

LAYOUT PLAN

LEGEND

- 2/1 (12.000\*) - Pit No. 2/Drainline No. 1
- 12.000\* - As constructed top of structure levels.
- - - - - As constructed pipe invert levels.
- - - - - RP boundary.
- - - - - Top of batter.
- - - - - Toe of batter.
- - - - - Stormwater drain line.
- - - - - Subsoil drainage.
- - - - - Sewer main.
- - - - - Sewer manhole.
- - - - - uPVC water main.
- - - - - Poly water main.
- - - - - Stormwater drain line.
- - - - - Subsoil drainage.
- - - - - Sewer main.
- - - - - Water main.
- - - - - Underground electrical supply.
- - - - - National Broadband Network.

NOTES:

1. All Kerb Inlet Grates are Class 'D' and 'Bicycle Safe' to AS 3996 U.N.O.
2. All poly inter allotment drainage pipes are rubber ring jointed.

STORMWATER STRUCTURE SETOUT TABLE

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
2/25	6181.530*	76389.650*	Grated Kerb Inlet (4800L)	9.780k*
3/25	6177.250*	76333.880*	Grated Kerb Inlet (4800L)	13.118k*
4/25	6181.550*	76308.390*	1200x1200 Stormwater Manhole, Type 2	14.795*
1/27	6164.920*	76335.190*	800x800 Block Field Inlet Pit	13.490*
2/27	6138.710*	76337.840*	600x600 Concrete Field Inlet Pit	14.224*
3/27	6142.110*	76319.540*	600x600 Poly Field Inlet Pit	15.010*
4/27	6145.440*	76301.180*	600x600 Poly Field Inlet Pit	15.992*
1/28	6184.890*	76332.580*	Grated Kerb Inlet (2400R)	13.224k*

- All dimensions are to centre of chamber.
- All graded kerb inlets constructed over 900x900 Type 1 stormwater manhole to Council standard details U.N.O.
- Pits 2/25 & 3/25 are non standard chambers, refer to table below.
- Refer to drawings SUNJ0003/15-16 for field inlet pit details.
- 600x600 raised grates to all field inlet pits.
- Class 'D' cover & frame to stormwater manhole 4/25.

NON STANDARD CHAMBER TABLE

PIT No.	Y distance (mm)	Z distance (mm)
2/25	2500	900
3/25	2500	900

- Refer to drawing SUNJ0003/17 for details

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: 11/12/12

\* - Indicates as constructed information.

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



REAL PROPERTY DESCRIPTION

Lot 901 on SP 226447,  
Lot 902 on SP 218628,  
Lot 4 & 5 on RP 743005  
Parish of BOHLE  
County of ELPHINSTONE  
Holbourne Street - Bushland Beach



ROWLANDS SURVEYS PTY LTD

22 GORDEN STREET  
GARBUTT, 4814  
Ph. (07)47755077

BASE SURVEY  
Rowlands Surveys (42821/03)  
TRUNCATED COORDINATES  
E 0.000, N 0.000  
EQUIVALENT TO  
E 460000, N 7800000

LEVEL DATUM A.H.D.  
Horizontal Datum GDA' 94 Zone 55  
Refer P.M. 174438 RL. 4.820  
Bolt & washer in kerb.  
Cnr HILLOCK CR. & GLENDOWER ST.

Scale  
0 2.5 5 7.5 10m

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.



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ACN 100 817 356

Issue	Description	Date
B A P1	AMENDED TO AS CONSTRUCTED. ISSUED FOR CONSTRUCTION. PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	11/12/2012 28/05/2012 03/11/2011
Drawn DC Date 03/11/2011 Checked DC Approved DC	In Association With <b>SUNLAND GROUP LIMITED</b> STAGE 3, 20 TRADITIONAL RESIDENTIAL LOT SUBDIVISION HOLBOURNE STREET BUSHLAND BEACH	STORMWATER DRAIN LINE PLAN Drawing Number SUNJ0003/12 Issue B

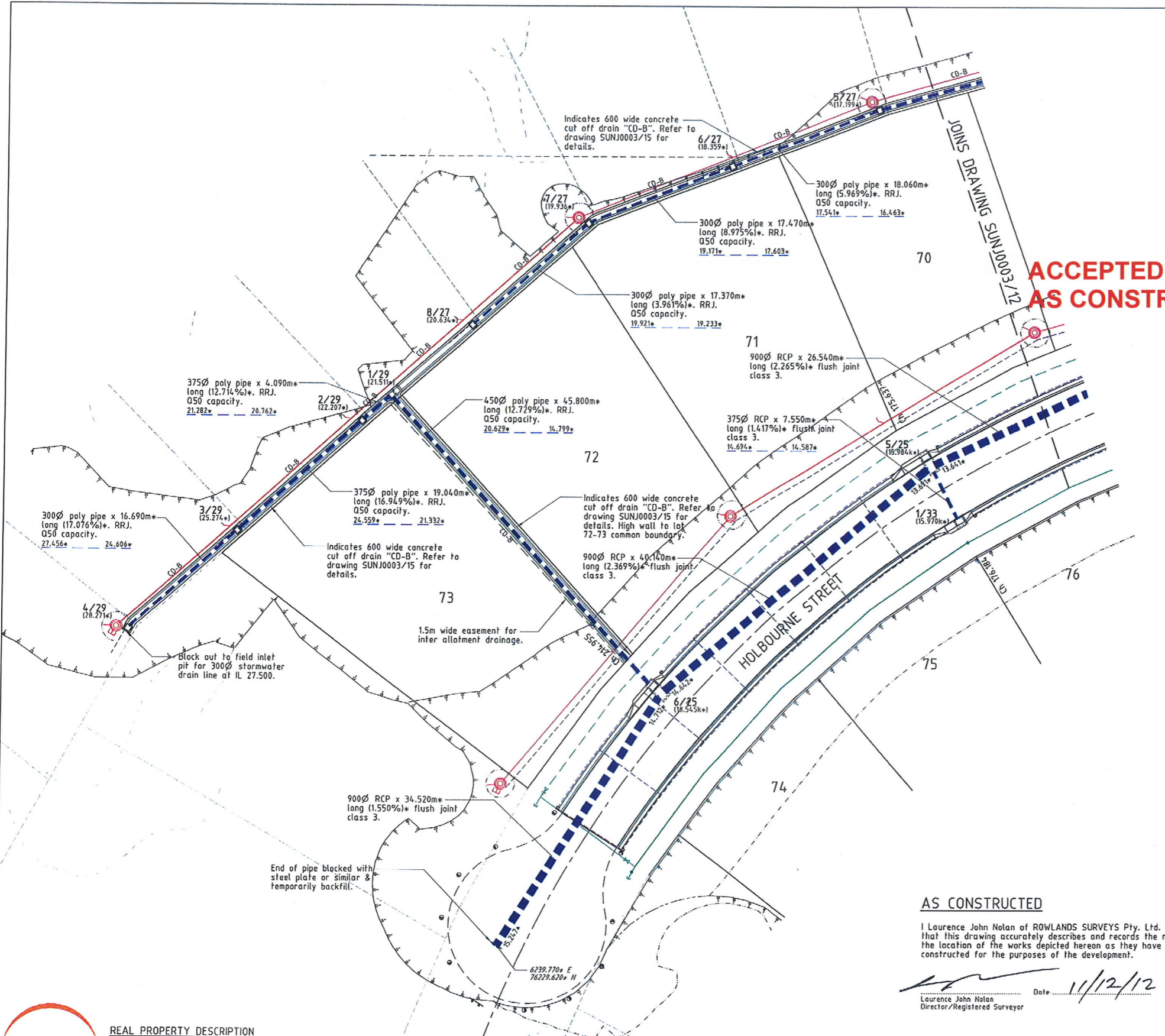
**LEGEND**

- 2/1 (12.000\*) - Pit No. 2/Drainline No. 1
- 12.000\* - As constructed top of structure levels.
- Top of batter.
- Toe of batter.
- Stormwater drain line.
- Subsoil drainage.
- Sewer main.
- Sewer manhole.
- uPVC water main.
- Poly water main.

**NOTES:**

1. All Kerb Inlet Grates are Class 'D' and 'Bicycle Safe' to AS 3996 U.N.O.
2. Trench stops are spaced not greater than 6.0m and located within 300mm of pipe joints U.N.O.  
Where pipe grade exceeds:
  - 1 in 6 (16.7%) provide concrete scour stops,
  - 1 in 10 (10.0%) provide cement stabilised sand bags (3% cement content).
 Spacing of stops are that top of stop is not less than 100mm above the top of pipe of the next uphill stop, subject to a minimum cover of 300mm.
3. All poly inter allotment drainage pipes are rubber ring jointed.
4. Refer to drawing SUNJ0003/15 for concrete encasement details.

**ACCEPTED AS CONSTRUCTED**



**STORMWATER STRUCTURE SETOUT TABLE**

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
5/25	6189.980*	76283.120*	Grated Kerb Inlet (3600L)	15.984k*
6/25	6212.940*	76250.200*	Grated Kerb Inlet (3600L)	16.545k*
5/27	6148.940*	76281.340*	600x600 Poly Field Inlet Pit	17.199*
6/27	6153.850*	76263.960*	600x600 Poly Field Inlet Pit	18.359*
7/27	6158.740*	76247.190*	600x600 Poly Field Inlet Pit	19.936*
8/27	6168.940*	76233.130*	600x600 Poly Field Inlet Pit	20.634*
1/29	6176.240*	76222.800*	600x600 Concrete Field Inlet Pit	21.511*
2/29	6178.780*	76219.600*	600x600 Poly Field Inlet Pit	22.207*
3/29	6190.000*	76204.220*	600x600 Poly Field Inlet Pit	25.274*
4/29	6199.920*	76190.800*	600x600 Poly Field Inlet Pit	28.271*
1/33	6196.910*	76286.126*	Grated Kerb Inlet (2400R)	15.970k*

- All dimensions are to centre of chamber.
- All grated kerb inlets constructed over 900x900 Type 1 Stormwater Manholes to Council Standards details U.N.O.
- Pits 5/25 & 6/25 are non standard chambers, refer to table below.
- Refer to drawing SUNJ0003/15 for field inlet pit details.
- 600x600 raised grates to all field inlet pits.

**NON STANDARD CHAMBER TABLE**

PIT No.	Y distance (mm)	Z distance (mm)
5/25	2500	900
6/25	2500	900

- Refer to drawing SUNJ0003/17 for details

**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: 11/12/12

**SUNLAND GROUP**  
REAL PROPERTY DESCRIPTION  
Lot 901 on SP 226447,  
Lot 902 on SP 218628,  
Lot 4 & 5 on RP 743005  
Parish of BOHLE  
County of ELPHINSTONE  
Holbourne Street - Bushland Beach

**LAYOUT PLAN**



Scale  
0 2.5 5 7.5 10m

BASE SURVEY  
Rowlands Surveys (42821/03)  
TRUNCATED COORDINATES  
E 0.000, N 0.000  
EQUIVALENT TO  
E 460000, N 7800000

LEVEL DATUM A.H.D.  
Horizontal Datum GDA' 94 Zone 55  
Refer P.M. 174-438 RL. 4.820  
Doll & washer in kerb.  
Cnr HILLOCK CR. & GLENDOWER ST.

\* - Indicates as constructed information.

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

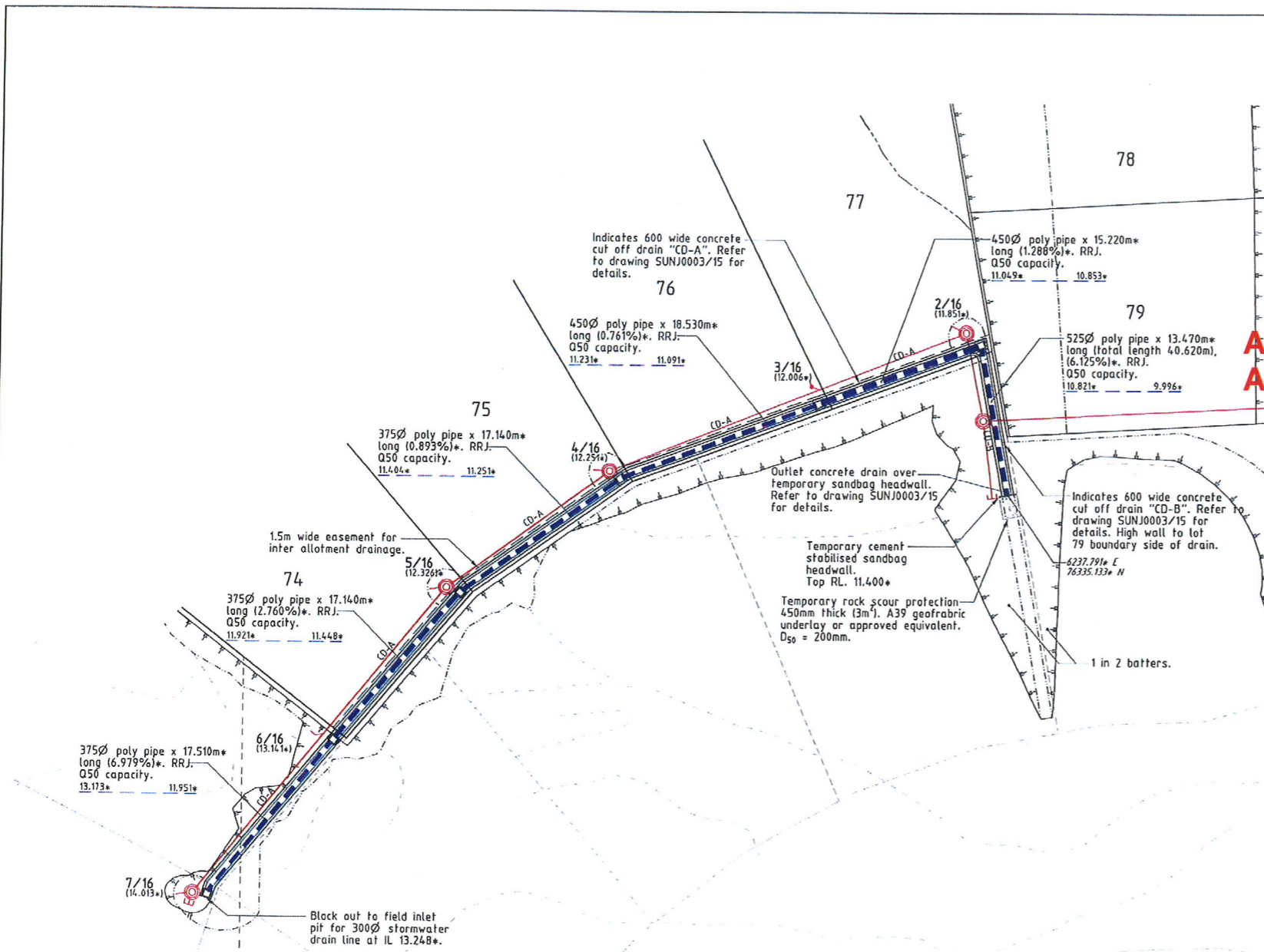
In Association with:  
**ROWLANDS SURVEYS PTY LTD**  
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**NORTHERN CONSULTING**  
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Email: mail@nceng.com.au  
Milton Messer & Associates Pty. Ltd.  
ACN 100 817 356

Issue	Description	Date
B	AMENDED TO AS CONSTRUCTED.	11/12/2012
A	ISSUED FOR CONSTRUCTION.	28/05/2012
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	03/11/2011

Drawn DC	In Association With	<b>SUNLAND GROUP LIMITED</b>	STORMWATER DRAIN LINE PLAN
Date 03/11/2011	STAGE 3, 20 TRADITIONAL RESIDENTIAL LOT SUBDIVISION		
Checked [Signature]	HOLBOURNE STREET	Drawing Number	Issue
Approved [Signature]	BUSHLAND BEACH	SUNJ0003/13	B



**ACCEPTED  
AS CONSTRUCTED**

**LEGEND**

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- 12.000\* - As constructed top of structure levels.
- As constructed pipe invert levels.
- Top of batter.
- Toe of batter.
- Stormwater drain line.
- Sewer main.
- Sewer manhole.

**NOTES:**

1. All poly inter allotment drainage pipes are rubber ring jointed.

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Laurence John Nolan  
Director/Registered Surveyor  
Date: 11/12/12

**STORMWATER STRUCTURE SETOUT TABLE**

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
2/16	6223.750*	76333.990*	600x600 Concrete Field Inlet Pit	11.851*
3/16	6227.580*	76319.260*	600x600 Concrete Field Inlet Pit	12.006*
4/16	6232.570*	76301.410*	600x600 Concrete Field Inlet Pit	12.251*
5/16	6241.130*	76286.560*	600x600 Poly Field Inlet Pit	12.326*
6/16	6253.160*	76274.350*	600x600 Poly Field Inlet Pit	13.141*
7/16	6265.710*	76262.140*	600x600 Poly Field Inlet Pit	14.013*

- All dimensions are to centre of chamber.
- Refer to drawings SUNJ0003/15 for field inlet pit details.
- 600x600 raised grates to all field inlet pits.



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 Lot 902 on SP 218628,  
 Lot 4 & 5 on RP 743005  
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 County of ELPHINSTONE  
 Holbourne Street - Bushland Beach

In Association with:-  
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 22 GORDEN STREET  
 CARBUTT. 4814  
 Ph. (07)47755077



**BASE SURVEY**  
 Rowlands Surveys (4/2821/03)  
 TRUNCATED COORDINATES  
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 E 460000, N 7800000

**LEVEL DATUM A.H.D.**  
 Horizontal Datum GDA' 94 Zone 55  
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 engineers

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C AMENDED TO AS CONSTRUCTED.	11/12/2012
B STORMWATER DRAIN LINE 16 AMENDED.	30/07/2012
A ISSUED FOR CONSTRUCTION.	28/05/2012
P1 PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	03/11/2011
Issue	Date
Drawn DC	In Association With
Date 03/11/2011	<b>SUNLAND GROUP LIMITED</b>
Checked	STAGE 3, 20 TRADITIONAL RESIDENTIAL LOT SUBDIVISION
Approved	HOLBOURNE STREET BUSHLAND BEACH
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STORMWATER DRAIN LINE PLAN	Drawing Number
	<b>SUNJ0003/14</b>
	Issue
	<b>C</b>