



SEWERAGE NOTES:

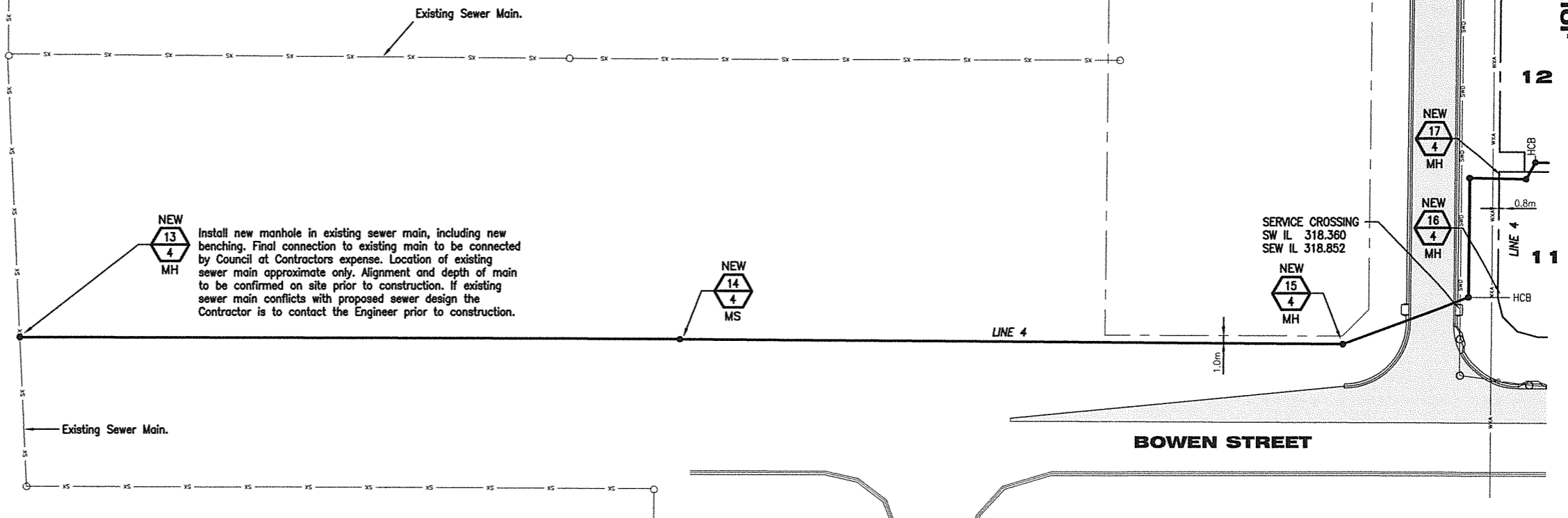
- THE SURFACE LEVELS SHOWN ON THE SEWERAGE PLAN & LONGITUDINAL SECTIONS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL COMPLETE MANHOLES/INSPECTION CHAMBERS 75mm MIN. ABOVE FINISHED SURFACE LEVEL.
- ALL GRAVITY SEWERAGE PIPES TO BE 150mm dia. DWV RRI CLASS "SN8" UNO.
- ALL MANHOLES TO BE 1050mm DIA. NOM WITH IMPRINTED "SEWER" WORDING ON LIDS.
- ALL MAINTENANCE SHAFTS TO BE "WORMALL POO PIT 600" OR EQUIVALENT APPROVED BY WSA AND ENGINEER.
- FOR OFFSETS TO MANHOLES, OFFTAKES & END OF LINES - REFER THIS PLAN.
- THE CONTRACTOR OR HIS SURVEYOR SHALL MAINTAIN ACCURATE RECORDS OF LEVELS & LOCATIONS OF ALL SERVICES TO FULLY COMPLY WITH COUNCILS 'AS CONSTRUCTED' INFORMATION REQUIREMENTS.
-  INDICATES MANHOLES (MH) / MAINTENANCE SHAFT (MS) NUMBER.
 INDICATES SEWER LINE NUMBER.
- ALL MANHOLE DROP TYPES TO BE IN ACCORDANCE WITH I.P.W.E.A STANDARD DRAWING NO. S-0021 "ACCESS CHAMBERS 1050mm NOM. DIA. PRECAST COMPONENTS".
- ALL HOUSE CONNECTION BRANCHES TO BE IN ACCORDANCE WITH I.P.W.E.A STANDARD DRAWING NO. S-0030 "HOUSE CONNECTION BRANCHES".
- ALL WORKS ASSOCIATED WITH LIVE SEWERAGE LINES TO BE CARRIED OUT BY COUNCIL AT THE CONTRACTORS EXPENSE.
- SEWERAGE LINES HAVE BEEN SET AT DEPTHS WHICH ALLOW FOR FUTURE CUTTING OF ALLOTMENTS DURING FORMATION OF BUILDING PLATFORMS SUCH THAT ADEQUATE COVER TO THE LINE WILL BE MAINTAINED. NO CHANGES TO THE DESIGN GIVEN ARE TO BE CARRIED OUT WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
- ALL HOUSE CONNECTION STUBS TO BE 100mm dia. DWV CLASS "SN10" PIPE (1 IN 60 MIN GRADE).
A 50 x 40mm YELLOW PAINTED PEG SHALL BE LOCATED VERTICALLY ABOVE THE PROPERTY CONNECTION END CAP, WITH THE TOP OF THE PEG TO BE VISIBLE AND WHITE PLASTIC MARKER TAPE 50mm WIDE SHALL BE ATTACHED TO THE PROPERTY CONNECTION END CAP. PVC RISER BROUGHT VERTICALLY, MAXIMUM 1.0M ABOVE SURFACE AND STAPLED TO THE MARKER PEG.
A YELLOW MARKER STAKE (25mm x 25mm x 900mm LONG, DRIVEN 300mm INTO THE GROUND) SHALL BE PLACED ADJACENT TO THE DUMPY PEG AND MARKED WITH THE WORD "SEWER" AND THE DEPTH TO THE PROPERTY CONNECTION.
- BRASS KERB MARKER TO BE INSERTED INTO KERB AND CHANNEL BOTH SIDES OF ROAD TO INDICATE SERVICE CROSSING. DISKS TO BE FIRMLY BONDED TO CONCRETE KERB SURFACE AT CONSTRUCTION AND CORRECTLY ORIENTATED FOR EASE OF IDENTIFICATION.

- MARKER TAPE FOR SEWER MAINS TO BE INSTALLED IN ACCORDANCE WITH WSA 02-2002-2.3 STANDARD DRAWING SEW-1201.
- SEWER CHAMBER COMPONENTS TO BE COMPLETELY SEALED USING LOCTITE, URETHANE TUBE SEALANT.
- EXISTING SEWER LINES AND MANHOLE LOCATED BETWEEN MANHOLES 13/3 AND 16/3 TO BE EXCAVATED AND REMOVED. ALL EXISTING BEDDING MATERIAL SHALL BE REMOVED FROM THE SITE, AND THE TRENCH REFILLED WITH CLEAN, NON ORGANIC MATERIAL, FREE FROM DEBRIS, MOISTENED/DRYED TO OPTIMUM MOISTURE CONTENT, AND COMPACTED TO ACHIEVE A MINIMUM OF 95% STANDARD COMPACTION. DENSITY TESTING SHALL BE CARRIED OUT BY A NATA REGISTERED LABORATORY AT THE FOLLOWING FREQUENCY:
1 TEST
PER 20 LINEAR METRES OF TRENCH
PER 300mm OF DEPTH

REFER SHEET 302 FOR SEWERAGE MANHOLE SETOUT TABLE

AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

LEGEND	
— SF —	FUTURE SEWER MAIN
— SX —	NEW SEWER GRAVITY MAIN
— SXA —	EXISTING SEWER MAIN
— SXR —	EXISTING SEWER MAIN REMOVED
— SWF —	FUTURE STORMWATER DRAINAGE
— SWD —	NEW STORMWATER DRAINAGE
— SWX —	EXISTING STORMWATER DRAINAGE
— SCX —	EXISTING STORMWATER CULVERT
— RF —	FUTURE ROOFWATER DRAINAGE
— RW —	NEW ROOFWATER DRAINAGE
— EF —	FUTURE UG ELECTRICAL
— E —	NEW UG ELECTRICAL
— FX —	EXISTING OVERHEAD ELECTRICAL
— WF —	FUTURE WATER MAIN
— W150 —	NEW #150 WATER MAIN
— W100 —	NEW #100 WATER MAIN
— WS —	NEW WATER SERVICE
— WX —	EXISTING WATER MAIN
— GF —	FUTURE GAS MAIN
— G —	NEW GAS MAIN
— GS —	NEW GAS SERVICE
— GX —	EXISTING GAS MAIN
— TX —	EXISTING TELSTRA CABLES
HCB	INSTALL NEW HOUSE CONNECTION STUB TO SERVICE EACH ALLOTMENT IN THIS STAGE



SEWER RETICULATION LAYOUT PLAN

Scale:- P

Revisions	Date
3 As Constructed	July 13
2 Road Layout	Oct 11
1 For Construction	Oct 11
A Original issue	



136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL:
mail@bakerrossow.com.au

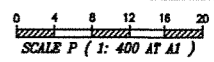


client **URBAN LAND DEVELOPMENT AUTHORITY**
project **PROPOSED RESIDENTIAL SUBDIVISION CURREY STREET, ROMA (STAGE 1)**
title **SEWER RETICULATION LAYOUT PLAN SHEET 1 OF 2**

Survey FYE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/12	Certified FOR BAKER ROSSOW CONSULTING ENGINEERS
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JOB No. 105848	No. of plans
	Plan No. 301
A 1 2 3	

AS CONSTRUCTED

DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

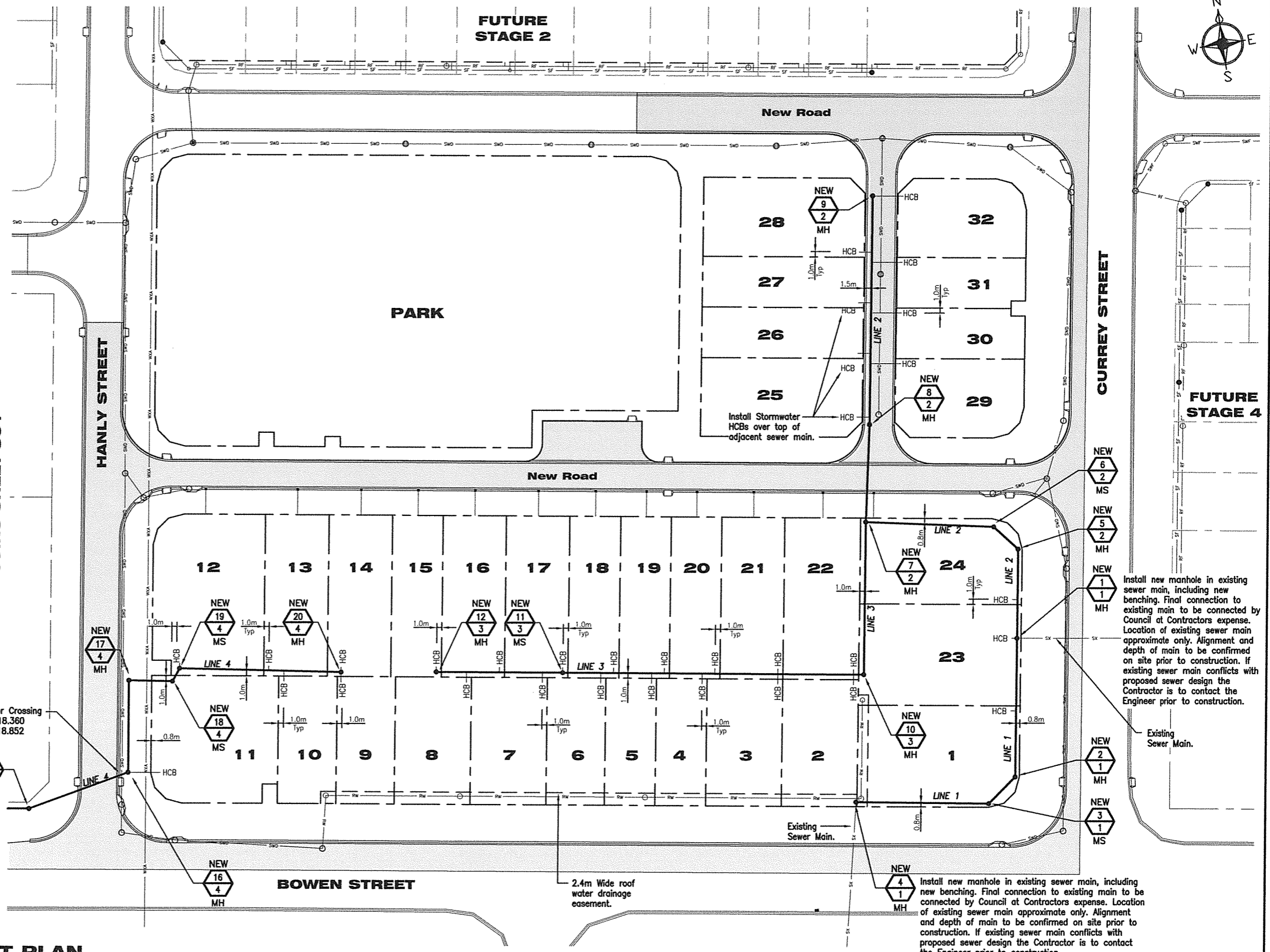
Manhole Setout Table		
Manhole ID	Easting	Northing
1/1 (MH)	676576.856	7059845.625
2/1 (MH)	676572.505	7059818.932
3/1 (MS)	676566.665	7059814.331
4/1 (MH)	676540.812	7059818.714
5/2 (MH)	676579.832	7059863.023
6/2 (MS)	676575.823	7059868.140
7/2 (MH)	676550.588	7059873.008
8/2 (MH)	676554.269	7059892.108
9/2 (MH)	676561.648	7059936.705
10/3 (MH)	676545.443	7059843.483
11/3 (MS)	676487.403	7059852.839
12/3 (MH)	676462.781	7059856.855
13/4 (MH)	676177.583	7059875.794
14/4 (MS)	676279.348	7059859.253
15/4 (MH)	676379.213	7059842.735
16/4 (MH)	676399.641	7059846.834
17/4 (MH)	676402.793	7059864.570
18/4 (MS)	676410.978	7059863.164
19/4 (MS)	676412.747	7059865.465
20/4 (MH)	676444.053	7059859.769

"As-Constructed" drawings provide Coordinates to MGA94

LEGEND

- SF — FUTURE SEWER MAIN
- SX — NEW SEWER GRAVITY MAIN
- SXX — EXISTING SEWER MAIN
- SXXA — EXISTING SEWER MAIN REMOVED
- SWF — FUTURE STORMWATER DRAINAGE
- SWD — NEW STORMWATER DRAINAGE
- SWX — EXISTING STORMWATER DRAINAGE
- SCX — EXISTING STORMWATER CULVERT
- RF — FUTURE ROOFWATER DRAINAGE
- RW — NEW ROOFWATER DRAINAGE
- EF — FUTURE UG ELECTRICAL
- E — NEW UG ELECTRICAL
- PX — EXISTING OVERHEAD ELECTRICAL
- WF — FUTURE WATER MAIN
- W150 — NEW #150 WATER MAIN
- W100 — NEW #100 WATER MAIN
- WS — NEW WATER SERVICE
- WX — EXISTING WATER MAIN
- GF — FUTURE GAS MAIN
- G — NEW GAS MAIN
- GS — NEW GAS SERVICE
- GX — EXISTING GAS MAIN
- TX — EXISTING TELSTRA CABLES
- HCB — INSTALL NEW HOUSE CONNECTION STUB TO SERVICE EACH ALLOTMENT IN THIS STAGE

JOINS SHEET 301



Install new manhole in existing sewer main, including new benching. Final connection to existing main to be connected by Council at Contractors expense. Location of existing sewer main approximate only. Alignment and depth of main to be confirmed on site prior to construction. If existing sewer main conflicts with proposed sewer design the Contractor is to contact the Engineer prior to construction.

Install new manhole in existing sewer main, including new benching. Final connection to existing main to be connected by Council at Contractors expense. Location of existing sewer main approximate only. Alignment and depth of main to be confirmed on site prior to construction. If existing sewer main conflicts with proposed sewer design the Contractor is to contact the Engineer prior to construction.

SEWER RETICULATION LAYOUT PLAN

Scale:— P

Revisions	Date
3 As Constructed	July 13
2 Road Layout For Construction	Oct 11
1 Original issue	Oct 11

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558

EMAIL:
mail@bakerrossow.com.au

client	URBAN LAND DEVELOPMENT AUTHORITY
project	PROPOSED RESIDENTIAL SUBDIVISION CURREY STREET, ROMA (STAGE 1)
title	SEWER RETICULATION LAYOUT PLAN SHEET 2 OF 2

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/13	Certified RPEQ 13598
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JOB No. 105848		No. of plans 302	
A	1	2	3

MANHOLE/END NAME
MANHOLE TYPE
LID TYPE
JUNCTION LINE
DROP TYPE
DEPTH TO HC STUB
HOUSE CONNECTION STUB INVERT LEVEL
HC TYPE
HC LOT No
CH. FROM D/S MH

LEGEND:

Refer IPWEAQ standard drawings S-0021 and S-0030

Manhole Type:

- A - Allotment. Light duty concrete lid
- F - Footpath. Medium duty concrete lid
- R - Road. Heavy duty cast iron lid
- EX - Existing Manhole
- END - End of Line
- MS - Maintenance Shaft

Lid Type:

- CF - Concrete Filled
- CI - Cast Iron

Drop Type:

- A - 40mm to 300mm. Internal benching
- B - 300mm to 600mm. External 45° Wye
- C - >600mm. External 90° junction and drop

HC Type:

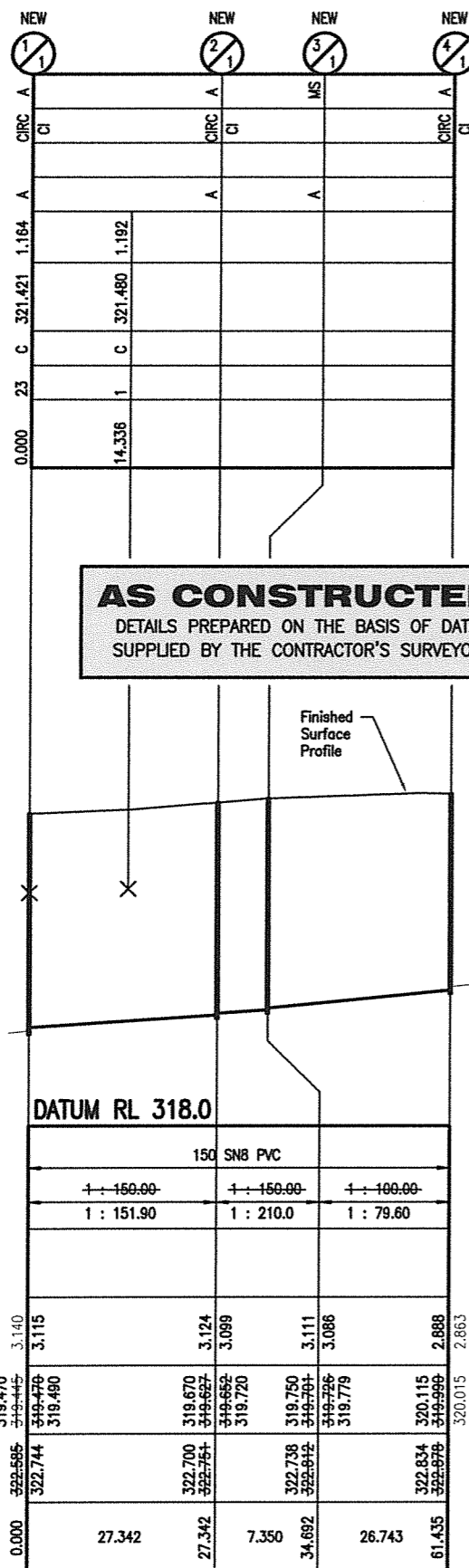
- A - 0mm to 300mm. Small drop, sloped branch
- B - 300mm to 600mm. Medium drop, sloped branch
- C - >600mm. Large drop, vertical branch

Notes:

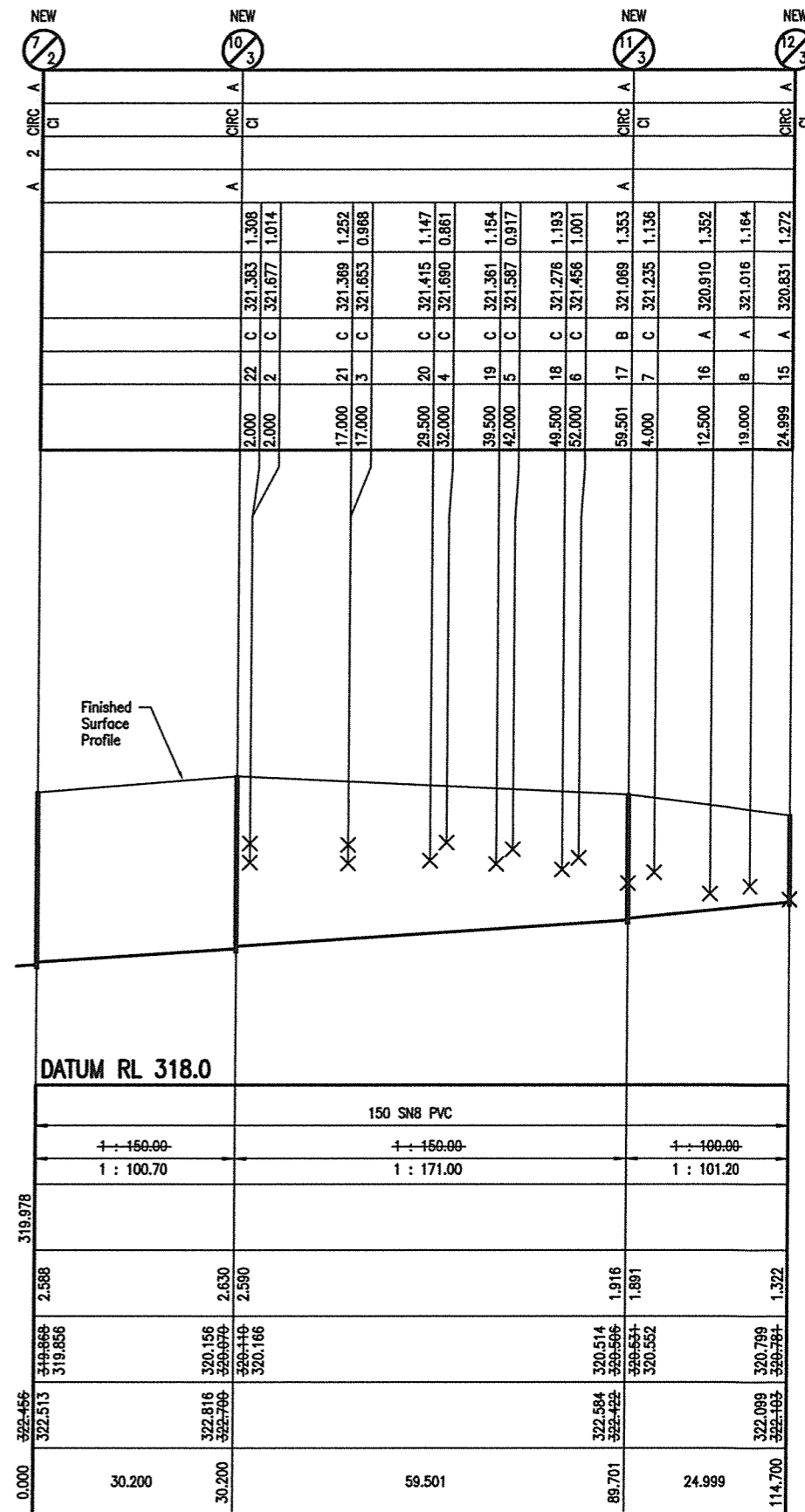
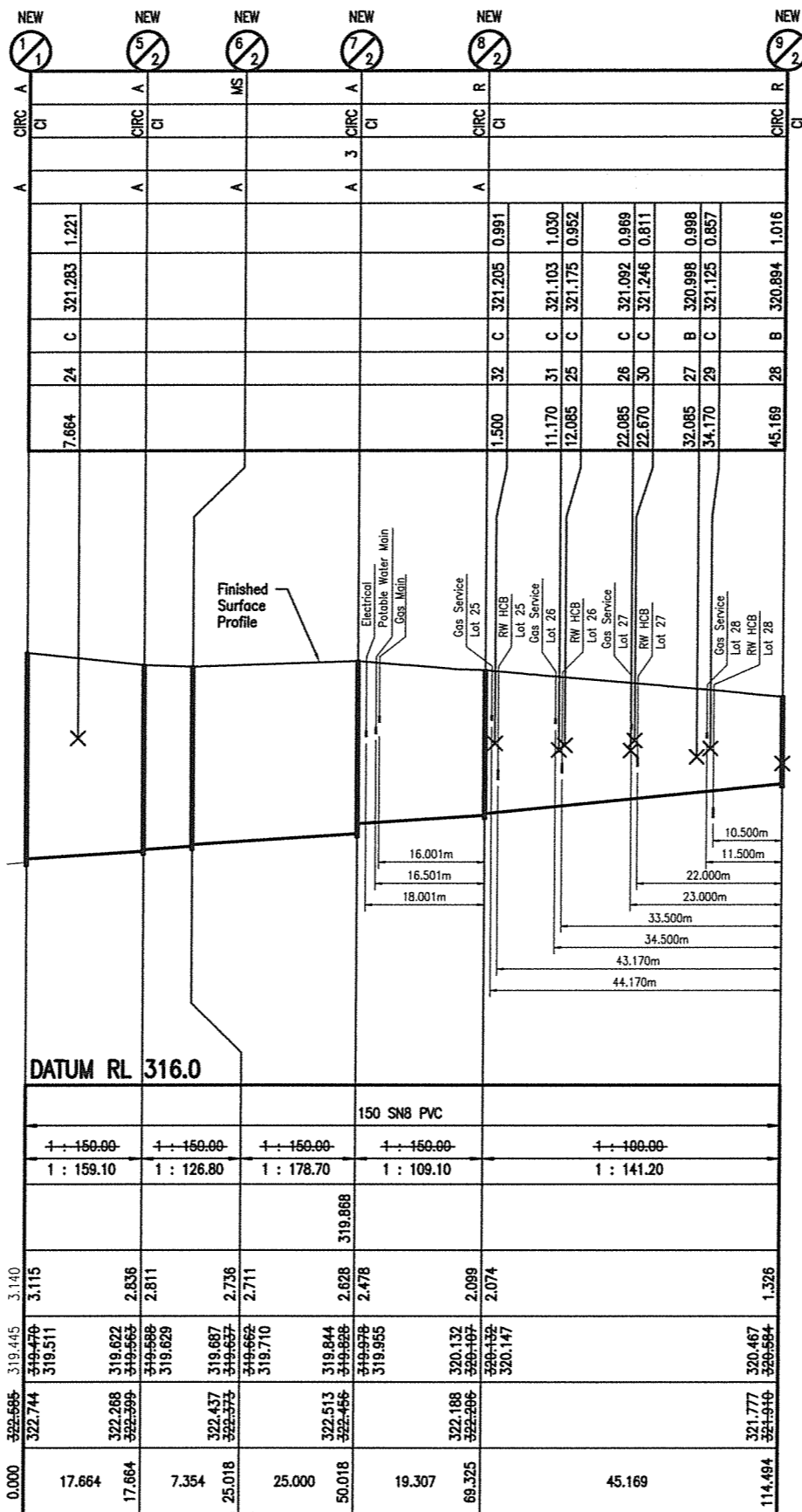
Refer sheet 301 and 302 for notes and details of connection, modification and removal of existing sewer mains and manholes.

DIAMETER
GRADE
JUNCTION INVERT LEVEL
DEPTH TO INVERT
INVERT LEVEL OF SEWER
DESIGN SURFACE LEVEL
RUNNING CHAINAGE

LINE



AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA
SUPPLIED BY THE CONTRACTOR'S SURVEYOR



Revisions	Date	
3	As Constructed	July 13
2	Road Layout	Oct 11
1	For Construction	Oct 11
A	Original issue	

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CONSULTING ENGINEERS

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL:
mail@bakerrossow.com.au

QUALITY ASSURED
SUPPLIER

QUEENSLAND GOVERNMENT

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL SUBDIVISION
CURREY STREET, ROMA (STAGE 1)**

title **SEWER LONGITUDINAL SECTIONS
SHEET 1 OF 3**

Survey	Drawn	Design	J/M	Examined	Certified
FYFE	AJH	BDR	BDR		
JUN 11	JUL 11	JUL 11	JUL 11		
				19/7/13	FOR BAKER ROSSOW CONSULTING ENGINEERS

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0 5 10 15 20 25 M
SCALE C (1: 500 AT A1)
0 0.5 1.0 1.5 2.0 2.5 M
SCALE G (1: 50 AT A1)

— BAR SCALES —

JOB No.
105848

No. of plans
303

A	1	2	3
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Z:\BRC Job\105801-106000 Job\105848 ULD Roma Stage 1\PC\Drawn\LSI.DWG Scale: Horiz 1 in 500 Vert 1 in 50

MANHOLE/END NAME
MANHOLE TYPE
LID TYPE
JUNCTION LINE
DROP TYPE
DEPTH TO HC STUB
HOUSE CONNECTION STUB INVERT LEVEL
HC TYPE
HC LOT No
CH. FROM D/S MH

LEGEND:

Refer IPWEAQ standard drawings S-0021 and S-0030

Manhole Type:

- A - Allotment. Light duty concrete lid
- F - Footpath. Medium duty concrete lid
- R - Road. Heavy duty cast iron lid
- EX - Existing Manhole
- END - End of Line
- MS - Maintenance Shaft

Lid Type:

- CF - Concrete Filled
- CI - Cast Iron

Drop Type:

- A - 40mm to 300mm. Internal benching
- B - 300mm to 600mm. External 45° Wye
- C - >600mm. External 90° junction and drop

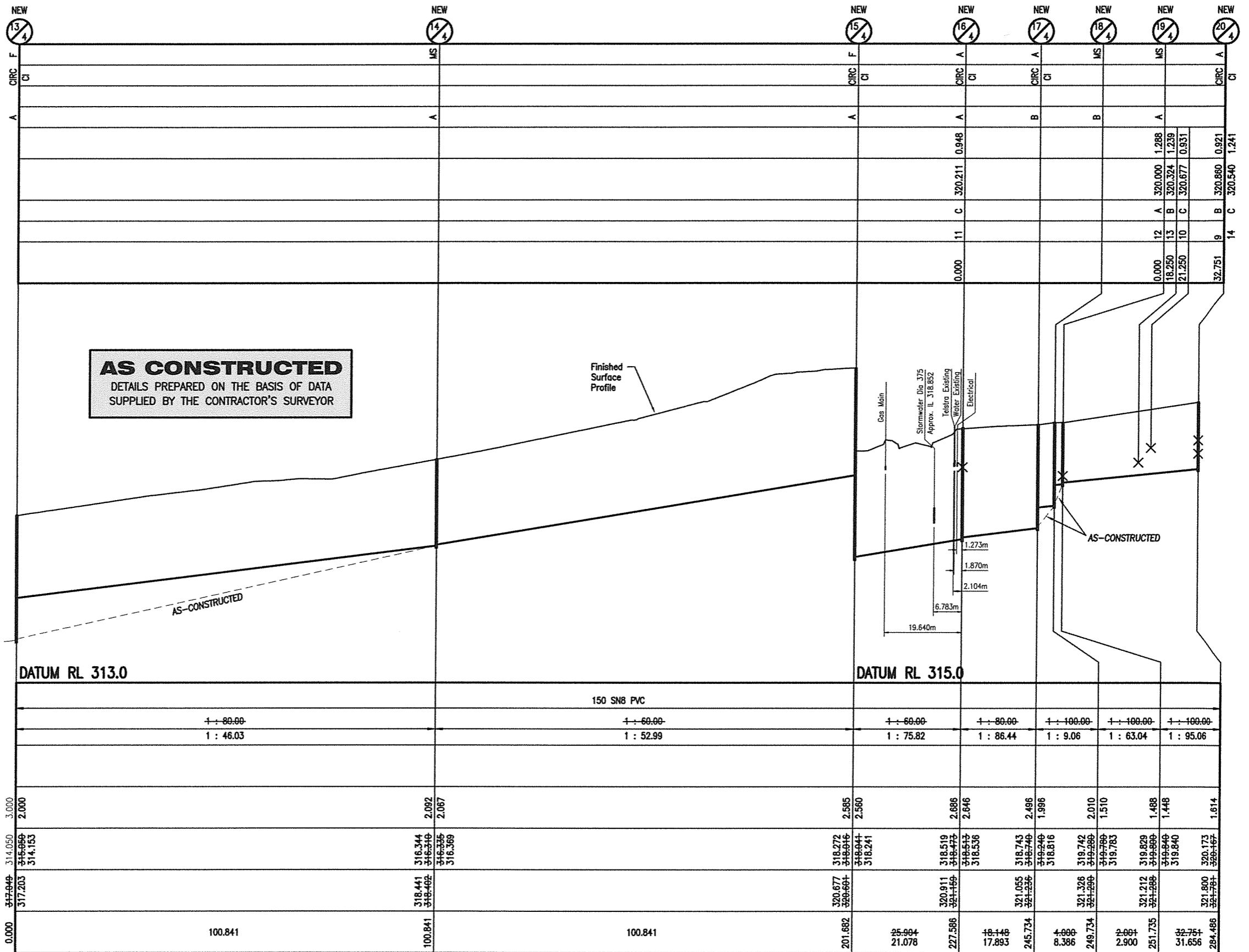
HC Type:

- A - 0mm to 300mm. Small drop, sloped branch
- B - 300mm to 600mm. Medium drop, sloped branch
- C - >600mm. Large drop, vertical branch

Notes:

Refer sheet 301 and 302 for notes and details of connection, modification and removal of existing sewer mains and manholes.

DIAMETER
GRADE
JUNCTION INVERT LEVEL
DEPTH TO INVERT
INVERT LEVEL OF SEWER
DESIGN SURFACE LEVEL
RUNNING CHAINAGE



AS CONSTRUCTED
 DETAILS PREPARED ON THE BASIS OF DATA
 SUPPLIED BY THE CONTRACTOR'S SURVEYOR

Finished Surface Profile

AS-CONSTRUCTED

DATUM RL 313.0

DATUM RL 315.0

150 SN8 PVC

LINE

4

Revisions	Date
3 As Constructed	July 13
2 Road Layout For Construction	Oct 11
1 Original issue	Oct 11

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CONSULTING ENGINEERS

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL: mail@bakerrossow.com.au

QUALITY ASSURED SUPPLIER
QUEENSLAND GOVERNMENT

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL SUBDIVISION
CURREY STREET, ROMA (STAGE 1)**

title **SEWER LONGITUDINAL SECTIONS
SHEET 2 OF 3**

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/11/13	Certified FOR BAKER ROSSOW CONSULTING ENGINEERS
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0 5 10 15 20 25 M
SCALE C (1: 500 AT A1)
0 0.5 1.0 1.5 2.0 2.5 M
SCALE G (1: 50 AT A1)

— BAR SCALES —

JOB No. 105848

No. of plans
Plan No. **304**

A	1	2	3
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Z:\BROE\Job\105801-106000\Job\105848\UDA Roma Stage 1\PCSEWER\LSI.DWG Scale: Horiz 1 in 500 Vert 1 in 50

GENERAL NOTES:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE LOCATION OF ALL EXISTING SERVICES PRIOR TO EXCAVATION. THE CONTRACTOR SHALL CO-ORDINATE THE WORKS WITH ANY RELEVANT AUTHORITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND REINSTATEMENT OF ANY OF THE EXISTING SERVICES WHICH MAY BE UNCOVERED AND OR DAMAGED IN THE COURSE OF THE WORKS.
- ALL WORK AREAS SHALL BE LEFT IN A FREE DRAINING STATE.
- LEVELS AND GRADIENTS AT JUNCTIONS WITH EXISTING WORKS MAY BE VARIED AS REQUIRED TO ACHIEVE SATISFACTORY CONNECTIONS - SUBJECT TO THE PRIOR APPROVAL OF THE ENGINEER.
- ALL FILL/BACKFILL SHALL BE COMPACTED IN 150mm LAYERS TO 95% RELATIVE DRY DENSITY AS DETERMINED BY A.S.1289 5.1.1 (STANDARD COMPACTION)
- ALL TOPSOIL AREAS TO BE COVERED BY GRASS SEEDING.
- RETAIN EXISTING TREES WHERE PRACTICABLE - REMOVE TREES ONLY AS AGREED UPON BETWEEN THE DEVELOPER AND THE CONTRACTOR.
- THE CONTRACTOR OR HIS SURVEYOR SHALL MAINTAIN ACCURATE RECORDS OF LEVELS & LOCATIONS OF ALL SERVICES TO FULLY COMPLY WITH M.R.C. 'AS CONSTRUCTED' INFORMATION REQUIREMENTS.
- THE CONTRACTOR OR HIS SURVEYOR IS RESPONSIBLE FOR THE SETTING OUT & MAINTENANCE OF ALL CONTROL LINES, & STORMWATER LINES, (OFFSET FOR CONSTRUCTION PURPOSES WHERE NECESSARY), AS DETAILED ON THIS & SUBSEQUENT PLANS.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE STORMWATER DRAINAGE LONGITUDINAL PLANS.

STORMWATER DRAINAGE NOTES:

- INDICATES STORMWATER GULLY INLET / MANHOLE NUMBER.
- INDICATES STORMWATER LINE NUMBER.
- ALL STORMWATER INLET PITS TO BE IN ACCORDANCE WITH MANUFACTURER'S DETAILS AND SPECIFICATIONS.
- ALL BEDDING OF STORMWATER PIPES TO BE TYPE HS3 SUPPORT IN ACCORDANCE WITH I.P.W.E.A. (Q) STANDARD DRAWING No. D-0030.
- BRASS KERB MARKER TO BE INSERTED INTO KERB AND CHANNEL BOTH SIDES OF ROAD TO INDICATE SERVICE CROSSING. DISKS TO BE FIRMLY BONDED TO CONCRETE KERB SURFACE AT CONSTRUCTION AND CORRECTLY ORIENTATED FOR EASE OF IDENTIFICATION.

ROOFWATER DRAINAGE NOTES:

- ALL HOUSE CONNECTIONS ROOF WATER DRAINAGE PIPES TO BE CLASS 'SN10'. BRANCHES TO ROOF WATER DRAINAGE PITS TO FINISH 600mm MAX. BELOW FINISHED SURFACE LEVEL AND BE CLOSED OFF BY A PUSH ON CAP. CONNECTION STUBS SHALL BE IDENTIFIED BY MEANS OF A BLUE MARKER TAPE ATTACHED TO THE END OF THE CONNECTION STUB, BROUGHT TO THE SURFACE DURING BACKFILL AND ATTACHED TO A DUMPY PEG PLACED DIRECTLY OVER THE CONNECTION STUB. A BLUE MARKER STAKE (25mm x 25mm x 0.9m LONG, DRIVEN 0.3m INTO GROUND) SHALL BE PLACED ADJACENT TO THE DUMPY PEG, AND MARKED WITH THE WORD "ROOFWATER" AND THE DEPTH TO THE CONNECTION STUB.
- THE CONTRACTOR IS TO ENSURE ALL ALLOTMENTS NOT SERVICED BY ROOFWATER DRAINS CAN OUTLET ROOFWATER DRAINAGE TO THE STREET. IF IN DOUBT REFER TO THE ENGINEER FOR DETERMINATION.
- ALL ROOFWATER MANHOLES SHALL BE DIA 900mm CPO

KERB ADAPTORS:

- ALL KERB ADAPTORS TO BE DURAGAL DN80X4.0mm MEDIUM WALL CHS PIPEWORK OR EQUAL (ø88.9 OD) AND INSTALLED IN ACCORDANCE WITH DETAILS ON SHEET 507.

ANTI PONDING GULLY PITS:

- INSTALL ANTI PONDING GULLY PIT INCLUDING CYCLE PROOF GRATE ON PRECAST OR CAST IN SITU PIT, IN ACCORDANCE WITH IPWEAQ STD DWG D-0068. ø300 RCP OUTLET PIPE TO PIT P15/3.
- INSTALL ANTI PONDING GULLY PIT INCLUDING CYCLE PROOF GRATE ON PRECAST OR CAST IN SITU PIT, IN ACCORDANCE WITH IPWEAQ STD DWG D-0068. ø300 RCP OUTLET PIPE TO PIT P18/3.

LEGEND	
	FUTURE SEWER MAIN
	NEW SEWER GRAVITY MAIN
	EXISTING SEWER MAIN
	EXISTING SEWER MAIN REMOVED
	FUTURE STORMWATER DRAINAGE
	NEW STORMWATER DRAINAGE
	EXISTING STORMWATER DRAINAGE
	EXISTING STORMWATER CULVERT
	FUTURE ROOFWATER DRAINAGE
	NEW ROOFWATER DRAINAGE
	FUTURE UG ELECTRICAL
	NEW UG ELECTRICAL
	EXISTING OVERHEAD ELECTRICAL
	FUTURE POTABLE WATER MAIN
	NEW ø150 POTABLE WATER MAIN
	NEW ø100 POTABLE WATER MAIN
	NEW POTABLE WATER SERVICE
	EXISTING POTABLE WATER MAIN
	FUTURE GAS MAIN
	NEW GAS MAIN
	NEW GAS SERVICE
	EXISTING GAS MAIN
	EXISTING TELSTRA CABLES
	INSTALL NEW HOUSE CONNECTION STUB TO SERVICE ALLOTMENTS
	KERB ADAPTOR. REFER SHEET 507 FOR DETAILS

STORMWATER DRAINAGE LAYOUT PLAN

Scale: - P

Revisions	Date
3	As Constructed
2	Road Layout
1	For Construction
A	Original issue

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PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558

EMAIL:
mail@bakerrossow.com.au

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT
CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **STORMWATER DRAINAGE LAYOUT PLAN**

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/15	Certified FOR-BAKER ROSSOW CONSULTING ENGINEERS
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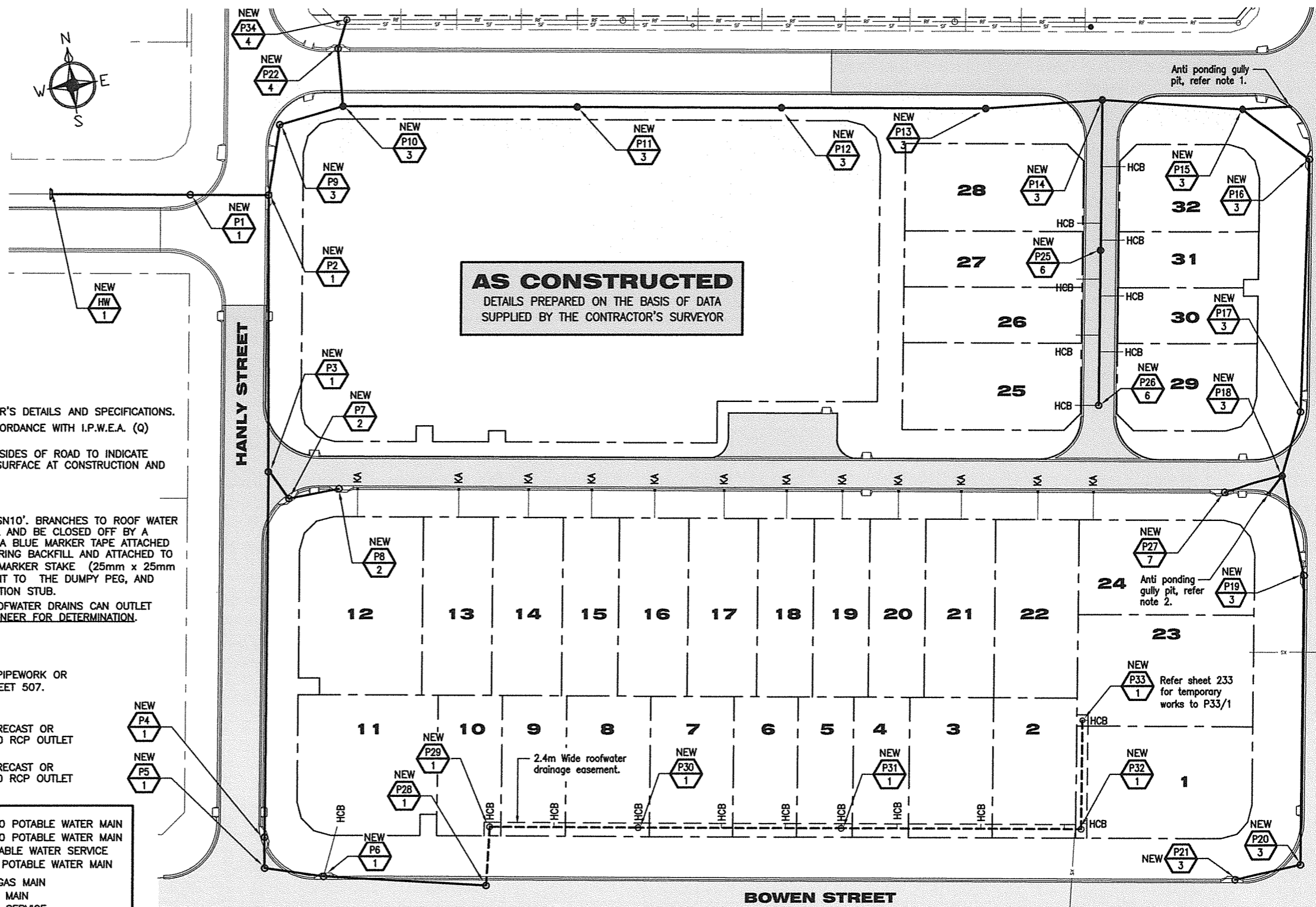
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0 4 8 12 16 20
SCALE P (1: 400 AT A1)
- BAR SCALES -

JOB No. **105848**

No. of plans **502**

A 1 2 3



Manhole ID	Easting	Northing
HW/1	676377.041	7059960.464
P1/1	676401.447	7059956.554
P2/1	676415.234	7059954.297
P3/1	676407.816	7059905.307
P4/1	676397.381	7059840.928
P5/1	676396.586	7059835.123
P6/1	676406.794	7059832.110
P28/1	676435.573	7059825.875

Manhole ID	Easting	Northing
P29/1	676437.455	7059836.111
P30/1	676463.658	7059832.014
P31/1	676499.654	7059826.193
P32/1	676542.342	7059819.149
P33/1	676545.199	7059838.422
P7/2	676411.871	7059900.709
P8/2	676420.724	7059900.178

Manhole ID	Easting	Northing
P9/3	676419.107	7059966.373
P10/3	676430.758	7059967.921
P11/3	676472.080	7059961.072
P12/3	676508.026	7059955.509
P13/3	676544.137	7059949.451
P14/3	676565.067	7059947.782
P15/3	676589.920	7059941.889
P16/3	676600.534	7059931.350

Manhole ID	Easting	Northing
P17/3	676592.426	7059887.260
P18/3	676587.251	7059876.329
P19/3	676588.704	7059858.334
P20/3	676580.674	7059808.850
P21/3	676567.615	7059806.034
P22/4	676431.702	7059978.221
P34/4	676433.890	7059983.013

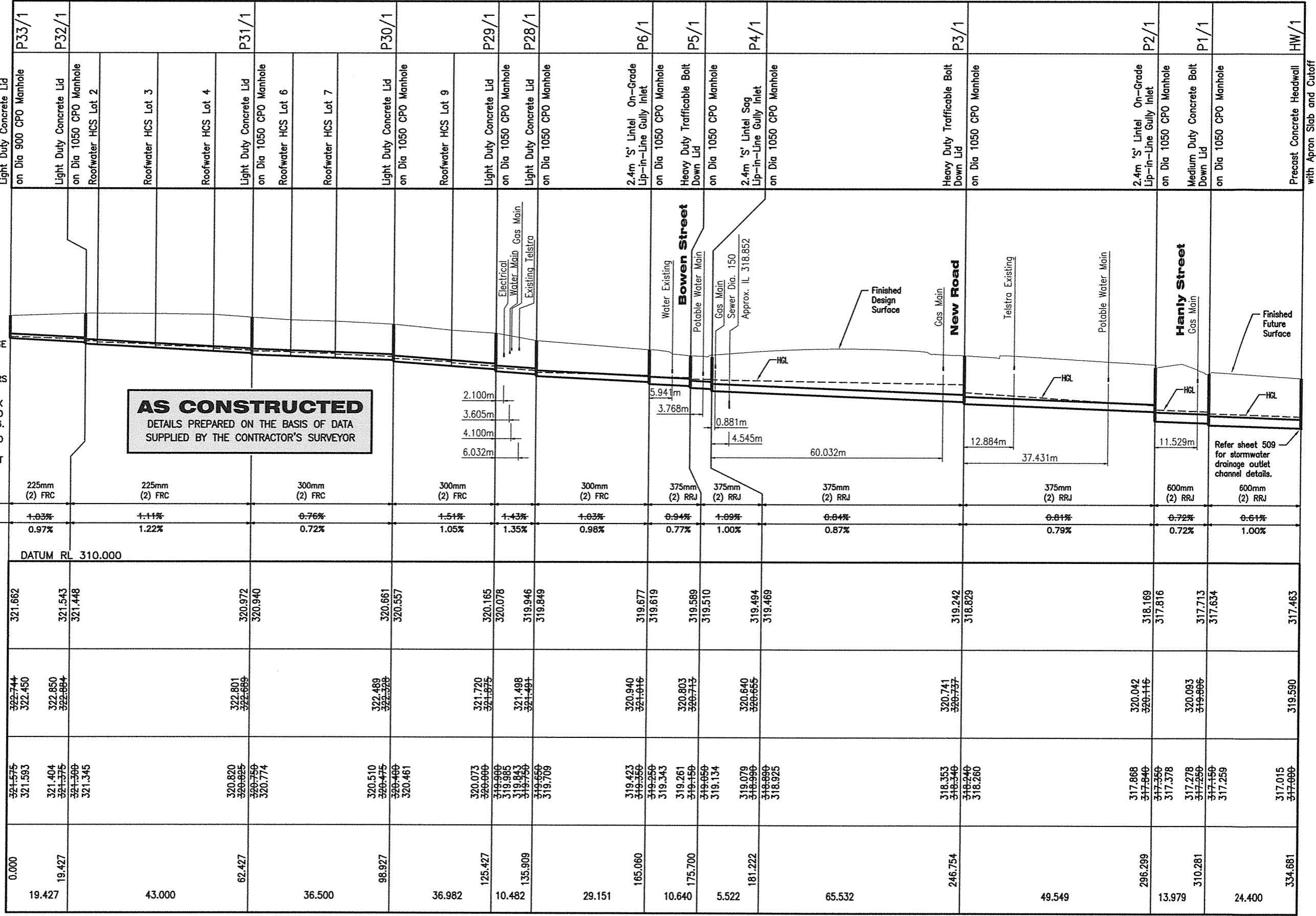
P25/6	676560.8230	7059921.199
P26/6	676556.098	7059893.870
P27/7	676576.521	7059874.901

"As-Constructed" drawings provide Coordinates to MGA94

STRUCTURE NAME
STRUCTURE DESCRIPTION

LEGEND:
WSE - Water Surface Elevation
HGL - Hydraulic Grade Line
SL - Surface Level
GL - Grate Level
LL - Lip Level

- NOTES:**
- SURFACE LEVEL REPRESENTS KERB LIP LEVEL IN THE CASE OF A GULLY INLET AND COVER LEVEL IN THE CASE OF A JUNCTION MANHOLE.
 - ALL STORMWATER INLET PITS TO BE IN ACCORDANCE WITH MANUFACTURERS DETAILS AND SPECIFICATIONS.
 - FOR CENTRE OF ROAD PIT, WITH MAX Q MANNING GRATE ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.
 - FOR 600 X 600 'ROCLA' DOMED RKO GRATED FIELD INLET ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.



AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

PIPE SIZEmm (Class)	225mm (2) FRC	225mm (2) FRC	300mm (2) FRC	300mm (2) FRC	300mm (2) FRC	375mm (2) RRJ	375mm (2) RRJ	375mm (2) RRJ	375mm (2) RRJ	600mm (2) RRJ	600mm (2) RRJ
PIPE GRADE %	-1.03% 0.97%	-1.11% 1.22%	-0.76% 0.72%	-1.51% 1.05%	-1.43% 1.35%	-1.03% 0.98%	-0.94% 0.77%	-1.09% 1.00%	-0.84% 0.87%	-0.81% 0.79%	-0.72% 1.00%

DATUM RL	310.000												
HYDRAULIC GRADE LEVEL	321.662	321.543 321.448	320.972 320.940	320.661 320.557	320.165 320.078	319.946 319.849	319.677 319.619	319.589 319.510	319.494 319.469	319.242 318.829	318.169 317.816	317.713 317.634	317.463
DESIGN SURFACE LEVEL	322.744 322.450	322.850 322.884	322.801 322.689	322.489 322.326	321.720 321.675	321.498 321.491	320.940 321.016	320.803 320.715	320.640 320.655	320.741 320.737	320.042 320.116	320.093 319.986	319.590
INVERT LEVEL OF DRAIN	321.575 321.593	321.404 321.375 321.360 321.345	320.820 320.825 320.750 320.774	320.510 320.475 320.460 320.461	320.073 320.060 319.980 319.985 319.843 319.750 319.650 319.709	319.423 319.350 319.343	319.261 319.150 319.134	319.079 318.990 318.890 318.925	318.353 318.340 318.240 318.260	317.868 317.840 317.350 317.378	317.278 317.250 317.150 317.259	317.015 317.000	
RUNNING CHAINAGE	0.000 19.427	19.427	62.427	98.927	125.427	135.909	29.151	10.640	5.522	65.532	49.549	13.979	24.400

LINE

1

Revisions	Date
3 As Constructed	July 13
2 Road Layout	Oct 11
1 For Construction	Oct 11
A Original issue	

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL: mail@bakerrossow.com.au

QUALITY ASSURED SUPPLIER
QUEENSLAND GOVERNMENT

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 1 OF 3**

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/1/13	Certified FOR BAKER ROSSOW CONSULTING ENGINEERS
DISCREPANCIES			DIMENSIONS		
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0 5 10 15 20 25 0 1 2 3 4 5 M
SCALE C (1: 500 AT A1) SCALE F (1: 100 AT A1)

- BAR SCALES -

JOB No. **105848**

No. of plans **503**

A 1 2 3

STRUCTURE NAME
STRUCTURE DESCRIPTION

LEGEND:
WSE - Water Surface Elevation
HGL - Hydraulic Grade Line
SL - Surface Level
GL - Gully Level
LL - Lip Level


- NOTES:**
- SURFACE LEVEL REPRESENTS KERB LIP LEVEL IN THE CASE OF A GULLY INLET AND COVER LEVEL IN THE CASE OF A JUNCTION MANHOLE.
 - ALL STORMWATER INLET PITS TO BE IN ACCORDANCE WITH MANUFACTURERS DETAILS AND SPECIFICATIONS.
 - FOR CENTRE OF ROAD PIT, WITH MAX Q MANNING GRATE ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.
 - FOR 600 X 600 'ROCLA' DOMED RKO GRATED FIELD INLET ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.

STRUCTURE NAME	STRUCTURE DESCRIPTION	PIPE SIZE (mm)	PIPE GRADE (%)	HYDRAULIC GRADE LEVEL	DESIGN SURFACE LEVEL	INVERT LEVEL OF DRAIN	RUNNING CHAINAGE
P21/3	2.4m 'S' Lintel On-Grade Lip-in-Line Gully Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.97% 1.06%	321.360	322.547 322.576	321.340	0.000
P20/3	Heavy Duty Trafficable Bolt Down Lid on Dia 1050 CPO Manhole	375mm (2) RRJ	1.41% 1.30%	321.240 321.135	322.576 322.562	321.209 321.188 321.080 321.031	12.375
P19/3	2.4m 'S' Lintel On-Grade Lip-in-Line Gully Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.82% 0.71%	320.433 320.349	321.948 321.943	320.358 320.350 320.250 320.259	64.174
P18/3	Heavy Duty Trafficable Bolt Down Lid on Dia 1050 CPO Manhole	375mm (2) RRJ	0.84% 0.63%	320.219 320.156	321.877 321.867	320.130 320.100 320.000 320.016	82.454
P17/3	Medium Duty Concrete Bolt Down Lid on Dia 1050 CPO Manhole	375mm (2) RRJ	0.55% 0.58%	320.056 319.975	321.865 321.978	319.941 319.900 319.831	94.363
P16/3	2.4m 'S' Lintel On-Grade Lip-in-Line Gully Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.66% 0.71%	319.882 319.797	321.433 321.495	319.570 319.550 319.450 319.503	139.487
P15/3	600 x 600 'Rocla' Domed RKO Grated Field Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.59% 0.58%	319.762 319.700	321.393 321.347	319.396 319.350 319.250 319.275	154.590
P14/3	Centre of Road Sag Pit, with Max Q Manning Grate on Dia 1050 CPO Manhole	375mm (2) RRJ	0.71% 0.86%	319.627 319.512	321.572 321.776	319.127 319.100 319.000 319.072	179.979
P13/3	600 x 600 'Rocla' Domed RKO Grated Field Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.66% 0.65%	319.419 319.394	321.478 321.404	318.891 318.850 318.750 318.776	201.041
P12/3	600 x 600 'Rocla' Domed RKO Grated Field Inlet on Dia 1050 CPO Manhole	375mm (2) RRJ	0.63% 0.66%	319.220 319.169	321.030 320.990	318.537 318.510 318.430 318.468	237.603
P11/3	600 x 600 'Rocla' Domed RKO Grated Field Inlet on Dia 1050 CPO Manhole	450mm (2) RRJ	0.60% 0.46%	318.994 318.968	320.495 320.560	318.226 318.200 318.121	274.165
P10/3	600 x 600 'Rocla' Domed RKO Grated Field Inlet on Dia 1050 CPO Manhole	450mm (2) RRJ	0.85% 0.54%	318.864 318.826	319.949 319.466	317.905 317.850 317.750 317.809	315.933
P9/3	Medium Duty Concrete Bolt Down Lid on Dia 1050 CPO Manhole	450mm (2) RRJ	0.79% 0.54%	318.517 318.302	320.224 319.950	317.623 317.550 317.554	327.676
P2/1	2.4m 'S' Lintel On-Grade Lip-in-Line Gully Inlet on Dia 1050 CPO Manhole	450mm (2) RRJ		318.185	320.042 320.116	317.486 317.450 317.350 317.378	340.380

AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

LINE

Revisions	Date
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BAKER ROSSOW
CONSULTING ENGINEERS

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL:
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QUEENSLAND GOVERNMENT

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 2 OF 3**

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/13	Certified FOR BAKER ROSSOW CONSULTING ENGINEERS
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0 5 10 15 20 25 M
SCALE C (1: 500 AT A1)
0 1 2 3 4 5 M
SCALE F (1: 100 AT A1)

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JOB No. **105848**

No. of plans **504**

Plan No. **504**

A 1 2 3

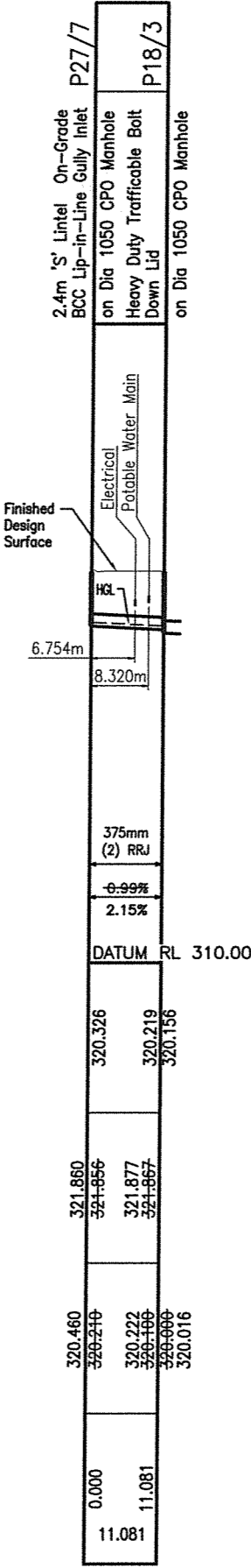
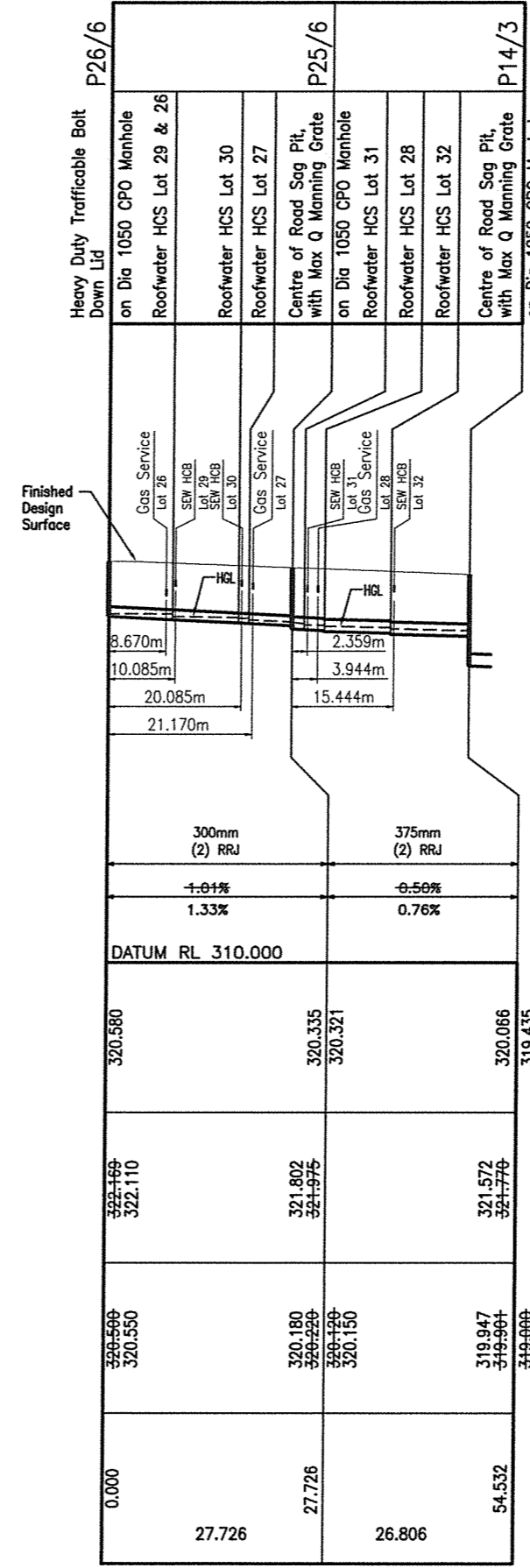
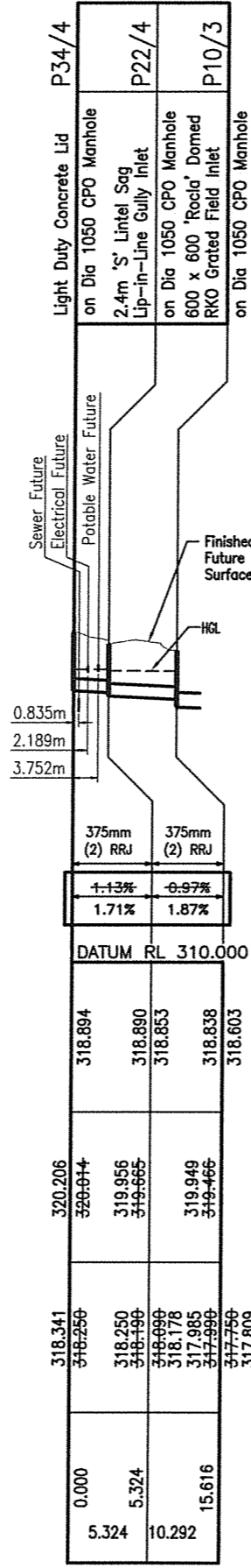
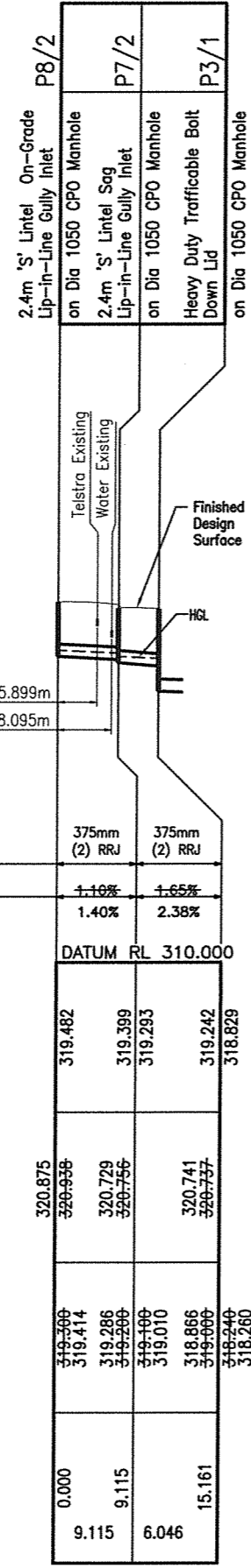
STRUCTURE NAME
STRUCTURE DESCRIPTION

LEGEND:
WSE - Water Surface Elevation
HGL - Hydraulic Grade Line
SL - Surface Level
GL - Grate Level
LL - Lip Level

- NOTES:**
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 2. ALL STORMWATER INLET PITS TO BE IN ACCORDANCE WITH MANUFACTURERS DETAILS AND SPECIFICATIONS.
 3. FOR CENTRE OF ROAD PIT, WITH MAX Q MANNING GRATE ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.
 4. FOR 600 X 600 'ROCLA' DOMED GRATED FIELD INLET ON DIA 1050 CPO MANHOLE DETAILS, REFER SHEET 506.

PIPE SIZEmm (Class)	375mm (2) RRJ	375mm (2) RRJ
PIPE GRADE %	1.10% 1.40%	1.65% 2.38%

LINE	2	4	6	7
HYDRAULIC GRADE LEVEL	319.482 319.399 319.293	318.894 318.890 318.853	320.580 320.335 320.321	320.326 320.219 320.156
DESIGN SURFACE LEVEL	320.875 320.936 320.729 320.756	320.206 319.956 319.665	322.169 322.110 321.802 321.975	321.860 321.856 321.877 321.867
INVERT LEVEL OF DRAIN	319.700 319.414 319.286 319.200 319.100 319.010 318.866 319.000 318.260	318.341 318.250 318.250 318.100 318.090 318.178 317.985 317.990 317.750 317.809	320.560 320.550 320.180 320.220 320.120 320.150 319.947 319.964 319.000 319.062	320.460 320.210 320.222 320.160 320.000 320.016
RUNNING CHAINAGE	0.000 9.115 6.046	0.000 5.324 10.292	0.000 27.726 26.806	0.000 11.081



AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

Revisions	Date
3 As Constructed	July 13
2 Road Layout For Construction	Oct 11 Oct 11
1 Original issue	

BAKER ROSSOW
CONSULTING ENGINEERS

136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL: mail@bakerrussow.com.au

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client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **STORMWATER DRAINAGE LONGITUDINAL SECTION SHEET 3 OF 3**

Survey FYFE JUN 11	Drawn AJH JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/13	Certified FOR-BAKER ROSSOW CONSULTING ENGINEERS
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0 5 10 15 20 25 M 0 1 2 3 4 5 M
SCALE C (1: 500 AT A1) SCALE F (1: 100 AT A1)
- BAR SCALES -

JOB No. **105848**

No. of plans **505**

A 1 2 3

CAUTION!
CONTRACTOR TO EXERCISE EXTREME CARE
DURING EXCAVATION IN VICINITY OF
EXISTING TELECOMMUNICATION CABLES.

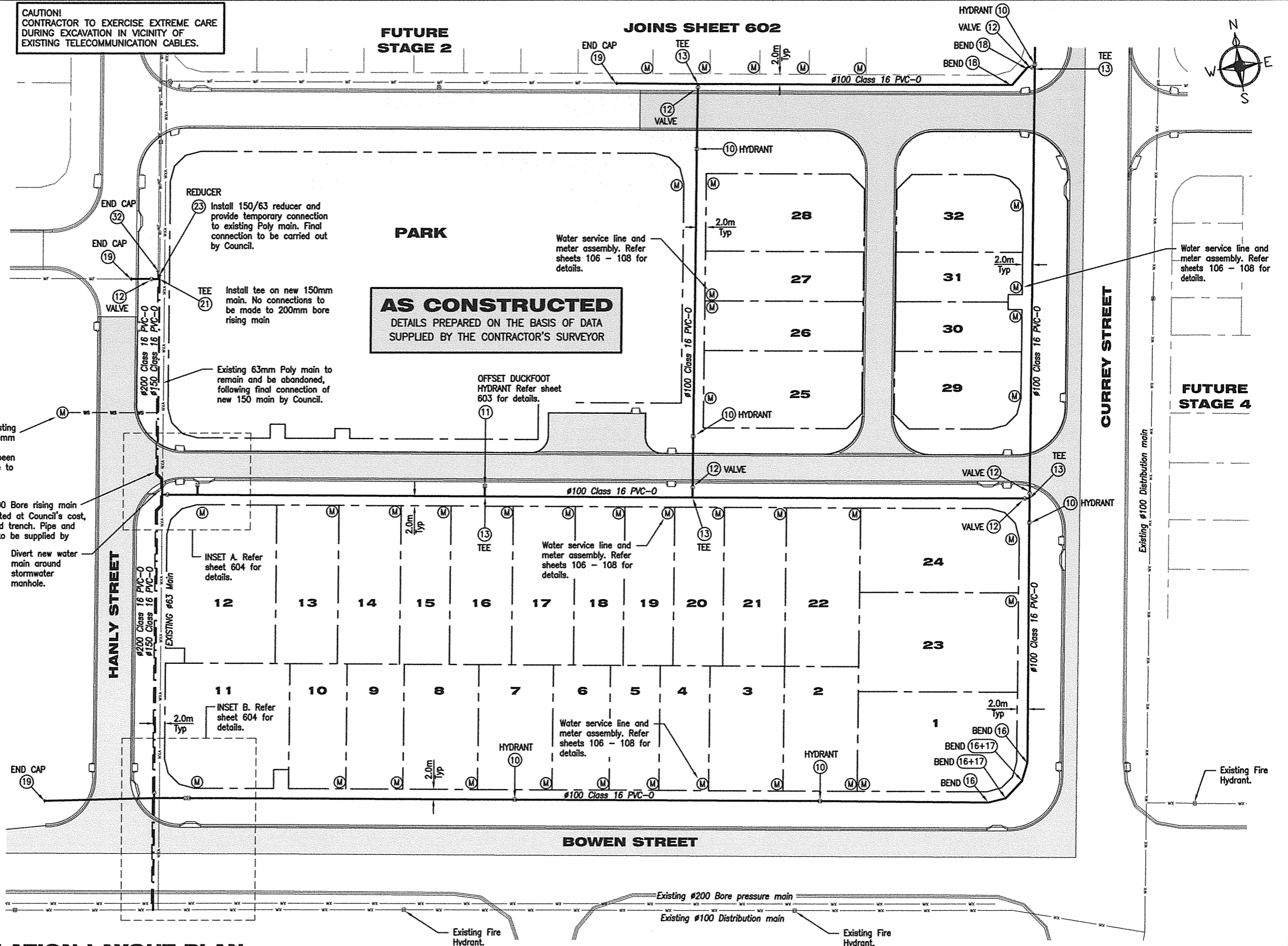
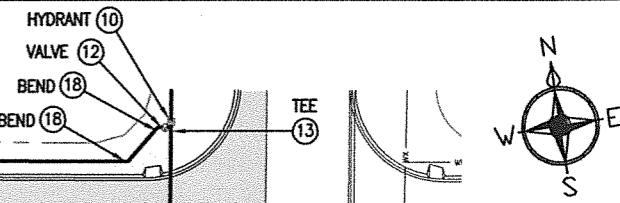
LEGEND

SF	FUTURE SEWER MAIN
SEW	NEW SEWER GRAVITY MAIN
SX	EXISTING SEWER MAIN
SXA	EXISTING SEWER MAIN REMOVED
SWF	FUTURE STORMWATER DRAINAGE
SWD	NEW STORMWATER DRAINAGE
SWX	EXISTING STORMWATER DRAINAGE
SCX	EXISTING STORMWATER CULVERT
RF	FUTURE ROOFWATER DRAINAGE
RW	NEW ROOFWATER DRAINAGE
E	FUTURE UG ELECTRICAL
EF	NEW UG ELECTRICAL
PK	EXISTING OVERHEAD ELECTRICAL
WF	FUTURE WATER MAIN
W200	NEW #200 WATER MAIN
W150	NEW #150 WATER MAIN
W100	NEW #100 WATER MAIN
WS	NEW WATER SERVICE
WX	EXISTING WATER MAIN
GF	FUTURE GAS MAIN
G	NEW GAS MAIN
GS	NEW GAS SERVICE
GX	EXISTING GAS MAIN
TX	EXISTING TELSTRA CABLES

(M) LOCATION OF WATER SERVICE CONNECTION. REFER SHEETS 106 - 108 FOR DETAILS.

FUTURE STAGE 2

JOINS SHEET 602



Install new water service (Long) to existing residence. Chnagoever from existing 63mm Poly main to new 150mm main to be undertaken once final connection has been carried out. Confirm location of service to suit existing water meter location

New #200 Bore rising main constructed at Council's cost, in shared trench. Pipe and fittings to be supplied by Council.

Divert new water main around stormwater manhole.

REDUCER
Install 150/63 reducer and provide temporary connection to existing Poly main. Final connection to be carried out by Council.

TEE
Install tee on new 150mm main. No connections to be made to 200mm bore rising main

Existing 63mm Poly main to remain and be abandoned, following final connection of new 150 main by Council.

AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA SUPPLIED BY THE CONTRACTOR'S SURVEYOR

OFFSET DUCKFOOT HYDRANT Refer sheet 603 for details.

Water service line and meter assembly. Refer sheets 106 - 108 for details.

Water service line and meter assembly. Refer sheets 106 - 108 for details.

Water service line and meter assembly. Refer sheets 106 - 108 for details.

Water service line and meter assembly. Refer sheets 106 - 108 for details.

TABLE OF FITTINGS:

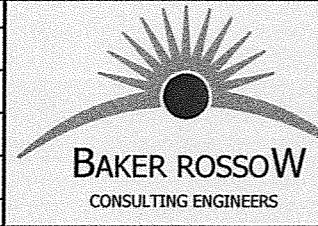
FITTING IDENT	DESCRIPTION.
100 DIA	
10	100 / 80 DIA. FIRE HYDRANT TEE, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER
11	100 / 80 DIA. "DUCKFOOT" FIRE HYDRANT BEND, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER. REFER SHEET 603 FOR DETAILS.
12	100 DIA. SLUICE VALVE, VALVE BOX & MARKER PLATE
13	100 x 100 x 100 DIA. C.I. TEE
14	100 x 100 x 150 DIA. C.I. TEE
15	100 x 100 x 150 x 150 DIA. C.I. CROSS
16	100 DIA. 11.25" C.I. BEND
17	100 DIA. 22.5" C.I. BEND
18	100 DIA. 45" C.I. BEND
19	100 DIA. END CAP & TRUST BLOCK
150 DIA	
20	150 DIA. SLUICE VALVE, VALVE BOX & MARKER PLATE
21	150 x 150 x 100 DIA. C.I. TEE
22	150 DIA. 45" C.I. BEND
23	150 DIA. to 63 DIA. REDUCER
200 DIA	
30	200 x 200 x 200 DIA. C.I. TEE
31	200 DIA. 45" C.I. BEND
32	200 DIA. END CAP & TRUST BLOCK

REFER SHEET 603 FOR WATER RETICULATION NOTES AND DETAILS

POTABLE WATER RETICULATION LAYOUT PLAN

Scale: - P

Revisions	Date
4	As Constructed July 13
3	Water Main Layout Feb 12
2	Road Layout Oct 11
1	For Construction Oct 11
A	Original issue



136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL:
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client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **POTABLE WATER RETICULATION LAYOUT PLAN SHEET 1 OF 2**

Survey FYFE JUN 11	Drawn DPM JUL 11	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/13	Certified FOR BAKER ROSSOW CONSULTING ENGINEERS
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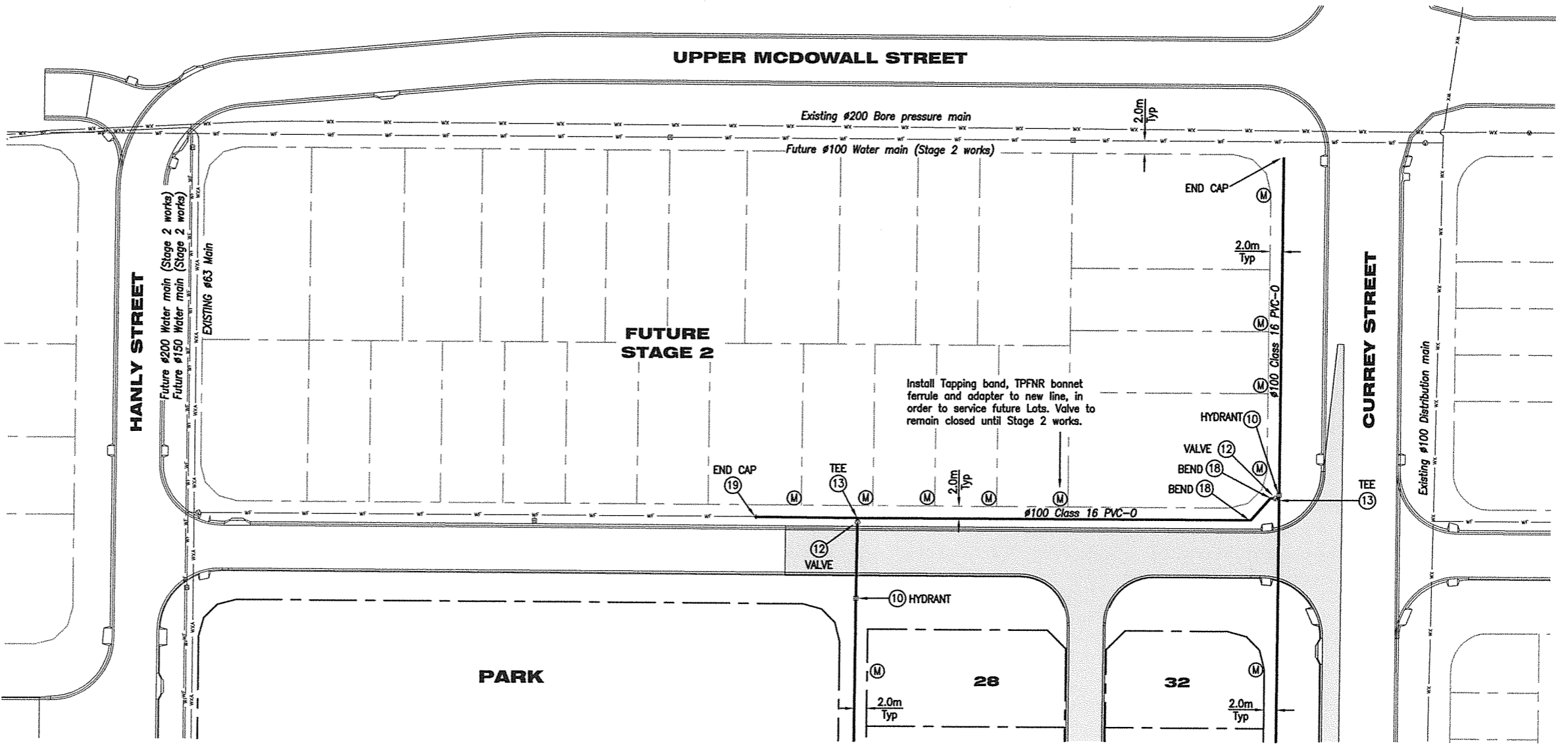
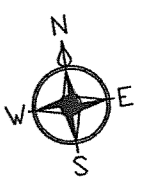
0 4 8 12 16 20	SCALE P (1 : 400 AT A1)
- BAR SCALES -	
JOB No. 105848	No. of plans Plan No. 601
A 1 2 3 4	

LEGEND

- SF — FUTURE SEWER MAIN
- SEW — NEW SEWER GRAVITY MAIN
- SX — EXISTING SEWER MAIN
- SXA — EXISTING SEWER MAIN REMOVED
- SWF — FUTURE STORMWATER DRAINAGE
- SWD — NEW STORMWATER DRAINAGE
- SWX — EXISTING STORMWATER DRAINAGE
- SCX — EXISTING STORMWATER CULVERT
- RF — FUTURE ROOFWATER DRAINAGE
- RW — NEW ROOFWATER DRAINAGE
- EF — FUTURE UG ELECTRICAL
- E — NEW UG ELECTRICAL
- PX — EXISTING OVERHEAD ELECTRICAL
- WF — FUTURE WATER MAIN
- W200 — NEW #200 WATER MAIN
- W150 — NEW #150 WATER MAIN
- W100 — NEW #100 WATER MAIN
- WS — NEW WATER SERVICE
- WX — EXISTING WATER MAIN
- GF — FUTURE GAS MAIN
- G — NEW GAS MAIN
- GS — NEW GAS SERVICE
- GX — EXISTING GAS MAIN
- TX — EXISTING TELSTRA CABLES

(M) LOCATION OF WATER SERVICE CONNECTION. REFER SHEETS 106 - 108 FOR DETAILS.

AS CONSTRUCTED
 DETAILS PREPARED ON THE BASIS OF DATA
 SUPPLIED BY THE CONTRACTOR'S SURVEYOR



CAUTION!
 CONTRACTOR TO EXERCISE EXTREME CARE
 DURING EXCAVATION IN VICINITY OF
 EXISTING TELECOMMUNICATION CABLES.

TABLE OF FITTINGS:

FITTING IDENT	DESCRIPTION.
100 DIA	
10	100 / 80 DIA. FIRE HYDRANT TEE, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER
11	100 / 80 DIA. "DUCKFOOT" FIRE HYDRANT BEND, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER. REFER SHEET 603 FOR DETAILS.
12	100 DIA. SLUICE VALVE, VALVE BOX & MARKER PLATE
13	100 x 100 x 100 DIA. C.I. TEE
14	100 x 100 x 150 DIA. C.I. TEE
15	100 x 100 x 150 x 150 DIA. C.I. CROSS
16	100 DIA. 11.25° C.I. BEND
17	100 DIA. 22.5° C.I. BEND
18	100 DIA. 45° C.I. BEND
19	100 DIA. END CAP & TRUST BLOCK
150 DIA	
20	150 DIA. SLUICE VALVE, VALVE BOX & MARKER PLATE
21	150 x 150 x 100 DIA. C.I. TEE
22	150 DIA. 45° C.I. BEND
23	150 DIA. to 63 DIA. REDUCER
200 DIA	
30	200 x 200 x 200 DIA. C.I. TEE
31	200 DIA. 45° C.I. BEND
32	200 DIA. END CAP & TRUST BLOCK

REFER SHEET 603 FOR WATER
 RETICULATION NOTES AND DETAILS

NOTE:
 LOCATION OF EXISTING TELSTRA CABLES SHOWN
 ON DRAWINGS ARE APPROXIMATE ONLY, THE
 CONTRACTOR IS TO ACCURATELY LOCATE
 POSITION AND DEPTH OF EXISTING TELSTRA
 CABLES AND ENGAGE SERVICESTREAM TO
 UNDERTAKE LOWERING OF CABLES IF DEEMED
 NECESSARY. IF IN DOUBT, REFER TO ENGINEER.

POTABLE WATER RETICULATION LAYOUT PLAN

Scale:- P

Revisions	Date
5 As Constructed	July 13
4 Water connection	Mar 12
3 Water main layout	Feb 12
2 Road Layout	Oct 11
1 For Construction	Oct 11
A Original issue	

136 HERRIES STREET
 PO BOX 1382
 TOOWOOMBA
 QLD 4350
 PH.: 07 4638 5655
 FAX.: 07 4638 3558
 EMAIL:
 mail@bakerrossow.com.au

QUALITY ASSURED
 SUPPLIER

QUEENSLAND GOVERNMENT

client	URBAN LAND DEVELOPMENT AUTHORITY
project	PROPOSED RESIDENTIAL DEVELOPMENT CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA
title	POTABLE WATER RETICULATION LAYOUT PLAN SHEET 2 OF 2

Survey	Drawn	Design	J/M	Examined	Certified
FYFE JUN 11	DPM JUL 11	BDR JUL 11	BDR JUL 11	19/7/13	N20 RPR 13598
FOR BAKER ROSSOW CONSULTING ENGINEERS					

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DIMENSIONS
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, EXISTING SERVICES AND OTHER ITEMS NECESSARY TO COMPLETE THE WORKS BEFORE COMMENCING ANY WORK ON SITE. IF ANY DOUBT EXISTS THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH ANY WORK.

SCALE P (1: 400 AT A1)

— BAR SCALES —

JOB No.
105848

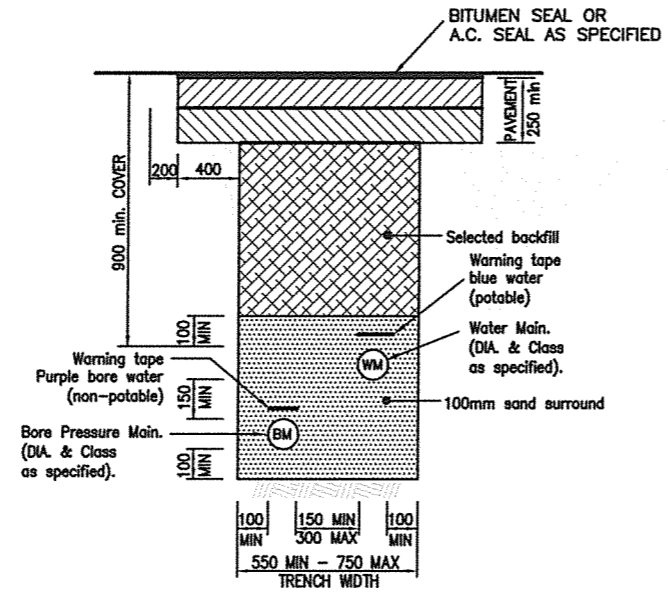
No. of plans
Plan No.
602

1	2	3	4	5
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LEGEND

- SF— FUTURE SEWER MAIN
- SEW— NEW SEWER GRAVITY MAIN
- SX— EXISTING SEWER MAIN
- SXA— EXISTING SEWER MAIN REMOVED
- SWF— FUTURE STORMWATER DRAINAGE
- SWD— NEW STORMWATER DRAINAGE
- SWX— EXISTING STORMWATER DRAINAGE
- SCX— EXISTING STORMWATER CULVERT
- RF— FUTURE ROOFWATER DRAINAGE
- RW— NEW ROOFWATER DRAINAGE
- EF— FUTURE UG ELECTRICAL
- E— NEW UG ELECTRICAL
- PX— EXISTING OVERHEAD ELECTRICAL
- WF— FUTURE WATER MAIN
- W— NEW #200 WATER MAIN
- W150— NEW #150 WATER MAIN
- W100— NEW #100 WATER MAIN
- WS— NEW WATER SERVICE
- WX— EXISTING WATER MAIN
- GF— FUTURE GAS MAIN
- G— NEW GAS MAIN
- GS— NEW GAS SERVICE
- GX— EXISTING GAS MAIN
- TX— EXISTING TELSTRA CABLES

(M) LOCATION OF WATER SERVICE CONNECTION. REFER SHEETS 106 - 108 FOR DETAILS.



WATER MAIN SHARED TRENCH DETAIL
ROADWAY CROSSING
SCHEMATIC ONLY

AS CONSTRUCTED
DETAILS PREPARED ON THE BASIS OF DATA
SUPPLIED BY THE CONTRACTOR'S SURVEYOR

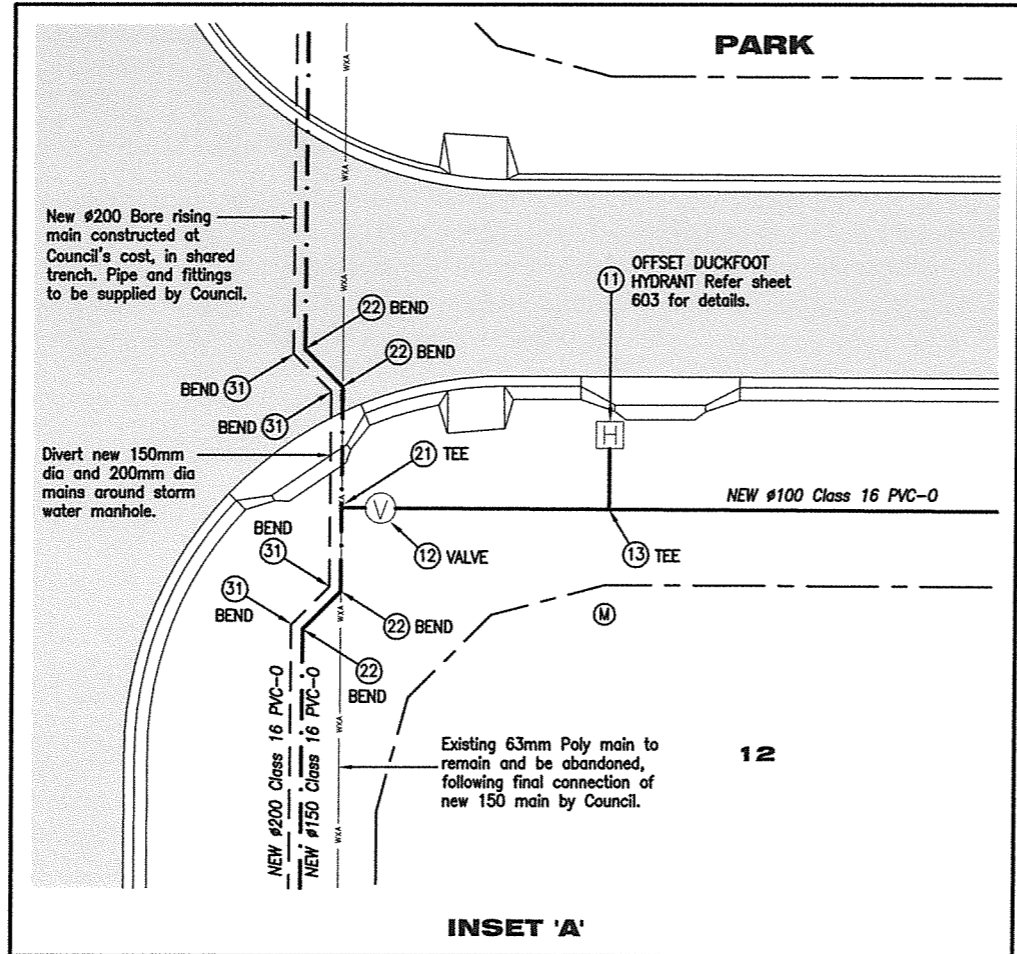


CAUTION!
CONTRACTOR TO EXERCISE EXTREME CARE
DURING EXCAVATION IN VICINITY OF
EXISTING TELECOMMUNICATION CABLES.

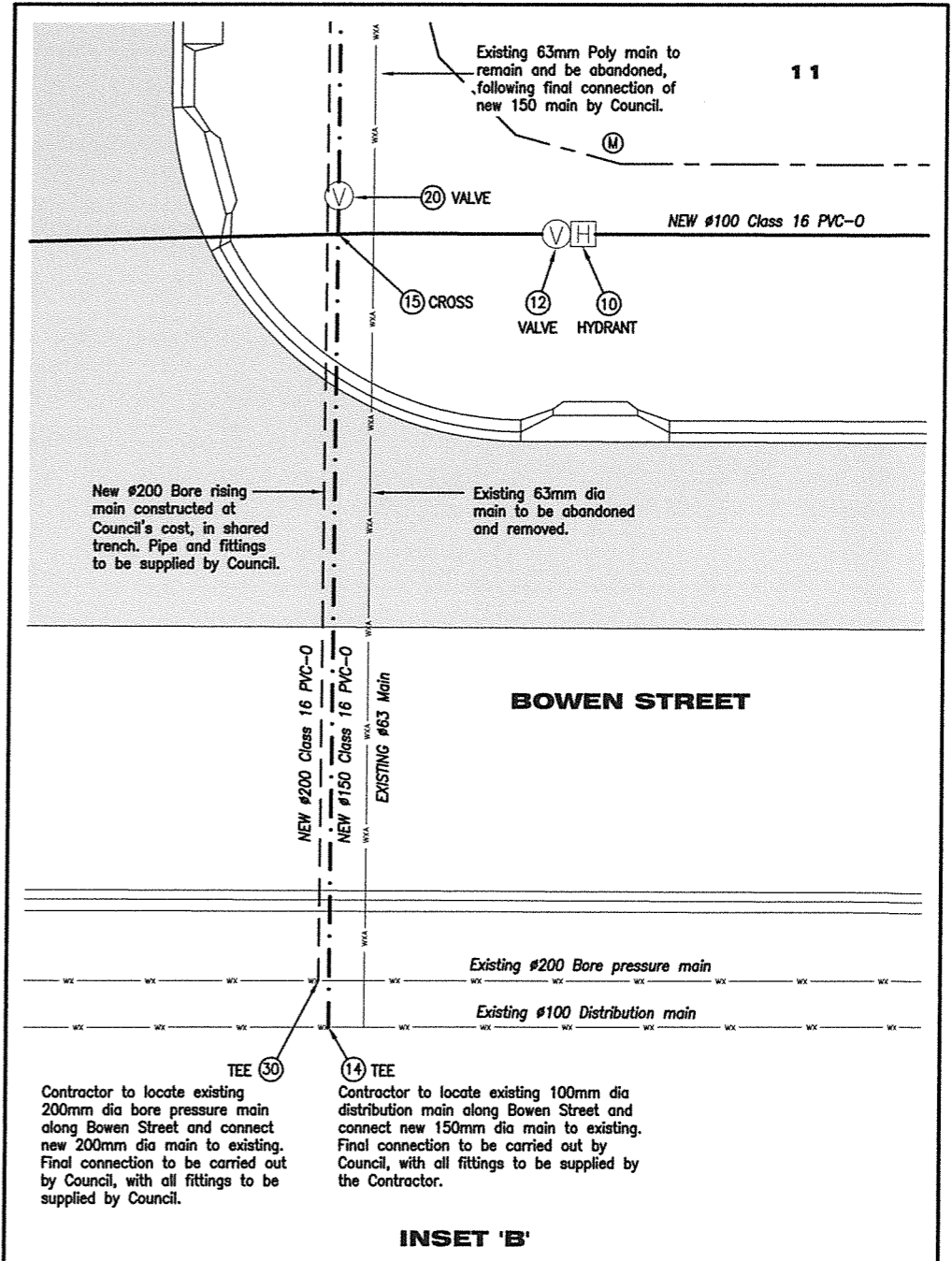
TABLE OF FITTINGS:

FITTING IDENT	DESCRIPTION.
100 DIA	
10	100 / 80 DIA. FIRE HYDRANT TEE, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER
11	100 / 80 DIA. "DUCKFOOT" FIRE HYDRANT BEND, 80 DIA. HYDRANT RISER, 80 DIA. SPRING HYDRANT, HYDRANT BOX & RRPM MARKER. REFER SHEET 603 FOR DETAILS.
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200 DIA	
30	200 x 200 x 200 DIA. C.I. TEE
31	200 DIA. 45" C.I. BEND
32	200 DIA. END CAP & TRUST BLOCK

REFER SHEET 603 FOR WATER
RETICULATION NOTES AND DETAILS



INSET 'A'



INSET 'B'

POTABLE WATER RETICULATION DETAIL

Scale:— F

Revisions	Date
1 As Constructed	July 13
A Original issue	



136 HERRIES STREET
PO BOX 1382
TOOWOOMBA
QLD 4350
PH.: 07 4638 5655
FAX.: 07 4638 3558
EMAIL:
mail@bakerrossow.com.au

client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT
CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA**

title **POTABLE WATER RETICULATION INSET PLAN**

Survey FYFE JUN 11	Drawn NUK JAN 12	Design BDR JUL 11	J/M BDR JUL 11	Examined 19/7/13	Certified KJP RPE 13598 FOR BAKER ROSSOW CONSULTING ENGINEERS
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GAS NOTES:

- GAS MAIN TO BE 50mm YELLOW STRIPE POLYETHYLENE, JOINTED BY ELECTROFUSION WELDING
- GAS SERVICES TO BE GENERALLY 40mm YELLOW STRIPE POLYETHYLENE OR EQUIVALENT APPROVED BY COUNCIL.
- GAS MAINS AND GAS SERVICES TO BE PIGGED, PRESSURE TESTED AND PURGED BEFORE COMPLETION. GAS MAIN TEST DURATION TO BE 12 HRS AT MINIMUM 280 kPa AND GAS SERVICES TEST DURATION TO BE 20 MINS AT MINIMUM 280kPa.
- CONTRACTOR IS TO PROVIDE ALL MATERIALS AND FITTINGS REQUIRED FOR SERVICE CONNECTIONS, COMPLETION OF TRENCHING AND CONNECTION TO EXISTING GAS MAINS.
- ALL GAS MAINS, VALVES AND TRENCHES, INCLUDING CONNECTION TO EXISTING MAIN TO BE UNDERTAKEN BY A COUNCIL APPROVED CONTRACTOR AND INSTALLED IN ACCORDANCE WITH MARANOIA REGIONAL COUNCIL STANDARD DRAWING MUDES-G-001.
- CONNECTION TO EXISTING GAS MAINS IN CURREY STREET AND BOWEN STREET, TO BE WAY OF DIRECT UNDER ROAD BORING.
- Ⓢ - INDICATES LOCATION OF FUTURE BOUNDARY ISOLATION VALVE AND BOX SET UP TO BE INSTALLED BY COUNCIL AT THE BOUNDARY OF EACH ALLOTMENT TO BE SERVICED. COPPER STANDPIPES, WRAPPED WITH DENSO TAPE OR POLYAMIDE TAPE TO BE USED TO CONNECT FROM THE END OF SERVICE LINE TO THE METER SET. METER SET TO BE ATTACHED TO SIDE OF RESIDENCE (NOT TO THE PROPERTY BOUNDARY) AT TIME OF BUILDING WORKS.
- PROVIDE SINGLE 40mm POLYETHYLENE (YELLOW STRIPE) GAS SERVICE IN 100MM DIAMETER SN4 ENVELOPER PIPE ACROSS ROAD FOR PROPERTY CONNECTION. PROVIDE CONNECTION TO GAS MAIN, INCLUDING TEE AND SERVICE VALVE. INSTALL CAP TO PROPERTY END OF SERVICE PIPE
- WARNING TAPE WITH TRACER WIRE TO BE LAID IN ALL GAS MAIN TRENCHES.

LEGEND

SF	FUTURE SEWER MAIN
SEW	NEW SEWER GRAVITY MAIN
SX	EXISTING SEWER MAIN
SXA	EXISTING SEWER MAIN REMOVED
SWF	FUTURE STORMWATER DRAINAGE
SWD	NEW STORMWATER DRAINAGE
SWX	EXISTING STORMWATER DRAINAGE
SCX	EXISTING STORMWATER CULVERT
RF	FUTURE ROOFWATER DRAINAGE
RW	NEW ROOFWATER DRAINAGE
EF	FUTURE UG ELECTRICAL
E	NEW UG ELECTRICAL
PX	EXISTING OVERHEAD ELECTRICAL
WF	FUTURE WATER MAIN
W150	NEW #150 WATER MAIN
W100	NEW #100 WATER MAIN
WS	NEW WATER SERVICE
WX	EXISTING WATER MAIN
GF	FUTURE GAS MAIN
OS	NEW GAS MAIN
GS	NEW GAS SERVICE
OX	EXISTING GAS MAIN
TX	EXISTING TELSTRA CABLES

CAUTION!
CONTRACTOR TO EXERCISE EXTREME CARE DURING EXCAVATION IN VICINITY OF EXISTING TELECOMMUNICATION CABLES.

NOTE:
LOCATION OF EXISTING TELSTRA CABLES SHOWN ON DRAWINGS ARE APPROXIMATE ONLY, THE CONTRACTOR IS TO ACCURATELY LOCATE POSITION AND DEPTH OF EXISTING TELSTRA CABLES AND ENGAGE SERVICESTREAM TO UNDERTAKE LOWERING OF CABLES IF DEEMED NECESSARY. IF IN DOUBT, REFER TO ENGINEER.

NATURAL GAS RETICULATION LAYOUT PLAN

Scale: - P

Revisions	Date
3 As Constructed	Aug 13
2 Road Layout	Oct 11
1 For Construction	Oct 11
A Original issue	



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client **URBAN LAND DEVELOPMENT AUTHORITY**

project **PROPOSED RESIDENTIAL DEVELOPMENT**

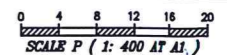
CLEARVIEW RISE - STAGE 1; BOWEN ST, ROMA

title **NATURAL GAS RETICULATION LAYOUT PLAN**

Survey	Drawn	Design	J/M	Examined	Certified
FYFE	DPM	BDR	BDR		NBA
JUN 11	JUL 11	JUL 11	JUL 11	27/8/13	RPEA 13598

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JOB No.
105848

No. of plans
Plan No.
801

A 1 2 3

