A1

THESE PLANS SHALL ONLY BE REPRODUCED IN COLOUR

WORK-AS-CONSTRUCTED

THE GABLES
BOX HILL

PRECINCT B

STAGE 2A

PRESSURE SEWER & RECYCLED WATER

LOCALITY PLAN
(NOT TO SCALE)

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No.	REVISION DESCRIPTION	BY	DATE
03	WORK-AS-CONSTRUCTED	D.S.	6/5/22
02	950L TANK OPTION ADDED	D.S.	20/2/21
01	ORIGINAL ISSUE FOR DISCUSSION	D.S.	23/10/20

SERVICE	DATE	REF.

WORK-AS-CONSTRUCTED CERTIFICATION

DEVELOPER: STOCKLAND DEVELOPMENT Pty. Ltd.
PROJECT SUPERVISOR: ROSE ATKINS RIMMER (INFRASTRUCTURE) Pty. Ltd.
CONSTRUCTOR: SPRINGFIELD CIVIL
COMPLETED: W.A.C. PREPARED: 6/5/2022

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
RAR Incorporated in New South Wales
WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
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Quality System Quality Endorsed Company

CLIENT: Stockland altogether.

TITLE: PLAN OF PROPOSED WATER INFRASTRUCTURE SERVICES
THE GABLES DEVELOPMENT - PRECINCT B (STAGE 2A)
RED GABLES ROAD, GABLES
L.G.A. THE HILLS

COVER SHEET

SHEET 1 OF 10

VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO
SCALE: -	DATUM: -	U.B.D. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022

JOB No: 4/23645/B2a

A1

SEWER NOTES

1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A., PRESSURE SEWERAGE CODE OF AUSTRALIA WSA 07-2007 VERSION 1.1 & POLYETHYLENE PIPELINE CODE WSA 01-2004.

2. ALL EQUIPMENT, MATERIALS & ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW & SHALL COMPLY WITH ALTOGETHER GROUP 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 & SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS & LOCATIONS 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.

4. PRESSURE SEWER MAINS SHALL BE BLACK POLYETHYLENE (PE100 PN16) WITH A CREAM STRIPE AS PER WSA 07-2007 & ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A.

5. ALL POLYETHYLENE MAINS ≤DN200 SHALL BE JOINED BY ELECTROFUSION TECHNIQUES IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS. ALL POLYETHYLENE MAINS >DN200 SHALL BE JOINED BY BUTTWELD TECHNIQUES IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS

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 & WATER MAINS.* MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS & FOR ROADWAYS. MAXIMUM PIPE COVER SHALL GENERALLY BE 1.5m, WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1.5m, BUT LESS THAN 2.5m, THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. *THE CONTRACTOR SHALL ENSURE THAT ALL PRESSURE SEWER & 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 2m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE BOX HILL WATER REPRESENTATIVE).

9. ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 & WSA-PS351.

10. ALL BENDS SHALL BE ELECTROFUSION OR BUTTWELD SWEEP BENDS. *FABRICATED BENDS SHALL NOT BE USED IN LIEU.* KNUCKLE ELBOWS ARE NOT PERMITTED.

11. *MINIMUM BENDING RADIUS FOR PN16 PE100 (SDR11) SHALL BE 20 x DN. (ie. 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 GROUP STANDARD DRAWINGS. REFER TO WEBSITE FOR CURRENT VERSION.
    SMALL MAINS (≤ DN110)
    https://information.altogethergroup.com.au/governance/Land__Housing/PSS-1017A-FS.pdf
    LARGE MAINS (> DN110)
    https://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 & CONNECTED TO SURFACE VALVES.

16. ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie 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 & SHALL COMPLY WITH ALTOGETHER GROUP 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 25mm INSTRUMENTATION CONDUIT (ORANGE) AND 1 x 25mm 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.

21. *THE CONSTRUCTOR SHALL PROVIDE BOX HILL 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 & CONFIRMATION IS PROVIDED BY THE BOX HILL WATER REPRESENTATIVE.*

22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.

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 & APPROVAL FOR BACKFILLING GIVEN BY THE BOX HILL WATER REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.*

25. THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 21.3.4) ARE:
    TRAFFICABLE:
    PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / CROSSING (8 Tests)
    NON-TRAFFICABLE:
    PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (11 Tests)

26. BOUNDARY KITS (COMPLETE) SHALL BE eONE SUPPLIED. COLLECTION TANKS SHALL BE INSTALLED WITH BOUNDARY KIT *(REFER ALTOGETHER GROUP STANDARD DRAWINGS PSS-1112-FS & PSS-1113-FS)*, PUMP TO BE INSTALLED BY OTHERS.

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

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

29. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO BOX HILL WATER REQUIREMENTS.

30. ROPE OFF ALL PRESSURE SEWER UNITS & 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 GROUP REQUIREMENTS.

32. *WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER GROUP Q.A. SUBMISSION CHECKLIST.*

RECYCLED WATER NOTES

1. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN DRAWINGS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A. & WSA 03-2011-3.1 (SYDNEY WATER WATER EDITION - 2014).

2. POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.

3. ALL EQUIPMENT, MATERIALS & ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW, SHALL CONFORM WITH THE APPROPRIATE CURRENT AUSTRALIAN STANDARDS & SHALL COMPLY WITH ALTOGETHER GROUP REQUIREMENTS.

4. ALL SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING SERVICES WILL BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORKS. THE CONSTRUCTOR IS TO DETERMINE LEVELS & LOCATIONS 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 SURVEYOR THE POSITION & LEVEL OF ALL EXISTING & PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.

6. MAINS 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 & WATER MAINS.* MINIMUM PIPE COVER SHALL BE 600mm IN FOOTWAYS (TYPE B EMBEDMENT: WAT-1202-V) & FOR ROADWAYS (TYPE L EMBEDMENT: WAT-1204-V). MAXIMUM PIPE COVER SHALL GENERALLY BE 1.5m, WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 1.5m, BUT IS LESS THAN 2.5m, THE MAIN AS A MINIMUM SHALL BE EMBEDDED IN STABILISED SAND. *THE CONTRACTOR SHALL ENSURE THAT ALL RECYCLED WATER & PRESSURE SEWER MAINS HAVE SUFFICIENT VERTICAL SEPARATION AS PER THE CLEARANCE TABLE ADJACENT.*

7. ALL RECYCLED WATER MAINS SHALL BE LILAC ≡PVC (PN16). DIFFERENTIATION OF POTABLE & RECYCLED WATER SYSTEMS SHALL BE AS PER TABLE 4.1 WSA03-2011 WITH BOTH SERVICES BEING CLASSIFIED AS WATERMAINS. RECYCLED WATER MAINS SHALL ALWAYS BE LOWER THAN POTABLE MAINS. 150mm VERTICAL CLEARANCE BETWEEN POTABLE WATER & RECYCLED WATER MAINS SHALL BE PROVIDED.

8. MAXIMUM JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

9. LOCALLY LOWER PIPEWORK IN VICINITY OF STOP VALVES TO ENSURE SUFFICIENT COVER IS MAINTAINED OVER VALVES. LOWERING OF PIPEWORK SHALL 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 & 369. GEOTECHNICAL CONDITIONS SHOULD BE ASSESSED DURING CONSTRUCTION BY THE CONTRACTOR IN ASSOCIATION WITH THE BOX HILL WATER REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCHFILL TYPE & THE ROAD 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 & ALL OTHER FITTINGS SHALL BE THE SAME SIZE AS THROUGH WATER MAIN & ANTICLOCKWISE CLOSING.

13. HYDRANTS MUST NOT BE INSTALLED IN POTENTIAL DRIVEWAY LOCATIONS. HYDRANTS & WATER SERVICES SHALL BE NOMINALLY AT LEAST 5m 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 ALTOGETHER GROUP REQUIREMENTS. REFER TO ALTOGETHER GROUP WEBSITE FOR CURRENT VERSIONS.
    SINGLE SERVICE
    https://information.altogethergroup.com.au/governance/Land__Housing/WAT-1854-FS.pdf
    DUAL SERVICE
    https://information.altogethergroup.com.au/governance/Land__Housing/WAT-1855-FS.pdf

16. PROPERTY SERVICE CONNECTIONS SHALL BE FLUSHED & LOCKED (BY THE BOX HILL WATER REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.

17. SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie ROADWAYS, PATHS etc) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.

18. ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 03-2011-3.1 (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 BOX HILL 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 & CONFIRMATION IS PROVIDED BY THE BOX HILL WATER REPRESENTATIVE.*

22. UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.

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 & APPROVAL FOR BACKFILLING GIVEN BY THE BOX HILL WATER REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.*

25. THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE WATER SUPPLY CODE OF AUSTRALIA ARE:
    TRAFFICABLE:
    PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / CROSSING (8 Tests)
    NON-TRAFFICABLE:
    PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (11 Tests)

    TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 & 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA

26. SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO BOX HILL WATER REQUIREMENTS.

27. PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER GROUP REQUIREMENTS.

28. *WORK-AS-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER GROUP Q.A. SUBMISSION CHECKLIST.*

ALTOGETHER GROUP 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

WORK-AS-CONSTRUCTED

1. THIS DRAWING SET SHALL BE READ IN CONJUNCTION WITH THE HILLS SHIRE COUNCIL STANDARDS, ALTOGETHER GROUP SUPPLEMENTARY MANUAL TO W.S.A.A. & OTHER ASSOCIATED DRAWINGS AND TECHNICAL SPECIFICATIONS.

2. ALL PRESSURE SEWER LATERALS & RECYCLED WATER PROPERTY SERVICE CONNECTIONS CROSSING CARRIAGEWAYS SHALL BE INSTALLED WITHIN INDIVIDUAL SERVICE CONDUITS.

3. THE CONTRACTOR SHALL LOCATE AND IDENTIFY ALL UNDERGROUND SERVICES PRIOR TO COMMENCEMENT OF WORKS AND SHALL REPAIR ANY DAMAGE CAUSED TO SUCH SERVICES DURING THE COURSE OF WORKS. ANY SERVICE LOCATIONS ON THE FOLLOWING DRAWINGS ARE INDICATIVE ONLY.

4. MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENTS AND FOOTPATHS TO P.C.A. AND SUPERINTENDENTS REQUIREMENTS.

5. SUITABLE PROTECTION OF EXISTING ROAD PAVEMENT, KERB AND GUTTER, FOOTPATHS AND ANY EXISTING FEATURES SHALL BE PROVIDED UNTIL THE CONSTRUCTION WORKS ARE COMPLETED.

CLEARANCES BETWEEN PIPELINES & UNDERGROUND SERVICES

Utility (Existing or proposed service)	Minimum horizontal clearance mm		Minimum vertical clearance [1] mm
	New main size		
	≤DN200	>DN200	
Water mains [2] > DN375	600	600	300
Water mains [2] ≤ DN375	300 [4]	600	150
Gas mains	300 [4]	600	150
Telecommunication conduits and cables	300 [4]	600	150
Electricity conduits and cables	500	1000	225 [8]
Stormwater drains	300 [4]	600	150 [9]
Sewers - gravity	1000 [9] / 600	1000 [9] / 600	500 [9]
Sewers - pressure and vacuum	600	600	300 [9]
Kerbs	150	600 [3]	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 2m when passing installations such as poles, pits, and small structures, providing the structures is not destabilised in the process.*
5. *Clearances from kerbs shall be measured from the nearest point of the kerb. For water/sewer <DN375, 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 this is no alterative 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 GROUP REPRESENTATIVE IN WRITING.

PRESSURE SEWER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN75	PE100	PN16	94.5
DN63	PE100	PN16	362.5
DN50	PE100	PN16	843.8
DN40	PE100	PN16	2,829.4
		TOTAL	*4,130.2*

RECYCLED WATER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN100	m.P.V.C.	PN16	1,220.6

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Quality System Quality Endorsed Company

GENERAL NOTES | SHEET 2 OF 10 | VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:	JOB No.
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
SCALE: -	DATUM: -	U.D.S. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022	

A1

WORK-AS-CONSTRUCTED

Precinct B Development Stages

- Stage 1
- Stage 2
- Stage 3
- Stage 4

SHEET 4

SHEET 5

RED ROAD

DRIVE

GABLES

VALLETTA

CATARACT ROAD

BOUNDARY ROAD

FONTANA DRIVE

JANPETER ROAD

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.

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RAR Incorporated in New South Wales

Quality System Endorsed Company

PRESSURE SEWER GENERAL ARRANGEMENT

SHEET 3 OF 10

VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:	JOB No:
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
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WORK-AS-CONSTRUCTED

PRESSURE SEWER LEGEND

X	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
▮	TAPER
FP ●	FLUSHING POINT
TFP ⊙	TEMPORARY FLUSHING POINT
⊠	PROPERTY BOUNDARY KIT
650L ◎	COLLECTION TANK (eONE 650L)
800L ◎	COLLECTION TANK (eONE 800L)
950L ◉	COLLECTION TANK (eONE 950L)
▣	CONTROL/ALARM PANEL
—e—	ELECTRICAL CABLES
▭	FLOW METER
▶	AIR VALVE
PP Ⓐ	PRESSURE MONITORING POINT
ⓜ	REMOTE MONITORED PRESSURE TRANSDUCER
⟩⟨	VERTICAL DEFLECTION

(S) DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN, CONNECTION MADE TO EXISTING MAIN WITH *PLASSON TAPPING SADDLE* IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER *WAT-1108-V*).

(T) DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN, LATERAL CONNECTIONS TO EXISTING MAIN WERE MADE BY MEANS OF A *TEE* ONLY. ***TAPPING SADDLES ARE NOT PERMITTED.***

INSERTED DN200 x 110 TEE WITH DN110 x 75 TAPER ON EXISTING MAIN

INSERTED DN200 x 90 TEE WITH DN90 x 50 TAPER ON EXISTING MAIN

CLOSED S.V. & DISUSED DN50 MAIN

LAID DN75 MAIN GENERALLY 2.2m P.L.

DN75 x 63 TEE WITH DN75 x 63 TAPER

LAID DN63 MAIN GENERALLY 2.2m P.L.

DN63 x 63 TEE WITH DN63 x 50 TAPER

LAID DN50 MAIN GENERALLY 2.2m P.L.

RECOVERED FLUSHING POINT

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN63 MAIN GENERALLY 2.2m P.L.

LAID DN63 MAIN GENERALLY 2.2m P.L.

LAID DN63 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

DN50 x 50 TEE

RECOVERED END CAP

LAID DN75 MAIN GENERALLY 2.2m FROM FUTURE P.L.

SUNBURST

EXISTING

SOMMER

PILASTER

BELFRY

STREET

CIRCUIT

DROMOS

RED

GABLES

ROAD

FUTURE ROAD

(Approx. 225m TO BOUNDARY ROAD)

'A' JOIN LINE - SEE SHEET 5 'A'

'B' JOIN LINE - SEE SHEET 5 'B'

'C' JOIN LINE - SEE SHEET 5 'C'

'D' JOIN LINE - SEE SHEET 5 'D'

'E' JOIN LINE - SEE SHEET 5 'E'

DENOTES LAY MAIN UNDER SERVICE

DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.

AREAS HATCHED THUS NOT DRAINED.

0 10 20 30 40 50 METRES

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PRESSURE SEWER DETAIL PLAN 1				SHEET 4 OF 10	VERSION: WAC
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WORK-AS-CONSTRUCTED

RECOVERED FLUSHING POINT

LAID DN50 MAIN GENERALLY 2.2m P.L.

RECOVERED FLUSHING POINT

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

DN63 x 50 TAPER

DN63 x 50 TEE

LAID DN63 MAIN GENERALLY 2.2m P.L.

DN63 x 50 TEE WITH DN63 x 50 TAPER

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

DN50 x 50 TEE

LAID DN50 MAIN GENERALLY 2.2m P.L.

LAID DN50 MAIN GENERALLY 2.2m P.L.

RECOVERED FLUSHING POINT

LAID DN50 MAIN

INSERTED DN50 x 50 TEE

FUTURE ROAD

SUNBURST

CIRCUIT

SOMMER

BELFRY

STREET

DROMOS

STREET

ROAD

GAMBREL

STREET

GABLES

DORMER

STREET

RED

VALLETTA

DRIVE

ATRIUM STREET

VALLETTA

DRIVE

PRESSURE SEWER LEGEND

X	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
I	TAPER
FP	FLUSHING POINT
TFP	TEMPORARY FLUSHING POINT
	PROPERTY BOUNDARY KIT
650L	COLLECTION TANK (eONE 650L)
800L	COLLECTION TANK (eONE 800L)
950L	COLLECTION TANK (eONE 950L)
	CONTROL/ALARM PANEL
	ELECTRICAL CABLES
	FLOW METER
	AIR VALVE
PP	PRESSURE MONITORING POINT
m	REMOTE MONITORED PRESSURE TRANSDUCER
	VERTICAL DEFLECTION

Ⓢ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING MAIN WITH *PLASSON TAPPING SADDLE* IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER *WAT-1108-V*).

Ⓣ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. LATERAL CONNECTIONS TO EXISTING MAIN WERE MADE BY MEANS OF A *TEE* ONLY. ***TAPPING SADDLES ARE NOT PERMITTED.***

▲ ESMT FOR PADMOUNT SUBSTATION 2.75 W.

DENOTES LAY MAIN UNDER SERVICE

DENOTES LAY MAIN OVER SERVICE

AREAS HATCHED THUS NOT DRAINED.

0 10 20 30 40 50 METRES

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
RAR Incorporated in New South Wales
WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
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Quality Endorsed Company

PRESSURE SEWER DETAIL PLAN 2

SHEET 5 OF 10

VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO
SCALE: 1:500	DATUM: A.H.D.	U.D.S. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022

JOB No. 4/23645/B2a

A1

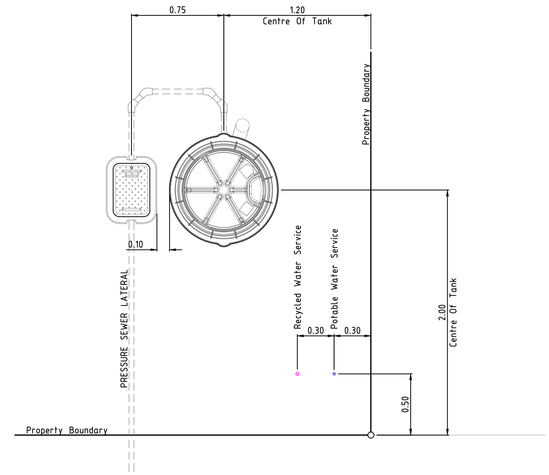
WORK-AS-CONSTRUCTED

PRESSURE SEWER COLLECTION TANK LEVEL DETAILS

THE GABLES DEVELOPMENT - PRECINCT B [STAGE 2A]

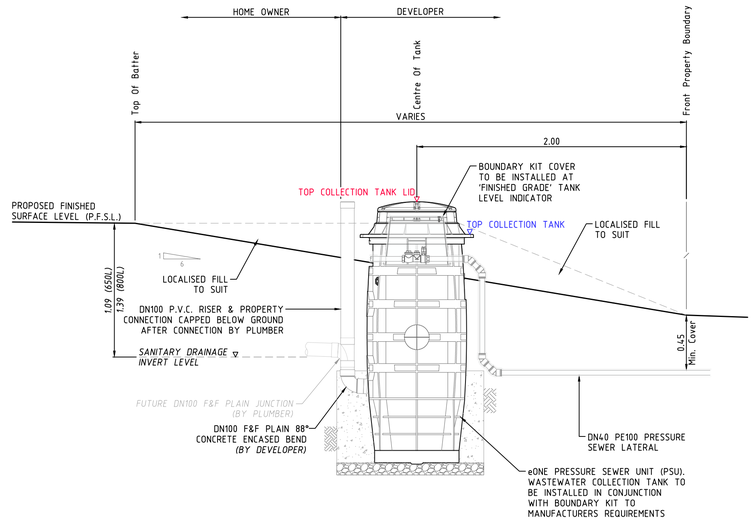
LOT NUMBER	COLLECTION TANK LOCATION	TANK SIZE	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK	DESIGN SANITARY DRAINAGE INVERT LEVEL	*TOP OF COLLECTION TANK LID* *	*CALCULATED SANITARY DRAINAGE INVERT LEVEL*	*WAC v's DESIGN INVERT LEVEL COMPARISON*
	[FRONT / REAR]	*[650L / 800L / 950L]*		*[Design R.L.]*	*[Design R.L.]*	*[Work-As-Constructed]*	*[Work-As-Constructed]*	*[- LOWER / + HIGHER]*
3101	FRONT FLAT	650L	38.30	38.26	37.26	*38.55*	*37.28*	*0.02*
3102	FRONT FLAT	650L	38.28	38.24	37.24	*38.56*	*37.29*	*0.05*
3103	FRONT FLAT	650L	38.16	38.12	37.12	*38.40*	*37.13*	*0.01*
3104	FRONT FLAT	650L	38.01	37.97	36.97	*38.24*	*36.97*	*0.00*
3105	FRONT FLAT	650L	37.86	37.82	36.82	*38.12*	*36.85*	*0.03*
3106	FRONT FLAT	650L	37.66	37.62	36.62	*37.91*	*36.64*	*0.02*
3107	FRONT FLAT	650L	37.38	37.34	36.34	*37.63*	*36.36*	*0.02*
3108	FRONT FLAT	650L	37.35	37.31	36.31	*37.61*	*36.34*	*0.03*
3109	FRONT FLAT	650L	37.20	37.16	36.16	*37.46*	*36.19*	*0.03*
3110	FRONT FLAT	650L	36.89	36.85	35.85	*37.15*	*35.88*	*0.03*
3111	FRONT FLAT	800L	36.84	36.80	35.50	*37.12*	*35.55*	*0.05*
3112	FRONT FLAT	950L	37.53	37.49	35.89	*37.78*	*35.91*	*0.02*
3113	FRONT FLAT	950L	37.93	37.89	36.29	*38.15*	*36.28*	*-0.01*
3114	FRONT FLAT	950L	38.11	38.07	36.47	*38.34*	*36.47*	*0.00*
3115	FRONT FLAT	950L	38.32	38.28	36.68	*38.51*	*36.64*	*-0.04*
3116	FRONT FLAT	950L	38.50	38.46	36.86	*38.71*	*36.84*	*-0.02*
3117	FRONT FLAT	950L	38.53	38.49	36.89	*38.77*	*36.90*	*0.01*
3118	FRONT FLAT	950L	38.90	38.86	37.26	*39.14*	*37.27*	*0.01*
3119	FRONT FLAT	950L	39.08	39.04	37.44	*39.31*	*37.44*	*0.00*
3120	FRONT FLAT	950L	39.25	39.21	37.61	*39.51*	*37.64*	*0.03*
3121	REAR	650L	38.79	38.75	37.75	*39.03*	*37.76*	*0.01*
3122	FRONT FLAT	800L	39.65	39.61	38.31	*39.88*	*38.31*	*0.00*
3123	REAR	800L	40.28	40.24	38.94	*40.53*	*38.96*	*0.02*
3124	FRONT FLAT	950L	41.07	41.03	39.43	*41.28*	*39.41*	*-0.02*
3125	REAR	800L	41.67	41.63	40.33	*41.90*	*40.33*	*0.00*
3126	REAR	800L	42.26	42.22	40.92	*42.54*	*40.97*	*0.05*
3127	REAR	800L	42.92	42.88	41.58	*43.17*	*41.60*	*0.02*
3128	FRONT FLAT	800L	43.12	43.08	41.78	*43.36*	*41.79*	*0.01*
3129	FRONT FLAT	950L	44.06	44.02	42.42	*44.30*	*42.43*	*0.01*
3130	FRONT FLAT	650L	44.13	44.09	43.09	*44.41*	*43.14*	*0.05*
3131	FRONT FLAT	800L	44.82	44.78	43.48	*45.00*	*43.43*	*-0.05*
3132	FRONT FLAT	800L	44.72	44.68	43.38	*44.92*	*43.35*	*-0.03*
3133	FRONT FLAT	650L	44.10	44.06	43.06	*44.35*	*43.08*	*0.02*
3134	FRONT FLAT	800L	44.01	43.97	42.67	*44.19*	*42.62*	*-0.05*
3135	FRONT FLAT	800L	43.38	43.34	42.04	*43.48*	*41.91*	*-0.13*
3136	FRONT FLAT	650L	42.07	42.03	41.03	*42.33*	*41.06*	*0.03*
3137	FRONT FLAT	650L	41.35	41.31	40.31	*41.63*	*40.36*	*0.05*
3138	FRONT FLAT	650L	40.55	40.51	39.51	*40.75*	*39.48*	*-0.03*
3139	FRONT FLAT	650L	39.58	39.54	38.54	*39.80*	*38.53*	*-0.01*
3140	FRONT FLAT	650L	38.82	38.78	37.78	*39.02*	*37.75*	*-0.03*
3141	FRONT FLAT	650L	38.80	38.76	37.76	*39.03*	*37.76*	*0.00*
3142	FRONT FLAT	800L	38.51	38.47	37.17	*38.72*	*37.15*	*-0.02*
3143	REAR	800L	39.37	39.33	38.03	*39.58*	*38.01*	*-0.02*
3144	REAR	800L	40.01	39.97	38.67	*40.21*	*38.64*	*-0.03*
3145	REAR	800L	40.66	40.62	39.32	*40.81*	*39.24*	*-0.08*
3146	FRONT FLAT	950L	41.14	41.10	39.50	*41.32*	*39.45*	*-0.05*
3147	REAR	650L	39.83	39.79	38.79	*40.05*	*38.78*	*-0.01*
3148	REAR	650L	39.67	39.63	38.63	*39.86*	*38.59*	*-0.04*
3149	FRONT FLAT	800L	40.11	40.07	38.77	*40.30*	*38.73*	*-0.04*
3150	FRONT FLAT	800L	39.38	39.34	38.04	*39.57*	*38.00*	*-0.04*
3151	FRONT FLAT	800L	38.87	38.83	37.53	*39.06*	*37.49*	*-0.04*
3152	FRONT FLAT	650L	37.76	37.72	36.72	*37.94*	*36.67*	*-0.05*
3153	FRONT FLAT	650L	38.15	38.11	37.11	*38.34*	*37.07*	*-0.04*
3154	FRONT FLAT	650L	38.28	38.24	37.24	*38.45*	*37.18*	*-0.06*
3155	REAR	800L	38.11	38.07	36.77	*38.34*	*36.77*	*0.00*
3156	REAR	800L	37.73	37.69	36.39	*37.95*	*36.38*	*-0.01*
3157	REAR	800L	37.33	37.29	35.99	*37.56*	*35.99*	*0.00*
3158	REAR	800L	36.91	36.87	35.57	*37.13*	*35.56*	*-0.01*
3159	FRONT FLAT	650L	36.40	36.36	35.36	*36.64*	*35.37*	*0.01*
3160	FRONT FLAT	650L	36.38	36.34	35.34	*36.64*	*35.37*	*0.03*
3161	FRONT FLAT	650L	35.73	35.69	34.69	*36.00*	*34.73*	*0.04*
3162	FRONT FLAT	650L	36.31	36.27	35.27	*36.53*	*35.26*	*-0.01*
3163	FRONT FLAT	650L	36.65	36.61	35.61	*36.89*	*35.62*	*0.01*
3164	FRONT FLAT	650L	36.98	36.94	35.94	*37.20*	*35.93*	*-0.01*
3165	FRONT FLAT	800L	37.35	37.31	36.01	*37.55*	*35.98*	*-0.03*
3166	REAR	800L	37.96	37.92	36.62	*38.21*	*36.64*	*0.02*
3167	REAR	800L	38.45	38.41	37.11	*38.68*	*37.11*	*0.00*
3168	REAR	800L	38.83	38.79	37.49	*39.06*	*37.49*	*0.00*
3169	REAR	800L	37.46	37.42	36.12	*37.68*	*36.11*	*-0.01*
3170	REAR	800L	37.07	37.03	35.73	*37.28*	*35.71*	*-0.02*

* COLLECTION TANK LEVEL PROVIDED TO G.P.S. ACCURACY ONLY. THE BUILDER IS REQUIRED TO CONFIRM DRAINAGE CONSTRAINTS PRIOR TO MAKING CONNECTION TO TANK.



TYPICAL INFRASTRUCTURE SETOUT DIMENSIONS

SCALE 1:25



COLLECTION TANK SECTIONAL ELEVATION

SCALE 1:25

COLLECTION TANK NOTES

1. DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY ENSPIRE DATED 18/6/20 (PB *Design Tin*.dwg).
2. DESIGN LEVELS CAN ONLY BE ASSUMED AS CURRENT AT TIME OF EXTRACTION. ALL LEVELS SHALL BE CONFIRMED WITH THE SITE SUPERINTENDENT *PRIOR* TO INSTALLATION OF TANKS. SHOULD THE PROPOSED FINISHED SURFACE LEVEL (P.F.S.L.) DIFFER FROM DESIGN BY MORE THAN 100mm, THE CONSTRUCTOR SHALL CONTACT THE DESIGNER IMMEDIATELY.
3. COLLECTION TANK SETOUT SHALL BE COMPLIANT WITH *FSI-1000-FS* & *FSI-SK03A-FS*. COLLECTION TANK INSTALLATION LEVELS DOCUMENTED ADJACENT SHALL SUPERSEDE ANY LEVELS ADVISED ON DRAWING FSI-SK03A-FS.
4. R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

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Quality Endorsed Company

COLLECTION TANK LEVEL DETAILS 1

SHEET 6 OF 10

VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:	JOB No.
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
SCALE: -	DATUM: -	U.D.S. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022	

A1

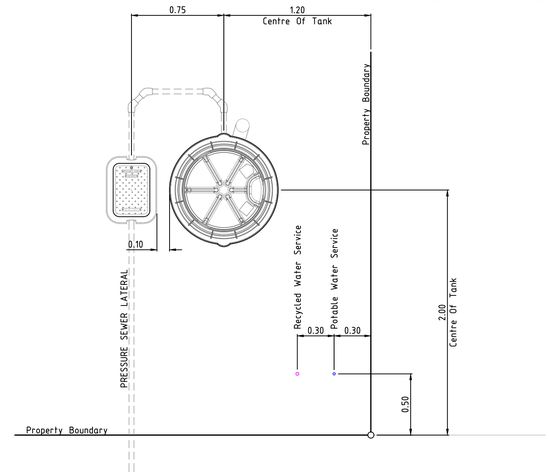
WORK-AS-CONSTRUCTED

PRESSURE SEWER COLLECTION TANK LEVEL DETAILS

THE GABLES DEVELOPMENT - PRECINCT B [STAGE 2A]

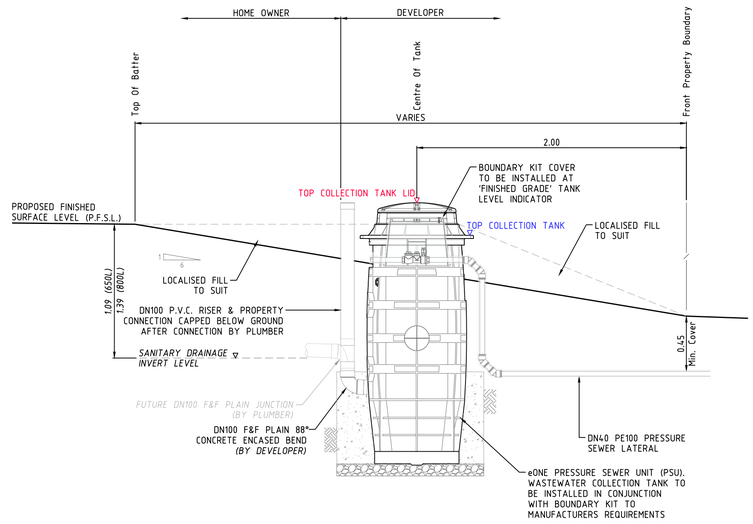
LOT NUMBER	COLLECTION TANK LOCATION	TANK SIZE	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK	DESIGN SANITARY DRAINAGE INVERT LEVEL	*TOP OF COLLECTION TANK LID* *	*CALCULATED SANITARY DRAINAGE INVERT LEVEL*	*WAC v's DESIGN INVERT LEVEL COMPARISON*
	[FRONT / REAR]	*[650L / 800L / 950L]*		*[Design R.L.]*	*[Design R.L.]*	*[Work-As-Constructed]*	*[Work-As-Constructed]*	*[- LOWER / + HIGHER]*
3171	FRONT FLAT	950L	36.98	36.94	35.34	*37.19*	*35.32*	*-0.02*
3172	FRONT FLAT	950L	36.61	36.57	34.97	*36.93*	*35.06*	*0.09*
3173	FRONT FLAT	650L	35.70	35.66	34.66	*35.93*	*34.66*	*0.00*
3174	FRONT FLAT	650L	35.58	35.54	34.54	*35.76*	*34.49*	*-0.05*
3175	FRONT FLAT	800L	35.44	35.40	34.10	*35.84*	*34.27*	*0.17*
3176	FRONT FLAT	800L	35.89	35.85	34.55	*36.10*	*34.53*	*-0.02*
3177	FRONT FLAT	800L	36.30	36.26	34.96	*36.52*	*34.95*	*-0.01*
3178	FRONT FLAT	800L	36.68	36.64	35.34	*36.89*	*35.32*	*-0.02*
3179	FRONT FLAT	650L	36.95	36.91	35.91	*37.23*	*35.96*	*0.05*
3180	FRONT FLAT	800L	37.51	37.47	36.17	*37.75*	*36.18*	*0.01*
3181	FRONT FLAT	650L	37.55	37.51	36.51	*37.83*	*36.56*	*0.05*
3182	FRONT FLAT	800L	37.86	37.82	36.52	*38.14*	*36.57*	*0.05*
3183	FRONT FLAT	650L	38.19	38.15	37.15	*38.46*	*37.19*	*0.04*
3184	FRONT FLAT	800L	38.53	38.49	37.19	*38.77*	*37.20*	*0.01*
3185	FRONT FLAT	800L	38.86	38.82	37.52	*39.10*	*37.53*	*0.01*
3186	FRONT FLAT	650L	39.20	39.16	38.16	*39.45*	*38.18*	*0.02*
3187	FRONT FLAT	800L	39.53	39.49	38.19	*39.77*	*38.20*	*0.01*
3188	FRONT FLAT	650L	39.59	39.55	38.55	*39.83*	*38.56*	*0.01*
3189	FRONT FLAT	800L	40.21	40.17	38.87	*40.45*	*38.88*	*0.01*
3190	FRONT FLAT	800L	40.54	40.50	39.20	*40.76*	*39.19*	*-0.01*
3191	FRONT FLAT	800L	40.88	40.84	39.54	*41.10*	*39.53*	*-0.01*
3192	FRONT FLAT	800L	41.21	41.17	39.87	*41.42*	*39.85*	*-0.02*
3193	FRONT FLAT	800L	41.55	41.51	40.21	*41.75*	*40.18*	*-0.03*
3194	FRONT FLAT	800L	41.89	41.85	40.55	*42.07*	*40.50*	*-0.05*
3195	FRONT FLAT	650L	41.96	41.92	40.92	*42.20*	*40.93*	*0.01*
3196	REAR	650L	43.97	43.93	42.93	*44.19*	*42.92*	*-0.01*
3197	REAR	650L	43.85	43.81	42.81	*44.05*	*42.78*	*-0.03*
3198	REAR	800L	43.52	43.48	42.18	*43.70*	*42.13*	*-0.05*
3199	REAR	800L	43.15	43.11	41.81	*43.39*	*41.82*	*0.01*
3200	REAR	800L	42.73	42.69	41.39	*42.93*	*41.36*	*-0.03*
3201	REAR	800L	42.31	42.27	40.97	*42.54*	*40.97*	*0.00*
3202	REAR	800L	41.90	41.86	40.56	*42.14*	*40.57*	*0.01*
3203	REAR	800L	41.47	41.43	40.13	*41.72*	*40.15*	*0.02*
3204	REAR	800L	41.05	41.01	39.71	*41.31*	*39.74*	*0.03*
3205	REAR	800L	40.63	40.59	39.29	*40.88*	*39.31*	*0.02*
3206	REAR	800L	40.21	40.17	38.87	*40.43*	*38.86*	*-0.01*
3207	REAR	800L	39.80	39.76	38.46	*40.03*	*38.46*	*0.00*
3208	REAR	800L	39.37	39.33	38.03	*39.63*	*38.06*	*0.03*
3209	REAR	800L	38.95	38.91	37.61	*39.18*	*37.61*	*0.00*
3210	REAR	650L	38.53	38.49	37.49	*38.78*	*37.51*	*0.02*
3211	FRONT FLAT	950L	38.82	38.78	37.18	*39.07*	*37.20*	*0.02*
3212	FRONT FLAT	800L	39.40	39.36	38.06	*39.68*	*38.11*	*0.05*
3213	FRONT FLAT	800L	39.68	39.64	38.34	*39.95*	*38.38*	*0.04*
3214	FRONT FLAT	800L	40.15	40.11	38.81	*40.42*	*38.85*	*0.04*
3215	FRONT FLAT	800L	40.65	40.61	39.31	*40.88*	*39.31*	*0.00*
3216	FRONT FLAT	800L	41.15	41.11	39.81	*41.40*	*39.83*	*0.02*
3217	FRONT FLAT	800L	41.65	41.61	40.31	*41.94*	*40.37*	*0.06*
3218	FRONT FLAT	800L	42.15	42.11	40.81	*42.39*	*40.82*	*0.01*
3219	FRONT FLAT	800L	42.65	42.61	41.31	*42.86*	*41.29*	*-0.02*
3220	FRONT FLAT	800L	43.14	43.10	41.80	*43.35*	*41.78*	*-0.02*
3221	FRONT FLAT	800L	43.64	43.60	42.30	*43.82*	*42.25*	*-0.05*
3222	FRONT FLAT	800L	44.13	44.09	42.79	*44.31*	*42.74*	*-0.05*
3223	FRONT FLAT	800L	44.63	44.59	43.29	*44.91*	*43.34*	*0.05*
3224	FRONT FLAT	800L	45.10	45.06	43.76	*45.32*	*43.75*	*-0.01*
3225	FRONT FLAT	650L	45.43	45.39	44.39	*45.67*	*44.40*	*0.01*
3226	FRONT FLAT	650L	45.57	45.53	44.53	*45.76*	*44.49*	*-0.04*
3227	FRONT FLAT	650L	45.58	45.54	44.54	*45.77*	*44.50*	*-0.04*
3228	FRONT FLAT	650L	45.40	45.36	44.36	*45.66*	*44.39*	*0.03*
3229	FRONT FLAT	650L	45.38	45.34	44.34	*45.69*	*44.42*	*0.08*
3230	FRONT FLAT	650L	45.23	45.19	44.19	*45.52*	*44.25*	*0.06*
3231	FRONT FLAT	650L	44.94	44.90	43.90	*45.17*	*43.90*	*0.00*
3232	FRONT FLAT	800L	45.95	45.91	44.61	*46.13*	*44.56*	*-0.05*
3233	FRONT FLAT	650L	46.33	46.29	45.29	*46.55*	*45.28*	*-0.01*
3234	FRONT FLAT	650L	46.38	46.34	45.34	*46.60*	*45.33*	*-0.01*
3235	REAR	650L	46.70	46.66	45.66	*46.92*	*45.65*	*-0.01*
3236	REAR	650L	46.95	46.91	45.91	*47.21*	*45.94*	*0.03*
3237	REAR	650L	46.99	46.95	45.95	*47.21*	*45.94*	*-0.01*
3238	REAR	650L	47.00	46.96	45.96	*47.24*	*45.97*	*0.01*
3239	REAR	650L	47.04	47.00	46.00	*47.27*	*46.00*	*0.00*
3240	REAR	800L	46.78	46.74	45.44	*47.04*	*45.47*	*0.03*
3241	REAR	800L	46.41	46.37	45.07	*46.63*	*45.06*	*-0.01*
3242	REAR	800L	45.96	45.92	44.62	*46.25*	*44.68*	*0.06*
3243	REAR	800L	45.49	45.45	44.15	*45.67*	*44.10*	*-0.05*
3244	REAR	800L	45.02	44.98	43.68	*45.27*	*43.70*	*0.02*
3245	REAR	800L	44.55	44.51	43.21	*44.80*	*43.23*	*0.02*
3246	REAR	800L	44.05	44.01	42.71	*44.29*	*42.72*	*0.01*
3247	REAR	800L	43.53	43.49	42.19	*43.79*	*42.22*	*0.03*
3248	REAR	800L	42.98	42.94	41.64	*43.25*	*41.68*	*0.04*
3249	REAR	800L	42.41	42.37	41.07	*42.70*	*41.13*	*0.06*
3250	REAR	800L	41.84	41.80	40.50	*42.09*	*40.52*	*0.02*
3251	REAR	800L	41.27	41.23	39.93	*41.46*	*39.89*	*-0.04*
3252	REAR	650L	40.70	40.66	39.66	*40.93*	*39.66*	*0.00*
3253	FRONT FLAT	950L	40.70	40.66	39.06	*40.91*	*39.04*	*-0.02*

* COLLECTION TANK LEVEL PROVIDED TO G.P.S. ACCURACY ONLY. THE BUILDER IS REQUIRED TO CONFIRM DRAINAGE CONSTRAINTS PRIOR TO MAKING CONNECTION TO TANK.



TYPICAL INFRASTRUCTURE SETOUT DIMENSIONS

SCALE 1:25



COLLECTION TANK SECTIONAL ELEVATION

SCALE 1:25

COLLECTION TANK NOTES

1. DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY ENSPIRE DATED 18/6/20 (PB *Design Tin.dwg*).
2. DESIGN LEVELS CAN ONLY BE ASSUMED AS CURRENT AT TIME OF EXTRACTION. ALL LEVELS SHALL BE CONFIRMED WITH THE SITE SUPERINTENDENT *PRIOR* TO INSTALLATION OF TANKS. SHOULD THE PROPOSED FINISHED SURFACE LEVEL (P.F.S.L.) DIFFER FROM DESIGN BY MORE THAN 100mm, THE CONSTRUCTOR SHALL CONTACT THE DESIGNER IMMEDIATELY.
3. COLLECTION TANK SETOUT SHALL BE COMPLIANT WITH *FSI-1000-FS* & *FSI-SK03A-FS*. COLLECTION TANK INSTALLATION LEVELS DOCUMENTED ADJACENT SHALL SUPERSEDE ANY LEVELS ADVISED ON DRAWING FSI-SK03A-FS.
4. R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
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COLLECTION TANK LEVEL DETAILS 2

SHEET 7 OF 10

VERSION: WAC

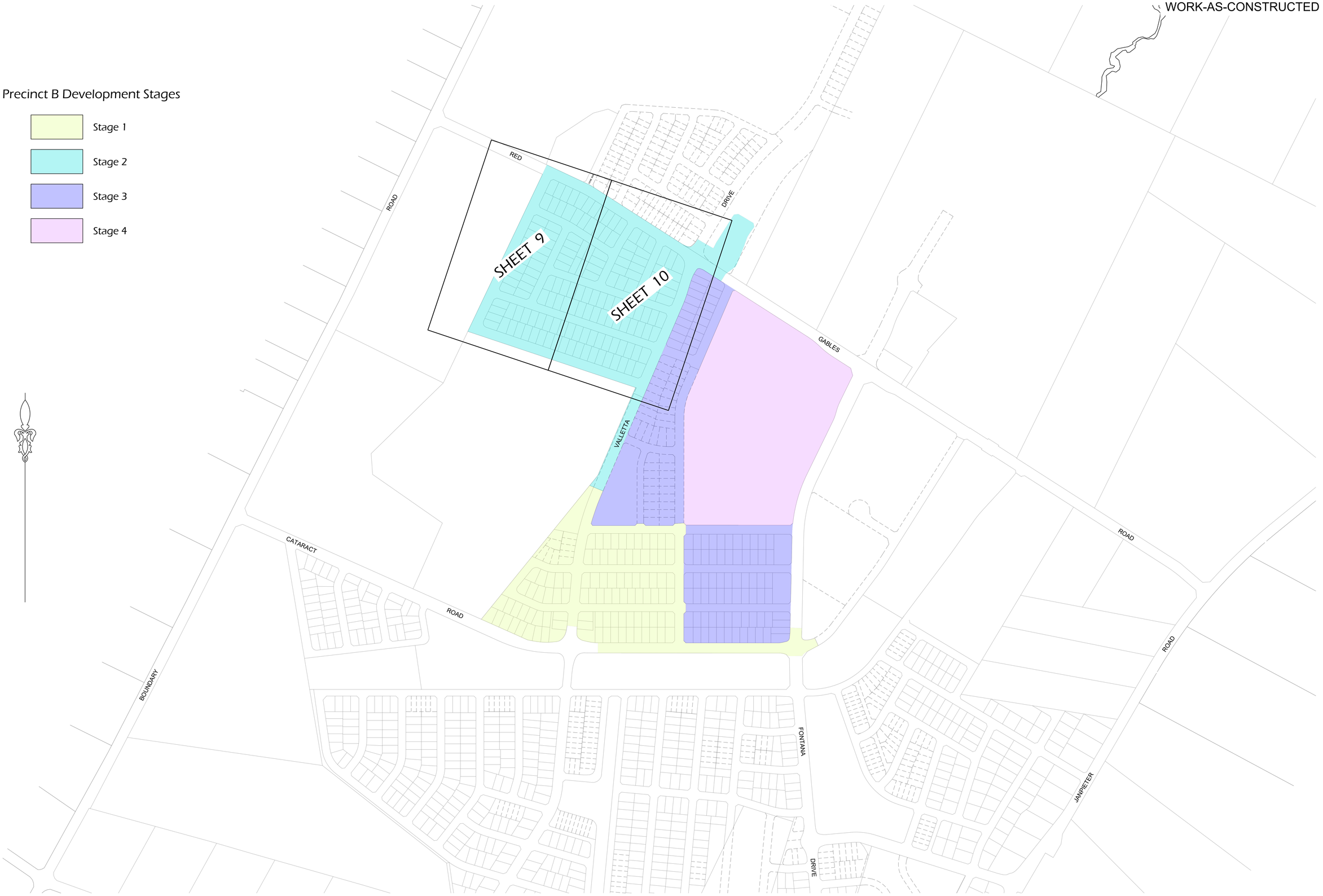
DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:	JOB No.
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
SCALE: -	DATUM: -	U.B.D. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022	

A1

WORK-AS-CONSTRUCTED

Precinct B Development Stages

- Stage 1
- Stage 2
- Stage 3
- Stage 4



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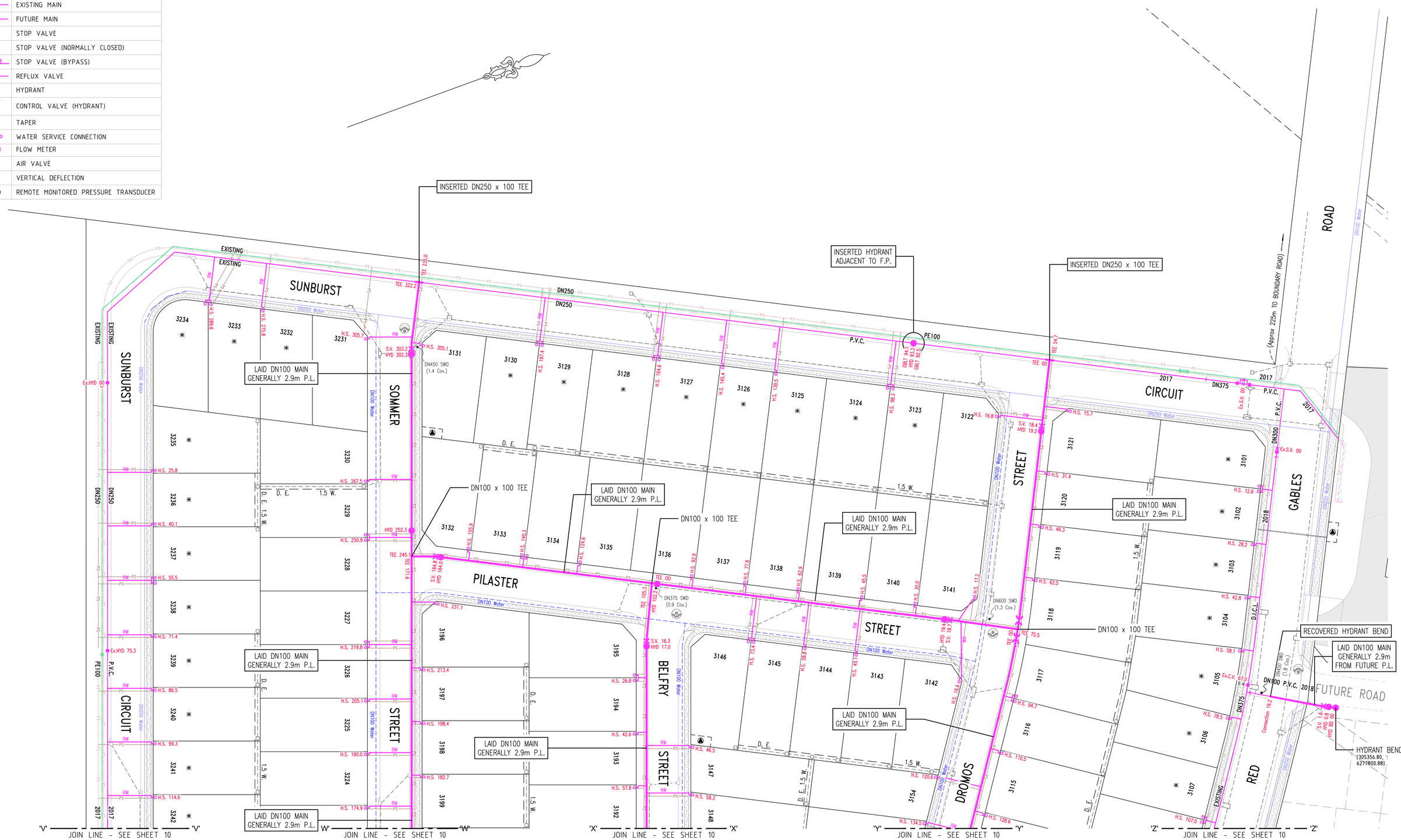
RECYCLED WATER GENERAL ARRANGEMENT				SHEET 8 OF 10	VERSION: WAC
DRAFTED: D.SHEATHER	DESIGNED: D.SHEATHER	REVIEWED: K.GAO	VERIFIED: K.GAO	JOB No: 4/23645/B2a	
SCALE: -	DATUM: -	U.B.D. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022		

A1

WORK-AS-CONSTRUCTED

RECYCLED WATER LEGEND

	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
×	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
CV	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
PT	REMOTE MONITORED PRESSURE TRANSDUCER



DENOTES LAY MAIN UNDER SERVICE

DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.

✳ DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN

0 10 20 30 40 50 METRES

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RECYCLED WATER DETAIL PLAN 1

SHEET 9 OF 10

VERSION: WAC

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D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
SCALE: 1:500	DATUM: -	U.D.D. REFERENCE: 88 H15	DATE OF ISSUE: 6/5/2022	

A1

WORK-AS-CONSTRUCTED

RECYCLED WATER LEGEND

	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
×	STOP VALVE
⊗	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
CV	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
(m)	REMOTE MONITORED PRESSURE TRANSDUCER

NOTE D1
- EXISTING SACRIFICIAL S.V. ABANDONED AT THE TIME OF CONNECTION,
- S.V. OPENED UPON CONNECTION,
- EXTENSION SPINDLE REMOVED & DISPOSED OF,
- SURFACE FITTINGS REMOVED & DISPOSED OF, &
- OPEN S.V.'s BURIED.

DENOTES LAY MAIN UNDER SERVICE
DENOTES LAY MAIN OVER SERVICE

ESMT FOR PADMOUNT SUBSTATION 2.75 W.

* DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN

0 10 20 30 40 50 METRES

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RECYCLED WATER DETAIL PLAN 2

SHEET 10 OF 10 | VERSION: WAC

DRAFTED:	DESIGNED:	REVIEWED:	VERIFIED:	JOB No.
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/B2a
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