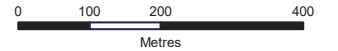


GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
- ▭ Model Boundary
- ▭ Cadastre
- ++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

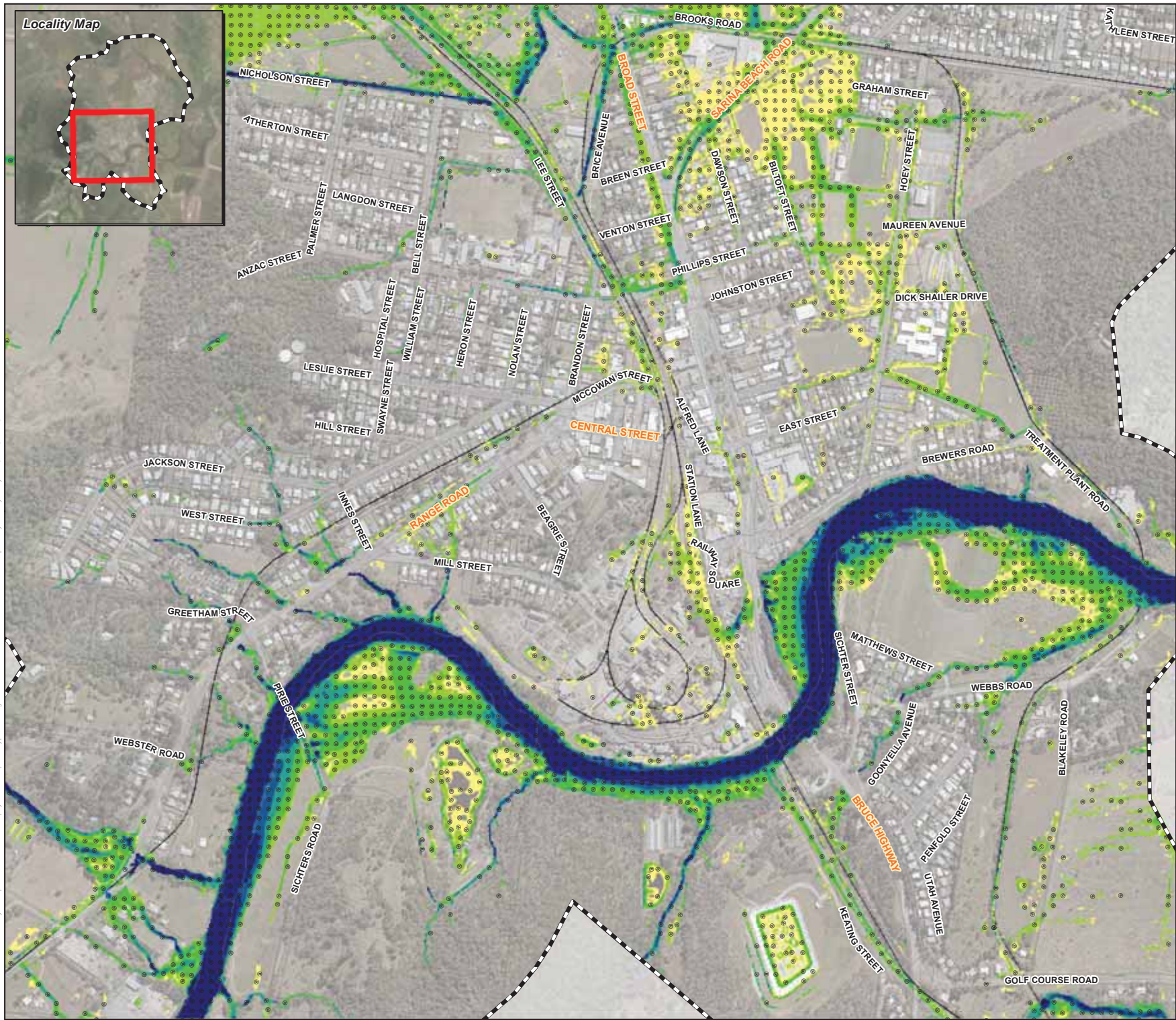
Results Filters Applied:  
- Length = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (GLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

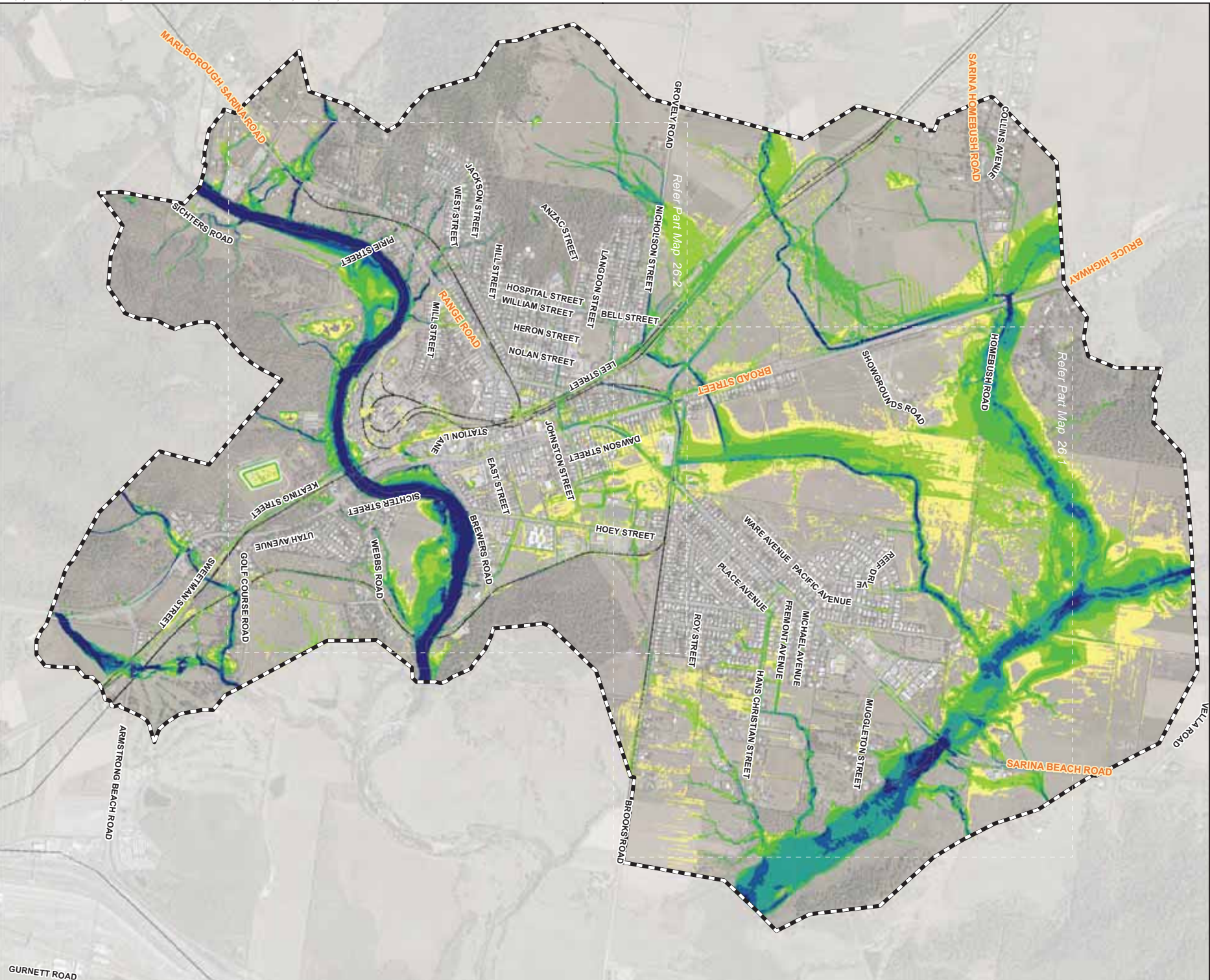
Peak Velocity and Flow Direction  
Basecase  
5% AEP (20 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**25.2**



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**LEGEND**  
 Model Boundary  
 Cadastral  
 QLD Rail Line

**Peak Depth Averaged Velocity (m/s)**  
 < 0.25  
 0.25 - 0.50  
 0.50 - 1.00  
 1.00 - 1.50  
 1.50 - 2.00  
 > 2.00

0 200 400 800  
metres  
GDA 1994 MGA Zone 55  
1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

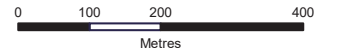
**Peak Velocity and Flow Direction Basecase**  
2% AEP (50 yr ARI) 1440min Storm

Project: Sarina Drainage Study  
 Area: 4 (Catchment)  
 Base Data: 10/2018 (CAD 0.0)  
 Street Data: 10/2017 (MCA)

PROJECT ID: 60567081  
 CREATED BY: bgrah  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**26**

GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
  - ▭ Model Boundary
  - ▭ Cadastre
  - ++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
  - 0.25 - 0.50
  - 0.50 - 1.00
  - 1.00 - 1.50
  - 1.50 - 2.00
  - > 2.00

Results Filters Applied:  
- Length < 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

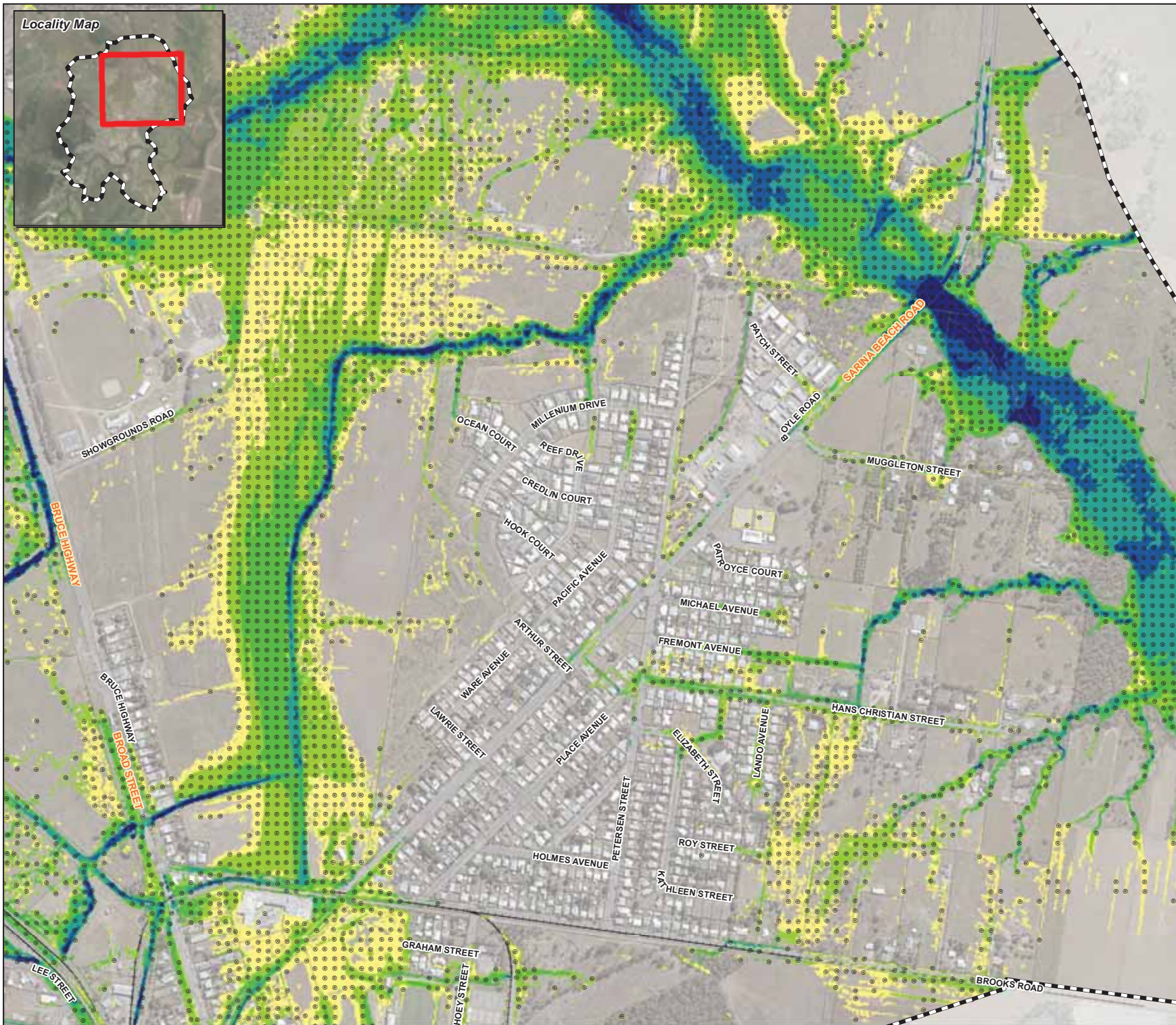
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

Peak Velocity and Flow Direction  
Basemap  
2% AEP (50 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

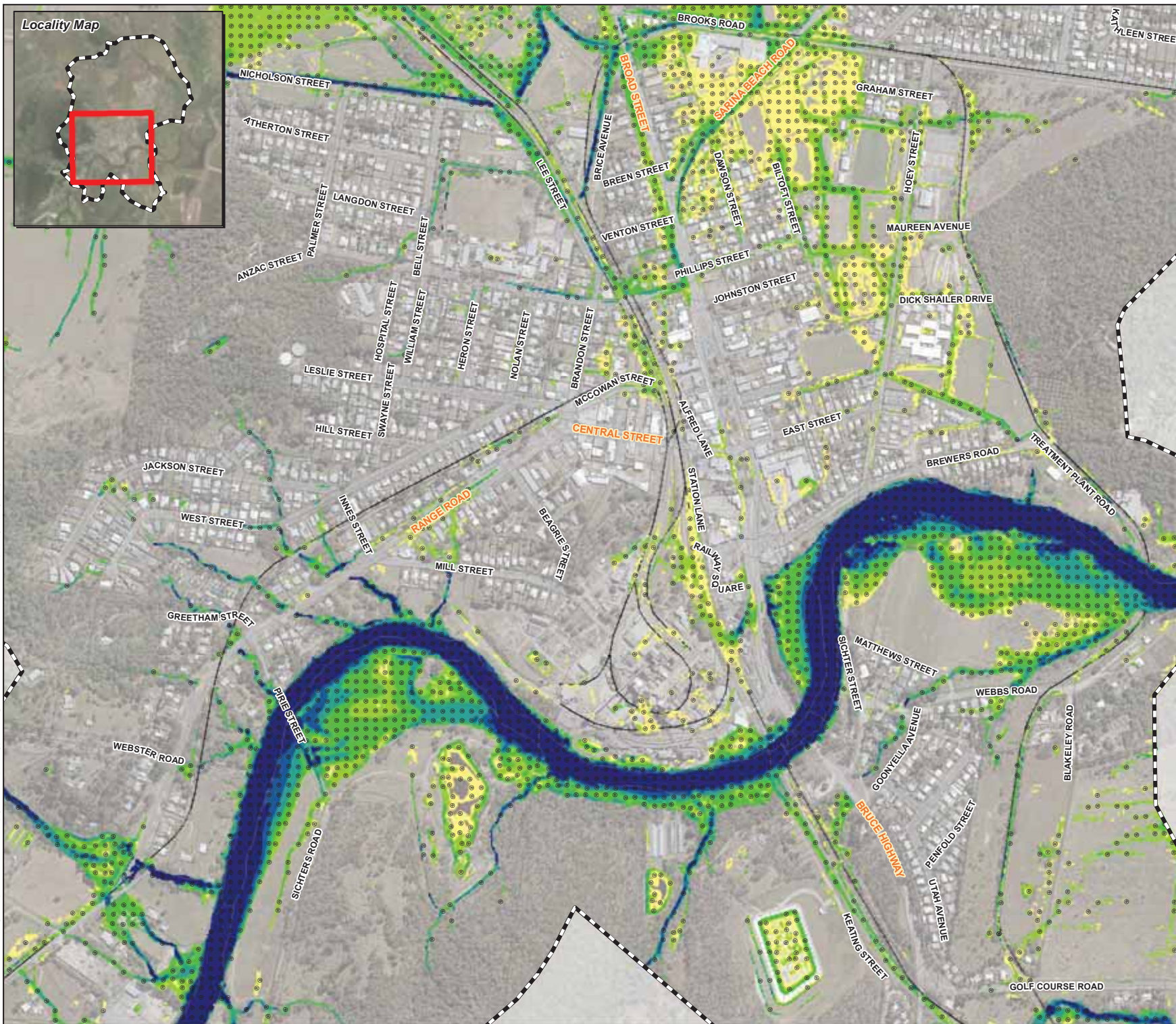
Map  
**26.1**

**Locality Map**

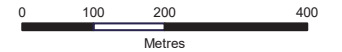


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
- ▭ Model Boundary
- ▭ Cadastre
- +++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- Yellow: < 0.25
- Light Green: 0.25 - 0.50
- Medium Green: 0.50 - 1.00
- Dark Green: 1.00 - 1.50
- Blue-Green: 1.50 - 2.00
- Dark Blue: > 2.00

Results Filters Applied:  
- Length = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (GLD Gov)  
Street Data (c) 2017 (MRC)

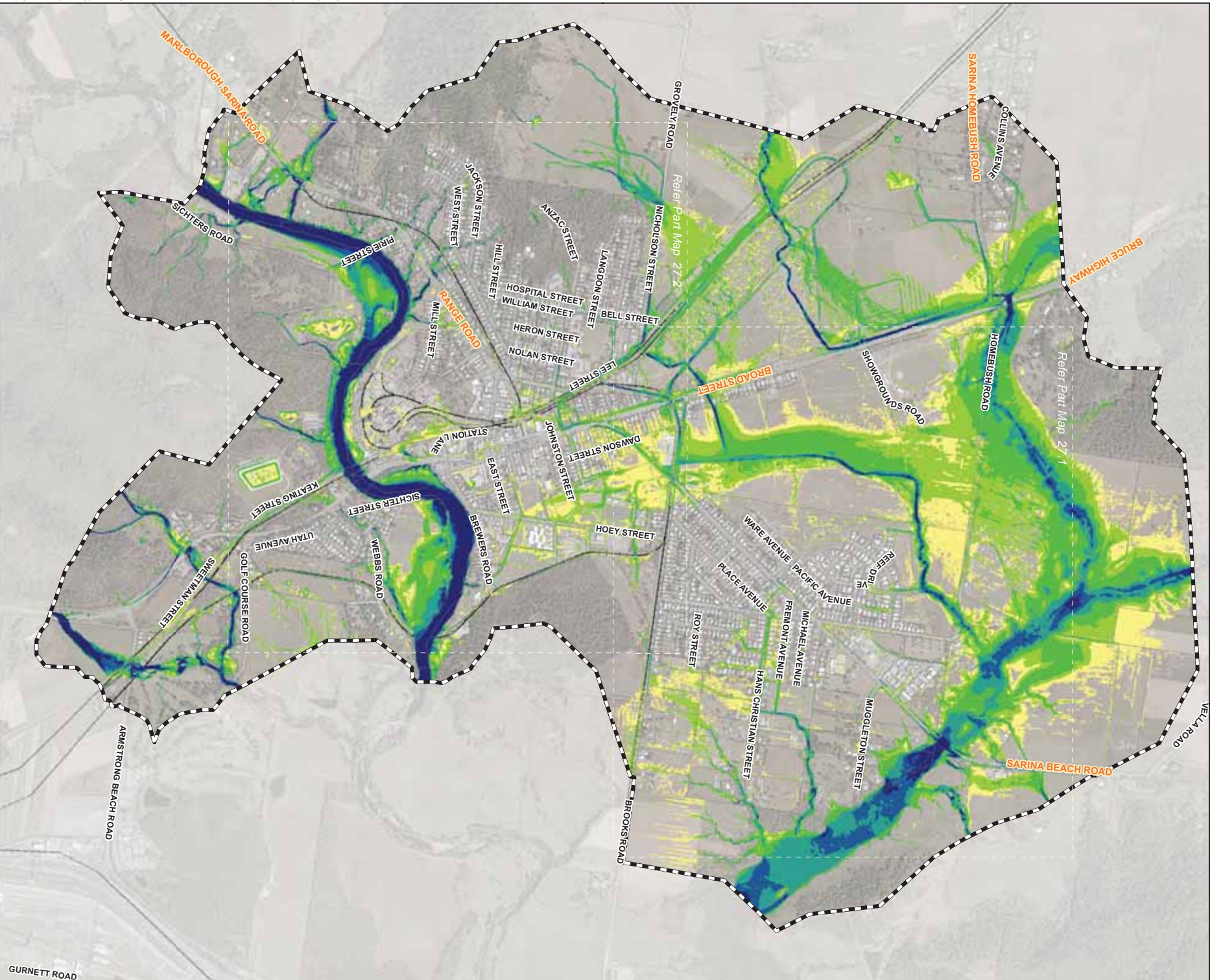
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

Peak Velocity and Flow Direction  
Basecase  
2% AEP (50 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**26.2**

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**LEGEND**  
 Model Boundary  
 Cadastral  
 QLD Rail Line

**Peak Depth Averaged Velocity (m/s)**  


-  < 0.25
-  0.25 - 0.50
-  0.50 - 1.00
-  1.00 - 1.50
-  1.50 - 2.00
-  > 2.00

0 200 400 800  
 metres  
 GDA 1994 MGA Zone 55  
 1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
 Sarina Drainage Study

**Peak Velocity and Flow Direction Basecase**  
 1% AEP (100 yr ARI) 1440min Storm

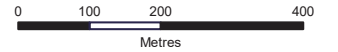
Project: Sarina Drainage Study  
 Area: 4 (Catchment)  
 Base Data: 10/2016 (CAD 0.0)  
 Street Data: 10/2017 (MCA)

PROJECT ID: 60567081  
 CREATED BY: bregm  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**27**

A3 size

GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
- ▭ Model Boundary
- ▭ Cadastre
- ++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

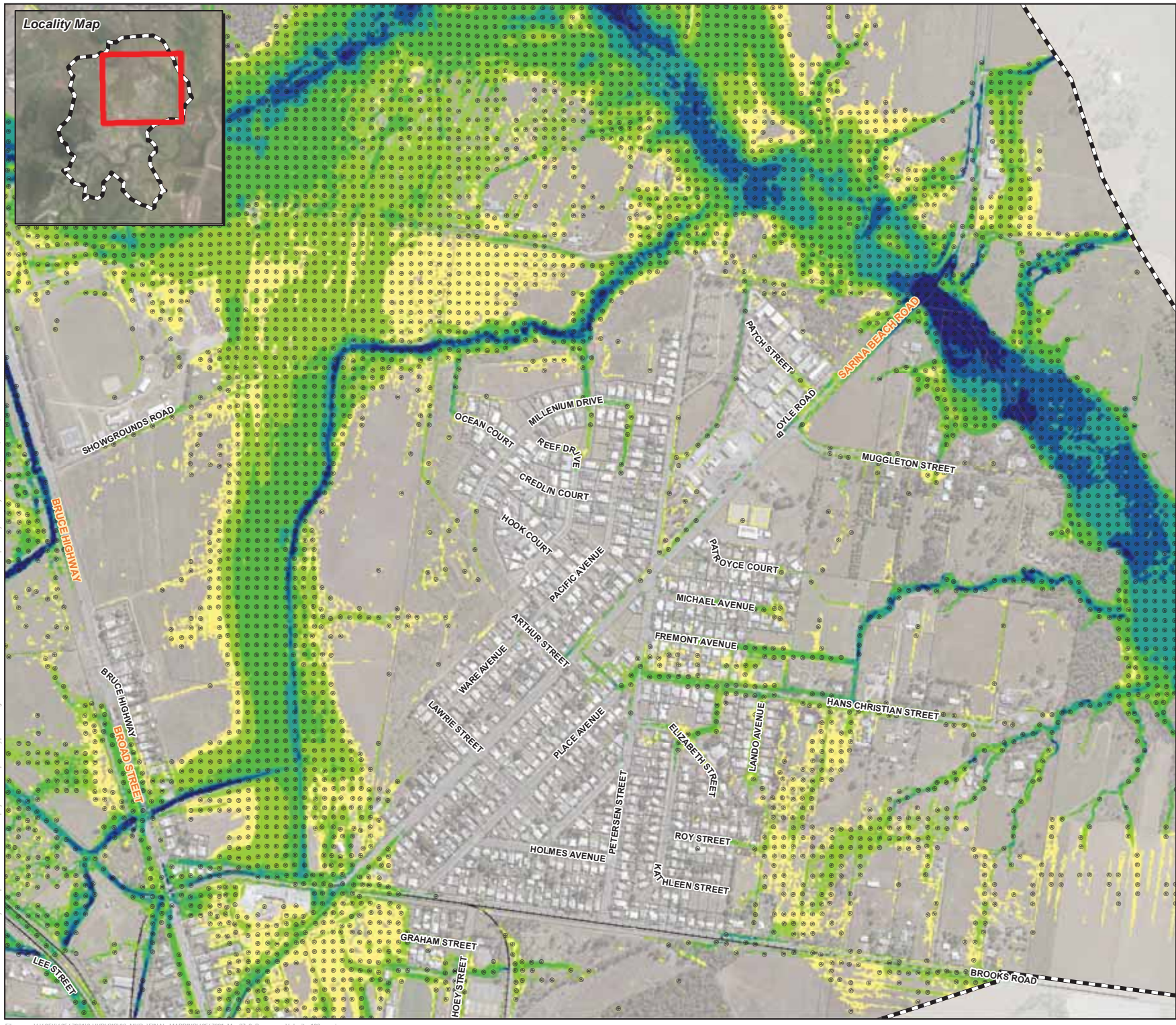
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

Peak Velocity and Flow Direction  
Basecase  
1% AEP (100 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

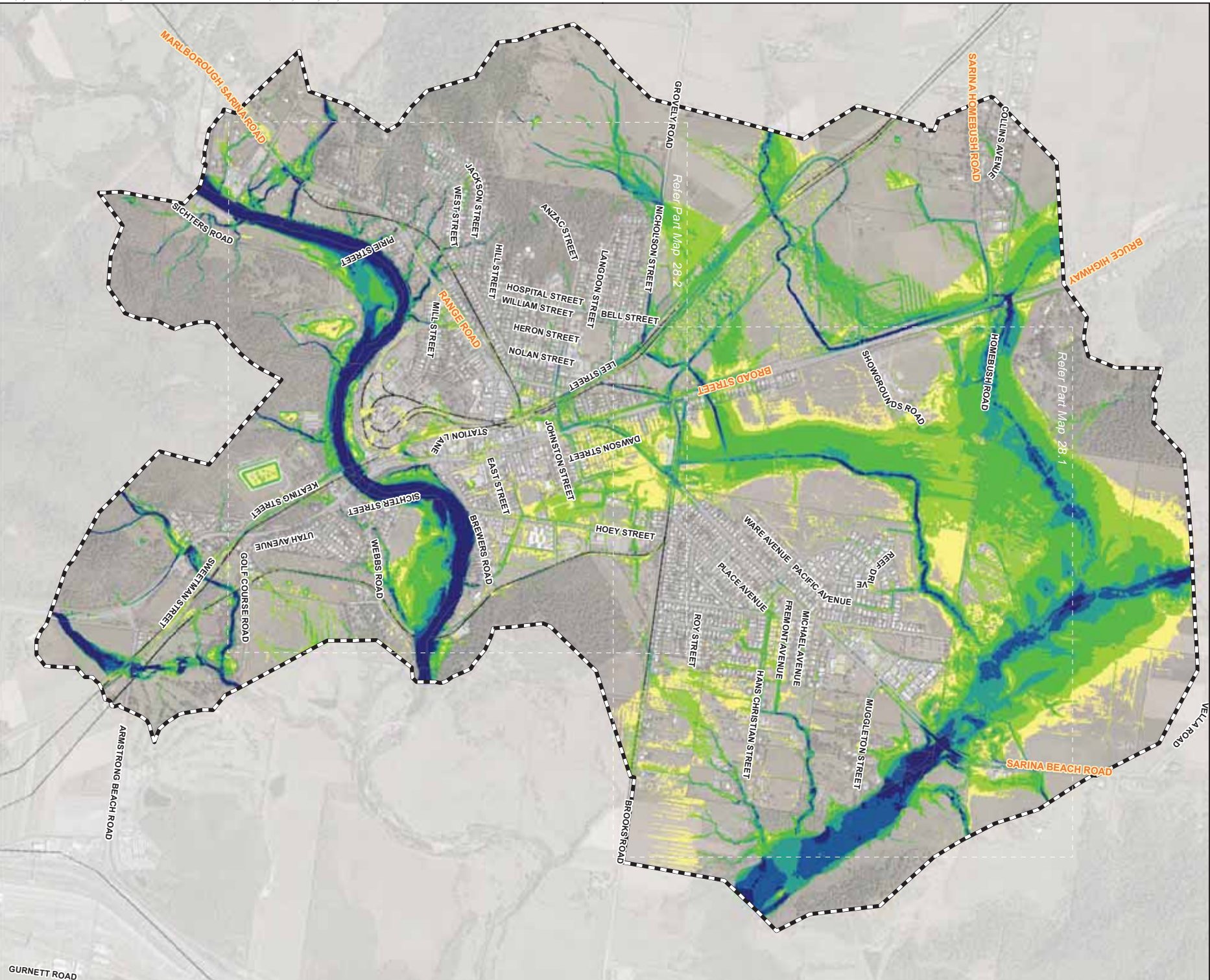
Map  
**27.1**

**Locality Map**



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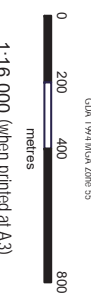


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**LEGEND**  
 Model Boundary  
 Cadastral  
 QLD Rail Line

**Peak Depth Averaged Velocity (m/s)**

	0.25 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	> 2.00



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Velocity and Flow Direction**  
Basecase - 0.5% AEP  
(200 yr AR1) 1440mm Storm

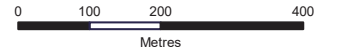
Project: Sarina Drainage Study  
 - Area: 4 (C&D) (km²)  
 - Base Data: 10/2008 (CAD 0.0)  
 - Street Data: 10/2017 (MCA)

PROJECT ID: 60567081  
 CREATED BY: bgrjh  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**28**

A3 size

GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

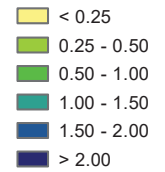
⊗ Directional Velocity Vector

▬ Model Boundary

□ Cadastre

+++ QLD Rail Line

**Peak Depth Averaged Velocity (m/s)**



Results Filters Applied:  
- Length < 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (GLD Gov)  
Street Data (c) 2017 (MRC)

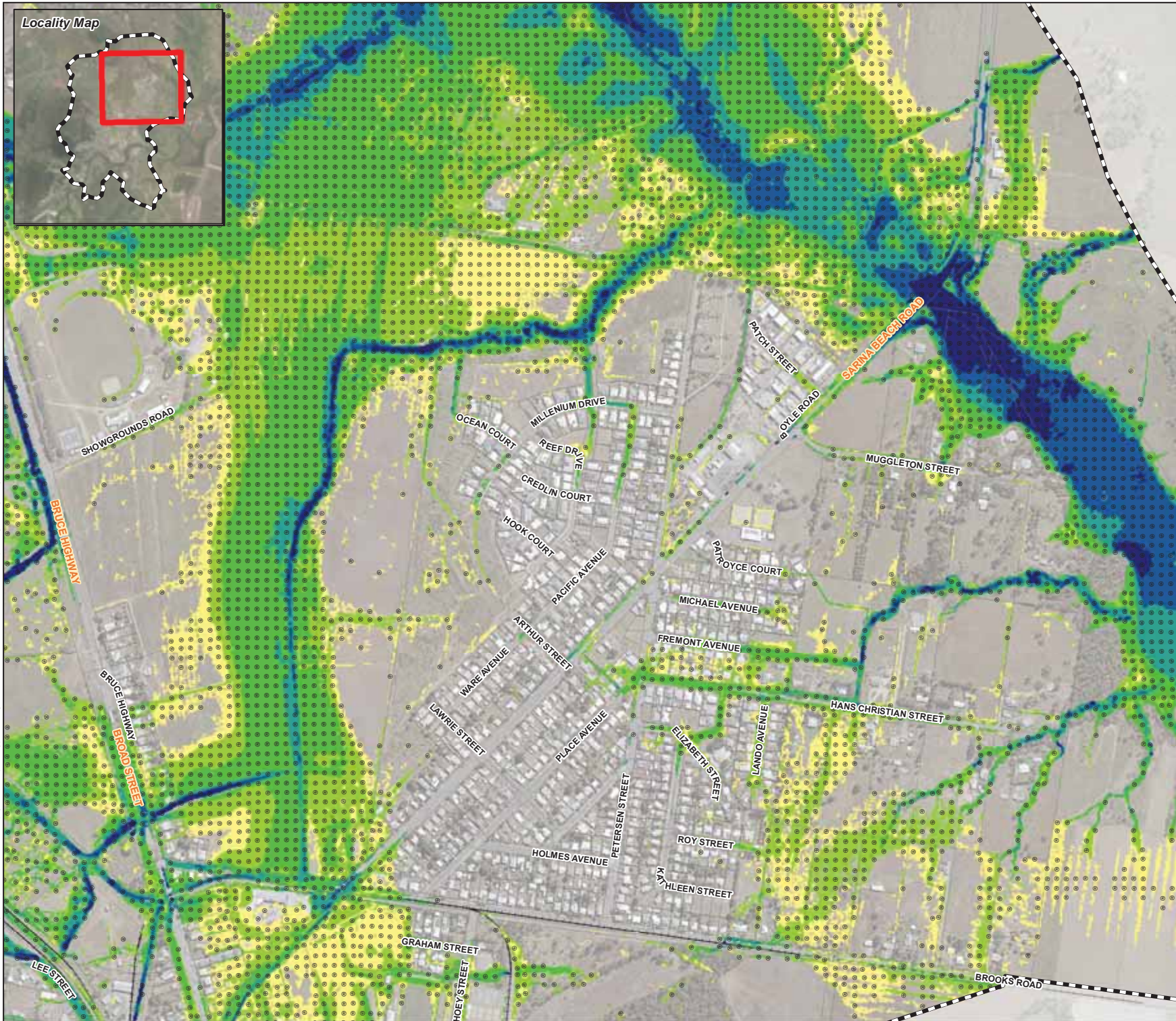
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Velocity and Flow Direction**  
Basecase - 0.5% AEP  
(200 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighgh  
LAST MODIFIED: 13/08/18  
VERSION: v01

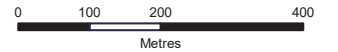
Map  
**28.1**

**Locality Map**



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GDA 1994 MGA Zone 55



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**LEGEND**

- ⊗ Directional Velocity Vector
- ▬ Model Boundary
- ▭ Cadastre
- ⋈ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

Results Filters Applied:  
 - Length > 0.1m  
 - Area < 4 Cells (36m²)  
 Data sources:  
 Base Data (c) 2018 (GLD Gov)  
 Street Data (c) 2017 (MRC)

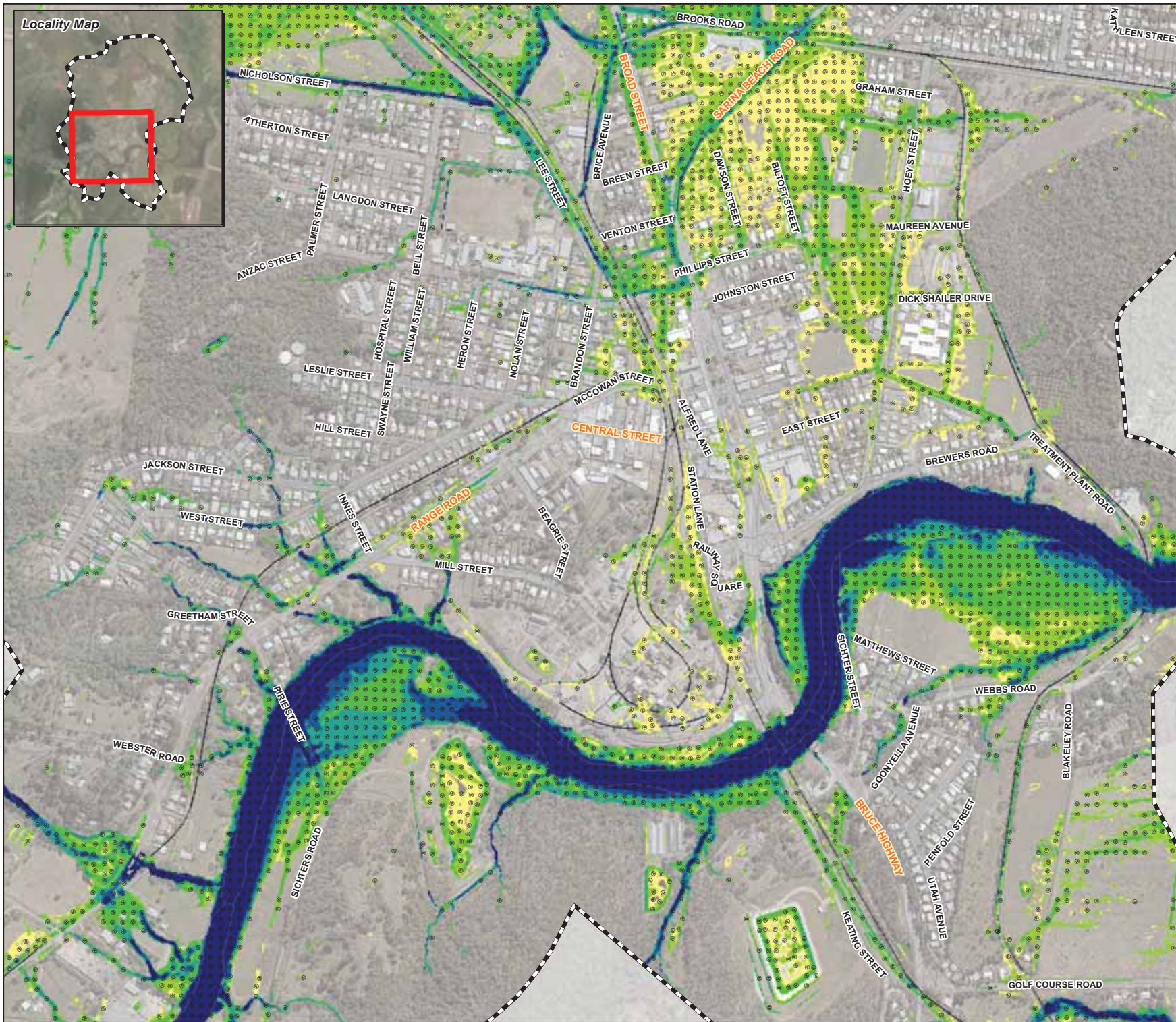
**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Velocity and Flow Direction  
 Basecase - 0.5% AEP  
 (200 yr ARI) 1440min Storm

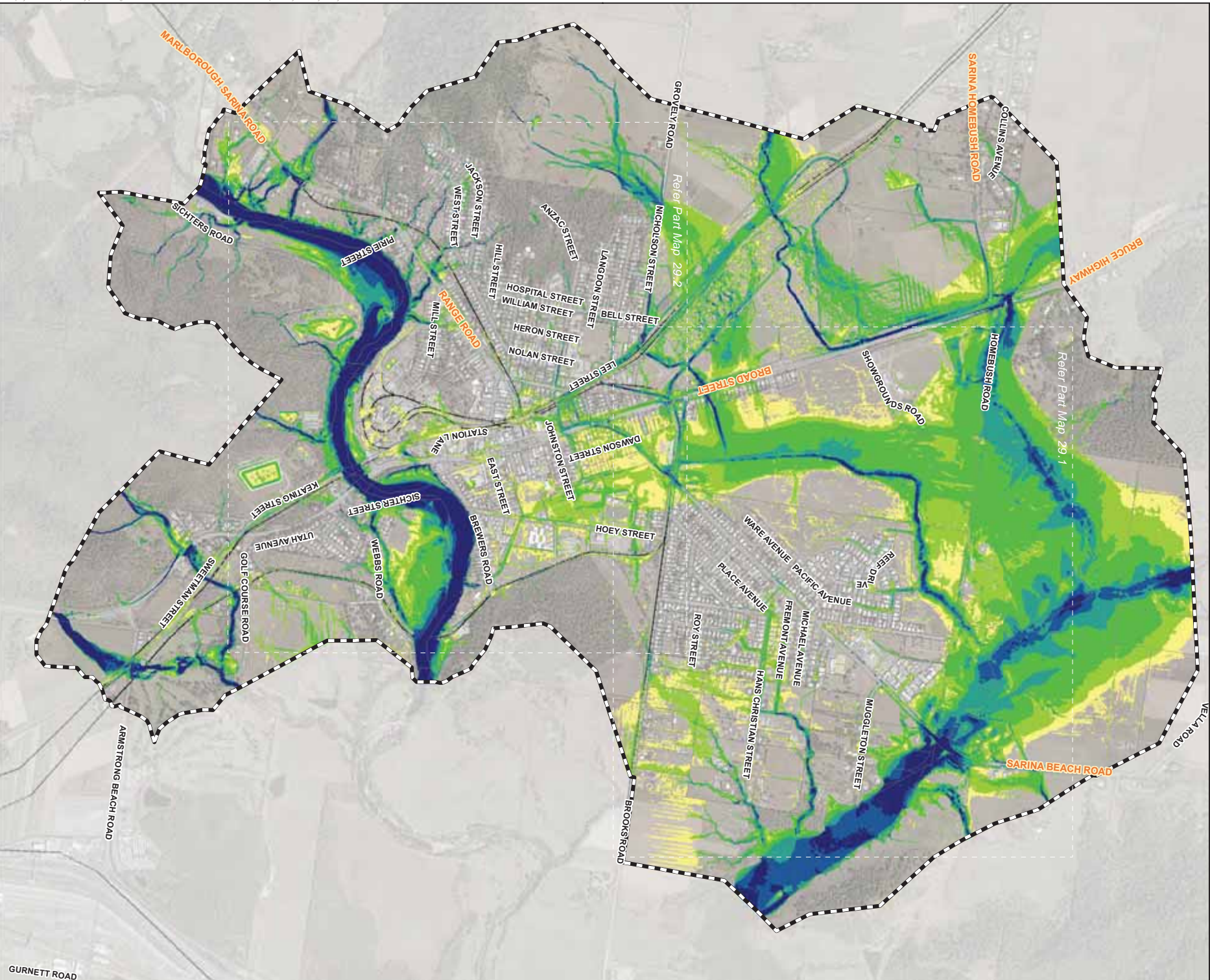
PROJECT ID: 60567081  
 CREATED BY: brighgh  
 LAST MODIFIED: 13/08/18  
 VERSION: v01

Map  
**28.2**

**Locality Map**

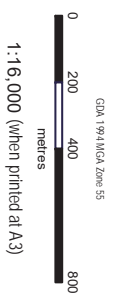


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- LEGEND**
- Model Boundary
  - Cadastre
  - QLD Rail Line
  - Peak Depth Averaged Velocity (m/s)
    - < 0.25
    - 0.25 - 0.50
    - 0.50 - 1.00
    - 1.00 - 1.50
    - 1.50 - 2.00
    - > 2.00



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Velocity and Flow Direction**  
Basecase - 0.2% AEP  
(500 yr ARI) 1440min Storm

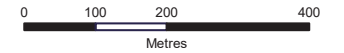
PROJECT ID	60567081	Map
CREATED BY	begjn	29
LAST MODIFIED	13/08/18	
VERSION	01	

Project: Sarina Drainage Study  
Area: 4 (CR) (Sar)  
Base Data: 10/2018 (CR) (Sar)  
Sheet Data: 10/2017 (MCA)

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
- ▭ Model Boundary
- ▭ Cadastre
- +++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

Results Filters Applied:  
- Length < 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

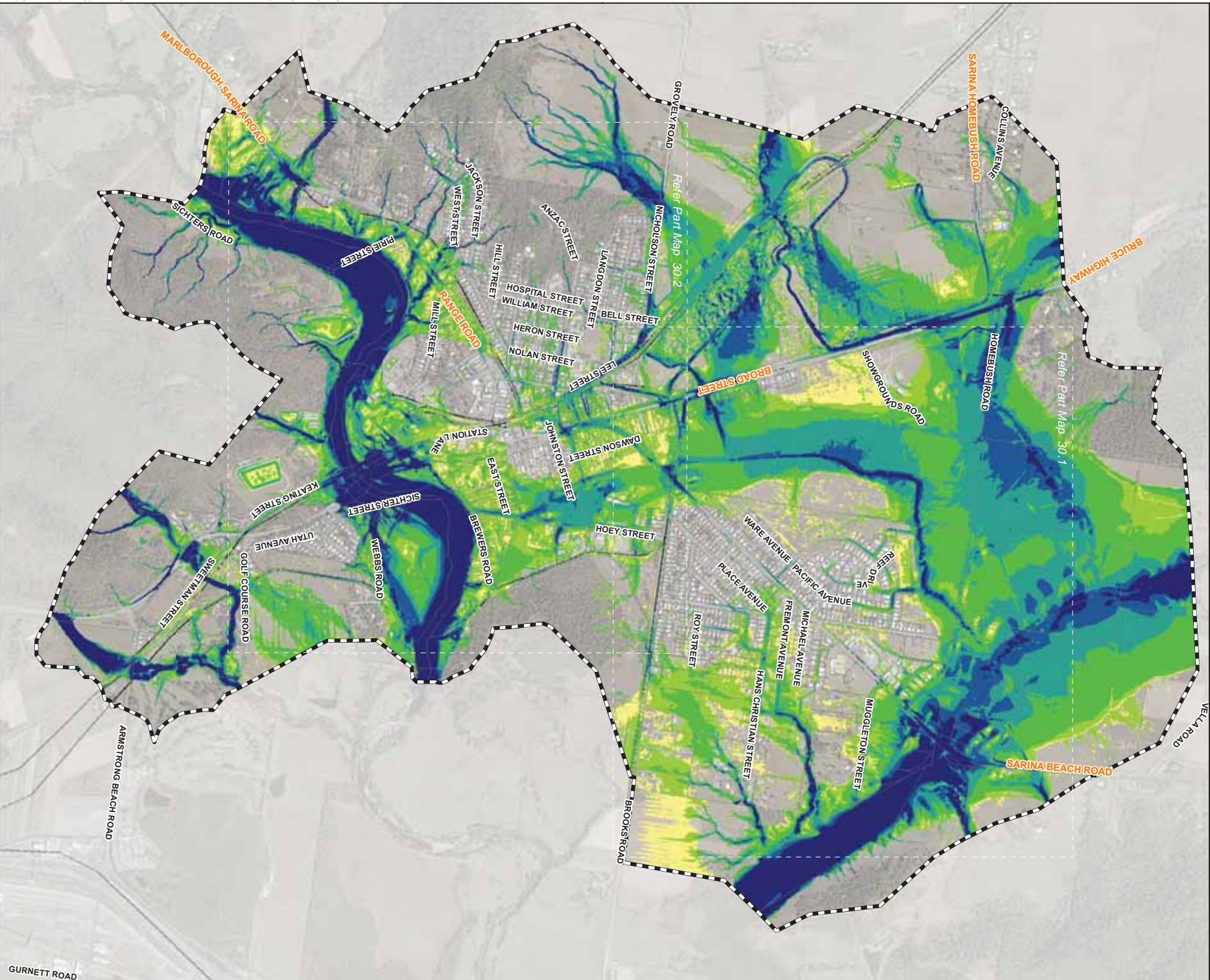
Peak Velocity and Flow Direction  
Basemap - 0.2% AEP  
(500 yr ARI) 1440min Storm

PROJECT ID 60567081  
CREATED BY brighgh  
LAST MODIFIED 13/08/18  
VERSION: v01

Map  
**29.1**

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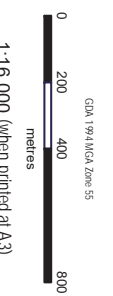


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**LEGEND**  
 Model Boundary  
 Cadastral  
 QLD Rail Line

**Peak Depth Averaged Velocity (m/s)**

	0.25 - 0.50
	0.50 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	> 2.00



1:16,000 (when printed at A3)

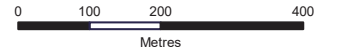
**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Velocity and Flow Direction**  
Basecase  
PMF Event 360min Storm

PROJECT ID	60567081	Map	30
CREATED BY	begjn		
LAST MODIFIED	13/08/18		
VERSION	01		

Project: Sarina Drainage Study  
 Area: 4 (Catchment)  
 Base Data: 10/2018 (CAD 0.01)  
 Street Data: 10/2017 (MCA)

GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- ⊗ Directional Velocity Vector
- ▭ Model Boundary
- ▭ Cadastre
- ++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

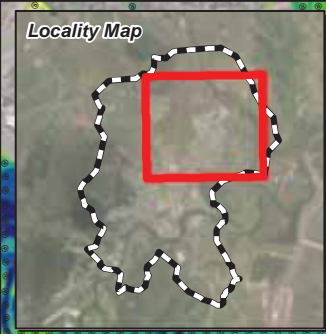
Results Filters Applied:  
- Length < 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

Peak Velocity and Flow Direction  
Basecase  
PMF Event 360min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**30.1**

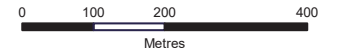


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Locality Map



GDA 1994 MGA Zone 55



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**LEGEND**

- ⊗ Directional Velocity Vector
- ▬ Model Boundary
- ▭ Cadastre
- ++ QLD Rail Line
- Peak Depth Averaged Velocity (m/s)**
- < 0.25
- 0.25 - 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00

Results Filters Applied:  
- Length < 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (GLD Gov)  
Street Data (c) 2017 (MRC)

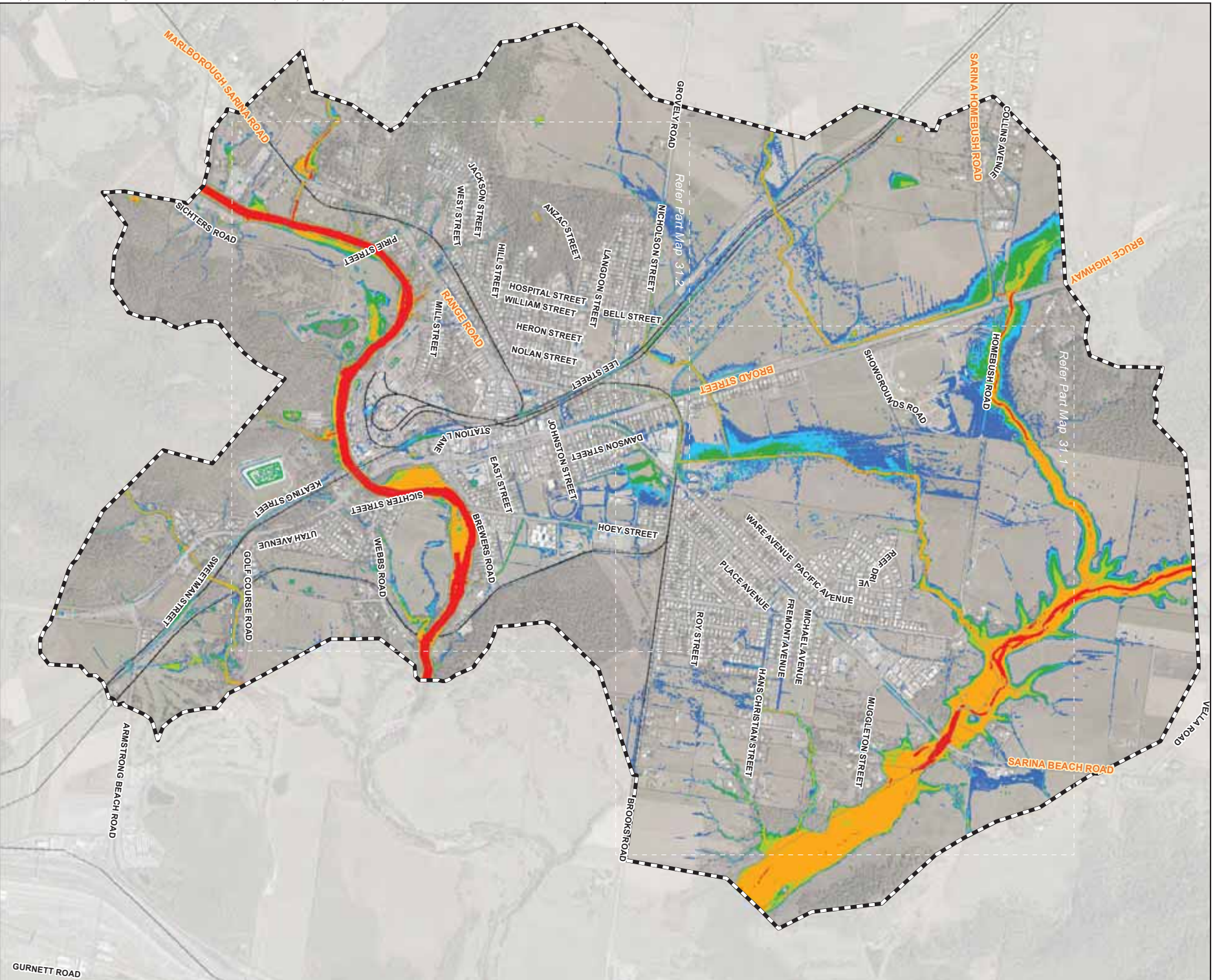
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

Peak Velocity and Flow Direction  
Basecase  
PMF Event 360min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**30.2**

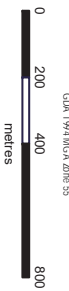
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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Category 3
- Category 4
- Category 5
- Category 6
- Peak Flood Hazard
- Category 1
- Category 2



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Hazard Mapping Basecase**  
18% AEP (5 yr AR) 1440min Storm

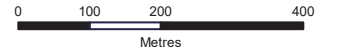
PROJECT ID: 60567081  
CREATED BY: boggh  
LAST MODIFIED: 13/08/18  
VERSION: 01

Map  
**31**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Hazard**

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5
- Category 6

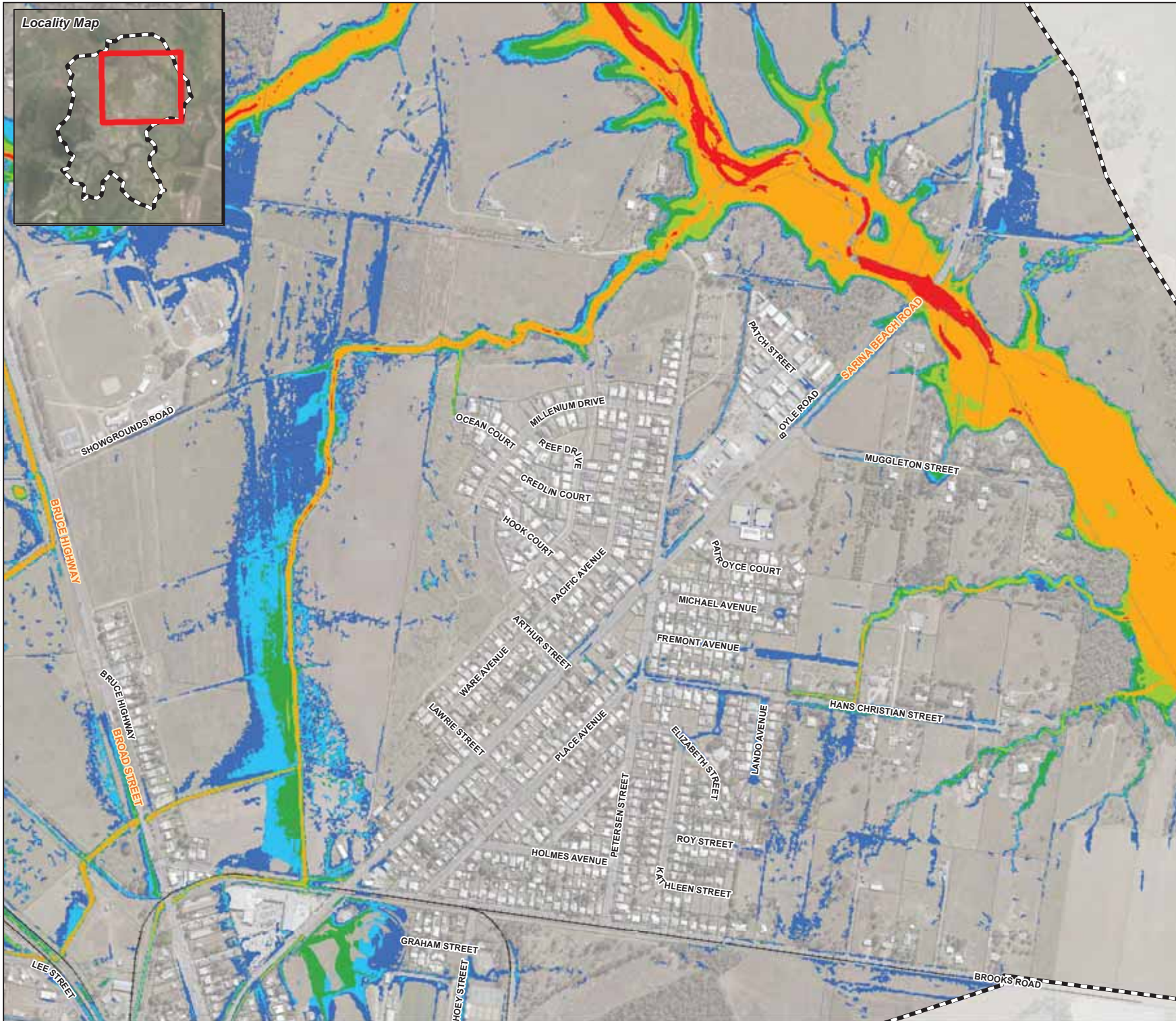
Results Filters Applied:  
- Depth > 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Hazard Mapping  
Basecase  
18% AEP (5 yr ARI) 1440min Storm

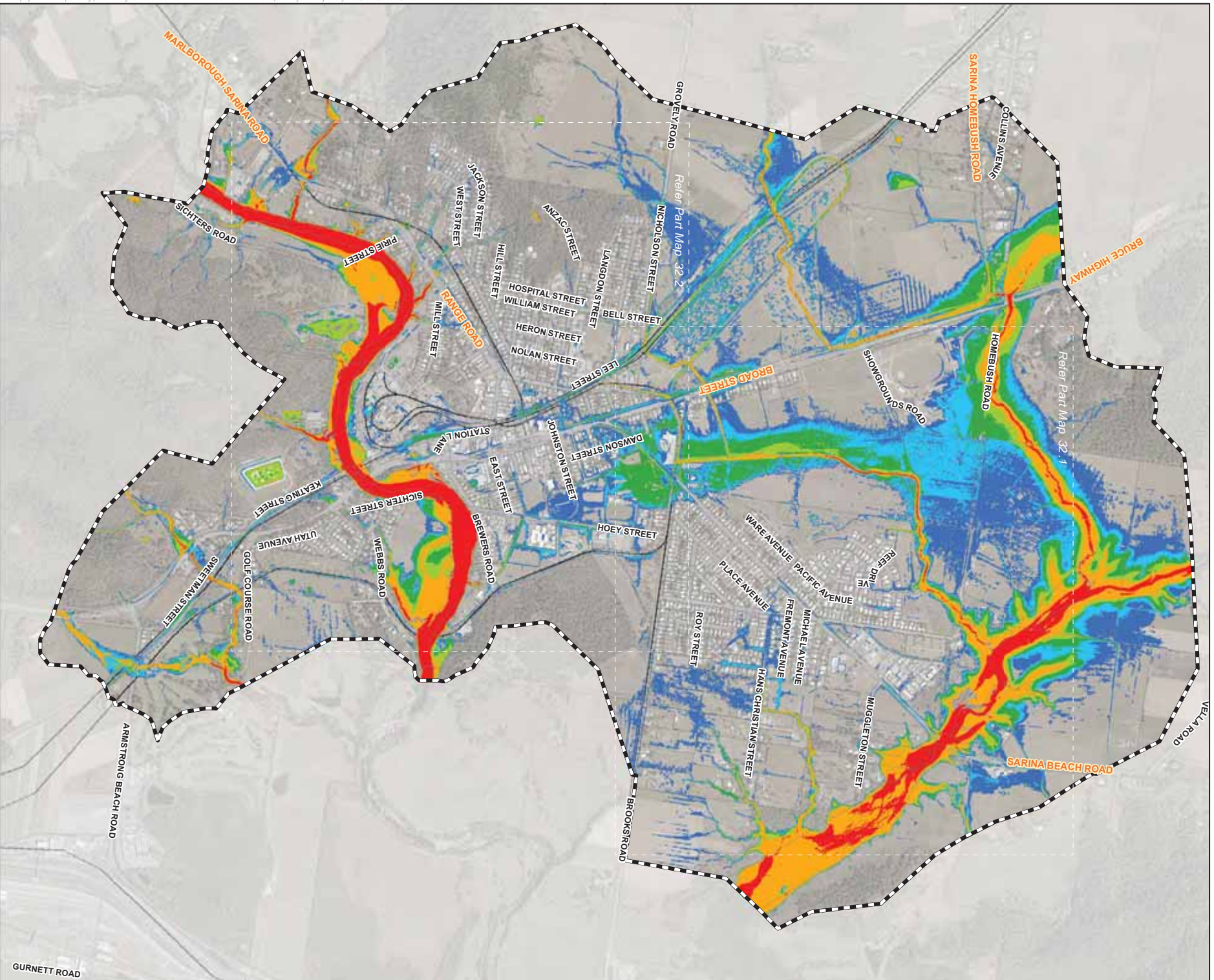
PROJECT ID: 60567081  
CREATED BY: brighh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**31.1**





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**LEGEND**

-  Model Boundary
-  Cadastre
-  QLD Rail Line
-  Category 3
-  Category 4
-  Category 5
-  Category 6
-  Peak Flood Hazard Category 1
-  Peak Flood Hazard Category 2

0 200 400 800  
metres  
GDA 1994 MGA Zone 55

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Hazard Mapping**  
Basecase  
1% AEP (100 yr ARI) 1440min Storm

Project: Sarina Drainage Study  
- Area: 4 (Cat 3-6)  
- Date: 8/2017 (CAD 09/17)  
- Sheet: Data 8/2017 (MCA)

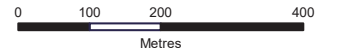
PROJECT ID: 60557081  
CREATED BY: boggh  
LAST MODIFIED: 13/08/18  
VERSION: 01

Map  
**32**  
A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Hazard**

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5
- Category 6

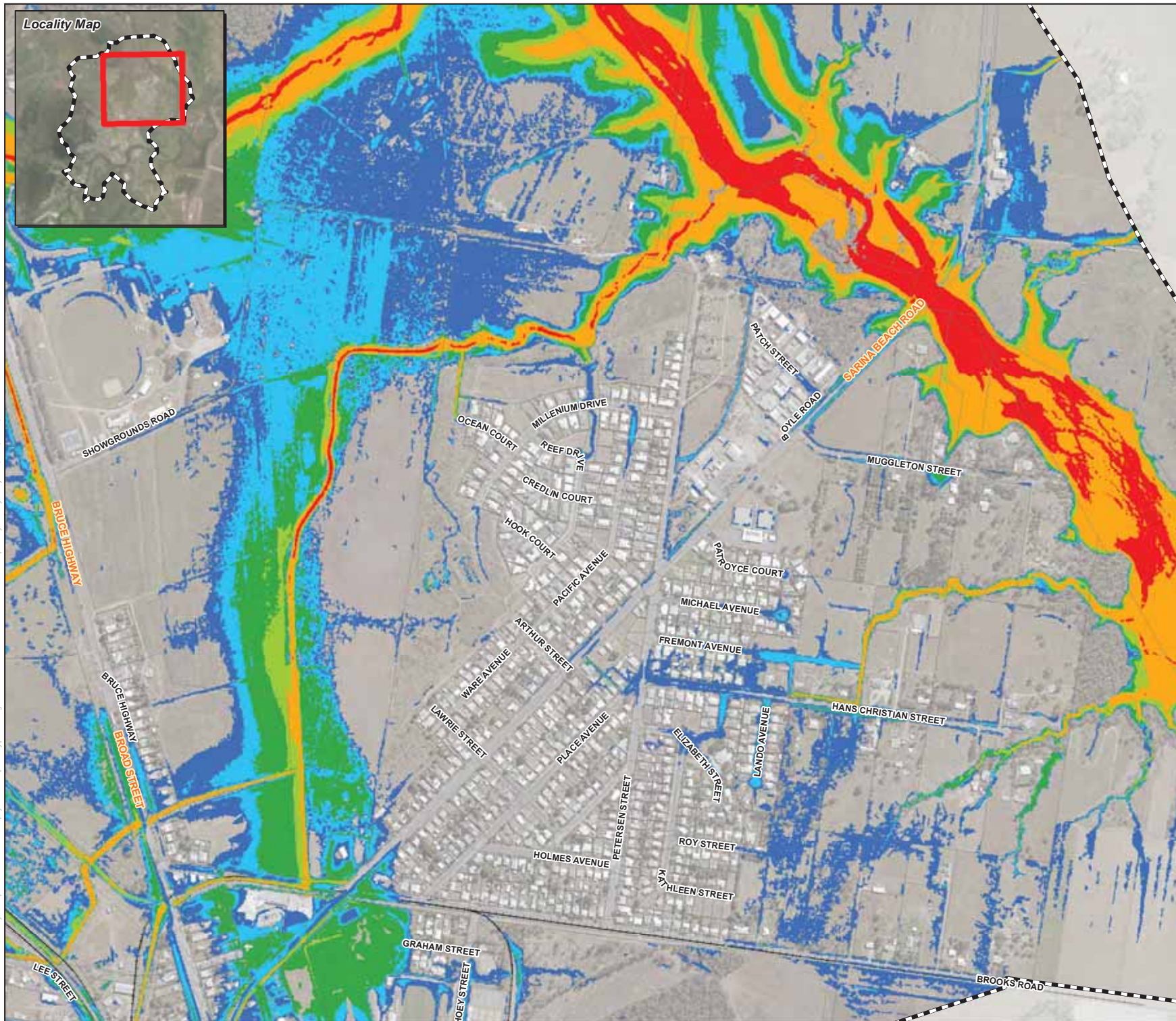
Results Filters Applied:  
- Depth = 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Hazard Mapping  
Basecase  
1% AEP (100 yr ARI) 1440min Storm

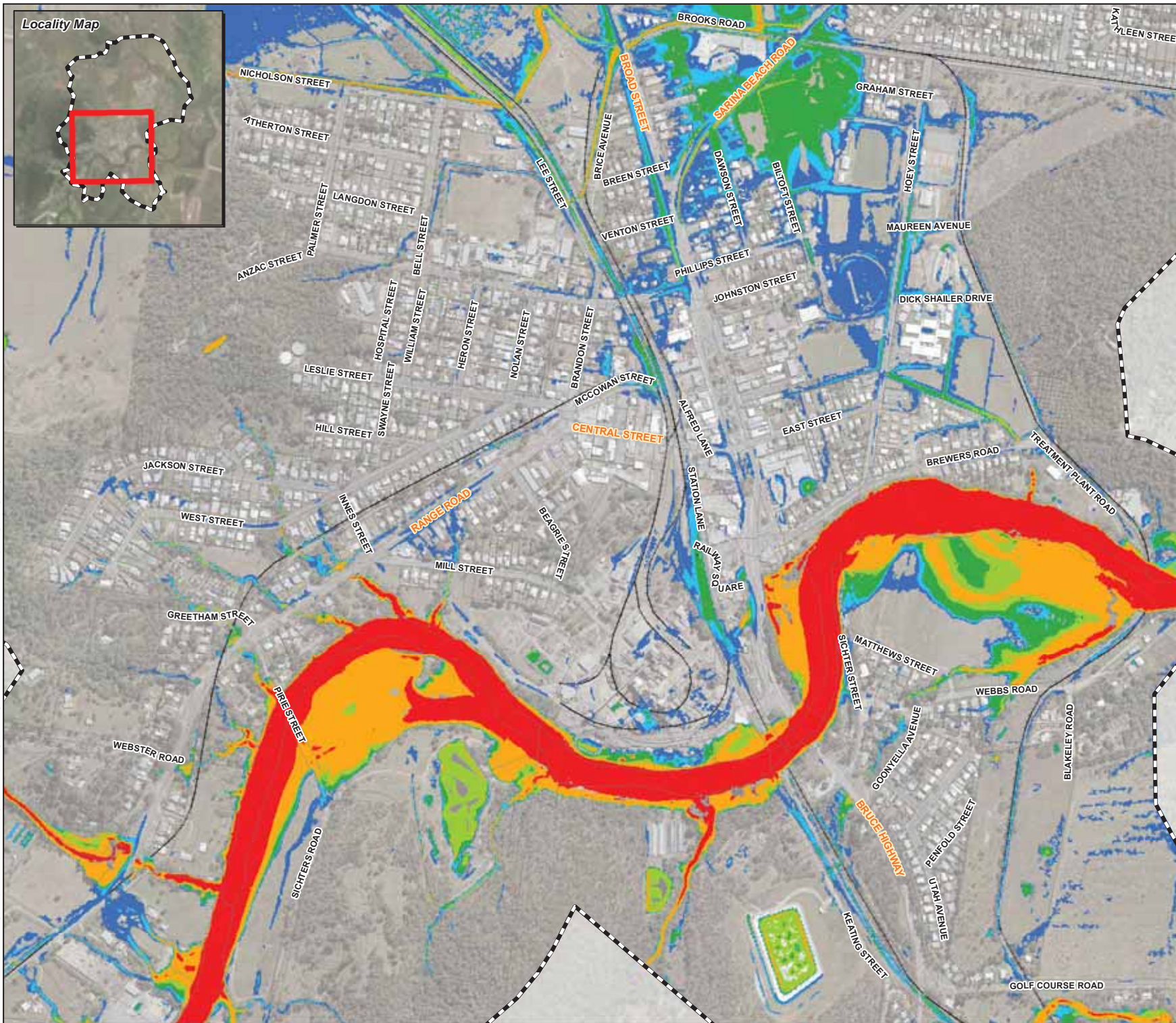
PROJECT ID: 60567081  
CREATED BY: brighgh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**32.1**

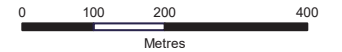


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Hazard**

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5
- Category 6

Results Filters Applied:  
- Depth > 0.1m  
- Area < 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

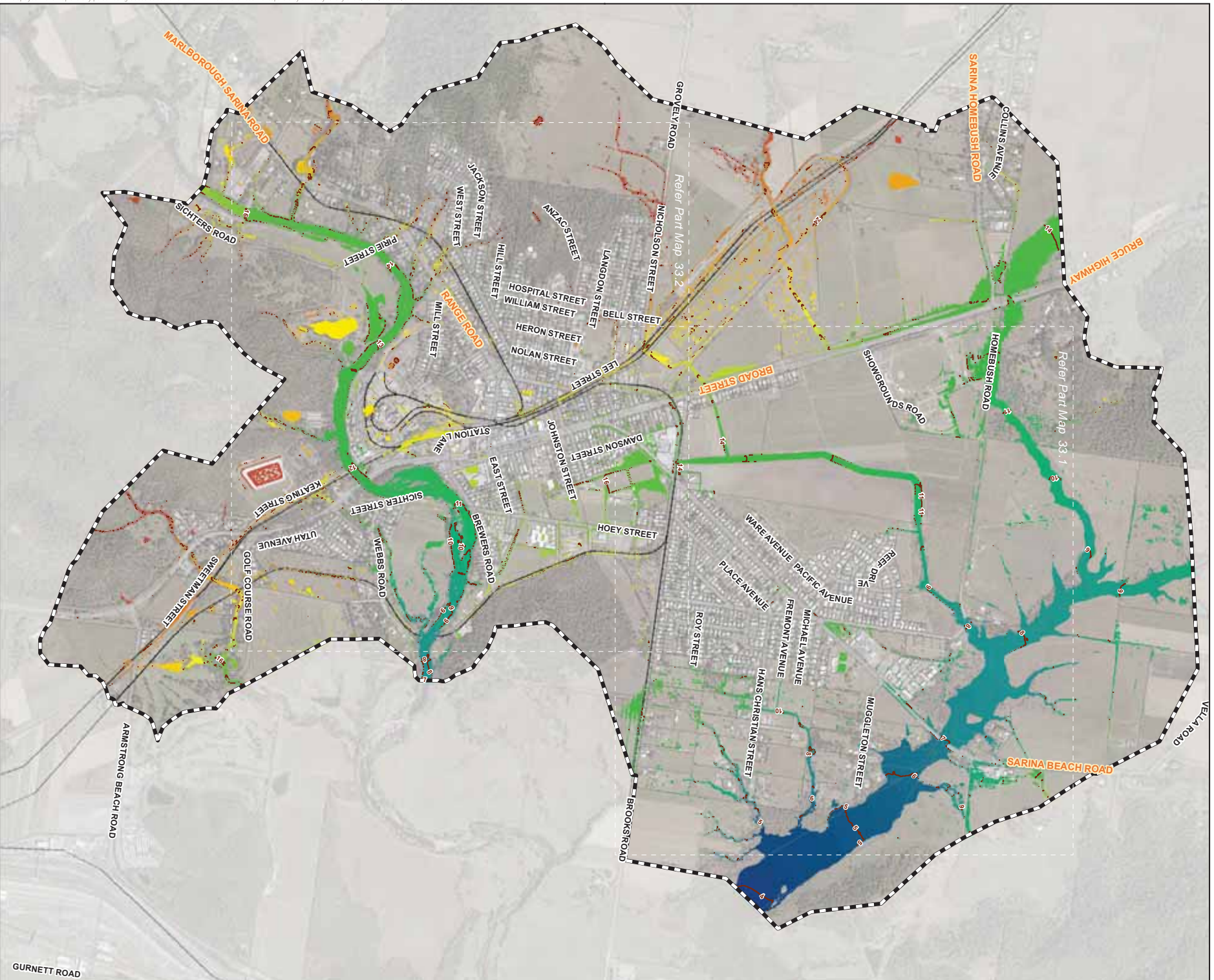
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Hazard Mapping**  
**Basecase**  
**1% AEP (100 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighgh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**32.2**

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**LEGEND**  
 Model Boundary  
 Major Contour (1:0m AHD)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (m AHD)**  
 High : 30  
 Low : 3

0 200 400 800  
metres  
GDA 1994 MGA Zone 55  
1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
63% AEP (1 EY) 1440min Storm

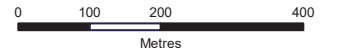
PROJECT ID: 60567081  
 CREATED BY: bmgp  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**33**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHd)**
- High : 30
- Low : 3

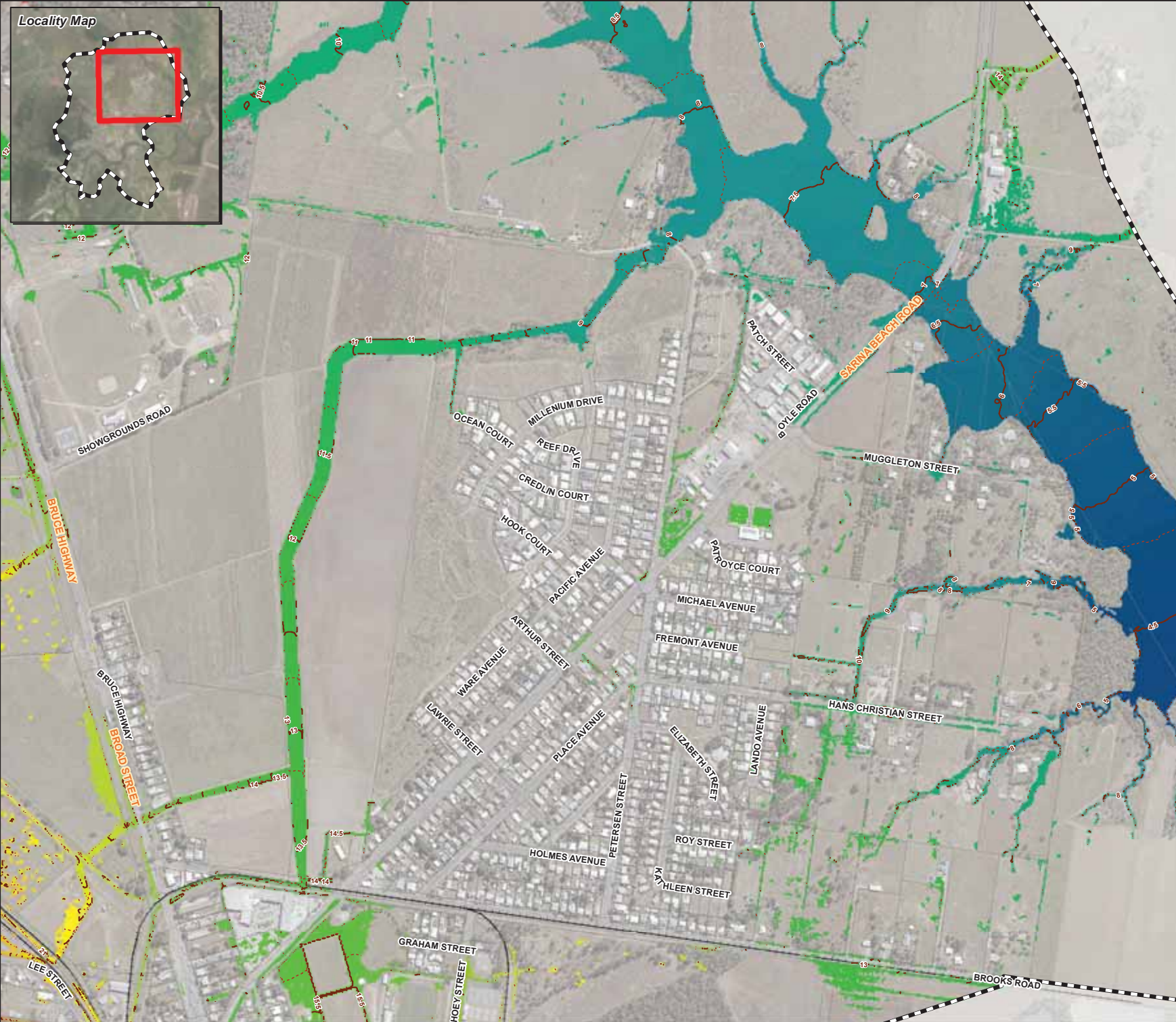
Results Filters Applied:  
- Depth > 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**63% AEP (1 EY) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**33.1**



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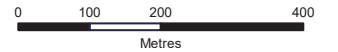




Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHD)**
- High : 30
- Low : 3

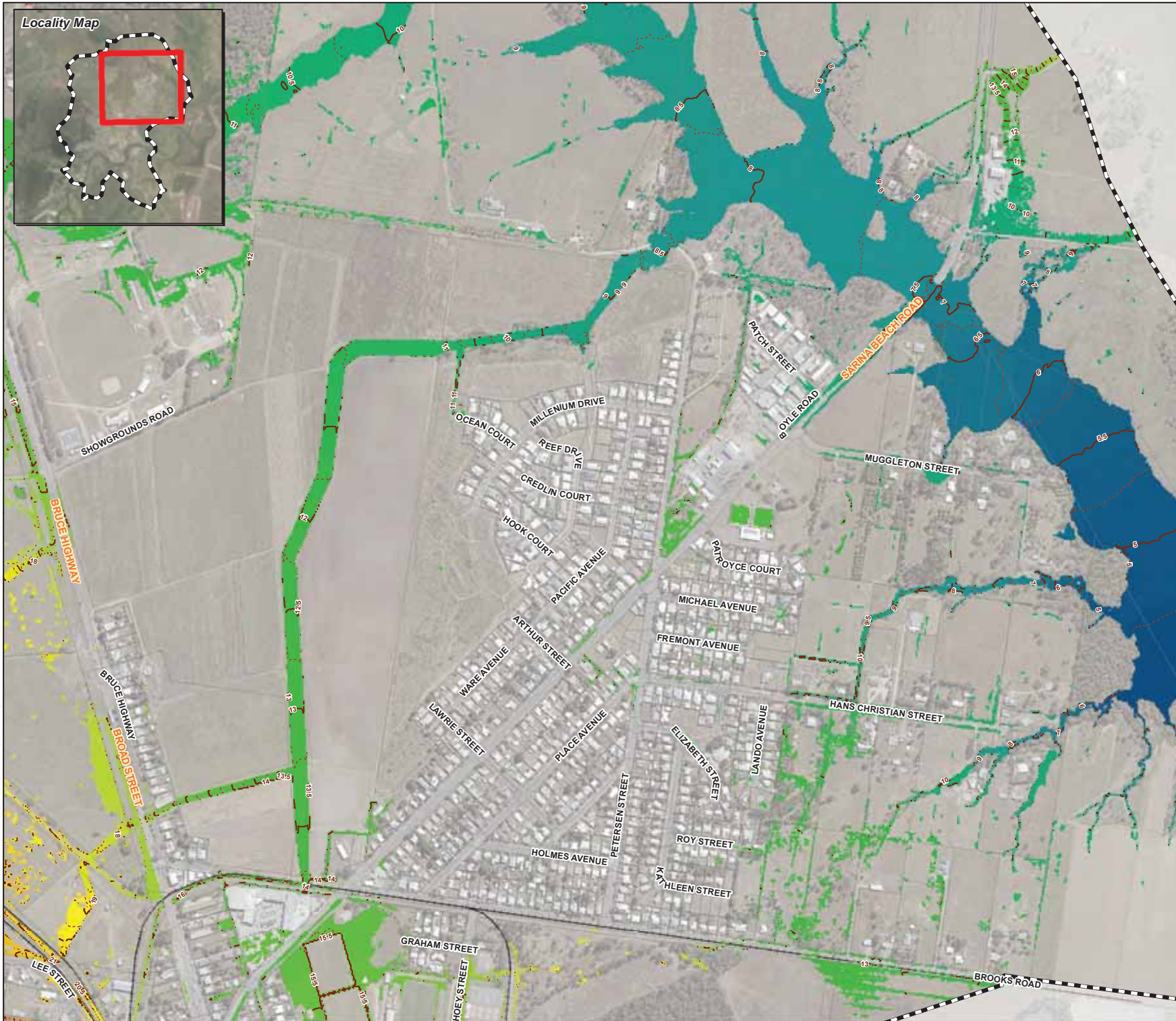
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**39% AEP (2 yr ARI) 1440min Storm**

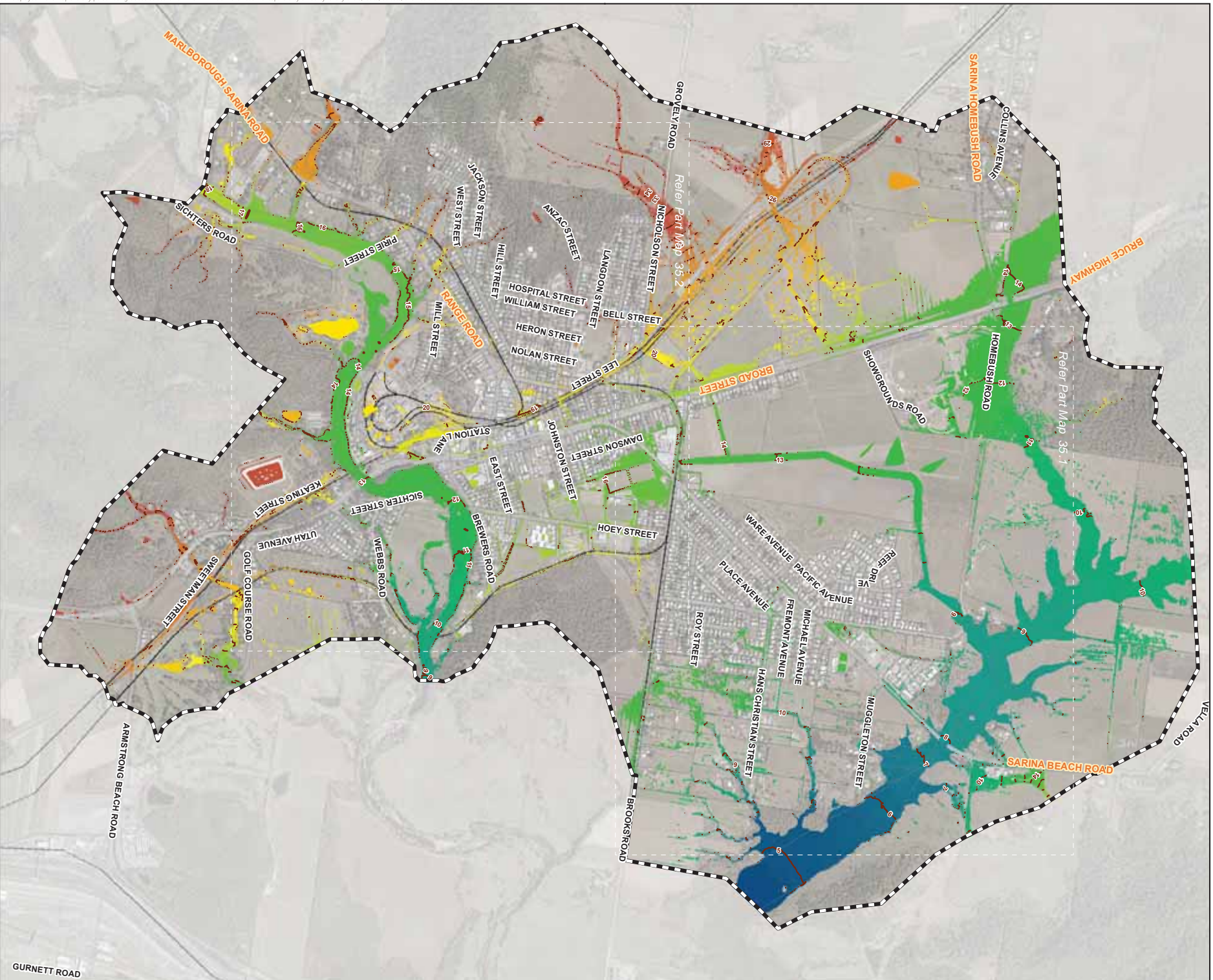
PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**34.1**



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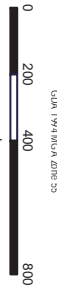




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**LEGEND**  
 Model Boundary  
 Major Contour (1:0m AHD)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (m AHD)**  
 High : 30  
 Low : 3



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
 Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
 18% AEP (5 yr AR) 1440min Storm

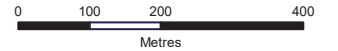
PROJECT ID	60557081
CREATED BY	brgh
LAST MODIFIED	13/08/18
VERSION	01

Map  
**35**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
  - Minor Contour (0.25mAHD)
  - Model Boundary
  - Cadastre
  - QLD Rail Line
- Peak Water Surface Elevation (mAH)**
- 
- High : 30  
Low : 3

Results Filters Applied:  
- Depth = 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

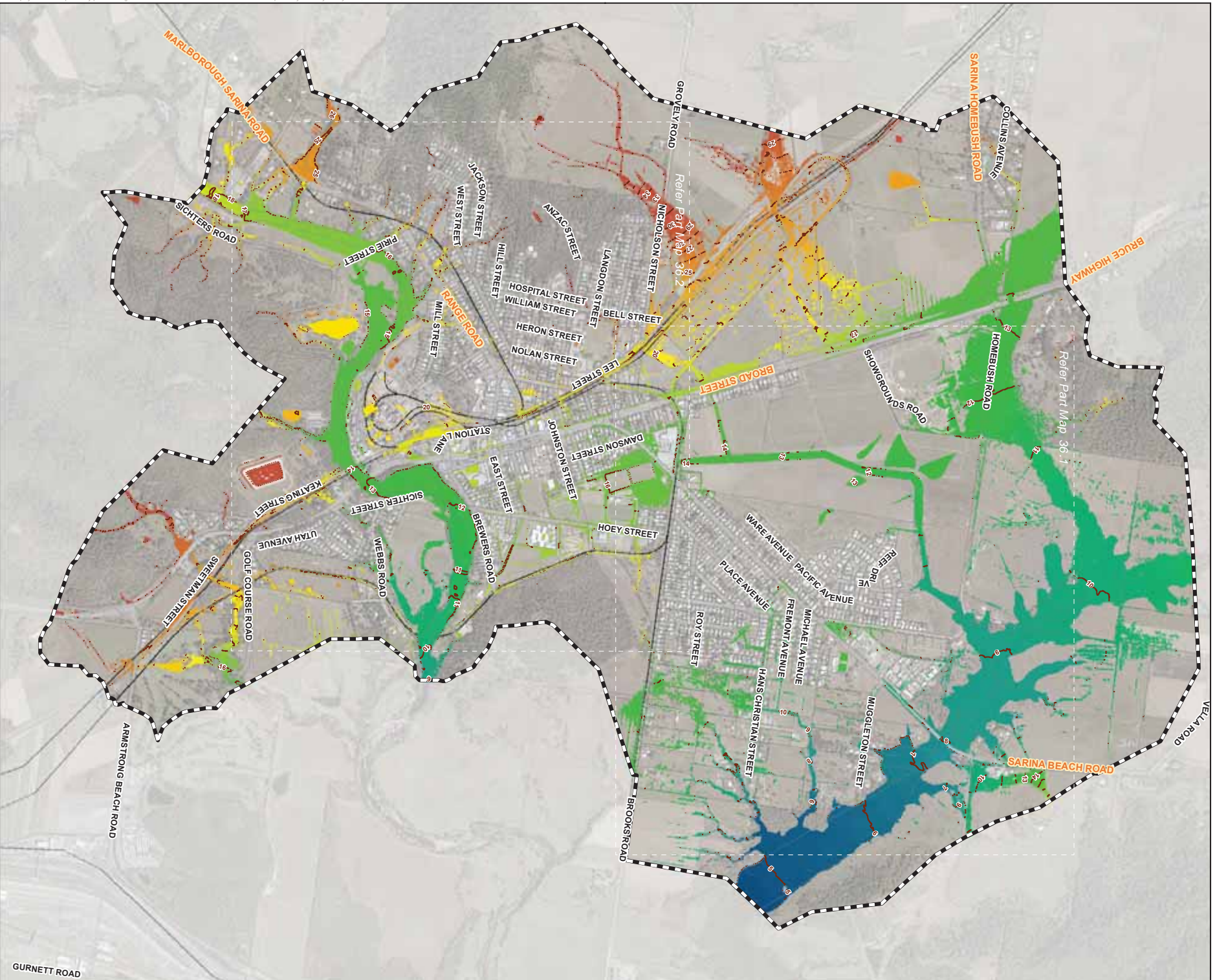
**Peak Water Surface Elevation (PWSE) - Developed Case**  
**18% AEP (5 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighg  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**35.1**

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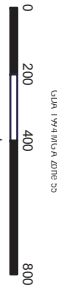




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www.aecom.com

**LEGEND**  
 Model Boundary  
 Major Contour (1:0m AHD)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (m AHD)**  
 High : 30  
 Low : 3



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
10% AEP (10 yr ARI) 1440min Storm

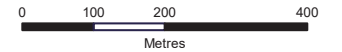
PROJECT ID	66567081
CREATED BY	brgh
LAST MODIFIED	13/08/18
VERSION	01

Map  
**36**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAH D)
- Minor Contour (0.25mAH D)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAH D)**
- High : 30
- Low : 3

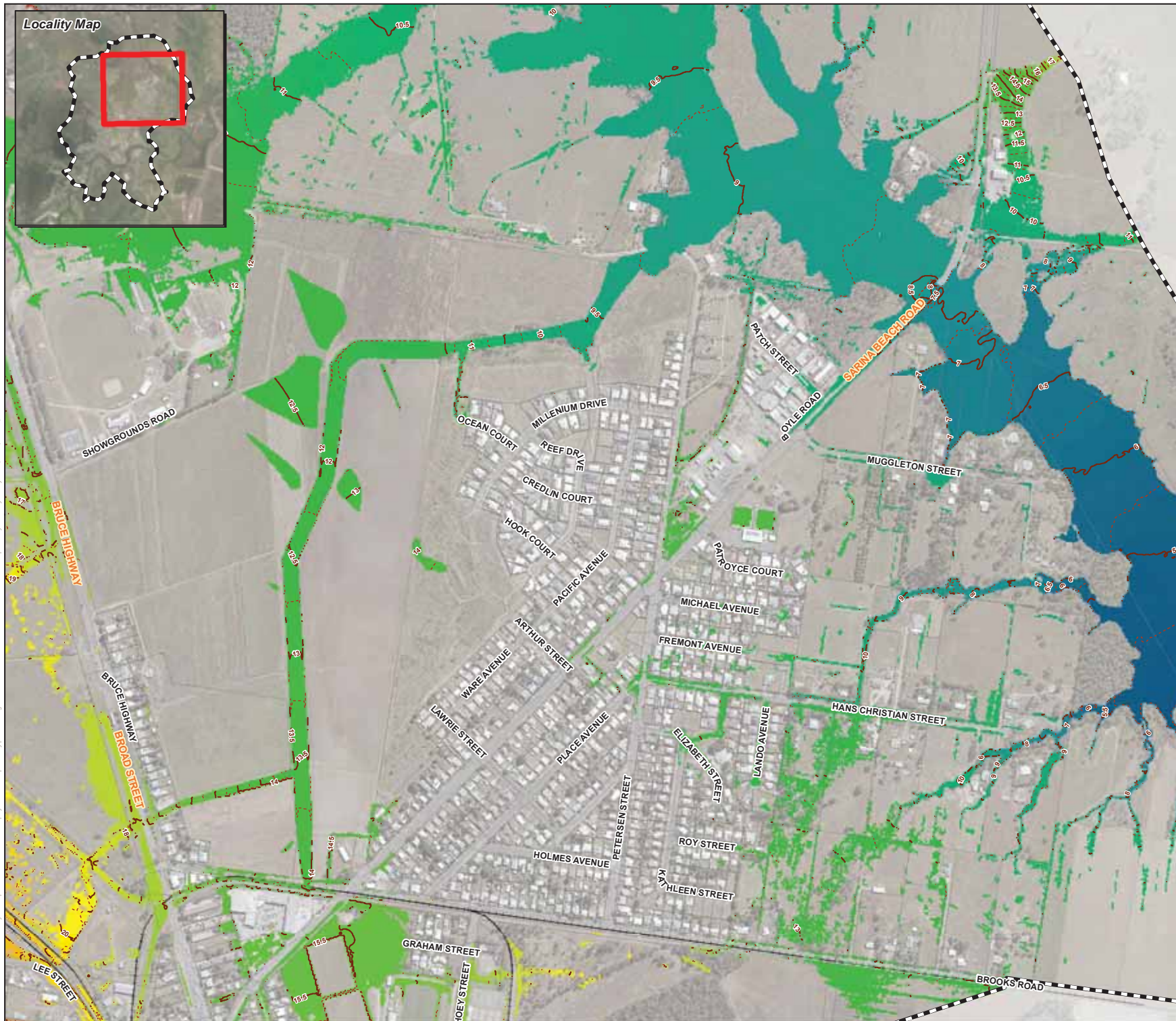
Results Filters Applied:  
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- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**10% AEP (10 yr ARI) 1440min Storm**

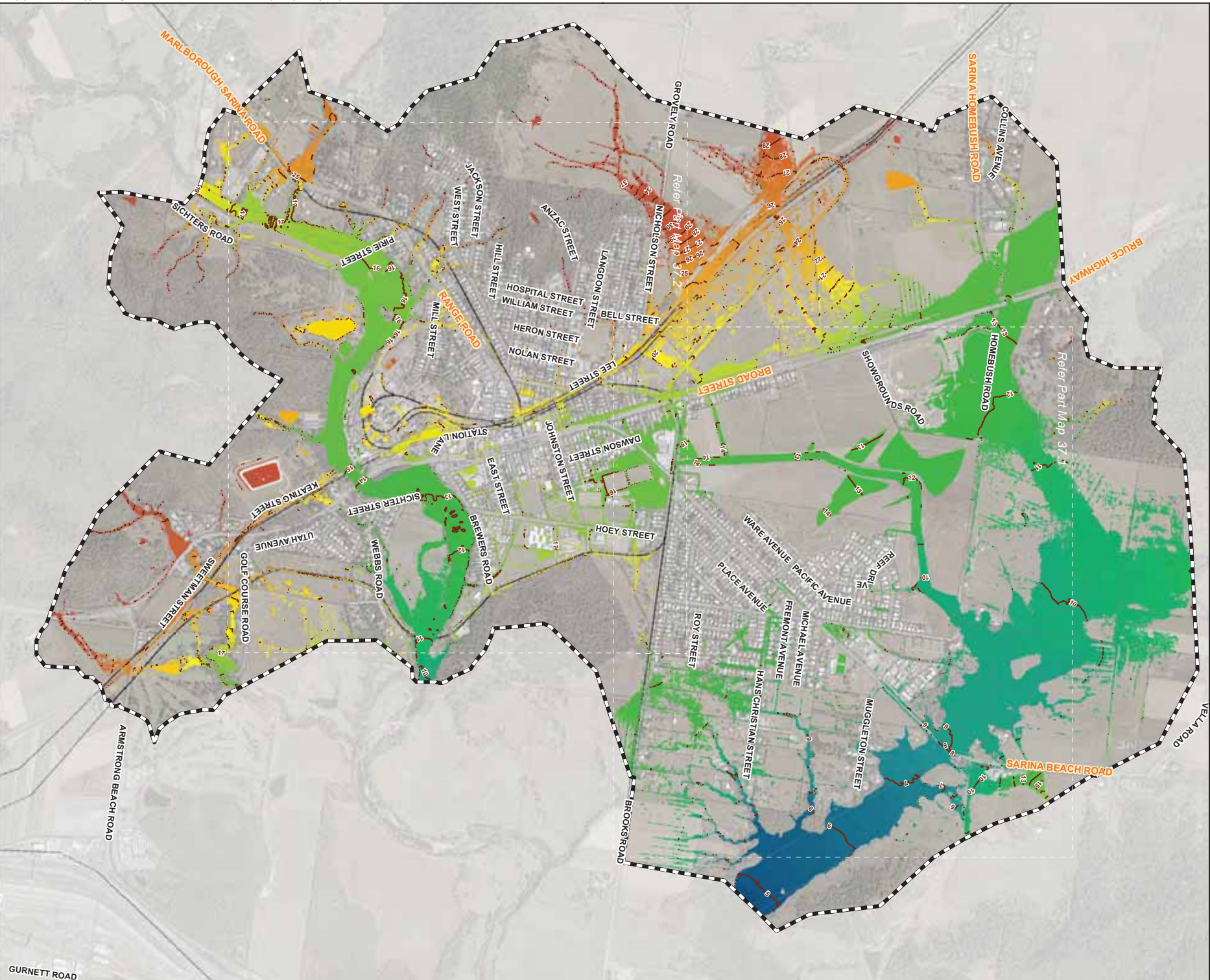
PROJECT ID: 60567081  
CREATED BY: brighg  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**36.1**



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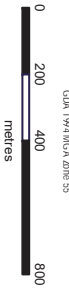
AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.

Filename: V:\655\65508112\HW\GIS02\_MXD\FINAL\_MAPPING\655081\_Map37\_1\_Developed\_Height\_000.mxd

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**LEGEND**  
 Model Boundary  
 Major Contour (1:0m AHD)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (m AHD)**  
 High : 30  
 Low : 3



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
5% AEP (20 yr AR) 1440mm Storm

PROJECT ID: 655081  
 CREATED BY: bngjn  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

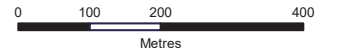
Map  
**37**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHD)**
- High : 30
- Low : 3

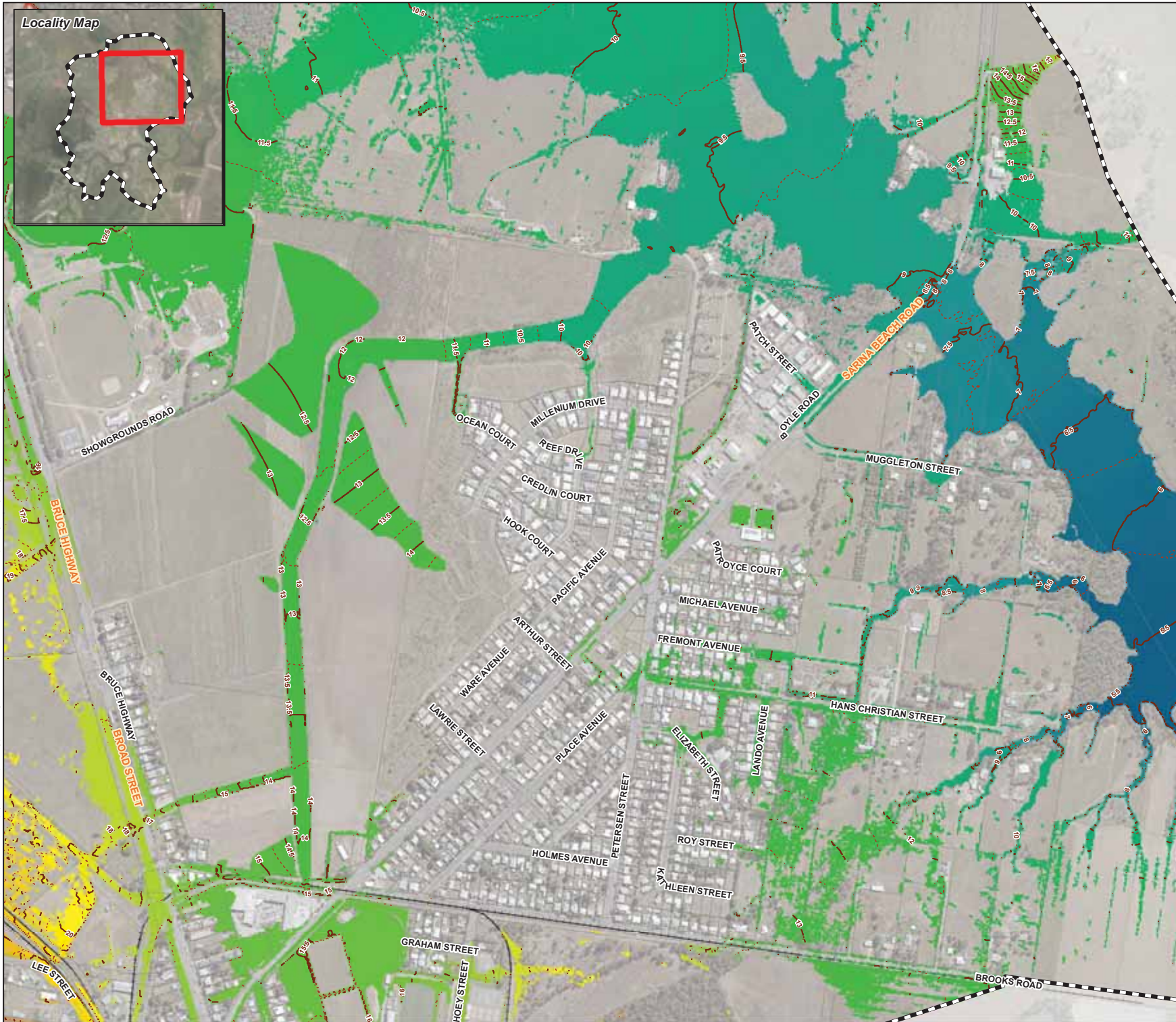
Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**5% AEP (20 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**37.1**

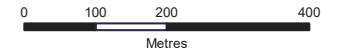


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHD)**
- High : 30
- Low : 3

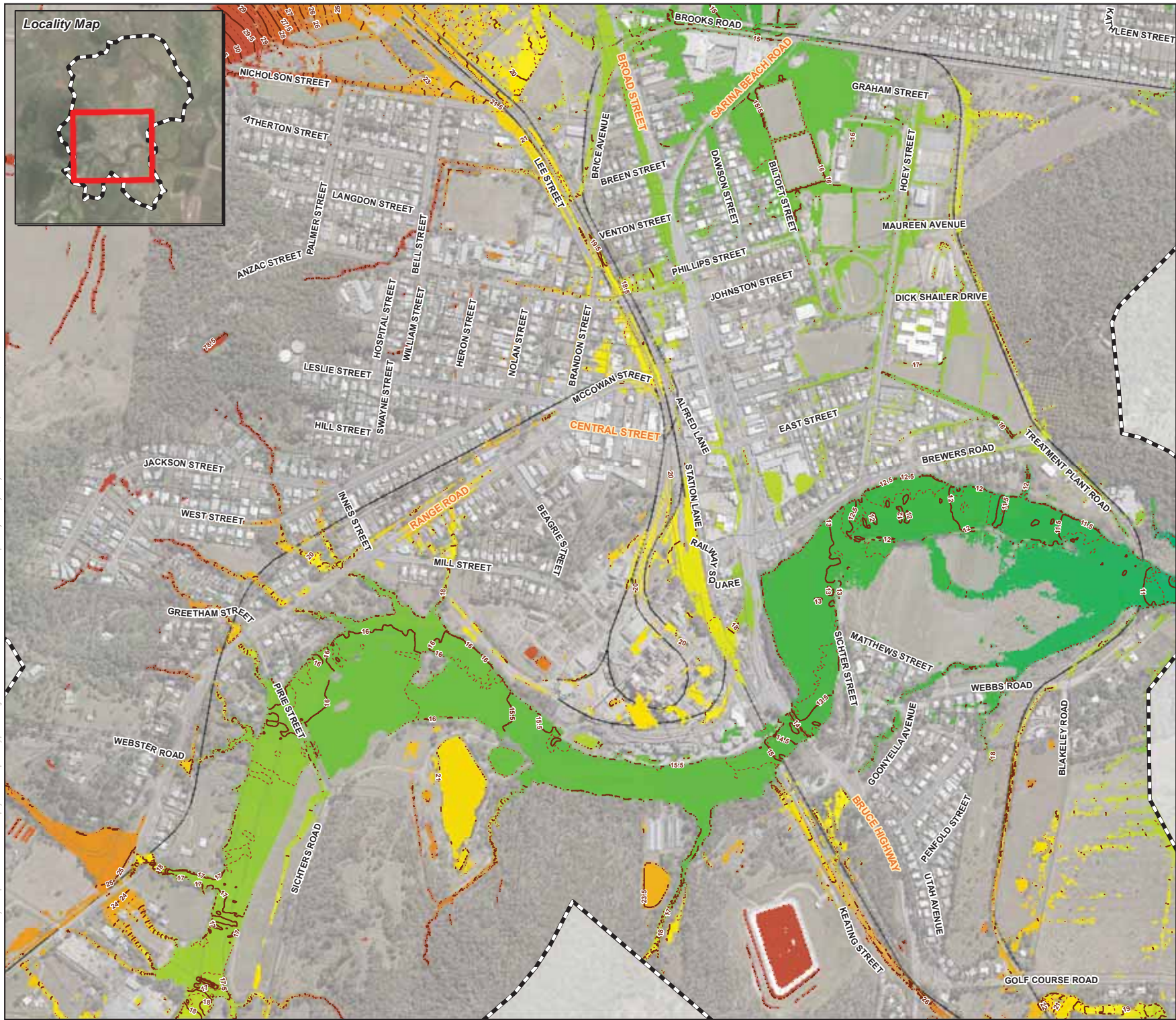
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- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**5% AEP (20 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brigh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**37.2**



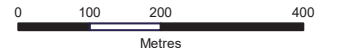
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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5m AHD)
- Minor Contour (0.25m AHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (m AHD)**
- High : 30
- Low : 3

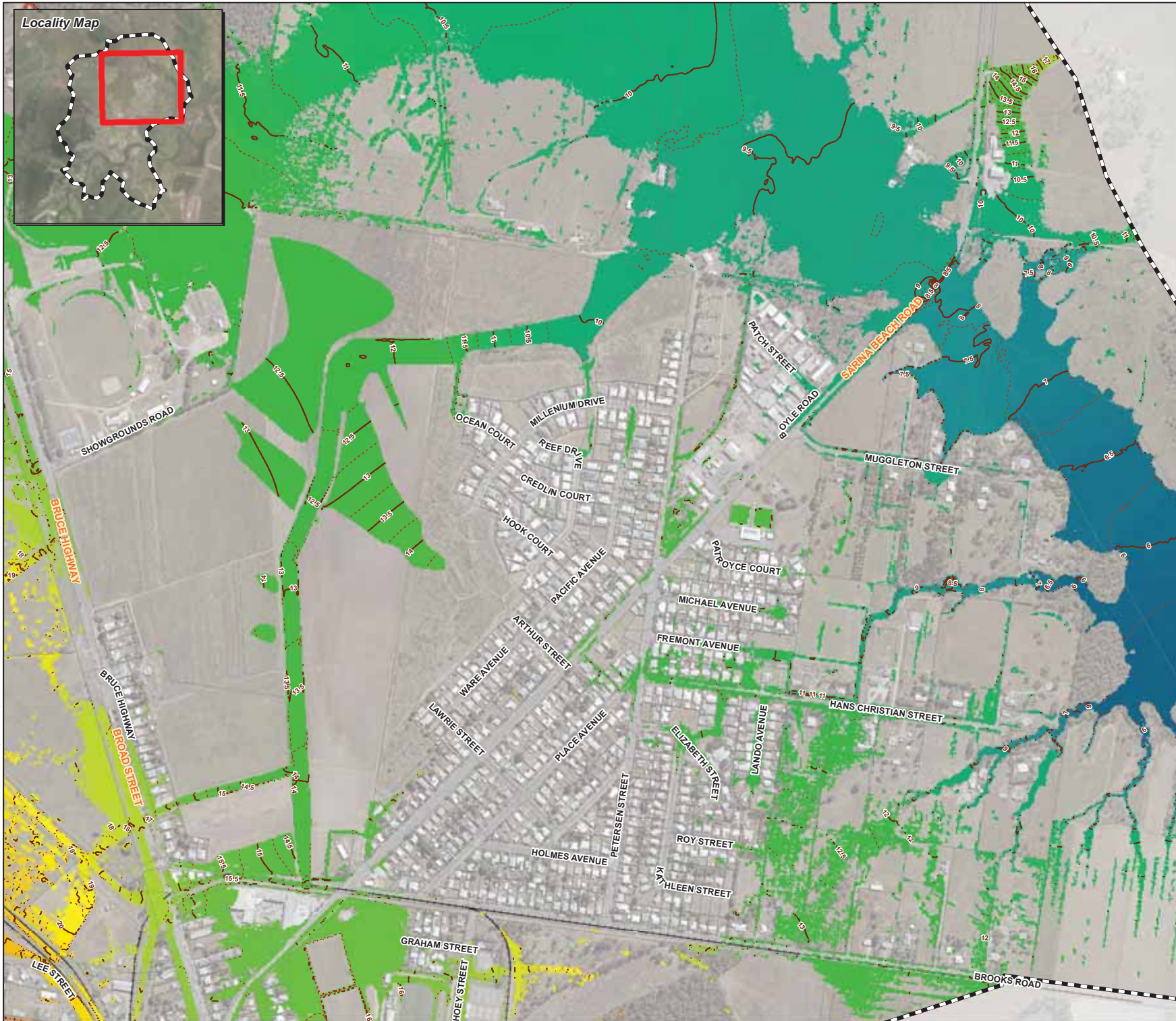
Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**2% AEP (50 yr ARI) 1440min Storm**

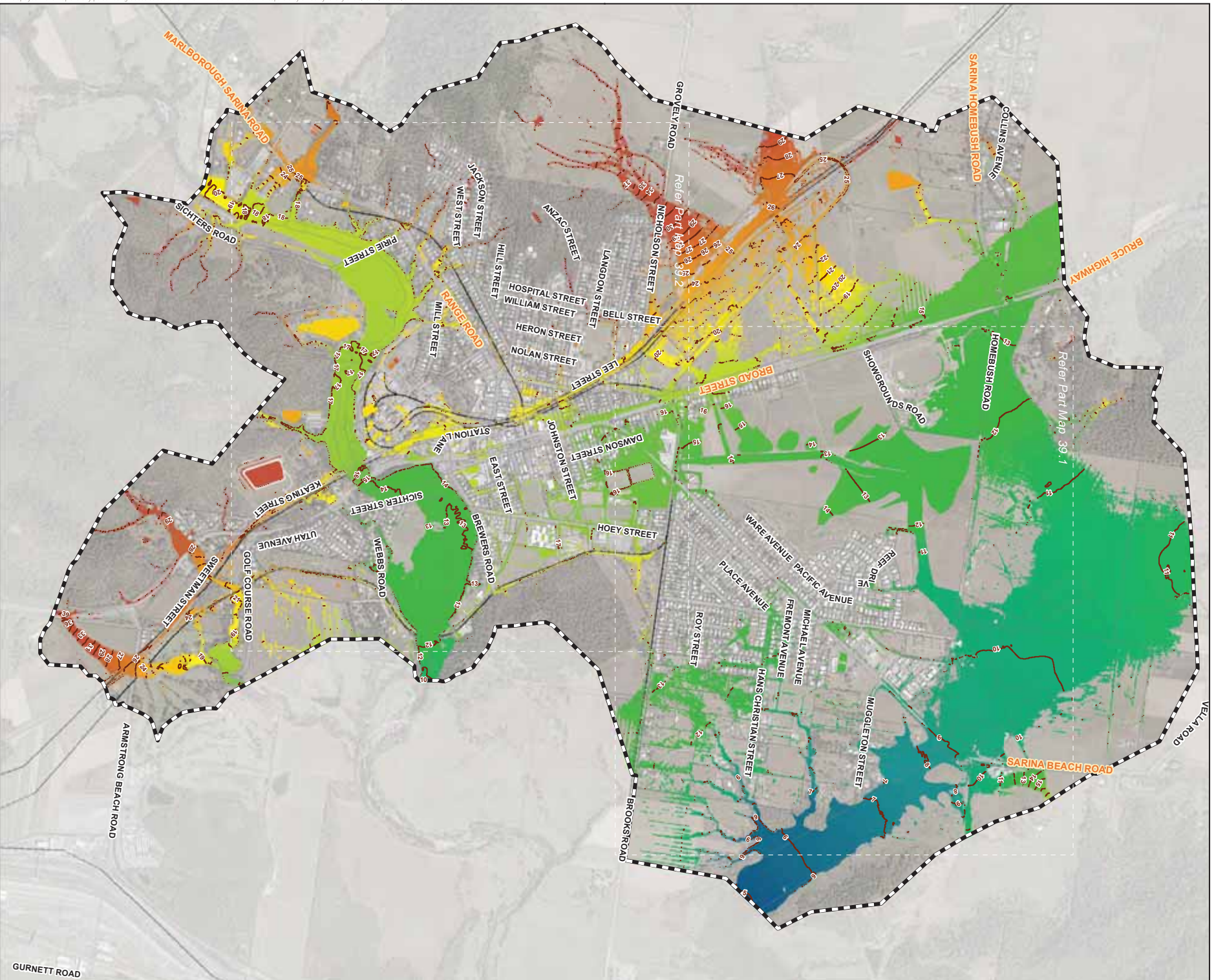
PROJECT ID: 60567081  
CREATED BY: brighg  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**38.1**



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**LEGEND**  
 Model Boundary  
 Major Contour (1:0m AHD)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (m AHD)**  
 High : 30  
 Low : 3

0 200 400 800  
 metres  
 GDA 1994 MGA Zone 55  
 1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
 Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
 1% AEP (100 yr ARI) 1440min Storm

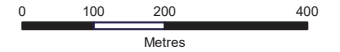
PROJECT ID: 60567081  
 CREATED BY: bgrgn  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**39**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHD)**
- High : 30
- Low : 3

Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

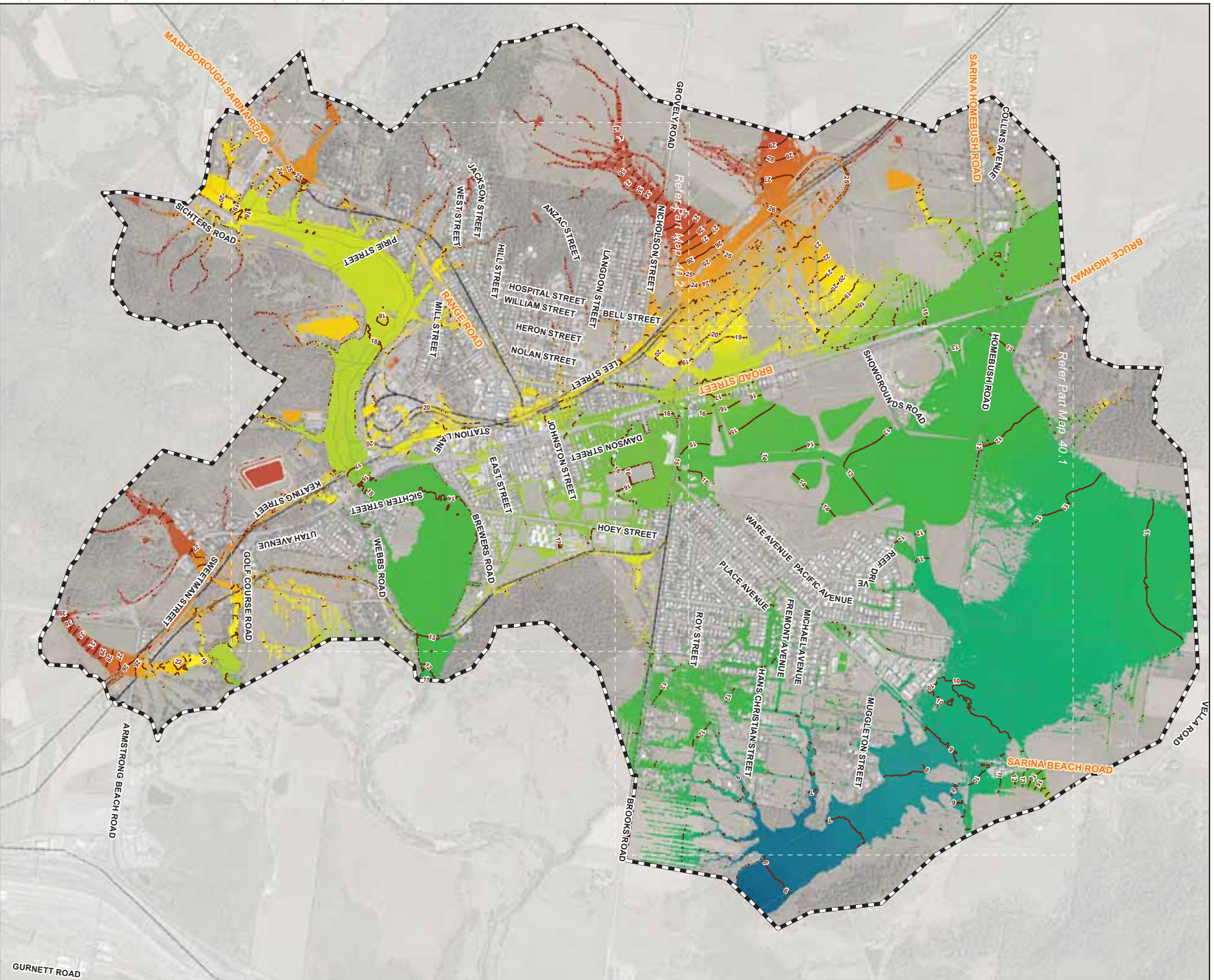
**Peak Water Surface Elevation (PWSE) - Developed Case**  
**1% AEP (100 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**39.1**

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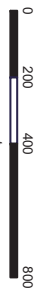




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**LEGEND**  
 Model Boundary  
 Major Contour (1:0mAHID)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (mAHID)**  
 High : 30  
 Low : 3



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case - 0.5% AEP (200yr ARI) 1440min Storm**

Project files saved  
 - Drawn: 01m  
 - Area: 4 Color (20m)  
 Base Data: 6/2017 (CAD 0.0)  
 Street Data: 6/2017 (ARC)

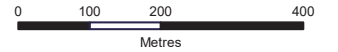
PROJECT ID: 60567081  
 CREATED BY: bgrgn  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**40**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
- Minor Contour (0.25mAHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHD)**
- High : 30
- Low : 3

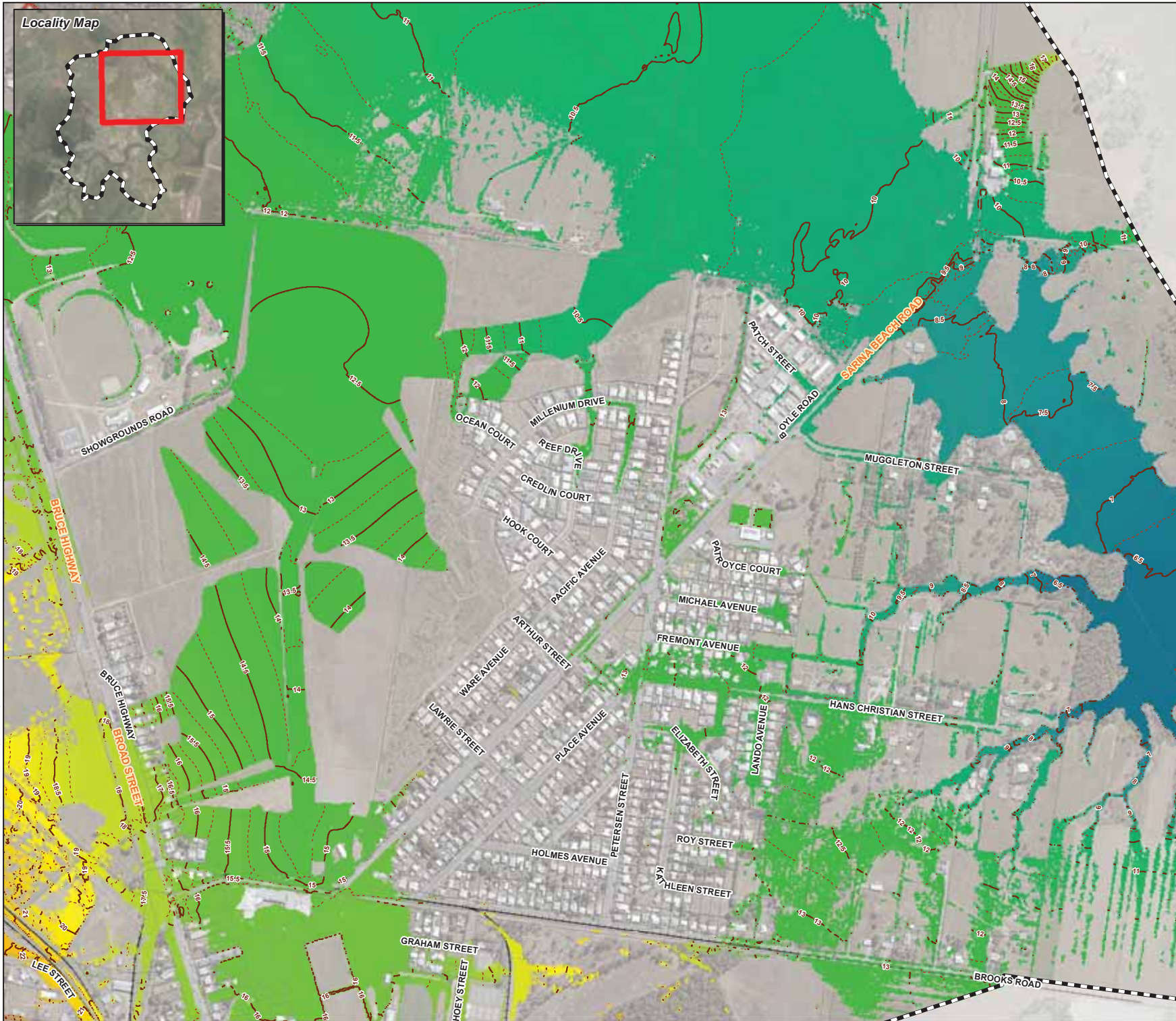
Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case - 0.5% AEP (200yr ARI) 1440min Storm**

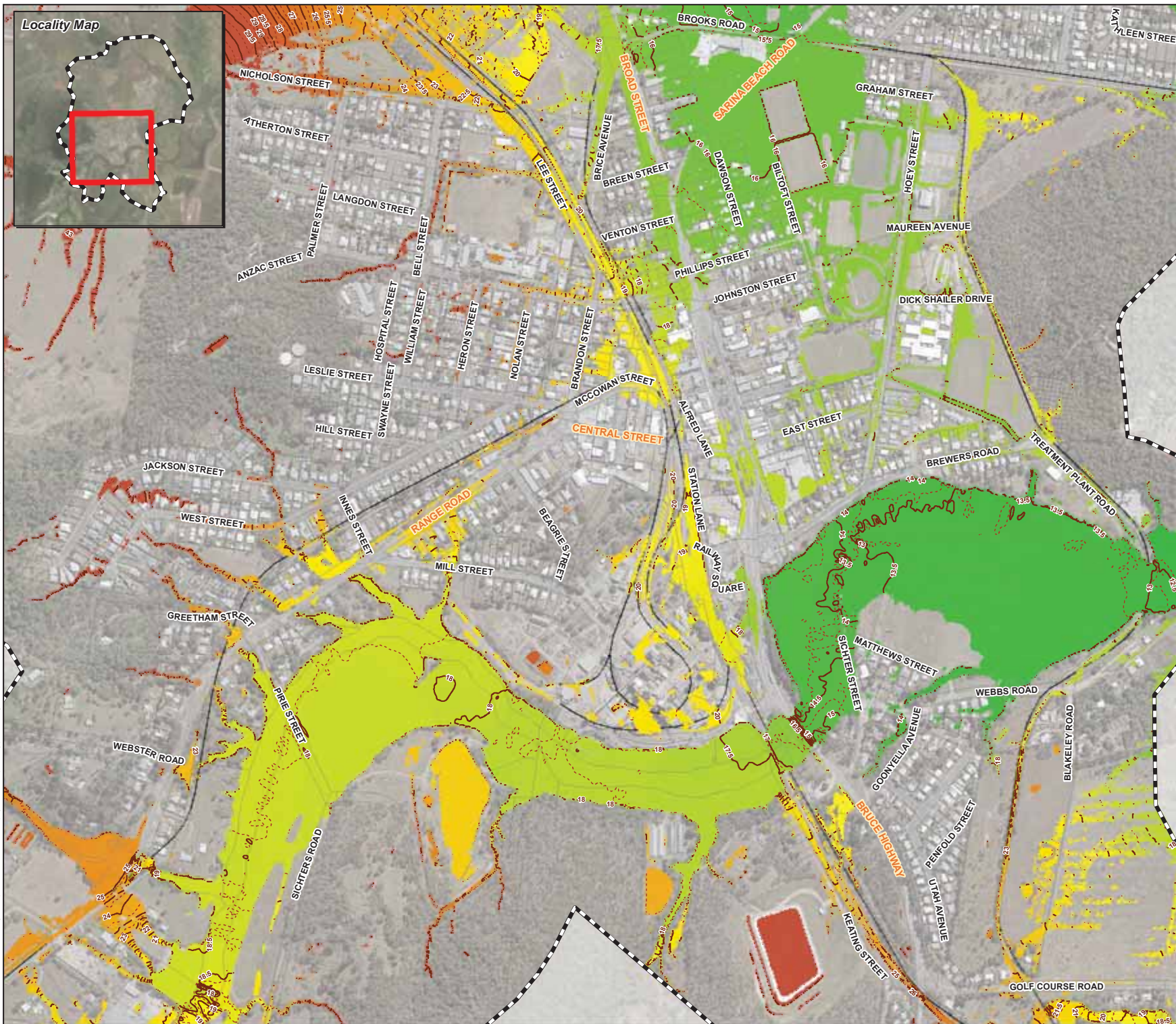
PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**40.1**

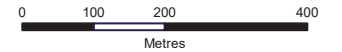


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5m AHD)
- Minor Contour (0.25m AHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (m AHD)**
- High : 30
- Low : 3

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

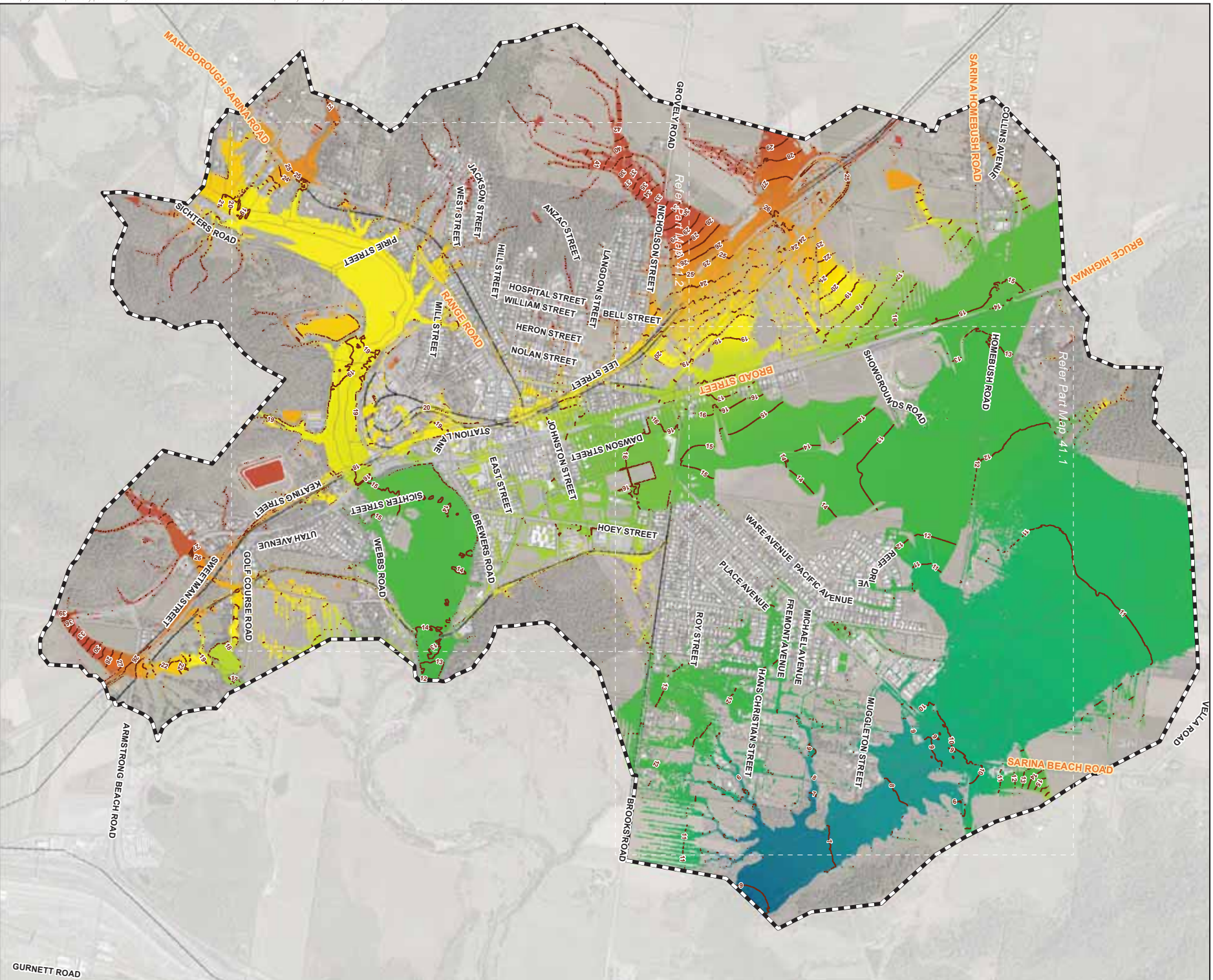
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case - 0.5% AEP (200yr ARI) 1440min Storm**

PROJECT ID 60567081  
CREATED BY brighth  
LAST MODIFIED 13/08/18  
VERSION: v01

Map  
**40.2**

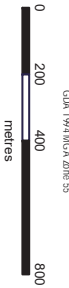
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**LEGEND**  
 Model Boundary  
 Major Contour (1:0mAHID)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (mAHID)**  
 High : 30  
 Low : 3



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

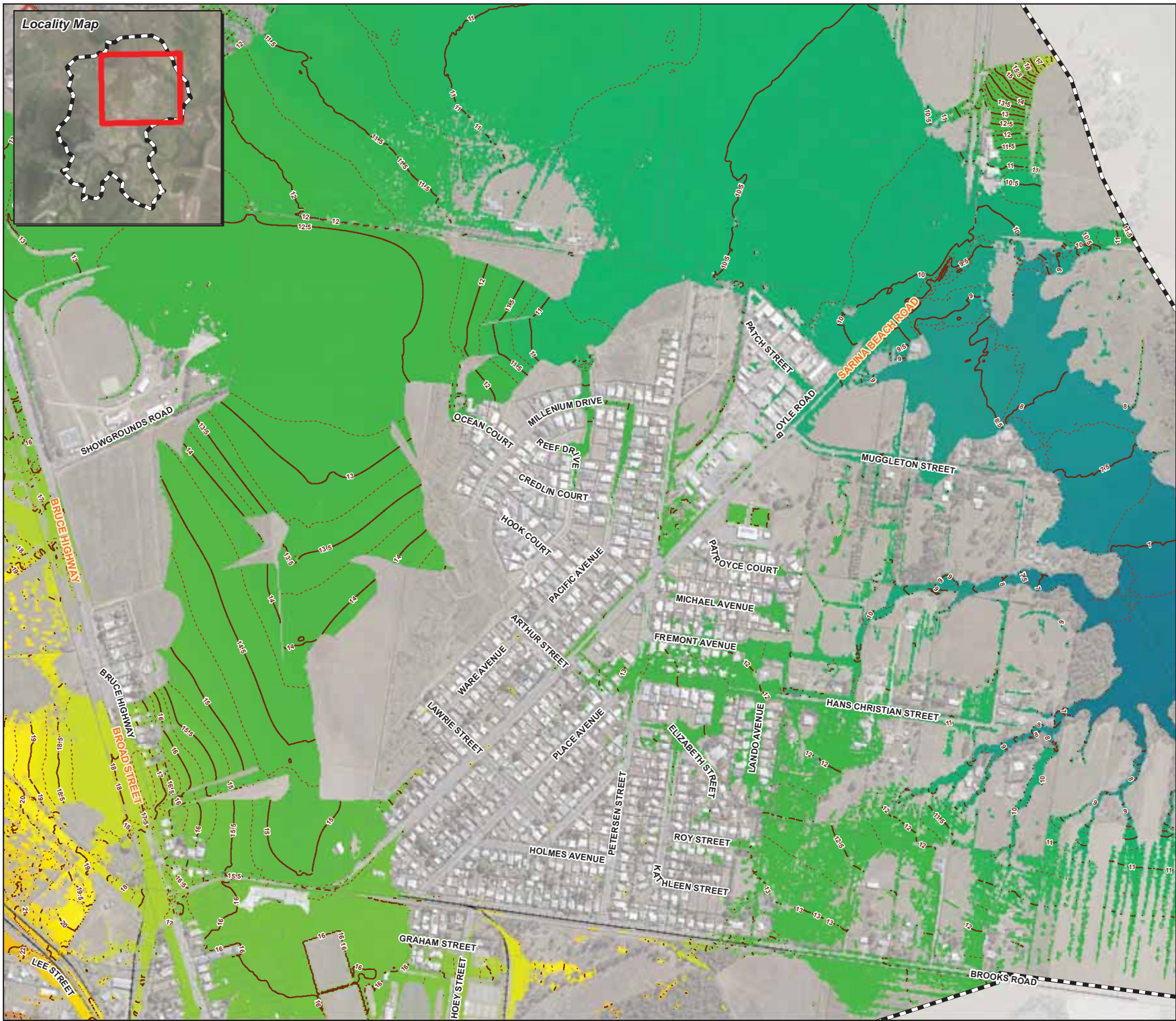
**Peak Water Surface Elevation (PWSE) - Developed Case - 0.2% AEP (500yr AR) 1440min Storm**

Project files saved  
 - Origin: 0.1m  
 - Area: 4 Cells (50m)  
 Base Data: 8/2017 (CAD 0.0)  
 Street Data: 8/2017 (ARC)

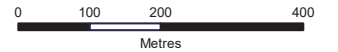
PROJECT ID: 60567081  
 CREATED BY: bgrgn  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

Map  
**41**

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHd)
- Minor Contour (0.25mAHd)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (mAHd)**
- High : 30
- Low : 3

Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m²)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

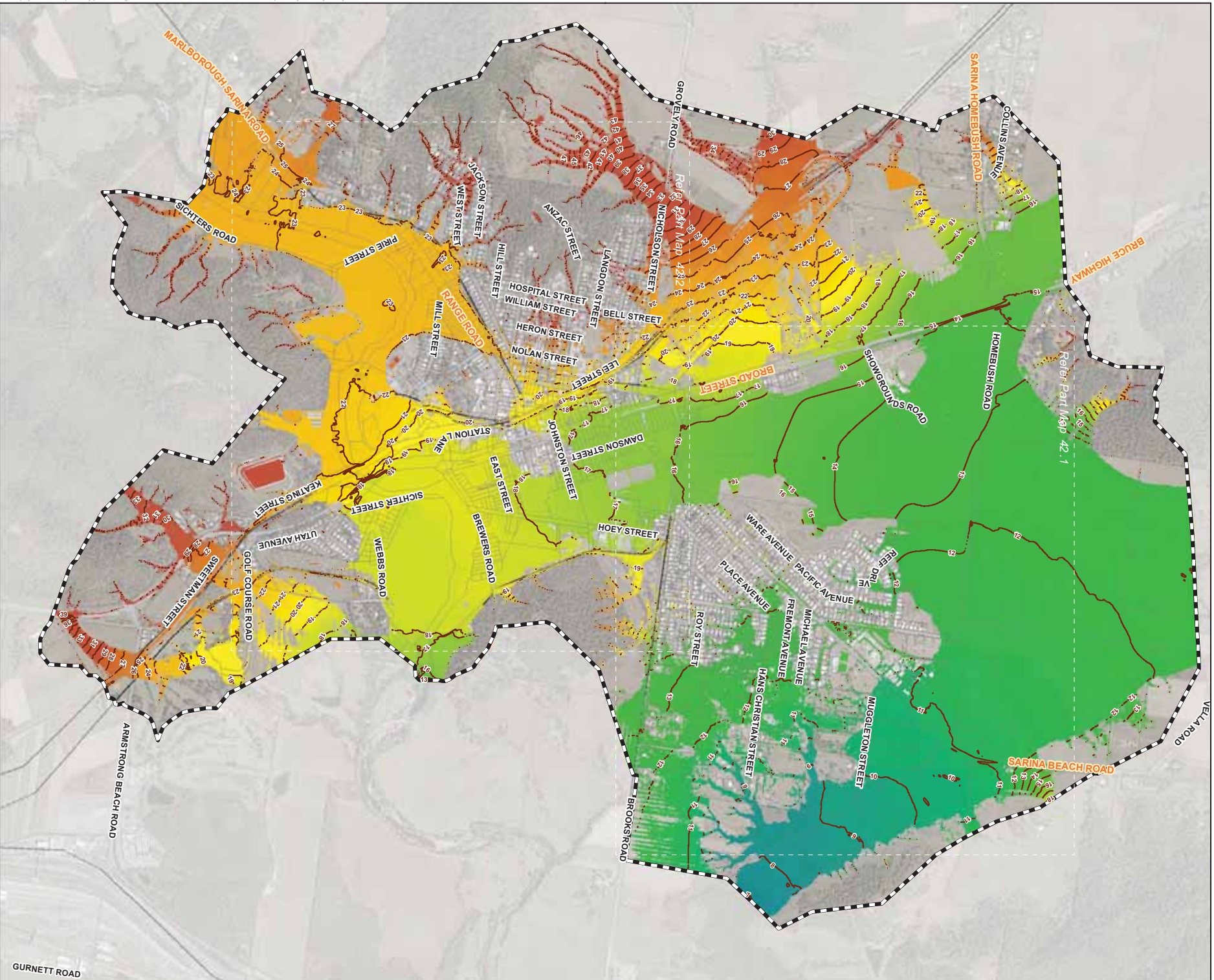
**Peak Water Surface Elevation (PWSE) - Developed Case - 0.2% AEP (500yr ARI) 1440min Storm**

PROJECT ID 60567081  
CREATED BY brighth  
LAST MODIFIED 13/08/18  
VERSION: v01

Map  
**41.1**

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**LEGEND**  
 Model Boundary  
 Major Contour (1:0mAH)  
 Cadastrate  
 QLD Rail Line

**Peak Water Surface Elevation (mAH)**  
 High : 30  
 Low : 3

0 200 400 800  
metres  
GDA 1984 MGA Zone 55

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Water Surface Elevation (PWSE) - Developed Case**  
PMF Event 360min Storm

Project: Sarina Drainage Study  
 - Area: 4 (Cable Street)  
 - Base Data: 8/2017 (CAD 0.0)  
 - Street Data: 8/2017 (MCC)

PROJECT ID: 60567081  
 CREATED BY: bgrgn  
 LAST MODIFIED: 13/08/18  
 VERSION: 01

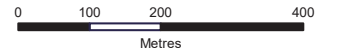
Map  
**42**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5mAHD)
  - Minor Contour (0.25mAHD)
  - Model Boundary
  - Cadastre
  - QLD Rail Line
- Peak Water Surface Elevation (mAH)**
- 
- High : 30  
Low : 3

Results Filters Applied:  
- Length = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

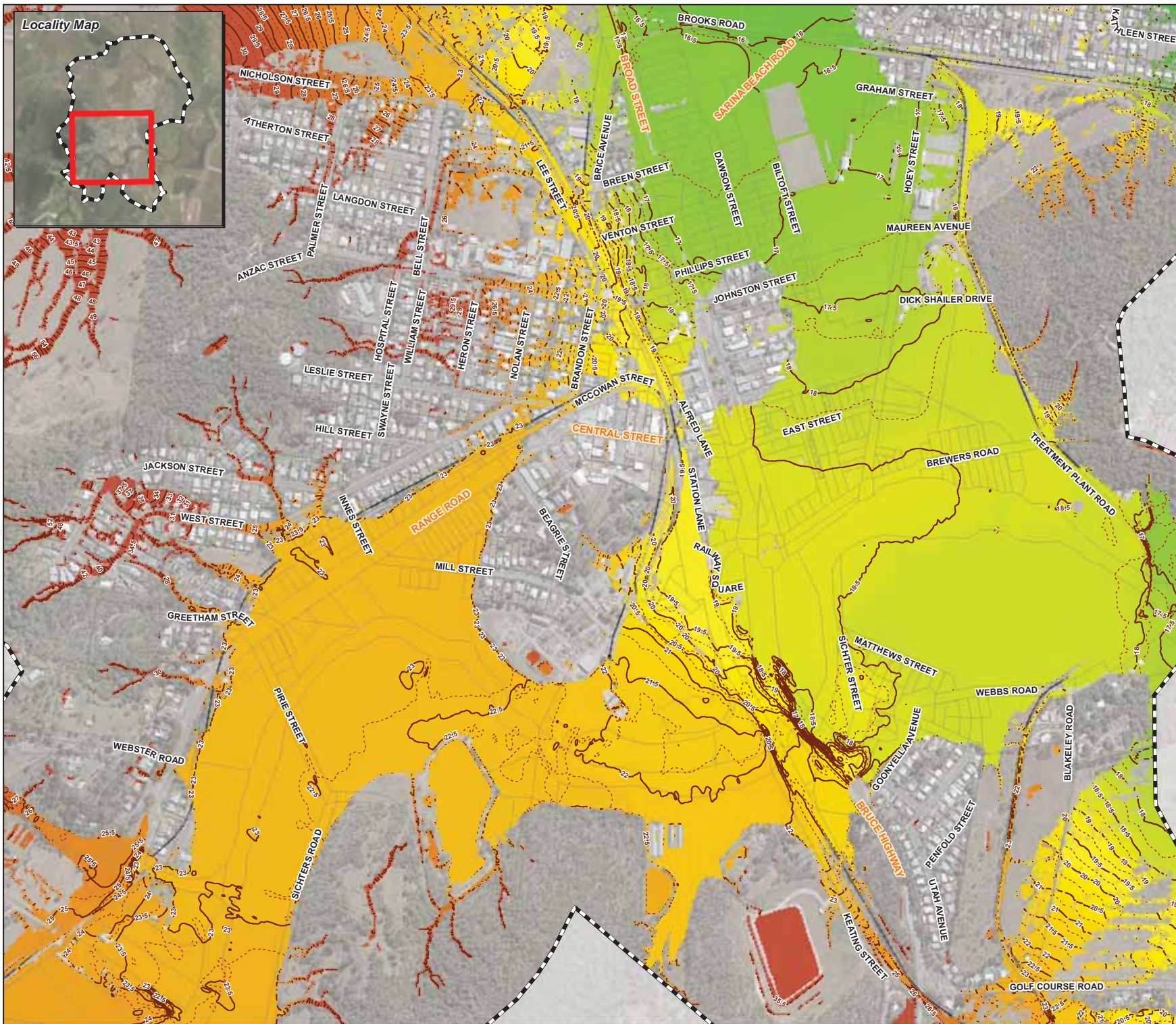
**Peak Water Surface Elevation (PWSE) - Developed Case**  
**PMF Event 360min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

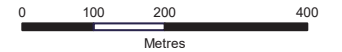
Map  
**42.1**

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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Major Contour (0.5m AHD)
- Minor Contour (0.25m AHD)
- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Water Surface Elevation (m AHD)**
- High : 30
- Low : 3

Results Filters Applied:  
- Length > 0.1m  
- Area < 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (OLD Gov)  
Street Data (c) 2017 (MRC)

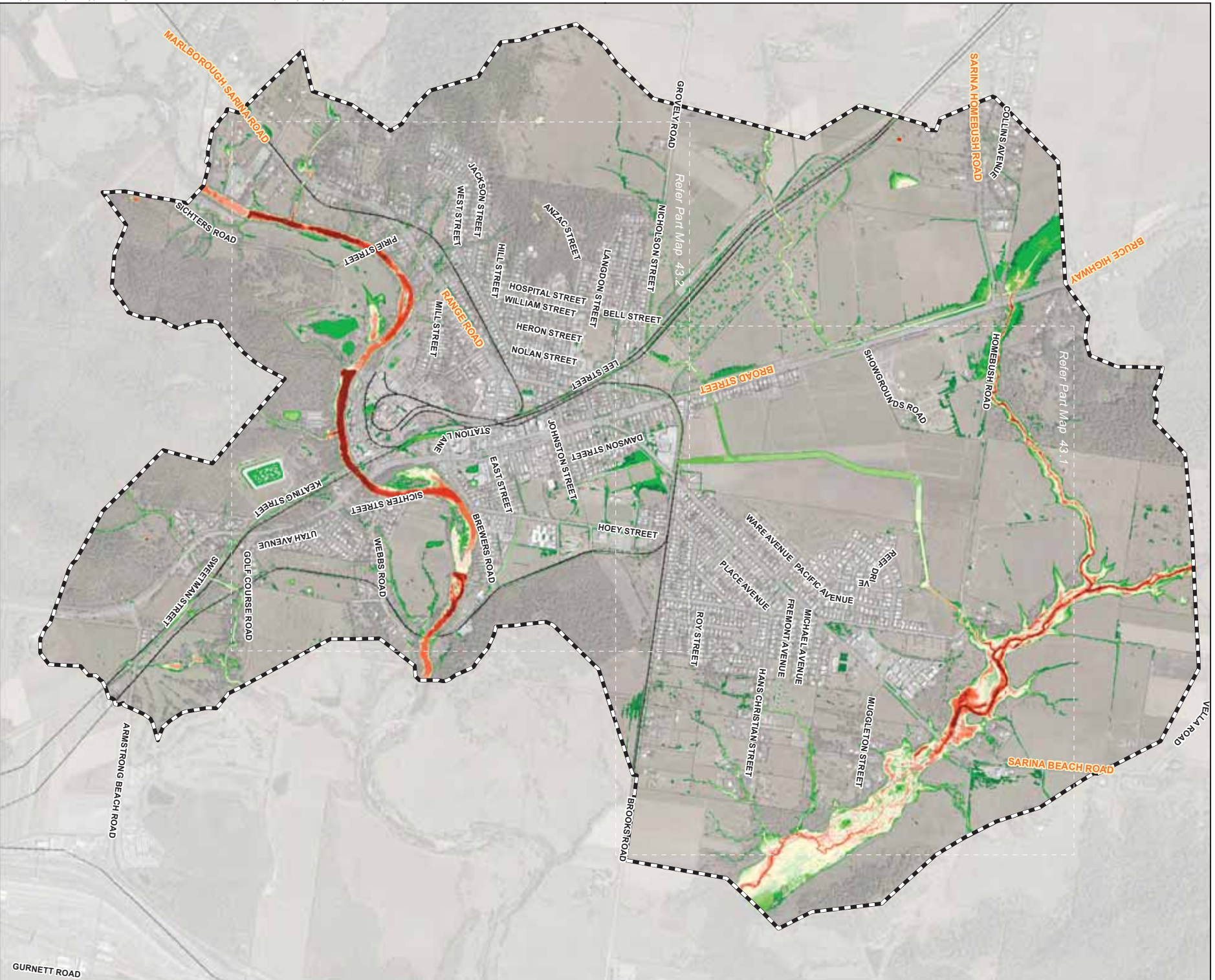
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Water Surface Elevation (PWSE) - Developed Case**  
**PMF Event 360min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01















Map  
**42.2**

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**LEGEND**

-  Model Boundary
-  Cadastre
-  QLD Rail Line
- Peak Flood Depth (m)**
-  <math>< 0.20</math>
-  0.20 - 0.40
-  0.40 - 0.60
-  0.60 - 0.80
-  0.80 - 1.00
-  1.00 - 1.25
-  1.25 - 1.50
-  1.50 - 2.00
-  2.00 - 2.50
-  2.50 - 3.00
-  > 3.00

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
63% AEP (1 EY) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: bgrbh  
LAST MODIFIED: 13/08/18  
VERSION: 01

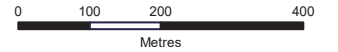
Map  
**43**

Scale: 1:16,000 (when printed at A3)  
0 200 400 800 metres  
GDA 1984 MGA Zone 55

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

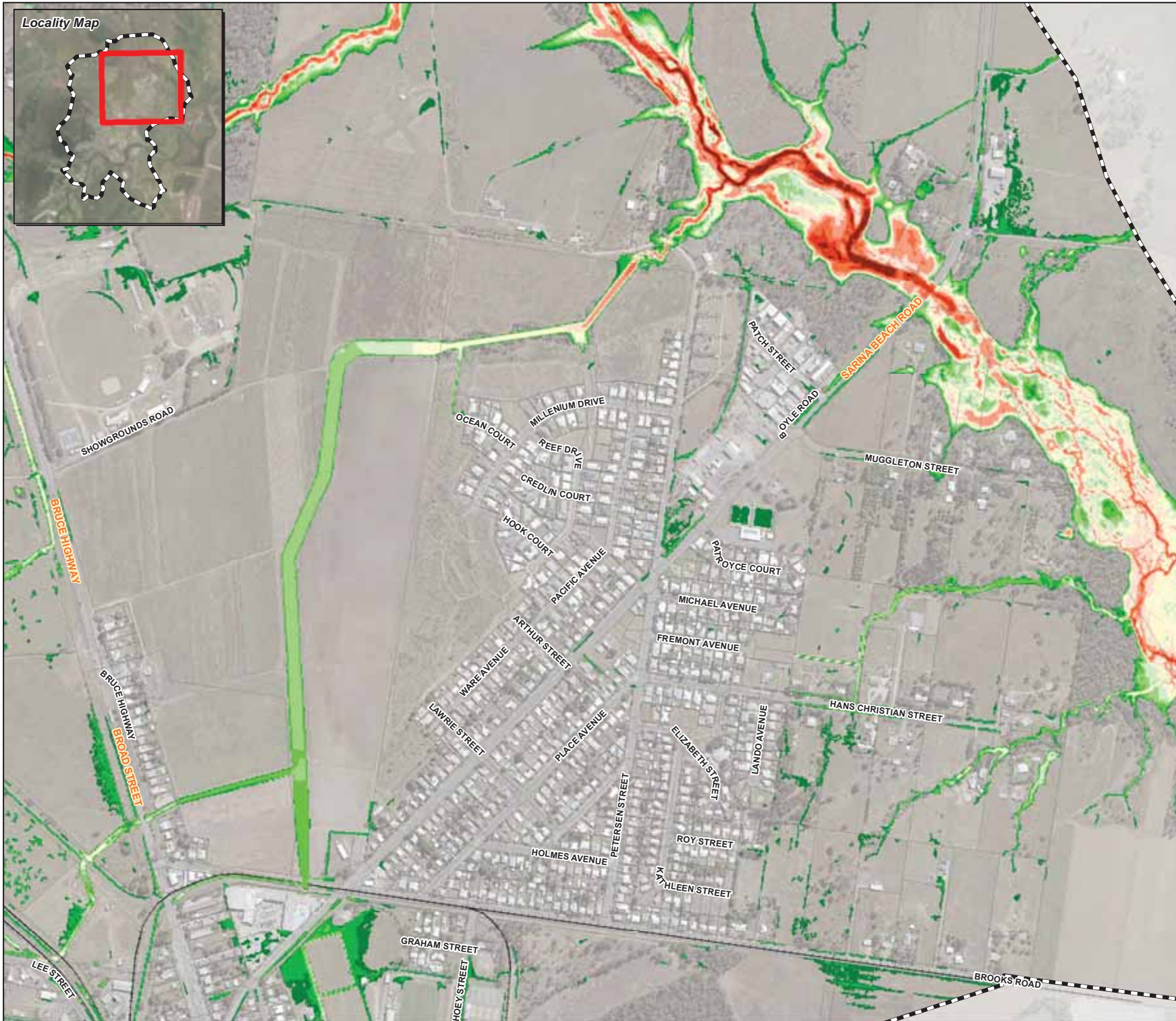
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**63% AEP (1 EY) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: briggh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**43.1**

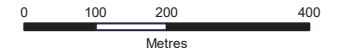


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

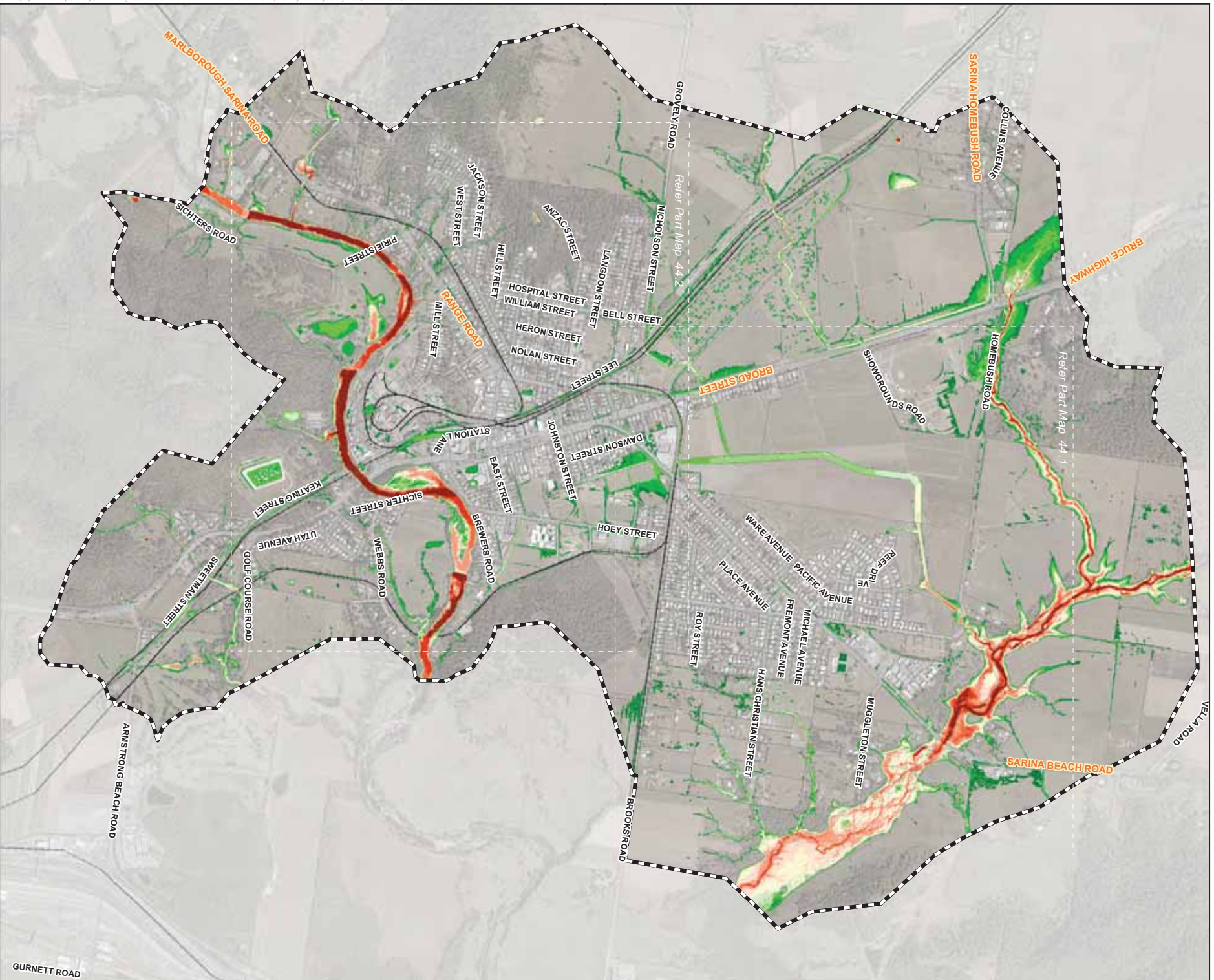
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**63% AEP (1 EY) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brigh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**43.2**

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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- > 3.00

0 200 400 800  
metres  
GDA 1994 MGA Zone 55

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
39% AEP (2 yr AR) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: bogph  
LAST MODIFIED: 13/08/18  
VERSION: 01

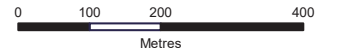
Map  
**44**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

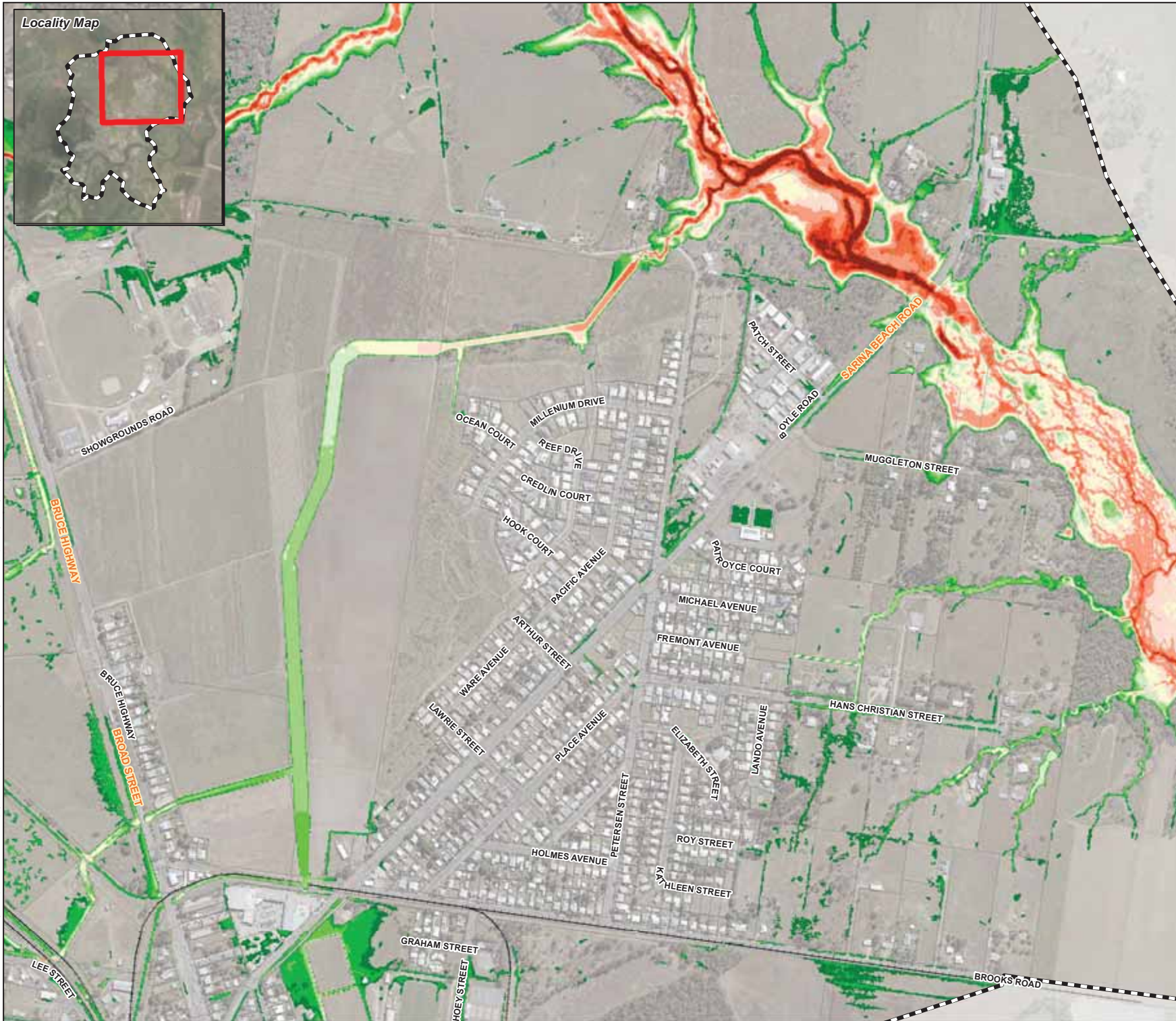
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**39% AEP (2 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**44.1**

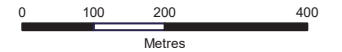


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
 - Depth = 0.1m  
 - Area = 4 Cells (50m)  
 Data sources:  
 Base Data (c) 2018 (QLD Gov)  
 Street Data (c) 2017 (MRC)

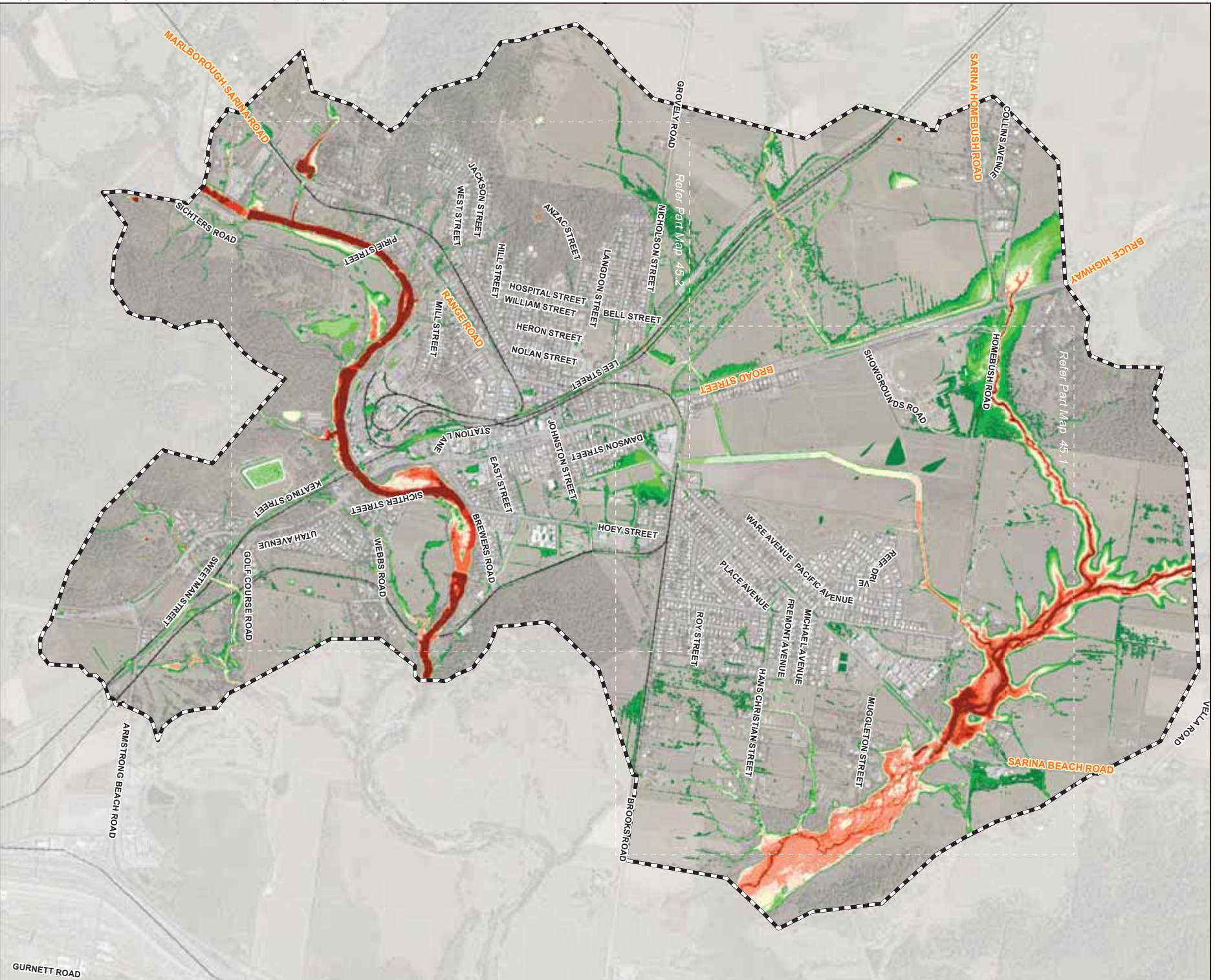
**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Depth**  
 Developed Case  
 39% AEP (2 yr ARI) 1440min Storm

PROJECT ID: 60567081  
 CREATED BY: brigh  
 LAST MODIFIED: 13/08/18  
 VERSION: v01














Map  
**44.2**

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**LEGEND**

-  Model Boundary
-  Cadastre
-  QLD Rail Line
- Peak Flood Depth (m)**
-  < 0.20
-  0.20 - 0.40
-  0.40 - 0.60
-  0.60 - 0.80
-  0.80 - 1.00
-  1.00 - 1.25
-  1.25 - 1.50
-  1.50 - 2.00
-  2.00 - 2.50
-  > 3.00

GDA 1984 MGA Zone 55  
0 200 400 800  
metres

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
18% AEP (5 yr AR) 1440mm Storm

PROJECT ID: 60567081  
CREATED BY: bogn  
LAST MODIFIED: 13/08/18  
VERSION: 01

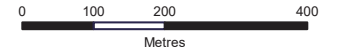
Map  
**45**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
 - Depth < 0.1m  
 - Area < 4 Cells (36m)  
 Data sources:  
 Base Data (c) 2018 (QLD Gov)  
 Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Depth**  
 Developed Case  
 18% AEP (5 yr ARI) 1440min Storm

PROJECT ID: 60567081  
 CREATED BY: brighth  
 LAST MODIFIED: 13/08/18  
 VERSION: v01

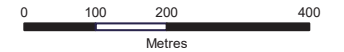
Map  
**45.1**

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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

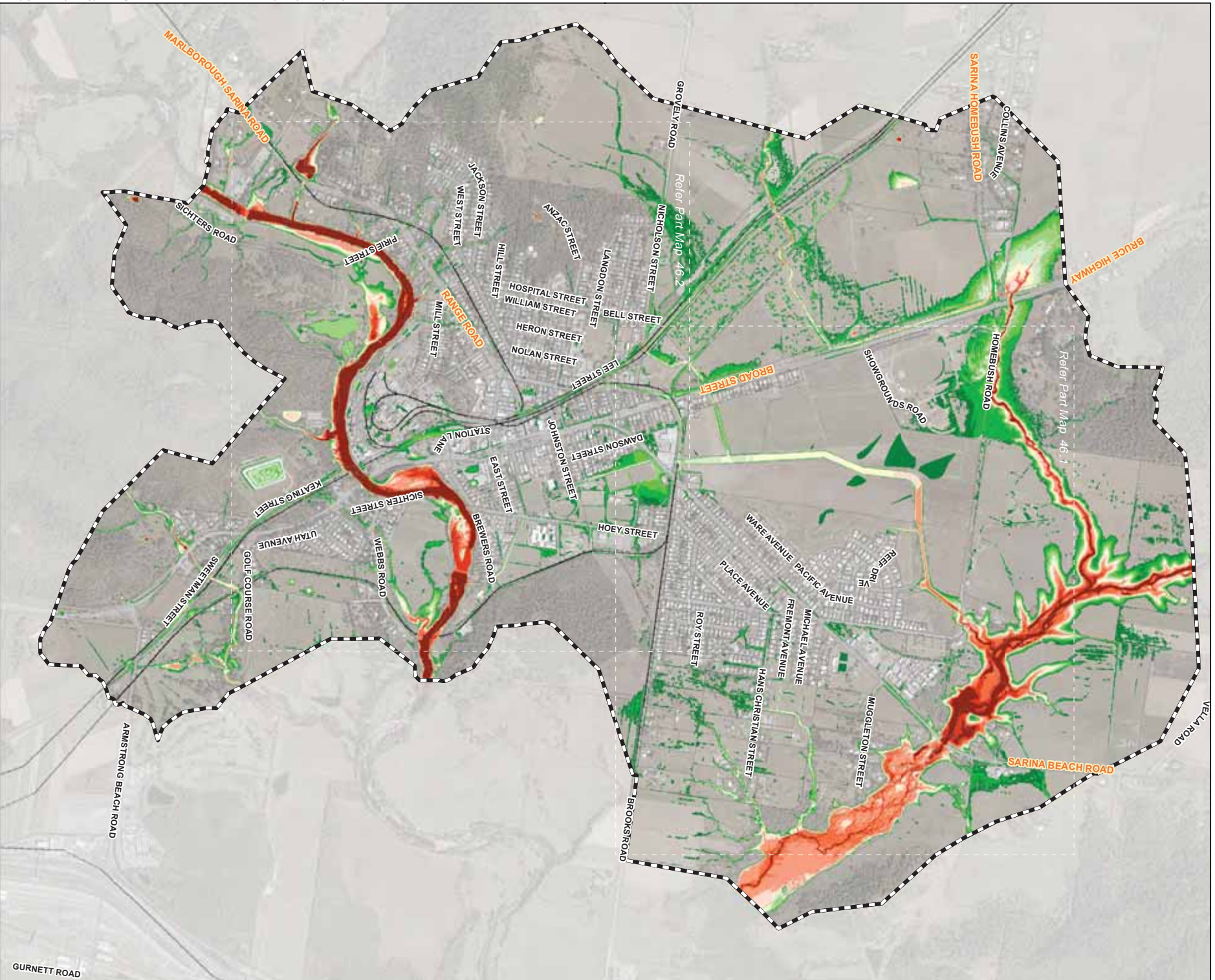
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**18% AEP (5 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**45.2**

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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

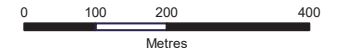
Peak Flood Depth  
Developed Case  
10% AEP (10 yr ARI) 1440min Storm

PROJECT ID	66567081	Map	46
CREATED BY	beggh		
LAST MODIFIED	13/08/18		
VERSION	01		

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

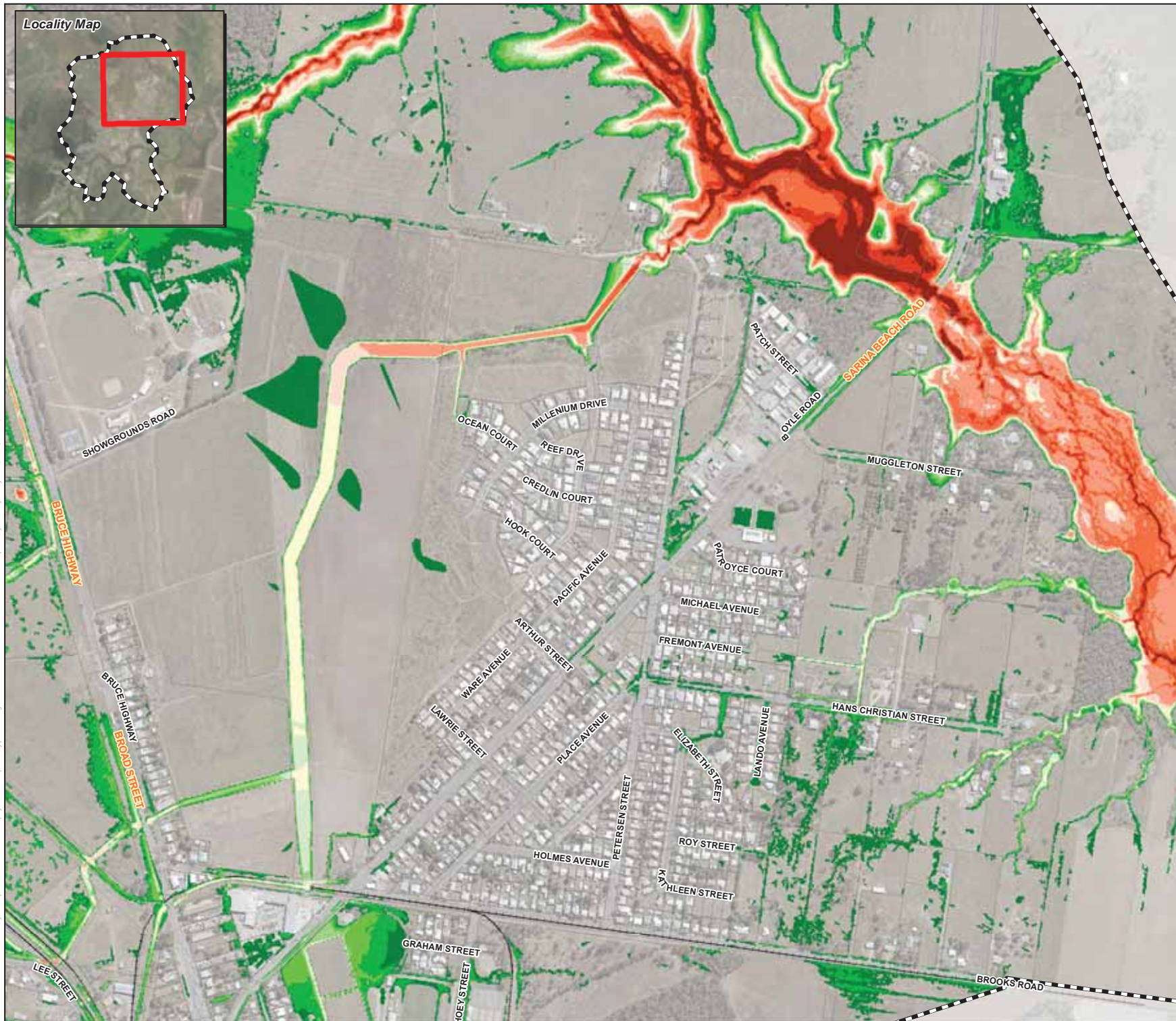
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**10% AEP (10 yr ARI) 1440min Storm**

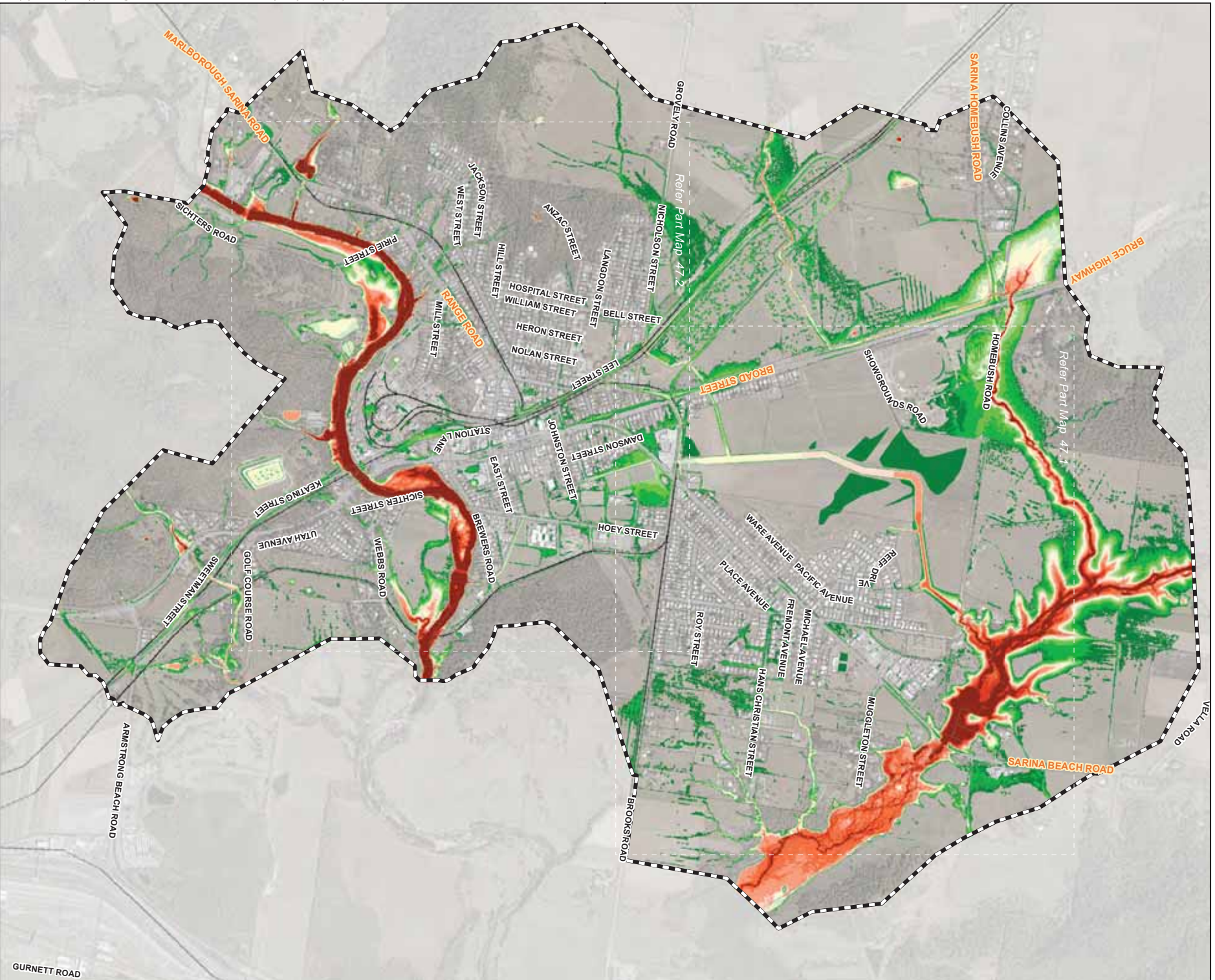
PROJECT ID: 60567081  
CREATED BY: brighgh  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**46.1**











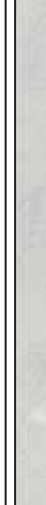


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**LEGEND**

-  Model Boundary
-  Cadastre
-  QLD Rail Line
- Peak Flood Depth (m)**
-  0.40 - 0.80
-  0.80 - 1.00
-  1.00 - 1.25
-  1.25 - 1.50
-  1.50 - 2.00
-  2.00 - 2.50
-  2.50 - 3.00
-  > 3.00

GDA 1994 MGA Zone 55  
0 200 400 800  
metres

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
5% AEP (20 yr AR) 1440mm Storm

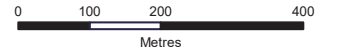
PROJECT ID	66567081	Map	47
CREATED BY	begjn		
LAST MODIFIED	13/08/18		
VERSION	01		

Positive Structures  
- Depth: 0.1m  
- Area: 4 Cells (20m)  
Based Data: 8/2017 (CAD 0.0)  
Sheet Data: 8/2017 (DWG)

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

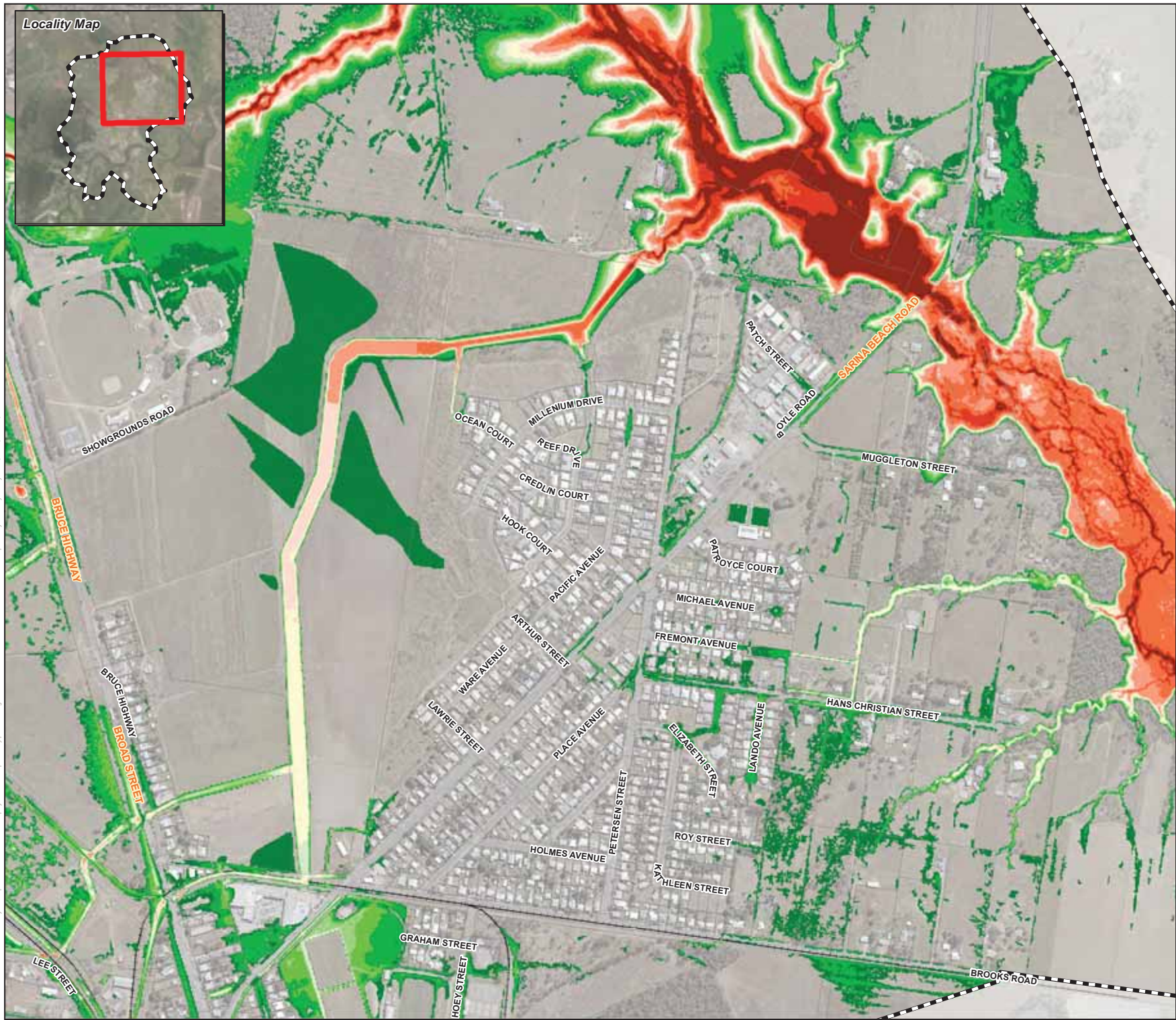
Results Filters Applied:  
 - Depth = 0.1m  
 - Area = 4 Cells (36m)  
 Data sources:  
 Base Data (c) 2018 (QLD Gov)  
 Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
 Developed Case  
 5% AEP (20 yr ARI) 1440min Storm

PROJECT ID: 60567081  
 CREATED BY: brighg  
 LAST MODIFIED: 13/08/18  
 VERSION: v01

Map  
**47.1**

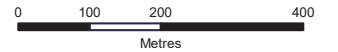


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

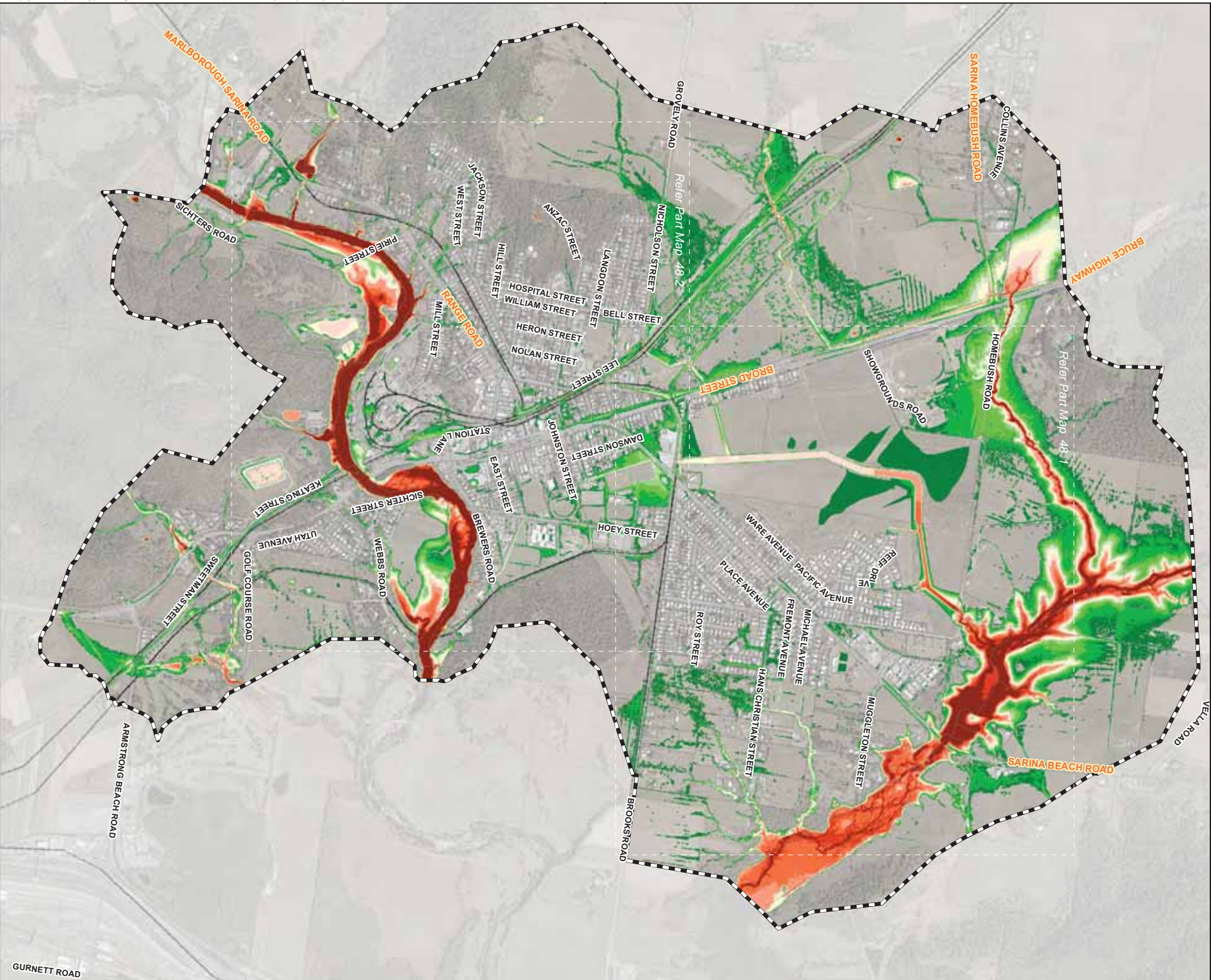
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**5% AEP (20 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**47.2**

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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
2% AEP (50 yr ARI) 1440min Storm

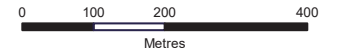
PROJECT ID	60557081	Map
CREATED BY	beggh	48
LAST MODIFIED	13/08/18	
VERSION	01	

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

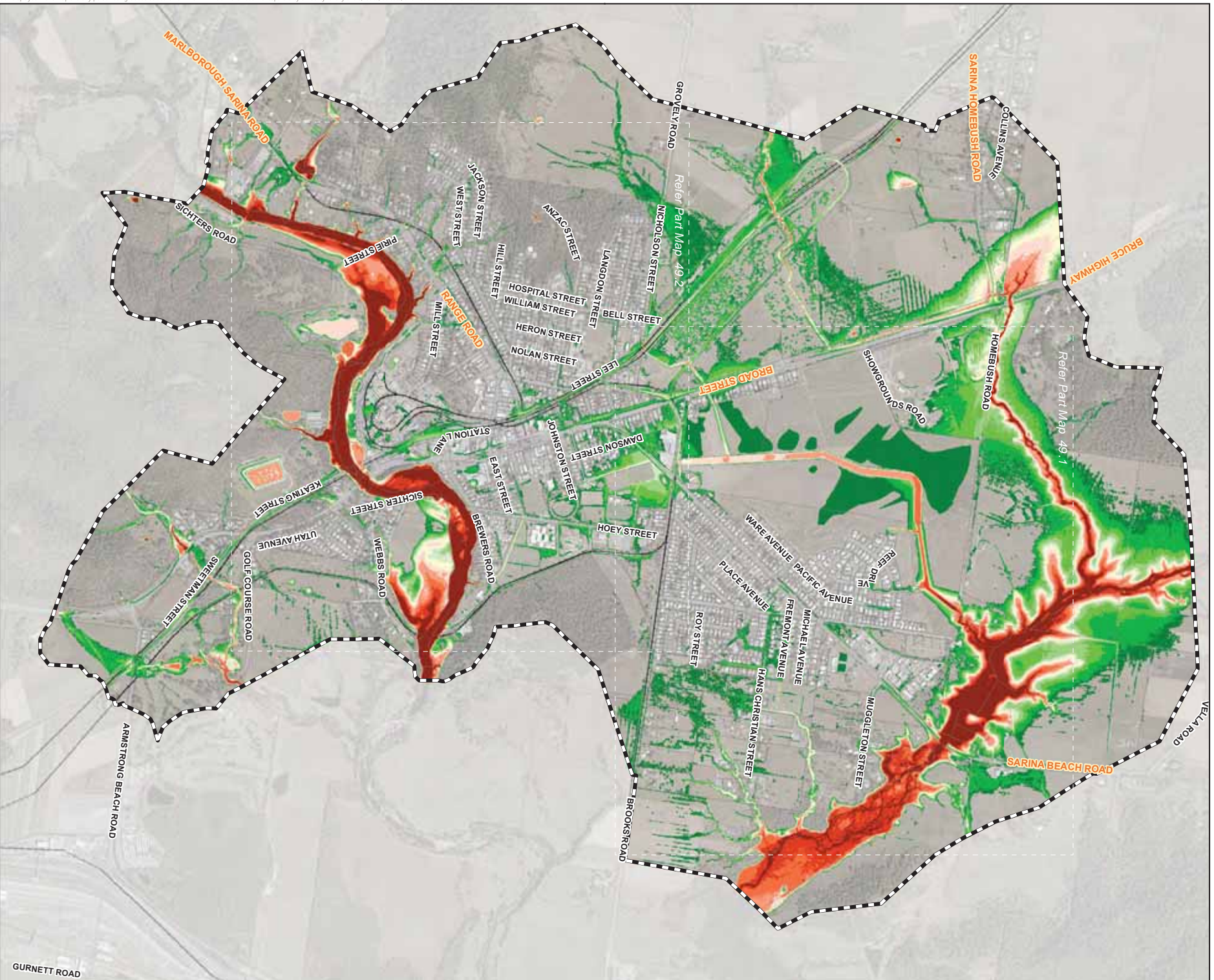
**Peak Flood Depth**  
**Developed Case**  
**2% AEP (50 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**48.1**















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**LEGEND**

-  Model Boundary
-  Cadastre
-  QLD Rail Line
- Peak Flood Depth (m)**
-  <math>< 0.20</math>
-  0.20 - 0.40
-  0.40 - 0.60
-  0.60 - 0.80
-  0.80 - 1.00
-  1.00 - 1.25
-  1.25 - 1.50
-  1.50 - 2.00
-  2.00 - 2.50
-  2.50 - 3.00
-  > 3.00

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
1% AEP (100 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: boggh  
LAST MODIFIED: 13/08/18  
VERSION: 01

Map  
**49**

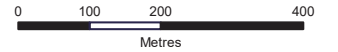
Scale: 1:16,000 (when printed at A3)  
0 200 400 800 metres  
GDA 1984 MGA Zone 55

Source: Streetscape  
- Areas <math>< 0.1\text{ m}</math>  
- Areas <math>0.1 - 0.5\text{ m}</math>  
- Areas <math>0.5 - 1.0\text{ m}</math>  
- Areas <math>1.0 - 2.0\text{ m}</math>  
- Areas <math>2.0 - 3.0\text{ m}</math>  
- Areas > 3.0 m  
Based on data to 30/07/2017 (CAD 0.5m)  
Street Data to 30/07/2017 (MGA)

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

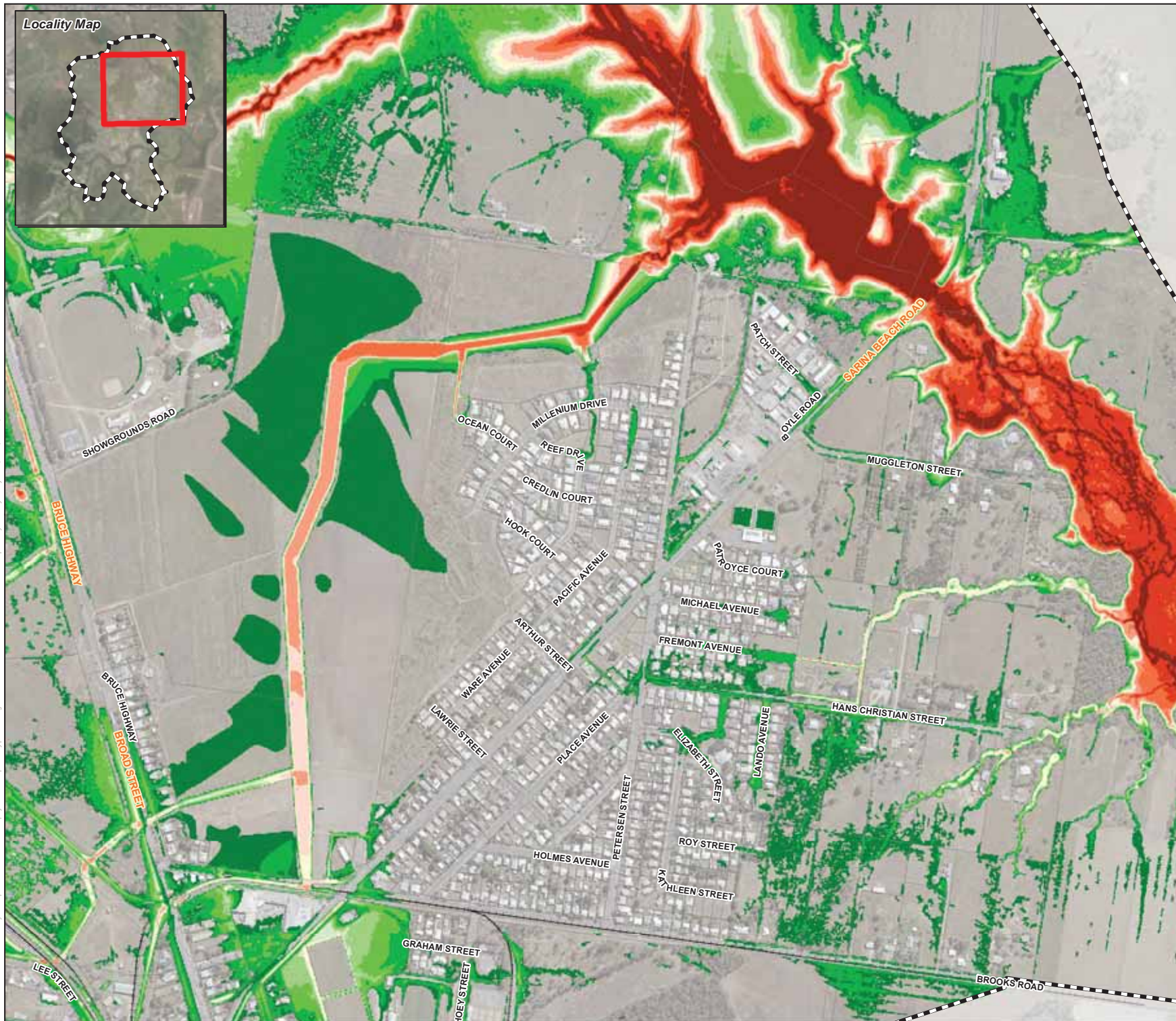
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case**  
**1% AEP (100 yr ARI) 1440min Storm**

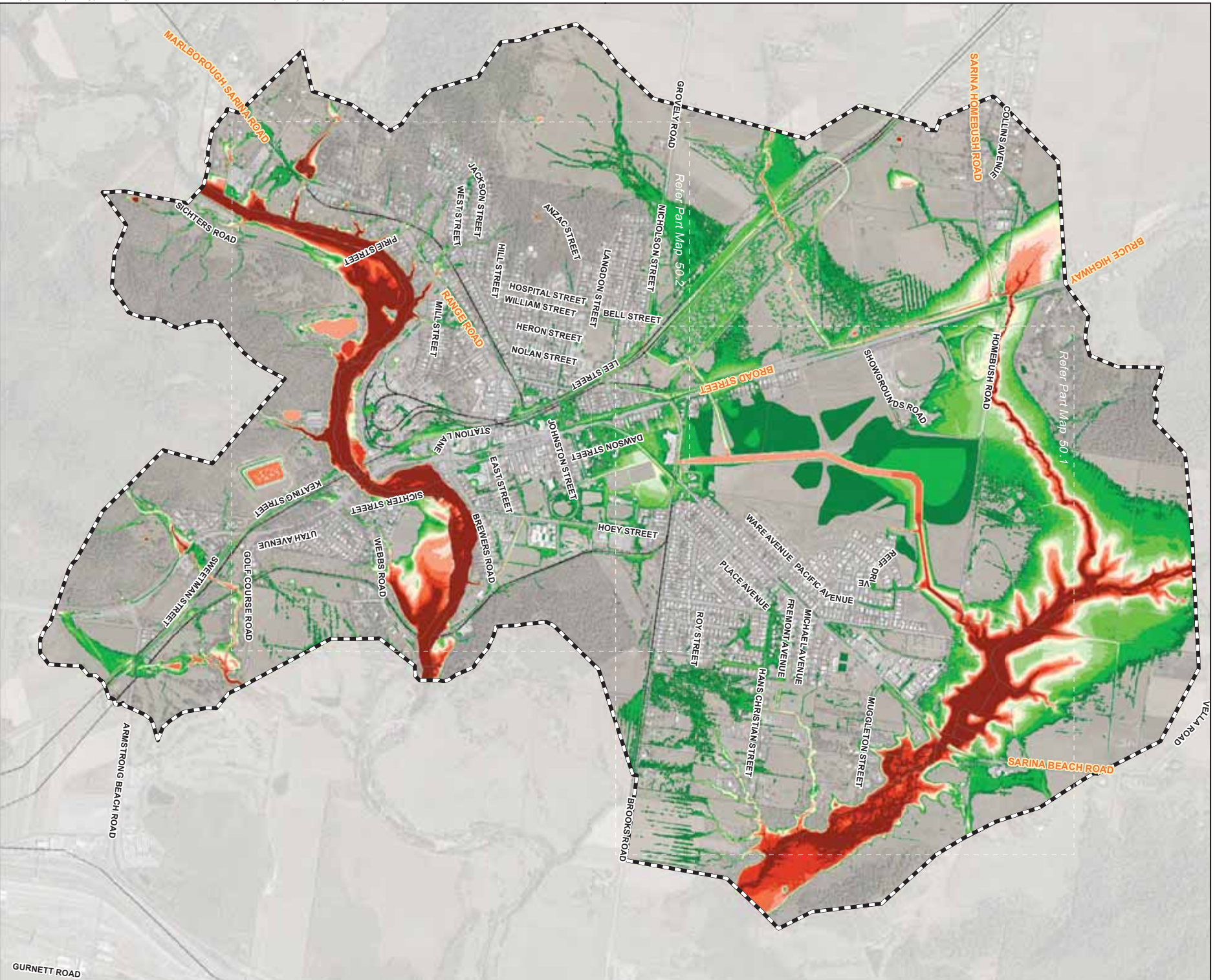
PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**49.1**



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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- <math>< 0.20</math>
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- > 3.00



1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Depth**  
Developed Case - 0.5% AEP  
(200 yr ARI) 1440min Storm

PROJECT ID	60567081
CREATED BY	beggh
LAST MODIFIED	13/08/18
VERSION	01

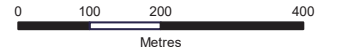
Map  
**50**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

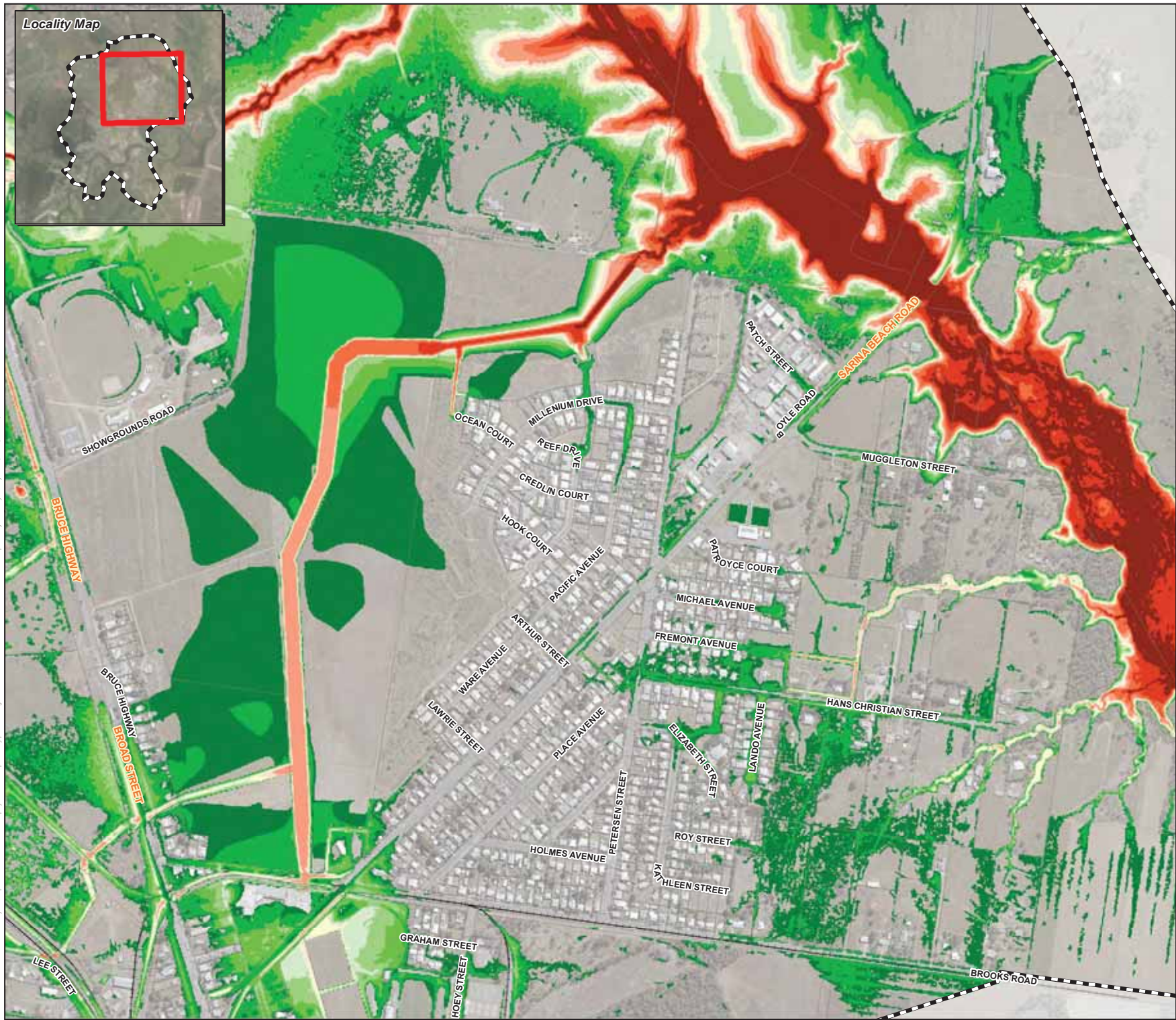
Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (36m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
**Developed Case - 0.5% AEP**  
**(200 yr ARI) 1440min Storm**

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**50.1**

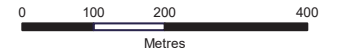


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
- Depth = 0.1m  
- Area = 4 Cells (50m)  
Data sources:  
Base Data (c) 2018 (QLD Gov)  
Street Data (c) 2017 (MRC)

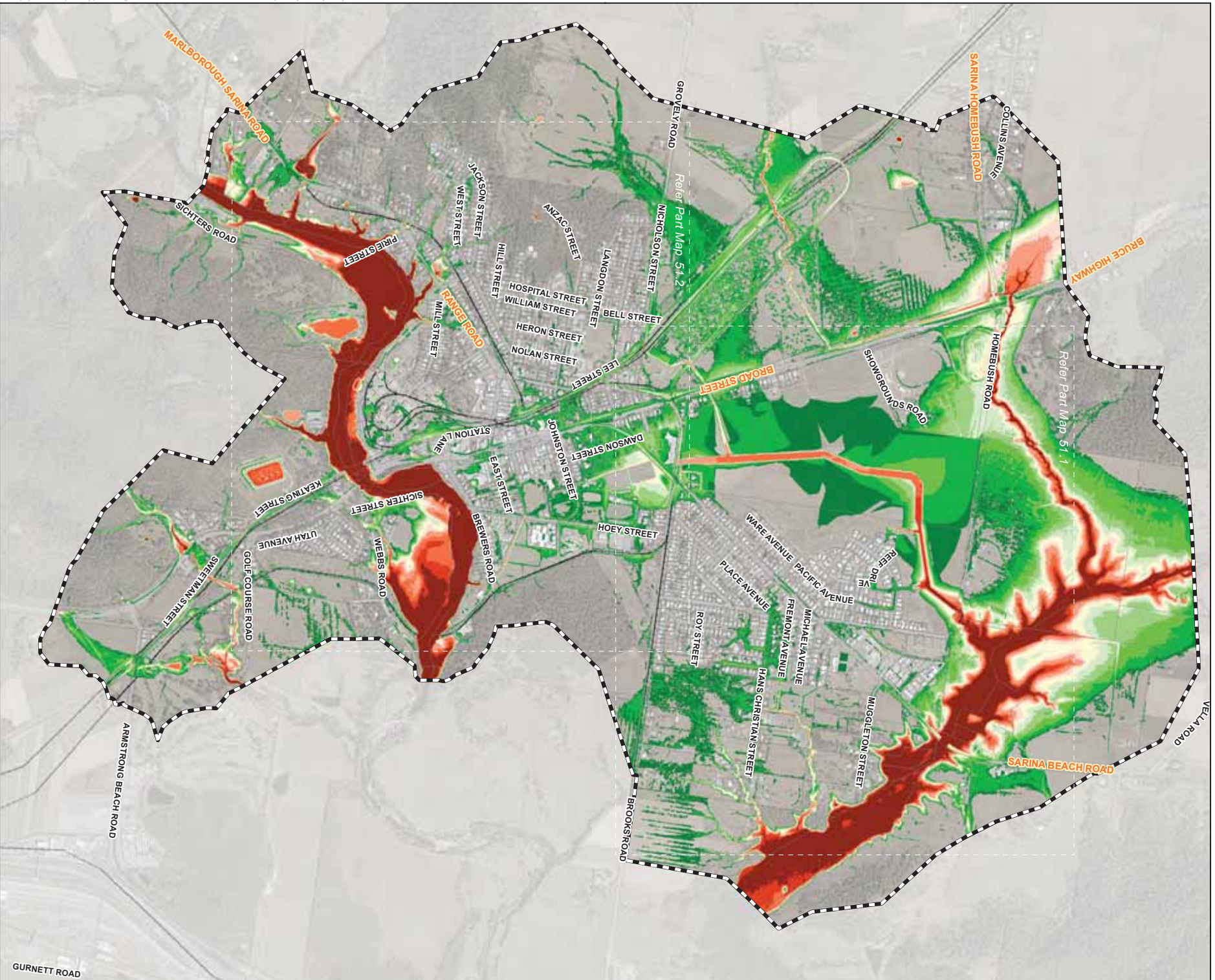
**MACKAY REGIONAL COUNCIL**  
**Sarina Drainage Study**

**Peak Flood Depth**  
Developed Case - 0.5% AEP  
(200 yr ARI) 1440min Storm

PROJECT ID: 60567081  
CREATED BY: brighth  
LAST MODIFIED: 13/08/18  
VERSION: v01

Map  
**50.2**

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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- <math>< 0.20</math>
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00



1:16,000 (When printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

**Peak Flood Depth**  
Developed Case - 0.2% AEP  
(500 yr ARI) 1440min Storm

PROJECT ID	60567081
CREATED BY	beggh
LAST MODIFIED	13/08/18
VERSION	01

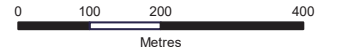
Map  
**51**

A3 size

Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

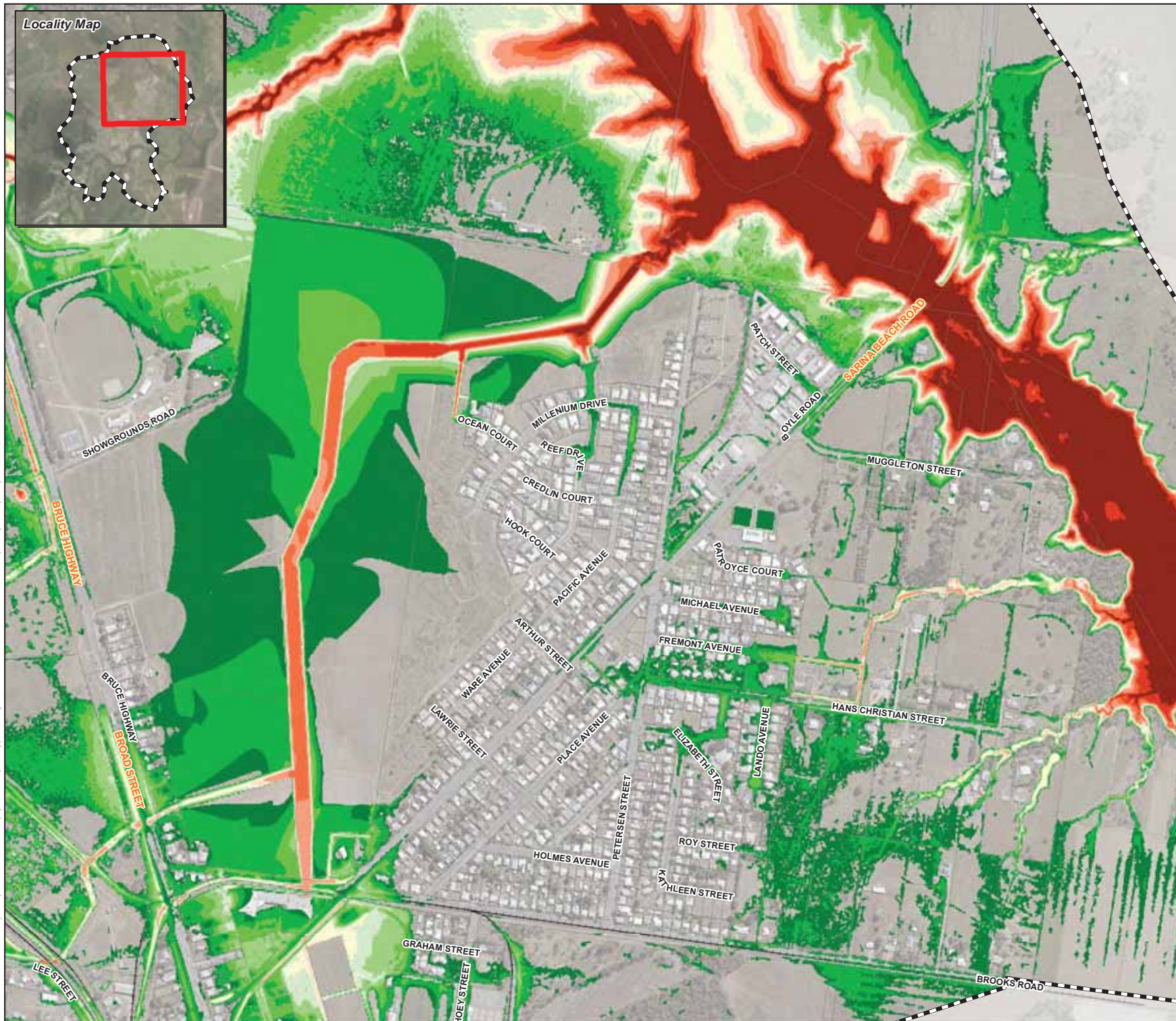
Results Filters Applied:  
 - Depth = 0.1m  
 - Area = 4 Cells (36m)  
 Data sources:  
 Base Data (c) 2018 (QLD Gov)  
 Street Data (c) 2017 (MRC)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
 Developed Case - 0.2% AEP  
 (500 yr ARI) 1440min Storm

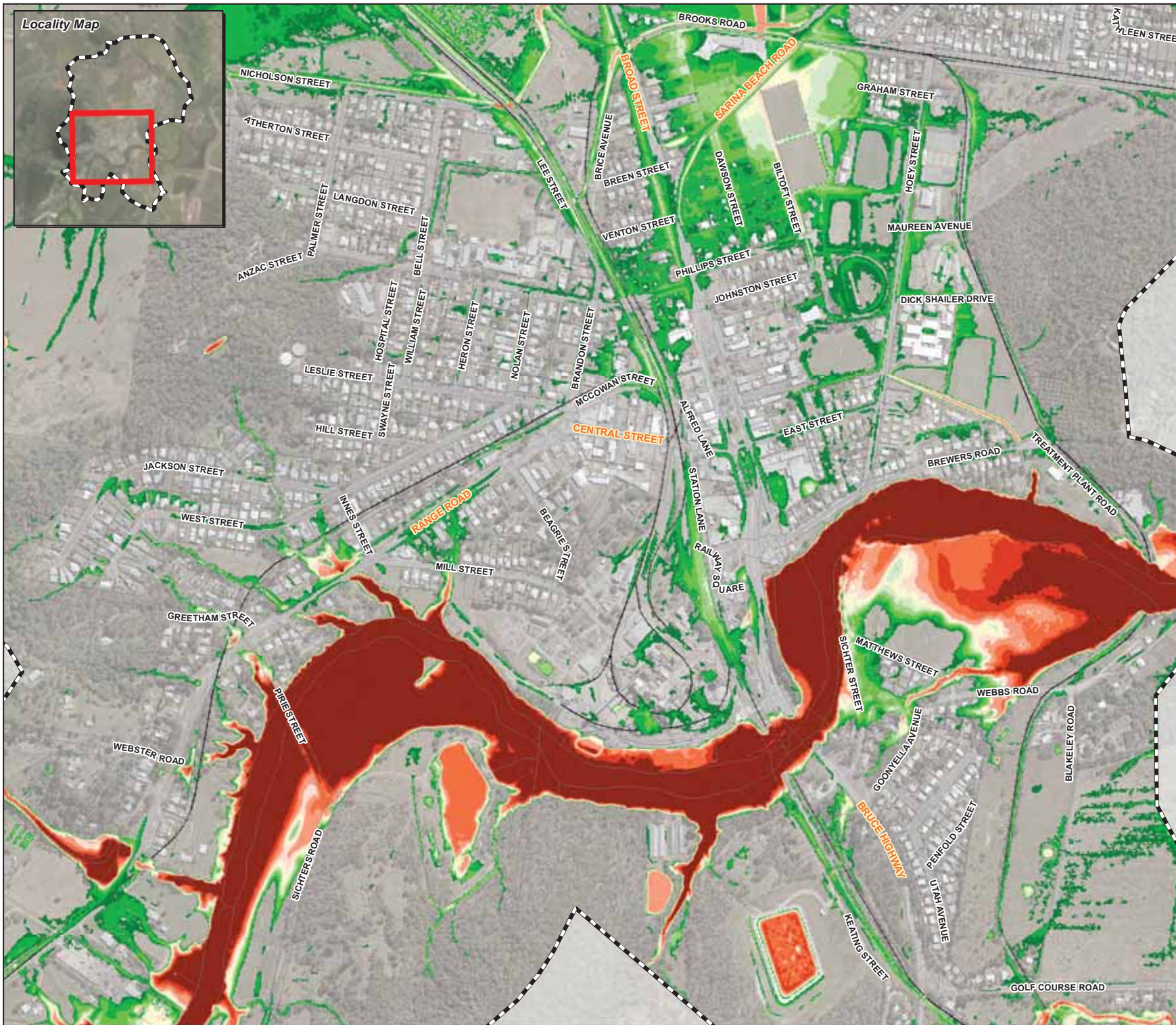
PROJECT ID: 60567081  
 CREATED BY: brighth  
 LAST MODIFIED: 13/08/18  
 VERSION: v01

Map  
**51.1**

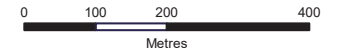


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Locality Map



GDA 1994 MGA Zone 55



1:7,500 (when printed at A3)

**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line

**Peak Flood Depth (m)**

- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- 2.50 - 3.00
- > 3.00

Results Filters Applied:  
 - Depth = 0.1m  
 - Area = 4 Cells (50m)  
 Data sources:  
 Base Data (c) 2018 (QLD Gov)  
 Street Data (c) 2017 (MRC)

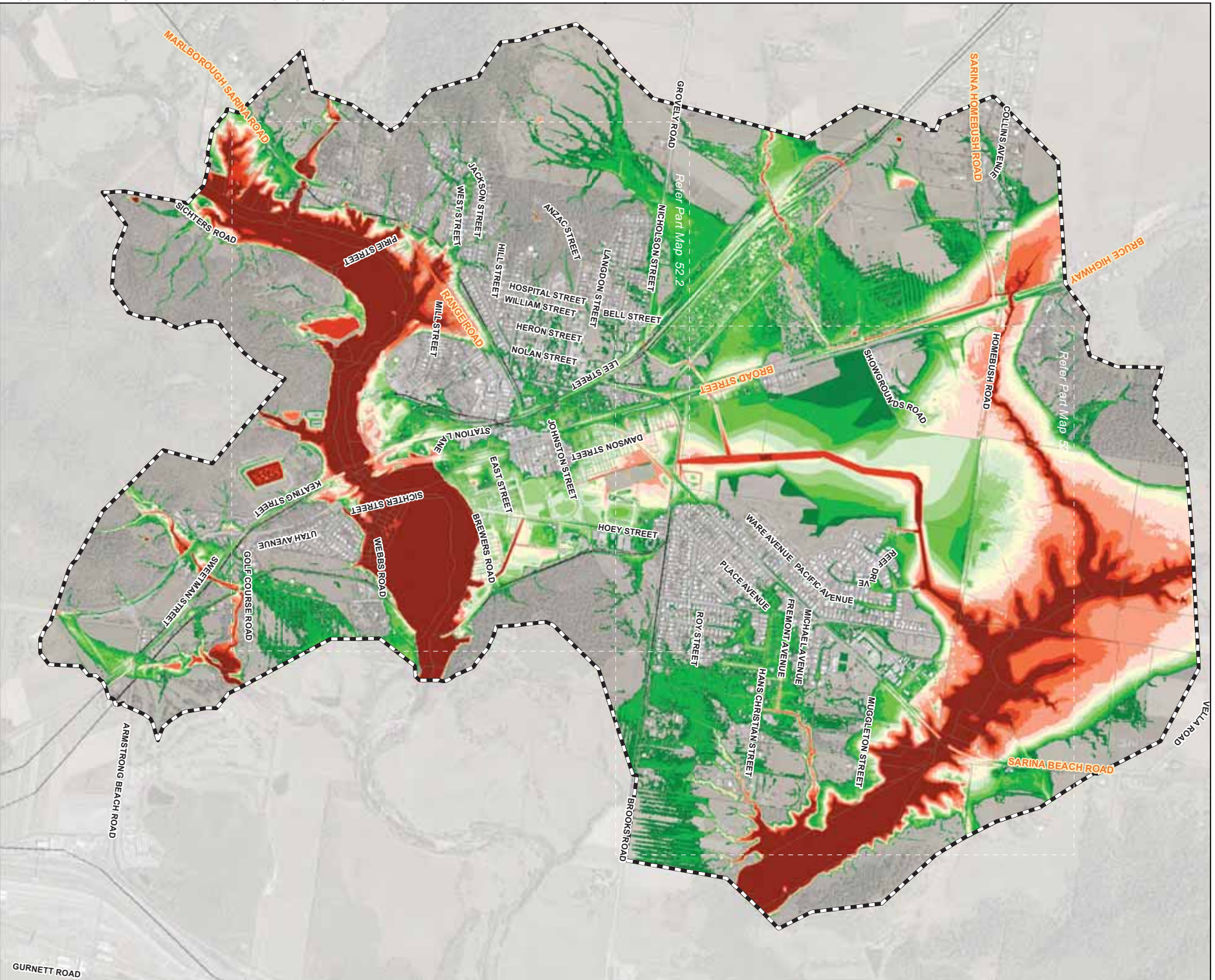
**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
 Developed Case - 0.2% AEP  
 (500 yr ARI) 1440min Storm

PROJECT ID: 60567081  
 CREATED BY: brighgh  
 LAST MODIFIED: 13/08/18  
 VERSION: v01

Map  
**51.2**

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**LEGEND**

- Model Boundary
- Cadastre
- QLD Rail Line
- Peak Flood Depth (m)**
- < 0.20
- 0.20 - 0.40
- 0.40 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.25
- 1.25 - 1.50
- 1.50 - 2.00
- 2.00 - 2.50
- > 3.00

0 200 400 800  
metres  
GDA 1994 MGA Zone 55

1:16,000 (when printed at A3)

**MACKAY REGIONAL COUNCIL**  
Sarina Drainage Study

Peak Flood Depth  
Developed Case  
PMF Event 360min Storm

Project: Sarina Drainage Study  
Drawn: [Name]  
Checked: [Name]  
Scale: 1:16,000  
Sheet: 52 of 101

PROJECT ID: 60567081  
CREATED BY: bogn  
LAST MODIFIED: 13/08/18  
VERSION: 01

Map  
**52**

A3 size