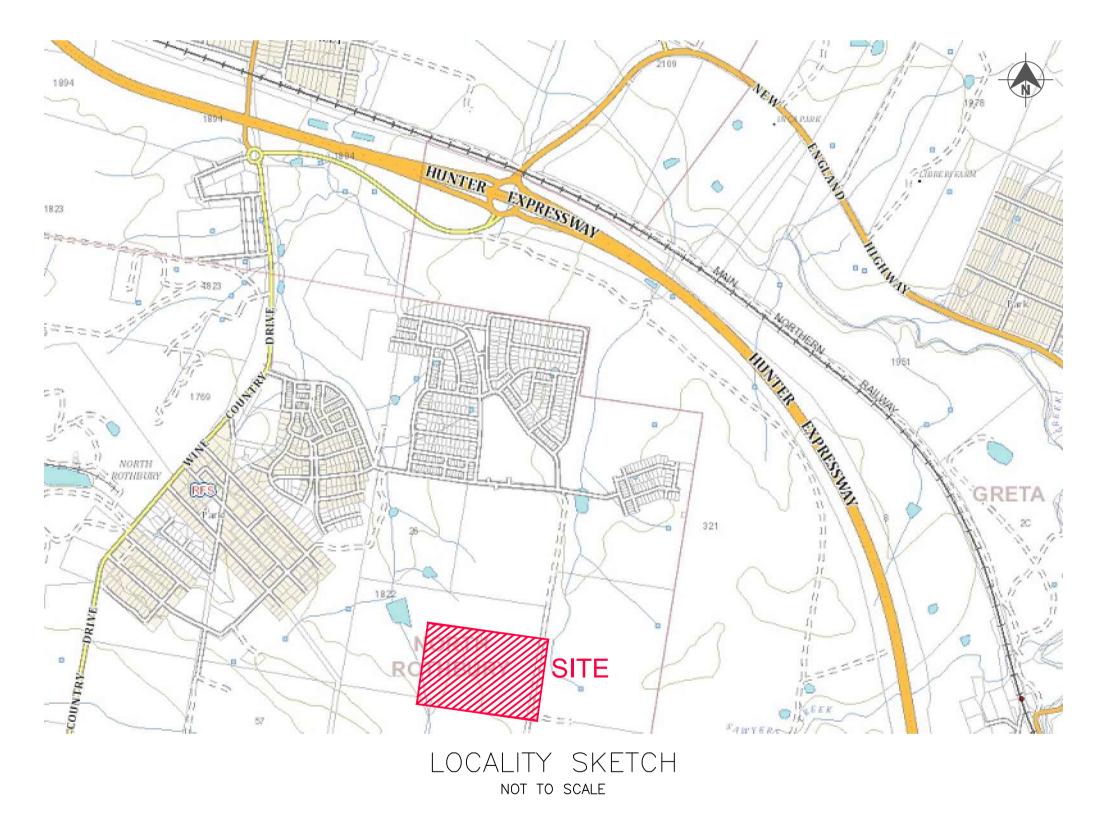


# PROPOSED SUBDIVISION STAGE 23 FERRY PARADE, HUNTLEE



COVER SHEET, LOCALITY PLAN & DRAWING INDEX 240037(23)-WAC-001 240037(23)-WAC-002 GENERAL NOTES OVERALL SITE PLAN POTABLE WATER DETAIL PLAN - SHEET 1 240037(23)-WAC-005 POTABLE WATER DETAIL PLAN - SHEET 3 240037(23)-WAC-007 POTABLE WATER DETAIL PLAN - SHEET 4 -240037(23)-WAC-008 NOT USED 240037(23)-WAC-009 RECYCLED WATER DETAIL PLAN - SHEET 1 240037(23)-WAC-010 RECYCLED WATER DETAIL PLAN - SHEET 2 240037(23)-WAC-011 RECYCLED WATER DETAIL PLAN - SHEET 3 RECYCLED WATER DETAIL PLAN - SHEET 4 240037(23)-WAC-012 | <del>-240037(23)-WAC-013 | NOT USED-</del> 240037(23)-WAC-014 PRESSURE SEWER DETAIL PLAN - SHEET 1 240037(23)-WAC-015 PRESSURE SEWER DETAIL PLAN - SHEET 2 PRESSURE SEWER DETAIL PLAN - SHEET 3 240037(23)-WAC-016 240037(23)-WAC-017 PRESSURE SEWER DETAIL PLAN - SHEET 4 240037(23)-WAC-018 FITTINGS TABLE TYPICAL PIPEWORK TRENCHING DETAILS 240037(23)-WAC-019 TYPICAL SERVICE CONNECTION DETAILS 240037(23)-WAC-020 WASTE WATER COLLECTION TANK LEVEL DETAILS 240037(23)-WAC-021 240037(23)-WAC-022 | THRUST BLOCK DETAILS

DRAWING INDEX

Sheet Description

Sheet Title

WORK AS CONSTRUCTED

THESE BRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 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 ABWJohnson Pty Ltd COMPANY

NAME MATHEW DAVID LONDON NAME

SIGNED DATE 30/09/2021 SIGNED DATE ...../...../.....

REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029 E: 345 612. 942 N: 6 382 878. 917 RL: 77.675m Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56 APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved:25/03/2021

B 19,02,2021 OLIENT COMMENTS UDIAL DETAIL CLIENT COMMENTS OLIENT COMMENTS OLIENT DESIGNE MAIN TYPICAL DETAIL CLIENT COMMENTS OLIENT DESIGN FILE N: LIENT COMMENTS OLIENT COMMENTS OLIENT DESIGN FILE N: ALL DIMENSIONS ARE IN METRES. DO NOT SCALE OF MAIN TYPICAL DETAIL CLIENT COMMENTS OLIENT COMMENTS OLIE	_ Ri	A 05		PRELIMINARY ISSUE	DRAWN G.S.	J.N. T.S	CR	SCALES		Hunter Office	CLIENT	PROPERTY DESCRIPTION			/ATER, RECYCLED W JRE SEWER RETICUL		
ADN 62 120 445 709		C 01 D 22 O 25 1 24	.03.2021 2.03.2021 5.03.2021 4.06.2021	UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL ALTOGETHER COMMENTS FOR CONSTRUCTION UPDATE TANK LEVEL DETAILS	G.S. T.S.	C.B. T.S	6. C.B. C.B.		adw	Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email:hunter@adwjohnson.com.au	altogether.	STAC	GE 23	PLAN TITLE	TITLE SHEET		
2 10001 (20) WIT 100 1 (20)	DE	ESIGN FIL	.E N:\					ALL DIMENSIONS ARE IN METRES. DO NOT SCA	<b>johnson</b>					PROJECT No. 240037(23)	- WAC -	NUMBER 001	REV.

# PRESSURE SEWER NOTES:

REQUIREMENTS.

- 1. 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.
- 2. 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.

- 3. 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.
- 4. PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 02-2007 AND ALTOGETHER SUPPLEMENTARY MANUAL TO WSAA.

THE CONTRACTOR MUST ENSURE ALL SERVICES ARE LOCATED BY THE RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF WORKS.

- 5. ALL POLYETHYLENE MAINS ≤ DN200 SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.

  ALL POLYETHYLENE MAINS ≥ DN200 SHALL BE JOINED USING BUTTWELD JOINTING TECHNIQUES IN ACCORDANCE WITH MANUFACTURERS
- 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.

- 7. 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.
- 8. MAINS WITHIN 2.0m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER REPRESENTATIVE).
- 9. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 AND WSA-PS351.
- 10. ALL BENDS SHALL BE <u>ELECTROFUSION OR BUTT WELD SWEEP BENDS</u>. FABRICATED BENDS SHALL NOT BE USED IN LIEU. KNUCKLE ELBOWS ARE NOT PERMITTED.
- 11. <u>MINIMUM</u> 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).
- 12. ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).
- 13. FLUSHING PITS SHALL CONFORM WITH ALTOGETHER STANDARD DRAWINGS. REFER TO ALTOGETHER WEBSITE FOR CURRENT VERSION.
- SMALL MAINS (< DN110)

  <p><a href="http://information.altogethergroup.com.au/governance/Land\_Housing/PSS-1017A-FS.pdf">http://information.altogethergroup.com.au/governance/Land\_Housing/PSS-1017A-FS.pdf</a>
- LARGE MAINS (> DN110)

  <u>http://information.altogethergroup.com.au/governance/Land\_Housing/PSS-1017B-FS.pdf</u>
- III 1 p:// litt orilla Hori.act ogether group.com.ad/governance/Lang\_nodsing/P35=10176=F3.pg
- 14. 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).
- 15. DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING AND CONNECTED TO SURFACE FITTINGS.
- 16. ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc.) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- 17. DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 18. 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.
- 19. ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 VERSION 1.1.
- 20. FOR LOTS WITH TANKS IN THE REAR.

FITTINGS.

- 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).
- 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 ALTOGETHER 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 PROPERTY
- 24. BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED AND APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER REPRESENTATIVE.

  THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED
- 25. 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/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE.
- 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.
- 27. ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa.

  ALL LINES FROM THE WASTEWATER COLLECTION TANK TO THE MANUAL ISOLATION VALVE WITHIN THE BOUNDARY KIT TO BE PRESSURE TESTED TO 1000KPa.
- 28. ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- 29. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER 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 ALTOGETHER REQUIREMENTS.
- 32. WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER Q.A. SUBMISSION CHECKLIST.

# POTABLE WATER AND RECYCLED WATER NOTES:

- 1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN BRAWINGS, 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.
- 3. 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.
- 6. 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.
- 7. 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 ALTOGETHER 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.
- SINGLE SERVICE: <a href="http://information.altogethergroup.com.au/governance/Land">http://information.altogethergroup.com.au/governance/Land</a> Housing/WAT-1854-FS.pdf

  DUAL SERVICE: <a href="http://information.altogethergroup.com.au/governance/Land">http://information.altogethergroup.com.au/governance/Land</a> Housing/WAT-1855-FS.pdf
- 16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE ALTOGETHER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- 17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc. SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- 18. 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 ALTOGETHER 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 ALTOGETHER REPRESENTATIVE.
  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
    PIPE EMBEDMENT ZONE: NIL
    PROPERTY SERVICES

    TRENCH FILL ZONE: 1 TEST/900MM OF FILL AND EACH 100 LINEAL METERS OF PIPE.
- 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 ALTOGETHER REQUIREMENTS.

FITTINGS.

- 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. SUBMISSION CHECKLIST.
- 29. WHERE THE PIPE GRADE EXCEEDS 5%, TRENCHSTOPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH WAT-1209 AND WAT-1210 AT THE SPACING OF 100/GRADE%.
  WHERE PIPE GRADES EXCEED 15%, CONCRETE BULKHEADS WILL BE CONSTRUCTED AT SPACING AS PER TABLE 7.5 OF WSA03-2001 SYDNEY WATER EDITION 2014.

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.
- 3. 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 H CLEARA	MINIMUM VERTICAL	
(EXISTING OR PROPOSED SERVICE)	NEW MA	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 <sup>8</sup>
STORMWATER DRAINS	300 4	600	150 %
SEWERS (GRAVITY)	1000 6 / 600	1000 <sup>6</sup> / 600	500 °
SEWERS (PRESSURE AND VACUUM)	600	600	300 %
KERBS	150	6005	150 (WHERE POSSIBLE)

### NOTES:

- 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 AUTHORITY.
- 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.
- 5. 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.
- 7. 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
- 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.
- 9. 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 OF THE SEWER).

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

# WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 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 ABWJohnson Pty Ltd COMPANY

NAME MATHEW DAVID LONDON NAME

SIGNED DATE 30/09/2021 SIGNED REGISTERED SURVEYOR

DATE ....../.... CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029
E: 345 612. 942
N: 6 382 878. 917
RL: 77.675m

Co-Ord System: MGA Ground
MGA Datum: GDA94
MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved: 25/03/2021

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES			CLIENT	PROPERTY DESCRIPTION		PROJECT POTABLE W	ATER, RECYCLED WA	TER AND	
A	05.02.2021	PRELIMINARY ISSUE	G.S.	J.N.	T.S.	C.B.			Hunter Office					JRE SÉWER RETICULA		
С	01.03.2021	CLIENT COMMENTS UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL	G.S. G.S.	1.S. T.S.	1.S. T.S.	C.B.			Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282			SUBDIVISION	PLAN TITLE			
D O	22.03.2021 25.03.2021	ALTOGETHER COMMENTS FOR CONSTRUCTION	T.S.	T.S. C.B	T.S. T.S	C.B.			Phone: (02) 4978 5100	ditodether.		GE 23		GENERAL NOTES		
1	24.06.2021	UPDATE TANK LEVEL DETAILS	G.S.	C.B.	T.S.	C.B.		aawi	Fax: (02) 4978 5199	41100	FERRY PARA	DE, HUNTLEE		GLINLIVAL NOTES		
2	30.09.2021	WORK AS CONSTRUCTED	I.B.	C.B.	T.S.	C.B.			email: hunter@adwjohnson.com.au www.adwjohnson.com.au		CHDVEVED	Longuina	DDO IFOT N	DICCIDI INE	NUMBER	DEV
2501011								liohnsor			SURVEYED  ADW Johnson	DATOM	PROJECT No. 240037(22)	DISCIPLINE	NUMBER OO2	REV.
DESIGN	FILE N:\			<u> </u>			ALL DIMENSIONS ARE IN METRES. DO NOT SCALE	<b> Jonnsor</b>	ABN 62 129 445 398		ADW Johnson	A.H.D.	240037(23)	- WAC -		002

DIAL1100 BEFORE YOU DIG



# WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 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 COMPAN

NAME MATHEW DAVID LONDON NAME

DATE 30/09/2021 SIGNED DATE ...../......

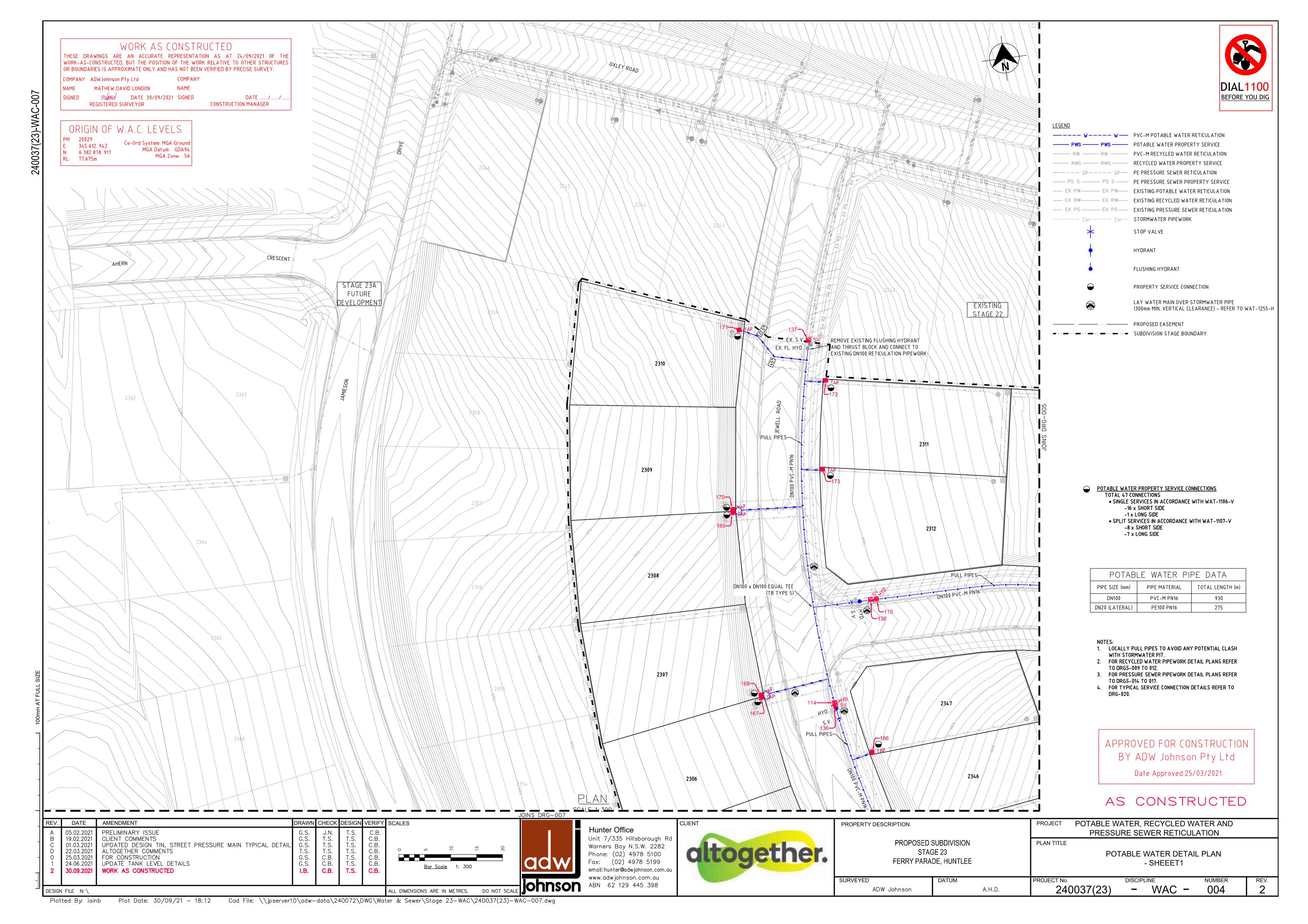
REGISTERED SURVEYOR CONSTRUCTION MANAGER

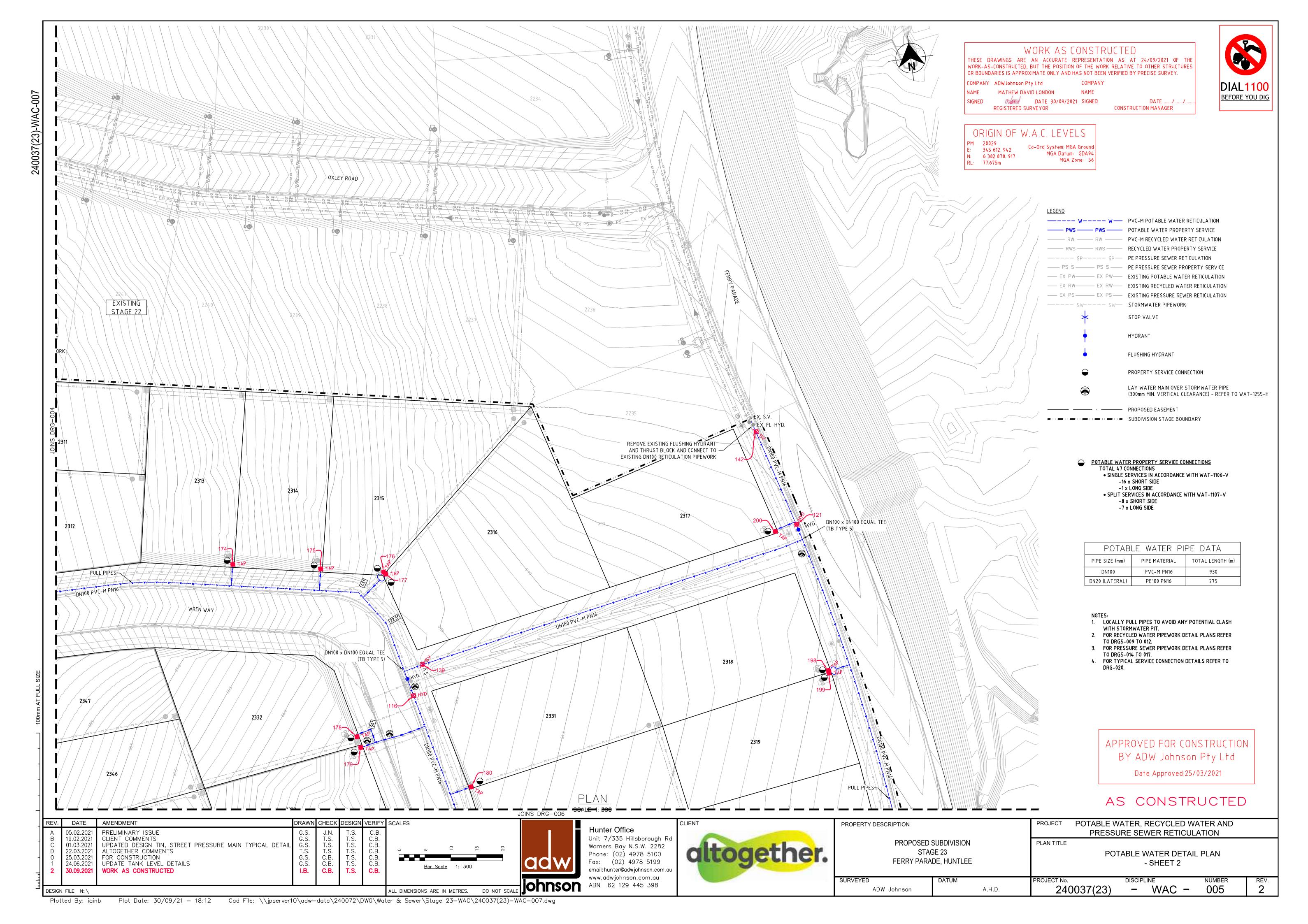
# ORIGIN OF W.A.C. LEVELS PM 20029 E: 345 612. 942 N: 6 382 878. 917 RL: 77.675m ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56

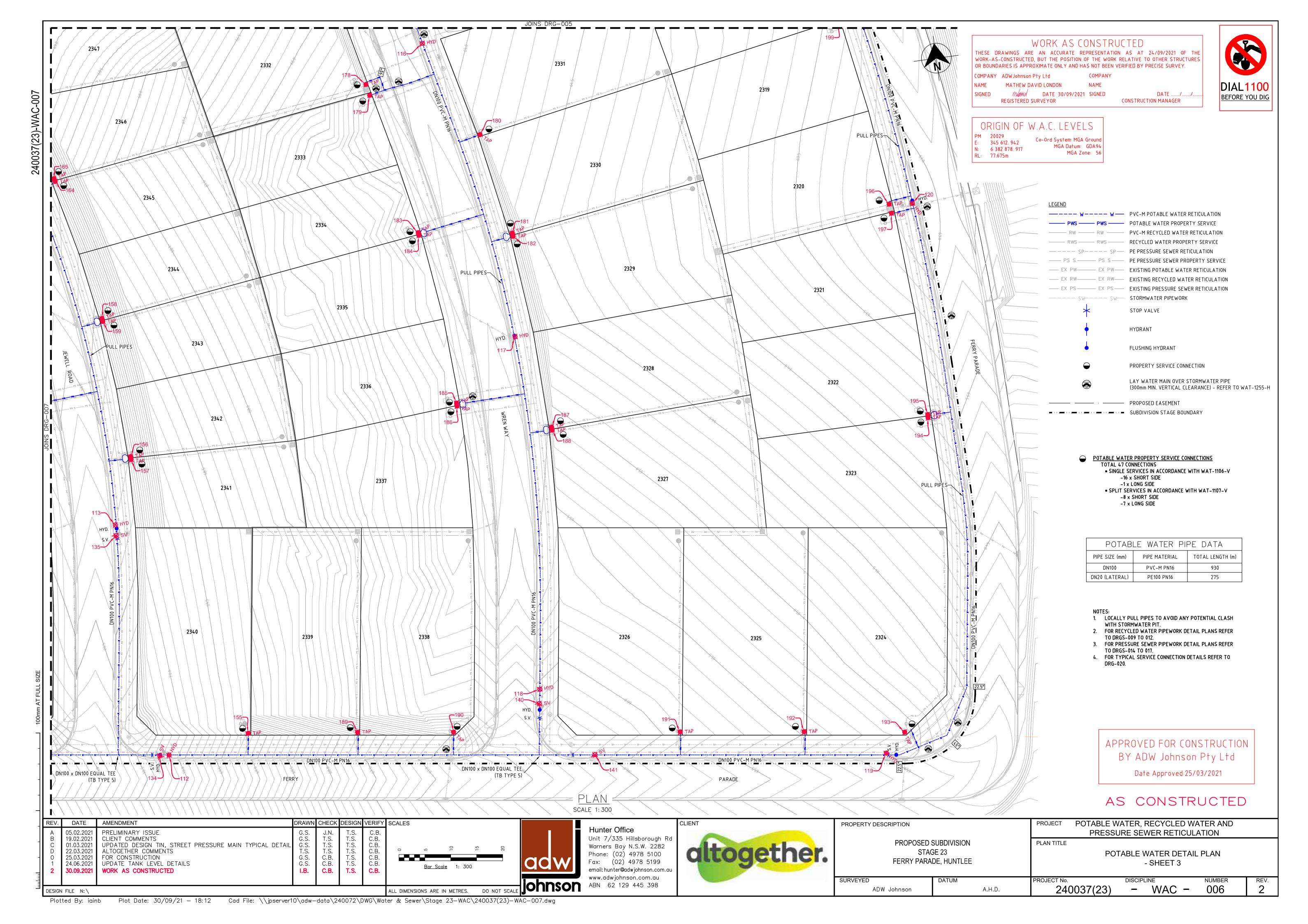
APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

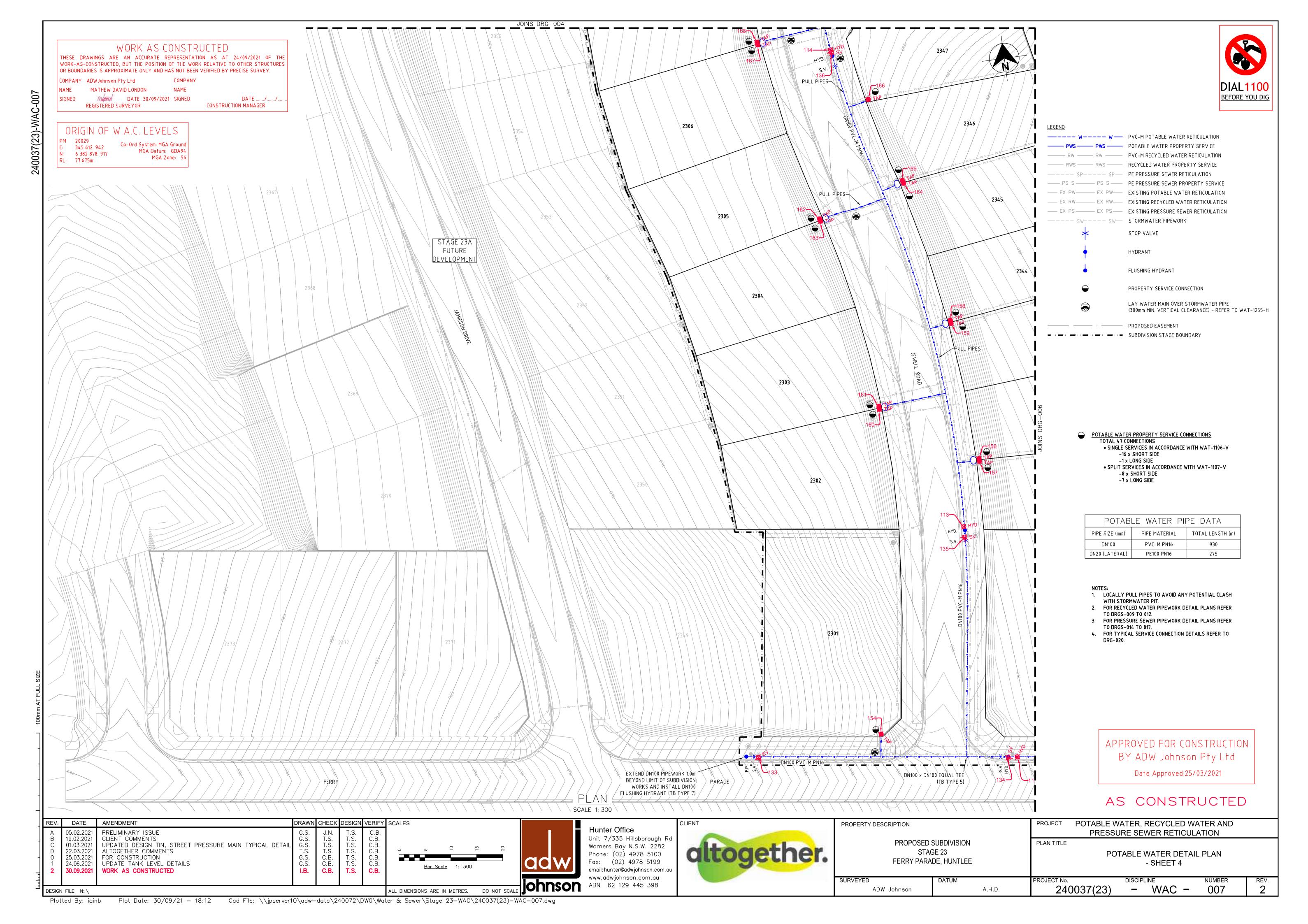
Date Approved:25/03/2021

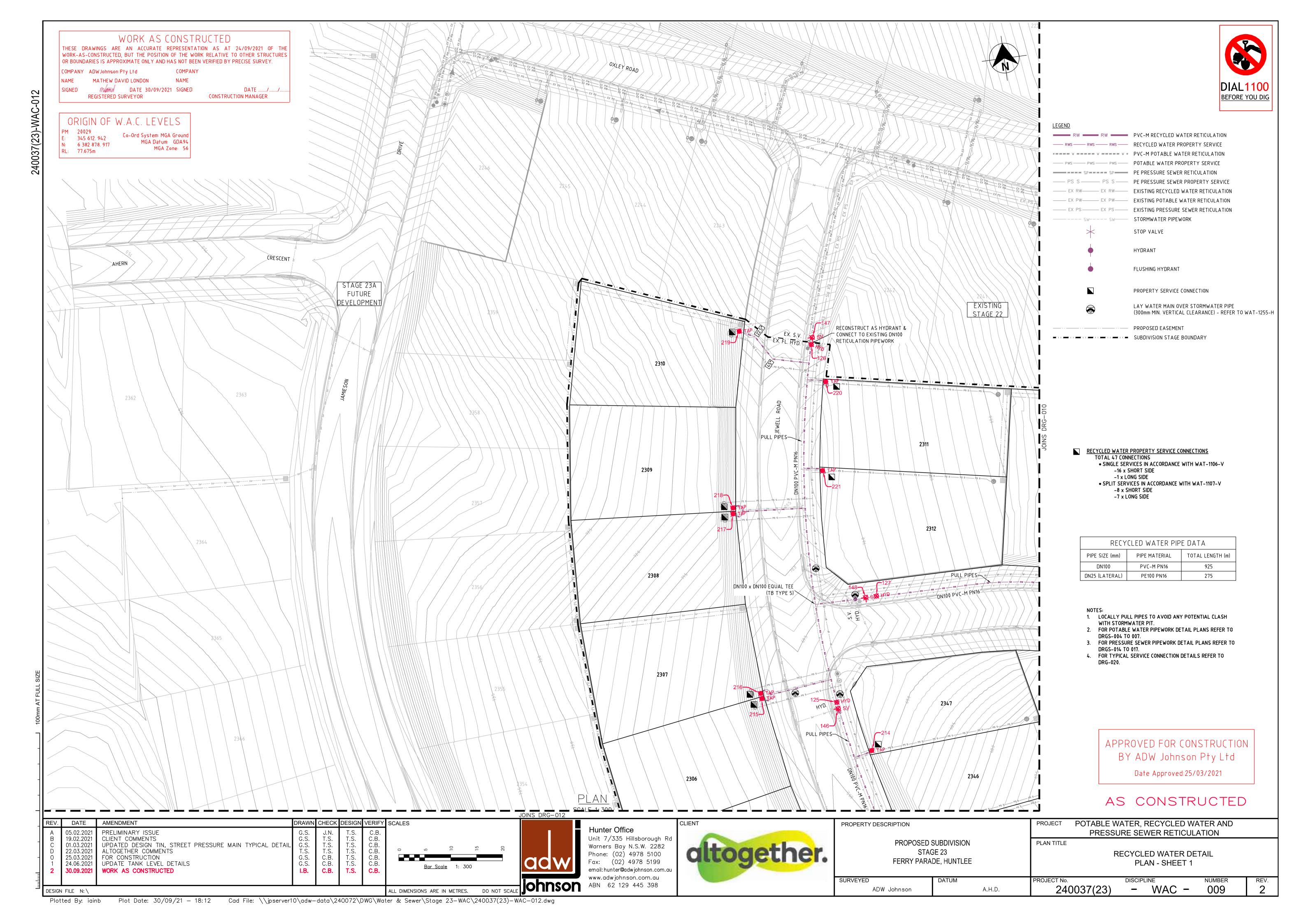
RE	EV.	DATE	AMENDMENT	DRAWN	CHEC	K DESIG	N VEF	RIFY SCALES			CLIENT	PROPERTY DESCRIPTION			PROJECT POTABLE W	ATER, RECYCLED W	ATER AND	
A	05		PRELIMINARY ISSUE	G.S.	J.N.	T.S	. C	.B.		Hunter Office					PRESSU	RE SEWER RETICUL	.ATION	
	3   19	.02.2021	CLIENT COMMENTS UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL	G.S. G.S.	1.S. T.S.	T.S.	C.	В. <b>Г</b>		Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282		PROPOSED :	SUBDIVISION		PLAN TITLE			
		2.03.2021	ALTOGETHER COMMENTS FOR CONSTRUCTION	T.S.	T.S.	T.S.	C.	B. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Phone: (02) 4978 5100	ditodether.		SE 23			OVEDALL CITE DI	A N I	
	1 24	.06.2021	UPDATE TANK LEVEL DETAILS	G.S.	C.B.		C.	B. <u>Bar Scale</u> 1: 1000	adwi	Fax: (02) 4978 5199	decogociioi.	FERRY PARA	DE, HUNTLEE			OVERALL SITE PLA	AIN	
-	2 30	0.09.2021	WORK AS CONSTRUCTED	I.B.	C.B.	T.S.	C.	B. Bar Scale 1. 1000		email: hunter@adwjohnson.com.au								
									lahnsan	www.adwjohnson.com.au		SURVEYED	DATUM		PROJECT No.	DISCIPLINE	NUMBER	REV.
DES	SIGN FIL	.E N: \						ALL DIMENSIONS ARE IN METRES. DO NOT SCALE	<b>johnson</b>	ABN 62 129 445 398		ADW Johnson		A.H.D.	240037(23)	- WAC -	003	2
P	lotted	By: iainb	Plot Date: 30/09/21 — 18:11 Cad File: C:\Users\ic	ainb\Ap	pData\	Local\	Temp\	AcPublish_8288\Unsaved Drawing1.dwg										

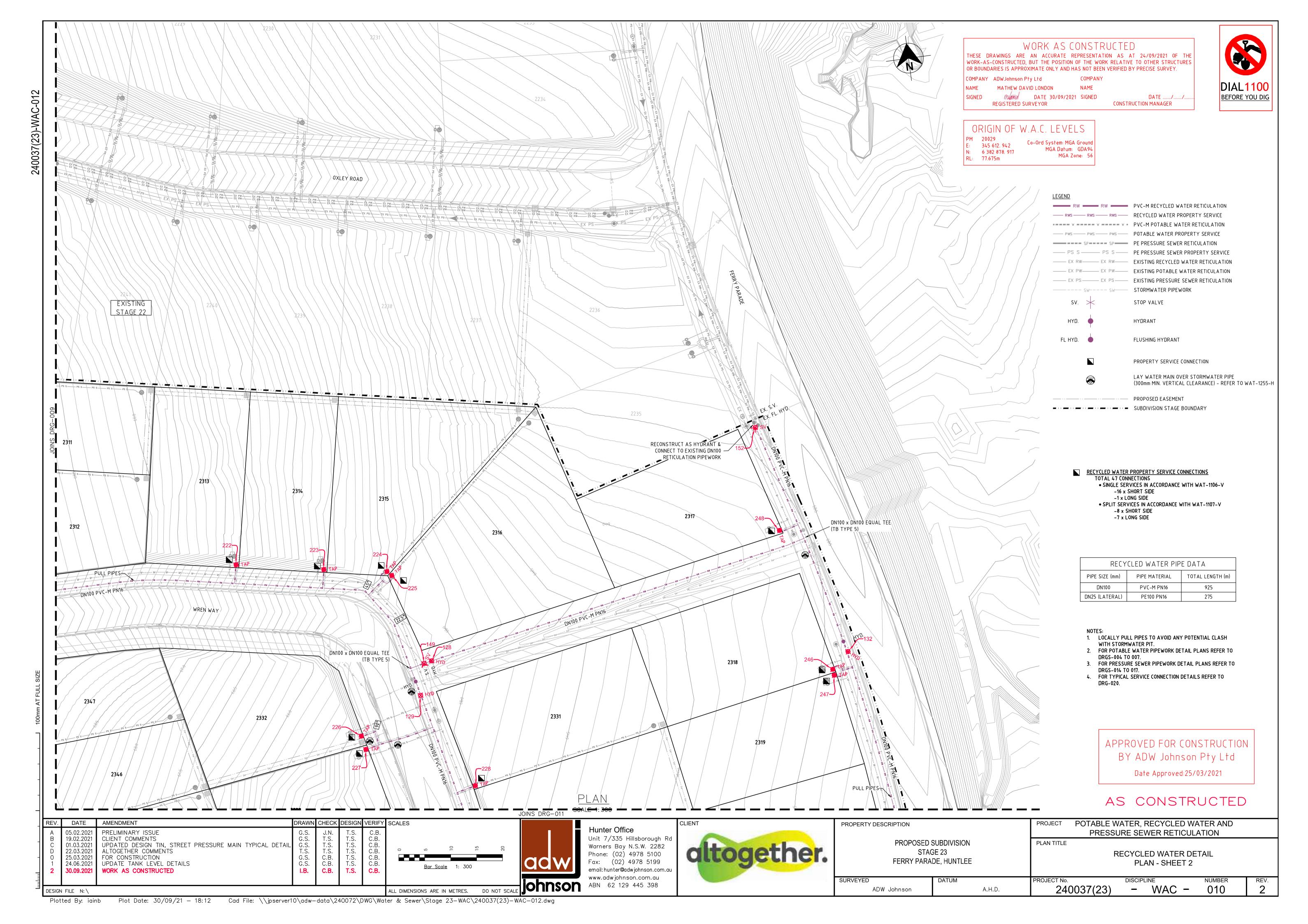


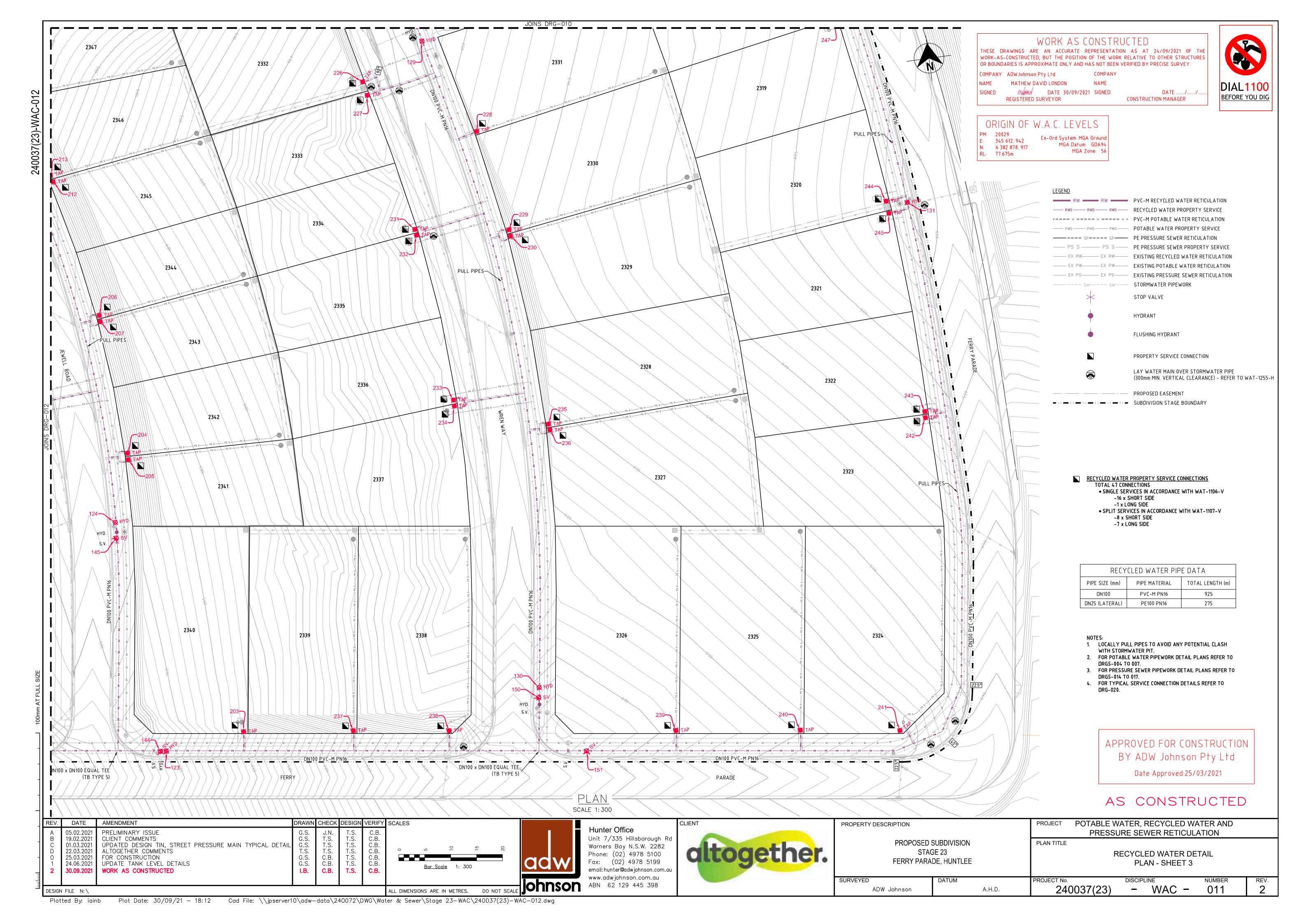


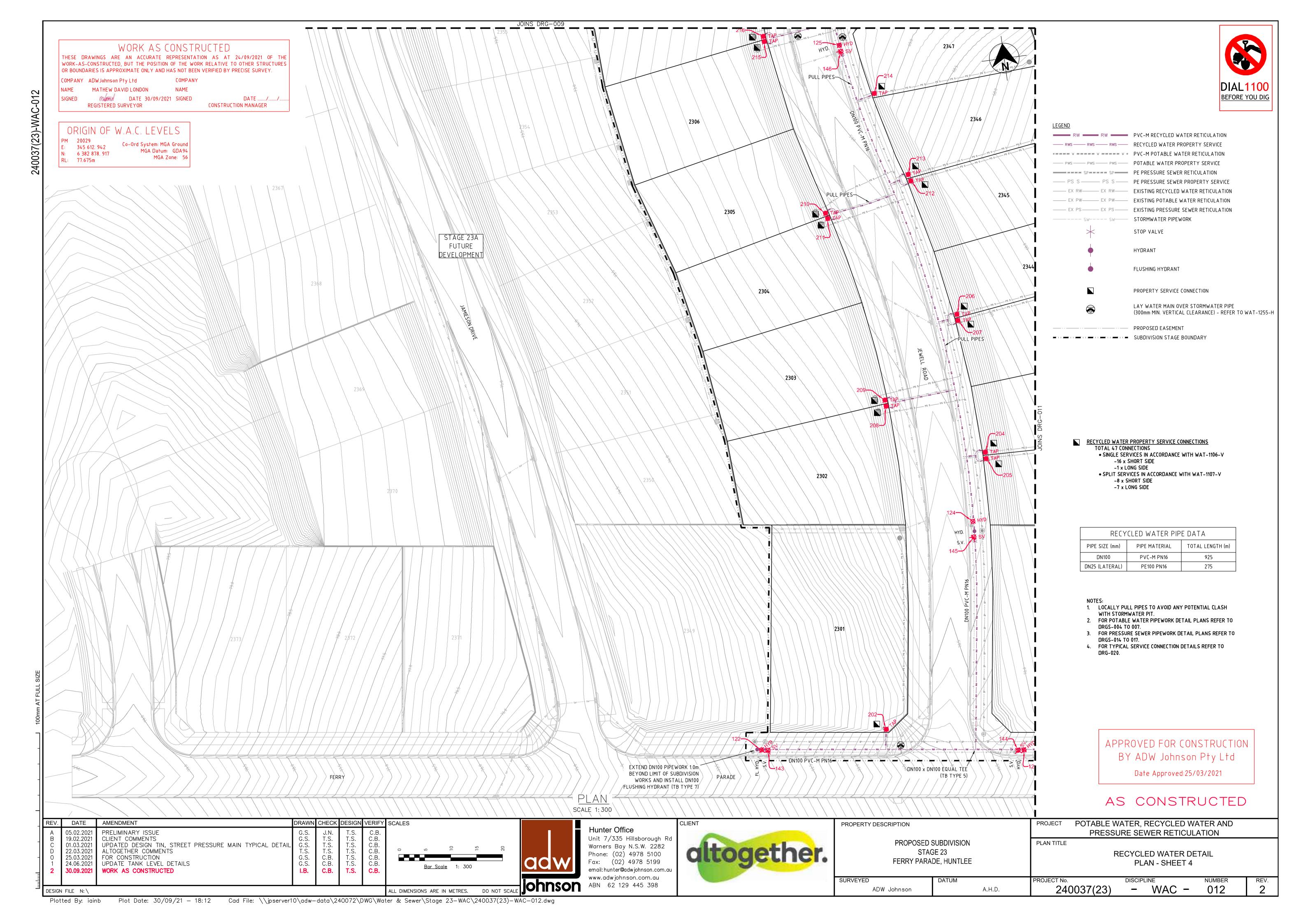


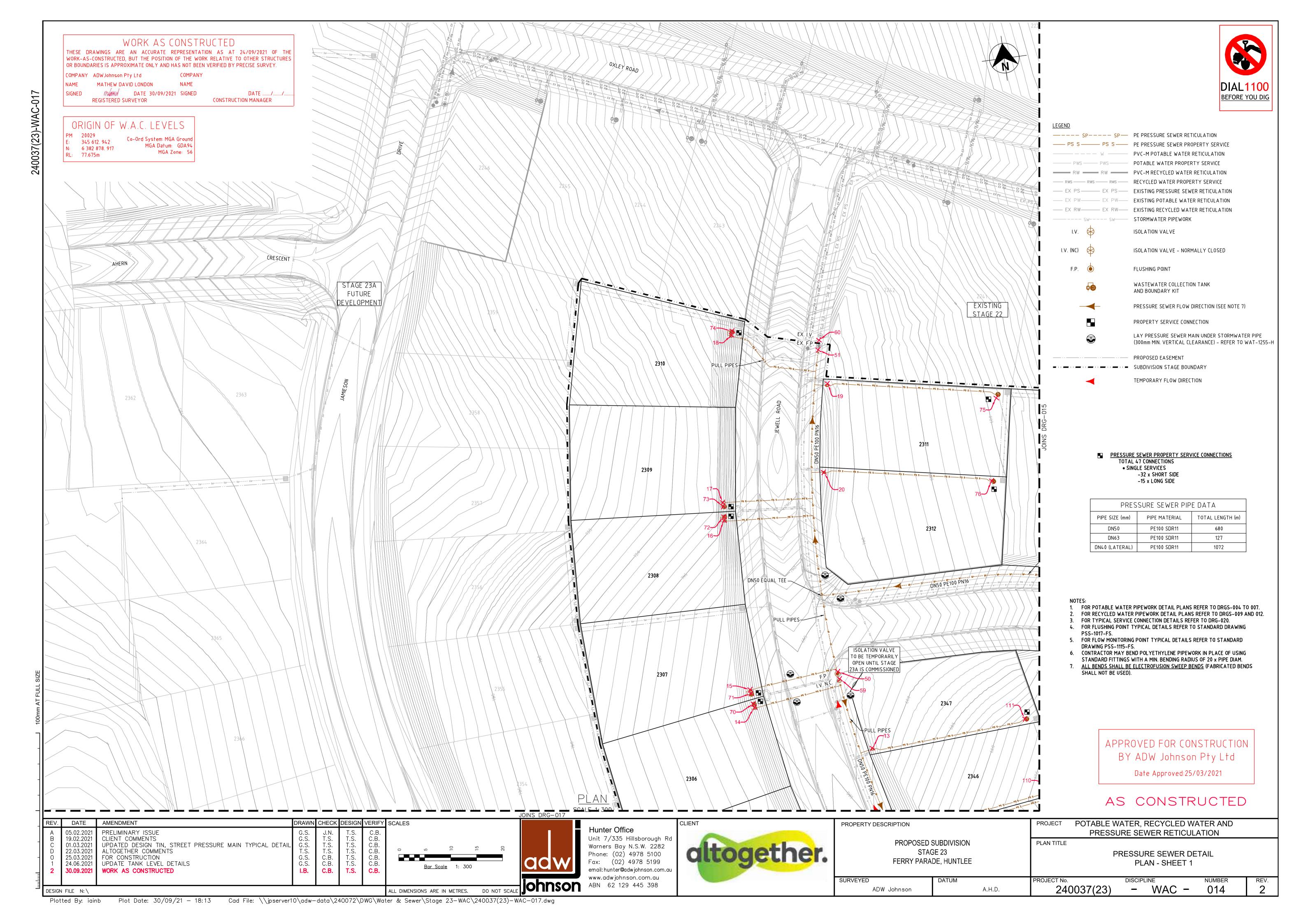


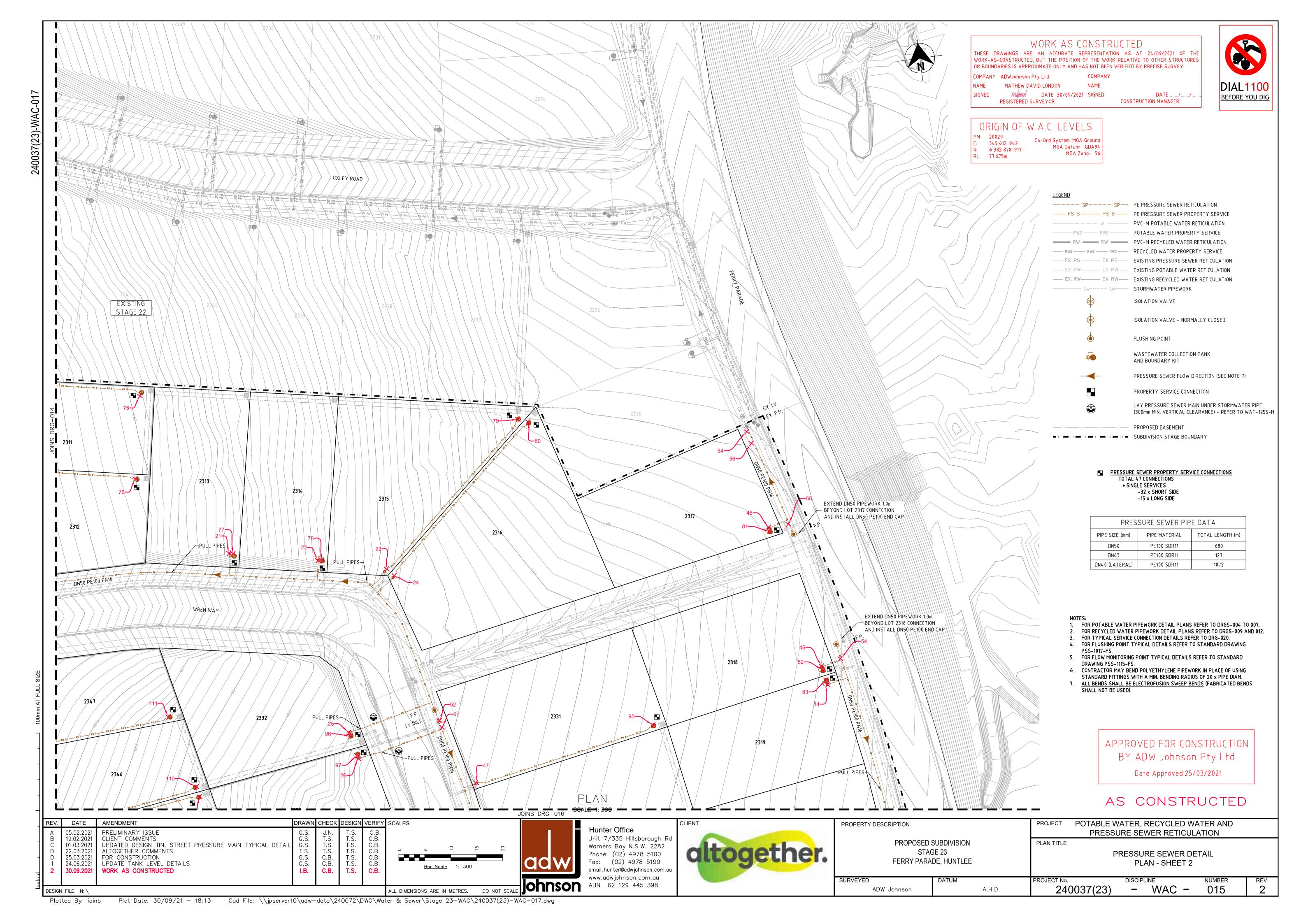


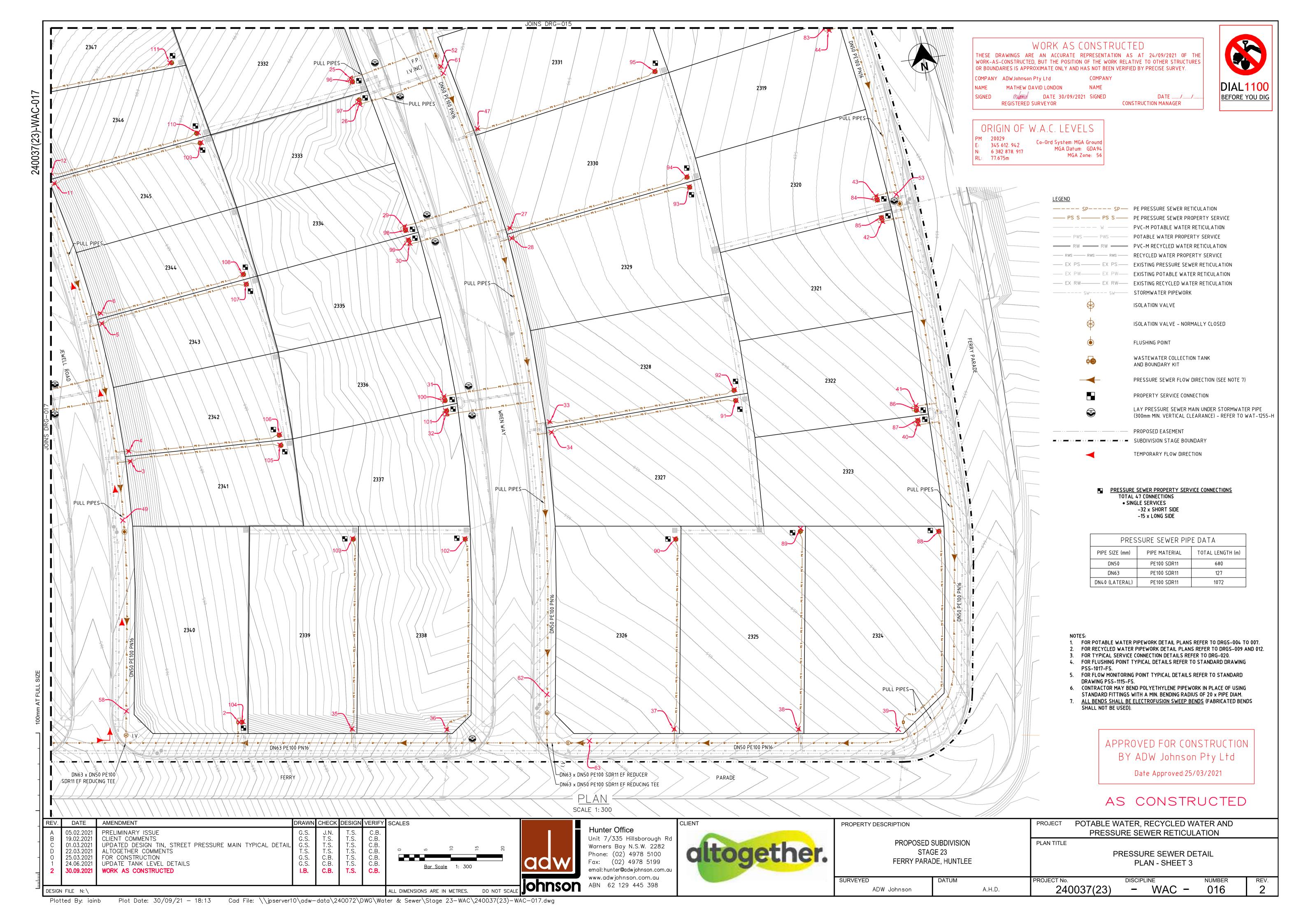


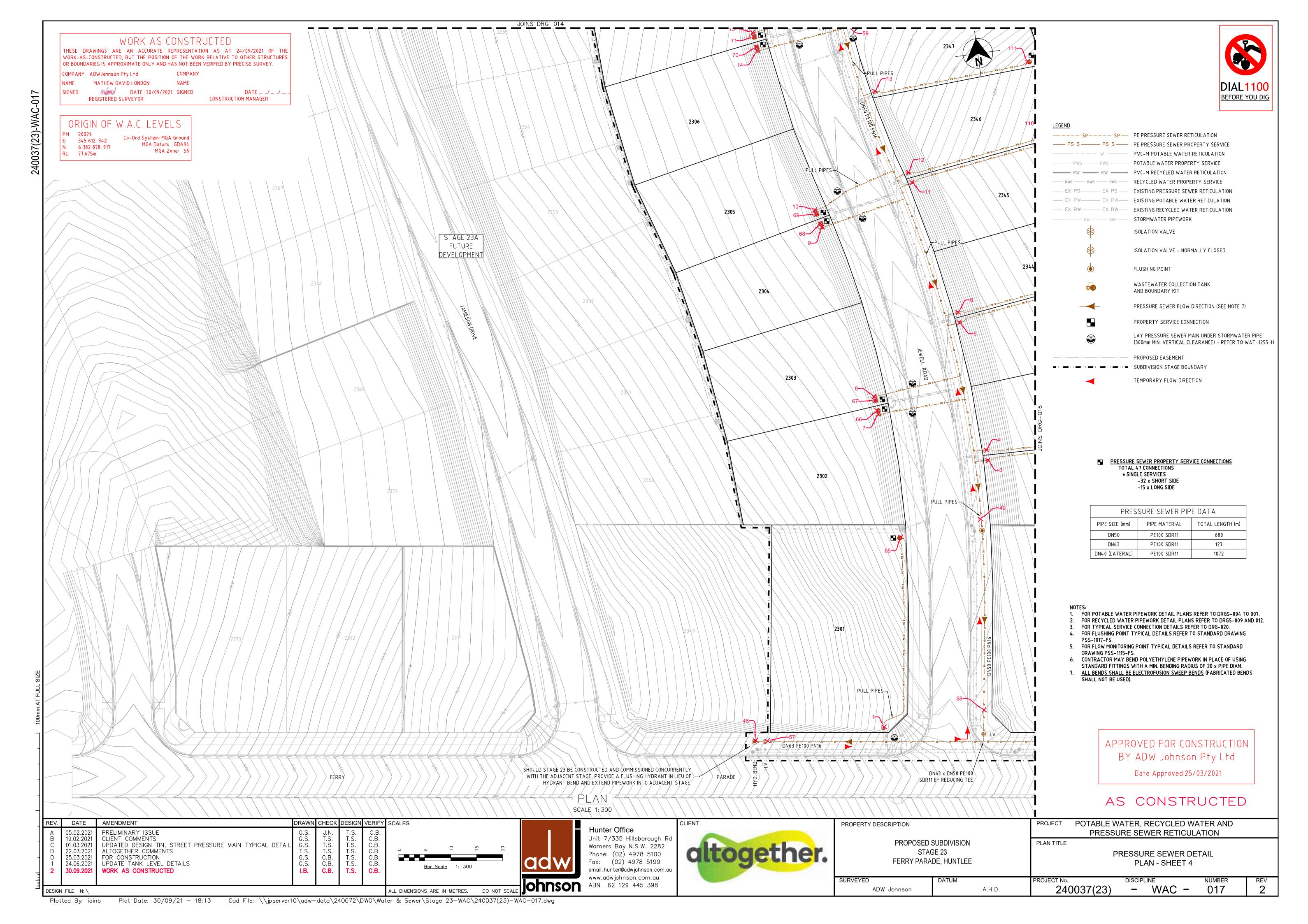












240037(23)-WAC-021

Point Table

Northings

6382268.54

6382316.72

6382318.74

6382345.82

6382328.46

6382331.98

6382365.70

6382369.17

6382371.88

5382390.31

6382401.19

6382404.72

6382437.73

6382441.22

6382472.93

6382461.11

5382444.28

6382417.71

6382414.23

6382412.79

6382384.03

6382351.17

6382349.21

5382354.24

6382320.76

6382313.14

6382311.05

6382259.71

5382257.07

6382251.11

382247.79

6382245.05

5382302.83

6382306.38

6382342.43

5382347.49

6382380.41

5382384.10

6382412.03

6382371.05

6382269.38

6382305.68

6382405.81

6382467.82

6382383.88

6382385.03

6382412.11

6382428.52

6382347.29 63.09

Levels (odes

71.84 seBDYKIT

70.33 seBDYKIT

70.62 seBDYKIT

70.64 seBDYKIT

70.18 seBDYKIT

70.21 seBDYKIT

70.14 seBDYKIT

70.22 seBDYKIT

71.18 seBDYKIT

71.15 seBDYKIT

70.47 seBDYKIT

70.13 seBDYKIT

65.50 seBDYKIT

65.33 seBDYKIT

65.41 seBDYKIT

65.05 seBDYKIT

65.27 seBDYKIT

65.46 seBDYKIT

65.17 seBDYKI

65.23 seBDYKI

65.99 seBDYKIT

63.77 seBDYKI

63.21 seBDYKIT

63.18 seBDYKIT

63.41

63.57

69.86

63.56

seBDYKIT

seBDYKI<sup>\*</sup>

seBDYKI

seBDYKI

seBDYKI

seBDYKIT

seBDYKI

seBDYKIT

seBDYKI

seFP

seFP

seFP

seFP

seFP

seFP

seFP

seFP

seFP

6382421.49 | 67.36 | seBDYKIT

6382378.75 | 65.40 | seBDYKIT

6382350.91 65.29 seBDYKIT

6382317.39 65.46 seBDYKIT

67.74

seBDYKIT

seBDYKIT

seBDYKIT

seBDYKIT

seBDYKIT

seBDYKIT

seBDYKIT

6382263.98 | 69.32 | seBDYKIT

6382343.83 | 69.96 | seBDYKIT

6382373.90 | 69.62 | seBDYKIT

Point # Eastings

346401.75

346442.55

346428.69

346428.65

346426.90

346426.96

346408.94

346408.64

346403.22

346402.27

346421.61

346421.19

346416.95

346395.55

346395.18

346394.72

346394.93

346401.07

346418.12

346415.04

346462.82

346479.60

346492.50

346493.82

346480.95

346482.0

346507.45

346507.47

346487.36

346487.88

346490.35

346490.35

346509.85

346509.9

346463.91

346481.9

346525.39

346549.15

346568.19

346580.1

346580.28

346578.73

346578.26

346573.6

346573.00

346566.59

346503.87

346376.86

346425.66

346412.43

346417.22

346498.54

346582.12

346576.74

346570.40

346565.53

28

35

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48

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53

Plotted By: iainb

Point Table

Northings

6382268.99

6382430.89

6382329.22

6382331.22

69 346402.49 6382368.39 70.35 seTANK2305

70 | 346395.43 | 6382401.94 | 70.26 | seTANK2306

6382403.95

6382438.46

6382440.45

6382453.88

6382421.27

6382417.64

6382438.55

6382383.31

6382346.73

6382343.24

6382305.57

6382281.79

89 | 346554.96 | 6382286.00 | 64.75 | seTANK2325

90 346530.71 6382287.38 65.33 seTANK2326

92 | 346545.98 | 6382314.29 | 64.48 | seTANK2328

6382354.23

6382356.27

6382377.29

6382383.30

6382379.43

6382353.53

6382351.66

6382293.02

6382296.07

6382263.99

6382315.90

6382317.87

6382347.50

6382349.50

6382375.73

6382259.98

6382305.39

114 346410.90 6382400.00 69.38

346546.00 | 6382312.18 | 64.48 | seTANK2327

64.02

64.29

65.54

69.42

67.94

70.18

70.30

83 346573.52 6382381.30 63.51 seTANK2319

79 | 346521.55 | 6382439.34 | 63.83 | seTANK2315

Levels Codes

seSV

seSV

seSV

seSV

seSV

seSV

seSV

seTANK2301

seTANK2302

70.73 seTANK2303

70.32 seTANK2304

70.30 seTANK2307

71.29 seTANK2308

71.31 seTANK2309

69.17 seTANK2312

67.43 seTANK2313

66.23 seTANK2314

63.83 seTANK2316

63.71 seTANK2317

63.33 seTANK2321

63.88 seTANK2322

63.87 seTANK2323

64.15 seTANK2324

seTANK2329

seTANK233

seTANK2333

64.02 seTANK2330

65.52 seTANK2332

65.40 seTANK2334

65.42 seTANK2335

65.58 seTANK2336

65.59 seTANK2337

65.68 seTANK2338

66.85 seTANK2339

67.68 seTANK2343

67.43 seTANK2345

67.45 seTANK2346

67.94 seTANK2347

seTANK2340

seTANK2341

seTANK2342

seTANK2344

ΩΥHεw

waHYD

 $\mathsf{DYHew}$ 

C.B. C.B. C.B.

C.B.

C.B.

seTANK2318

seTANK2320

seTANK231

73.04

70.71

69.31

66.11

66.21

63.45

70.73

6382473.69 70.60 seTANK2310

69.00

63.51

63.32

Point # Eastings

58 346421.24 6382269.13

59 346412.57 6382404.37

62 346502.06 6382261.09

63 346508.92 6382251.08

68 346402.98 6382366.43

76 346446.90 6382438.18

81 346566.65 6382411.23

87 346580.23 6382303.59

64 346564.93

66 346408.82

67 346408.70

71 346395.25

72 346394.77

73 346394.92

74 346401.31

75 346449.98

77 346463.61

78 346480.40

80 346523.47

82 346573.18

84 346578.33

85 346578.68

86 346580.31

88 346581.20

346542.79

346542.56

346539.26

346481.13

346481.86

100 346490.29 6382319.98

101 346490.33 6382318.04

98 346487.49

99 346487.72

102 346490.56

103 346469.14

105 346457.73

107 346455.53

108 346455.18

109 346450.72

112 346427.71

113 346423.61

346443.21

346457.90

110 346450.39 6382377.70

111 346446.88 6382391.82

94

60 346417.63 6382469.64 69.78

61 346498.83 6382382.55 65.08

65 | 346410.00 | 6382304.37 | 70.64 |

Point Table

Northings Levels Codes

6382418.66 | 69.04 | waHYD

6382389.14 65.01 waHYD

6382330.63 65.31 waHYD

6382262.68 66.05 waHYD

6382241.23 | 65.14 | waHYD

5382345.50 | 63.03 | waHYD

6382411.62 | 63.56 | waHYD

6382267.43 | 73.01 | waHYDR

5382305.48 │ 70.31 │ waHYDR

6382400.01 69.37 waHYDR

6382469.00 69.80 waHYDR

6382419.24 | 69.07 | waHYDR

6382395.52 | 65.08 | waHYDR

6382389.21 | 65.02 | waHYDR

6382262.62 | 66.06 | waHYDR

5382345.46 | 63.04 | waHYDR

6382386.16 | 63.30 | waHYDR

6382266.79 | 72.97 | waSV

6382260.15 70.28 waSV

6382303.34 70.34 waSV

6382469.96 69.75 waSV

6382248.69 | 66.22 | waSV

6382267.20 72.95 waSVR

6382260.53 70.27 waSVR

6382302.45 70.36 waSVR

6382398.76 69.37 waSVR

6382470.35 | 69.77 | waSVR

6382395.20 65.13 waSVR

6382260.72 | 66.11 | waSVR

382249.25 | 66.22 | waSVR

6382431.43 | 63.37 | waSVR

6382267.98 | 71.65 | waTAP

6382262.02 | 69.07 | waTAP

6382318.01 70.26 waTAP

6382317.43 | 70.22 | waTAP

6382345.17 69.91 waTAP

5382344.55 | 69.91 | waTAP

6382330.04 | 70.28 | waTAP

382330.66 | 70.26 | waTAP

6382368.03 69.75 waTAP

6382372.57 | 69.63 | waTAP

6382373.16 | 69.63 | waTAP

6382389.55 | 69.57 | waTAP

6382402.92 | 69.68 | waTAP

5382403.43 | 69.69 | waTAP

6382439.01 70.79 waTAP

6382439.59 | 70.76 | waTAP

6382473.72 | 70.04 | waTAP

6382444.91 70.28 waTAP

6382461.82 70.01

5382367.55 69.71

346419.68 | 6382419.25 | 69.18 | waSVR

waSV

6382399.45 69.39

6382418.74 69.13

6382394.86 65.11

382259.94 66.13

382430.39 63.36

70.21 | waHYDR

6382260.44

Point # Eastings

118 346500.32

119 346564.82

123 346427.79

116

117

120

121

122

124

125

126

127

128

130

131

132

133

134

135

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171

172

346421.68

346495.11

346504.98

346584.46

346572.89

346377.68

346424.15

346411.34

346416.02

346421.75

346498.61

346495.60

346500.72

346583.99

346578.41

346378.27

346425.93

346423.50

346411.01

346415.64

346420.52

346497.72

346499.84

346509.11

346567.64

346426.66

346423.91

346411.47

346416.39

346500.36

346508.10

346566.66

346402.30

346443.40

346428.34

346428.35

346426.57

346426.62

346410.62

346410.63

346404.27

346404.40

346421.29

346421.12

346416.77

346397.10

346397.07

346396.55

346396.64

346402.64

346417.81

173 346414.86

143 346378.89

DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT DATE PRELIMINARY ISSUE T.S. T.S. T.S. T.S. T.S. CLIENT COMMENTS 19.02.2021 T.S. T.S. C.B. C.B. UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL 01.03.2021 ALTOGETHER COMMENTS 22.03.2021 G.S. G.S. FOR CONSTRUCTION 25.03.2021 24.06.2021 UPDATE TANK LEVEL DETAILS C.B. 30.09.2021 WORK AS CONSTRUCTED DESIGN FILE N: \

0.1 0.2 0.3 0.4 A1 / A3 1:10 / 1:20

johnson ALL DIMENSIONS ARE IN METRES. DO NOT SCA

waTAP

**Hunter Office** Unit 7/ Warners Phone: Fax: email: hur www.adv

	PROPERTY DESCRIPTION
r.	PROPOSEI STA FERRY PAR
	SURVEYED
	ADW Johnson

POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION

CLIENT ABN 62 129 445 398

Point Table

Northings

6382419.03

346480.77 | 6382415.79

346492.70 6382413.52

346493.08 6382413.09

346483.23 6382382.79

346483.66 | 6382380.64

346503.69 6382370.18

346507.22 | 6382350.50

346507.27 6382349.89

346492.05 | 6382319.55

346492.04 6382318.95

346509.55 6382312.41

346509.57 6382311.83

346464.36 6382259.32

346482.68 | 6382256.77

346525.98 6382250.76

346568.87 | 6382244.73

346581.76 6382304.77

346579.98 6382345.99

346575.06 | 6382382.87

346568.62 6382410.83

346443.10 6382262.09

346428.35 | 6382318.36

346428.33 6382317.11

346426.64 6382344.24

346410.58 | 6382330.97 |

346404.49 6382367.21

346421.38 6382372.21

346416.73 6382389.85

346396.72 6382439.90

346402.60 | 6382473.48

346417.80 | 6382461.53

346414.81 | 6382444.63

346463.84 6382419.06

346493.28 6382412.86

346507.29 6382349.60

346489.20 6382353.44

346489.37 6382352.30

6382247.49

6382304.16

6382344.17

6382382.35

6382268.05

6382345.43

6382368.27

6382373.46

6382402.7

6382403.74

6382438.7

6382415.81

6382413.74

6382383.02

6382380.34

6382370.49

6382350.85

346410.64 | 6382329.80 | 70.25 | waTAPR

346549.68

346580.18

346575.12

346402.04

346426.62

346404.22

346397.12

346397.04

346480.47

346492.47

346483.20

346483.71

346503.65

346507.17

6382353.14

6382352.59

346489.26

346489.31

Levels (odes

65.28 waTAP

65.13 waTAP

65.03 waTAP

65.03 waTAP

65.48 waTAP

65.16 waTAP

waTAPR

63.58 waTAP

69.10 waTAPR

70.21 waTAPF

70.19 waTAPR

69.88 waTAPF

69.91 waTAPR

70.27 waTAPR

69.70 waTAPF

69.74 waTAPF

69.60 waTAPR

69.57 waTAPR

69.69 waTAPF

69.68 waTAPR

70.73 | waTAPF

70.78 waTAPR

70.01 | waTAPF

70.01 | waTAPR

70.30 | waTAPR

66.81 waTAPR

65.78 waTAPR

65.25 waTAPR

65.18 waTAPR

65.00 waTAPR

64.99 | waTAPF

65.22 waTAPR

65.21 waTAPR

waTAPF

waTAPF

waTAPF

65.26

65.14

65.01

waTAPF

69.61

66.78

65.77

65.27

65.21

64.97

65.22

65.46

65.17

67.72

66.87

65.87

65.02

63.65

63.64

63.05

63.12

63.37

63.35

71.74

Point # Eastings

176

177

178

180

182

189

193

200

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205

207

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212

214

216

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222

223

225

227

229

230

231

232

Point Table

6382247.50

241 | 346568.52 | 6382244.78 | 65.02 | waTAPR

6382303.85

6382305.03

245 | 346580.19 | 6382343.87 | 63.09 | waTAPR

246 | 346575.00 | 6382383.19 | 63.40 | waTAPR

248 346568.54 6382411.13 63.55 waTAPR

Levels (odes

65.48 waTAPR

65.49 waTAPR

65.15 waTAPR

65.17 waTAPR

67.75 waTAPR

66.85 waTAPR

65.87 waTAPR

65.43 | waTAPF

63.67 waTAPF

63.64 waTAPR

63.08 waTAPR

63.33 waTAPR

Point # | Eastings | Northings

233 346492.03 6382319.81

234 346492.03 6382318.65

235 | 346509.53 | 6382312.69 |

236 346509.65 6382311.53

237 | 346464.08 | 6382259.33 |

238 | 346482.40 | 6382256.77

239 | 346525.72 | 6382250.77

244 346579.98 6382346.24

247 | 346575.14 | 6382382.02 |

240 346549.50

242 346581.71

243 346581.77

Date Approved:25/03/2021

345 612. 942

N: 6 382 878. 917

RL: 77.675m

	-CONSTRUCTED, BUT THE POSITION O ARIES IS APPROXIMATE ONLY AND HA		
Υ	ADW Johnson Pty Ltd	COMPANY	
	MATHEW DAVID LONDON	NAME	
	Mand DATE 30/09/2021	SIGNED	DATE/
	REGISTERED SURVEYOR		CONSTRUCTION MANAGER

BEFORE YOU DIG

WORK AS CONSTRUCTED
THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 OF TI
WORK-AS-CONSTRUCTED, BUT THE POSITION OF THE WORK RELATIVE TO OTHER STRUCTURI
OR BOUNDARIES IS APPROXIMATE ONLY AND HAS NOT BEEN VERIFIED BY PRECISE SURVEY.
COMPANY ADWJohnson Pty Ltd COMPANY

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COMPANY	ADW Johnson Pty Ltd	(	OMPANY	
NAME	MATHEW DAVID LONDO	N N	JΔMF	

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COMPANY	ADWJohnson Pty Ltd	COMPANY
NAME	MATHEW DAVID LONDON	NAME
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COMPANY	ADWJohnson Pty Ltd	COM	PANY
NAME	MATHEW DAVID LONDON	NAM	E

OMPANY	ADW Johnson P	'ty Ltd		COMPANY	
AME	MATHEW DAY			NAME	
GNED	mland	DATE 30/	09/2021	SIGNED	
	DECICTEDED CL	IDVENOD			CON

REGISTERED SONVETOR	CONS
RIGIN OF W.A.C. LEVELS	

Co-Ord System: MGA Ground

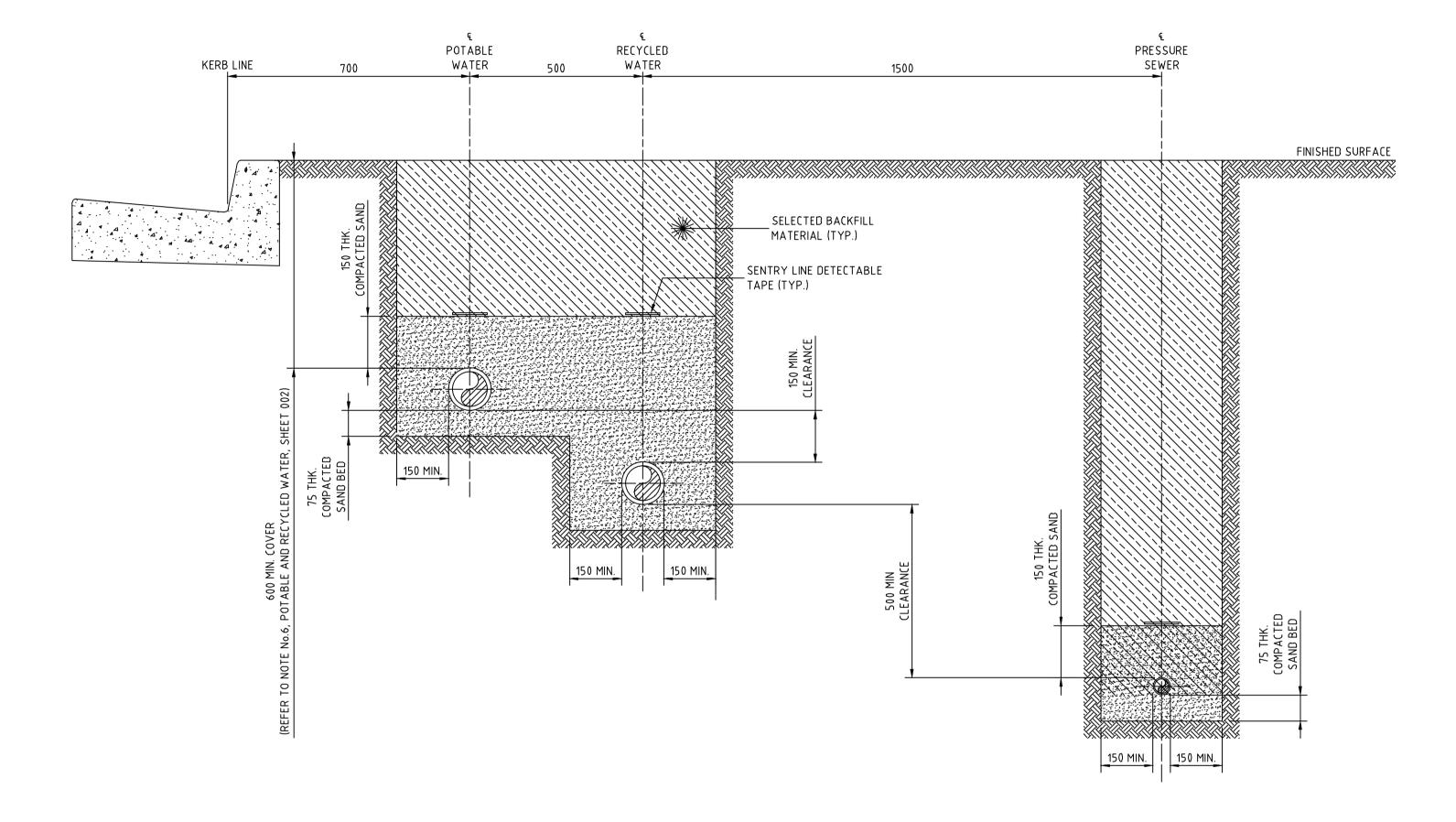
MGA Datum: GDA94

MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

7/335 Hillsborough Rd ers Bay N.S.W. 2282 e: (02) 4978 5100 (02) 4978 5199 hunter@adwjohnson.com.au	altogether.	PROPOSED S STAC FERRY PARA	SE 23	PLAN TITLE	FITTINGS TABLE	ATION
adwjohnson.com.au 62 129 445 398		SURVEYED ADW Johnson	DATUM A.H.D.	PROJECT No. 240037(23)	DISCIPLINE  - WAC -	NUMBER 018





THAN 20% BY MASS OF STONES FINISHED SURFACE SENTRY LINE DETECTABLE TAPE SOIL FREE FROM ORGANICS OR OTHER DELETERIOUS MATERIAL TO AS 2566.1 TABLES 3.1 & 3.2 (EXCLUDES SOILS WITH LL>50%) PRIVATE PROPERTY PRESSURE MAIN

TYPICAL DETAIL

DATE ....../.....

STREET PRESSURE MAIN TYPICAL DETAIL
SCALE 1:10

NOTES:

# WORK AS CONSTRUCTED

MATERIAL REMOVED FROM THE EXCAVATION OR IMPORTED MATERIAL CONTAINING NOT MORE

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 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 ABWJohnson Pty Ltd NAME NAME MATHEW DAVID LONDON

DATE 30/09/2021 SIGNED REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground MGA Datum: GDA94 MGA Zone: 56 345 612. 942 N: 6 382 878. 917 RL: 77.675m

APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd Date Approved:25/03/2021

# AS CONSTRUCTED

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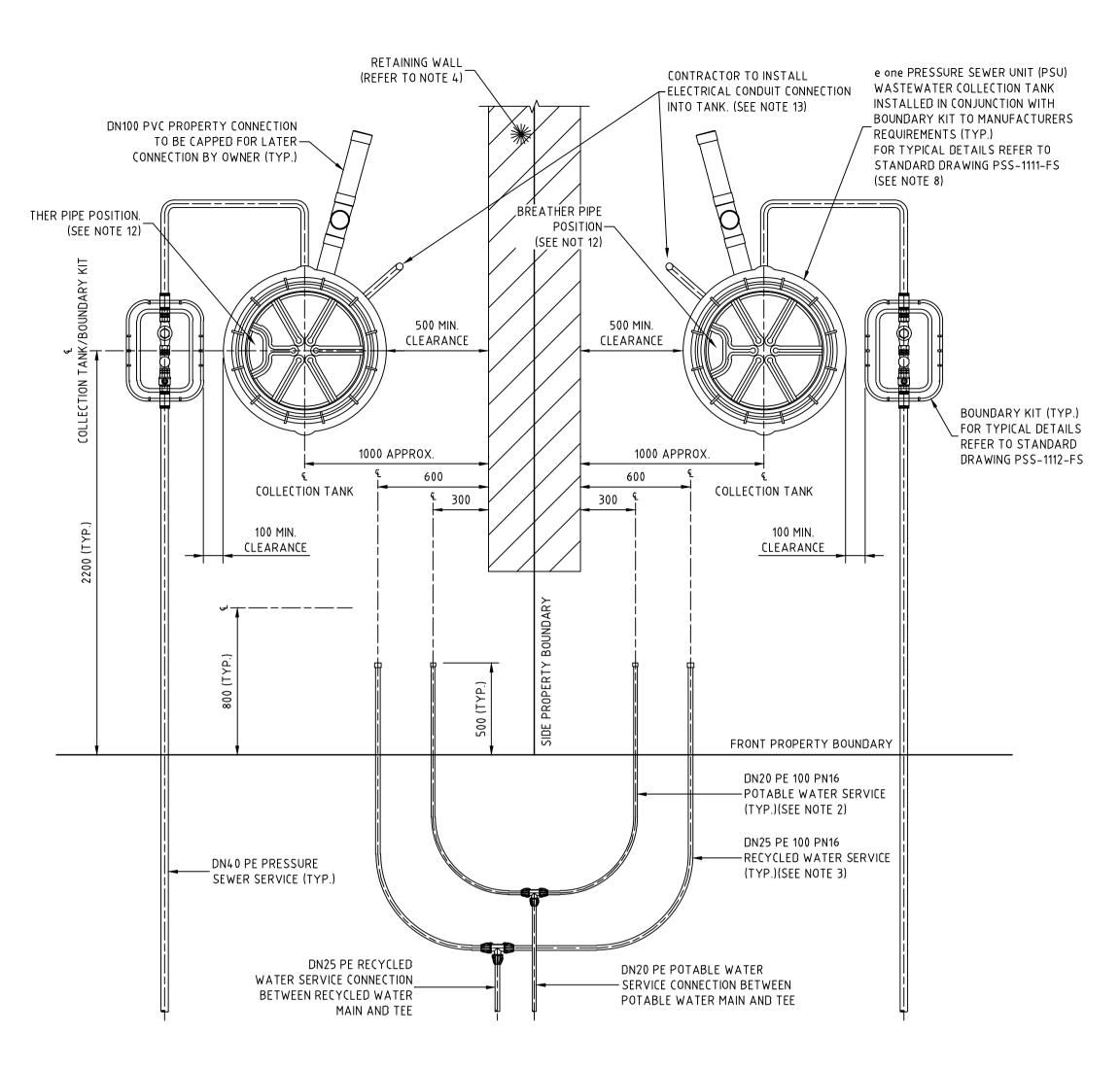
2

POTABLE WATER, RECYCLED WATER AND DRAWN CHECK DESIGN VERIFY SCALES AMENDMENT DATE PROPERTY DESCRIPTION C 01.03.2021 UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL 22.03.2021 ALTOGETHER COMMENTS FOR CONSTRUCTION UPDATE TANK LEVEL DETAILS

30.09.2021 WORK AS CONSTRUCTED **Hunter Office** T.S. T.S. T.S. T.S. T.S. T.S. C.B. C.B. C.B. C.B. C.B. C.B. PRESSURE SEWER RETICULATION 0.1 0.2 0.3 0.4 A1 / A3 T.S. T.S. T.S. C.B. C.B. Unit 7/335 Hillsborough Rd 1:10 / 1:20 PROPOSED SUBDIVISION altogether. PLAN TITLE G.S. T.S. G.S. G.S. Warners Bay N.S.W. 2282 STAGE 23 TYPICAL PIPEWORK Phone: (02) 4978 5100 FERRY PARADE, HUNTLEE TRENCHING DETAILS Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED PROJECT No. johnson ABN 62 129 445 398 240037(23) - WAC -ADW Johnson A.H.D. ALL DIMENSIONS ARE IN METRES. DO NOT SCAL DESIGN FILE N: \

1. ALL POLYETHYLENE FITTINGS SHALL BE JOINED USING ELECTROFUSION JOINTING TECHNIQUES IN ACCORDANCE WITH

MANUFACTURERS REQUIREMENTS. ROTATE BENDS AS NECESSARY.



# 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 BOUNDARY.
- 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. \$\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.
- 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.
- 12. POSITION TANK LID SUCH THAT BREATHER PIPE LOCATION IS ON THE DOWNSLOPE SIDE OF THE BLOCK WHERE POSSIBLE.
- 13. CONTRACTOR TO INSTALL ELECTRICAL CONDUIT CONNECTION. ELECTRICAL GROMMET SUPPLIED WITH TANK AND LOCATED LOOSE WITHIN TANK. \$\phi 25 CONDUIT TO BE PROVIDED WITH LONG RADIUS SWEEP BEND INTO THE VERTICAL POSITION AND LEFT CAPPED ABOVE GROUND LEVEL FOR FUTURE ELECTRICAL CONNECTION BY ELECTRICIAN ONCE DWELLING IS CONSTRUCTED.

# WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 24/09/2021 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 NAME

GNED DATE 30/09/2021 SIGNED DATE ...../...../.....

REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029 E: 345 612. 942 N: 6 382 878. 917 RL: 77.675m

Co-Ord System: MGA Ground
MGA Datum: GDA94
MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved:25/03/2021

BEFORE YOU DIG

AS CONSTRUCTED

	REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	
	A B C D O 1 2	05.02.2021 19.02.2021 01.03.2021 22.03.2021 25.03.2021 24.06.2021 30.09.2021	CLIENT COMMENTS UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL ALTOGETHER COMMENTS FOR CONSTRUCTION UPDATE TANK LEVEL DETAILS	G.S. G.S. T.S. G.S. I.B.	J.N. T.S. T.S. C.B. C.B.	T.S. T.S. T.S. T.S. T.S.	C.B. C.B. C.B. C.B. C.B. C.B.	0 0.1 0.2 0.3 0.4 A1 / A3 1:10 / 1:20 0 0.4 0.8 A1 / A3 1:20 / 1:40	adw
_	DESIGN	DESIGN FILE N:\  ALL DIMENSIONS ARE IN METRES. DO NOT SCALE							

Plotted By: iainb

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



PROPERTY DESCRIPTION	PROJECT	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION						
PROPOSED S	PLAN TITLE	T NEGOTIL GE	VVERTRETIOOE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
STAC FERRY PARA		TYPICAL SERVICE CONNECTIONS DETAILS						
I LIXIT FAIXA		COMMEC	HONS DETAIL	5				
SURVEYED	DATUM	PROJECT No.	DISCIP	LINE	NUMBER			
ADW Johnson	A.H.D.	240	0037(23) -	WAC -	020			

UPDATED DETAILS

WASTEWATER COLLECTION TANK COUNT

2100

2400

2700

TANK SIZE | NUMBER OF

43

0

3



CALCULATED TOP OF WAC V'S DESIGN **WAC SANITARY** COLLECTION **INVERT LEVEL** DRAINAGE TANK LID COMPARISON WASTEWATER COLLECTION TANK DETAILS **INVERT LEVEL** LOT NUMBER TOP OF TANK TANK FSL BASE IL CONNECTION IL TANK CAPACITY TANK LOCATION NORTHING EASTING 2301 70.74 70.56 68.61 69.51 2100 REAR 346409.746 | 6382304.246 70.640 69.33 -0.19 2100 FRONT 2302 70.71 68.76 69.66 346409.040 | 6382329.141 70.89 70.730 69.42 -0.24 2100 FRONT 70.71 2303 70.89 68.76 69.66 346408.859 | 6382331.133 70.730 69.42 -0.24 FRONT 2304 70.51 70.33 68.38 69.28 2100 346403.039 | 6382366.388 70.320 69.01 -0.28 2305 2100 FRONT 346398.441 | 6382383.843 70.49 70.31 68.36 69.26 70.350 69.04 -0.23 2100 2306 70.27 70.09 FRONT 68.14 69.04 346395.546 | 6382401.844 70.260 68.95 -0.09 2307 2100 FRONT 70.29 70.11 68.16 69.06 346395.325 | 6382403.833 70.300 68.99 -0.08 2308 70.07 FRONT 71.30 71.12 69.17 2100 346394.915 | 6382438.387 71.290 -0.09 69.98 2309 71.33 71.15 70.10 2100 FRONT 346395.088 6382440.380 69.20 71.310 70.00 -0.10 2100 FRONT 69.39 2310 70.62 70.44 68.49 346401.269 | 6382473.527 70.600 69.29 -0.11 REAR 2100 346450.404 6382454.511 2311 69.08 68.90 66.95 67.85 69.000 67.69 -0.16 REAR 69.08 2100 346447.207 | 6382438.023 2312 69.26 67.13 68.03 69.170 67.86 -0.17 2700 2313 67.49 67.31 64.76 65.66 FRONT 346463.753 | 6382420.758 67.430 65.52 -0.14 FRONT 2314 66.18 63.63 346480.442 | 6382417.521 66.36 64.53 66.230 64.32 -0.21 REAR 2315 63.87 61.74 2100 346521.673 6382439.371 63.69 62.64 63.830 -0.13 2100 REAR 61.70 346523.539 | 6382438.339 2316 63.83 63.65 62.60 63.830 62.52 -0.09 2100 346566.734 2317 63.67 61.72 62.62 FRONT 6382411.128 63.710 62.40 63.85 2100 FRONT 346573.155 6382383.198 2318 63,66 63.48 61.53 62.43 63.510 -0.23 2100 FRONT 2319 63.47 61.52 62.42 346573.530 | 6382381.233 63.65 63.510 62.20 -0.23 2320 62.10 2100 FRONT 63.33 63.15 61.20 346578.344 | 6382346.720 63.320 62.01 -0.09 FRONT 2321 63.32 63.14 61.19 62.09 2100 346578.689 | 6382343.237 63.330 62.02 -0.08 61.77 62.67 2100 FRONT 346580.197 | 6382305.501 63.880 2322 63.72 62.57 -0.10 63.90 FRONT 61.79 2100 346580.216 | 6382303.500 2323 63.74 62.69 63.870 63.92 -0.13 REAR 2100 346581.272 6382281.793 2324 64.39 62.44 63.34 64.57 64.150 62.84 REAR 346554.789 | 6382285.494 2325 64.82 64.64 62.69 63.59 2100 64.750 63.44 -0.16 2326 65.35 65.17 63.22 64.12 2100 REAR 346530.800 | 6382287.331 65.330 64.02 -0.11 2100 REAR 2327 64.32 62.37 63.27 346545.951 | 6382312.198 64.50 64.480 63.17 -0.10 REAR 346545.908 | 6382314.198 64.28 63.23 64.46 62.71 2329 64.10 63.92 61.97 62.87 2100 REAR 346542.850 6382354.180 64.020 2330 61.98 2100 REAR 64.11 63.93 62.88 346542.611 | 6382356.166 64.020 62.71 -0.18 REAR 346539.308 6382377.199 64.15 62.20 63.10 2100 2331 64.33 64.290 62.98 -0.12 65.50 FRONT 346481.244 6382383.308 65.520 2332 65.68 63.55 64.45 2100 64.21 -0.25 65.540 2333 65.57 65.39 63.44 2100 FRONT 346482.057 | 6382379.679 64.23 64.34 -0.11 FRONT 65.28 2100 346487.426 6382353.525 2334 65.46 63.33 64.23 65.400 64.09 -0.14 2335 65.28 63.33 2100 FRONT 346487.736 6382351.548 64.11 -0.13 65.46 64.23 65.420 2336 65.67 63.54 2100 FRONT 346490.430 6382319.950 65.49 64.44 64.27 -0.17 2100 346490.463 6382317.947 FRONT 2337 65.67 65.49 63.54 64.44 64.28 -0.16 REAR 2338 65.59 346490.583 6382292.950 65.77 63.64 64.54 2100 65.680 64.37 -0.17 2339 66.93 66.75 64.80 65.70 2100 REAR 346469.197 6382295.939 66.850 65.54 -0.17 2340 69.28 66.73 2700 FRONT 346443.032 6382263.952 69.46 67.63 69.420 -0.12 67.51 REAR 2341 68.02 65.89 66.79 2100 346457.875 | 6382315.778 67.84 67.940 66.63 -0.17 REAR 2342 65.88 2100 346457.818 6382317.781 67.950 68.01 67.83 66.78 66.64 -0.14REAR 2343 67.77 67.59 65.64 66.54 2100 346455.565 6382347.460 67.680 66.37 -0.17 67.58 65.63 2100 REAR 346455.283 6382349.440 2344 67.76 66.53 67.710 66.40 -0.14REAR 2345 67.54 67.36 65.41 66.31 2100 346450.515 | 6382375.663 67.430 66.12 -0.19 REAR 346450.109 | 6382377.627 2346 67.50 67.32 65.37 66.27 2100 67.450 66.14 -0.13 67.79 65.84 2100 REAR 346447.191 | 6382391.761 2347 67.97 66.74 67.940 66.63 -0.11

DEVELOPER HOME OWNER 2200 ON BATT PROVIDE DN25 ELECTRICAL CONDUIT CONNECTION TO TANK (TANKS AND TURN UP WITH LONG RADIUS SWEEP BEND TO SURFACE TOP OF TANK LEVEL LEAVE 100mm ABOVE SURFACE LEVEL, CAPPED FOR FUTURE FINISHED SURFACE LEVEL CONNECTION BY ELECTRICAL (AFTER LANDSCAPING BY HOME OWNER) CONTRACTOR FINISHED SURFACE LEVEL BY DEVELOPER DN40 PE PRESSURE DN100 PVC POT RISER AND SEWER SERVICE PROPERTY CONNECTION, MIN.100mm ABOVE FSL AND CAPPED FOR LATER CONNECTION BY OWNER e one PRESSURE SEWER UNIT (PSU) WASTEWATER COLLECTION TANK INSTALLED IN CONJUNCTION WITH BOUNDARY KIT TO MANUFACTURERS REQUIREMENTS (TYP.) (2400mm DEEP PSU SHOWN) PROPERTY CONNECTION INVERT LEVEL (PCIL) FOR TYPICAL DETAILS REFER TO STANDARD DRAWINGS FSI-1000\_FS, FSI-SK03A\_FS AND FSI-SK03B\_FS N20 CONCRETE BALLAST TO ENCASE INLET ELBOW BUT NOT ABOVE TOP OF SOCKET AS SHOWN BASE INVERT LEVEL (BIL) — SELECT GRANULAR FILL

# PRESSURE SEWER SERVICE CONNECTION TYPICAL SECTIONAL ELEVATION SCALE 1:20

CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

PM 20029
E: 345 612.942
N: 6 382 878.917
RL: 77.675m

Co-Ord System: MGA Ground
MGA Datum: GDA94
MGA Zone: 56

REGISTERED SURVEYOR

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved:25/03/2021

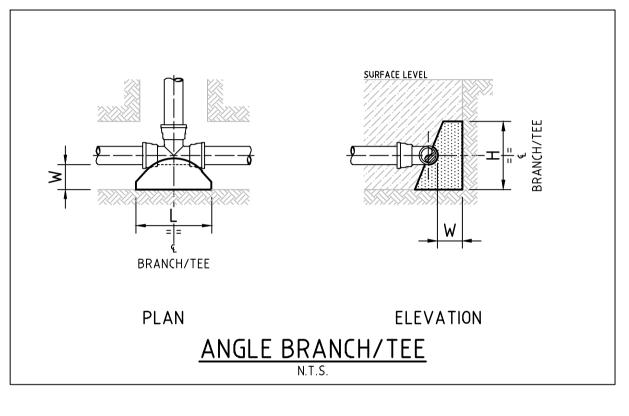
-	REV. DAT	2021 PRELIMINARY ISSUE G.S. J.N. T.:	SIGN VERIFY SCALES  5.S. C.B. 0 0.4 0.8 A1 / A3	Hunter Office	CLIENT	PROPERTY DESCRIPTION  PROPOSED SUBDIVISION STAGE 23 FERRY PARADE, HUNTLEE		PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION			
1	B 19.02.2 C 01.03.2 D 22.03.2 O 25.03.2 1 24.06.2 2 30.09.2	2021UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAILG.S.T.S.T.S.2021ALTOGETHER COMMENTST.S.T.S.T.S.2021FOR CONSTRUCTIONG.S.C.B.T.S.2021UPDATE TANK LEVEL DETAILSG.S.C.B.T.S.	1:20 / 1:40 C.B. C.B. C.B. C.B. C.B. C.B. C.B. C.B	Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email:hunter@adwjohnson.com.au	altogether.				E WATER COLLECTIC NK LEVEL DETAILS	N	
uluul	DESIGN FILE N	:\	ALL DIMENSIONS ARE IN METRES. DO NOT SCALE	nson ABN 62 129 445 398		SURVEYED ADW Johnson	DATUM A.H.D.	PROJECT No. 240037(23)	- WAC -	NUMBER 021	REV.
	Plotted By: iainb Plot Date: 30/09/21 - 18:14										

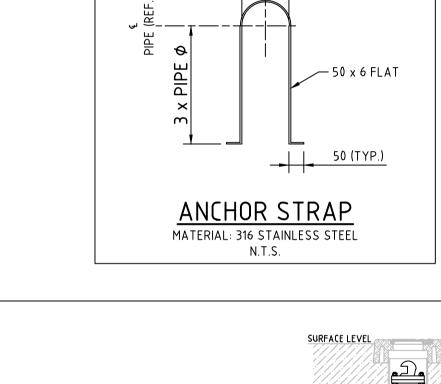
## THRUST BLOCK NOTES:

- 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 BEEPER 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. INSERTIO	N RUBBER BE	TWEEN ANCHOR	STRAP AND	PIPE BARREL.

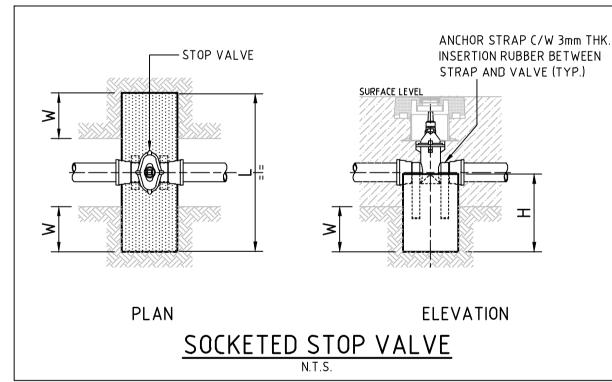
TYPE	FITTING	SOIL AHBP (kPa)	DESIGN STP (kPa)	THRUST	T A (m²)	LENGTH (L)	HEIGHT (H)	WIDTH (W)
1	DN150 x DN150 EQUAL TEE	100	1000	25.00	0.25	0.50	0.50	0.30
2	DN150 x DN100 REDUCING TEE	100	1000	12.00	0.12	0.40	0.30	0.30
3	DN150 SOCKETED STOP VALVE	100	1000	25.00	0.25	1.05	0.46	0.30
4	DN150 FLUSHING HYDRANT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

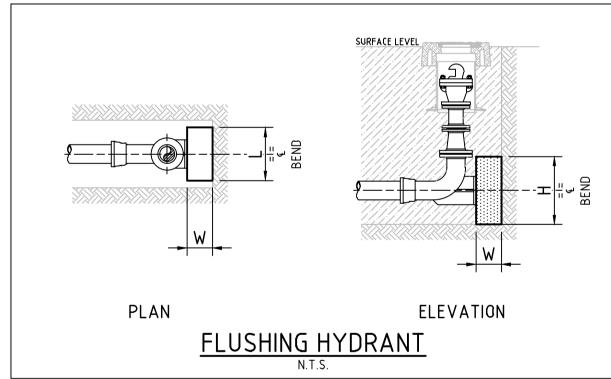




PIPE (REF.)

Ø TO SUIT PIPE





# WORK AS CONSTRUCTED

ORIGIN OF W.A.C. LEVELS

PM 20029
E: 345 612.942
N: 6 382 878.917
RL: 77.675m

Co-Ord System: MGA Ground
MGA Datum: GDA94
MGA Zone: 56

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved:25/03/2021

٦L		L AMENDAGENT									
┤┣	REV. DATE	AMENDMENT DRAWN CHECK DESIGN VERIF	SCALES	Hunter Office	CLIENT	PROPERTY DESCRIPTION			ATER, RECYCLED WAT		
	A 05.02.202 B 19.02.202	PRELIMINARY ISSUE G.S. J.N. T.S. C.B. G.S. T.S. T.S. C.B. G.S. T.S. T.S. C.B.		Unit 7/335 Hillsborough Rd				PRESSU	JRE SEWER RETICULAT	TION	
1	C 01.03.202	1 UPDATED DESIGN TIN, STREET PRESSURE MAIN TYPICAL DETAIL G.S. T.S. T.S. C.B.		Warners Bay N.S.W. 2282		PROPOSED S	SUBDIVISION	PLAN TITLE			
$\exists$	D 22.03.202 0 25.03.202	1 FOR CONSTRUCTION G.S. C.B. T.S. C.B.		Phone: (02) 4978 5100	ditodether.	STAC		TH TH	IRUST BLOCK DETAILS		
	1 24.06.202		aaw	Fax: (02) 4978 5199 email:hunter@adwjohnson.com.au	3	FERRY PARA	DE, HUNTLEE				
1	2 30.09.202	WORK AS CONSTRUCTED		www.adwichnson.com.au		SURVEYED	DATUM	PROJECT No.	DISCIPLINE	NUMBER	REV.
∄	DESIGN FILE N:\		ALL DIMENSIONS ARE IN METRES. DO NOT SCALE JOHNSON	ABN 62 129 445 398		ADW Johnson	A.H.D.	240037(23)	- WAC -	022	2
_	Plotted By: iainb Plot Date: 30/09/21 - 18:14										