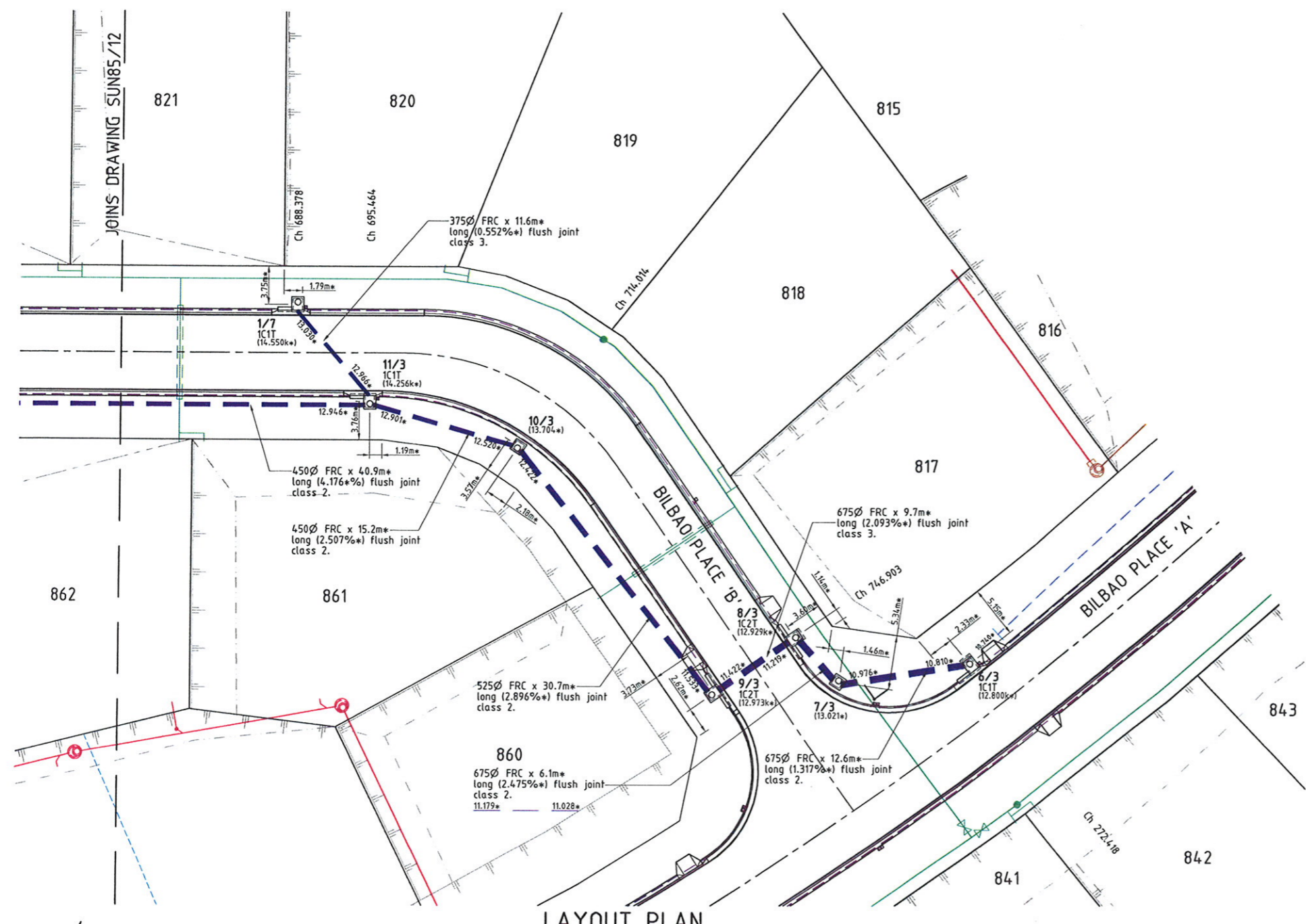


**LEGEND**

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



**STORMWATER STRUCTURE SETOUT TABLE**

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
6/3	5536.98*	76638.49*	Side Inlet Pit - 1 chamber, 1 trough	12.800k*
7/3	5526.38*	76631.73*	900x900 Stormwater Manhole	13.021*
8/3	5520.66*	76633.96*	Side Inlet Pit - 1 chamber, 2 troughs	12.929k*
9/3	5515.74*	76625.64*	Side Inlet Pit - 1 chamber, 2 troughs	12.973k*
10/3	5488.46*	76639.81*	900x900 Stormwater Manhole	13.704*
11/3	5473.42*	76637.78*	Side Inlet Pit - 1 chamber, 1 trough	14.256k*
1/7	5463.42*	76643.69*	Side Inlet Pit - 1 chamber, 1 trough	14.550k*

- All dimensions are to centre of chamber.  
 - Pits 6/3 & 8/3 are non standard chambers, refer to table below.

**NON STANDARD CHAMBER TABLE**

PIT No.	Y distance (mm)	Z distance (mm)
6/3	1500	900
8/3	1400	900

- Refer to Council standard drawing 10200 for details.

**APPROVED**

**AS CONSTRUCTED**

I John James Rowlands 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.

*John James Rowlands* Date: 22.12.10  
 John James Rowlands  
 Director/Registered Surveyor

**TOWNSVILLE CITY COUNCIL**  
 REC'D 14 JAN 2011

**REAL PROPERTY DESCRIPTION**

Lots 501 & 502 on SP 162413  
 Parish of BOHLE  
 County of ELPHINSTONE  
 Bilbao Place - Bushland Beach

In Association with:-



**ROWLANDS SURVEYS PTY LTD**

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



**SUNLAND GROUP**

LEVEL DATUM A.H.D.  
 Horizontal Datum GDA' 94 Zone 55  
 Refer P.M. 138403 RL. 8.545  
 Bolt & washer in manhole top.  
 LYNWOOD AVENUE



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 carried out in accordance with the former THURINGOWA CITY COUNCIL standard details.

**NORTHERN CONSULTING**  
 engineers

Civil & Structural Engineers  
 50 Punari Street, Currajong 4812  
 Phone: 07 4725 5550 Fax: 07 4725 5850  
 Email: mail@nceng.com.au  
 Milton Messner & Associates Pty. Ltd.  
 ACN 100 817 955

Issue	Description	Date
E	AMENDED TO AS CONSTRUCTED.	21/12/2010
D	ISSUED FOR CONSTRUCTION.	30/03/2010
C	BILBAO PLACE DESIGN AMENDED & BENCHING TO ALLOTMENTS ADDED.	24/03/2010
B	STORMWATER MANHOLE 7/3 RELOCATED.	14/09/2009
A	ISSUED FOR CONSTRUCTION.	21/07/2008
P2	PRELIMINARY - NOT FOR CONSTRUCTION - AMENDED TO COUNCIL REQUIREMENTS.	11/01/2008
P1	PRELIMINARY - NOT FOR CONSTRUCTION - ISSUED FOR OPERATIONAL WORKS APPROVAL.	02/11/2007

In Association with  
**SUNLAND GROUP LIMITED**

Checked  
 Approved

STAGE 85, 26 TRADITIONAL  
 RESIDENTIAL LOT SUBDIVISION  
 BILBAO PLACE  
 BUSHLAND BEACH

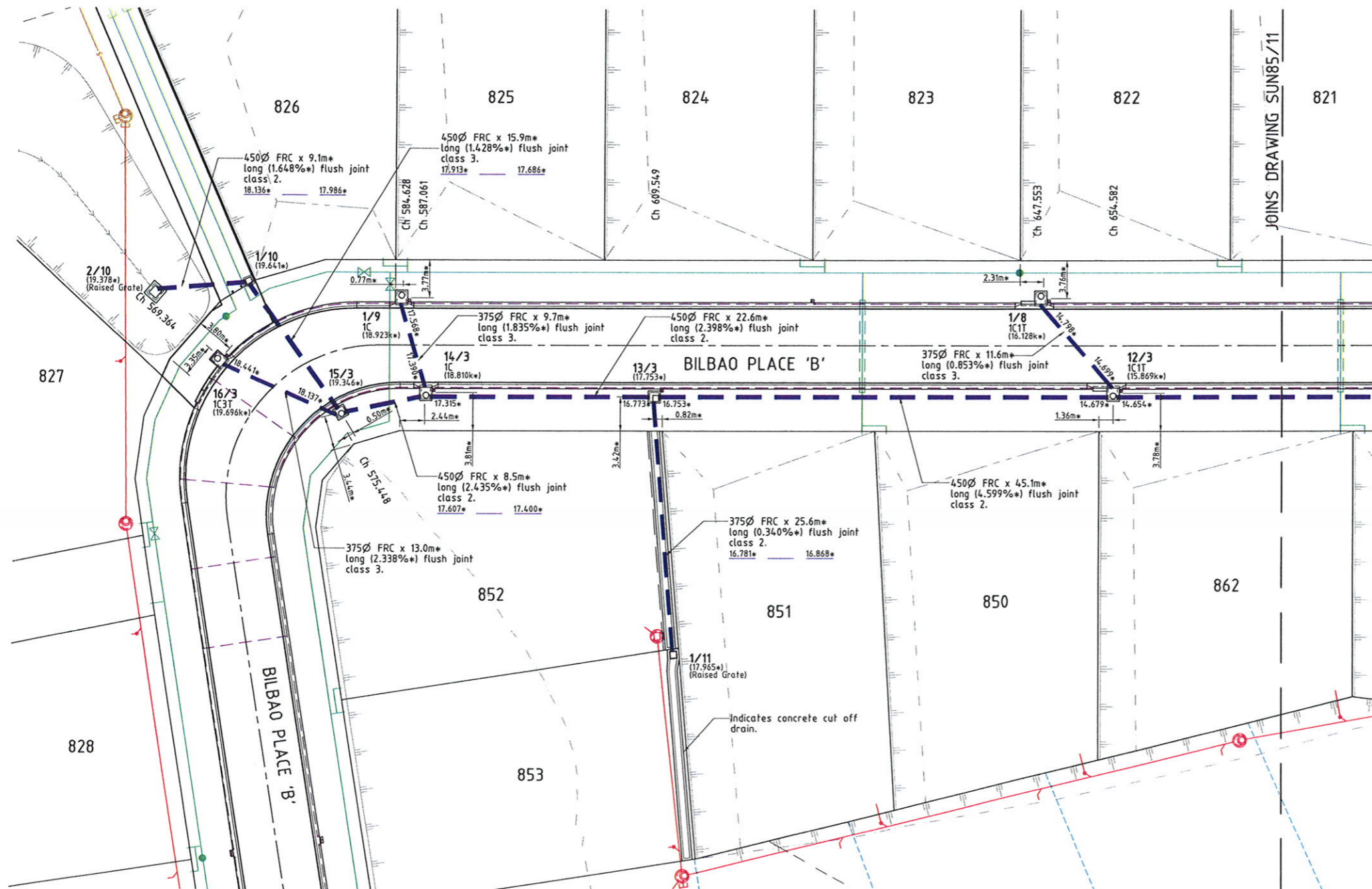
STORMWATER DRAIN LINE PLAN

Drawing Number  
**SUN85/11**

Issue  
**E**

**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.
- Invert of creek/drain.
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- Sewer main.
- Sewer manhole.
- Water main.
- Sewer main.
- Sewer manhole.
- Water main.



**LAYOUT PLAN**

**STORMWATER STRUCTURE SETOUT TABLE**

PIT No.	EASTING	NORTHING	STRUCTURE TYPE	TOP LEVEL
12/3	5436.21*	76620.86*	Side Inlet Pit - 1 chamber, 1 trough	15.859k*
13/3	5395.36*	76601.85*	900x900 Stormwater Manhole#	17.753*
14/3	5374.64*	76592.84*	Side Inlet Pit - 1 chamber	18.810k*
15/3	5367.93*	76587.65*	900x900 Stormwater Manhole	19.346*
16/3	5354.89*	76587.47*	Side Inlet Pit - 1 chamber, 3 troughs	19.696k*
1/8	5426.14*	76626.66*	Side Inlet Pit - 1 chamber, 1 trough	16.128k*
1/9	5368.77*	76600.53*	Side Inlet Pit - 1 chamber	18.923k*
1/10	5354.18*	76595.58*	600x600 Concrete Field Inlet Pit	19.641*
2/10	5346.30*	76591.07*	900x900 Gully Inlet Manhole	19.378*
1/11	5407.80*	76579.57*	600x600 Poly Field Inlet Pit	17.455*

- All dimensions are to centre of chamber.
- Grates to all stormwater structures within verges & pathways are Class 'C' bicycle & wheelchair safe.
- Pit 2/10 top level measured to top of chamber wall.
- # 600x600 grated inlet cover to manhole 13/3.
- \* Raised Grate inlet cover to manhole 2/10 & 1/11.

**APPROVED**

**AS CONSTRUCTED**

I John James Rowlands 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.

*John Rowlands* Date: 22.12.10  
 Lawrence John Rowlands  
 Director/Registered Surveyor  
 JOHN ROWLANDS.

**TOWNSVILLE CITY COUNCIL**  
 REC'D 14 JAN 2011

TOWN PLANNING

Issue	Description	Date
D	AMENDED TO AS CONSTRUCTED	21/12/2010
C	ISSUED FOR CONSTRUCTION.	30/03/2010
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**SUNLAND GROUP**

LEVEL DATUM A.H.D.  
 Horizontal Datum GDA' 94 Zone 55  
 Refer P.M. 138403 RL. 8.545  
 Bolt & washer in manhole top.  
 LYNWOOD AVENUE

Scale  
 0 2.5 5 7.5 10m

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 Milton Member & Associates Pty. Ltd.  
 ACN 100 817 355

Drawn TM Date 02/11/2007 Checked [Signature] Approved [Signature] COPYRIGHT ©	In Association with <b>SUNLAND GROUP LIMITED</b> STAGE 85, 26 TRADITIONAL RESIDENTIAL LOT SUBDIVISION BILBAO PLACE BUSHLAND BEACH	<b>STORMWATER DRAIN LINE PLAN</b> Drawing Number <b>SUN85/12</b> Issue <b>D</b>
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