

**ACCEPTED
AS CONSTRUCTED**

LAYOUT PLAN

SEWER MANHOLES

Manhole No.	Easting	Northing
5/ML01C	464628.810*	7874609.010*
6/ML01C	464632.420*	7874629.880*
7/ML01C	464635.140*	7874659.450*
1/ML01C1	464562.970*	7874614.950*
2/ML01C1	464485.440*	7874621.870*
3/ML01C1	464407.270*	7874625.920*
4/ML01C1	464369.320*	7874611.040*
5/ML01C1	464326.140*	7874615.000*
1/ML01C1a	464365.090*	7874641.280*
1/ML01C2	464556.630*	7874666.630*
2/ML01C2	464478.400*	7874673.660*
3/ML01C2	464401.350*	7874680.480*

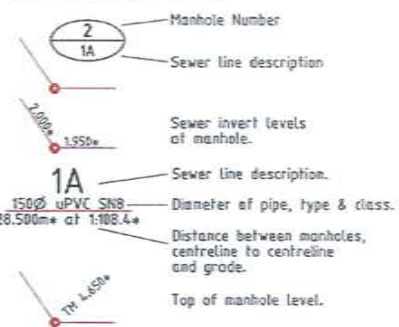
NOTES:

- All sewer manholes are 1050Ø as per Council details U.N.O.
- All sewer manhole tops are type 2 class 'B' covers U.N.O.
- All 225Ø & 150Ø sewer mains & fittings uPVC class SN10.
- All 100Ø sewer mains & fittings uPVC class SN10.
- Service connection invert levels marked with a '#' indicates the invert level on the sewer main with allotment drainage capable of connecting between the top of riser & sewer main invert levels.

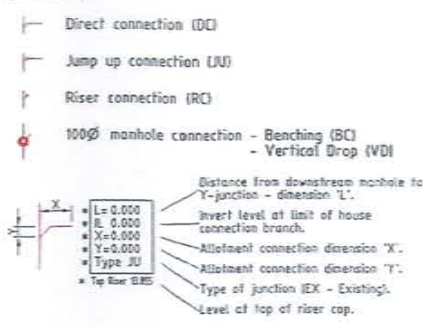
LEGEND

- GENERAL:-**
- RP boundary.
 - Top of batter.
 - Toe of batter.
 - Stormwater drain line.
 - Sewer main.
 - Sewer manhole.
 - Crusher dust backfill.
 - uPVC water main.
 - Poly water main.
 - Sewer main.
 - Sewer manhole.
 - Water main.

SEWERAGE RETICULATION:-



SERVICES:-



AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted herein as they have been constructed for the purposes of the development.

Laurence John Nolan
Director/Registered Surveyor

Date: 26/8/12

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.

Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: [07] 4725 5550 Fax: [07] 4725 5850
Email: mail@noeng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

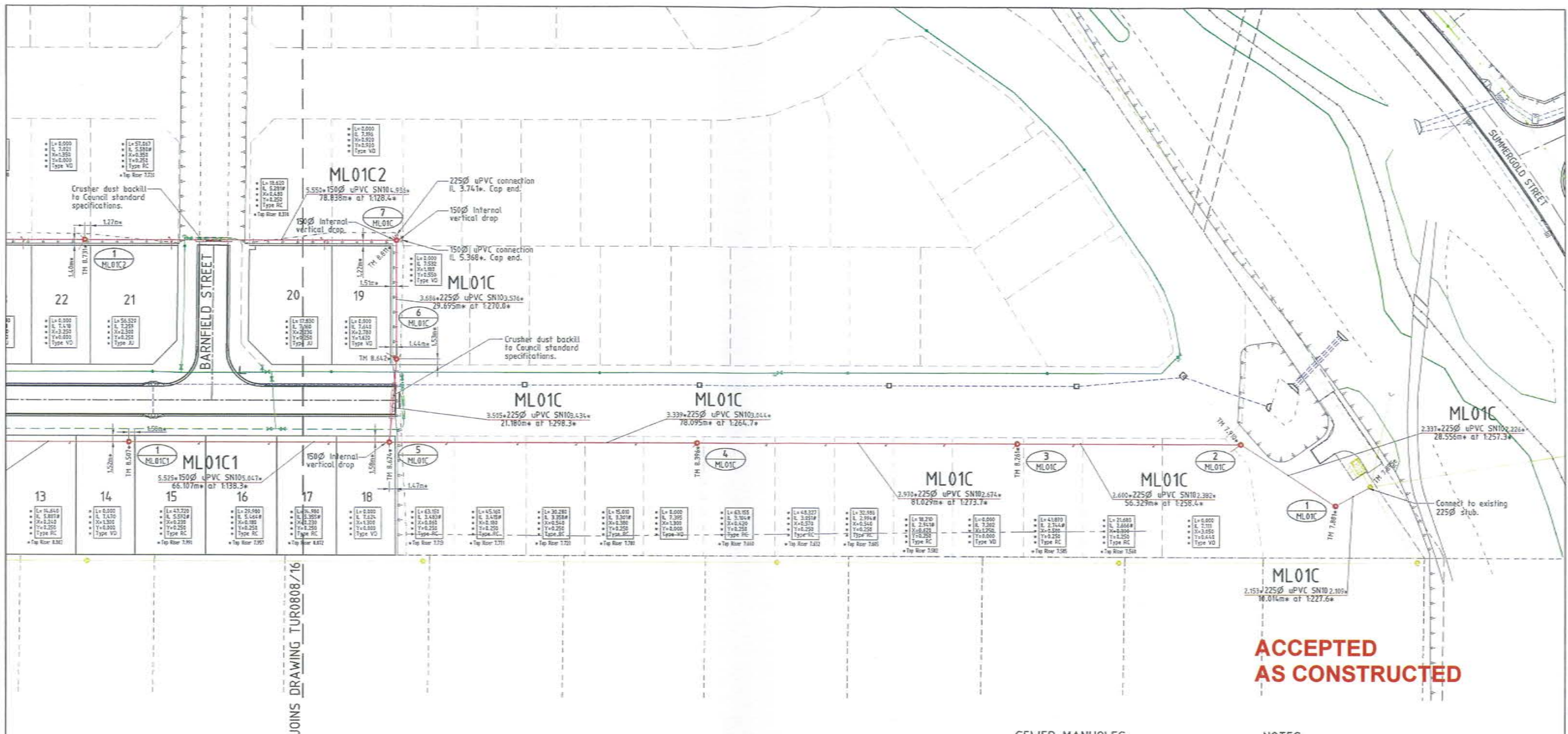
Issue	Description	Date
B	AMENDED TO AS CONSTRUCTED.	26/08/2013
A	ISSUED FOR CONSTRUCTION.	12/04/2013
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	26/02/2013
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION.	12/2/2013

REAL PROPERTY DESCRIPTION
Lot 900 on SP243526
Parish of BOWLE
County of ELPHINSTONE
Conway Street - Mount Low

LEVEL DATUM A.H.D. (Derf)
Horizontal Datum MGA '94 Zone 55
Refer PM 177367 RL. B.077
Bolt and washer in kerb
GUNDABLUCKY CREEK.

Scale: 1:100
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

Drawn LJ	In Association With BUSHLAND GROVE PTY LTD	SEWERAGE RETICULATION PLAN
Date 12/2/2013	BUSHLAND GROVE ESTATE STAGE 8, 32 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
Checked HFB	Drawing Number TUR0808/16	Issue B
Approved [Signature]		



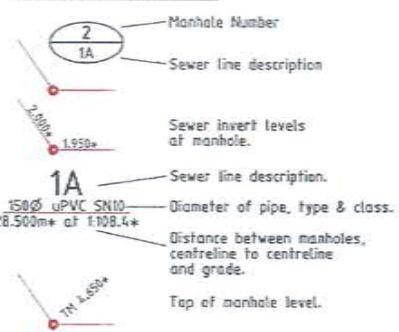
**ACCEPTED
AS CONSTRUCTED**

LEGEND

GENERAL:-

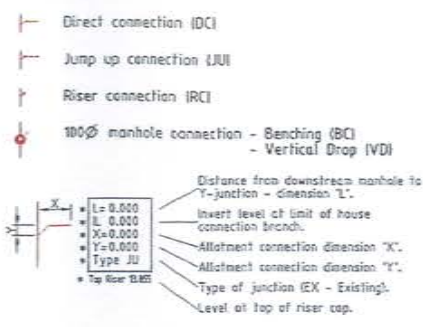
- - - - - RP boundary.
- - - - - Top of batter.
- - - - - Toe of batter.
- - - - - Stormwater drain line.
- - - - - Sewer main.
- - - - - Sewer manhole.
- - - - - Crusher dust backfill.
- - - - - uPVC water main.
- - - - - Poly water main.
- - - - - Sewer main.
- - - - - Sewer manhole.
- - - - - Water main.

SEWERAGE RETICULATION:-



LAYOUT PLAN

SERVICES:-



SEWER MANHOLES

Manhole No.	Easting	Northing
1/ML01C	464866.030*	7874572.440*
2/ML01C	464863.410*	7874569.870*
3/ML01C	464787.320*	7874595.050*
4/ML01C	464706.600*	7874602.120*
5/ML01C	464628.010*	7874609.010*
6/ML01C	464632.420*	7874629.880*
7/ML01C	464635.110*	7874659.450*
1/ML01C1	464562.970*	7874616.950*
1/ML01C2	464556.630*	7874666.630*

- All dimensions are to centre of chamber.

NOTES:

1. All sewer manholes are 1050mm as per Council details U.N.O.
2. All sewer manhole tops are type 2 class 'B' covers U.N.O.
3. All 225mm & 150mm sewer mains & fittings uPVC class SN10.
4. All 100mm sewer mains & fittings uPVC class SN10.
5. Service connection invert levels marked with a '#' indicates the invert level on the sewer main with allotment drainage capable of connecting between the top of riser & sewer main invert levels.

AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted hereon as they have been constructed for the purposes of the development.

Laurence John Nolan
Director/Registered Surveyor
Date: 26/8/13

REAL PROPERTY DESCRIPTION
Lot 980 on SP243626
Parish of BOHLE
County of ELPHINSTONE
Canway Street - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum MGA '94 Zone 55
Refer PH 177367 RL 5.077
80% and washer to baro
GUNDABLUY CRESSENT.

Scale
0 5 10 15 20m
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE
DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.

* - Indicates as constructed information.

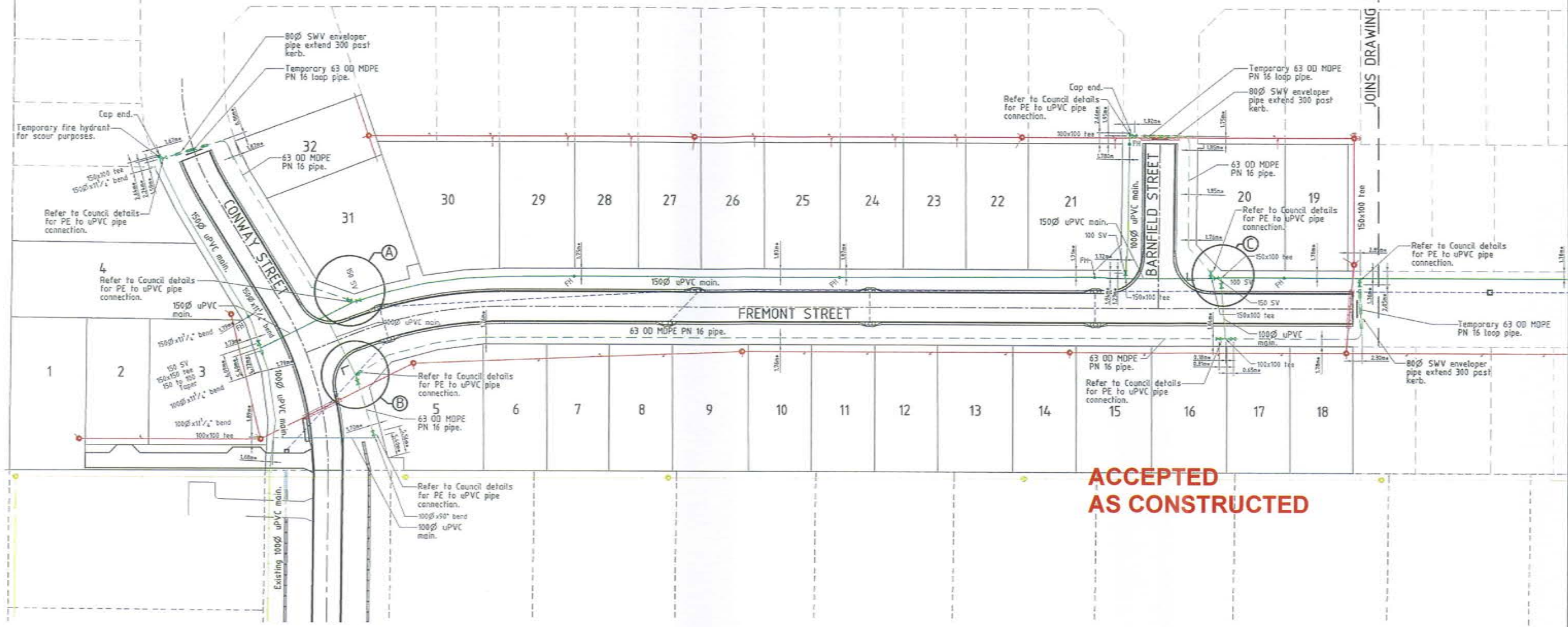
All work has been carried out in accordance with LOCAL AUTHORITIES standard details.



Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: [07] 4725 5550 Fax: [07] 4725 5580
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Issue	Description	Date
C	AMENDED TO AS CONSTRUCTED.	26/08/2013
B	FIRE HYDRANT LOCATIONS AMENDED.	28/05/2013
A	ISSUED FOR CONSTRUCTION.	12/04/2013
P2	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	28/12/2013
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION.	12/2/2013

Drawn	In Association With	SEWERAGE RETICULATION PLAN
LJ	BUSHLAND GROVE PTY LTD	
Date	BUSHLAND GROVE ESTATE	Drawing Number
12/2/2013	STAGE 8, 32 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW	
Checked		Issue
Approved		
COPYRIGHT ©		TUR0808/17
		C



ACCEPTED
AS CONSTRUCTED

LAYOUT PLAN

LEGEND
GENERAL-

- - - - - RP boundary.
- - - - - Top of batter.
- - - - - Toe of batter.
- - - - - Stormwater drain line.
- - - - - Sewer main.
- - - - - Sewer manhole.
- - - - - Crusher dust backfill.
- - - - - uPVC water main.
- - - - - Poly water main.
- - - - - Sewer main.
- - - - - Sewer manhole.
- - - - - Water main.

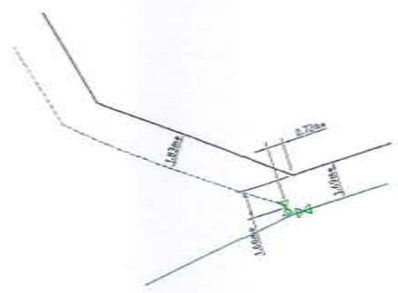
NOTES:

AS CONSTRUCTED WATER RETICULATION:

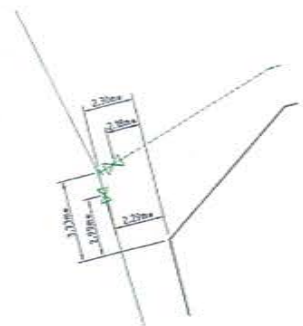
1. All water supply fixtures (FH, SV etc.) have been installed in accordance with Townsville City Council standards, i.e. adjacent to boundary intersection, U.N.O.
2. All uPVC water mains & fittings are Class 16 cast iron outside diameter compatible unless shown otherwise.

WATER RETICULATION:-

- FH Fire Hydrant.
- SV Stop Valve.
- Pipe diameter reducer.



DETAIL A
N.T.S.



DETAIL B
N.T.S.



DETAIL C
N.T.S.

AS CONSTRUCTED

I Laurence John Nolan of ROWLANDS SURVEYS Pty. Ltd. hereby certify that this drawing accurately describes and records the nature and the location of the works depicted hereon as they have been constructed for the purposes of the development.

Date: 27/8/17
Laurence John Nolan
Director/Registered Surveyor

* - Indicates as constructed information.

All work has been carried out in accordance with LOCAL AUTHORITIES standard details.

- P2 AMENDED TO AS CONSTRUCTED.
- P1 ISSUED FOR CONSTRUCTION.
- P2 PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.
- P1 PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR INFORMATION.

26/08/2013
12/04/2013
28/02/2013
12/2/2013

REAL PROPERTY DESCRIPTION
Lot 980 on SP243626
Parish of BOHLE
County of ELPHINSTONE
Conway Street - Mount Low

LEVEL DATUM A.M.D. (Der)
Horizontal Datum MGA '94 Zone 55
Refer FH 177367 PL, E.677
Bath and weather to kerb
GUNDBLUEY CRESENT.

Scale
0 5 10 15 20m
THE ORIGINAL OF THIS DOCUMENT IS COMPLETED TO THE SCALE NOTED.
AS REPRODUCTION CAN DISTORT SIZE & SHAPE USE ONLY THE
DIMENSIONS PROVIDED ON ARCHITECTURAL &/OR ENGINEERING DRAWINGS.
VERIFY DIMENSIONS ON SITE BEFORE CONSTRUCTION.



Civil & Structural Engineers
50 Punari Street, Currajong 4812
Phone: [07] 4725 5550 Fax: [07] 4725 5850
Email: mail@nceng.com.au
Milton Messer & Associates Pty. Ltd.
ACN 100 817 350

Drawn: LJ
Date: 12/2/2013
Checked: FB
Approved: [Signature]
COPYRIGHT ©

In Association With
BUSHLAND GROVE PTY LTD
BUSHLAND GROVE ESTATE STAGE 8, 32 ALLOTMENT RESIDENTIAL SUBDIVISION, MOUNT LOW

WATER RETICULATION PLAN

Drawing Number: **TUR0808/18**

Issue: **B**

