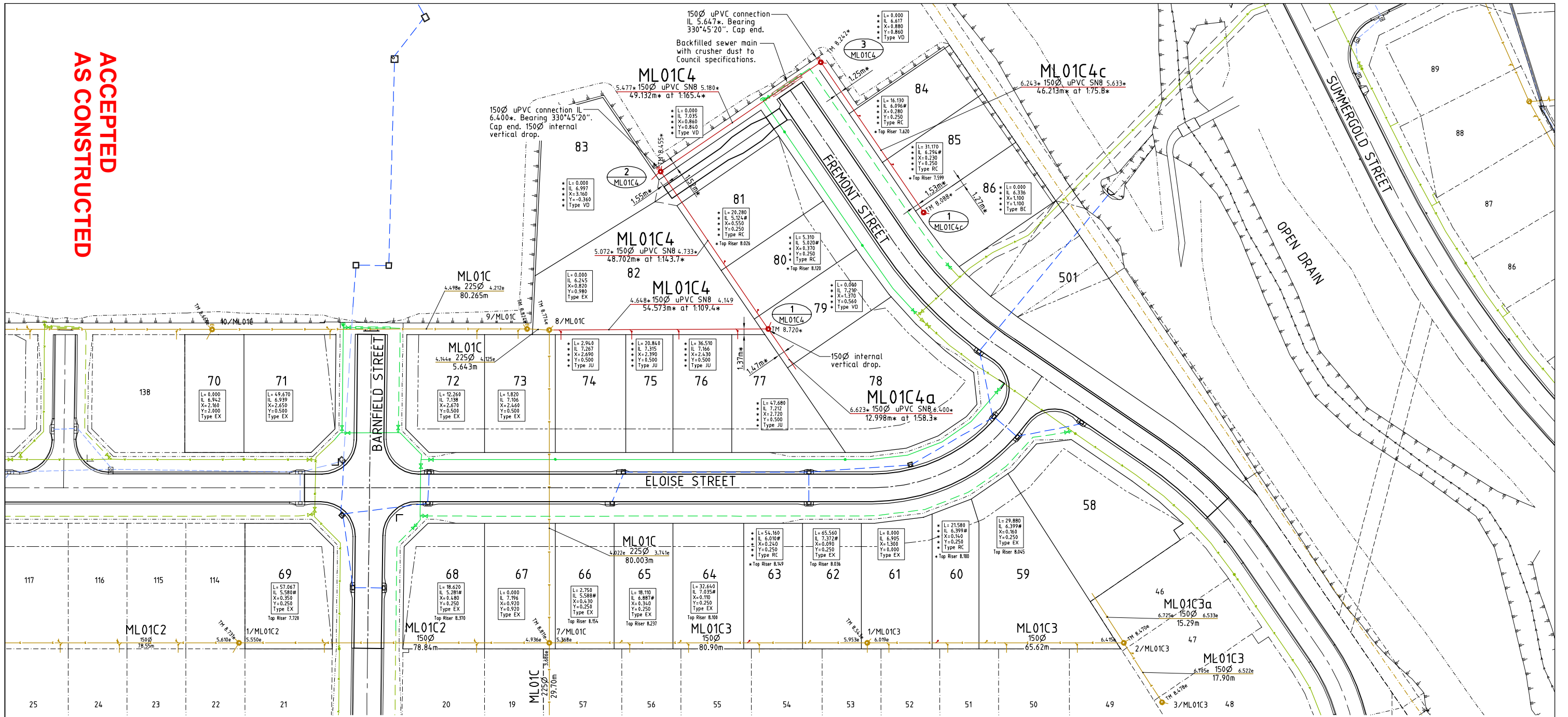


ACCEPTED
AS CONSTRUCTED



LAYOUT PLAN

LEGEND

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

SEWERAGE RETICULATION:-

- 2 - Manhole Number
- 1A - Sewer line description
- 2,200 - Sewer invert levels at manhole.
- 1A - Sewer line description.
- 150Ø uPVC SN8 - Diameter of pipe, type & class.
- 28.500m at 1:108.4 - Distance between manholes, centerline to centerline and grade.
- TM 4.650 - Top of manhole level.

SERVICES:-

- Direct connection (DC)
- Jump up connection (JU)
- Riser connection (RC)
- 100Ø manhole connection - Benching (BC) - Vertical Drop (VD)
- Distance from downstream manhole to Y-junction - dimension 'L'.
- Invert level at limit of house connection branch.
- Allotment connection dimension 'X'.
- Allotment connection dimension 'Y'.
- Type of junction (EX - Existing).
- Level at top of riser cap.

SEWER MANHOLES

Manhole No.	Easting	Northing
1/ML01C4	464697.850*	7874734.320*
2/ML01C4	464674.120*	7874776.850*
3/ML01C4	464716.980*	7874800.870*
1/ML01C4c	464739.810*	7874760.690*

- All dimensions are to centre of chamber.

AS CONSTRUCTED

Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

Laurence John Nolan
Director/Registered Surveyor

NOTES:

1. All sewer manholes are 1050Ø as per Council details U.N.O.
2. All sewer manhole tops are type 2 class 'B' covers U.N.O.
3. All 225Ø & 150Ø sewer mains & fittings are uPVC class SN8.
4. All 100Ø sewer mains & fittings are uPVC class SN10.
5. Service connection invert levels marked with a '#' indicates the invert level on the sewer main +200mm with allotment drainage capable of connecting between the top of riser & sewer main invert levels.

REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL. 8.195
Bolt and washer in kerb
FREMONT STREET

Scale 0 5 10 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.



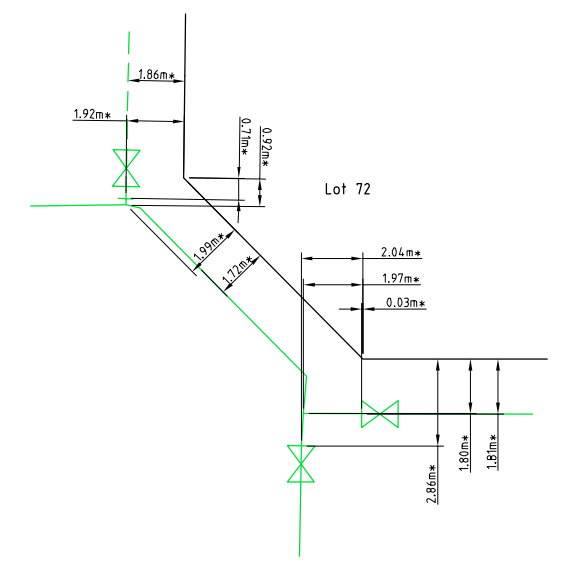
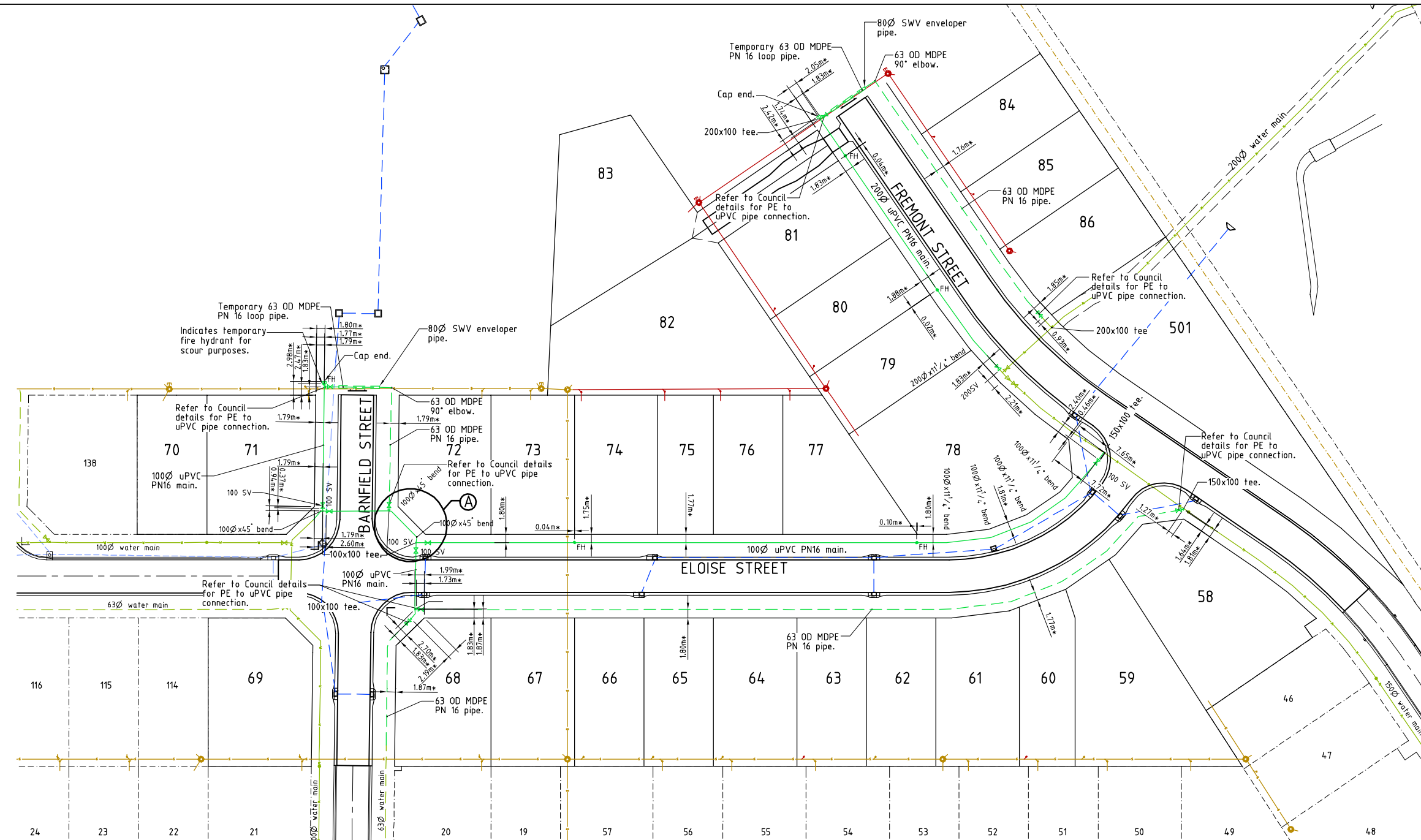
Civil & Structural Engineers
50 Punari Street, Curralong 4812
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Milton Messer & Associates Pty. Ltd.
ACN 100 817 356

Drawn	LJ
Date	18/12/2013
Checked	
Approved	
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In Association With
BUSHLAND GROVE PTY LTD
BUSHLAND GROVE ESTATE
STAGE 10, 29 ALLOTMENT
RESIDENTIAL SUBDIVISION,
MOUNT LOW

SEWERAGE RETICULATION PLAN	
Drawing Number	TUR0810/18
Issue	C

Issue	Description	Date
C	AMENDED TO AS CONSTRUCTED.	09/02/2016
B	LOT LAYOUT AMENDED AND STAGE 12 ADDED AS EXISTING.	03/08/2015
A	AMENDED FOR CONSTRUCTION.	1/10/2014
P2	PRELIMINARY - NOT FOR CONSTRUCTION - AMENDED TO COUNCIL'S REQUIREMENTS.	14/05/2014
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	18/12/2013



**ACCEPTED
AS CONSTRUCTED**

LAYOUT PLAN

AS CONSTRUCTED
Rowlands Surveys Pty Ltd (ACN 010 025 260) hereby certify that the works detailed on this drawing, denoted *, have been constructed to the dimensions and levels shown.

..... Date:.....
Laurence John Nolan
Director/Registered Surveyor

- LEGEND**
- GENERAL:-**
- - - - - RP boundary.
 - - - - - Stormwater drain line.
 - - - - - Sewer main.
 - - - - - Sewer manhole.
 - - - - - uPVC water main.
 - - - - - Poly water main.
 - - - - - Sewer main.
 - - - - - Sewer manhole.
 - - - - - Sewer rising main.
 - - - - - Water main.
 - - - - - Poly water main.
 - - - - - Stormwater drain line.

- NOTES:**
- AS CONSTRUCTED WATER RETICULATION:**
- All water supply fixtures (FH, SV etc.) have been installed in accordance with Townsville City Council standards. ie. adjacent to boundary intersection, U.N.O.
 - All uPVC water mains & fittings are Class 16, C.I.O.D. compatible unless shown otherwise.

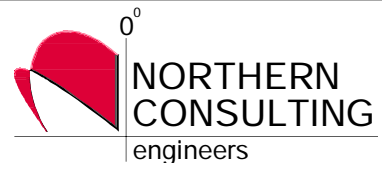
- WATER RETICULATION:-**
- FH Fire Hydrant.
 - SV Stop Valve.

REAL PROPERTY DESCRIPTION
Lot 900 on SP271044
Parish of BOHLE
County of ELPHINSTONE
Mount Low Parkway - Mount Low

LEVEL DATUM A.H.D. (Der)
Horizontal Datum GDA' 94 Zone 55
Refer PM 193519 RL. 8.195
Bolt and washer in kerb
FREMONT STREET

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.

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



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Issue	Description	Date
Drawn	In Association With BUSHLAND GROVE PTY LTD	
Date		
Checked	BUSHLAND GROVE ESTATE	
Approved	STAGE 10, 29 ALLOTMENT	
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Drawing Number TUR0810/19		Issue C