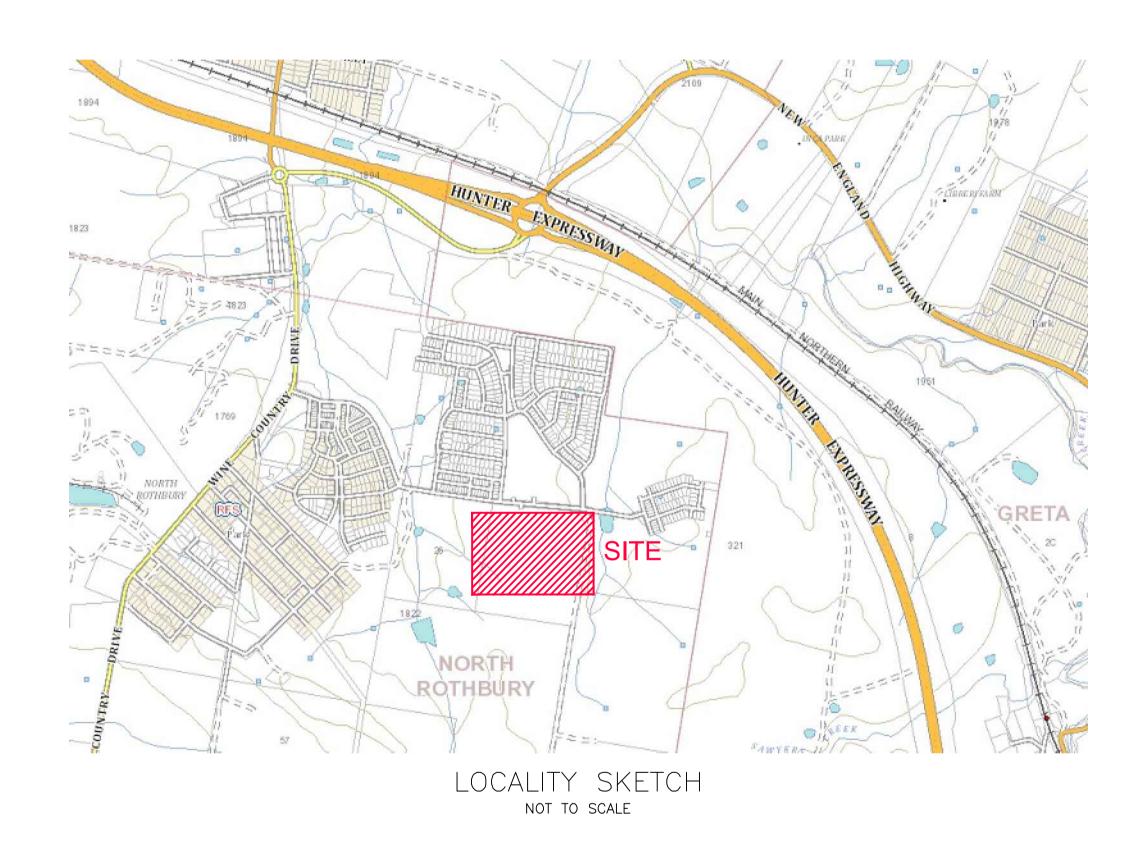


PROPOSED SUBDIVISION STAGE 21 FERRY PARADE, HUNTLEE



	DRAWING INDEX
Sheet Title	Sheet Description
240037(21)-WAC-001	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
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240037(21)-WAC-021	WASTE WATER COLLECTION TANK LEVEL DETAILS
240037(21)-WAC-022	THRUST BLOCK DETAILS

WORK AS CONSTRUCTED THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 02/06/2021 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

DATE 07/06/2021 SIGNED DATE/.....
REGISTERED SURVEYOR CONSTRUCTION MANAGER

ORIGIN OF W.A.C. LEVELS

 PM
 20029
 Co-Ord System: MGA Ground

 E:
 345 612. 914
 MGA Datum: GDA94

 N:
 6 382 878. 917
 MGA Zone: 56

 RL:
 77.675m

APPROVED FOR CONSTRUCTION
BY ADW Johnson Pty Ltd

Date Approved:07/06/2021

CONSTRUCTION ISSUE

REV. DATE AMENDMENT A 02.10.2020 PRELIMINARY ISSUE	DRAWN CHECK DESIGN VERIFY SCALES T.S. J.N. T.S. C.B.	Hunter Office Linit 7 (775 Lilling around Del	PROPERTY DESCRIPTION	PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION
C 26.11.2020 FLOW SYSTEMS COMMENTS FLOW SYSTEMS COMMENTS FLOW SYSTEMS COMMENTS CONSTRUCTION ISSUE CHECK UPDATED CONTOURS WORK AS CONSTRUCTED	T.S. J.N. T.S. C.B. C.B. T.S. J.N. T.S. C.B. C.B. C.B. C.B. C.B. C.B. C.B. C	Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au	PROPOSED SUBDIVISION STAGE 21 FERRY PARADE, HUNTLEE	COVER SHEET, LOCALITY PLAN & DRAWING INDEX
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REQUIREMENTS.

CLEARANCE TABLE ADJACENT.

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
- 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
- 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 HUNTLEE WATER REPRESENTATIVE).
- 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.
- 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).
- 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) 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

- 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. 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 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. 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.
 - NON-TRAFFICABLE TRENCH FILL ZONE: 1 TEST/900mm OF FILL AND EACH 100 LINEAL METRES OF PIPE. PIPE EMBEDMENT ZONE: NIL
- 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 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 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 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.
- 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.
- 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. SINGLE SERVICE: http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1854-FS.pdf
- 16. PROPERTY SERVICE CONNECTION IS SHALL BE FLUSHED AND LOCKED (BY THE HUNTLEE WATER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE
- 17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (i.e. ROADWAYS, PATHS etc. SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.

http://information.altogethergroup.com.au/governance/Land_Housing/WAT-1855-FS.pdf

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

- 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

	мімімі н	ORIZONTAL	
LITHITY		NCE (mm)	MINIMUM VEDTICAL
UTILITY (EXISTING OR PROPOSED SERVICE)	NEW MA	AIN SIZE	MINIMUM VERTICAL CLEARANCE (mm)
	≤ DN200	≥ DN200	1
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 6 / 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
- 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
- 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.
- 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 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. 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 HUNTLEE WATER REPRESENTATIVE IN WRITING

WORK AS CONSTRUCTED

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COMPANY COMPANY ADWJohnson Pty Ltd NAME NAME MATHEW DAVID LONDON

Man DATE 07/06/2021 SIGNED DATE/... CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

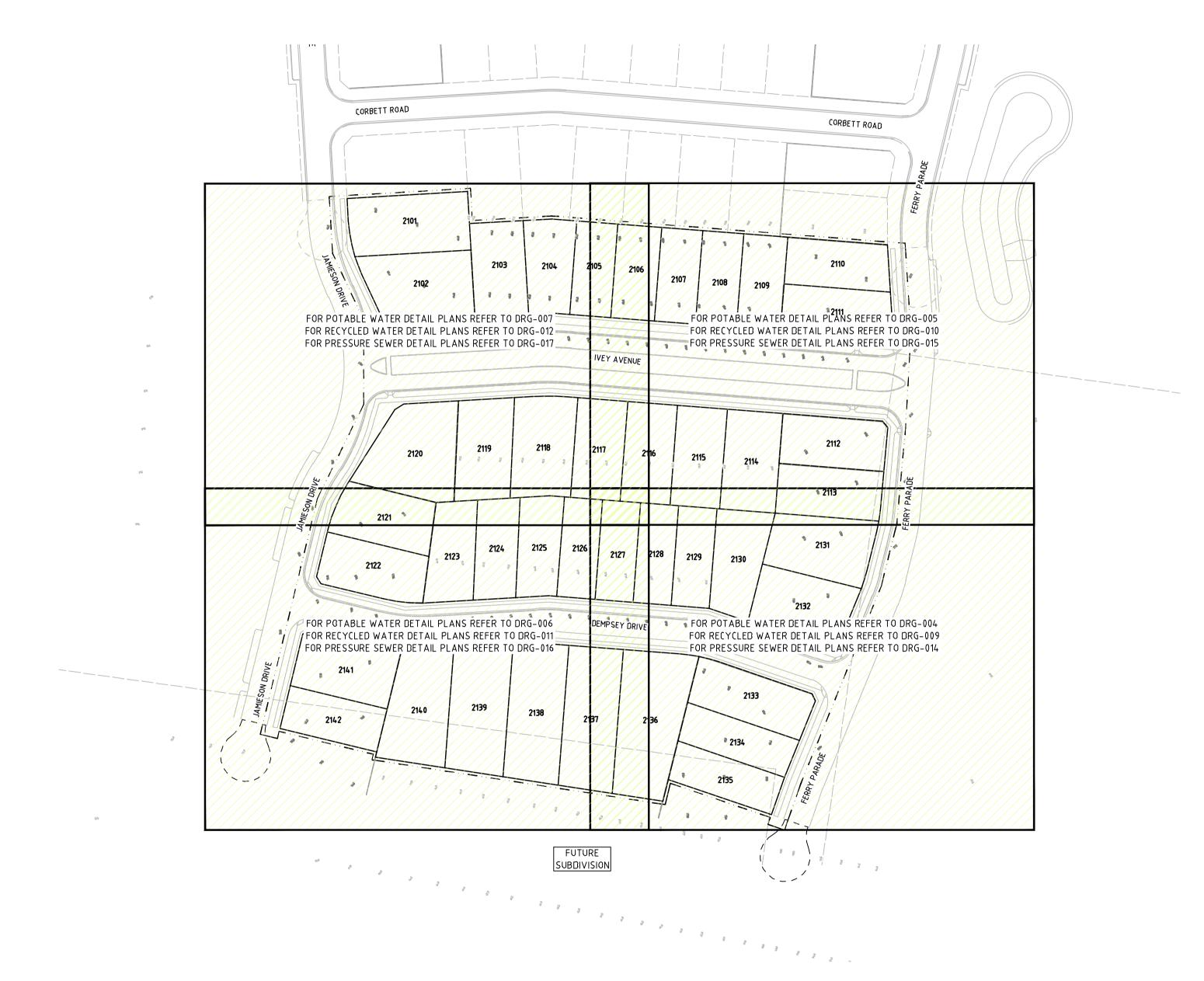
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> APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

CONSTRUCTION ISSUE

Date Approved:07/06/2021

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COMPANY ADW Johnson Pty Ltd

MATHEW DAVID LONDON NAME

DATE 07/06/2021 SIGNED

CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

E: 345 612. 914 N: 6 382 878, 917 RL: 77.675m

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

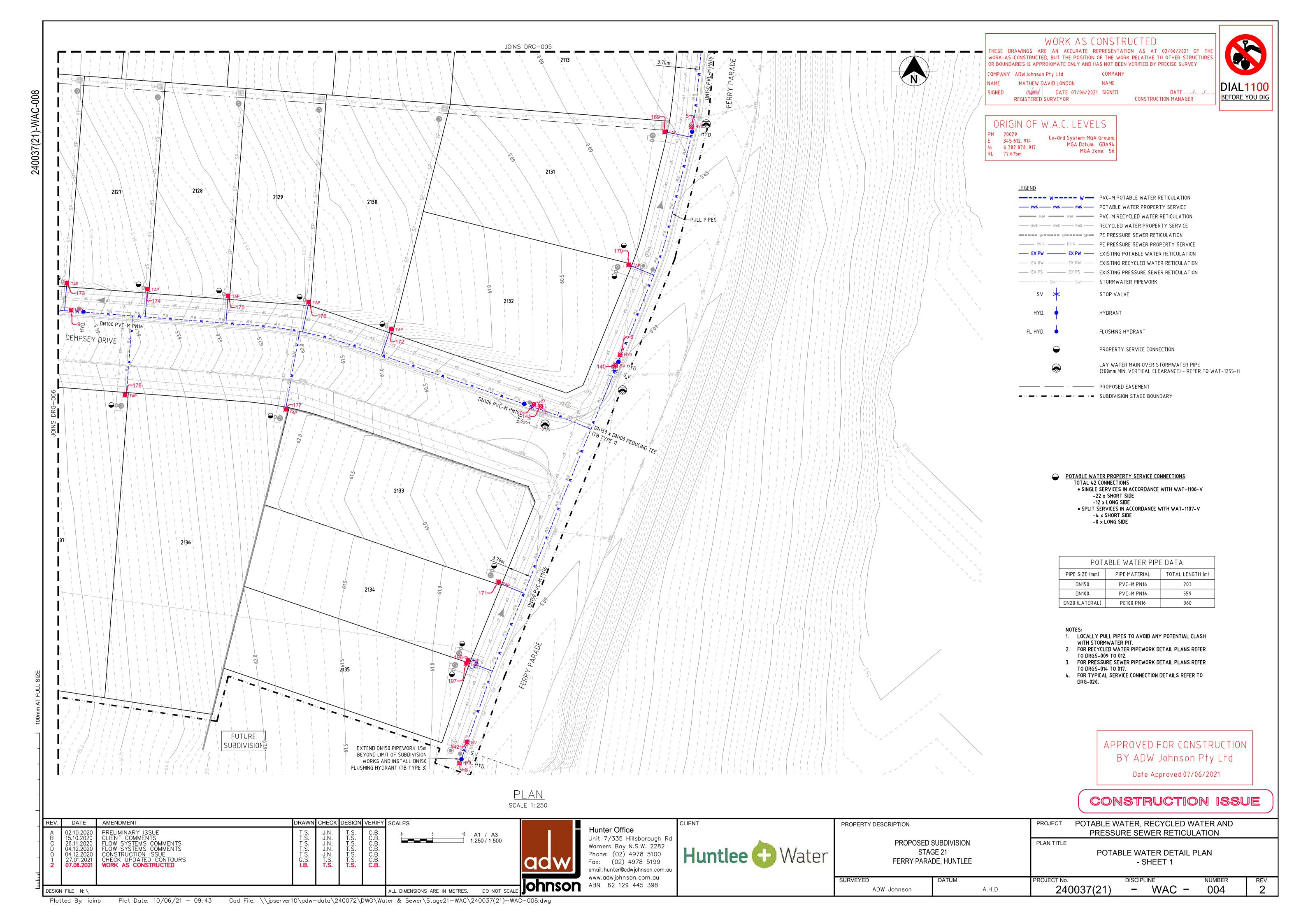
APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

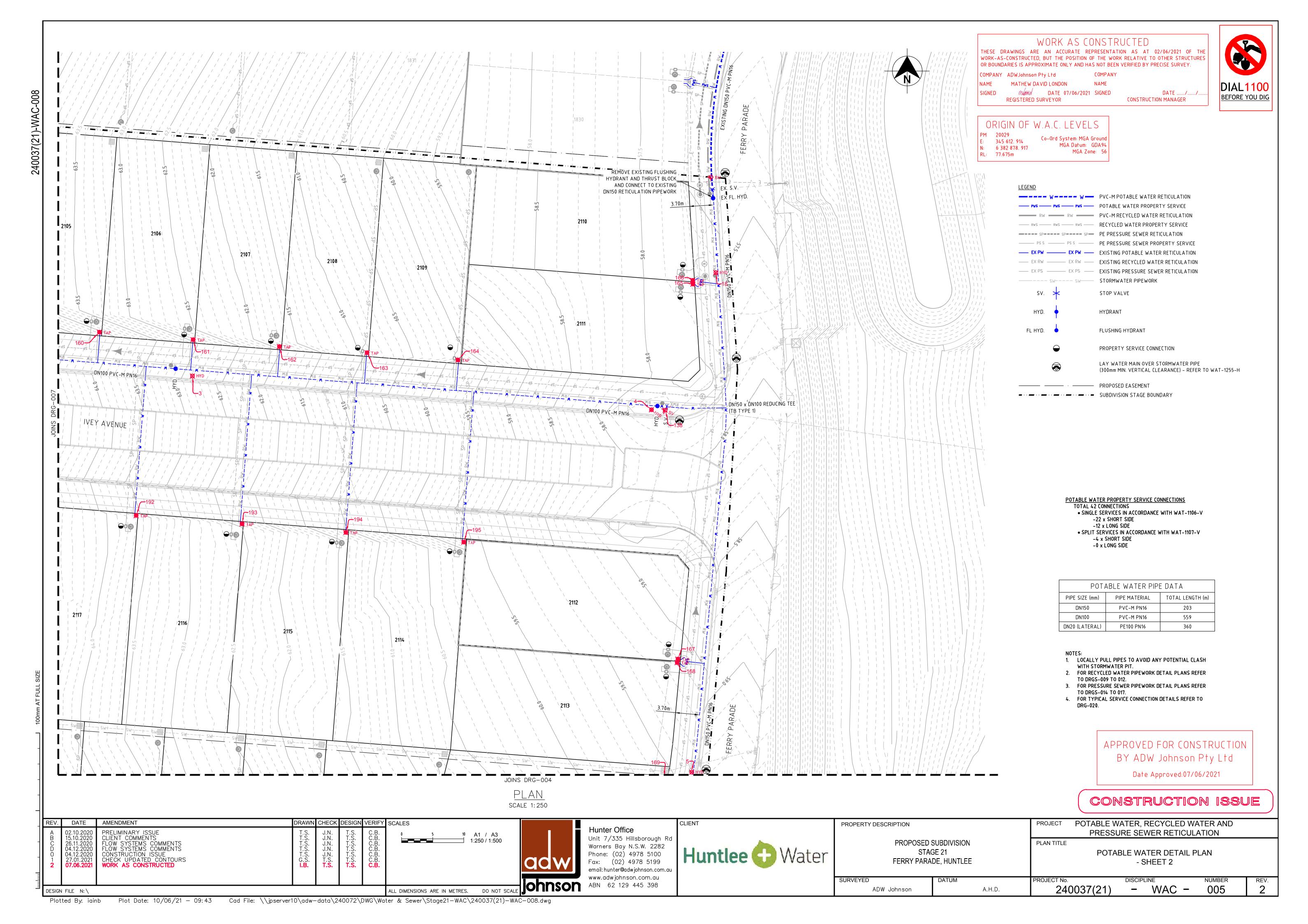
Date Approved:07/06/2021

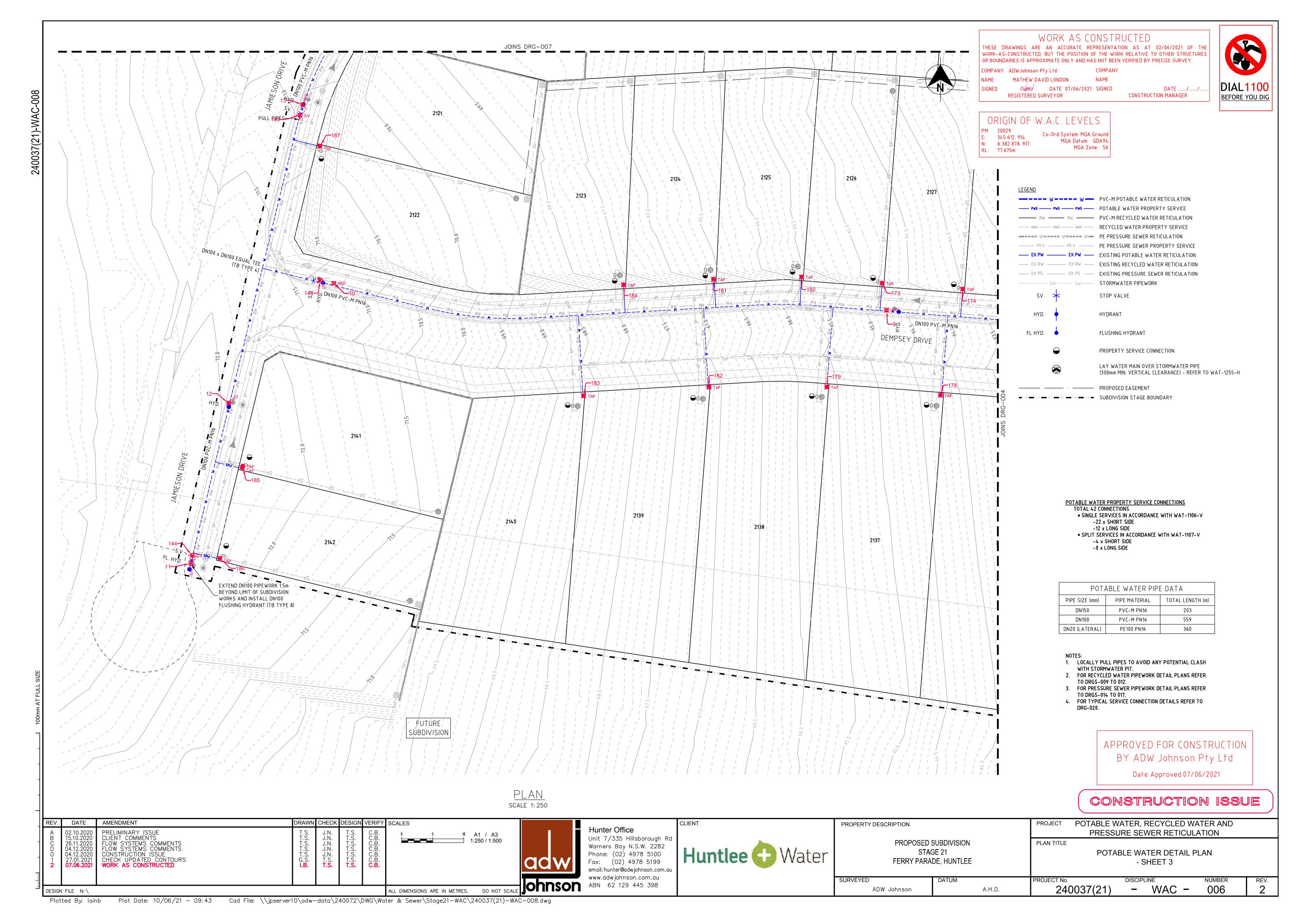
DATE/....../

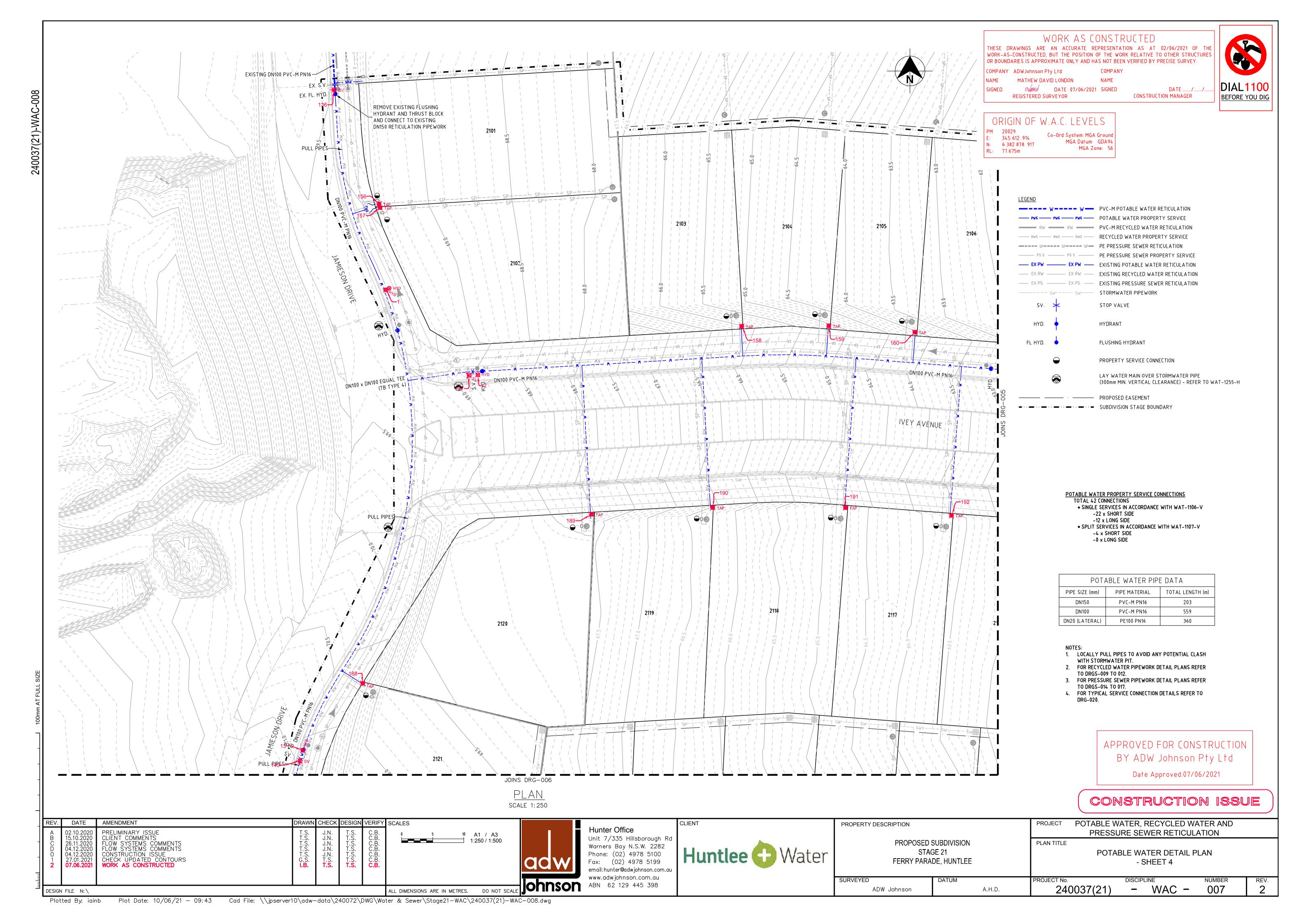
CONSTRUCTION ISSUE

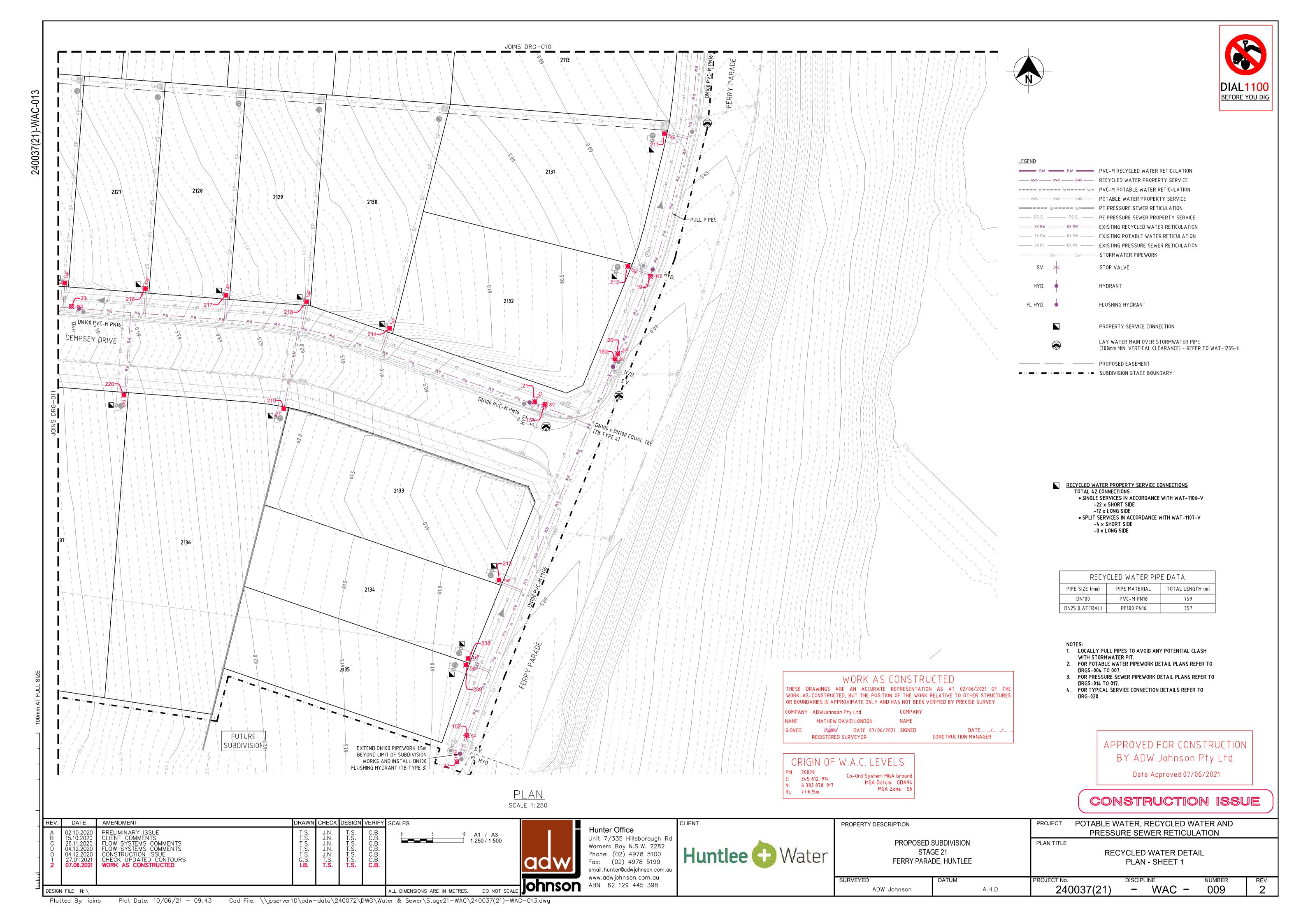
Since 2020 15.10.2020	CLIENT	RIFY SCALES		PROJECT POTABLE V	WATER, RECYCLED WA	ATER AND	
email: hunter@adwjohnson.com.au www.adwjohnson.com.au www.adwjohnson.com.au Discipline	Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100		AGE 21	PLAN TITLE	URE SEWER RETICUL	ATION	
ALL DIMENSIONS ARE IN METRES. DO NOT SCALE JOHN SON A.H.D. 240037(21) - WAC	email: hunter@adwjohnson.com.au www.adwjohnson.com.au ABN 62 129 445 398		·	PROJECT No. 240037(21)	DISCIPLINE - WAC -	NUMBER 003	REV.

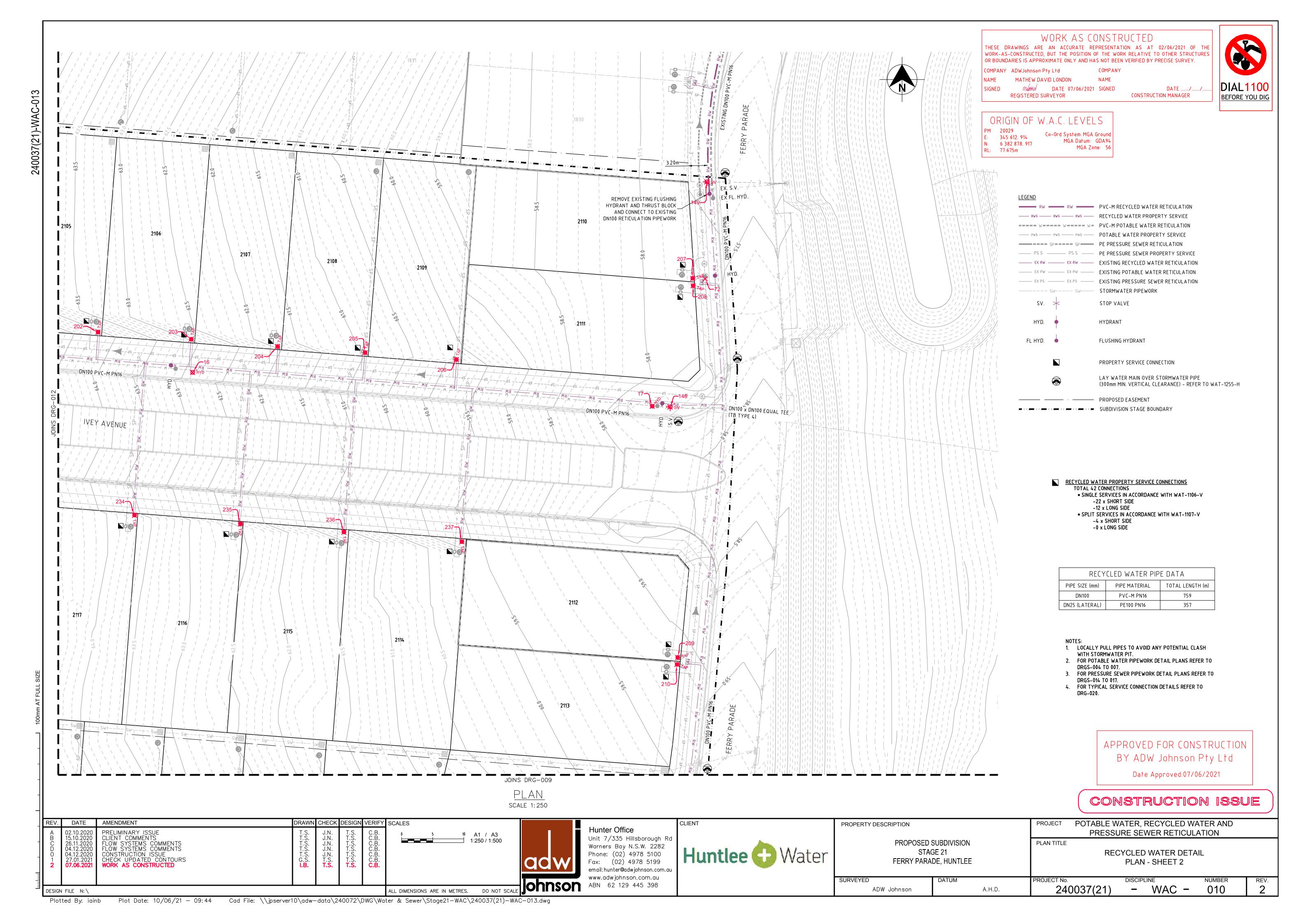


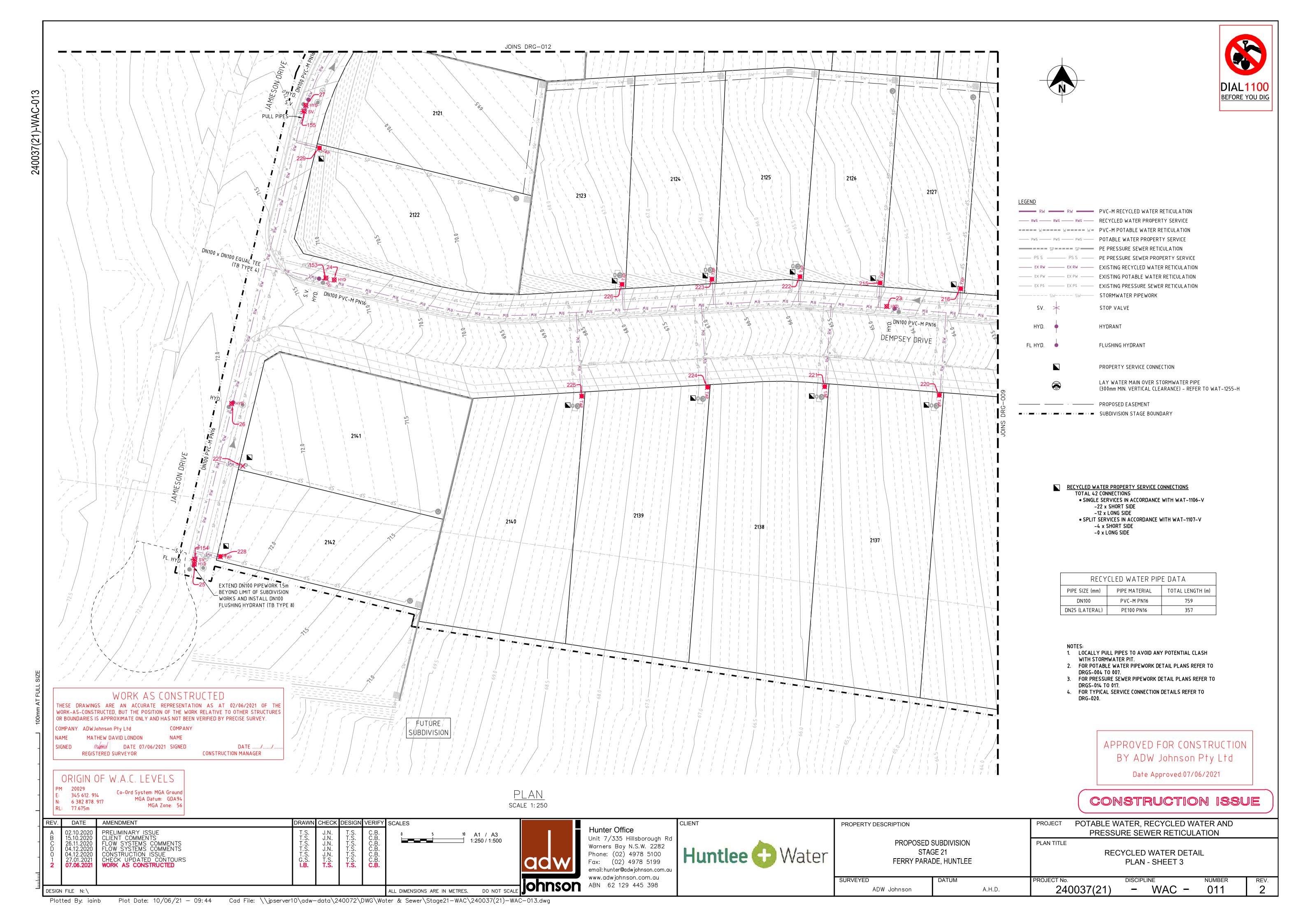


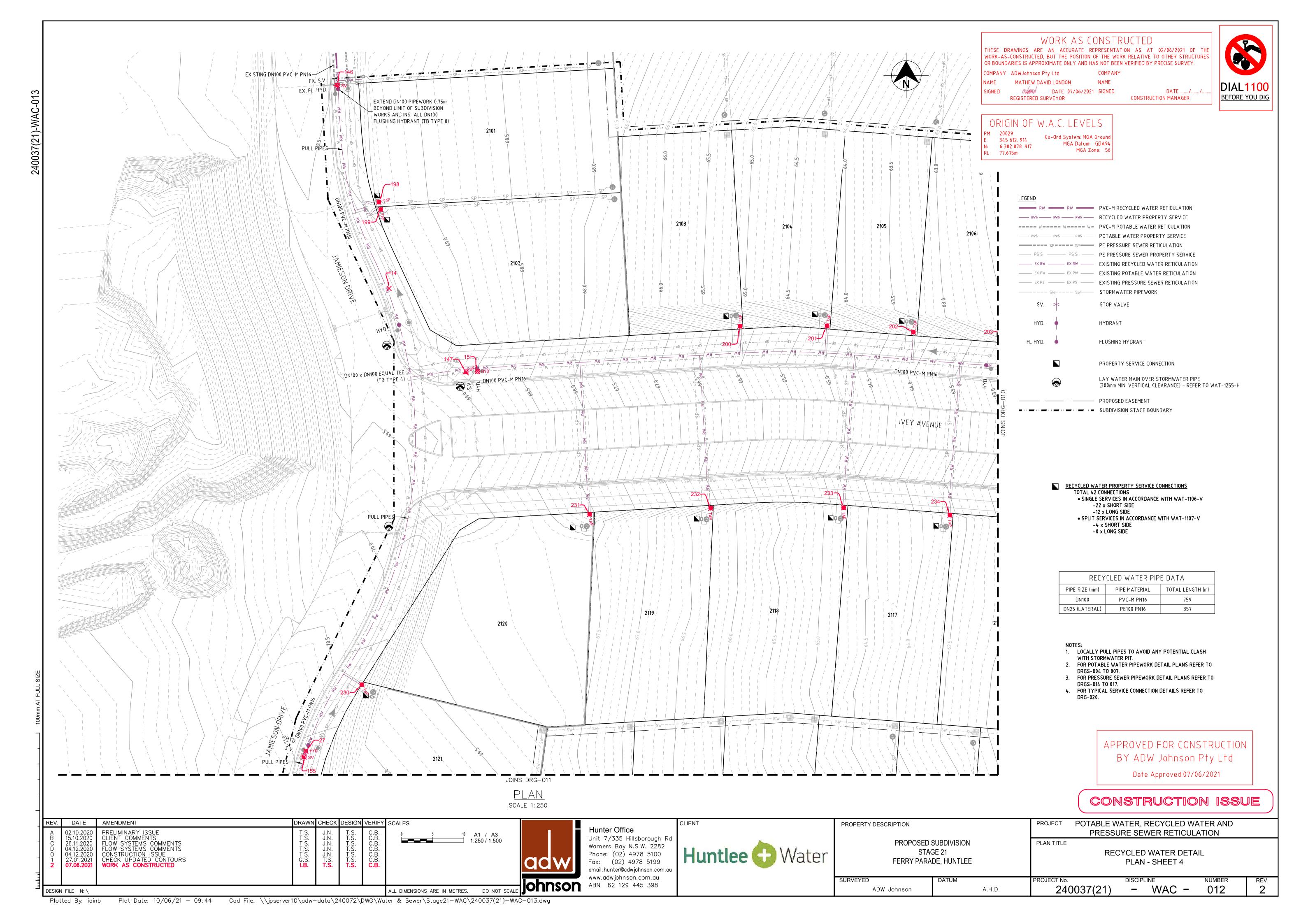


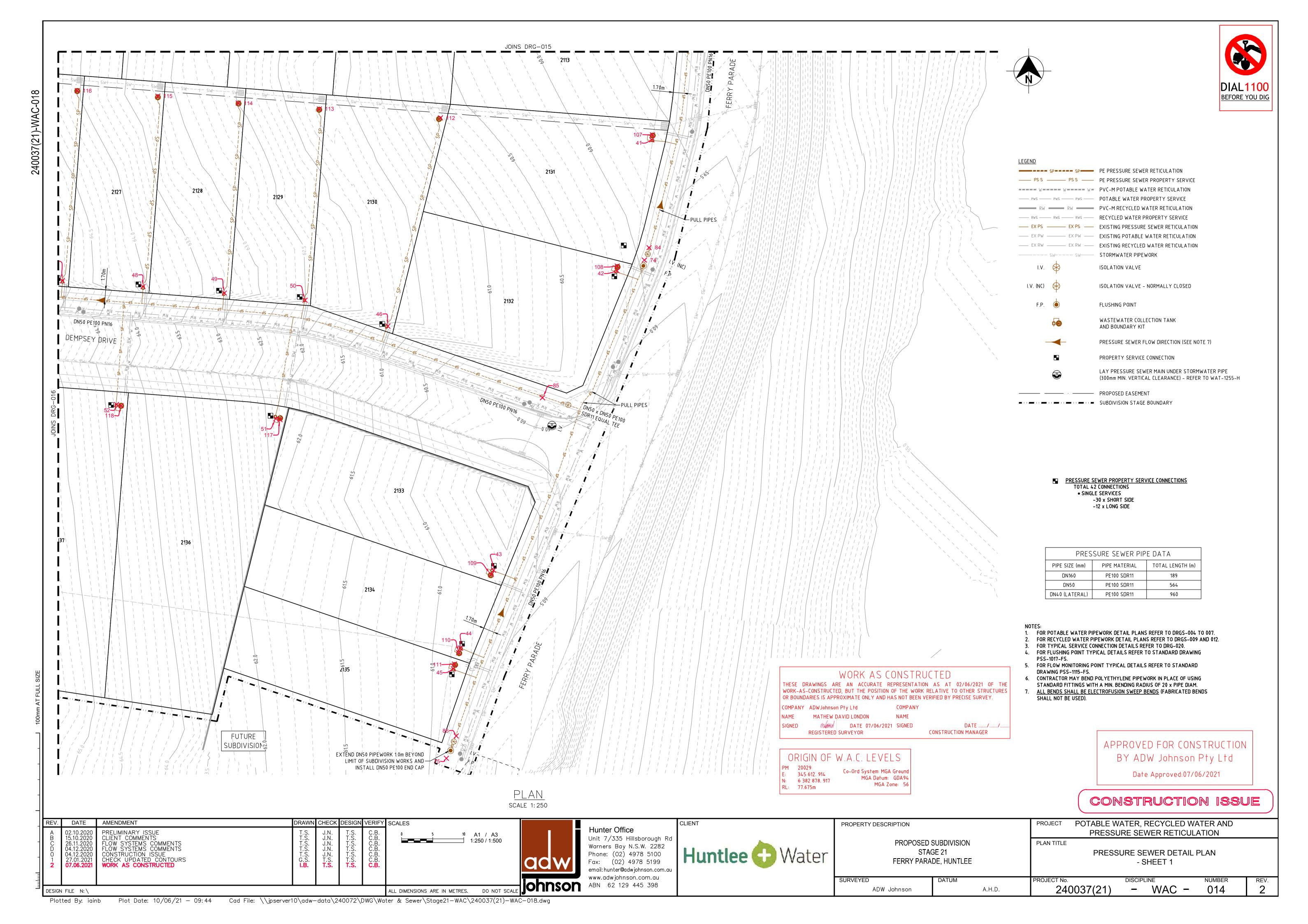


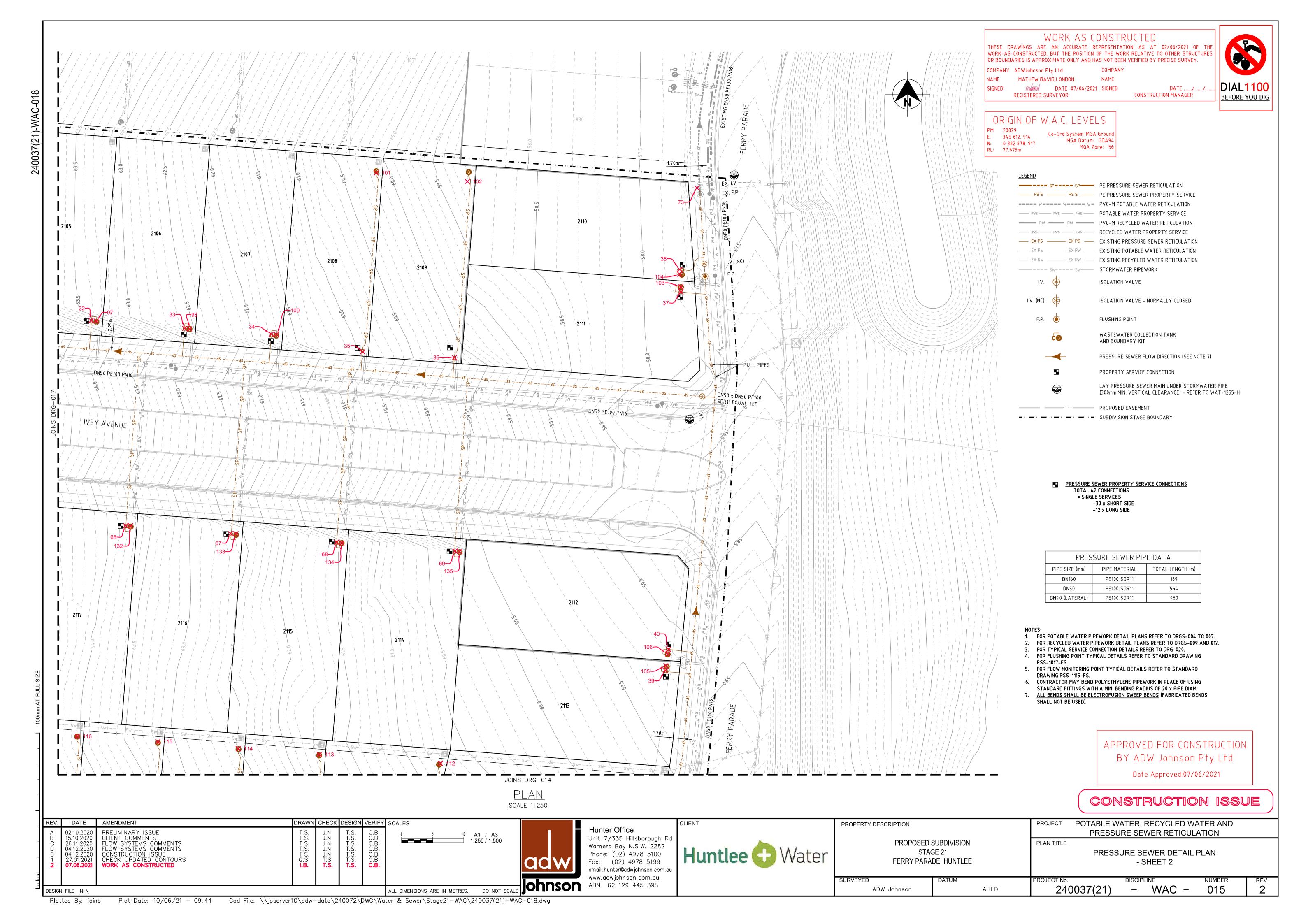


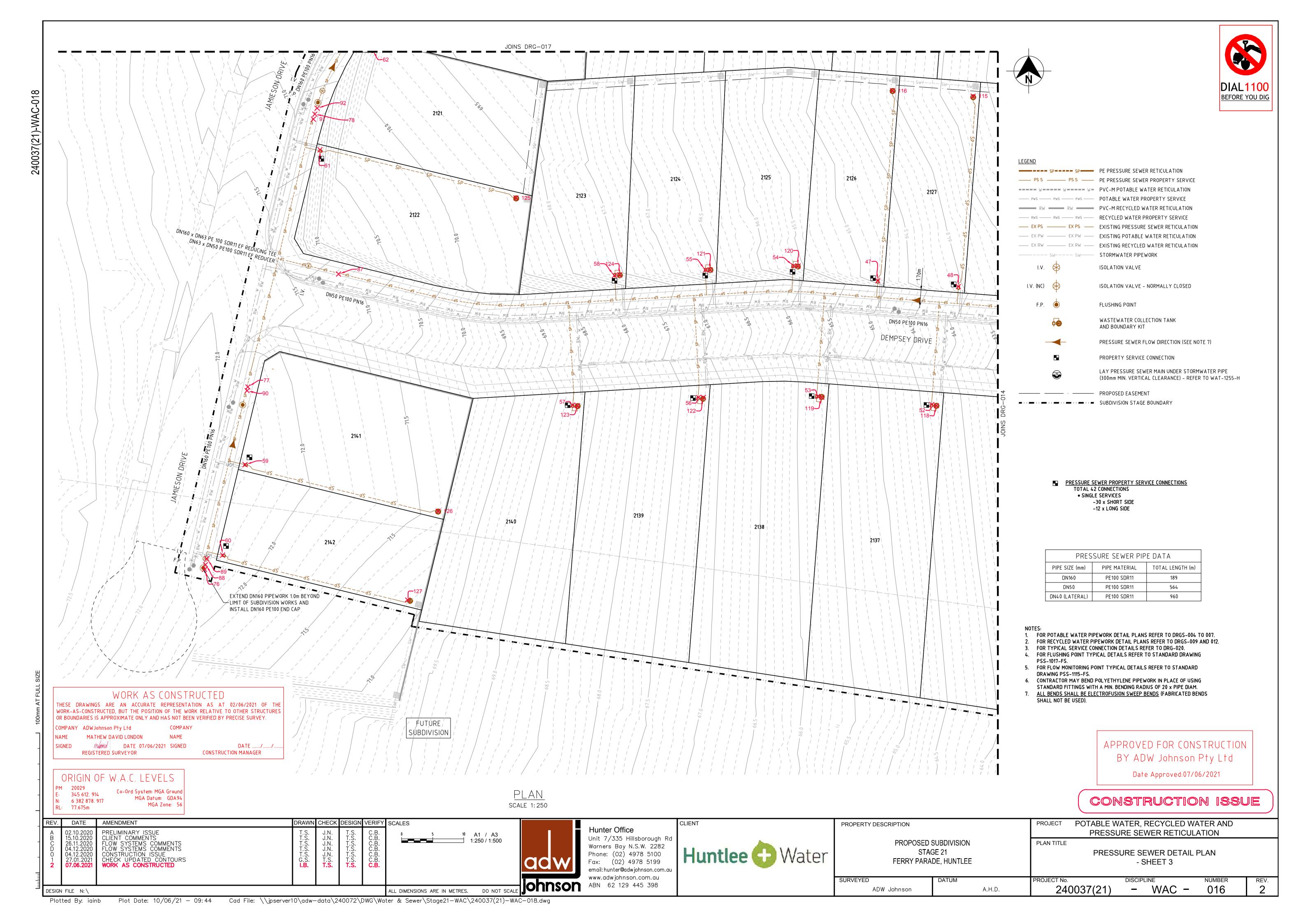


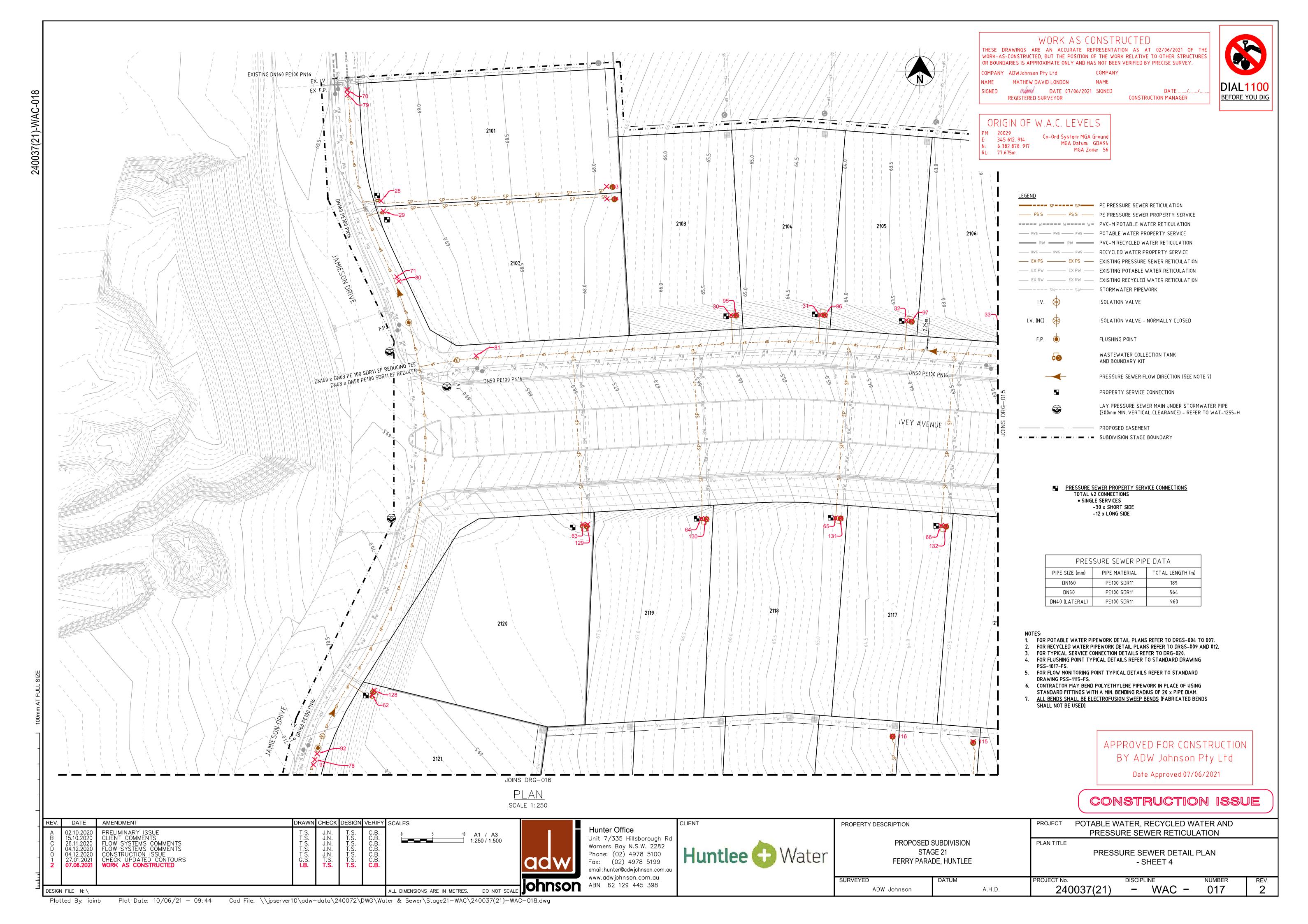












58 346475.73 6382723.90 59 | 346416.36 | 6382693.51 | 72.37 | seBDYKIT DATE AMENDMENT PRELIMINARY ISSUE

DESIGN FILE N: \

CLIENT COMMENTS
FLOW SYSTEMS COMMENTS
FLOW SYSTEMS COMMENTS CONSTRUCTION ISSUE
CHECK UPDATED CONTOURS
WORK AS CONSTRUCTED

Point Table

Point # Eastings Northings Levels Codes

1 346438.98 6382825.35 69.30 waHYD

2 346453.76 6382811.69 69.01 waHYD

3 346538.94 6382811.49 62.86 waHYD

4 346612.70 6382806.05 57.83 waHYD

6 346607.69 6382711.15 60.15 waHYD

7 346593.81 6382703.16 60.10 waHYD

8 346581.86 6382645.56 60.84 waHYD

9 346519.45 6382718.34 64.89 waHYD

11 346407.66 6382677.62 72.14 waHYD

12 346413.74 6382703.39 72.12 waHYD

13 346425.64 6382751.34 71.10 waHYD

14 346439.52 6382825.57 69.32 waHYDR

15 346453.70 6382812.23 69.03 waHYDR

16 346538.96 6382812.06 62.90 waHYDR

17 346612.84 6382806.64 57.82 waHYDR

18 346623.06 6382828.09 57.66 waHYDR

19 346612.57 6382723.76 59.97 waHYDR

20 346607.29 6382711.32 60.18 waHYDR

21 346593.96 6382703.62 60.12 waHYDR

22 346581.44 6382645.75 60.86 waHYDR

23 346519.49 6382718.91 64.91 waHYDR

24 346430.69 6382723.20 71.38 waHYDR

25 346408.21 6382677.53 72.15 waHYDR

26 346414.22 6382703.31 72.16 waHYDR

27 346426.13 6382751.22 71.10 waHYDR

28 346438.20 6382839.66 69.60 seBDYKIT

29 346438.59 6382837.99 69.58 seBDYKIT

30 346494.47 6382821.27 65.71 seBDYKIT

31 | 346508.82 | 6382821.31 | 64.76 | seBDYKIT

32 346522.65 6382820.43 63.80 seBDYKIT

33 346537.70 6382819.13 62.70 seBDYKIT

34 346551.64 6382818.23 61.82 seBDYKIT

6382815.40

6382828.63

6382767.57

6382724.66

6382676.53

6382723.06

6382721.08

6382719.94

6382700.89

6382703.17

6382725.47

6382704.32

57 | 346469.02 | 6382703.07 | 68.86 | seBDYKIT

346508.40 6382704.47

346490.38 | 6382724.80 |

346580.88 | 6382660.69 | 61.01 | seBDYKIT

59.95 seBDYKIT

57.92 seBDYKIT

59.37 seBDYKIT

59.28 seBDYKIT

59.77 seBDYKIT

61.31 seBDYKIT

65.08 seBDYKIT

64.11 seBDYKIT

63.16 seBDYKIT

62.29 seBDYKIT

64.43 seBDYKIT

65.70 seBDYKIT

66.72 seBDYKIT

67.40 seBDYKIT

67.72 seBDYKIT

seBDYKIT

seBDYKIT

seBDYKIT

60.30

60.85

35 346566.31

40 346615.45

43

36 346581.06 6382814.44

37 346617.46 6382825.01

39 346614.95 6382764.16

41 | 346612.79 | 6382745.71

346607.18

346587.36

346582.03

346518.04

346544.07

346526.75

346504.52

346489.22

50 346557.05

48 346531.00 6382722.11

346570.36 6382715.76

346617.27

5 346619.17 6382747.82 59.41

10 346430.63 6382722.62 71.36

DRAWN CHECK DESIGN VERIFY SCALES J.N. J.N. J.N. J.N. T.S. T.S. T.S. T.S. T.S. T.S.

ALL DIMENSIONS ARE IN METRES. DO NOT SCAL

Point Table

60 346412.75 6382678.97 72.34 seBDYKIT

62 346436.82 6382760.16 70.34 SeBDYKIT

65 346511.23 6382788.67 64.97 seBDYKIT

66 | 346528.23 | 6382787.45 | 63.88 | seBDYKIT

67 346545.07 6382786.16 62.72 seBDYKIT

71 346440.75 6382827.42 69.38

73 | 346620.04 | 6382841.72 | 57.48 |

76 | 346409.87 | 6382676.67 | 72.20 |

80 346441.08 6382826.73 69.37

82 346616.32 6382809.02 57.93

88 346410.00 6382677.42 72.22

89 346410.21 6382678.40 72.23

90 | 346416.68 | 6382705.38 | 72.14

346612.34 6382728.38 59.98

78 | 346427.58 | 6382749.84 |

346579.76 | 6382646.31 | 60.96 |

6382706.00

6382744.11 71.34 seBDYKIT

6382787.65 | 68.46 | seBDYKIT

6382788.56 | 66.46 | seBDYKIT

6382784.78 61.64 seBDYKIT

6382783.36 60.28 seBDYKIT

72.12

71.17

seFP

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selV

6382857.51 69.76

6382827.10 57.71

6382726.37 59.95

6382856.73 69.73

6382814.76 69.04

6382828.49 57.69

6382704.24 60.13

6382649.90 60.88

6382724.14 71.42

6382749.03 71.20

71.16

6382821.31 | 65.81 | seTANK2103

6382821.29 | 64.88 | seTANK2104

6382820.32 | 63.94 | seTANK2105

6382819.06 | 62.80 | seTANK2106

6382825.83 | 58.05 | seTANK211

6382827.84 | 58.04 | seTANK2110

6382764.92 | 59.46 | seTANK2113

6382746.50 | 59.87 | seTANK213

6382725.42 | 60.39 | seTANK2132

6382675.86 | 60.95 | seTANK2133

6382749.24 | 60.97 | seTANK2130

6382751.61 | 62.81 | seTANK2128

6382753.61 | 64.35 | seTANK2126

6382700.74 | 62.56 | seTANK2136

6382702.97 | 64.54 | seTANK213

6382704.31 | 65.92 | seTANK2138

6382725.42 | 65.80 | seTANK2125

61.94 | seTANK2107

59.22 | seTANK2109

59.39 seTANK2112

61.10 seTANK2134

61.12 seTANK213!

61.92 seTANK2129

63.47 | seTANK212

60.31 seTANK2108

6382750.79

93 | 346474.48 | 6382841.96 | 68.12 | seTANK2101

94 | 346474.52 | 6382839.98 | 68.11 | seTANK2102

6382818.15

6382844.14

6382842.75

6382766.83

6382663.29

6382661.46

6382750.67

6382752.73

Point # Eastings Northings Levels Codes

61 346428.41

63 346470.67

64 346489.71

68 346562.12

69 346581.15

70 | 346432.75

72 346621.35

77 346416.81

79 346432.87

81 346453.51

83 346621.48

85 346595.21

86 346581.35

87 346431.39

91 346427.36

92 346427.94

346523.47

346538.50

346583.1

346617.45

346617.2

346615.03

346615.3

346612.87

346607.22

346586.98

346581.7

346581.06

346578.81

346559.3

346533.3

346520.42

346553.04

118 346527.48

120 346505.24

114 346546.3

100 346552.4

101 346568.49

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102

103

105

106

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109

110

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116

119

346611.59

johnson

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

Huntlee Water

PROPERTY DESCRIPTION PROPOSED SUBDIVISION STAGE 21 FERRY PARADE, HUNTLEE

POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION PLAN TITLE

FITTINGS TABLES

SURVEYED PROJECT No. 240037(21) - WAC -018 A.H.D. ADW Johnson

Point #	Eastings	Point Tabl	Levels	Codes
121	346491.10	6382724.81	66.84	seTANK2
122	346490.02	6382704.31	67.51	seTANK2
123	346469.81	6382702.98	68.98	seTANK2
124	346476.56	6382724.02	67.82	seTANK2
125	346459.90	6382736.37	69.92	seTANK2
126	346447.38	6382686.03	71.68	seTANK2
127	346442.52	6382671.74	71.34	seTANK2
128	346437.13	6382760.98	70.45	seTANK2
129	346471.44	6382787.64	68.58	seTANK2
130	346490.50	6382788.51	66.56	seTANK2
131	346512.11	6382788.64	65.07	seTANK2
132	346529.01	6382787.42	63.99	seTANK2
133	346545.94	6382786.16	62.83	seTANK2
134	346562.96	6382784.68	61.75	seTANK2
135	346581.90	6382783.31	60.40	seTANK2
136	346430.70	6382857.49	69.63	waSV
137	346452.37	6382811.61	69.06	waSV
138	346614.90	6382806.01	57.85	waSV
139	346622.27	6382843.47	57.41	waSV
14 0	346606.97	6382709.46	60.20	
				waSV
141	346594.89	6382702.87	60.12	waSV
142	346583.09	6382648.91	60.82	waSV
143	346428.47	6382723.10	71.43	waSV
144	346407.89	6382678.92	72.19	waSV
145	346425.19	6382749.64	71.14	VZew
146	346431.18	6382858.23	69,68	waSVR
147	346451.89	6382812.17	69.09	waSVR
148	346615.72	6382806.52	57.86	waSVR
149	346621.62	6382842.70	57.45	waSVR
150	346606.88	6382710.50	60.16	waSVR
151	346595.64	6382703.21	60.10	waSVR
152	346583.04	6382649.99	60.80	waSVR
153	346429.35	6382723.50	71.41	waSVR
	346408.28			
154		6382678.29	72.18	waSVR
155	346425.85	6382750.28	71.14	waSVR
156	346437.90	6382839.14	69.52	waTAP
157	346438.05	6382838.54	69.52	waTAP
158	346496.18	6382819.48	65.95	waTAP
159	346510.17	6382819.54	65.10	waTAP
160	346523.98	6382818.52	63.96	MaTAP
161	346539.05	6382817.33	62.94	waTAP
162	346552.92	6382816.22	61.90	WaTAP
163	346567.00	6382815.22	60.93	waTAP
164	346581.60	6382814.08	59.79	waTAP
165	346619.36	6382826.26	57.83	waTAP
166	346619.33	6382826.85	57.72	waTAP
167	346616.94	6382766.01	59.07	waTAP
168	346616.84	6382765.45	59.07	waTAP
169			59.46	
	346614.83	6382746.99		WaTAP
170	346609.05	6382725.61	59.99	waTAP
171	346588.15	6382674.66	60.65	waTAP
172	346570.91	6382715.29	61.21	WaTAP
173	346518.74	6382722.67	65.02	waTAP
174	346531.71	6382721.72	64.00	waTAP
175	346544.65	6382720.63	63.10	waTAP
176	346557.61	6382719.63	62.28	WaTAP
177	346553.96	6382702.38	62.21	waTAP
	2/452042	6382704.66	64.22	waTAP
178	346528.13	0302704.00	ı	
178 179	346528.13	6382705.98	65.60	waTAP

Point #	Eastings	Northings	Levels	Codes
181	346491.64	6382723.30	66.97	waTAP
182	346490.91	6382705.97	67.16	waTAP
183	346470.76	6382704.56	68.59	waTAP
184	346477.20	6382722.40	68.03	waTAP
185	346415.92	6382693.00	72.32	waTAP
186	346412.30	6382678.45	72.18	waTAP
187	346428.36	6382744.68	71.25	waTAP
188	346435.25	6382762.08	70.67	WaTAP
189	346472.04	6382789.26	68.10	waTAP
190	346491.53	6382790.34	66.42	waTAP
191	346512.86	6382790.33	64.82	waTAP
192	346529.89	6382789.06	63.52	waTAP
193	346546.92	6382787.71	62.36	waTAP
194	346563.61	6382786.36	61.11	waTAP
195	346582.54	6382784.80	59.69	waTAP
196	346583.21	6382662.04	60.83	waTAP
197	346582.96	6382661.56	60,86	waTAP
198	346437.86	6382839.42	69.51	waTAPR
199	346438.15	6382838.26	69.50	waTAPR
200	346495.91	6382819.49	65.96	waTAPR
201	346509.88	6382819.54	65.16	waTAPR
202	346523.76	6382818.55	64.02	waTAPR
203	346538.74	6382817.39	62.97	waTAPR
204	346552.63	6382816.24	61.90	waTAPR
205	346566.70	6382815.23	60.96	waTAPR
206	346581.36	6382814.12	59.77	waTAPR
207	346619.34	6382827.18	57.79	waTAPR
208	346619.42	6382826.00	57.80	waTAPR
209	346616.94	6382766.25	59.04	waTAPR
210	346616.83	6382765.13	59.10	waTAPR
211	346614.79	6382746.68	59.47	waTAPR
212	346608.90	6382725.36	60.00	waTAPR
213	346588.21	6382674.94	60.63	waTAPR
214	346570.61	6382715.38	61.24	waTAPR
215	346518.42	6382722.70	65.08	waTAPR
216	346531.37	6382721.77	64.03	waTAPR
217	346544.32	6382720.69	63.08	waTAPR
218	346557.28	6382719.68	62.25	waTAPR
219	346553.62	6382702.47	62.28	waTAPR
220	346527.93	6382704.66	64.24	waTAPR
221	346509.52	6382706.02	65.65	waTAPR
222	346505.54	6382723.72	66.02	waTAPR
223	346491.40	6382723.31	66.96	waTAPR
224	346490.68	6382705.93	67.18	waTAPR
225	346470.47	6382704.50	68.62	waTAPR
226	346476.92	6382722.46	68.03	waTAPR
227	346415.98	6382693.26	72.29	waTAPR
228	346412.37	6382678.71	72.17	waTAPR
229	346428.30	6382744.39	71.26	waTAPR
230	346435.12	6382761.86	70.71	waTAPR
231	346471.74	6382789.28	68.17	waTAPR
232	346491.18	6382790.24	66.40	waTAPR
233	346512.57	6382790.32	64.84	waTAPR
234	346529.64	6382789.13	63.52	waTAPR
235	346546.66	6382787.70	62.38	waTAPR
236	346563.30	6382786.40	61.14	waTAPR
237	346582.24	6382784.85	59.72	waTAPR
238	346583.26	6382662.33	60.80	waTAPR
239	346582.88	6382661.29	60.85	waTAPR

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 02/06/2021 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.

BEFORE YOU DIG

COMPANY ADWJohnson Pty Ltd MATHEW DAVID LONDON NAME

Man DATE 07/06/2021 SIGNED DATE/... CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground E: 345 612, 914 MGA Datum: GDA94 N: 6 382 878. 917 MGA Zone: 56 RL: 77.675m

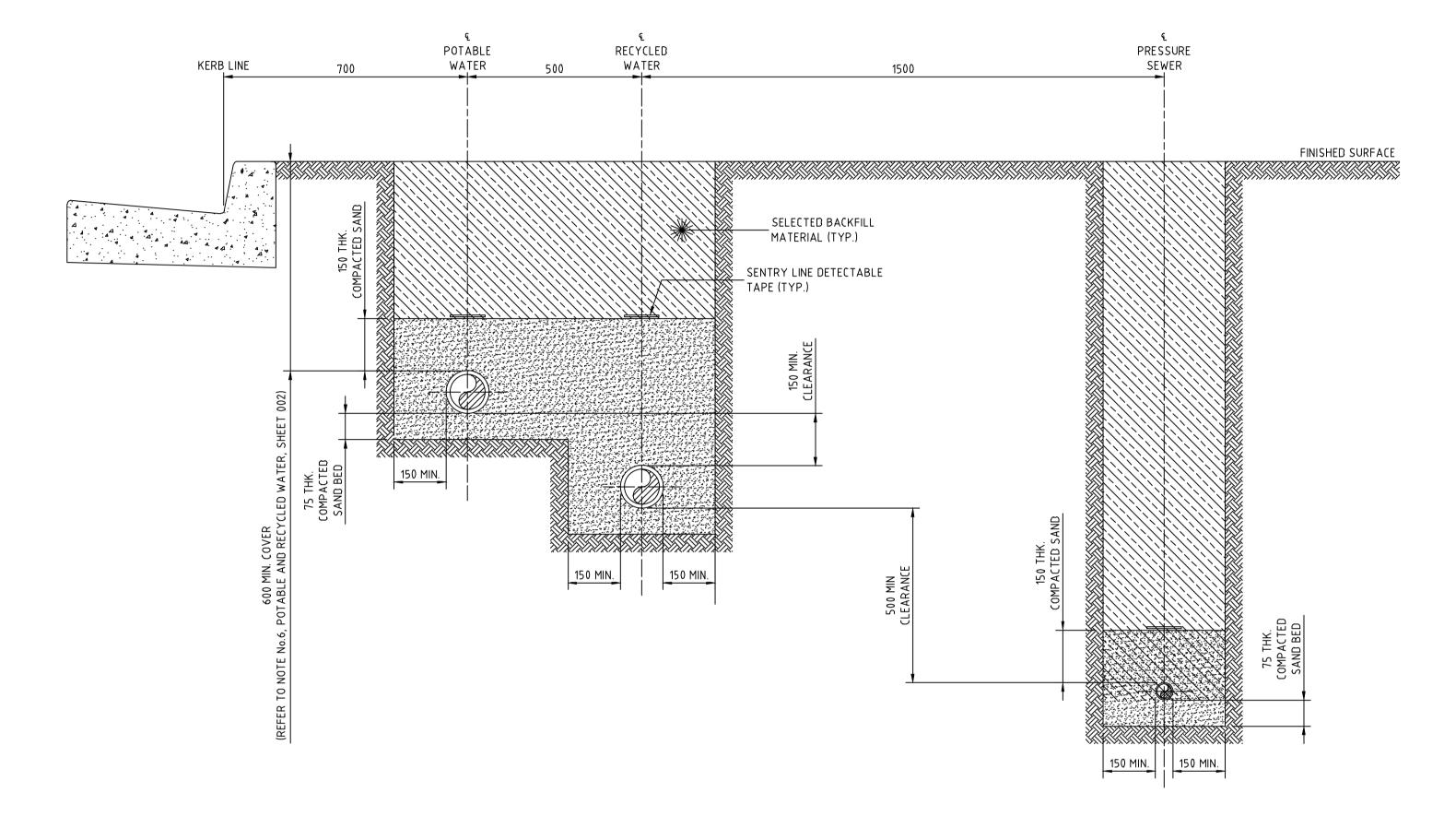
> APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

CONSTRUCTION ISSUE

Date Approved:07/06/2021

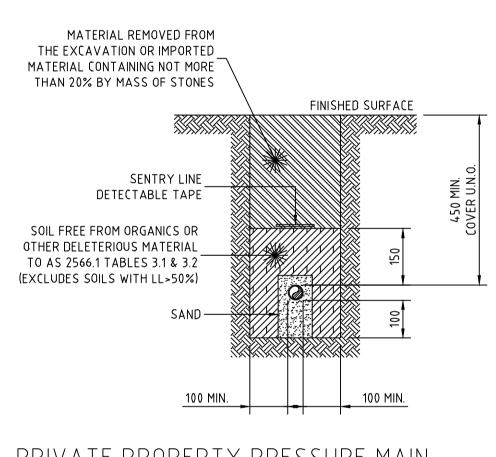
2





STREET PRESSURE MAIN TYPICAL DETAIL
SCALE 1:10

NOTES:



PRIVATE PROPERTY PRESSURE MAIN TYPICAL DETAIL

DATE/....../

CONSTRUCTION MANAGER

WORK AS CONSTRUCTED

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 02/06/2021 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 ADWJohnson Pty Ltd

NAME MATHEW DAVID LONDON Man DATE 07/06/2021 SIGNED REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

Co-Ord System: MGA Ground E: 345 612. 914 MGA Datum: GDA94 N: 6 382 878. 917 MGA Zone: 56 RL: 77.675m

APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

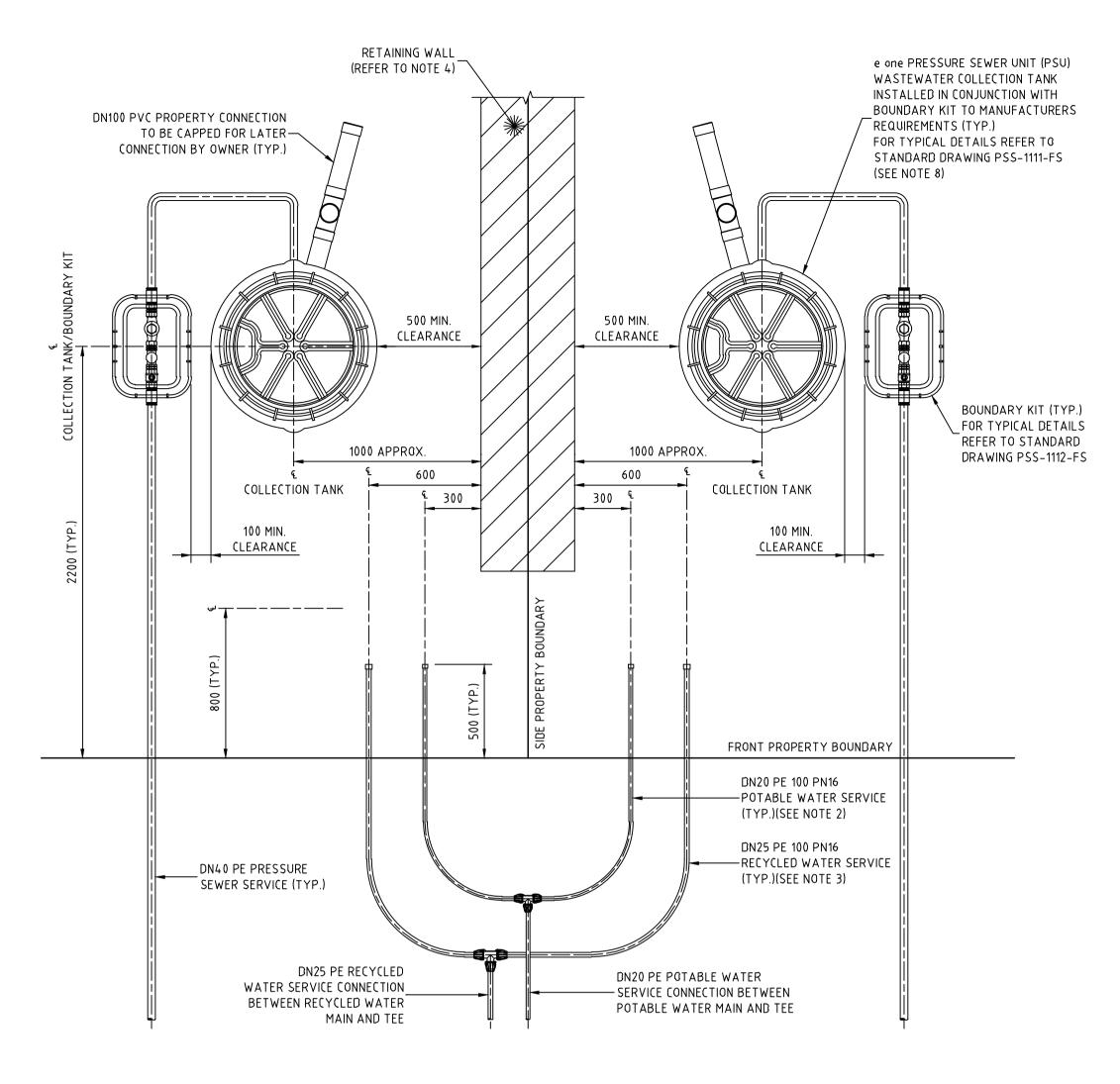
Date Approved:07/06/2021

CONSTRUCTION ISSUE

DRAWN CHECK DESIGN VERIFY SCALES DATE AMENDMENT POTABLE WATER, RECYCLED WATER AND PROPERTY DESCRIPTION **Hunter Office** PRELIMINARY ISSUE
CLIENT COMMENTS
FLOW SYSTEMS COMMENTS
FLOW SYSTEMS COMMENTS
CONSTRUCTION ISSUE
CHECK UPDATED CONTOURS
WORK AS CONSTRUCTED PRESSURE SEWER RETICULATION J.N. J.N. J.N. J.N. T.S. 0.1 0.2 0.3 0.4 A1 / A3 T.S. T.S. T.S. T.S. T.S. T.S. Unit 7/335 Hillsborough Rd 1:10 / 1:20 PROPOSED SUBDIVISION PLAN TITLE Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 STAGE 21 TYPICAL PIPEWORK FERRY PARADE, HUNTLEE Fax: (02) 4978 5199 TRENCHING DETAILS email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED johnson ABN 62 129 445 398 240037(21) - WAC -019 2 ADW Johnson A.H.D. DESIGN FILE N: \ ALL DIMENSIONS ARE IN METRES. DO NOT SCAL

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
- 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.

WORK AS CONSTRUCTED

BEFORE YOU DIG

THESE DRAWINGS ARE AN ACCURATE REPRESENTATION AS AT 02/06/2021 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 ADWJohnson Pty Ltd COMPANY

MATHEW DAVID LONDON NAME DATE 07/06/2021 SIGNED

DATE/...../ CONSTRUCTION MANAGER REGISTERED SURVEYOR

ORIGIN OF W.A.C. LEVELS

E: 345 612, 914

Co-Ord System: MGA Ground MGA Datum: GDA94 N: 6 382 878, 917 MGA Zone: 56 RL: 77.675m

> APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

> > Date Approved:07/06/2021

CONSTRUCTION ISSUE

POTABLE WATER, RECYCLED WATER AND PROPERTY DESCRIPTION **Hunter Office** PRESSURE SEWER RETICULATION CLIENT COMMENTS
FLOW SYSTEMS COMMENTS
FLOW SYSTEMS COMMENTS
CONSTRUCTION ISSUE
CHECK UPDATED CONTOURS
WORK AS CONSTRUCTED J.N. J.N. J.N. J.N. T.S. Unit 7/335 Hillsborough Rd PROPOSED SUBDIVISION PLAN TITLE Warners Bay N.S.W. 2282 0.8 A1 / A3 STAGE 21 TYPICAL SERVICE T.S. T.S. **T.S.** Phone: (02) 4978 5100 1:20 / 1:40 FERRY PARADE, HUNTLEE Fax: (02) 4978 5199 CONNECTION DETAILS email: hunter@adwjohnson.com.au www.adwjohnson.com.au SURVEYED PROJECT No. DISCIPLINE johnson ABN 62 129 445 398 240037(21) 020 - WAC -ADW Johnson A.H.D. ALL DIMENSIONS ARE IN METRES. DO NOT SCAL DESIGN FILE N: \



CALCULATED WAC V'S DESIGN VAC SANITARY **INVERT LEVEL** DRAINAGE WASTEWATER COLLECTION TANK DETAILS COMPARISON TANK LID **INVERT LEVEL** LOT NUMBER TANK FSL BASE IL CONNECTION IL TANK HEIGHT TANK CAPACITY TANK LOCATION EASTING NORTHING 67.98 65.85 346475.419 6382841.870 346476.883 6382820.136 346509.549 6382821.291 FRONT 63.79 61.06 61.96 800 L FRONT 346523.507 6382820.211 63.939 346538.463 6382819.053 62.804 FRONT 59.08 59.98 FRONT 6382817.973 61.937 REAR 60.22 58.09 58.99 346568.509 6382844.411 650 L 6382844.275 59.224 346583.349 FRONT 6382827.770 FRONT 6382825.777 346617.449 FRONT 6382766.766 346615.338 FRONT 60.27 58.14 59.04 6382783.198 FRONT 61.57 59.44 650 L FRONT 346562.924 6382784.664 **61.753** 346545.974 6382785.975 62.829 650 L

 346529.025
 6382787.287
 63.994

 346512.076
 6382788.599
 65.069

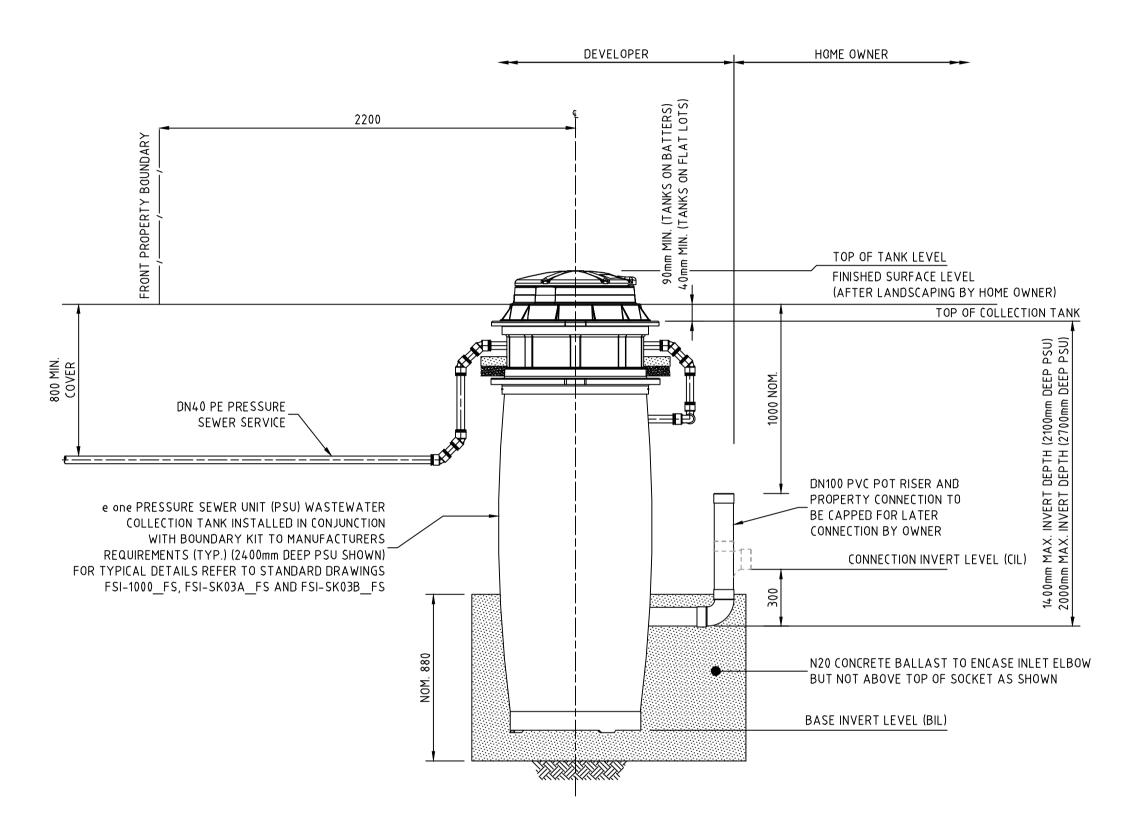
 FRONT 62.78 63.68 FRONT 65.18 FRONT 346490.526 6382788.476 66.41 64.28 FRONT 6382787.364 68.575 6382760.701 70.446 FRONT 67.63 68.53 650 L REAR 346459.941 6382736.292 **69.915** 65.87 FRONT 346476.601 6382723.941 67.822 66.68 63.95 64.85 FRONT 6382724.782 **66.844** FRONT 65.67 62.94 63.84 346505.209 6382725.340 65.804 64.13 62.00 62.90 6382753.549 **64.351** 346520.437 6382752.546 63.473 6382751.541 62.809 346533.392 61.14 60.46 346546.353 6382750.540 61.921 6382749.050 60.966 59.64 346578.586 6382746.392 59.871 FRONT 58.10 59.00 650 L FRONT 346607.273 6382725.272 **60.390** 6382675.732 60.949 6382663.201 61.099 346586.888 346581.819 FRONT 60.97 58.84 FRONT 346581.156 6382661.314 **61.115** 346553.036 6382700.977 **62.562** FRONT 62.39 60.26 61.16 650 L

 346527.485
 6382702.954
 64.543

 346509.041
 6382704.382
 65.919

 63.66 FRONT 67.32 65.19 66.09 68.83 66.70 67.60 FRONT 346489.960 6382704.079 346469.814 6382702.914 68.9
 REAR
 346447.387
 6382685.963
 71.676
 70.36

 REAR
 346442.872
 6382671.623
 71.339
 70.02



PRESSURE SEWER SERVICE CONNECTION TYPICAL SECTIONAL ELEVATION

WORK AS CONSTRUCTED

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COMPANY ADWJohnson Pty Ltd NAME MATHEW DAVID LONDON

Man DATE 07/06/2021 SIGNED DATE/...../.... REGISTERED SURVEYOR CONSTRUCTION MANAGER

MGA Zone: 56

ORIGIN OF W.A.C. LEVELS Co-Ord System: MGA Ground E: 345 612. 914 MGA Datum: GDA94

N: 6 382 878, 917

RL: 77.675m

APPROVED FOR CONSTRUCTION BY ADW Johnson Pty Ltd

Date Approved:07/06/2021

CONSTRUCTION ISSUE

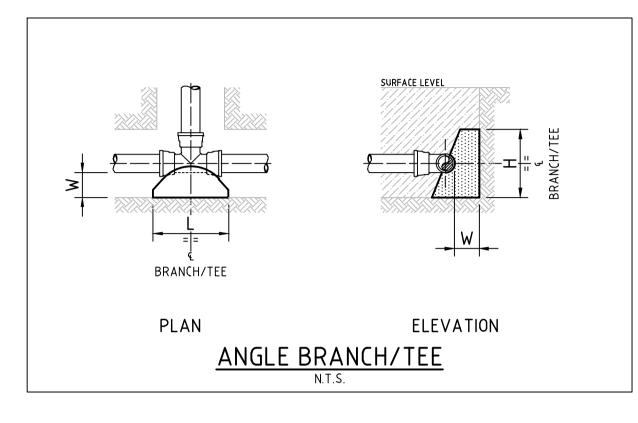
-	A 02.10.	0.2020	AMENDMENT PRELIMINARY ISSUE CLIENT COMMENTS	DRAWI	CHECK DESIGN V J.N. T.S.	ZERIFY SCALES C.B. 0 0,4 0,8 A1 / A3		Hunter Office	CLIENT	PROPERTY DESCRIPTION			ATER, RECYCLED WA JRE SEWER RETICULA		
	C 26.11. 04.12. 04.12. 1 27.01 07.06	.2020 .2020 2.2020 2.2020 1.2021 6.2021	FLOW SYSTEMS COMMENTS FLOW SYSTEMS COMMENTS CONSTRUCTION ISSUE CHECK UPDATED CONTOURS WORK AS CONSTRUCTED	T.S. T.S. T.S. G.S. I.B.	J.N. T.S. J.N. T.S. J.N. T.S. T.S. T.S. T.S. T.S. T.S.	1:20 / 1:40 C.B. C.B. C.B. C.B.	Warners E Phone: (0 Fax: (0 email:hunte	Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email: hunter@adwjohnson.com.au	Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 Huntlee Water	STA	SUBDIVISION GE 21 NDE, HUNTLEE	PLAN TITLE WASTE WATER COLLECTION TANK LEVEL DETAILS			
	ESIGN FILE	N: \				ALL DIMENSIONS ARE IN METRES. DO NOT SCALE	johnson	www.adwjohnson.com.au ABN 62 129 445 398		SURVEYED ADW Johnson	DATUM A.H.D.	PROJECT No. 240037(21)	DISCIPLINE - WAC -	NUMBER 021	REV.

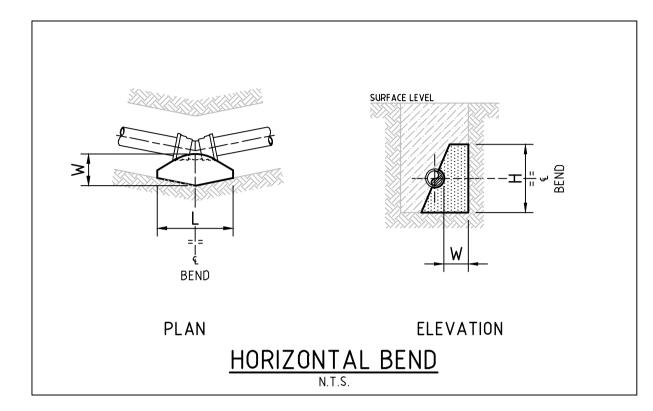


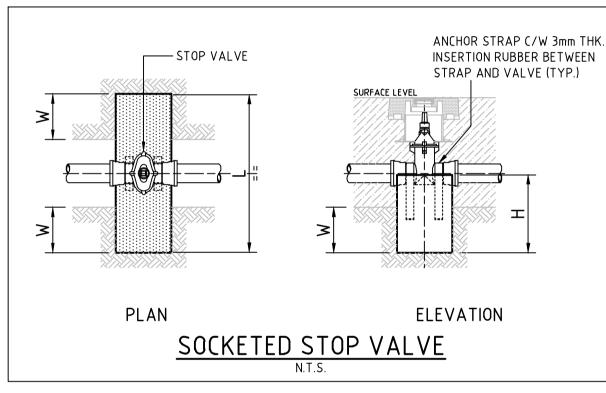
THRUST BLOCK NOTES:

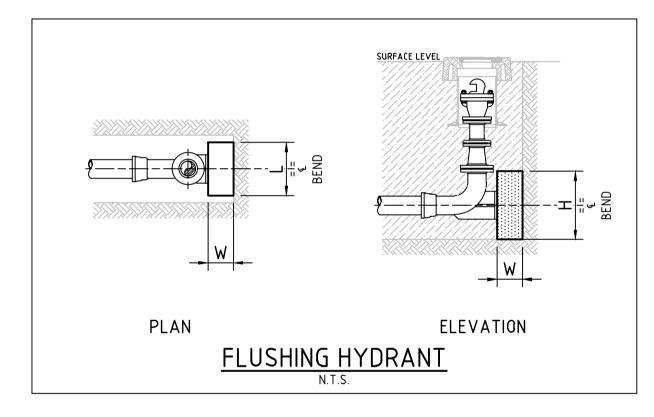
- 1. "N" DENOTES NOMINAL THRUST AREA TO BE ACHIEVED BY POURING CONCRETE THE FULL LENGTH OF THE FITTING AND EXTENDING FROM THE FLOOR OF THE TRENCH TO NOM. 100mm ABOVE THE FITTING.
- 2. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
- 3. THRUST BLOCK DIMENSIONS ARE 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 \$25 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.

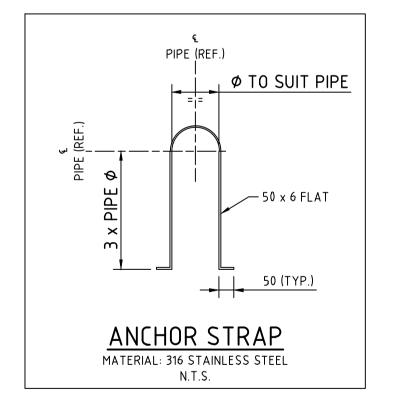
TYPE	FITTING	SOIL AHBP (kPa)	DESIGN STP (kPa)	THRUST	T A (m²)	LENGTH (L)	HEIGHT (H)	WIDTH (W)
1	DN150 x DN100 REDUCING TEE	100	1000	12.00	0.12	0.40	0.30	0.30
2	DN150 SOCKETED STOP VALVE	100	1000	25.00	0.25	1.05	0.46	0.30
3	DN150 FLUSHING HYDRANT	100	1000	25.00	0.25	0.50	0.50	0.30
4	DN100 x DN100 EQUAL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











ORIGIN OF W.A.C. LEVELS

PM 20029
E: 345 612. 914
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:07/06/2021

CONSTRUCTION ISSUE

2

aaw johnson

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

Huntlee Water

PROPERTY DESCRIP	PTION
	PROPOSED SUBDIVISION STAGE 21 FERRY PARADE, HUNTLEE

PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION

PLAN TITLE

THRUST BLOCK DETAILS

SURVEYED DATUM PROJECT No. DISCIPLINE NUMBER
ADW Johnson A.H.D. 240037(21) - WAC - 022