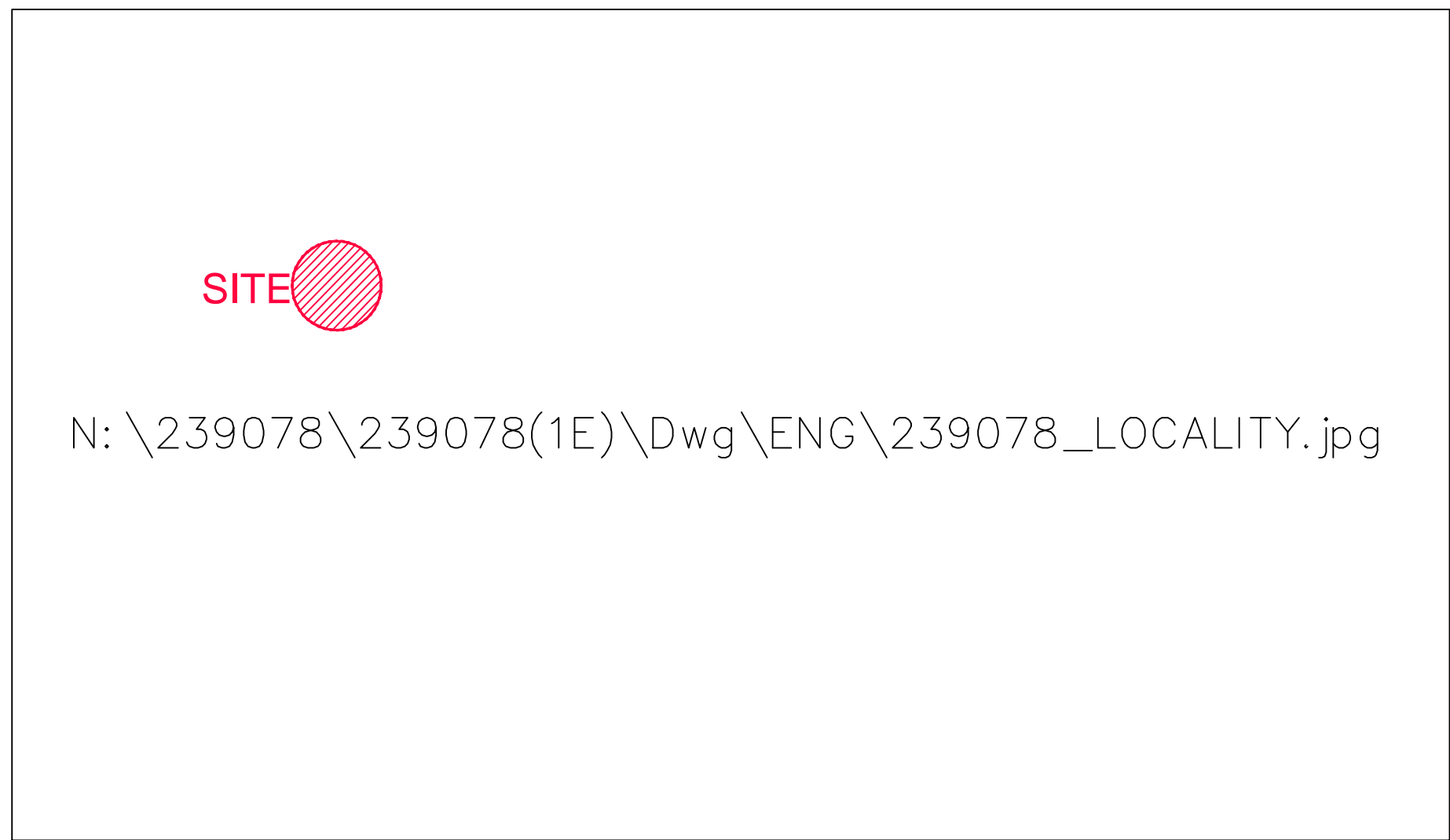
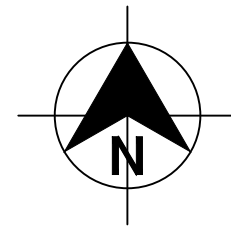


20-23647 1F Title

100mm AT FULL SIZE

100mm AT FULL SIZE

POTABLE WATER, RECYCLED WATER  
AND PRESSURE SEWER RETICULATION  
PROPOSED SUBDIVISION  
STAGE 1F WATAGAN PARK  
McCULLOUGH STREET, COORANBONG  
DA/573/2014



LOCALITY SKETCH  
NOT TO SCALE

DRAWING INDEX

No.	NAME
239078(1F)-WAT-001	COVER SHEET, LOCALITY PLAN AND DRAWING INDEX.
239078(1F)-WAT-002	GENERAL NOTES.
239078(1F)-WAT-003	OVERALL SITE PLAN.
239078(1F)-WAT-004	POTABLE WATER DETAIL PLAN SHEET 1.
239078(1F)-WAT-005	POTABLE WATER DETAIL PLAN SHEET 2.
239078(1F)-WAT-006	NOT USED.
239078(1F)-WAT-007	NOT USED.
239078(1F)-WAT-008	RECYCLED WATER DETAIL PLAN SHEET 1.
239078(1F)-WAT-009	RECYCLED WATER DETAIL PLAN SHEET 2.
239078(1F)-WAT-010	NOT USED.
239078(1F)-WAT-011	NOT USED.
239078(1F)-WAT-012	PRESSURE SEWER DETAIL PLAN SHEET 1.
239078(1F)-WAT-013	PRESSURE SEWER DETAIL PLAN SHEET 2.
239078(1F)-WAT-014	PRESSURE SEWER MAIN LONGITUDINAL SECTION.
239078(1F)-WAT-015	NOT USED.
239078(1F)-WAT-016	TYPICAL PIPEWORK DETAILS.
239078(1F)-WAT-017	NOT USED.
239078(1F)-WAT-018	TYPICAL SERVICE CONNECTION DETAILS.
239078(1F)-WAT-019	NOT USED.
239078(1F)-WAT-020	ROAD CROSS SECTIONS SHEET 1.
239078(1F)-WAT-021	ROAD CROSS SECTIONS SHEET 2.
239078(1F)-WAT-022	NOT USED.
239078(1F)-WAT-023	THRUST BLOCK DETAILS.

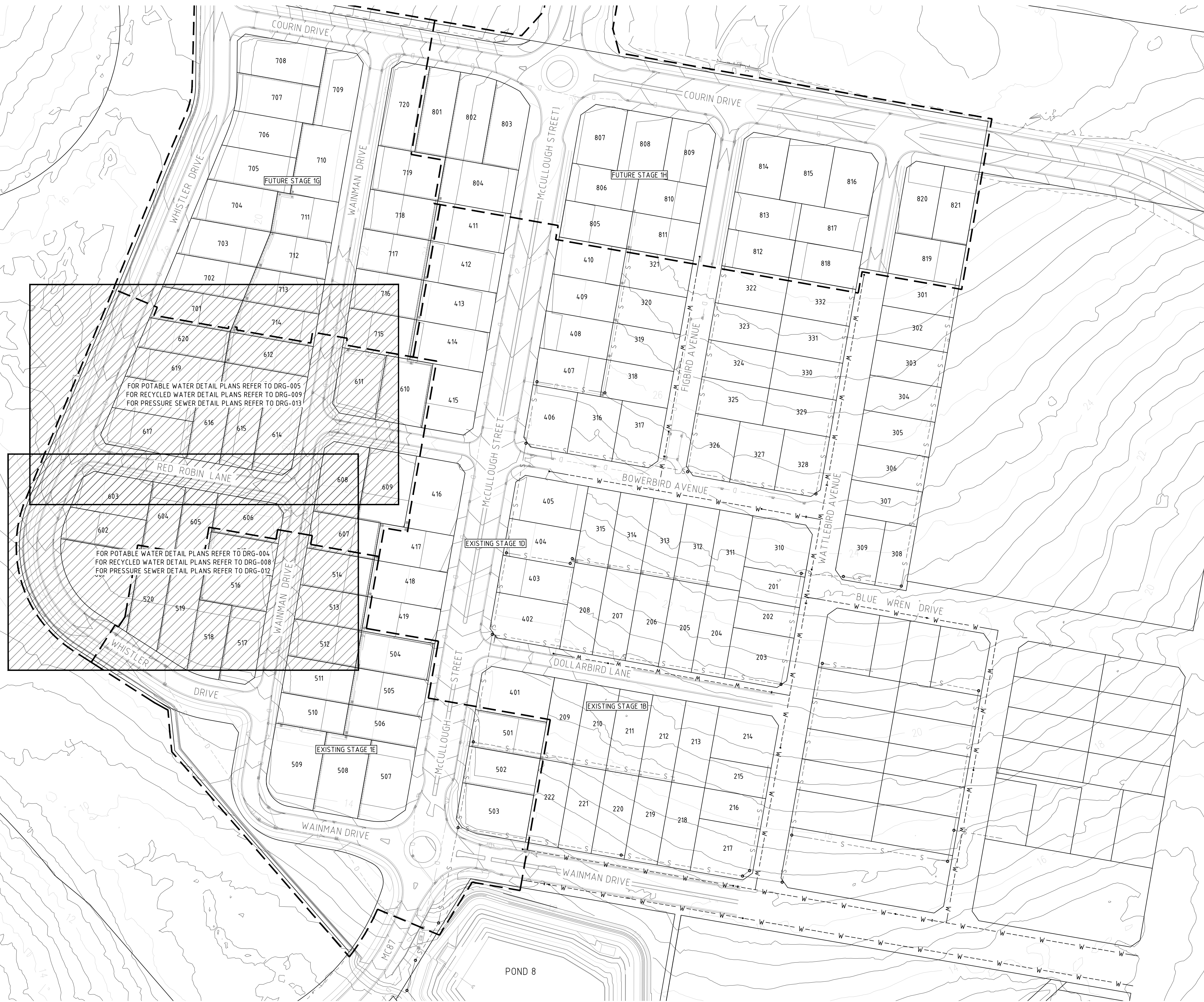
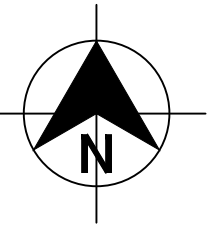
WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	 <div>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</div>		CLIENT	PROPERTY DESCRIPTION		PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION								
							PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014				PLAN TITLE  COVER SHEET, LOCALITY PLAN AND DRAWING INDEX										
DESIGN FILE N:\							SURVEYED ADW Johnson				DATUM A.H.D.		PROJECT No. 239078(1F) –		DISCIPLINE WAT –		NUMBER AT_		REV. WAC		



Plotted By: adamarmishaw      Plot Date: 22/01/16 - 13:44      Cad File: C:\Users\adamarmishaw\appdata\local\temp\AcPublish\_4704\20-23647 1F Notes.dwg





LEGEND  
--- W --- EXISTING WATER MAIN (HUNTER WATER)  
--- S --- EXISTING SEWER MAIN (HUNTER WATER)  
--- SUBDIVISION STAGE BOUNDARIES

PLAN  
SCALE 1:1000

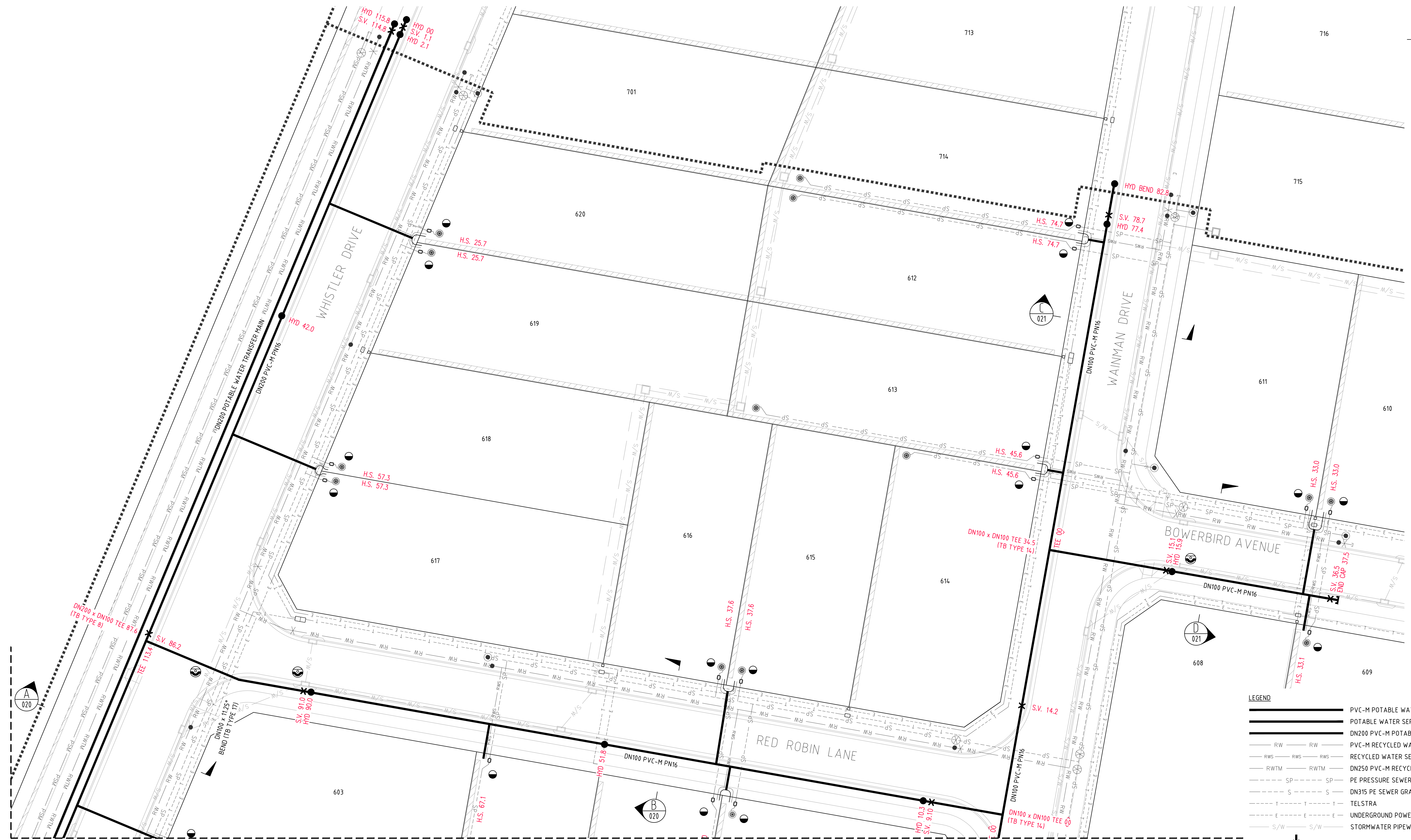
WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES			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	CLIENT 	PROPERTY DESCRIPTION		PROJECT		PLAN TITLE						
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		 A1 / A3 1:1000 / 1:2000	PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014				POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		GENERAL SITE PLAN								
B	7.10.2014	AMENDED ISSUE	T.M.	L.G.	J.N.																	
O	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.																
WAC	28.10.2015	WORK AS CONSTRUCTED – RAR	A.S.A.			B.K.																
DESIGN FILE: N:\							ALL DIMENSIONS ARE IN METRES. DO NOT SCALE				SURVEYED ADW Johnson		DATUM A.H.D.		PROJECT No. 239078(1F) –		DISCIPLINE WAT –		NUMBER 003		REV. WAC	









PLAN  
SCALE 1:250

- POTABLE WATER SERVICE CONNECTIONS**
- TOTAL 21 CONNECTIONS
  - SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 2 x SHORT SIDE
    - 1 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 3 x SHORT SIDE
    - 6 x LONG SIDE

POTABLE WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN200	PVC-M PN16	385
DN100	PVC-M PN16	248

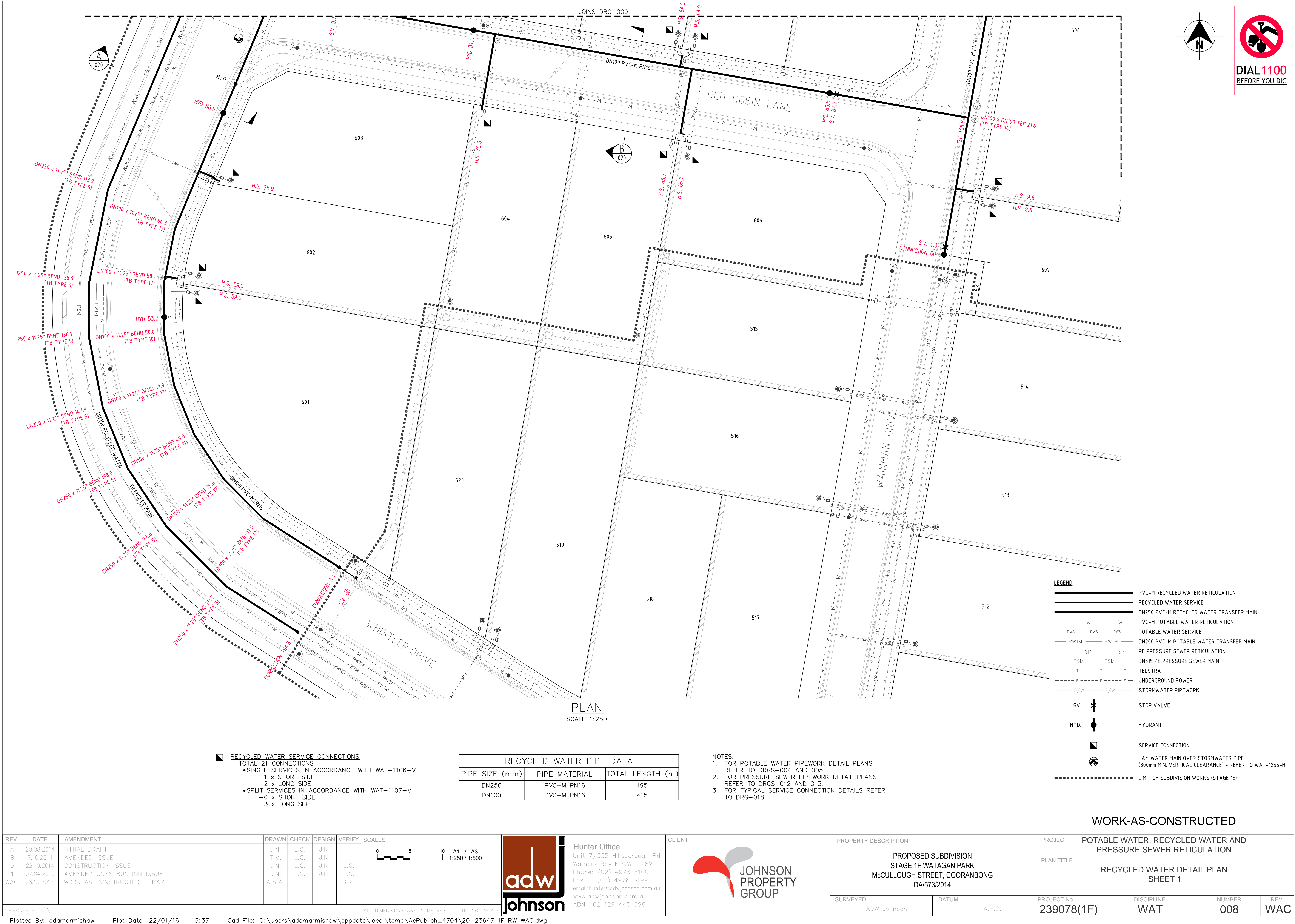
- NOTES:
- FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-008 AND 009.
  - FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-012 AND 013.
  - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-018.

- LEGEND**
- PVC-M POTABLE WATER RETICULATION
  - POTABLE WATER SERVICE
  - DN200 PVC-M POTABLE WATER TRANSFER MAIN
  - PVC-M RECYCLED WATER RETICULATION
  - RECYCLED WATER SERVICE
  - DN250 PVC-M RECYCLED WATER TRANSFER MAIN
  - PE PRESSURE SEWER RETICULATION
  - DN315 PE SEWER GRAVITY MAIN
  - TELSTRA
  - UNDERGROUND POWER
  - STORMWATER PIPEWORK
  - SV. STOP VALVE
  - HYD. HYDRANT
  - SERVICE CONNECTION
  - LAY WATER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
  - LIMIT OF SUBDIVISION WORKS (STAGE 1E)

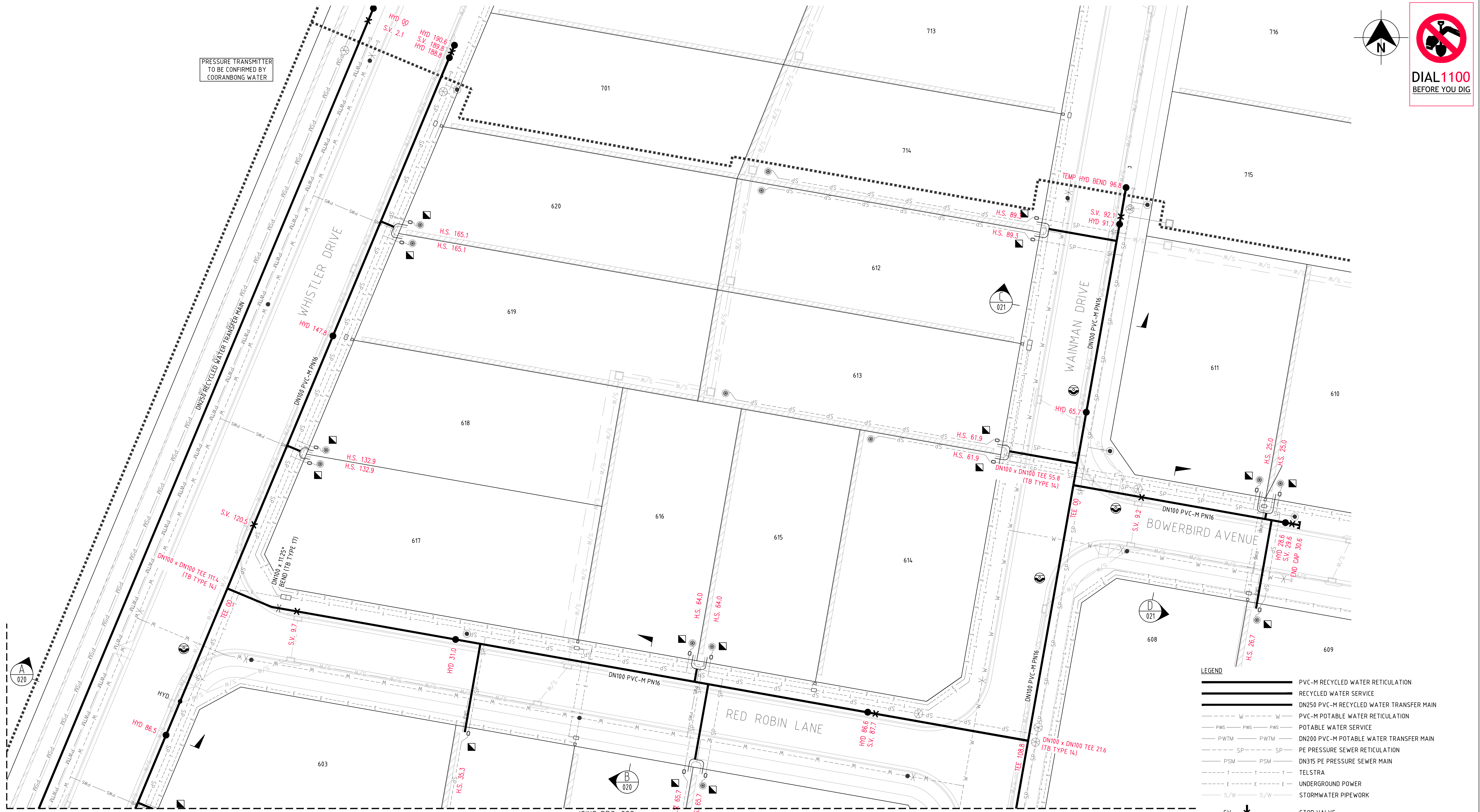
WORK-AS-CONSTRUCTED

REV.		DATE	AMENDMENT		DRAWN	CHECK	DESIGN	VERIFY	SCALES		HUNTER OFFICE		CLIENT	PROPERTY DESCRIPTION		PROJECT				
A		20.08.2014	INITIAL DRAFT		J.N.	L.G.	J.N.				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		PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014		POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION					
B		7.10.2014	AMENDED ISSUE		T.M.	L.G.	J.N.								PLAN TITLE					
0		22.10.2014	CONSTRUCTION ISSUE		J.N.	L.G.	J.N.	L.G.					POTABLE WATER DETAIL PLAN SHEET 2							
1		07.04.2015	AMENDED CONSTRUCTION ISSUE		J.N.	L.G.	J.N.	L.G.												
WAC		28.10.2015	WORK AS CONSTRUCTED – RAR		A.S.A.			B.K.												
DESIGN FILE N:\									ALL DIMENSIONS ARE IN METRES. DO NOT SCALE				SURVEYED ADW Johnson		DATUM A.H.D.		PROJECT No. 239078(1F) –	DISCIPLINE WAT	NUMBER 005	REV. WAC







PLAN  
SCALE 1:250

- RECYCLED WATER SERVICE CONNECTIONS
- TOTAL 21 CONNECTIONS
- SINGLE SERVICES IN ACCORDANCE WITH WAT-1106-V
    - 1 x SHORT SIDE
    - 2 x LONG SIDE
  - SPLIT SERVICES IN ACCORDANCE WITH WAT-1107-V
    - 6 x SHORT SIDE
    - 3 x LONG SIDE

RECYCLED WATER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN250	PVC-M PN16	195
DN100	PVC-M PN16	415

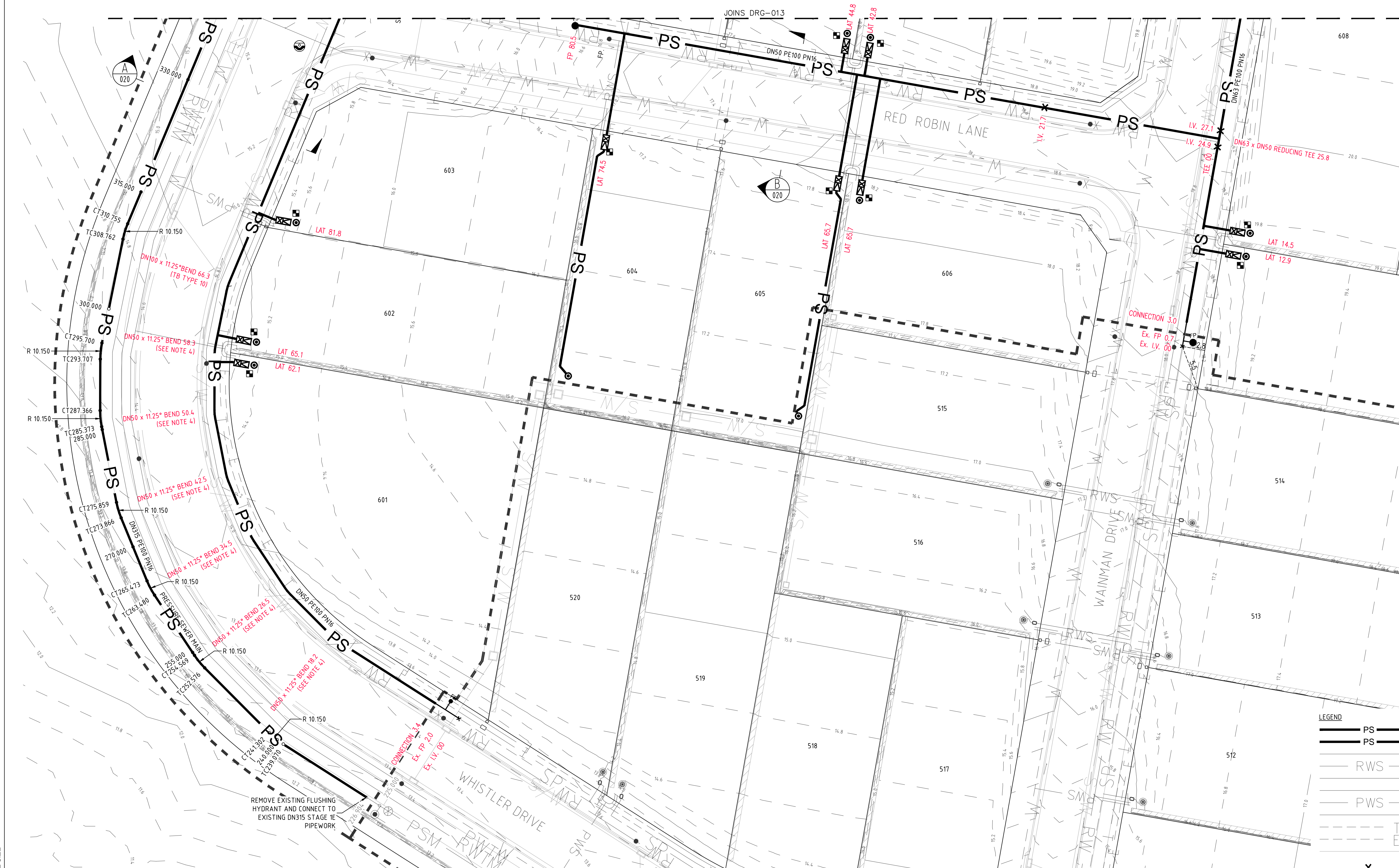
- NOTES:
1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-004 AND 005.
  2. FOR PRESSURE SEWER PIPEWORK DETAIL PLANS REFER TO DRGS-012 AND 013.
  3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-018.

LEGEND	
	PVC-M RECYCLED WATER RETICULATION
	RECYCLED WATER SERVICE
	DN250 PVC-M RECYCLED WATER TRANSFER MAIN
	PVC-M POTABLE WATER RETICULATION
	POTABLE WATER SERVICE
	DN200 PVC-M POTABLE WATER TRANSFER MAIN
	PE PRESSURE SEWER RETICULATION
	DN315 PE PRESSURE SEWER MAIN
	TELSTRA
	UNDERGROUND POWER
	STORMWATER PIPEWORK
	STOP VALVE
	HYDRANT
	SERVICE CONNECTION
	LAY WATER MAIN OVER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
	LIMIT OF SUBDIVISION WORKS (STAGE 1E)

## WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		<p>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</p>		CLIENT	PROPERTY DESCRIPTION		PROJECT		POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
							PLAN TITLE					RECYCLED WATER DETAIL PLAN SHEET 2						
							SURVEYED					DATUM		PROJECT No.	DISCIPLINE	NUMBER	REV.	
							ADW Johnson					A.H.D.		239078(1F)	WAT	009	WAC	
DESIGN FILE N:\							ALL DIMENSIONS ARE IN METRES. DO NOT SCALE											





PLAN  
SCALE 1:250

■ **PRESSURE SEWER SERVICE CONNECTIONS**  
TOTAL 21 CONNECTIONS  
• SINGLE SERVICES  
-13 x SHORT SIDE  
-8 x LONG SIDE

PRESSURE SEWER PIPE DATA		
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)
DN315	PE100 PN16	197
DN75	PE100 PN16	39
DN63	PE100 PN16	58
DN50	PE100 PN16	283

- NOTES:
- FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-004 TO 006.
  - FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-009 TO 011.
  - FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-022.
  - CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.
  - ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).
  - DN315 PE PRESSURE SEWER MAIN TO BE LAID TO GRADE.

**LEGEND**

PS	PE PRESSURE SEWER RETICULATION
PS	DN315 PE PRESSURE SEWER MAIN
RWS	PVC-M RECYCLED WATER RETICULATION
RWS	RECYCLED WATER SERVICE
RWS	DN250 PVC-M RECYCLED WATER TRANSFER MAIN
PWS	PVC-M POTABLE WATER RETICULATION
PWS	POTABLE WATER SERVICE
PWS	DN200 PVC-M POTABLE WATER TRANSFER MAIN
TELSTRA	UNDERGROUND POWER
STORMWATER PIPEWORK	STORMWATER PIPEWORK
ISOLATION VALVE / STOP VALVE	ISOLATION VALVE / STOP VALVE
FLUSHING POINT	FLUSHING POINT
WASTEWATER COLLECTION TANK AND BOUNDARY KIT	WASTEWATER COLLECTION TANK AND BOUNDARY KIT
SERVICE CONNECTION	SERVICE CONNECTION
LAY WATER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H	LAY WATER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
LIMIT OF SUBDIVISION WORKS (STAGE 1E)	LIMIT OF SUBDIVISION WORKS (STAGE 1E)

WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		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	CLIENT 	PROPERTY DESCRIPTION <b>PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014</b>	PROJECT	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION								
DESIGN FILE: N:\		Plot Date: 22/01/16 - 13:40		Cad File: C:\Users\adamarmishaw\appdata\local\temp\AcPublish_4704\20-23647 1F WW WAC.dwg		PLAN TITLE	PRESSURE SEWER DETAIL PLAN SHEET 1														
ALL DIMENSIONS ARE IN METRES. DO NOT SCALE		Scales: 0 5 10 A1 / A3 1:250 / 1:500		SURVEYED	DATUM	PROJECT No.	DISCIPLINE					NUMBER	REV.								
										ADW Johnson		A.H.D.		239078(1F) -		WAT -		012		WAC	





JOINS DRG-012

PLAN  
SCALE 1:250

- PRESSURE SEWER SERVICE CONNECTIONS  
TOTAL 21 CONNECTIONS  
• SINGLE SERVICES  
-13 x SHORT SIDE  
-8 x LONG SIDE

PRESSURE SEWER PIPE DATA			
PIPE SIZE (mm)	PIPE MATERIAL	TOTAL LENGTH (m)	
DN315	PE100 PN16	197	
DN75	PE100 PN16	39	
DN63	PE100 PN16	58	
DN50	PE100 PN16	283	

- NOTES:  
1. FOR POTABLE WATER PIPEWORK DETAIL PLANS REFER TO DRGS-004 TO 006.  
2. FOR RECYCLED WATER PIPEWORK DETAIL PLANS REFER TO DRGS-009 TO 011.  
3. FOR TYPICAL SERVICE CONNECTION DETAILS REFER TO DRG-022.  
4. CONTRACTOR MAY BEND POLYETHYLENE PIPEWORK IN PLACE OF USING STANDARD FITTINGS WITH A MIN. BENDING RADIUS OF 20 x PIPE DIAM.  
5. ALL BENDS SHALL BE ELECTROFUSION SWEEP BENDS (FABRICATED BENDS SHALL NOT BE USED).  
6. DN315 PE PRESSURE SEWER MAIN TO BE LAID TO GRADE.

- LEGEND
- PS PE PRESSURE SEWER RETICULATION
  - PS DN315 PE PRESSURE SEWER MAIN
  - PVC-M RECYCLED WATER RETICULATION
  - RWS RECYCLED WATER SERVICE
  - DN250 PVC-M RECYCLED WATER TRANSFER MAIN
  - PVC-M POTABLE WATER RETICULATION
  - PWS POTABLE WATER SERVICE
  - DN200 PVC-M POTABLE WATER TRANSFER MAIN
  - TELSTRA UNDERGROUND POWER
  - STORMWATER PIPEWORK
  - ISOLATION VALVE / STOP VALVE
  - FLUSHING POINT
  - WASTEWATER COLLECTION TANK AND BOUNDARY KIT
  - SERVICE CONNECTION
  - LAY WATER MAIN UNDER STORMWATER PIPE (300mm MIN. VERTICAL CLEARANCE) - REFER TO WAT-1255-H
  - LIMIT OF SUBDIVISION WORKS (STAGE 1E)

WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		
B	7.10.2014	AMENDED ISSUE	T.M.	L.G.	J.N.		
O	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.	
1	07.04.2015	AMENDED CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.	
WAC	27.10.2015	WORK AS CONSTRUCTED - RAR	A.S.A.			B.K.	

DESIGN FILE: N:\

Plot Date: 22/01/16 - 13:40

ALL DIMENSIONS ARE IN METRES. DO NOT SCALE

**adw Johnson**

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

CLIENT

**JOHNSON PROPERTY GROUP**

PROPERTY DESCRIPTION

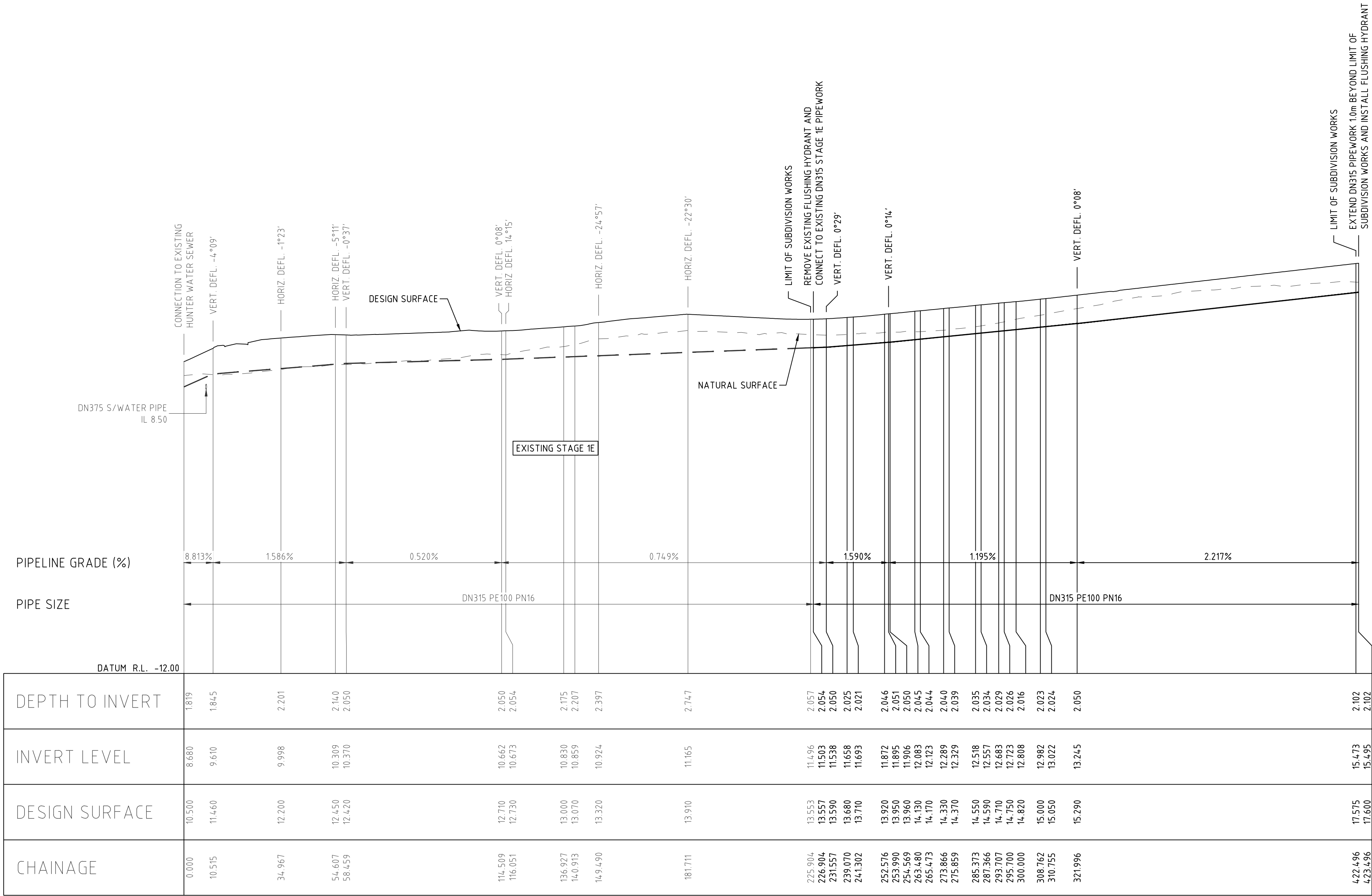
PROPOSED SUBDIVISION  
STAGE 1F WATAGAN PARK  
McCULLOUGH STREET, COORANBONG  
DA/573/2014

SURVEYED ADW Johnson

DATUM A.H.D.

PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION			
PLAN TITLE PRESSURE SEWER DETAIL PLAN SHEET 2			
PROJECT No. 239078(1F)	DISCIPLINE WAT	NUMBER 013	REV. WAC





LONGITUDINAL SECTION - DN315 PRESSURE SEWER MAIN

HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:200

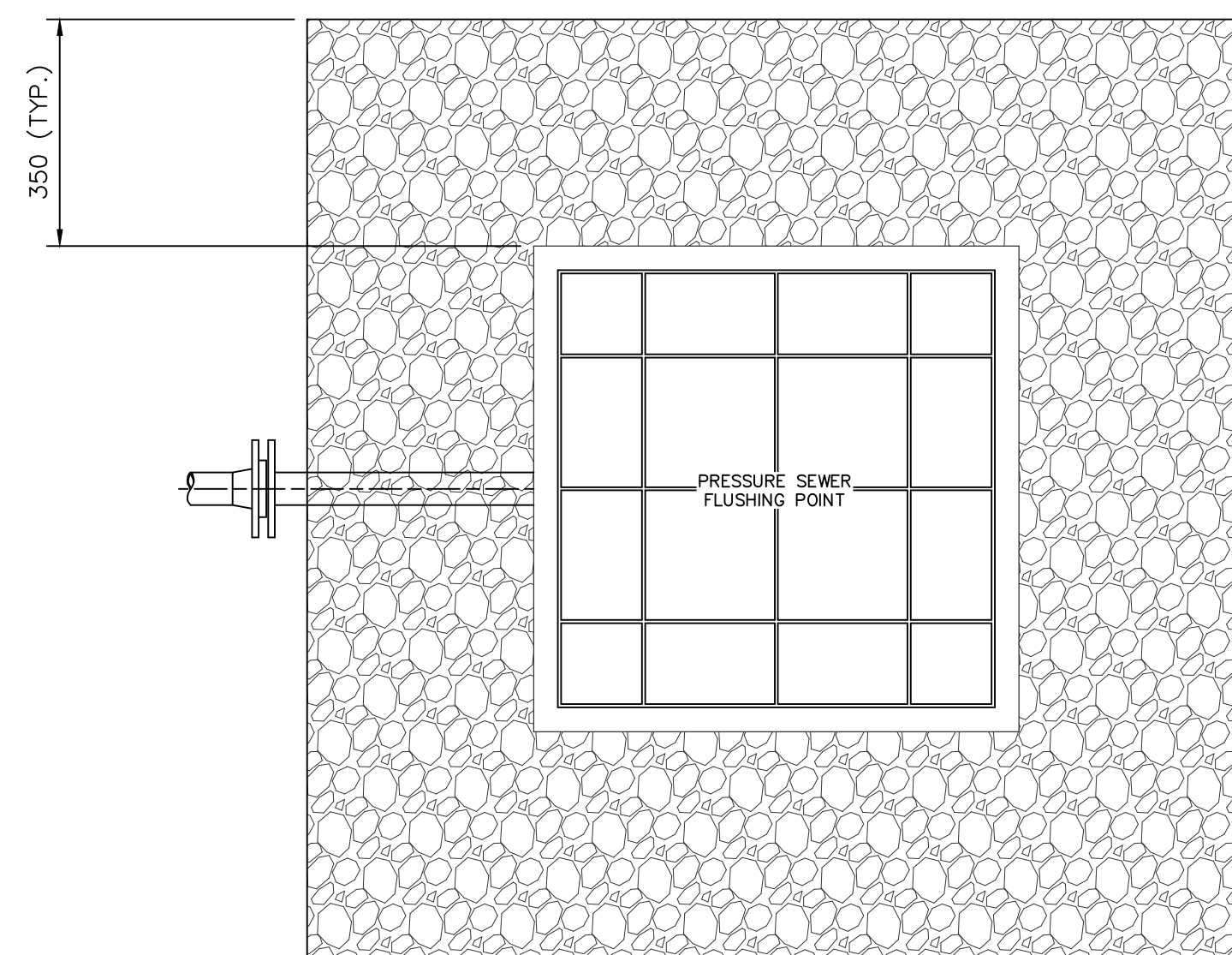
WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		0 5 10 A1 / A3 1:250 / 1:500	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	PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	PRESSURE SEWER MAIN LONGITUDINAL SECTION	239078(1F)	WAT	014	WAC
B	7.10.2014	AMENDED ISSUE	T.M.	L.G.	J.N.										
O	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.									
1	07.04.2015	AMENDED CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.									
WAC	27.10.2015	WORK AS CONSTRUCTED - RAR	A.S.A.			B.K.									
DESIGN FILE: N:\								ALL DIMENSIONS ARE IN METRES. DO NOT SCALE							

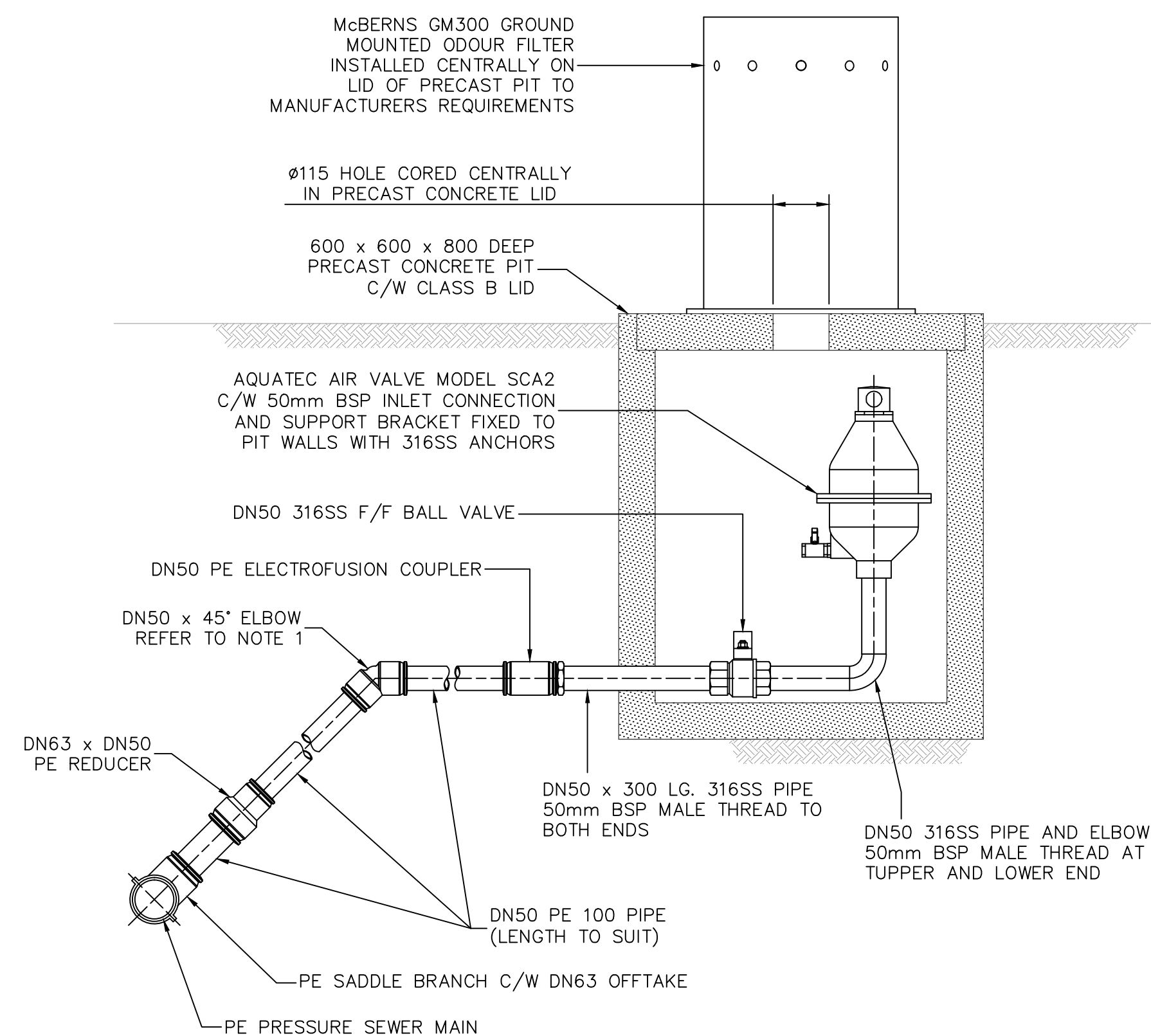




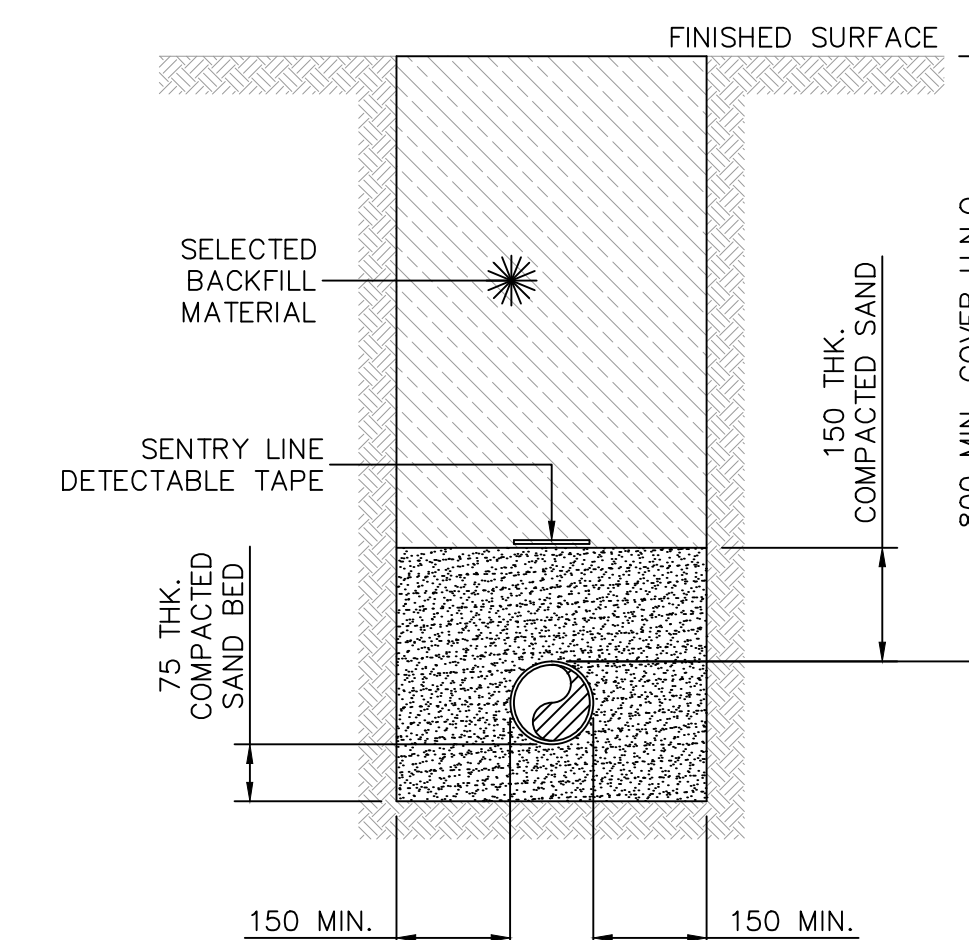
**DIAL 1100**  
BEFORE YOU DIE



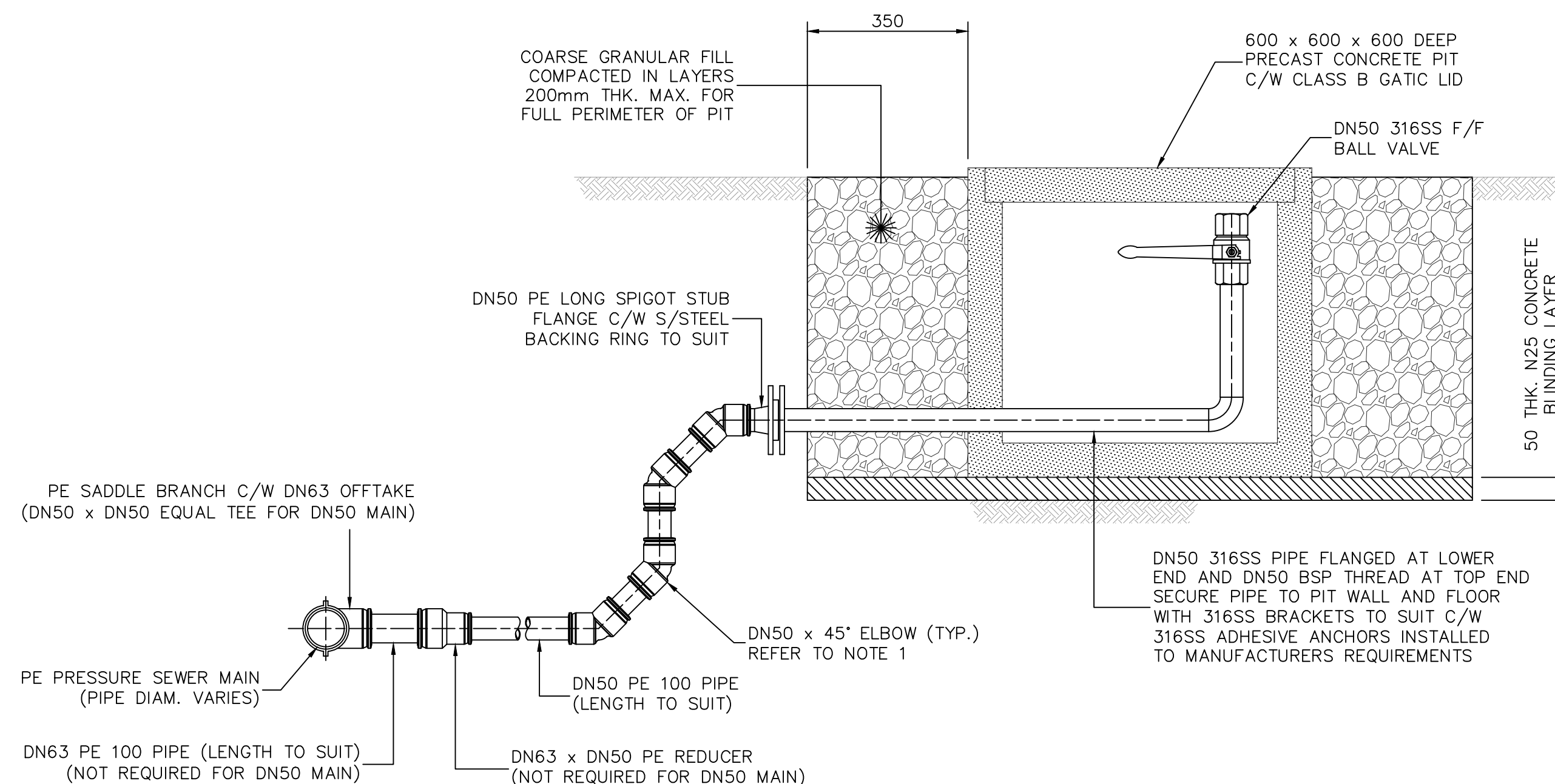
## PLAN



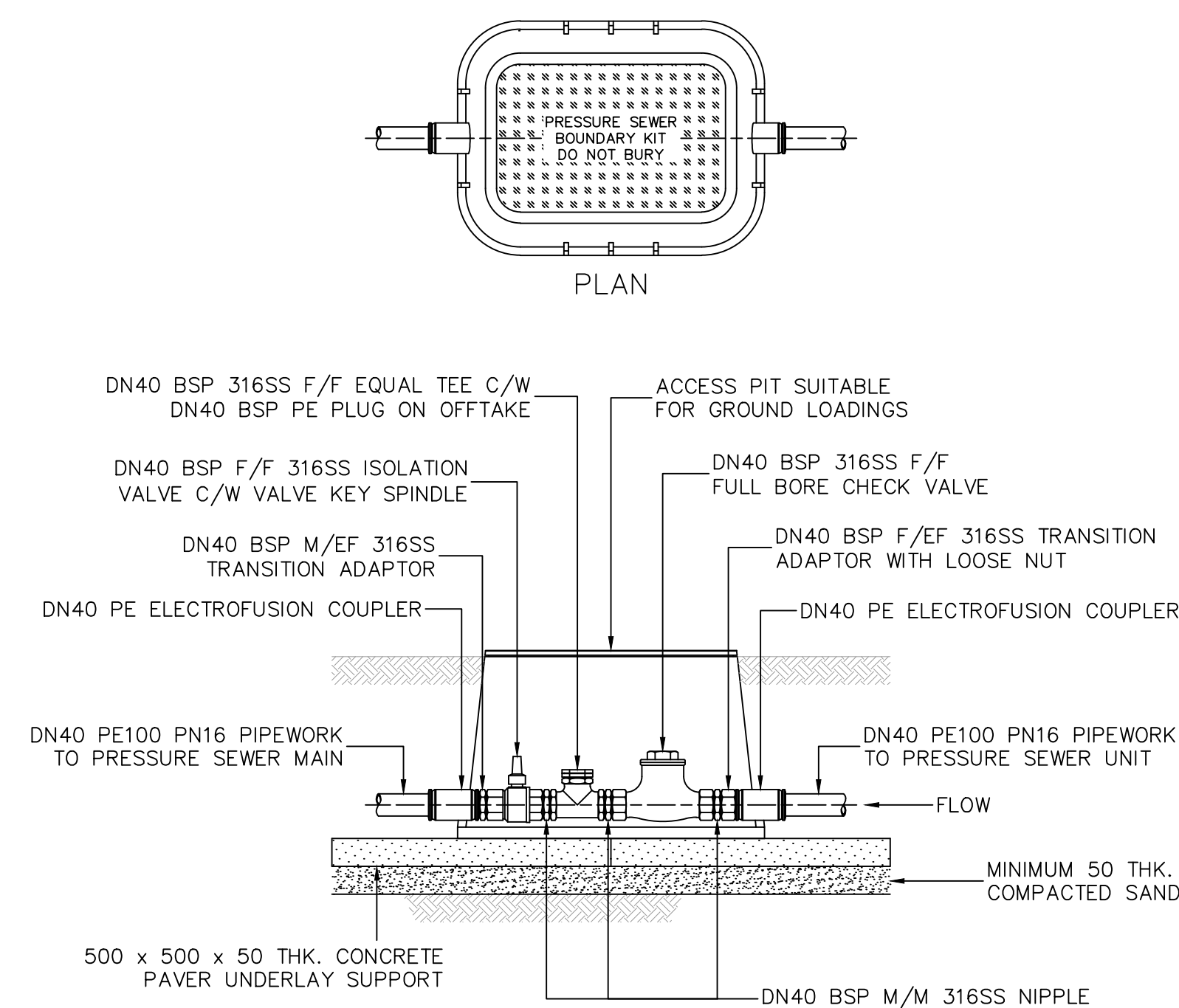
SECTIONAL ELEVATION  
AIR VALVE TYPICAL DETAIL  
SCALE 1:10



STREET PRESSURE MAIN  
TYPICAL DETAIL  
SCALE 1:10



SECTIONAL ELEVATION  
FLUSHING POINT TYPICAL DETAIL  
SCALE 1:10

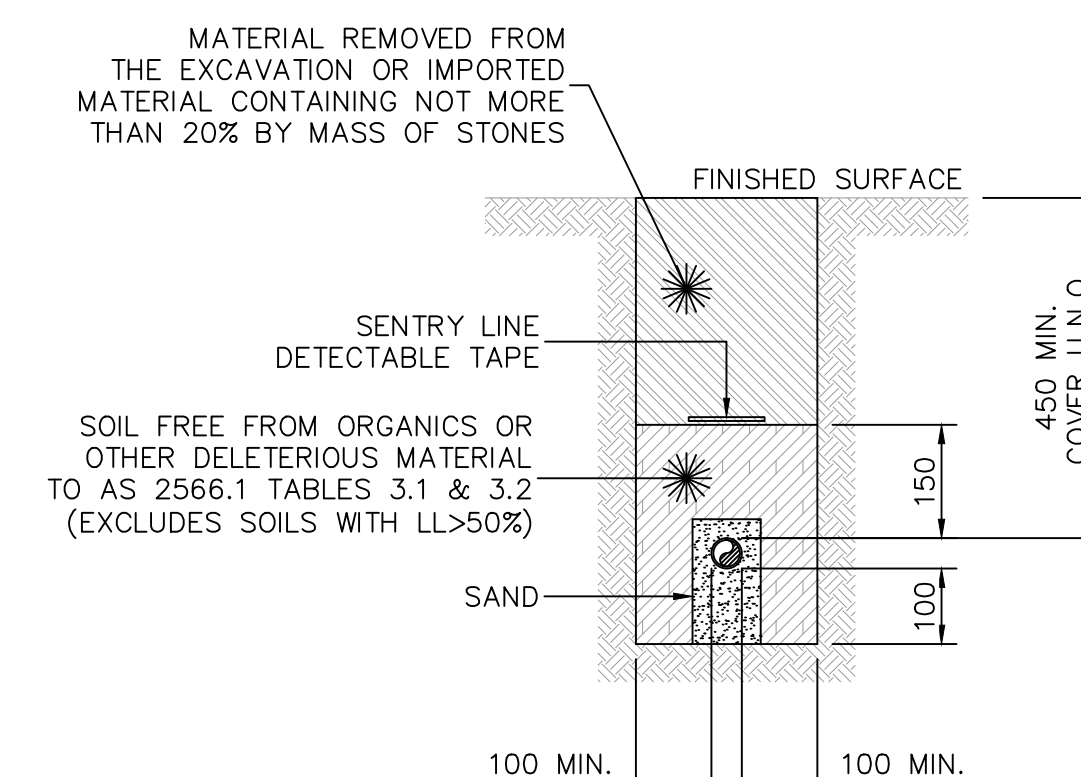


SECTIONAL ELEVATION

BOUNDARY KIT TYPICAL DETAIL

SCALE 1:10


(SUPPLIED BY NOV MONO PUMPS AUSTRALIA)



PRIVATE PROPERTY PRESSURE MAIN  
TYPICAL DETAIL  
SCALE 1:10

NOTES:

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

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		
B	03.09.2014	AMENDED ISSUE	T.M.	L.G.	J.N.		
O	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.		
WAC	28.10.2015	WORK AS CONSTRUCTED – RAR	A.S.A.			L.G. B.K.	



**Hunter Office**  
Unit 7/335 Hillsborough Rd  
Warners Bay N.S.W. 2282  
Phone: (02) 4978 5100  
Fax: (02) 4978 5199  
email: [hunter@adwjohanson.com.au](mailto:hunter@adwjohanson.com.au)  
[www.adwjohanson.com.au](http://www.adwjohanson.com.au)  
ABN 62 129 445 398

CLIENT	
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	PROPERTY DESCRIPTION
1.	Property Description
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94.	Property Description
95.	Property Description
96.	Property Description
97.	Property Description
98.	Property Description
99.	Property Description
100.	Property Description

PROPOSED SUBDIVISION  
STAGE 1F WATAGAN PARK  
McCULLOUGH STREET, COORANBONG  
DA/573/2014

	SURVEYED
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DATUM
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	PROJECT N
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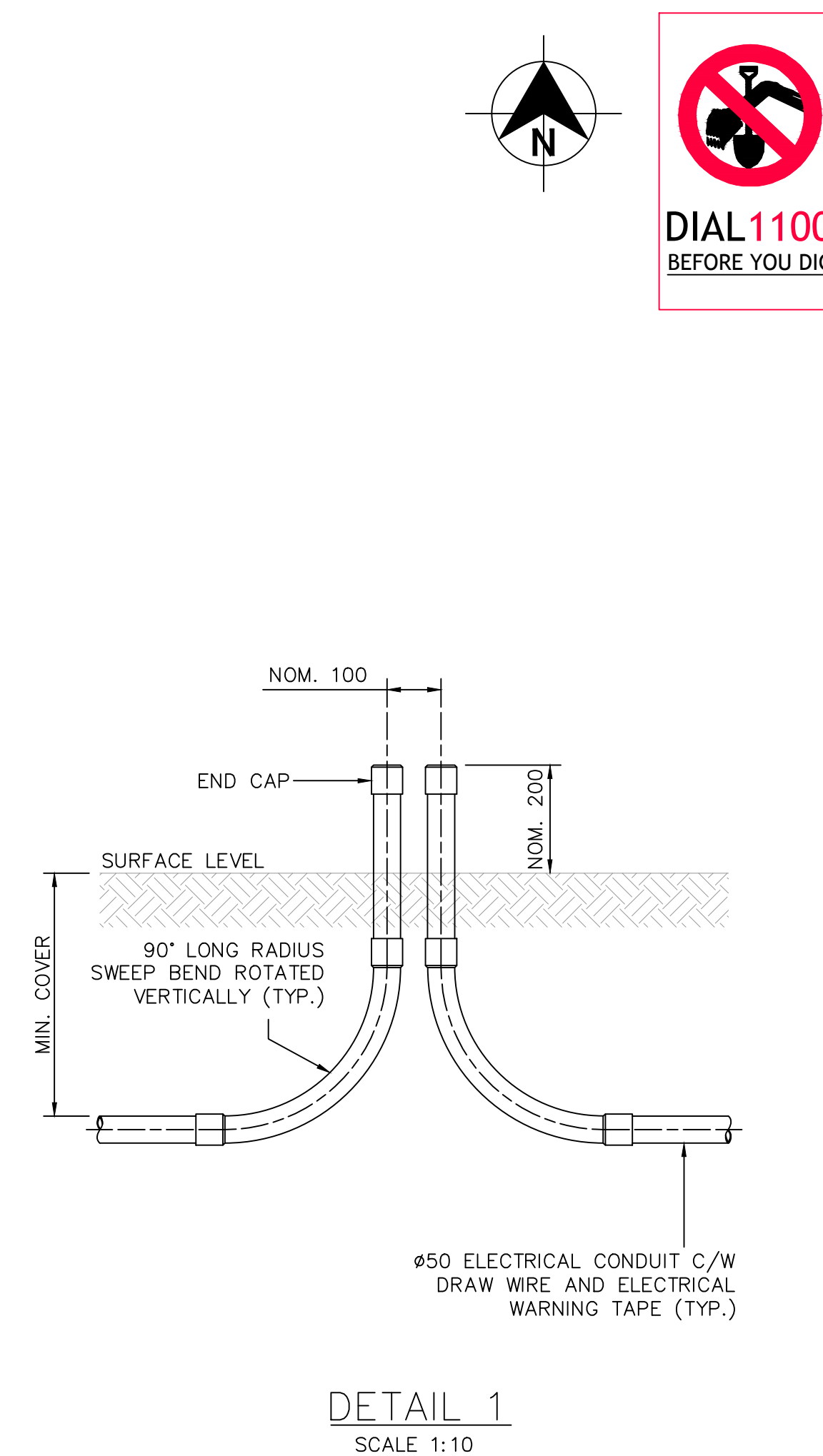
DISCIPLINE

NUMBER

REV.	
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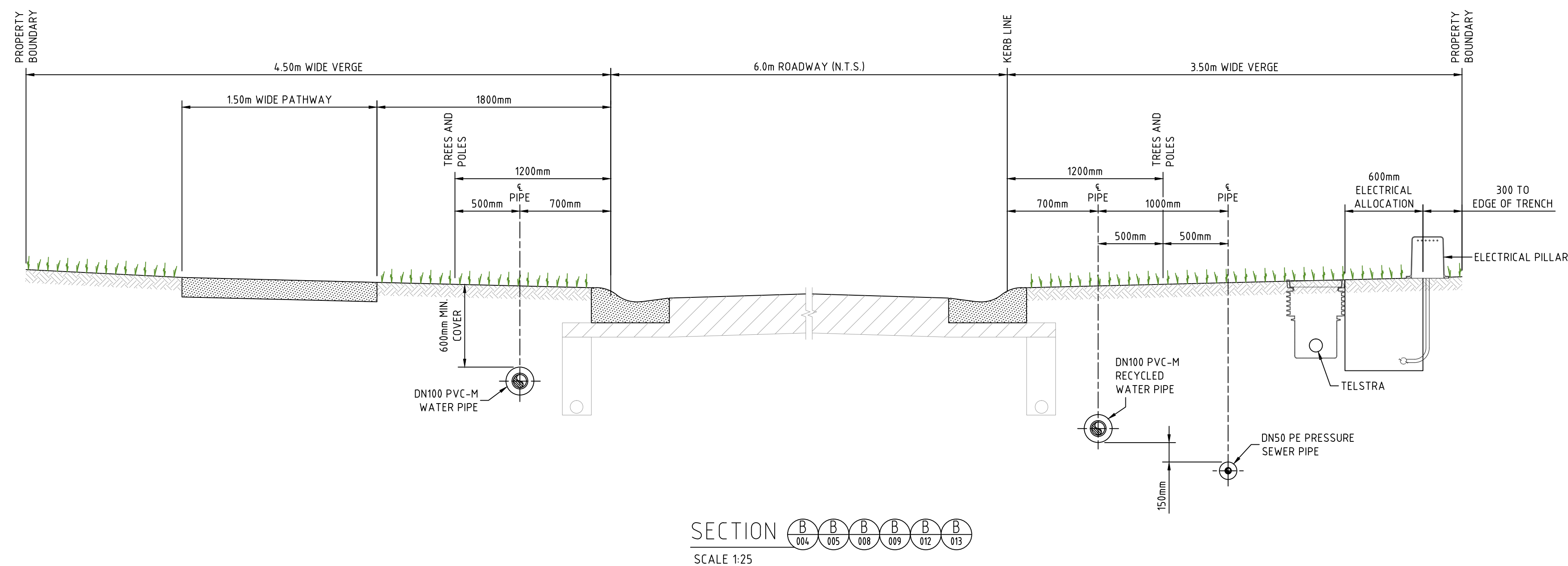
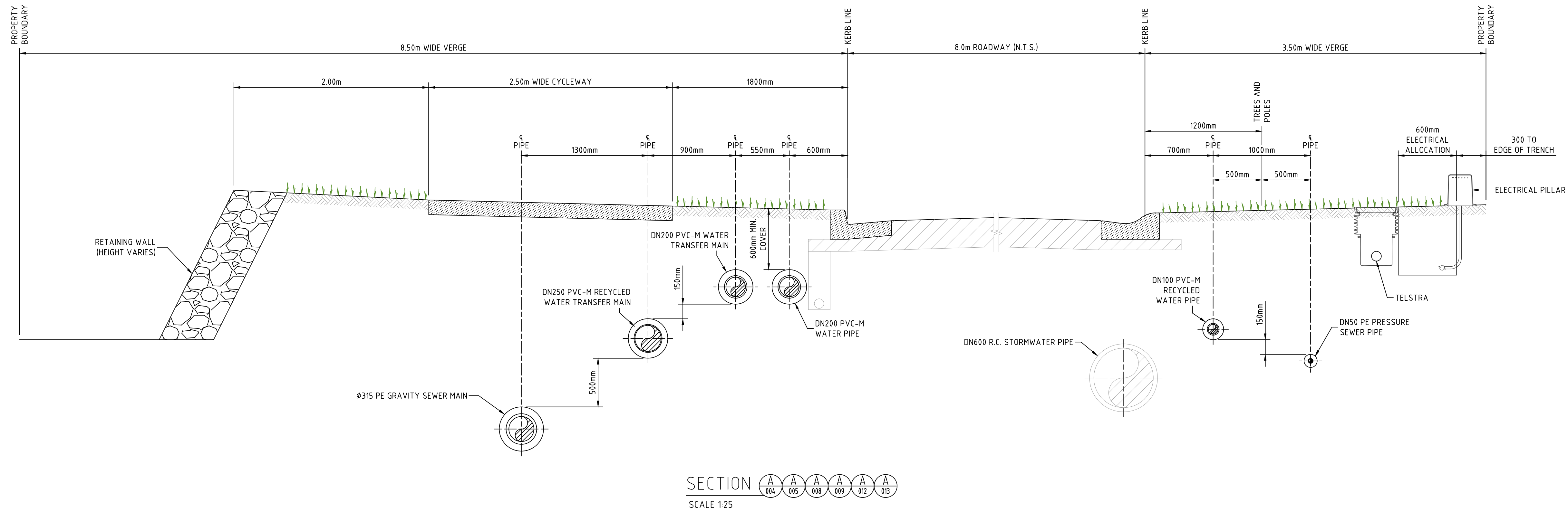
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- Plotted By: adamarmishaw      Plot Date: 22/01/16 - 13:46      Cad File: C:\Users\adamarmishaw\appdata\local\temp\AcPublish\_4704\20-23647 1F Details.dwg



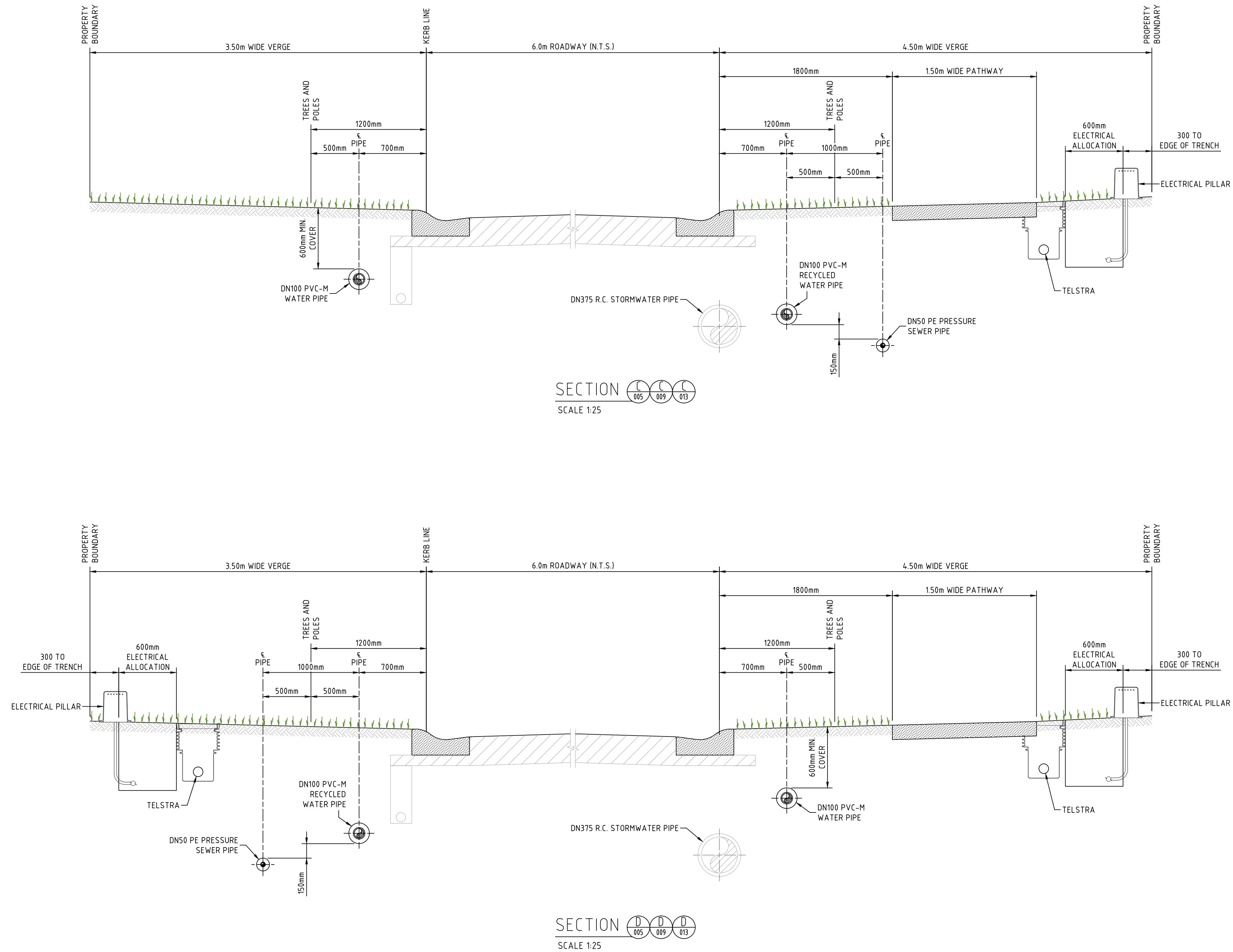


- NOTE:
- FOR MINIMUM VERTICAL AND HORIZONTAL CLEARANCES REFER TO WATER SUPPLY CODE OF AUSTRALIA WSA 03-2002-2.3, TABLE 4.1 (HUNTER WATER EDITION VERSION 1).

## WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	CLIENT	PROPERTY DESCRIPTION	PROJECT	PLAN TITLE	PROJECT No.	DISCIPLINE	NUMBER	REV.
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		0 0.5 1 A1 / A3 1:25 / 1:50	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	PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014	POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION	ROAD CROSS SECTIONS DETAILS	239078(1F)	WAT	020	WAC
B	03.09.2014	AMENDED ISSUE	T.M.	L.G.	J.N.										
0	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.									
1	07.04.2015	AMENDED CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.									
WAC	28.10.2015	WORK AS CONSTRUCTED - RAR	A.S.A.			B.K.									



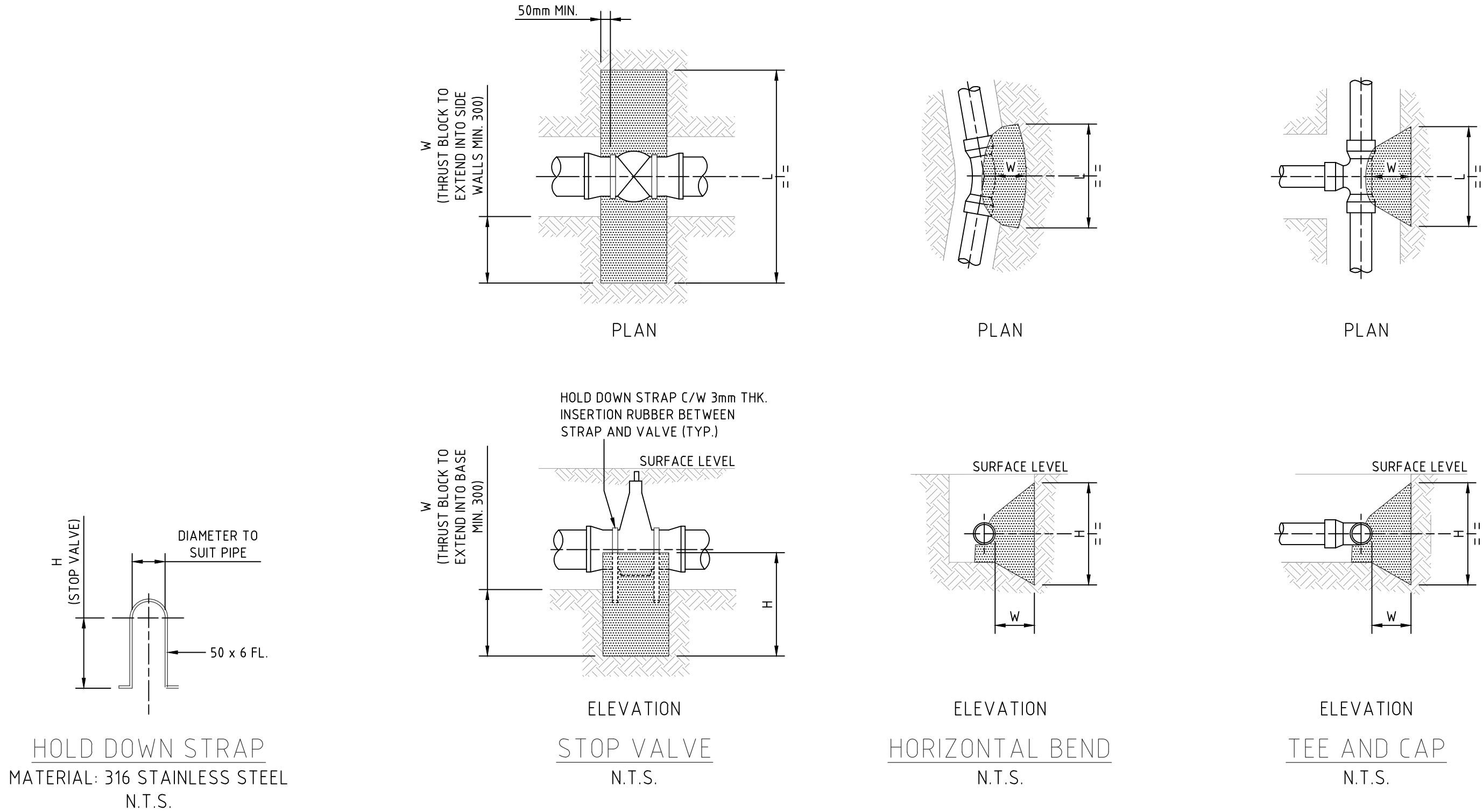


- NOTE:
- FOR MINIMUM VERTICAL AND HORIZONTAL CLEARANCES REFER TO WATER SUPPLY CODE OF AUSTRALIA WSA 03-2002-2.3, TABLE 4.1 (HUNTER WATER EDITION VERSION 1).

## WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES		<p>Hunter Office Unit 7/335 Hillsborough Rd Warners Bay N.S.W. 2282 Phone: (02) 4978 5100 Fax: (02) 4978 5199 email:hunter@adwjohanson.com.au www.adwjohanson.com.au ABN 62 129 445 398</p>	CLIENT 	PROPERTY DESCRIPTION		PROJECT POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION		
B	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.		PROPOSED SUBDIVISION STAGE 1F WATAGAN PARK McCULLOUGH STREET, COORANBONG DA/573/2014				PLAN TITLE  ROAD CROSS SECTIONS SHEET 2				
O	03.09.2014	AMENDED ISSUE	T.M.	L.G.	J.N.										
	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.										
WAC	28.10.2015	WORK AS CONSTRUCTED – RAR	A.S.A.				L.G. B.K.								
DESIGN FILE N:\							ALL DIMENSIONS ARE IN METRES. DO NOT SCALE		SURVEYED ADW Johnson		DATUM A.H.D.	PROJECT No. 239078(1F) –	DISCIPLINE WAT –	NUMBER 021	REV. WAC





SERVICE PRESSURE (ALL PROPERTIES) = STANDARD (20m-60m)								
TYPE	FITTING	Soil AHBP (Kpa)	Design STP (Kpa)	Thrust	TA (m2)	Length (L)	Height (H)	Width (W)
1	DN315 Flushing Hydrant	100	1000	94.00	0.94	1.00	0.94	0.40
2	DN300 x DN100 Taper	100	1000	82.00	0.82	1.55	0.69	0.40
3	DN250 x 45° Bend	100	1000	51.00	0.51	0.75	0.68	0.40
4	DN250 x 22.5° Bend	100	1000	26.00	0.26	0.55	0.47	0.40
5	DN250 x 11.25° Bend	100	1000	13.00	0.13	0.40	0.33	0.40
6	DN250 Flushing Hydrant	100	1000	65.00	0.65	0.90	0.72	0.40
7	DN200 x DN200 Tee	100	1000	43.00	0.43	0.70	0.61	0.30
8	DN200 x DN100 Tee	100	1000	12.00	0.12	0.40	0.30	0.30
9	DN200 x DN100 Taper	100	1000	31.00	0.31	1.20	0.55	0.30
10	DN200 x 45° Bend	100	1000	33.00	0.33	0.60	0.55	0.30
11	DN200 x 22.5° Bend	100	1000	17.00	0.17	0.45	0.38	0.30
12	DN200 x 11.25° Bend	100	1000	8.10	0.08	0.30	0.30	0.30
13	DN200 Stop Valve	100	1000	43.00	0.43	1.20	0.55	0.30
13	DN200 Flushing Hydrant	100	1000	43.00	0.43	0.70	0.61	0.30
14	DN100 x DN100 Tee	100	1000	12.00	0.12	0.40	0.30	0.30
15	DN100 x 45° Bend	100	1000	8.80	0.09	0.30	0.30	0.30
16	DN100 x 22.5° Bend	100	1000	4.50	0.05	0.30	0.30	0.30
17	DN100 x 11.25° Bend	100	1000	2.20	0.02	0.30	0.30	0.30
18	DN100 Stop Valve	100	1000	12.00	0.12	1.05	0.49	0.30
19	DN100 Flushing Hydrant	100	1000	12.00	0.12	0.40	0.30	0.30
20	DN100 End Cap	100	1000	12.00	0.12	0.40	0.30	0.30

THRUST BLOCK NOTES:

1. CONCRETE THRUST BLOCKS ARE TO BE PROVIDED FOR ALL FITTINGS IN ACCORDANCE WITH TABLE.
2. 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.
3. THRUST BLOCKS ARE TO BE CONSTRUCTED SUCH THAT THEY TRANSFER THE THRUST ONTO UNDISTURBED GROUND. THRUST BLOCKS ARE NOT TO INTERFERE WITH OTHER SERVICES.
4. FINISH THRUST BLOCKS APPROXIMATELY 100mm ABOVE THE TOP OF THE FITTING OR BEARING PAD AND EXTEND TO THE FLOOR OF THE TRENCH OR DEEPER IF NECESSARY TO ACHIEVE THE REQUIRED THRUST AREA (N). MAXIMUM ENCASEMENT TO BE 180°.
5. CONCRETE FOR THE THRUST BLOCKS TO BE GRADE S25 USING CEMENT TYPE "SR" TO AS3972. CONCRETE TO BE MECHANICALLY VIBRATED.
6. CONCRETE THRUST BLOCKS ARE TO BE CURED FOR A MINIMUM OF 7 DAYS BEFORE BEING SUBJECTED TO ANY THRUST LOAD.
7. REFER TO WAT-1205-V FOR GENERAL FITTING THRUST BLOCK ARRANGEMENTS.
8. REFER TO WAT-1207-V FOR GENERAL VALVE AND VERTICAL BEND THRUST BLOCK ARRANGEMENTS.

WORK-AS-CONSTRUCTED

REV.	DATE	AMENDMENT	DRAWN	CHECK	DESIGN	VERIFY	SCALES	<div><div></div><div>Hunter Office</div><div>Unit 7/335 Hillsborough Rd</div><div>Warners Bay N.S.W. 2282</div><div>Phone: (02) 4978 5100</div><div>Fax: (02) 4978 5199</div><div>email: hunter@adwjohnson.com.au</div><div>www.adwjohnson.com.au</div><div>ABN 62 129 445 398</div></div>	CLIENT	<div><div></div><div>JOHNSON PROPERTY GROUP</div></div>	PROPERTY DESCRIPTION		PROJECT			
A	20.08.2014	INITIAL DRAFT	J.N.	L.G.	J.N.				POTABLE WATER, RECYCLED WATER AND PRESSURE SEWER RETICULATION							
B	03.09.2014	AMENDED ISSUE	T.M.	L.G.	J.N.				PLAN TITLE							
O	22.10.2014	CONSTRUCTION ISSUE	J.N.	L.G.	J.N.	L.G.			THRUST BLOCK DETAILS							
WAC	28.10.2015	WORK AS CONSTRUCTED – RAR	A.S.A.			B.K.										
DESIGN FILE N:\							ALL DIMENSIONS ARE IN METRES.	DO NOT SCALE								