



THE GABLES

BOX HILL

PRECINCT H

STAGE 6A

PRESSURE SEWER & RECYCLED WATER



LOCALITY PLAN
(NOT TO SCALE)

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No.	REVISION DESCRIPTION	BY	DATE
03	WORK-AS-CONSTRUCTED	D.S.	19/7/24
02	FONTANA DRIVE BOUNDARY ADJUSTMENTS	D.S.	17/8/23
01	ORIGINAL ISSUE FOR DISCUSSION	D.S.	7/7/23

SERVICE: _____ DATE: _____ REF: _____			WORK-AS-CONSTRUCTED CERTIFICATION DEVELOPER: STOCKLAND DEVELOPMENT Pty. Ltd. PROJECT SUPERVISOR: ROSE ATKINS RIMMER (INFRASTRUCTURE) Pty. Ltd. CONSTRUCTOR: SPRINGFIELD CIVIL Pty. Ltd. COMPLETED: W.A.C. PREPARED: JULY 2024			ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd. WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT RAR SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399			CLIENT: Stockland altogether.			TITLE: PLAN OF PROPOSED WATER INFRASTRUCTURE SERVICES THE GABLES DEVELOPMENT - PRECINCT H (STAGE 6A) BARLOW BOULEVARD, GABLES L.G.A. THE HILLS			COVER SHEET SHEET 1 OF 12				VERSION: WAC
DRAWN: D.SHEATHER		CHECKED: D.SHEATHER		REVIEWED: K.GAO		VERIFIED: K.GAO		AS No. 4/23645/H6A		SCALE: -		DATE: -		DATE OF ISSUE: 19/7/2024		B.A.S. REFERENCE: 108 L3-L5			

SEWER NOTES

- 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.
- ALL EQUIPMENT, MATERIALS & ACCESSORIES USED IN THIS CONTRACT SHALL BE NEW & SHALL COMPLY WITH ALTOGETHER GROUP REQUIREMENTS. *BUTT FUSION FITTINGS DENOTED HERE WITH 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 & 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.
- 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.
- ALL POLYETHYLENE MAINS <DN200 SHALL BE JOINED BY ELECTROFUSION TECHNIQUES IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS. ALL POLYETHYLENE MAINS >DN200 SHALL BE JOINED BY BUTTWELDED TECHNIQUES IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS
- MAIN TO BE LAID GENERALLY AS INDICATED IN SERVICE ALLOCATION DIAGRAMS. INSTRUCTION NOTES SHALL TAKE PRECEDENCE OVER DIAGRAMS WHERE PROVIDED. *600mm HORIZONTAL CLEARANCE TO BE MAINTAINED BETWEEN ALL SEWER & WATER MAINS.* MINIMUM PIPE COVER SHALL BE 800mm IN FOOTWAYS & FOR ROADWAYS. MAXIMUM PIPE COVER SHALL GENERALLY BE 15m. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 15m, BUT LESS THAN 25m, 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.*
- MAINS CROSSING UNDER EXISTING DRIVEWAYS (SEALED, PAVED OR DECORATIVE) SHALL BE CONDUCTED BY UNDER BORING ONLY UNLESS PERMISSION IS GRANTED BY THE AFFECTED PROPERTY OWNER.
- MAINS WITHIN 2m OF ELECTRICITY OR POWER POLES SHALL BE CONDUCTED BY BORING TECHNOLOGY (UNLESS AGREED TO BY THE ALTOGETHER GROUP REPRESENTATIVE).
- ALL PIPE BEDDING MATERIAL SHALL COMPLY WITH WSAA PRODUCT SPECIFICATION WSA-PS350 & WSA-PS351.
- ALL BENDS SHALL BE ELECTROFUSION OR BUTTWELDED SWEEP BENDS. *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 (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*
- ALL HOUSE SERVICE LATERALS SHALL BE DN40 (PE100 PN16).*
- 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
- 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).
- DETECTABLE MARKING TAPE SHALL BE LAID ON TOP OF THE PIPE EMBEDMENT MATERIAL BEFORE BACKFILLING & CONNECTED TO SURFACE VALVES.
- ALL SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie ROADWAYS, PATHS etc) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPE SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- 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.
- ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 07-2007 Version 1.1.
- 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.*
- THE CONSTRUCTOR SHALL PROVIDE ALTOGETHER GROUP 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 ALTOGETHER GROUP REPRESENTATIVE.*
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
- BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED & APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER GROUP REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CO-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.*
- THE MINIMUM NUMBER OF COMPACTION TESTS REQUIRED TO SATISFY THE PRESSURE SEWER CODE OF AUSTRALIA (CLAUSE 213.4) ARE:
TRAFFICABLE:
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / CROSSING (5 Tests)
NON-TRAFFICABLE:
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (13 Tests)
- BOUNDARY KITS (COMPLETE) SHALL BE ONE 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.
- ALL MAINS (UP TO THE BOUNDARY KIT) SHALL BE PRESSURE TESTED TO 1600 kPa.*
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER GROUP REQUIREMENTS.
- ROPE OFF ALL PRESSURE SEWER UNITS & FLUSHING POINTS TO LIMIT DAMAGE DURING CONSTRUCTION.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER GROUP REQUIREMENTS.
- WORK-AS-CO-CONSTRUCTED DOCUMENTATION SHALL BE PROVIDED BY THE CONTRACTOR STRICTLY IN ACCORDANCE WITH THE ALTOGETHER GROUP Q.A. SUBMISSION CHECKLIST.*

RECYCLED WATER NOTES

- 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).
- POTABLE WATER SHALL BE UTILISED FOR FIRE FIGHTING PURPOSES.
- 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.
- 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.
- THE CONSTRUCTOR SHALL VERIFY WITH THE SITE SURVEYOR THE POSITION & LEVEL OF ALL EXISTING & PROPOSED BOUNDARIES PERTINENT TO THE INFRASTRUCTURE INSTALLATIONS.
- 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-V1) & FOR ROADWAYS (TYPE L EMBEDMENT: WAT-1204-V1). MAXIMUM PIPE COVER SHALL GENERALLY BE 15m. WHERE COVER FOR A TRENCHED INSTALLATION EXCEEDS 15m, BUT IS LESS THAN 25m, 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.*
- ALL RECYCLED WATER MAINS SHALL BE LILAC mPVC (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.
- MAXIMUM JOINT DEFLECTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- 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.
- 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 ALTOGETHER GROUP REPRESENTATIVE TO DETERMINE THE NEED TO MODIFY EMBEDMENT/TRENCHFILL TYPE & THE ROAD FOR TRENCH DRAINAGE/BULKHEADS.
- DURING CONSTRUCTION, ALL OPEN ENDS OF PIPES SHALL BE CAPPED OFF TO PREVENT ENTRY OF FOREIGN MATTER.
- HYDRANTS, STOP VALVES & ALL OTHER FITTINGS SHALL BE THE SAME SIZE AS THROUGH WATER MAIN & ANTICLOCKWISE CLOSING.
- 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.
- THRUST BLOCKS SHALL BE INSTALLED IN ACCORDANCE WITH WAT-1205.
- 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
- PROPERTY SERVICE CONNECTIONS SHALL BE FLUSHED & LOCKED (BY THE ALTOGETHER GROUP REPRESENTATIVE) FOLLOWING SUCCESSFUL PRESSURE TESTING.
- SURFACE FITTINGS LOCATED IN TRAFFICABLE AREAS (ie ROADWAYS, PATHS etc) SHALL HAVE HEAVY DUTY SURROUNDS INSTALLED.
- ALL MAINS SHALL BE TESTED IN ACCORDANCE WITH WSA 03-2011-3.1 (SYDNEY WATER EDITION - 2014).
- ALL MAINS SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS PRIOR TO COMMISSIONING.
- WATER QUALITY TESTING SHALL BE IN ACCORDANCE WITH WSA 03-2011-3.1 (SYDNEY WATER EDITION - 2014; CLAUSE 19.7).
- THE CONSTRUCTOR SHALL PROVIDE ALTOGETHER GROUP 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 ALTOGETHER GROUP REPRESENTATIVE.*
- UPON COMPLETION OF WORKS, ALL SURFACES MUST BE RESTORED AS CLOSE AS POSSIBLE, TO THE CONDITION THAT EXISTED PRIOR TO COMMENCEMENT OF WORK.
- PERMISSION OF ENTRY MUST BE OBTAINED BY THE CONTRACTOR FROM THE OWNER/OCCUPIER PRIOR TO COMMENCEMENT OF WORK IN PRIVATE PROPERTY.
- BURIED FITTINGS ARE NOT TO BE BACKFILLED UNTIL W.A.C. DETAILS HAVE BEEN OBTAINED & APPROVAL FOR BACKFILLING GIVEN BY THE ALTOGETHER GROUP REPRESENTATIVE. *THE CONTRACTOR SHALL PROVIDE M.G.A. COORDINATED WORK-AS-CO-CONSTRUCTED INFORMATION REGARDING THE INSTALLATION OF ALL BURIED FITTINGS.*
- 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 (6 Tests)
NON-TRAFFICABLE:
PIPE EMBEDMENT ZONE: NIL TRENCH FILL ZONE: 1 TEST / 100m (14 Tests)

TESTING SHALL BE IN ACCORDANCE WITH TABLE 16.1 & 17.1 OF THE WATER SUPPLY CODE OF AUSTRALIA
- SURFACE IDENTIFICATION MARKERS ARE TO BE PROVIDED TO ALTOGETHER GROUP REQUIREMENTS.
- PRESSURE TRANSMITTER TO BE MEASUREX MRB21 GENERAL PURPOSE TRANSMITTER WITH MICROSPIDER LOGGING TELEMETRY AND ALARM PER ALTOGETHER GROUP REQUIREMENTS.
- WORK-AS-CO-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

- 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.
- ALL PRESSURE SEWER LATERALS & RECYCLED WATER PROPERTY SERVICE CONNECTIONS CROSSING CARRIAGEWAYS SHALL BE INSTALLED WITHIN INDIVIDUAL SERVICE CONDUITS.
- 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.
- MAKE SMOOTH TRANSITION TO EXISTING WORKS (i.e. ROAD PAVEMENTS AND FOOTPATHS TO P.C.A. AND SUPERINTENDENTS REQUIREMENTS).
- 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 ¹ > DN375	600	600	300
Water mains ¹ < DN375	300*	600	150
Gas mains	300*	600	150
Telecommunication conduits and cables	300*	600	150
Electricity conduits and cables	500	1000	225*
Stormwater drains	300*	600	150*
Sewers - gravity	1000*/ 600	1000*/ 600	500*
Sewers - pressure and vacuum	600	600	300*
Kerbs	150	600*	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 of 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 not 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 GROUP REPRESENTATIVE IN WRITING.

RECYCLED WATER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN100	m.P.V.C.	PN16	1,390.9

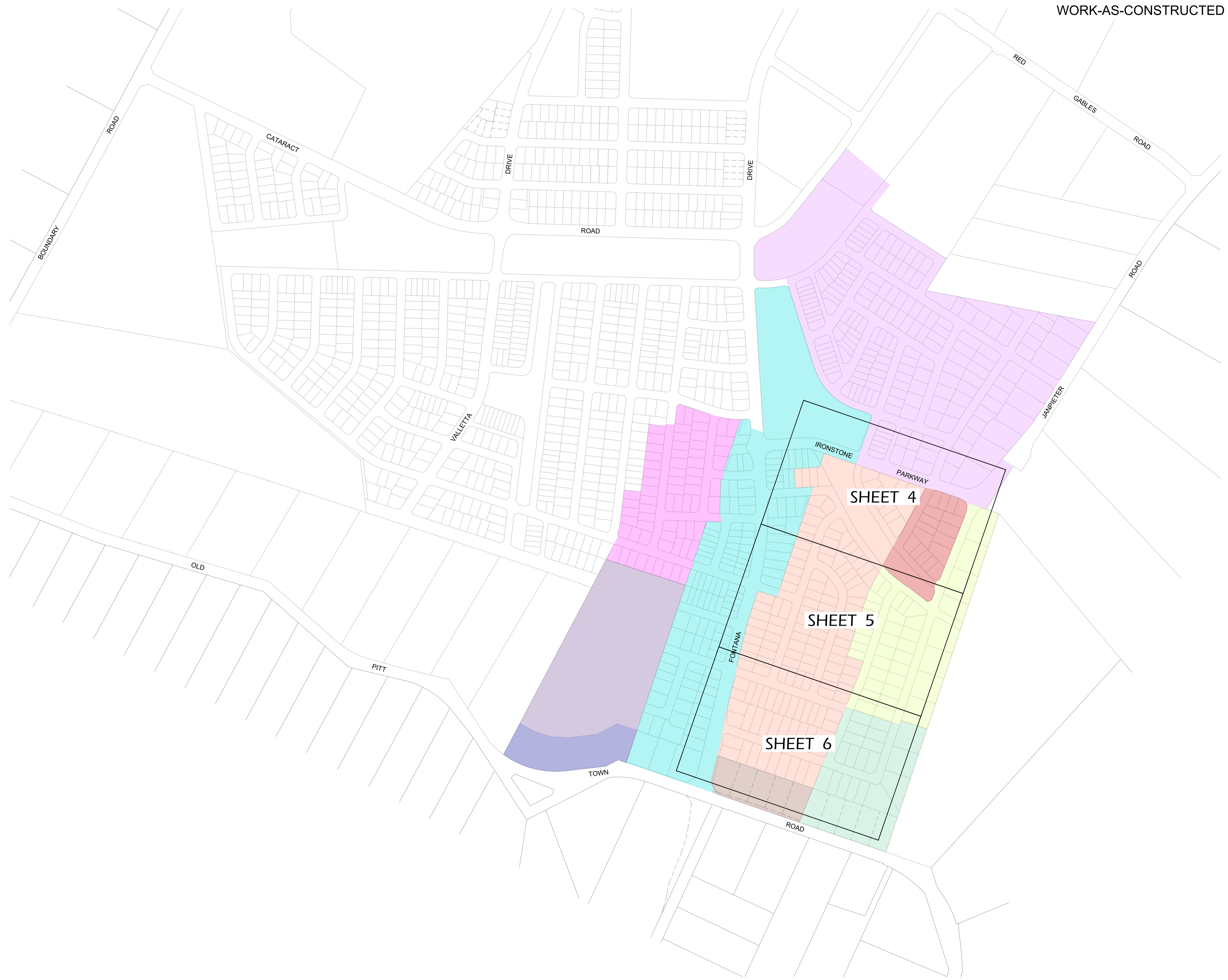
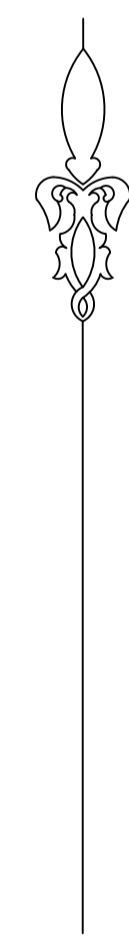
PRESSURE SEWER PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
DN63	PE100	PN16	271.1
DN50	PE100	PN16	1,094.1
DN40	PE100	PN16	2,444.1
TOTAL			3,809.3

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.  WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT SHOP 7 & 8 'M CENTRE' 40 STERLING ROAD, MINCHINBURY NSW 2770 PH: (02) 9853 0200 FAX: (02) 9671 7399				GENERAL NOTES		SHEET 2 OF 12 ^{VERSION} WAC	
DRAFTER: D.SHEATHER SCALE: -	DESIGNER: D.SHEATHER DATE: -	REVIEWER: K.GAO DATE: -	VERIFIED: K.GAO DATE OF ISSUE: 19/7/2024	4/23645/H6A			

Precinct H Development Stages

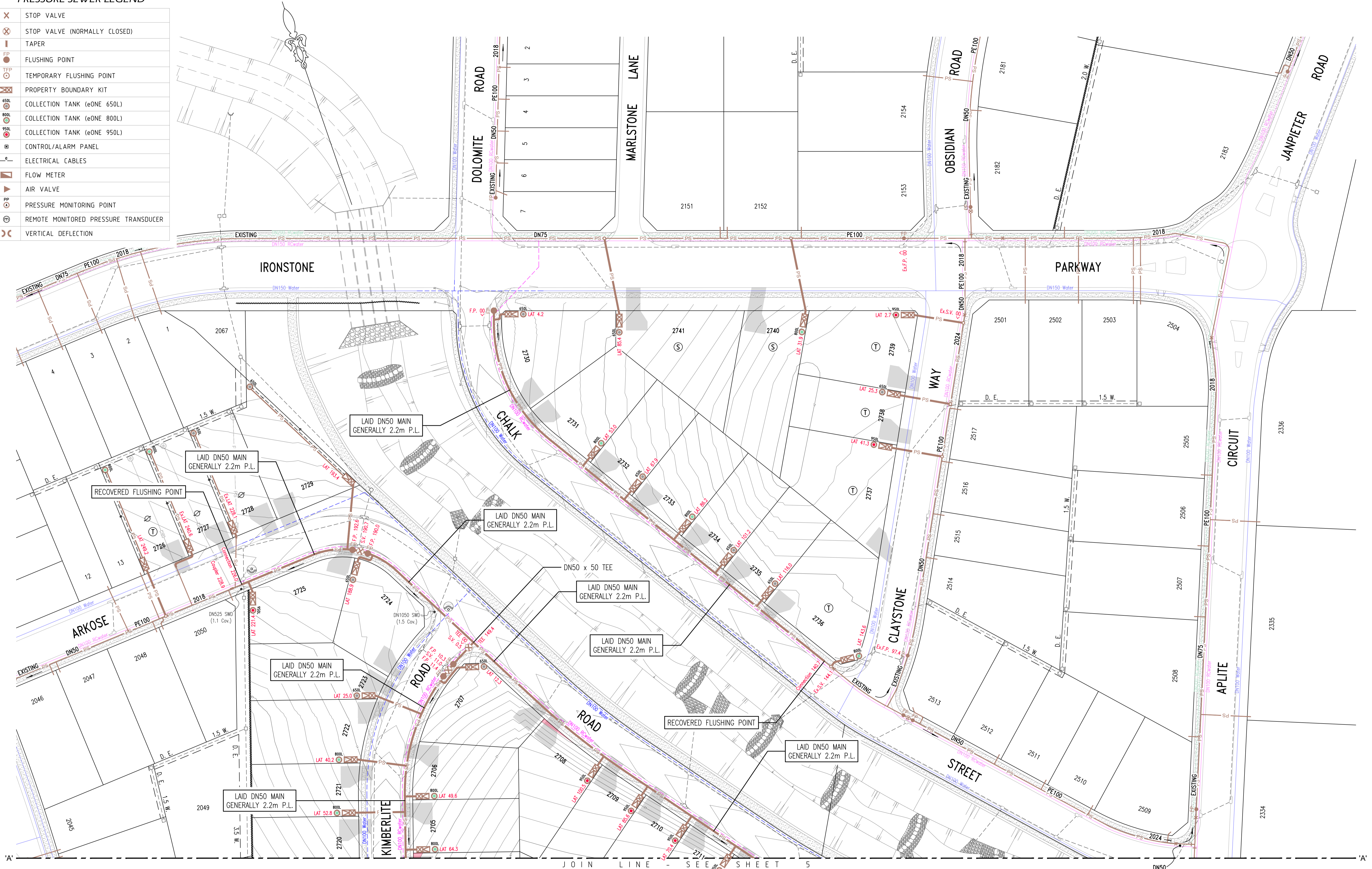
- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Stage 5
- Stage 6A
- Stage 6B
- Stage 7A
- Stage 7B
- Stage 7C



<p>ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd. <small>WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT</small> RAR <small>Incorporated in New South Wales</small></p>		PRESSURE SEWER GENERAL ARRANGEMENT				SHEET 3 OF 12	WAC											
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 6px;">DRAWN:</td> <td style="font-size: 6px;">DESIGNED:</td> <td style="font-size: 6px;">REVISED:</td> <td style="font-size: 6px;">CHECKED:</td> </tr> <tr> <td style="font-size: 6px;">D.SHEATHER</td> <td style="font-size: 6px;">D.SHEATHER</td> <td style="font-size: 6px;">K.GAO</td> <td style="font-size: 6px;">K.GAO</td> </tr> <tr> <td style="font-size: 6px;">SCALE:</td> <td style="font-size: 6px;">DATE:</td> <td style="font-size: 6px;">W.A.S. REFERENCE:</td> <td style="font-size: 6px;">DATE OF ISSUE:</td> </tr> <tr> <td style="font-size: 6px;">-</td> <td style="font-size: 6px;">-</td> <td style="font-size: 6px;">108 L3-L5</td> <td style="font-size: 6px;">19/7/2024</td> </tr> </table>	DRAWN:	DESIGNED:	REVISED:	CHECKED:	D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	SCALE:	DATE:	W.A.S. REFERENCE:	DATE OF ISSUE:	-	-	108 L3-L5	19/7/2024
DRAWN:	DESIGNED:	REVISED:	CHECKED:															
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO															
SCALE:	DATE:	W.A.S. REFERENCE:	DATE OF ISSUE:															
-	-	108 L3-L5	19/7/2024															

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
Ⓜ	REMOTE MONITORED PRESSURE TRANSDUCER
∩	VERTICAL DEFLECTION

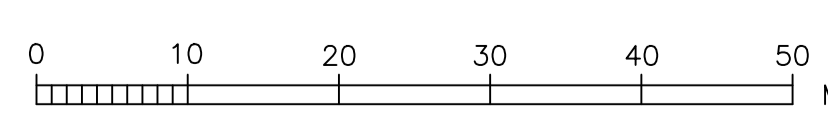


Ⓜ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

Ⓜ 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.

⊗ DENOTES EXISTING PROPERTY SERVICE DISUSED & REMOVED

AREAS HATCHED THUS NOT DRAINED.



Ⓜ DENOTES LAY MAIN UNDER SERVICE

Ⓜ DENOTES LAY MAIN OVER SERVICE

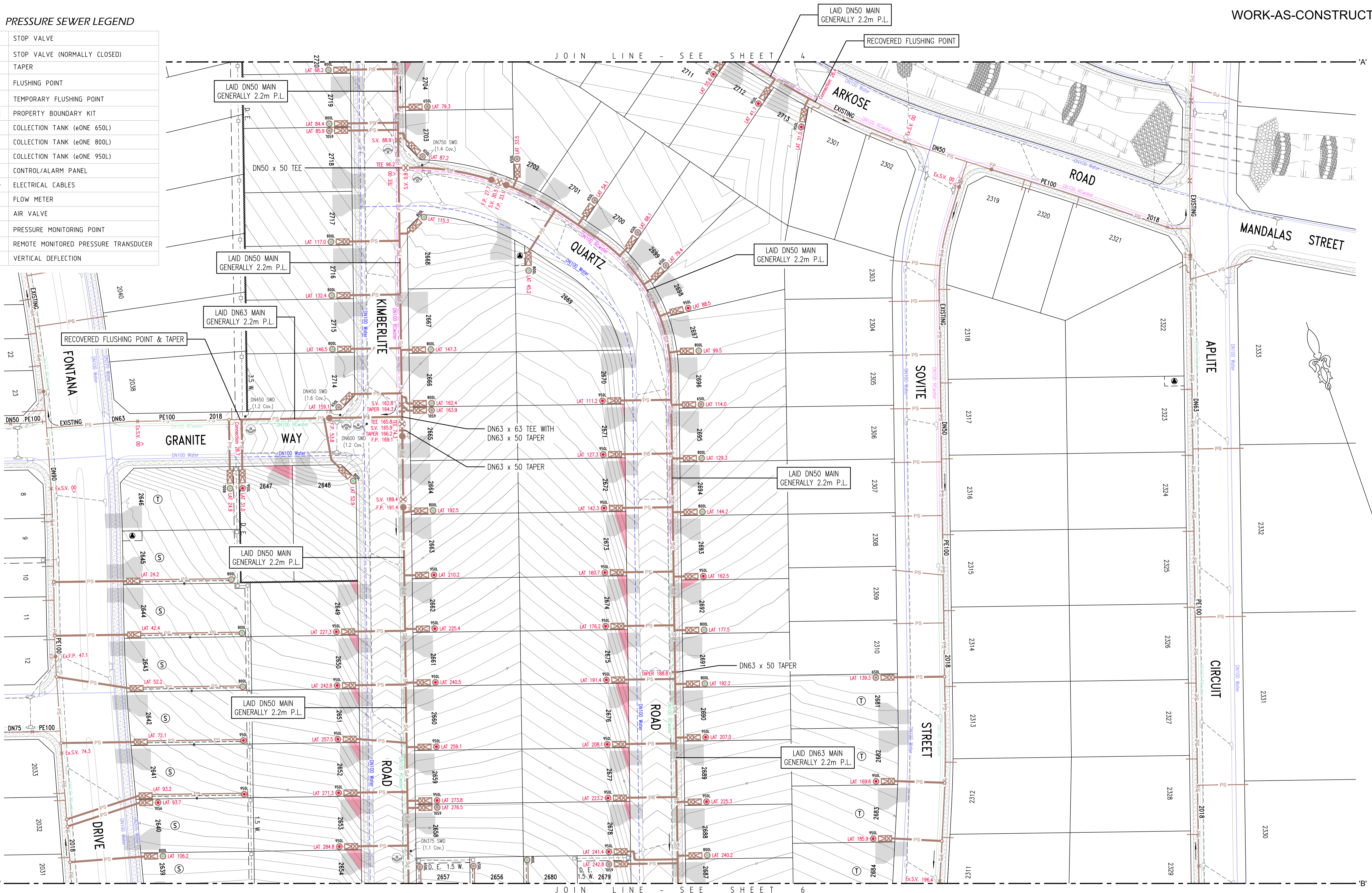
Ⓜ ESMT FOR PADMOUNT SUBSTATION 2.75 W.

ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
RAR
 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHINBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399

PRESSURE SEWER DETAIL PLAN 1				SHEET 4 OF 12	WAC
DRAWN	DESIGNED	REVISED	VERIFIED		
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO		
SCALE	DATUM	W.A.S. REFERENCE	DATE OF ISSUE	4/23645/H6A	
1:500	A.H.D.	108 L3-L5	19/7/2024		

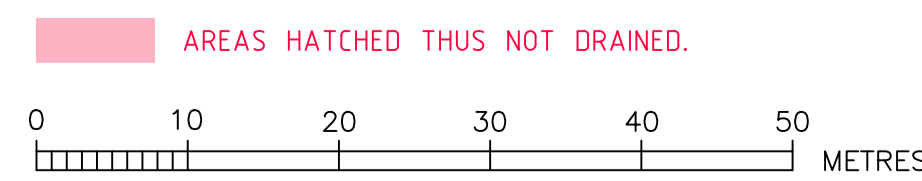
PRESSURE SEWER LEGEND

✕	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
—	ELECTRICAL CABLES
▶	FLOW METER
▲	AIR VALVE
⊙	PRESSURE MONITORING POINT
⊕	REMOTE MONITORED PRESSURE TRANSDUCER
⤴	VERTICAL DEFLECTION



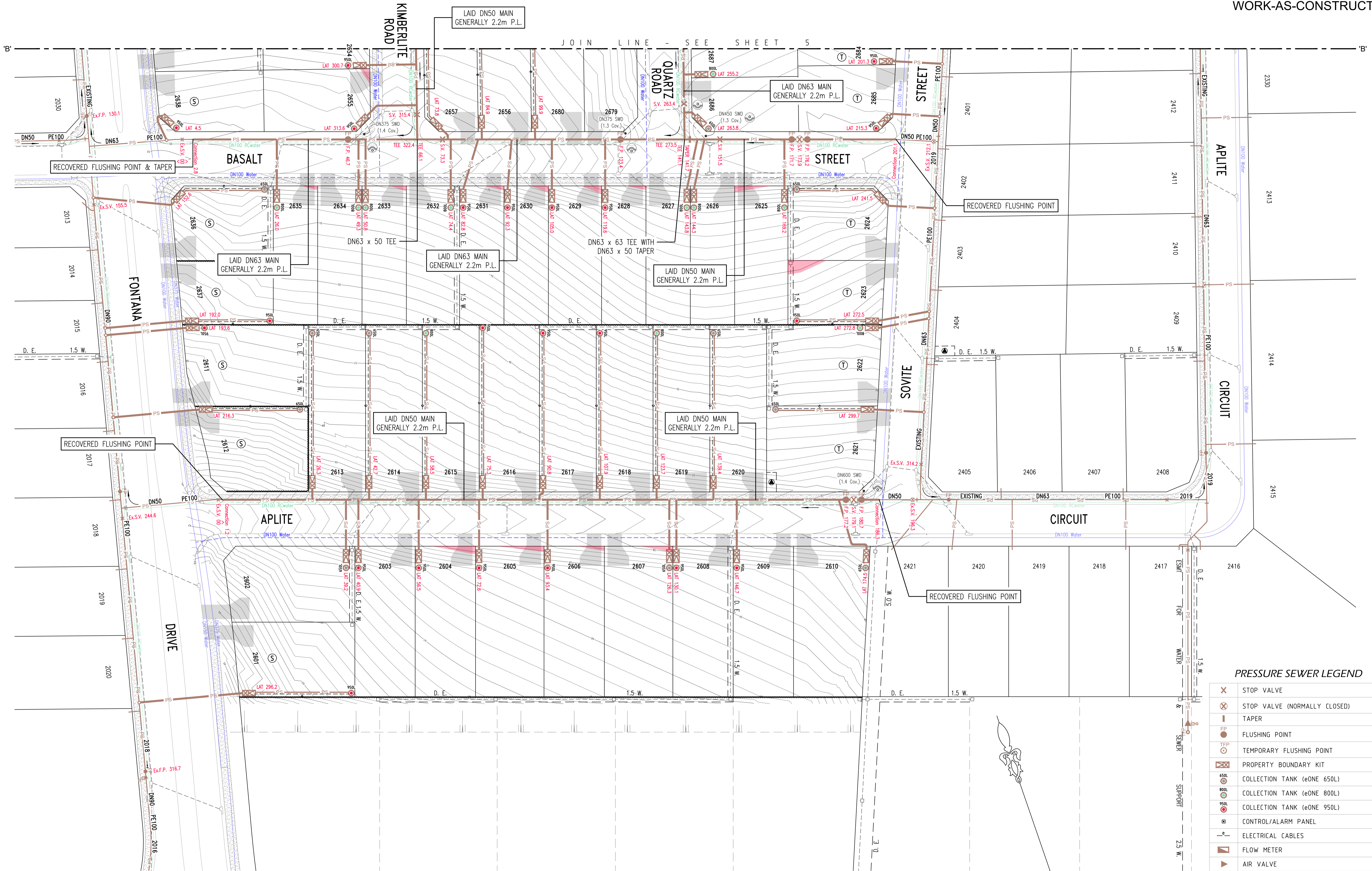
Ⓢ DENOTES PROPERTY LATERAL INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING MAIN WITH PLASSON TAPPING SADDLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS (REFER WAT-1108-V).

Ⓣ 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.



ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
RAR WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399

PRESSURE SEWER DETAIL PLAN 2				SHEET 5 OF 12		VERSION
DATE	DESIGNED	REVIEWED	VERIFIED	WAC		
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO			
SCALE	DRAWN	DATE REVISION	DATE OF ISSUE	JOB No.		
1:500	A.H.D.	108 L3-L5	19/7/2024	4/23645/H6A		

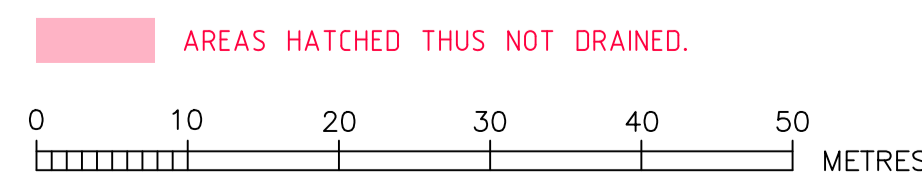


PRESSURE SEWER LEGEND

	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	TAPER
	FLUSHING POINT
	TEMPORARY FLUSHING POINT
	PROPERTY BOUNDARY KIT
	COLLECTION TANK (eONE 650L)
	COLLECTION TANK (eONE 800L)
	COLLECTION TANK (eONE 950L)
	CONTROL/ALARM PANEL
	ELECTRICAL CABLES
	FLOW METER
	AIR VALVE
	PRESSURE MONITORING POINT
	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.



Ⓢ DENOTES LAY MAIN UNDER SERVICE

Ⓣ DENOTES LAY MAIN OVER SERVICE

Ⓢ ESMT FOR PADMOUNT SUBSTATION 2.75 W.

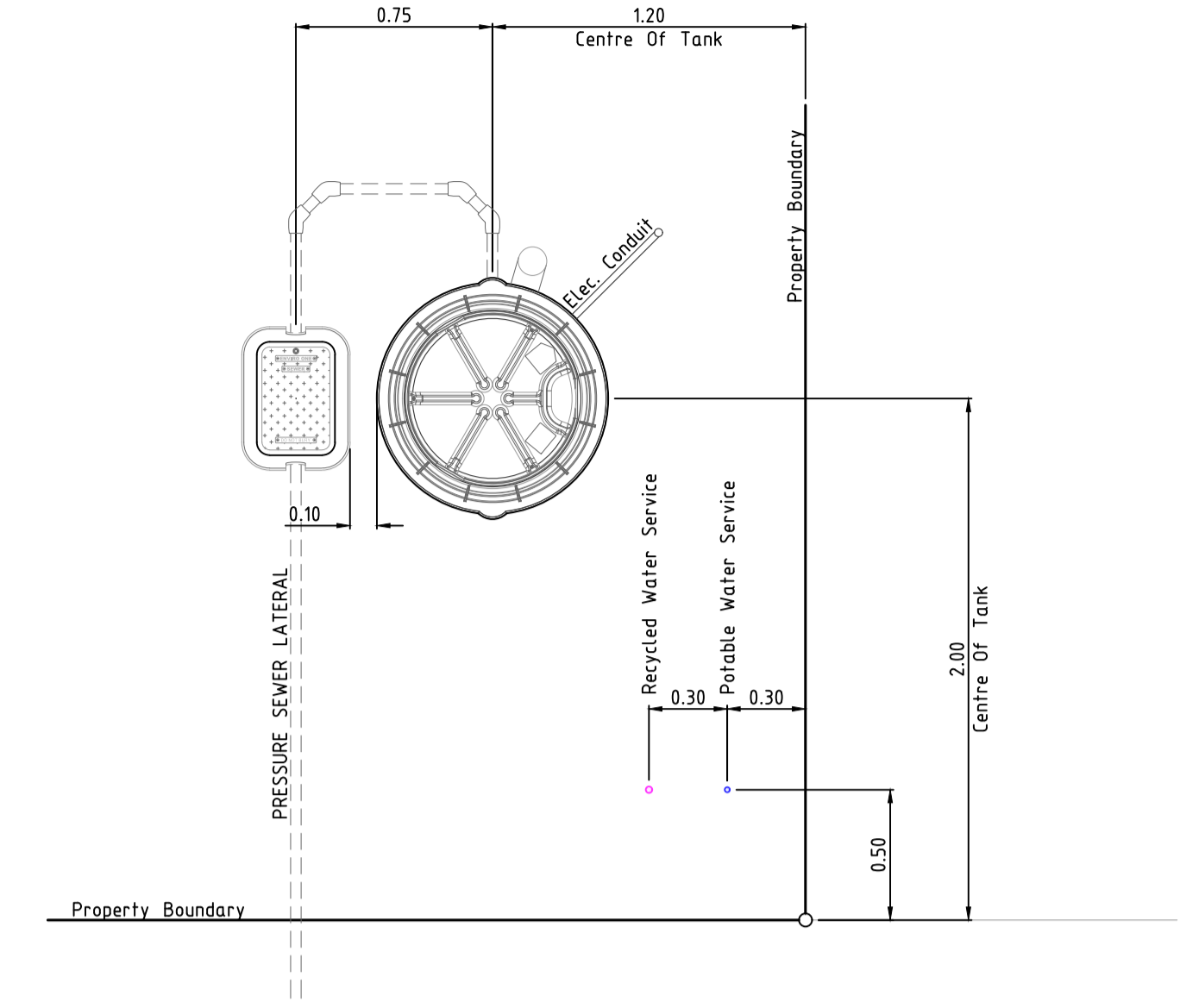
ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
RAR WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399

PRESSURE SEWER DETAIL PLAN 3				SHEET 6 OF 12		WAC
DRAWN	DESIGNED	REVIEWED	VERIFIED	JOB NO.		
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO	4/23645/H6A		
SCALE	DRAWN	DATE	DATE OF ISSUE			
1:500	A.H.D.	108 L3-L5	19/7/2024			

PRESSURE SEWER COLLECTION TANK LEVEL DETAILS

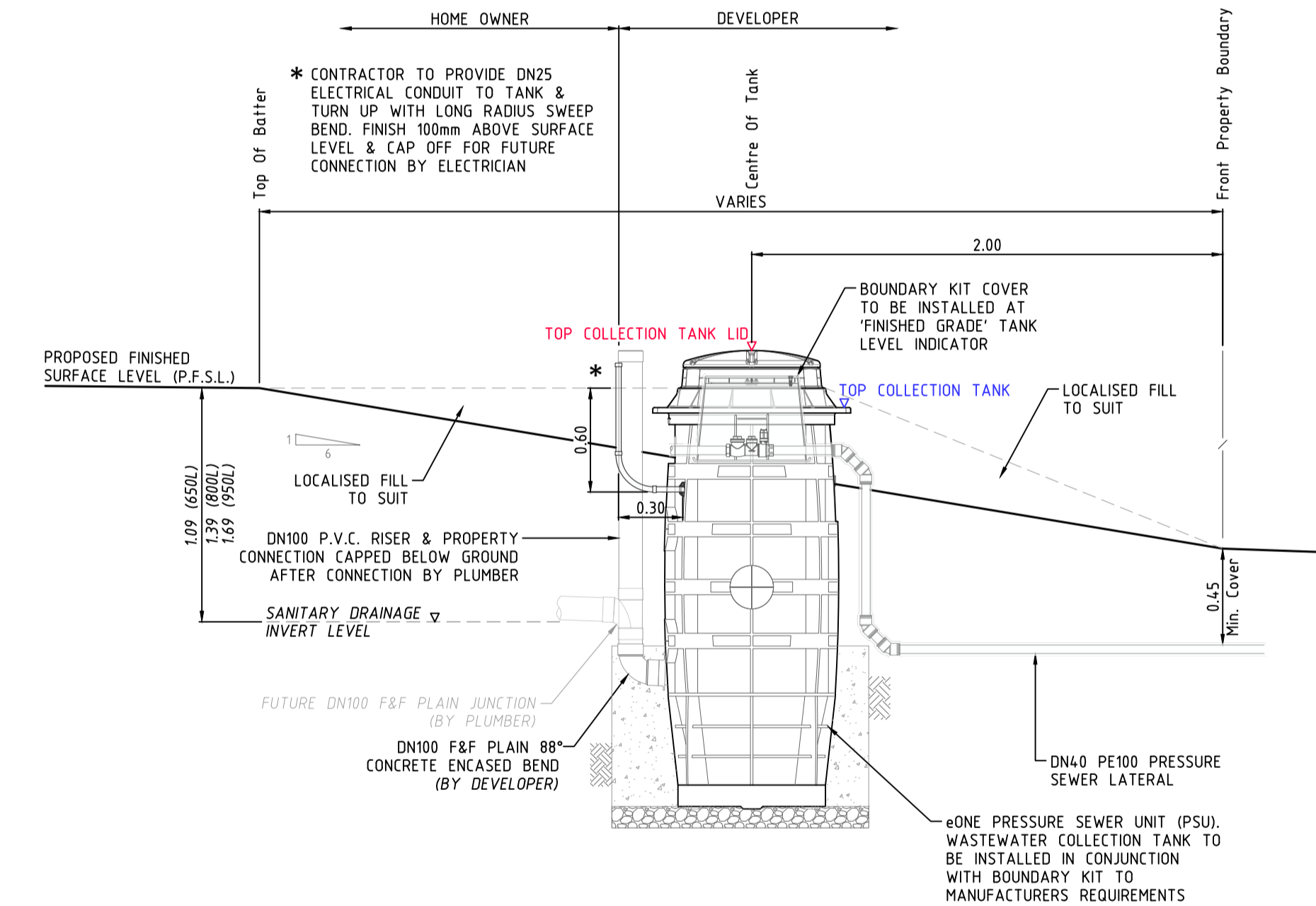
THE GABLES DEVELOPMENT - PRECINCT H [STAGE 6A]								
LOT NUMBER	COLLECTION TANK LOCATION [FRONT / REAR]	TANK SIZE [650L / 800L / 950L]	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK [Design R.L.]	DESIGN SANITARY DRAINAGE INVERT LEVEL [Design R.L.]	TOP OF COLLECTION TANK LID * [Work-As-Constructed]	CALCULATED SANITARY DRAINAGE INVERT LEVEL [Work-As-Constructed]	WAC v's DESIGN INVERT LEVEL COMPARISON [- LOWER / + HIGHER]
2601	REAR	950L	62.44	62.40	60.80	62.77	60.90	0.10
2602	FRONT FLAT	650L	60.38	60.34	59.34	60.66	59.39	0.05
2603	FRONT BATTER	950L	60.19	60.51	58.91	60.82	58.95	0.04
2604	FRONT BATTER	950L	59.50	59.91	58.31	60.14	58.27	-0.04
2605	FRONT BATTER	950L	59.04	59.41	57.81	59.65	57.78	-0.03
2606	FRONT BATTER	950L	58.69	59.01	57.41	59.23	57.36	-0.05
2607	FRONT BATTER	650L	58.08	58.41	57.41	58.69	57.42	0.01
2608	FRONT BATTER	950L	58.04	58.36	56.76	58.61	56.74	-0.02
2609	FRONT BATTER	950L	57.73	58.06	56.46	58.28	56.41	-0.05
2610	FRONT FLAT	650L	57.10	57.06	56.06	57.32	56.05	-0.01
2611	FRONT FLAT	950L	57.05	57.01	55.41	57.46	55.59	0.18
2612	REAR	650L	58.61	58.57	57.57	58.88	57.61	0.04
2613	REAR	650L	56.68	56.64	55.64	56.98	55.71	0.07
2614	REAR	650L	56.52	56.48	55.48	56.73	55.46	-0.02
2615	REAR	800L	56.29	56.25	54.95	56.53	54.96	0.01
2616	REAR	950L	55.76	55.72	54.12	56.00	54.13	0.01
2617	REAR	950L	55.15	55.11	53.51	55.26	53.39	-0.12
2618	REAR	950L	54.46	54.42	52.82	54.65	52.78	-0.04
2619	REAR	800L	53.87	53.83	52.53	54.07	52.50	-0.03
2620	REAR	650L	53.69	53.65	52.65	53.90	52.63	-0.02
2621	REAR	650L	55.25	55.21	54.21	55.50	54.23	0.02
2622	FRONT FLAT	800L	53.86	53.82	52.52	54.04	52.47	-0.05
2623	REAR	950L	52.86	52.82	51.22	53.10	51.23	0.01
2624	REAR	650L	50.05	50.01	49.01	50.29	49.02	0.01
2625	FRONT BATTER	800L	50.18	50.51	49.21	50.75	49.18	-0.03
2626	FRONT BATTER	800L	50.00	50.34	49.04	50.52	48.95	-0.09
2627	FRONT BATTER	800L	50.02	50.34	49.04	50.51	48.94	-0.10
2628	FRONT BATTER	950L	50.71	51.02	49.42	51.24	49.37	-0.05
2629	FRONT BATTER	950L	51.38	51.71	50.11	51.91	50.04	-0.07
2630	FRONT BATTER	950L	51.94	52.26	50.66	52.49	50.62	-0.04
2631	FRONT BATTER	950L	52.38	52.71	51.11	52.99	51.12	0.01
2632	FRONT BATTER	800L	52.50	52.82	51.52	53.07	51.50	-0.02
2633	FRONT BATTER	800L	52.91	53.23	51.93	53.51	51.94	0.01
2634	FRONT BATTER	800L	52.93	53.26	51.96	53.52	51.95	-0.01
2635	FRONT BATTER	800L	53.16	53.48	52.18	53.70	52.13	-0.05
2636	REAR	650L	53.07	53.03	52.03	53.33	52.06	0.03
2637	REAR	950L	55.81	55.77	54.17	56.05	54.18	0.01
2638	FRONT FLAT	950L	52.83	52.79	51.19	53.06	51.19	0.00
2639	FRONT FLAT	800L	51.39	51.35	50.05	51.55	49.98	-0.07
2640	FRONT FLAT	950L	50.73	50.73	49.13	50.94	49.07	-0.06
2641	REAR	950L	50.20	50.16	48.56	50.45	48.58	0.02
2642	REAR	950L	49.35	49.31	47.71	49.55	47.68	-0.03
2643	REAR	800L	48.61	48.57	47.27	48.81	47.24	-0.03
2644	REAR	800L	48.08	48.04	46.74	48.24	46.67	-0.07
2645	REAR	800L	47.68	47.64	46.34	47.92	46.35	0.01
2646	FRONT BATTER	800L	46.08	46.40	45.10	46.61	45.04	-0.06
2647	FRONT BATTER	950L	45.85	46.17	44.57	46.37	44.50	-0.07
2648	FRONT BATTER	800L	44.39	44.74	43.44	44.97	43.40	-0.04
2649	FRONT BATTER	950L	47.07	47.24	45.64	47.47	45.60	-0.04
2650	FRONT BATTER	950L	47.82	47.99	46.39	48.30	46.43	0.04
2651	FRONT BATTER	950L	48.58	48.75	47.15	48.96	47.09	-0.06
2652	FRONT BATTER	950L	49.46	49.64	48.04	49.83	47.96	-0.08
2653	FRONT BATTER	950L	50.48	50.65	49.05	50.85	48.98	-0.07
2654	FRONT BATTER	950L	51.52	51.69	50.09	51.92	50.05	-0.04
2655	FRONT BATTER	950L	52.34	52.47	50.87	52.69	50.82	-0.05
2656	REAR	650L	50.67	50.63	49.63	50.84	49.57	-0.06
2657	REAR	650L	50.76	50.72	49.72	50.91	49.64	-0.08
2658	FRONT FLAT	650L	49.63	49.59	48.59	49.83	48.56	-0.03
2659	FRONT FLAT	950L	49.48	49.44	47.84	49.70	47.83	-0.01
2660	FRONT FLAT	950L	48.59	48.55	46.95	48.79	46.92	-0.03
2661	FRONT FLAT	950L	47.68	47.64	46.04	47.91	46.04	0.00
2662	FRONT FLAT	950L	46.94	46.90	45.30	47.17	45.30	0.00
2663	FRONT FLAT	950L	46.19	46.15	44.55	46.38	44.51	-0.04
2664	FRONT FLAT	800L	45.30	45.26	43.96	45.48	43.91	-0.05
2665	FRONT FLAT	650L	44.32	44.28	43.28	44.50	43.23	-0.05
2666	FRONT FLAT	800L	44.26	44.22	42.92	44.43	42.86	-0.06
2667	FRONT FLAT	800L	43.86	43.82	42.52	44.06	42.49	-0.03
2668	FRONT FLAT	800L	42.84	42.80	41.50	43.04	41.47	-0.03
2669	FRONT BATTER	800L	43.08	43.42	42.12	43.60	42.03	-0.09
2670	FRONT BATTER	950L	43.73	44.03	42.43	44.24	42.37	-0.06

* 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

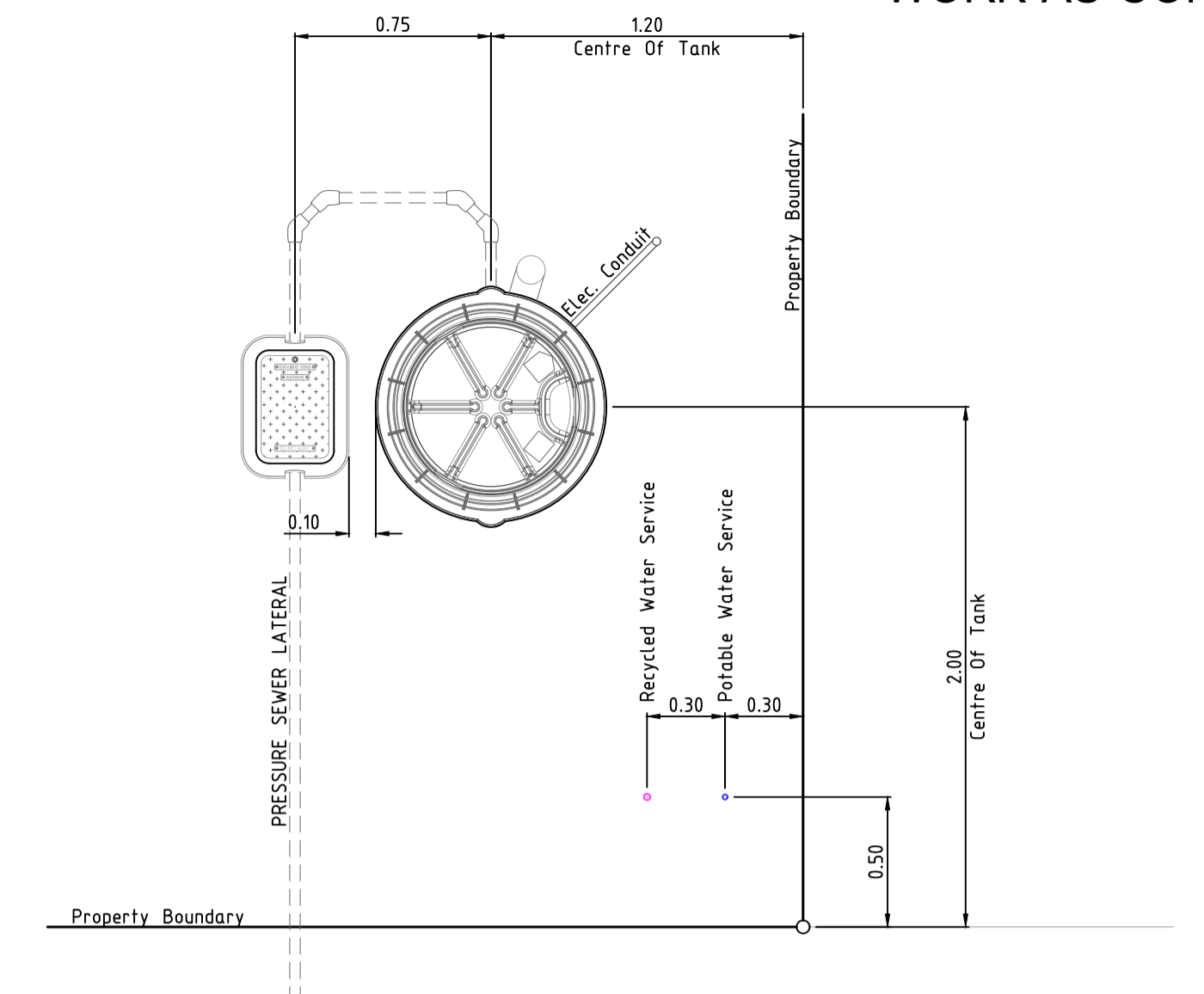
COLLECTION TANK NOTES

- DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY J. WYNDHAM PRINCE DATED 24/8/23 (Stage 6 Design TIN.dwg).
- 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.
- 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.
- R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

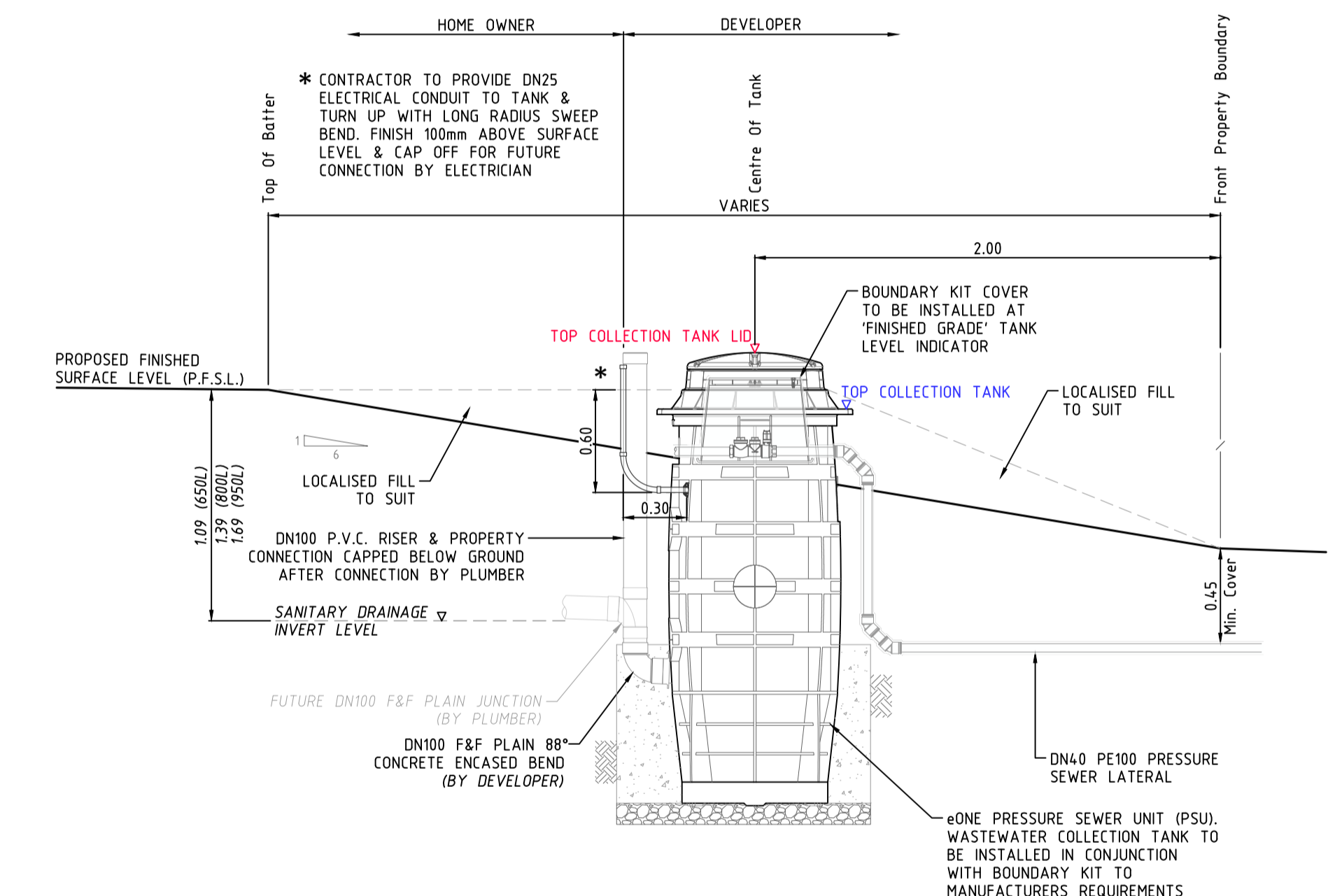
PRESSURE SEWER COLLECTION TANK LEVEL DETAILS
THE GABLES DEVELOPMENT - PRECINCT H [STAGE 6A]

LOT NUMBER	COLLECTION TANK LOCATION [FRONT / REAR]	TANK SIZE [650L / 800L / 950L]	PFSL AT TANK LOCATION	TOP OF COLLECTION TANK [Design R.L.]	DESIGN SANITARY DRAINAGE INVERT LEVEL [Design R.L.]	TOP OF COLLECTION TANK LID* [Work-As-Constructed]	CALCULATED SANITARY DRAINAGE INVERT LEVEL [Work-As-Constructed]	WAC v's DESIGN INVERT LEVEL COMPARISON [- LOWER / + HIGHER]
2671	FRONT BATTER	950L	44.08	44.38	42.78	44.61	42.74	-0.04
2672	FRONT BATTER	950L	44.63	44.94	43.34	45.20	43.33	-0.01
2673	FRONT BATTER	950L	45.44	45.74	44.14	45.98	44.11	-0.03
2674	FRONT BATTER	950L	46.11	46.42	44.82	46.63	44.76	-0.06
2675	FRONT BATTER	950L	46.79	47.10	45.50	47.32	45.45	-0.05
2676	FRONT BATTER	950L	47.60	47.91	46.31	48.23	46.36	0.05
2677	FRONT BATTER	950L	48.27	48.58	46.98	48.80	46.93	-0.05
2678	FRONT BATTER	950L	48.90	49.19	47.59	49.43	47.56	-0.03
2679	FRONT FLAT	650L	49.03	48.99	47.99	49.26	47.99	0.00
2680	REAR	800L	50.40	50.36	49.06	50.60	49.03	-0.03
2681	FRONT FLAT	650L	46.44	46.40	45.40	46.63	45.36	-0.04
2682	FRONT FLAT	950L	47.63	47.59	45.99	47.84	45.97	-0.02
2683	FRONT FLAT	950L	48.29	48.25	46.65	48.49	46.62	-0.03
2684	FRONT FLAT	950L	49.04	49.00	47.40	49.22	47.35	-0.05
2685	FRONT FLAT	950L	49.94	49.90	48.30	50.14	48.27	-0.03
2686	FRONT FLAT	650L	49.55	49.51	48.51	49.79	48.52	0.01
2687	FRONT FLAT	800L	49.17	49.13	47.83	49.43	47.86	0.03
2688	FRONT FLAT	800L	48.67	48.63	47.33	48.92	47.35	0.02
2689	FRONT FLAT	950L	48.06	48.02	46.42	48.29	46.42	0.00
2690	FRONT FLAT	950L	47.25	47.21	45.61	47.48	45.61	0.00
2691	FRONT FLAT	800L	46.56	46.52	45.22	46.83	45.26	0.04
2692	FRONT FLAT	800L	45.90	45.86	44.56	46.09	44.52	-0.04
2693	FRONT FLAT	950L	45.24	45.20	43.60	45.45	43.58	-0.02
2694	FRONT FLAT	800L	44.44	44.40	43.10	44.65	43.08	-0.02
2695	FRONT FLAT	800L	43.87	43.83	42.53	44.07	42.50	-0.03
2696	FRONT FLAT	650L	43.49	43.45	42.45	43.71	42.44	-0.01
2697	FRONT FLAT	800L	43.29	43.25	41.95	43.48	41.91	-0.04
2698	FRONT FLAT	950L	43.18	43.14	41.54	43.35	41.48	-0.06
2699	FRONT FLAT	650L	43.14	43.10	42.10	43.35	42.08	-0.02
2700	FRONT FLAT	650L	43.04	43.00	42.00	43.24	41.97	-0.03
2701	FRONT FLAT	650L	42.90	42.86	41.86	43.07	41.80	-0.06
2702	FRONT FLAT	650L	42.70	42.66	41.66	42.94	41.67	0.01
2703	FRONT FLAT	650L	42.33	42.29	41.29	42.59	41.32	0.03
2704	FRONT FLAT	650L	42.06	42.02	41.02	42.27	41.00	-0.02
2705	FRONT FLAT	800L	41.74	41.70	40.40	41.99	40.42	0.02
2706	FRONT FLAT	800L	41.35	41.31	40.01	41.55	39.98	-0.03
2707	FRONT FLAT	650L	40.49	40.45	39.45	40.84	39.57	0.12
2708	FRONT BATTER	950L	41.58	41.54	40.31	42.15	40.28	-0.03
2709	FRONT BATTER	950L	41.77	41.73	40.50	42.33	40.46	-0.04
2710	FRONT BATTER	950L	41.97	41.93	40.69	42.45	40.58	-0.11
2711	FRONT BATTER	950L	42.16	42.12	40.89	42.69	40.82	-0.07
2712	FRONT BATTER	950L	42.35	42.31	41.07	42.85	40.98	-0.09
2713	FRONT BATTER	950L	42.50	42.46	41.23	42.99	41.12	-0.11
2714	FRONT FLAT	650L	44.13	44.09	43.09	44.30	43.03	-0.06
2715	FRONT FLAT	800L	43.86	43.82	42.52	44.02	42.45	-0.07
2716	FRONT FLAT	800L	43.47	43.43	42.13	43.72	42.15	0.02
2717	FRONT FLAT	800L	43.09	43.05	41.75	43.25	41.68	-0.07
2718	FRONT FLAT	650L	42.29	42.25	41.25	42.49	41.22	-0.03
2719	FRONT FLAT	800L	42.23	42.19	40.89	42.41	40.84	-0.05
2720	FRONT FLAT	800L	41.84	41.80	40.50	42.02	40.45	-0.05
2721	FRONT FLAT	800L	41.45	41.41	40.11	41.70	40.13	0.02
2722	FRONT FLAT	800L	41.10	41.06	39.76	41.30	39.73	-0.03
2723	FRONT FLAT	650L	40.65	40.61	39.61	40.85	39.58	-0.03
2724	FRONT FLAT	650L	40.30	40.26	39.26	40.48	39.21	-0.05
2725	FRONT FLAT	950L	40.75	40.71	39.11	40.93	39.06	-0.05
2726	REAR	800L	40.51	40.47	39.17	40.74	39.17	0.00
2727	REAR	800L	40.11	40.07	38.77	40.38	38.81	0.04
2728	REAR	650L	39.71	39.67	38.67	39.97	38.70	0.03
2729	REAR	650L	39.12	39.08	38.08	39.31	38.04	-0.04
2730	FRONT FLAT	650L	39.15	39.11	38.11	39.34	38.07	-0.04
2731	FRONT FLAT	800L	39.79	39.75	38.45	39.97	38.40	-0.05
2732	FRONT FLAT	650L	40.01	39.97	38.97	40.19	38.92	-0.05
2733	FRONT FLAT	800L	40.29	40.25	38.95	40.45	38.88	-0.07
2734	FRONT FLAT	650L	40.51	40.47	39.47	40.73	39.46	-0.01
2735	FRONT FLAT	650L	40.71	40.67	39.67	40.88	39.61	-0.06
2736	FRONT FLAT	800L	40.79	40.75	39.45	41.08	39.51	0.06
2737	FRONT FLAT	950L	41.65	41.61	40.01	41.80	39.93	-0.08
2738	FRONT FLAT	650L	41.84	41.80	40.80	41.99	40.72	-0.08
2739	FRONT FLAT	950L	42.13	42.09	40.49	42.28	40.41	-0.08
2740	FRONT FLAT	800L	41.50	41.46	40.16	41.68	40.11	-0.05
2741	FRONT FLAT	650L	39.95	39.91	38.91	40.15	38.88	-0.03

* 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



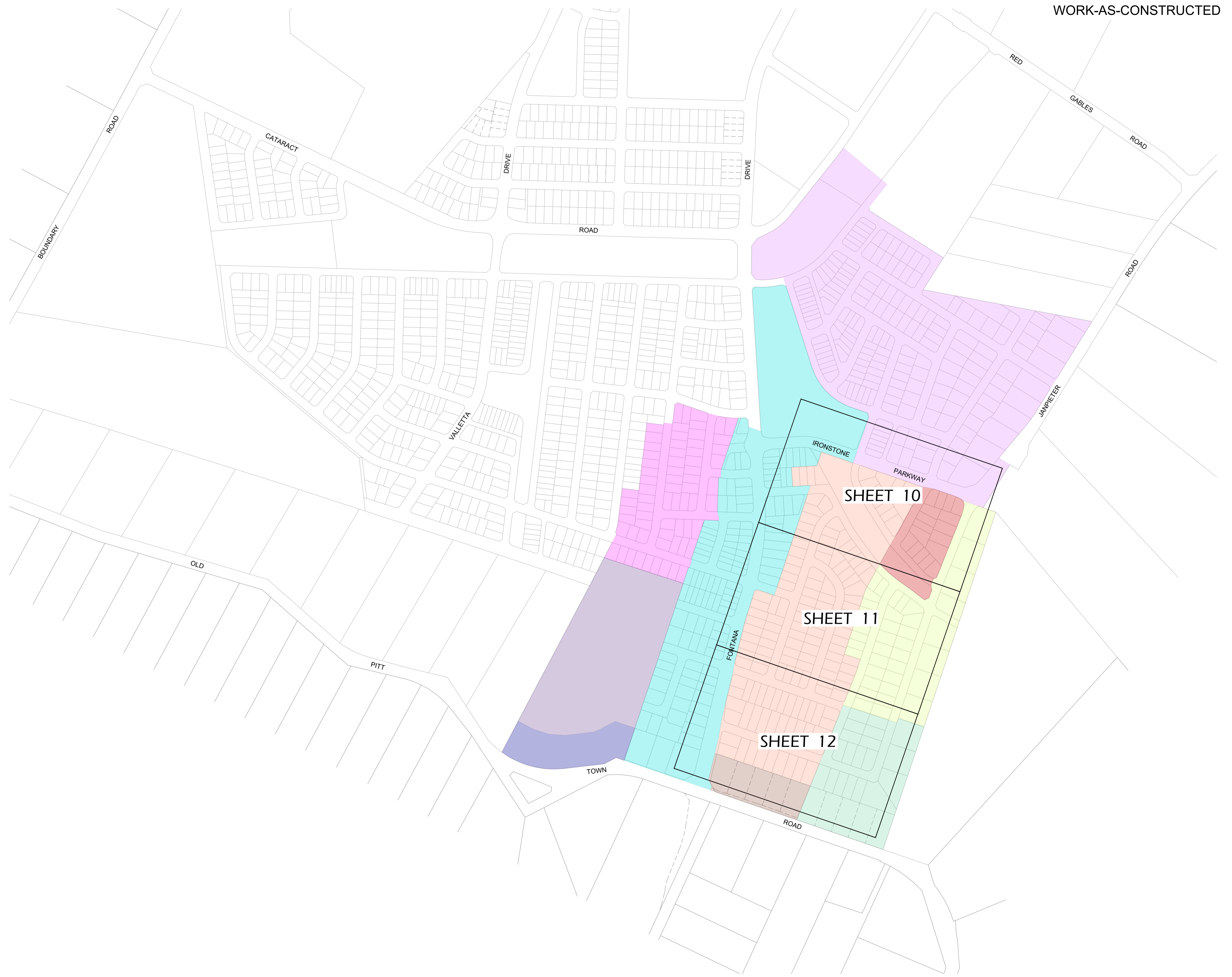
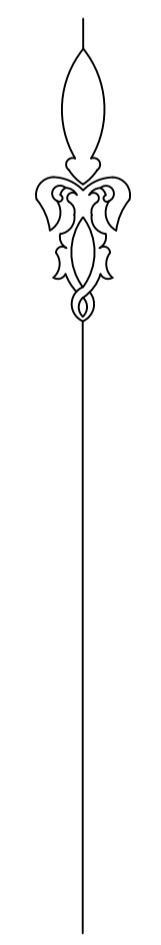
COLLECTION TANK SECTIONAL ELEVATION
SCALE 1:25

COLLECTION TANK NOTES

- DESIGN SURFACE LEVELS WERE ELECTRONICALLY EXTRACTED FROM DIGITAL DATA SUPPLIED BY J. WYNDHAM PRINCE DATED 24/8/23 (Stage 6 Design TIN.dwg).
- 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.
- 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.
- R.A.R. ACCEPT NO RESPONSIBILITY FOR INCONSISTENCIES IN EXTRACTED LEVELS RESULTING FROM CHANGES TO THE MODEL (SURFACE LEVEL) INFORMATION POST DATA EXTRACTION DATE.

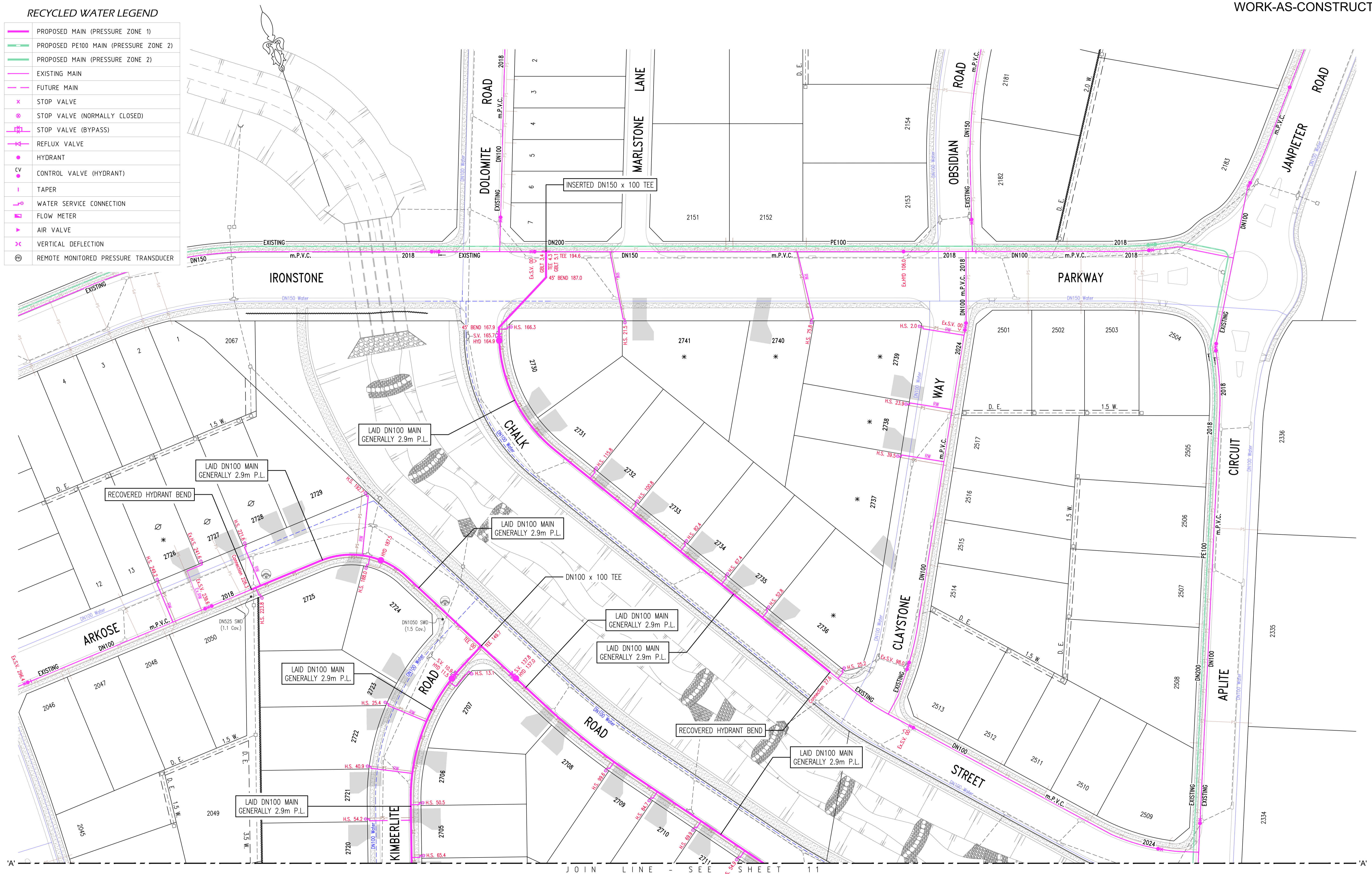
Precinct H Development Stages

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Stage 5
- Stage 6A
- Stage 6B
- Stage 7A
- Stage 7B
- Stage 7C



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
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
	REMOTE MONITORED PRESSURE TRANSDUCER

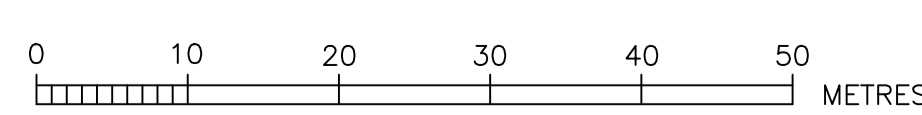


JOIN LINE - SEE SHEET 11

* DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING PRESSURISED MAIN WITH MAIN TAP IN ACCORDANCE WITH WAT-1108-V.

⊗ DENOTES EXISTING PROPERTY SERVICE REMOVED
 Ⓞ DENOTES ESMT FOR PADMOUNT SUBSTATION 2.75 W.

Ⓞ DENOTES LAY MAIN UNDER SERVICE
 ⊕ DENOTES LAY MAIN OVER SERVICE

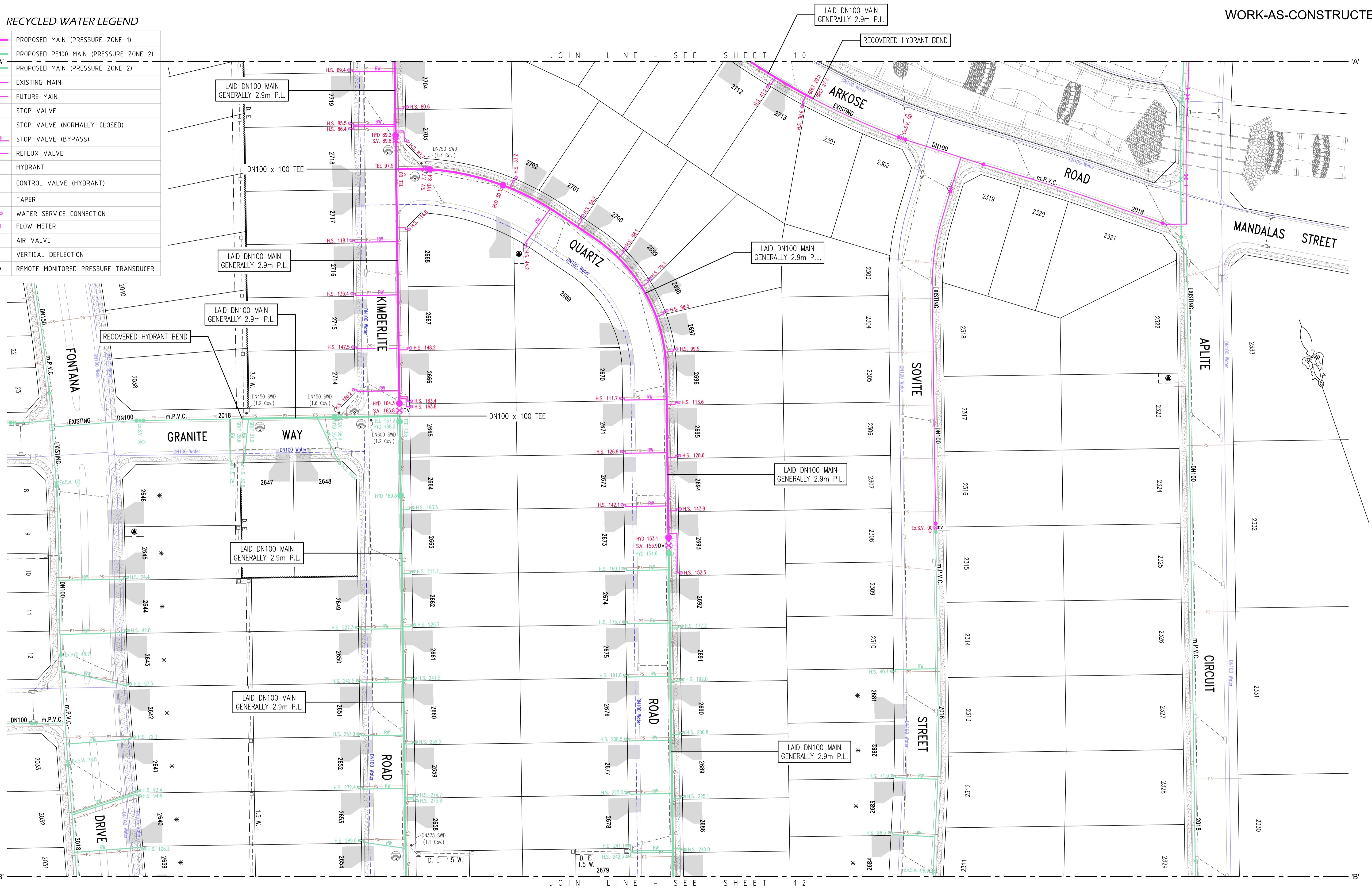


ROSE ATKINS RIMMER (Infrastructure) Pty. Ltd.
 WATER RELATED INFRASTRUCTURE DESIGN AND MANAGEMENT
RAR
 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHINBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399

RECYCLED WATER DETAIL PLAN 1				SHEET 10 OF 12		WAC
DESIGNED BY	D.SHEATHER	REVIEWED BY	K.GAO	VERIFIED BY	K.GAO	DATE
SCALE	1:500	DATE	108 L3-L5	DATE OF ISSUE	19/7/2024	4/23645/H6A

RECYCLED WATER LEGEND

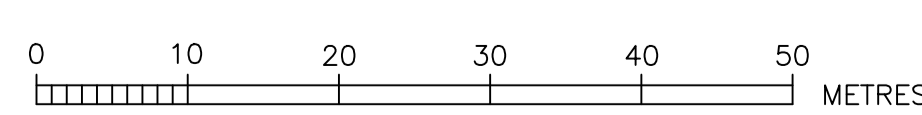
	PROPOSED MAIN (PRESSURE ZONE 1)
	PROPOSED PE100 MAIN (PRESSURE ZONE 2)
	PROPOSED MAIN (PRESSURE ZONE 2)
	EXISTING MAIN
	FUTURE MAIN
	STOP VALVE
	STOP VALVE (NORMALLY CLOSED)
	STOP VALVE (BYPASS)
	REFLUX VALVE
	HYDRANT
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL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



* DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING PRESSURISED MAIN WITH MAIN TAP IN ACCORDANCE WITH WAT-1108-V.

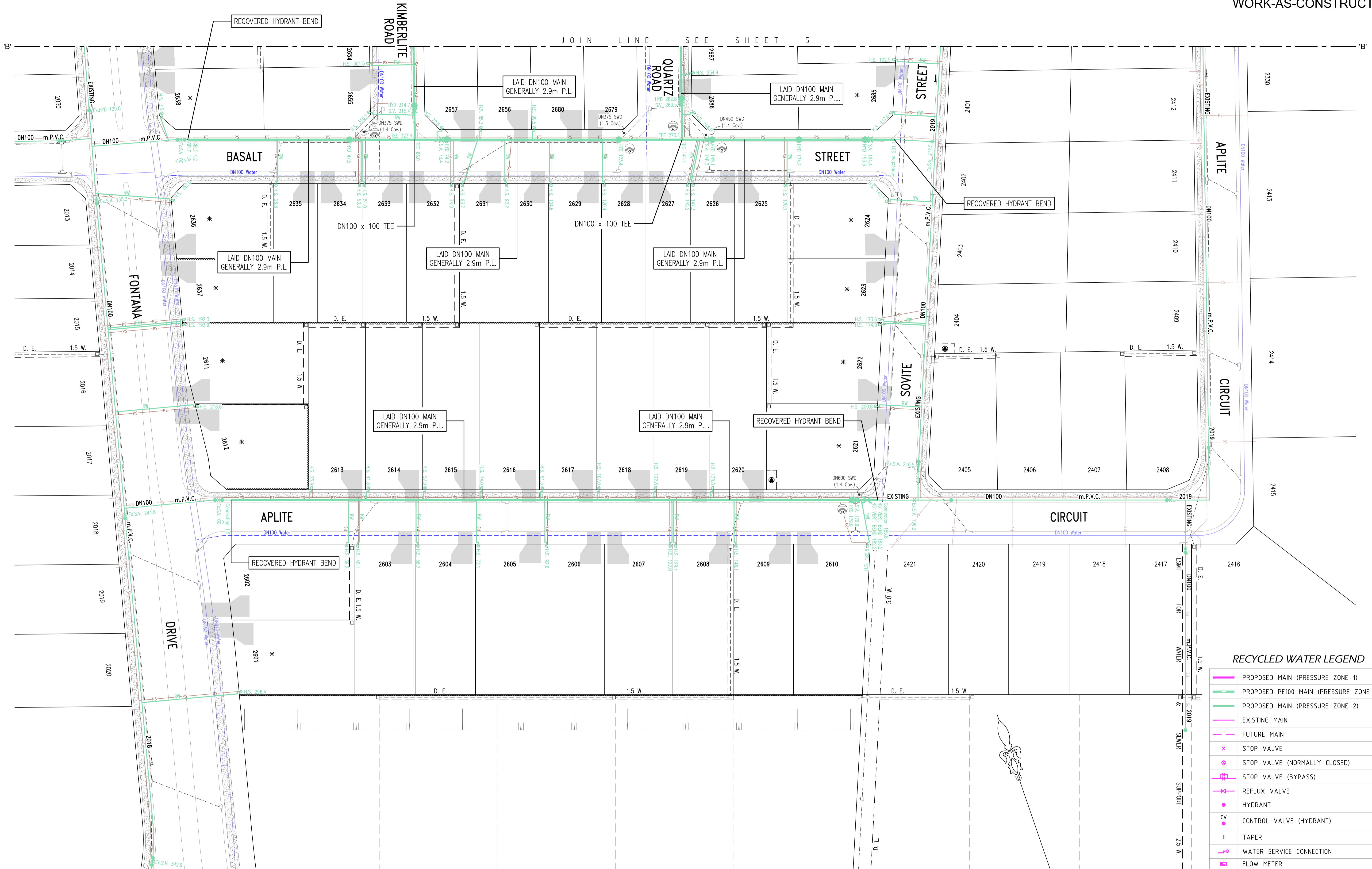
ESMT FOR PADMOUNT SUBSTATION 2.75 W.

⊖ DENOTES LAY MAIN UNDER SERVICE
⊕ DENOTES LAY MAIN OVER SERVICE



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 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399

RECYCLED WATER DETAIL PLAN 2				SHEET 11 OF 12		VERSION: WAC
DESIGNED BY: D.SHEATHER	DESIGNED BY: D.SHEATHER	REVIEWED BY: K.GAO	VERIFIED BY: K.GAO	DATE: 19/7/2024	SCALE: 1:500	PROJECT NO: 4/23645/H6A



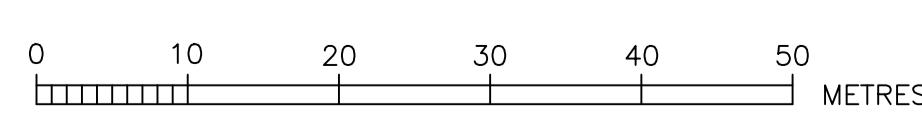
RECYCLED WATER LEGEND

	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
	CONTROL VALVE (HYDRANT)
	TAPER
	WATER SERVICE CONNECTION
	FLOW METER
	AIR VALVE
	VERTICAL DEFLECTION
	REMOTE MONITORED PRESSURE TRANSDUCER

* DENOTES PROPERTY SERVICE CONNECTION INSTALLED ON EXISTING MAIN. CONNECTION MADE TO EXISTING PRESSURISED MAIN WITH MAIN TAP IN ACCORDANCE WITH WAT-1108-V.

ESMT FOR PADMOUNT SUBSTATION 2.75 W.

⊙ DENOTES LAY MAIN UNDER SERVICE
⊙ DENOTES LAY MAIN OVER SERVICE



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 SHOP 7 & 8 'M CENTRE'
 40 STERLING ROAD, MINCHBURY NSW 2770
 PH: (02) 9853 0200 FAX: (02) 9671 7399



RECYCLED WATER DETAIL PLAN 3			
DRAWN	DESIGNED	REVIEWED	VERIFIED
D.SHEATHER	D.SHEATHER	K.GAO	K.GAO
SCALE	DATE	WAL. REFERENCE	DATE OF ISSUE
1:500	-	108 L3-L5	19/7/2024

SHEET 12 OF 12	WAC
4/23645/H6A	