

Little Creek Catchment Floodplain Risk Management Study

Final Report
Volume 2 of 2: Figures

October 2021



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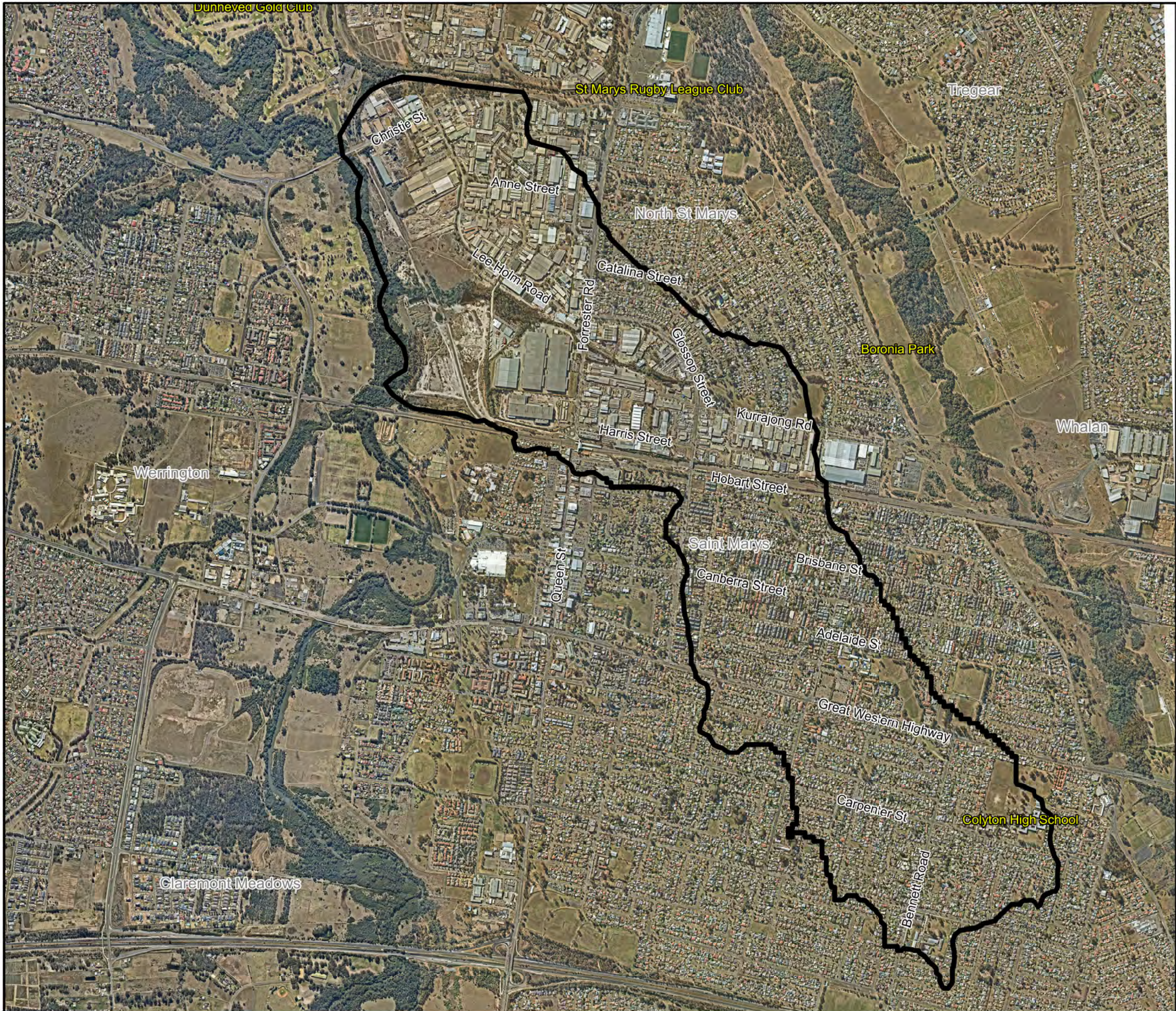
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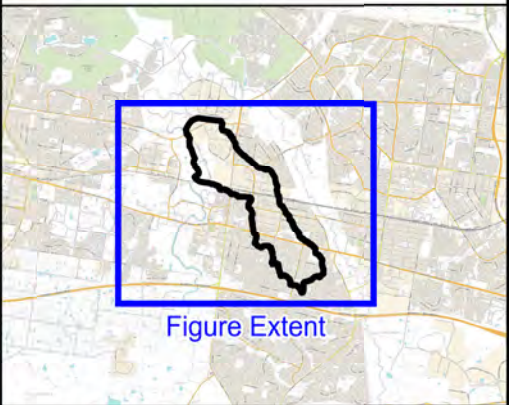
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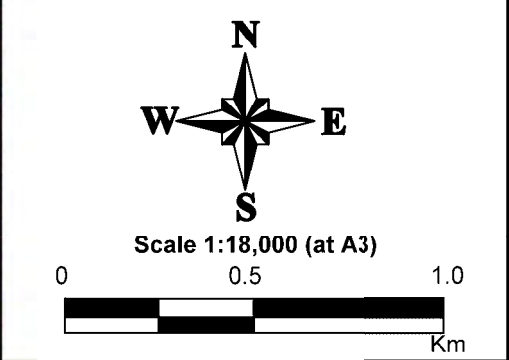
Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Catchment Boundary

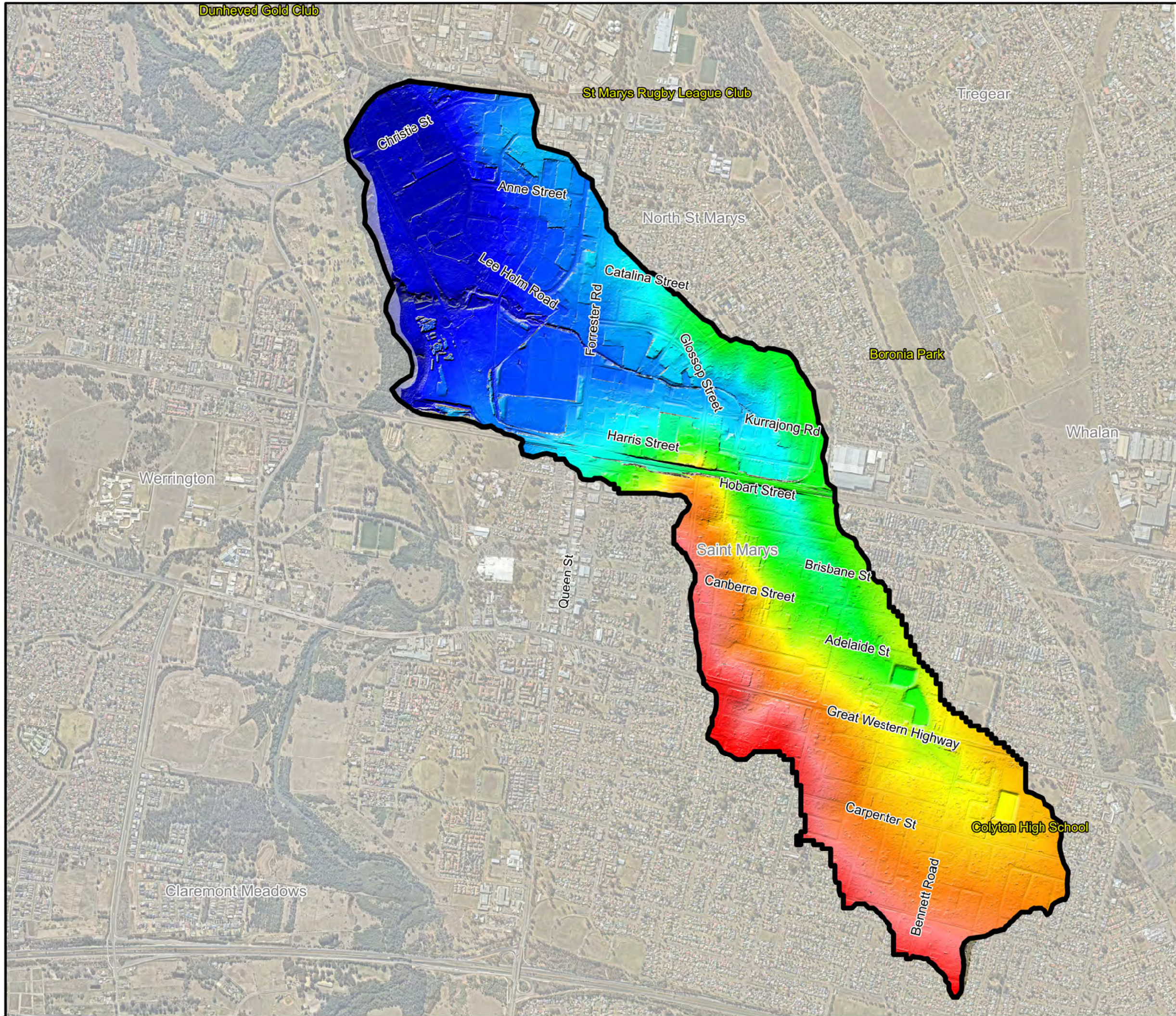
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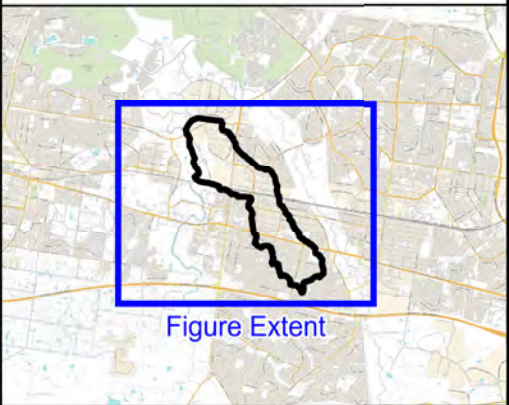
**Figure 1:
Little Creek
Catchment**

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 Catchment Simulation Solutions
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File Name: Little Creek Catchment.wor



Little Creek Catchment Floodplain Risk Management Study and Plan

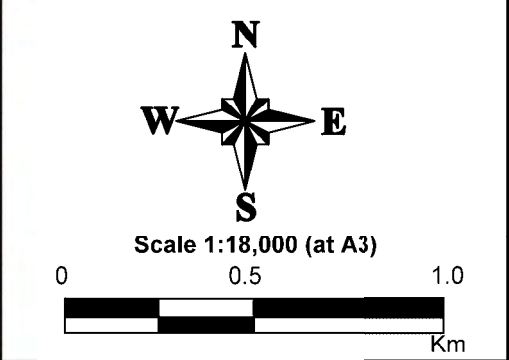


LEGEND

Ground Surface Elevation (mAHD)

Dark Blue	<= 20	Yellow	45
Blue	25	Orange	50
Light Blue	30	Light Red	55
Cyan	35	Red	>= 60
Green	40		

Notes:
Ground Elevations from 2019 LiDAR

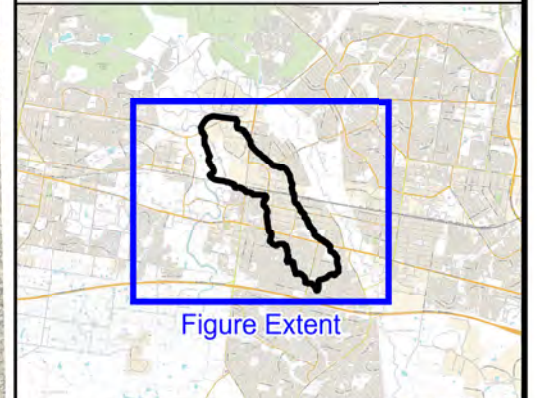


**Figure 2:
Ground Surface Elevations**













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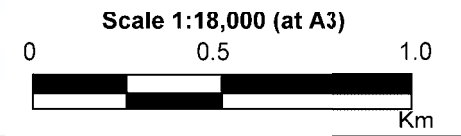
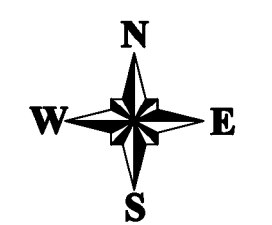
File Name: DEM Surface.wor



LEGEND

	Catchment Boundary
Land Zone	
Residential	Business / Mixed Use
 R2	 B1
 R3	 B4
 R4	Industrial
Environmental	 IN1
 E2	Special Activities
Recreation	 SP1
 RE1	 SP2
 RE2	

Notes:

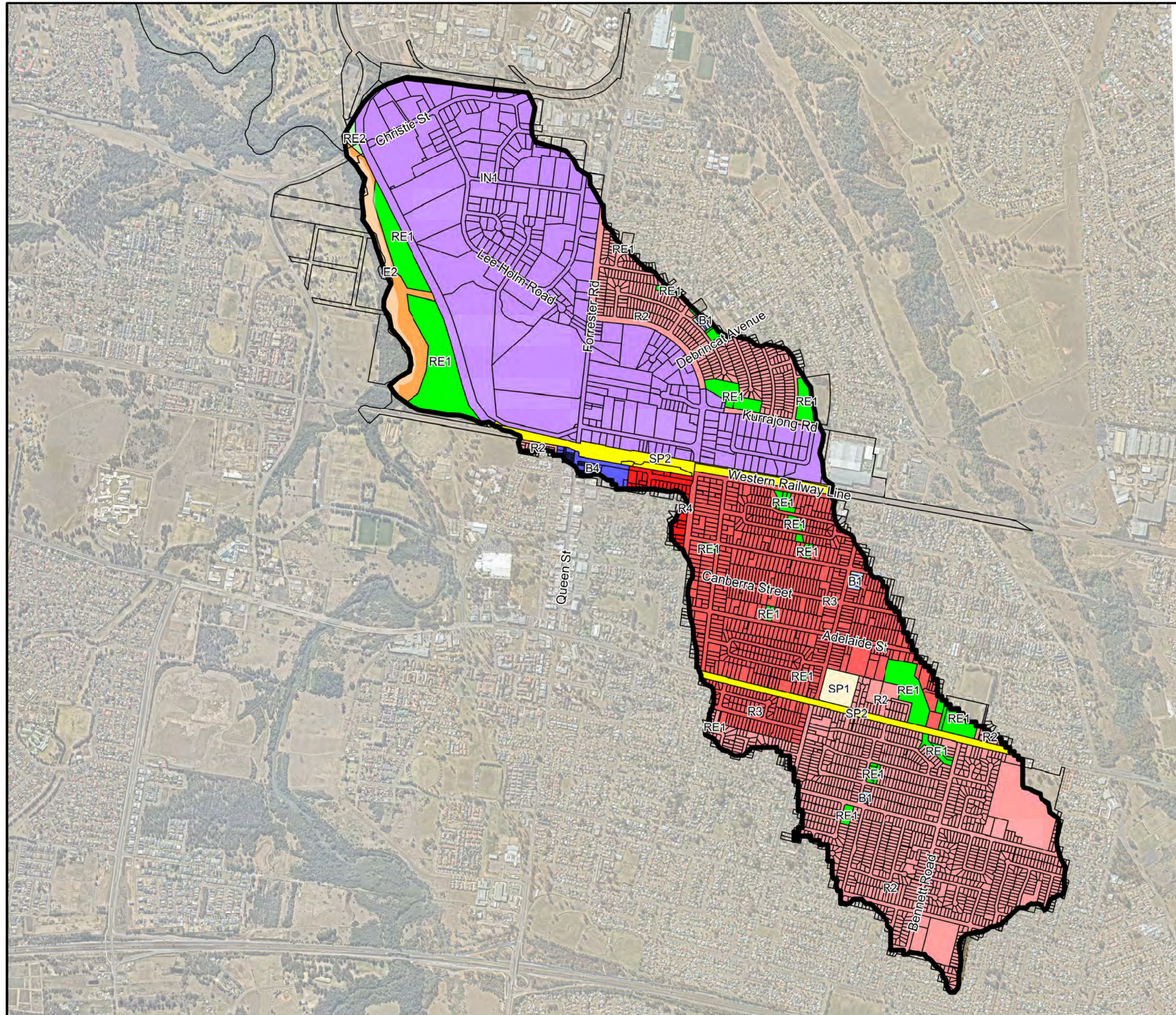


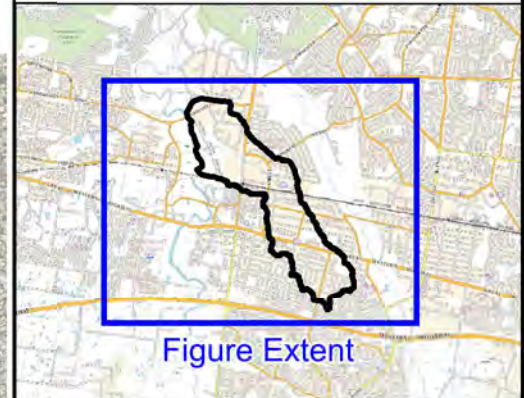
**Figure 3:
Existing Land
Use Zones**

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 Sydney, NSW 2000

File Name: Little Creek Existing LandUse.wor



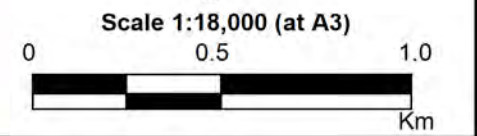


LEGEND

-  Catchment Boundary
-  Critical Facility
- Vulnerable Facility**
-  School
-  Child Care Centre
-  Church


Notes:

List of facilities is not exhaustive and there may be additional locations that are not identified on this plan.



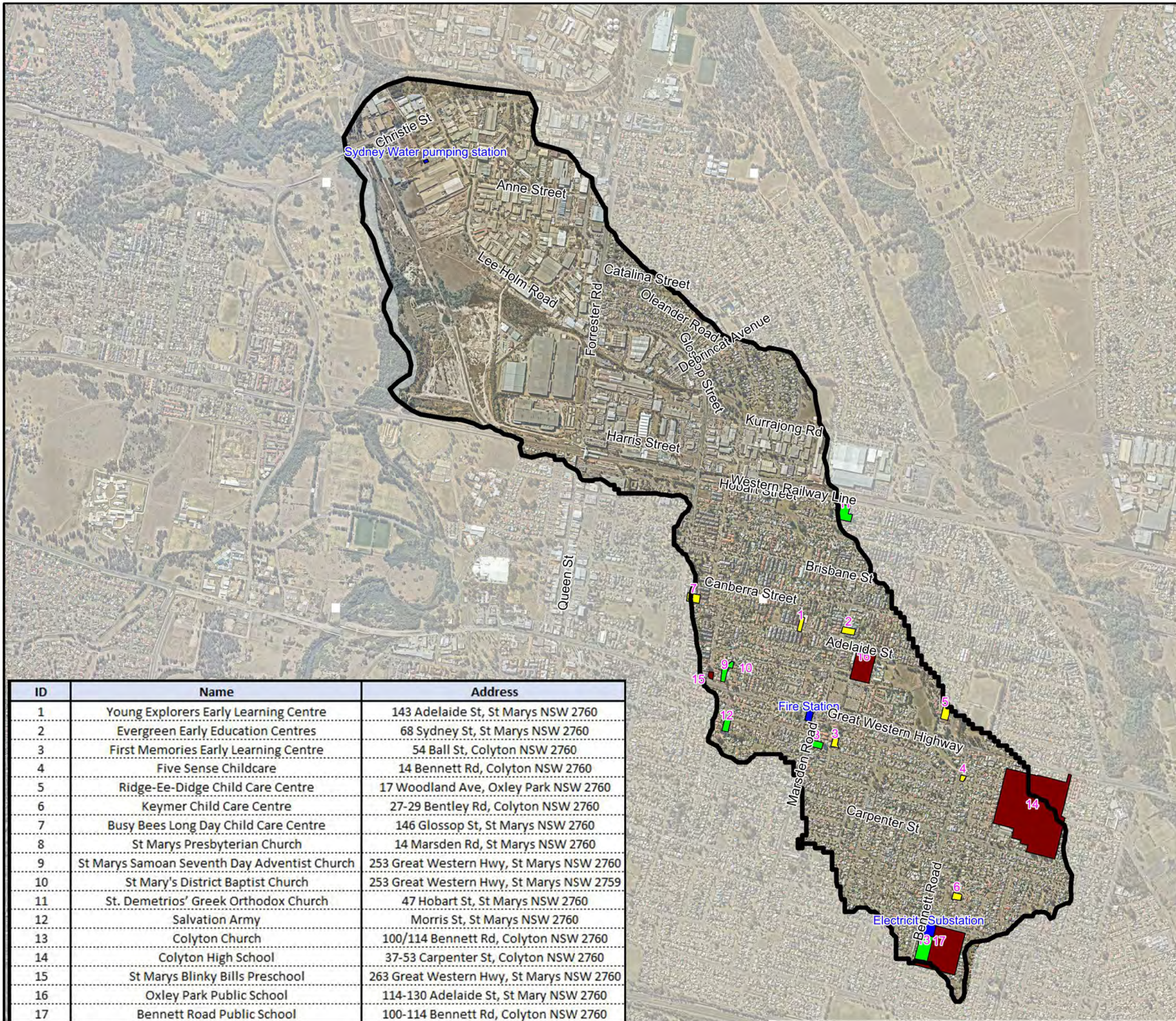
**Figure 4:
Vulnerable and Critical Facilities**

Prepared By:

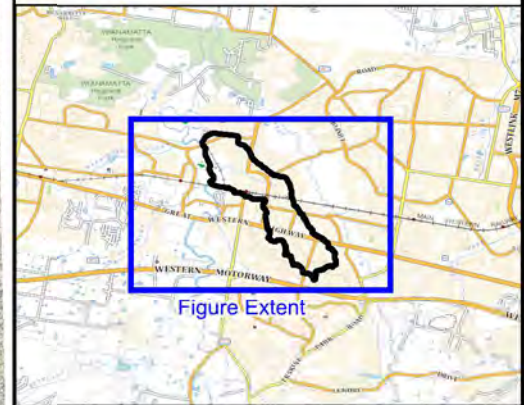
 **Catchment Simulation Solutions**
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Sydney, NSW 2000

File Name: Vulnerable and Critical Facilities .wor






ID	Name	Address
1	Young Explorers Early Learning Centre	143 Adelaide St, St Marys NSW 2760
2	Evergreen Early Education Centres	68 Sydney St, St Marys NSW 2760
3	First Memories Early Learning Centre	54 Ball St, Colyton NSW 2760
4	Five Sense Childcare	14 Bennett Rd, Colyton NSW 2760
5	Ridge-Ee-Didge Child Care Centre	17 Woodland Ave, Oxley Park NSW 2760
6	Keymer Child Care Centre	27-29 Bentley Rd, Colyton NSW 2760
7	Busy Bees Long Day Child Care Centre	146 Glossop St, St Marys NSW 2760
8	St Marys Presbyterian Church	14 Marsden Rd, St Marys NSW 2760
9	St Marys Samoan Seventh Day Adventist Church	253 Great Western Hwy, St Marys NSW 2760
10	St Mary's District Baptist Church	253 Great Western Hwy, St Marys NSW 2759
11	St. Demetrios' Greek Orthodox Church	47 Hobart St, St Marys NSW 2760
12	Salvation Army	Morris St, St Marys NSW 2760
13	Colyton Church	100/114 Bennett Rd, Colyton NSW 2760
14	Colyton High School	37-53 Carpenter St, Colyton NSW 2760
15	St Marys Blinky Bills Preschool	263 Great Western Hwy, St Marys NSW 2760
16	Oxley Park Public School	114-130 Adelaide St, St Mary NSW 2760
17	Bennett Road Public School	100-114 Bennett Rd, Colyton NSW 2760



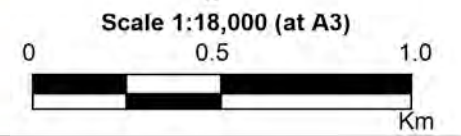
Little Creek Catchment Flood Risk Management Study and Plan




LEGEND

-  Catchment Boundary
-  Land with Scenic and Landscape Values
- Heritage Sites
 -  Aboriginal Heritage Site
 -  General Heritage Site
 -  State Heritage Site

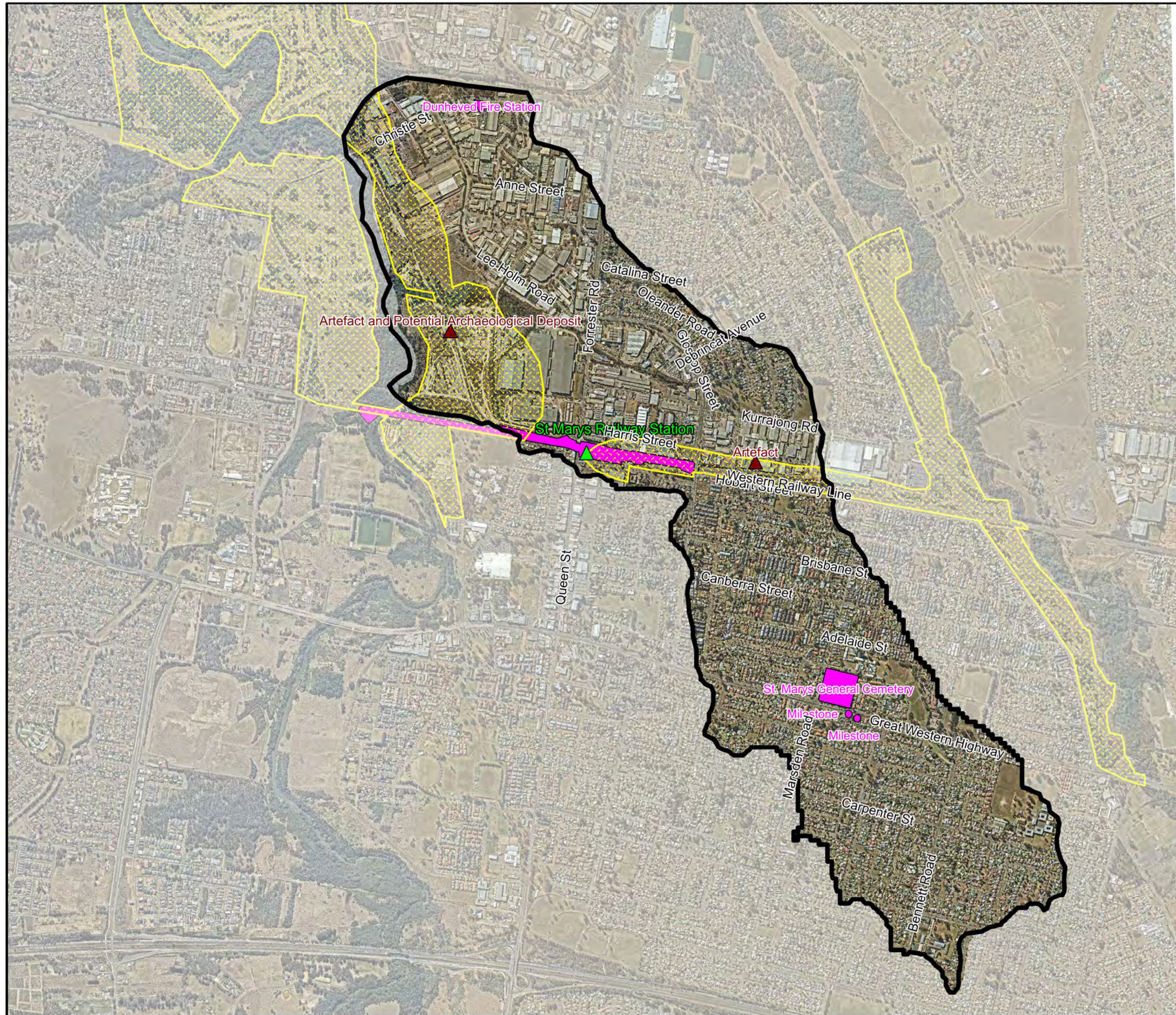
Notes:



**Figure 5:
Environmental and
Heritage Constraints**

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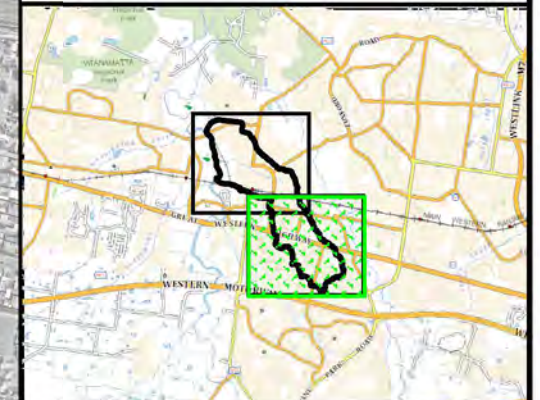
File Name: Environmental and Heritage Constraints.wor



FLOODWATER DEPTH MAPS













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

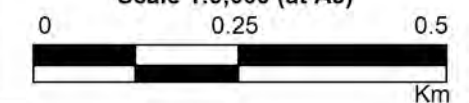



Figure 6.1
Peak Floodwater
Depths for the
0.5EY Flood

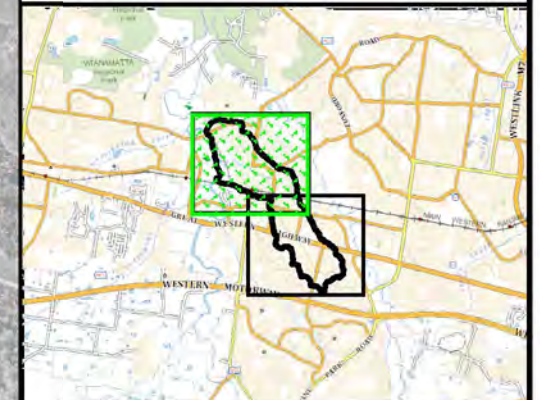
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Sydney, NSW 2000

File Name: Figure 6 Peak Floodwater Depths for the 0.5EY Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

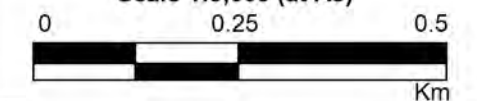

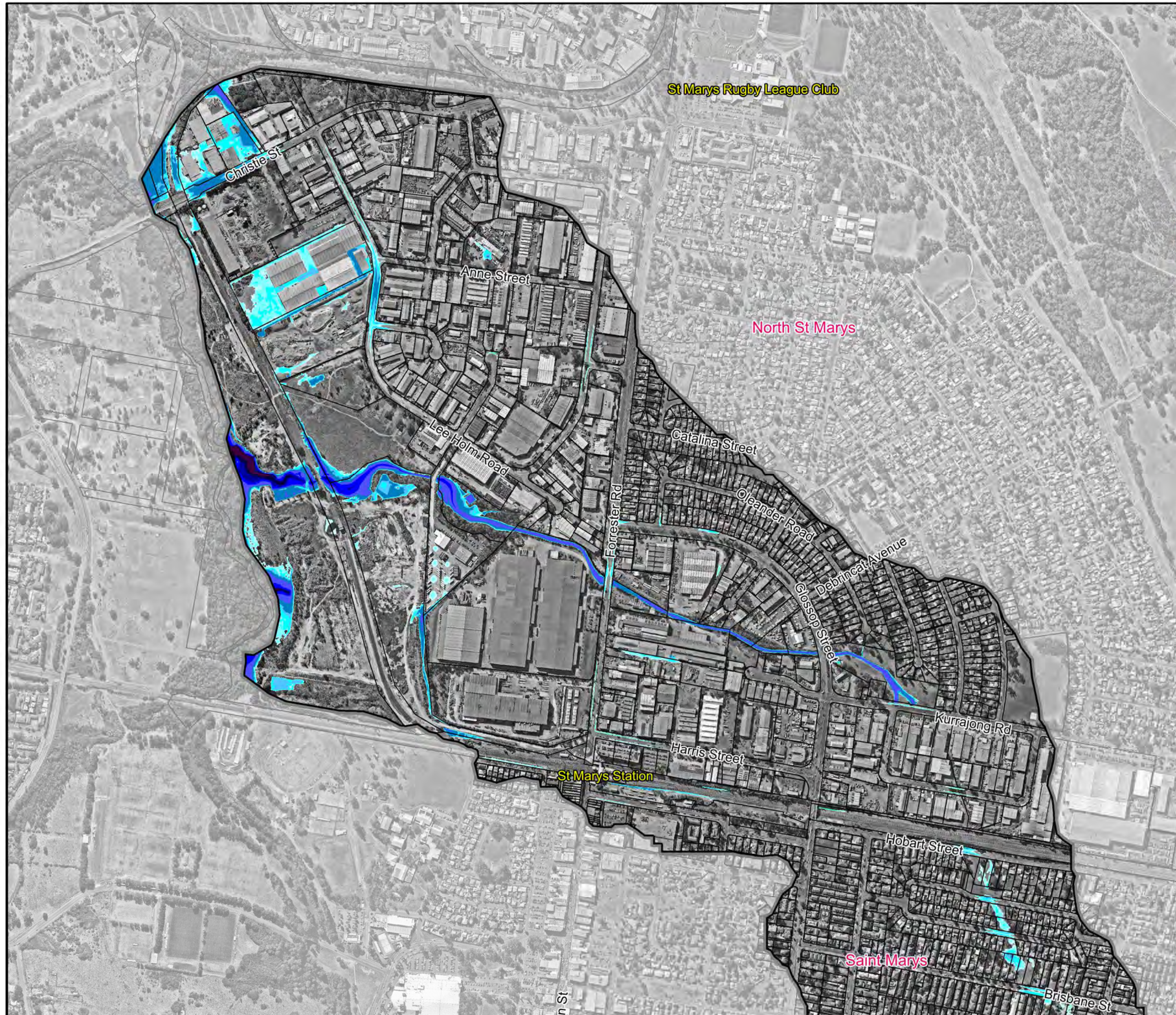


Figure 6.2
Peak Floodwater
Depths for the
0.5EY Flood

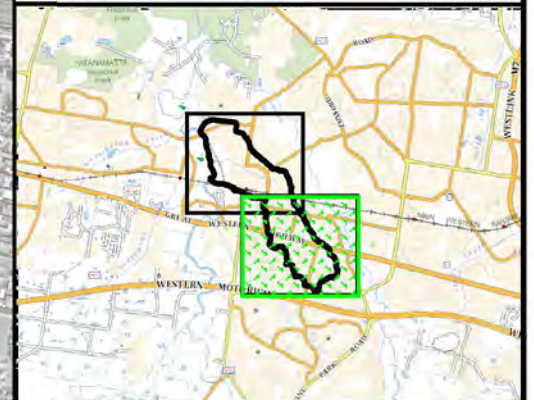
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File Name: Figure 6 Peak Floodwater Depths for the 0.5EY Flood.wor













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LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

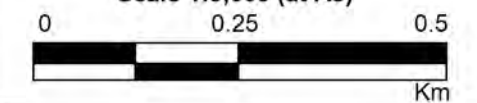



Figure 7.1
Peak Floodwater
Depths for the
20% AEP Flood

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File Name: Figure 7 Peak Floodwater Depths for the 20% AEP Flood.wor













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LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

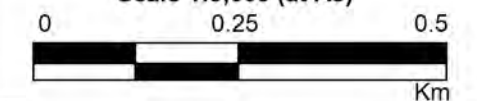

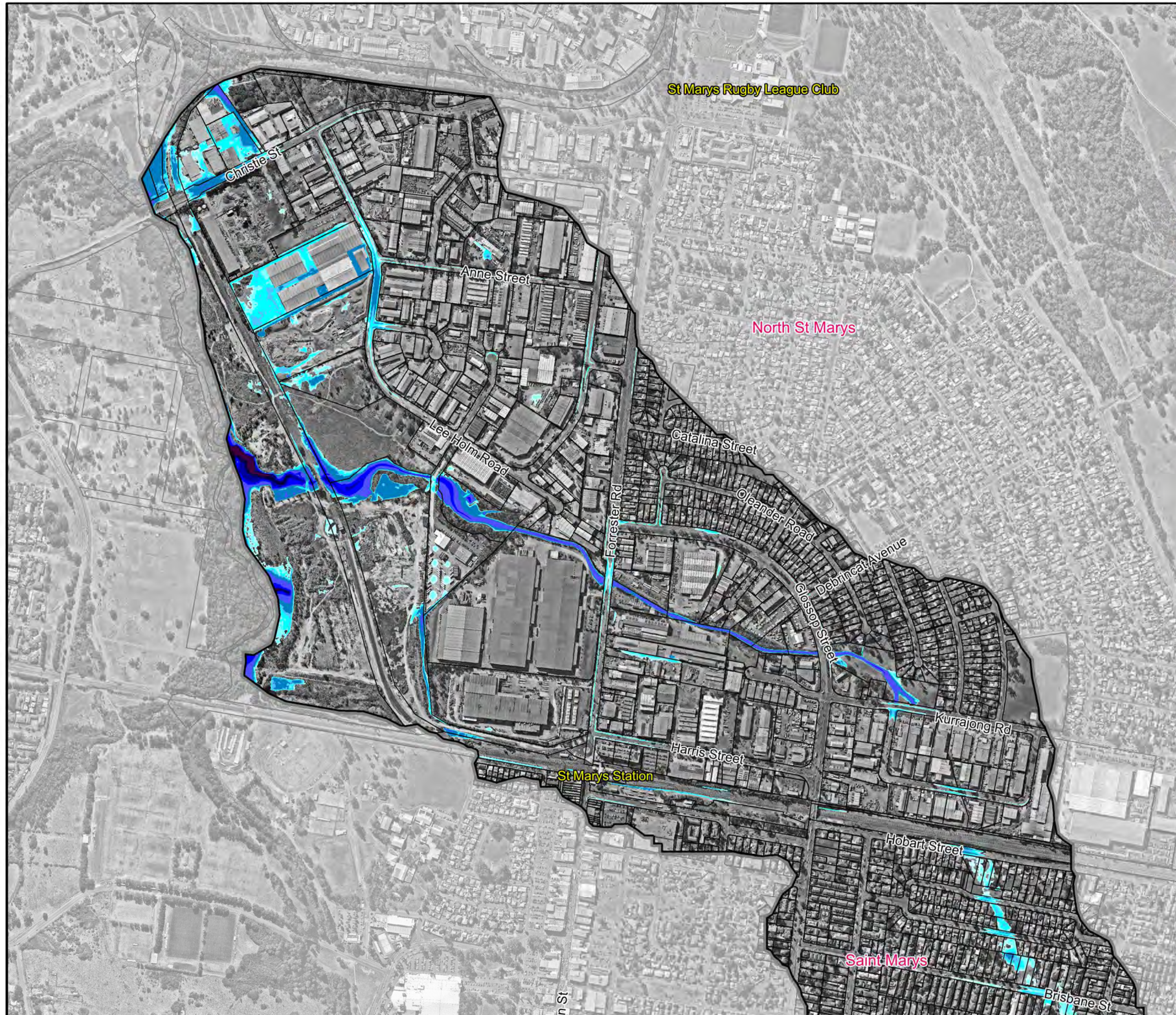


Figure 7.2
Peak Floodwater
Depths for the
20% AEP Flood

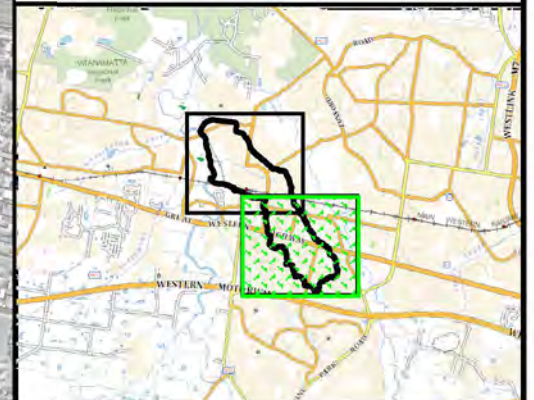
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File Name: Figure 7 Peak Floodwater Depths for the 20% AEP Flood.wor













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LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

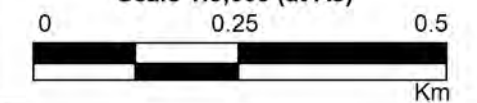



Figure 8.1
Peak Floodwater
Depths for the
10% AEP Flood

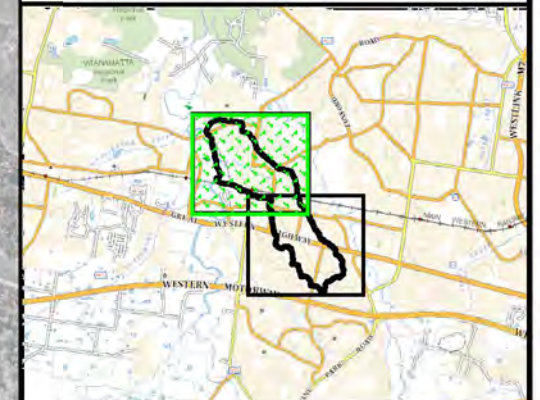
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File Name: Figure 8 Peak Floodwater Depths for the 10% AEP Flood.wor



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LEGEND

Depths (m)

Lightest Blue	0.15 to 0.2
Light Blue	0.2 to 0.3
Medium Light Blue	0.3 to 0.4
Medium Blue	0.4 to 0.5
Dark Blue	0.5 to 1.0
Very Dark Blue	1.0 to 2.0
Dark Purple	2.0 to 3.0
Black	3.0 to 4.0
Dark Purple	4.0 to 5.0
Black	> 5.0

Notes:



Scale 1:9,000 (at A3)

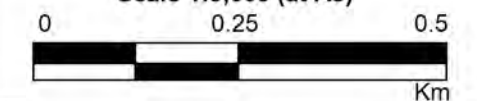

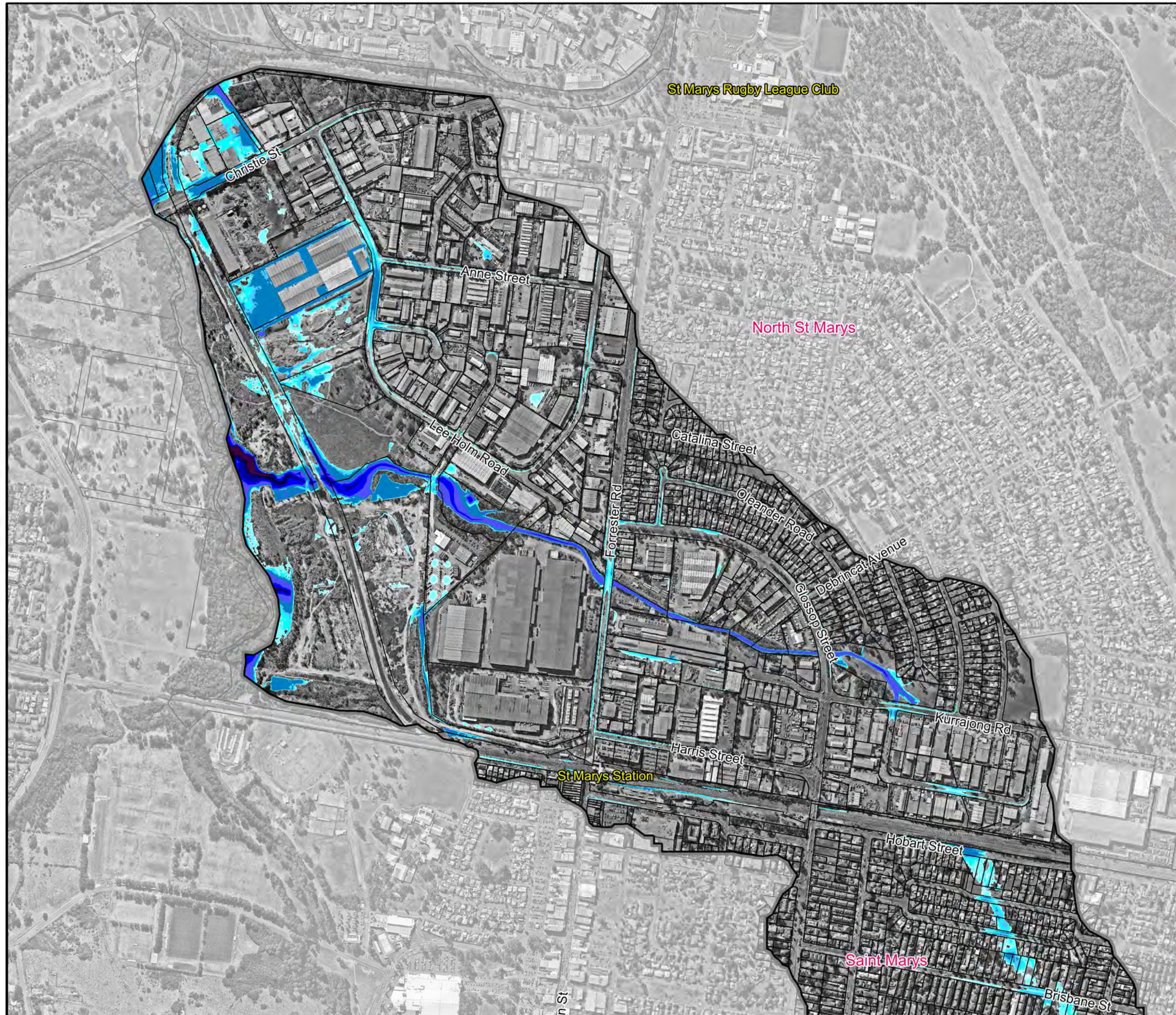


Figure 8.2
Peak Floodwater
Depths for the
10% AEP Flood

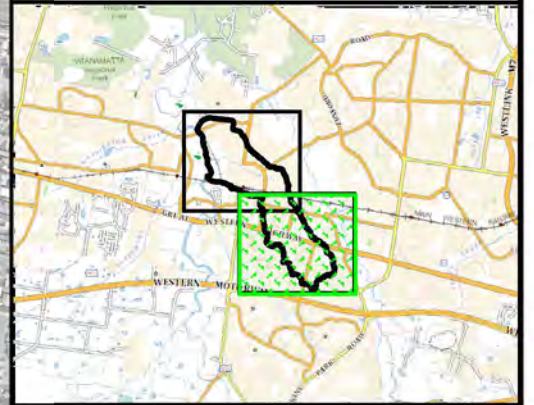
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File Name: Figure 8 Peak Floodwater Depths for the 10% AEP Flood.wor







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LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

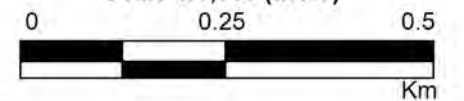



Figure 9.1
Peak Floodwater
Depths for the
5%AEP Flood

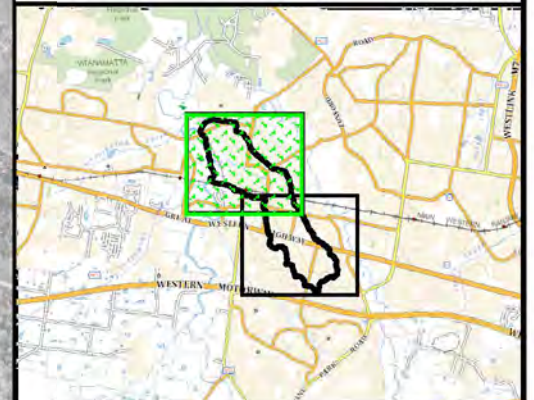
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File Name: Figure 9 Peak Floodwater Depths for the 5%AEP Flood.wor













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LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

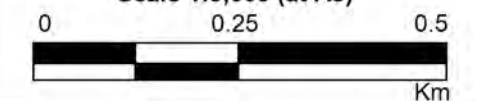

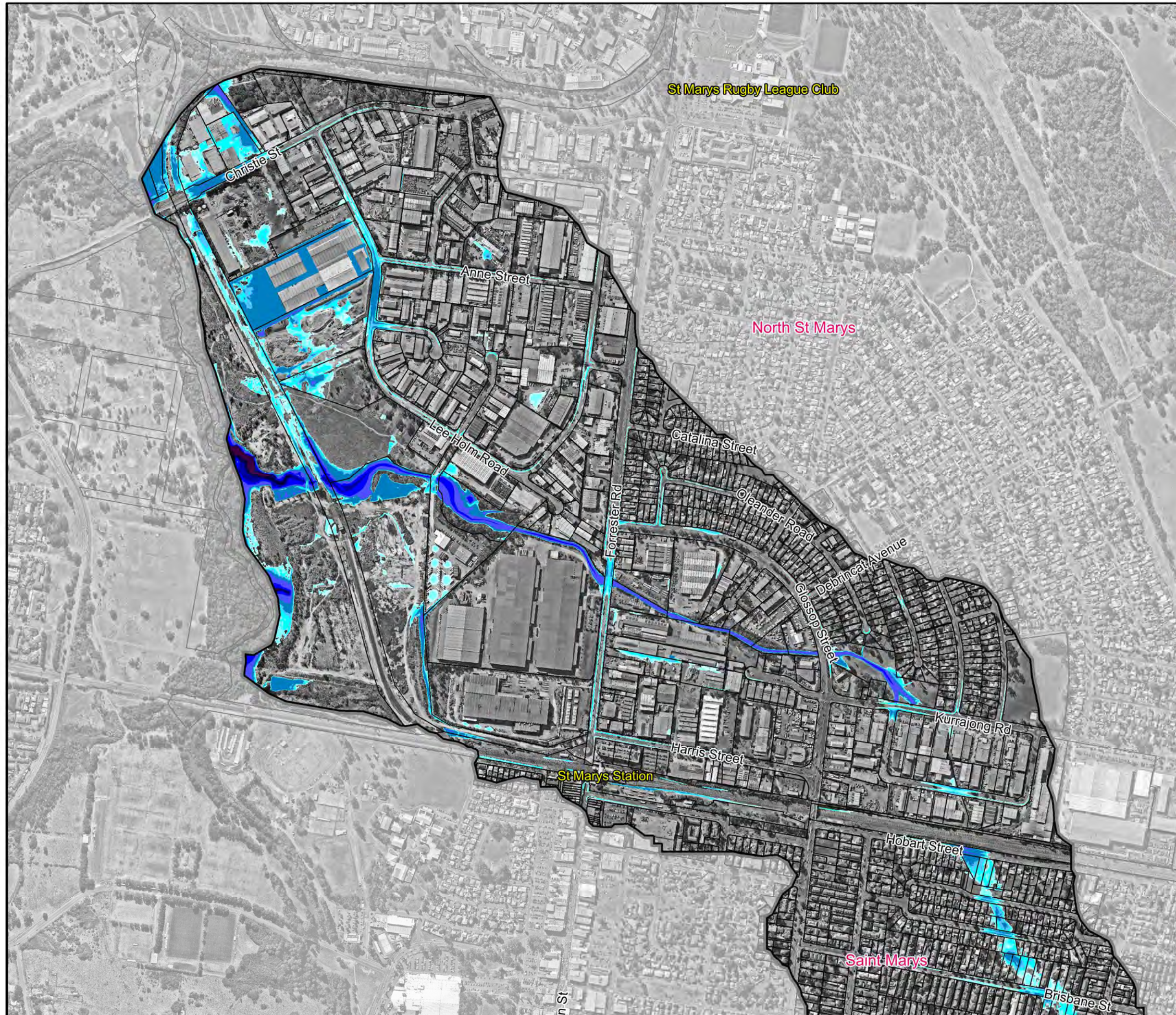


Figure 9.2
Peak Floodwater
Depths for the
5% AEP Flood

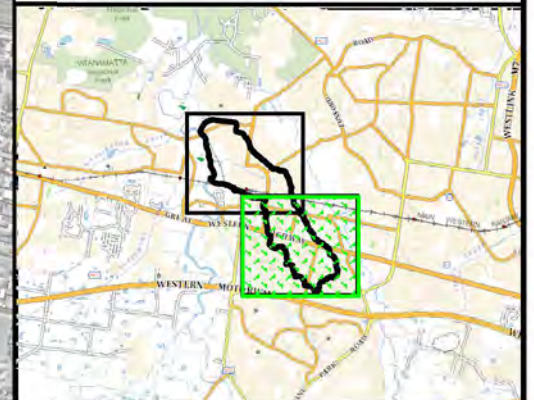
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File Name: Figure 9 Peak Floodwater Depths for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

Lightest Blue	0.15 to 0.2
Light Blue	0.2 to 0.3
Medium Light Blue	0.3 to 0.4
Medium Blue	0.4 to 0.5
Dark Blue	0.5 to 1.0
Very Dark Blue	1.0 to 2.0
Dark Purple	2.0 to 3.0
Black	3.0 to 4.0
Dark Purple	4.0 to 5.0
Black	> 5.0

Notes:

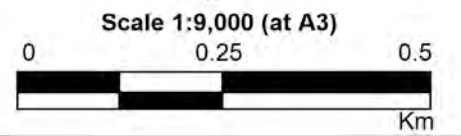


Figure 10.1
Peak Floodwater
Depths for the
2%AEP Flood

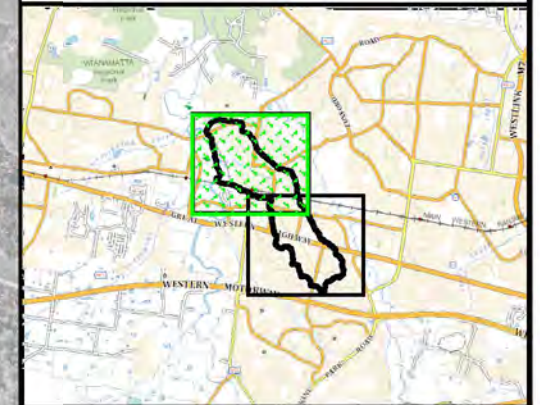
Prepared By:

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 Sydney, NSW 2000

File Name: Figure 10 Peak Floodwater Depths for the 2%AEP Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

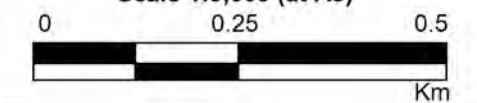

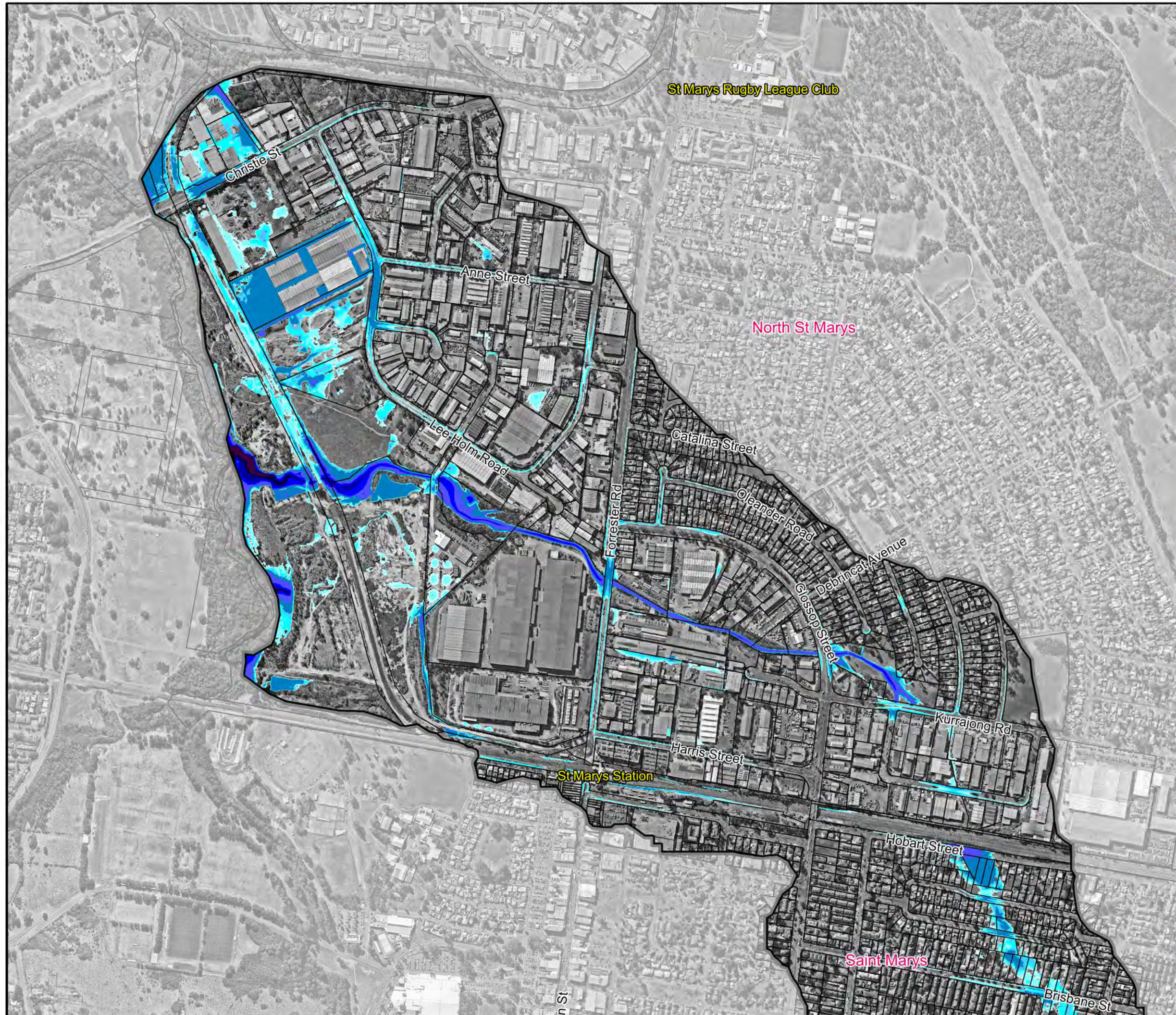


Figure 10.2
Peak Floodwater
Depths for the
2% AEP Flood

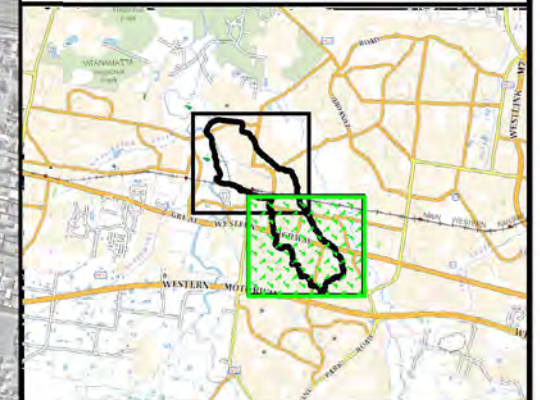
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File Name: Figure 10 Peak Floodwater Depths for the 2% AEP Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

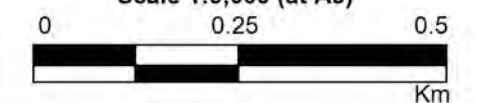



Figure 11.1
Peak Floodwater
Depths for the
1%AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 11 Peak Floodwater Depths for the 1%AEP Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

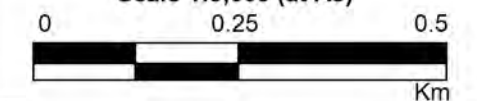

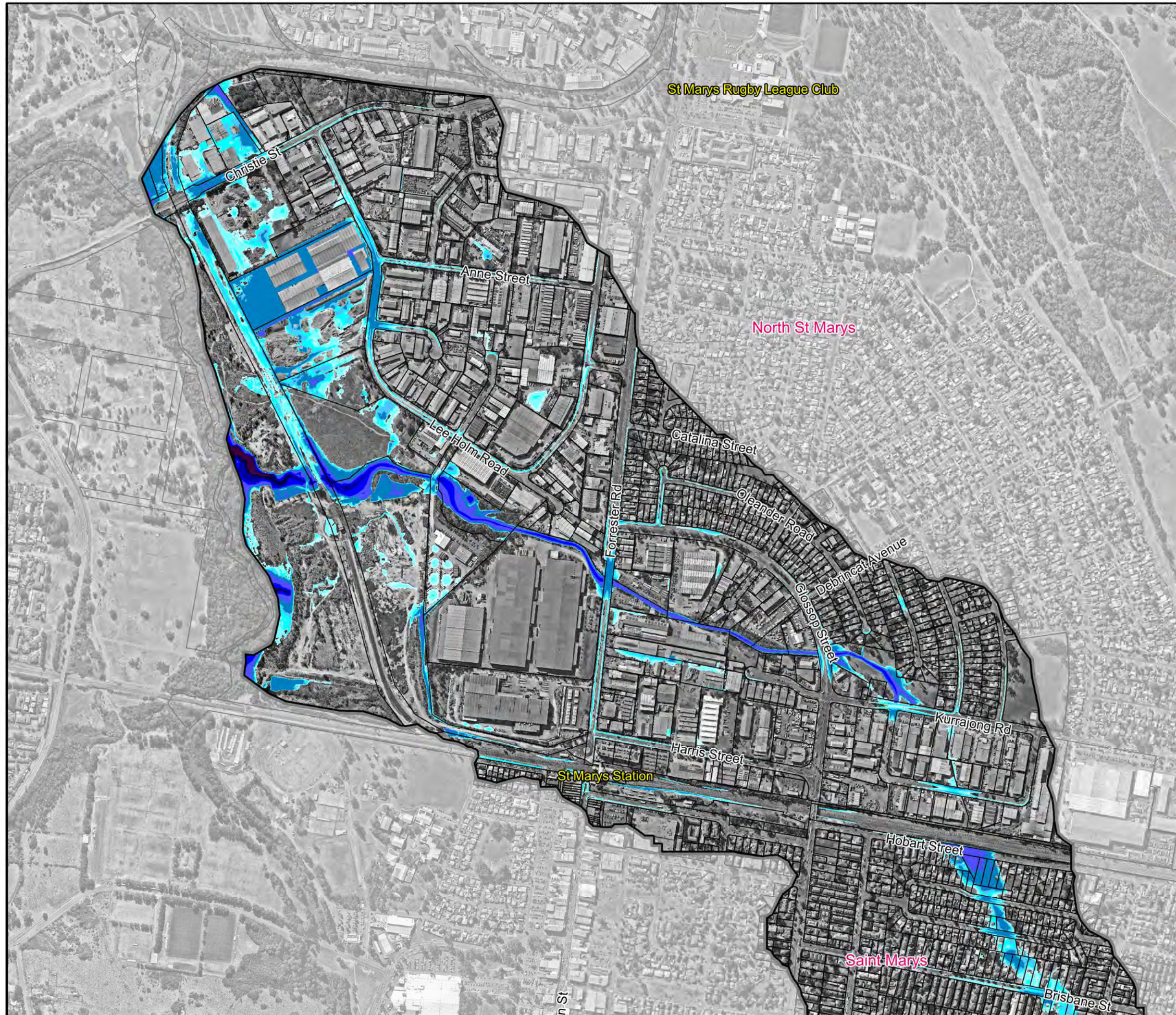


Figure 11.2
Peak Floodwater
Depths for the
1%AEP Flood

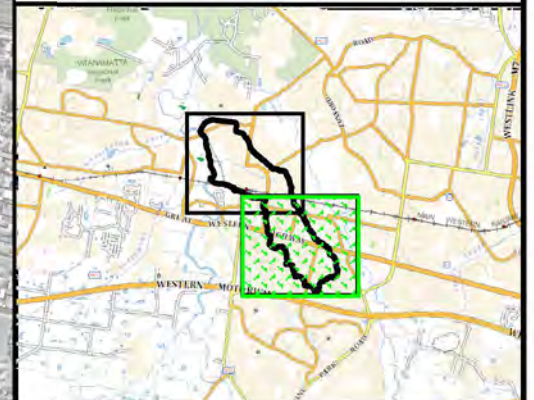
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 11 Peak Floodwater Depths for the 1%AEP Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

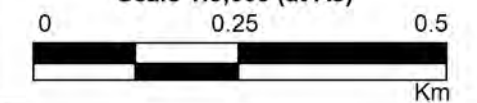



Figure 12.1
Peak Floodwater
Depths for the
0.5%AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 12 Peak Floodwater Depths for the 0.5%AEP Flood.wor













Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:



Scale 1:9,000 (at A3)

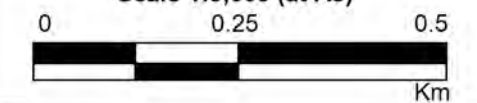

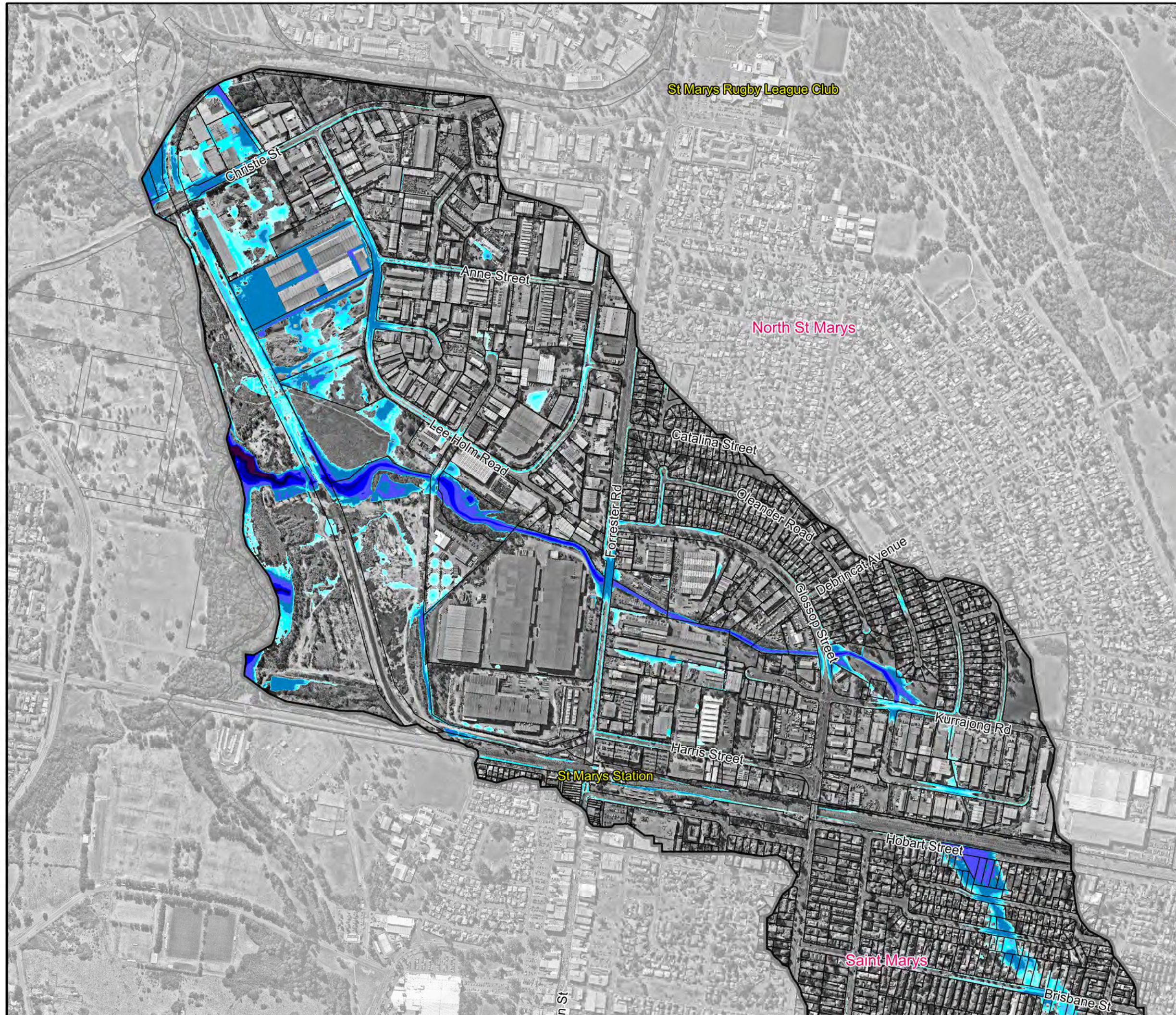


Figure 12.2
Peak Floodwater
Depths for the
0.5% AEP Flood

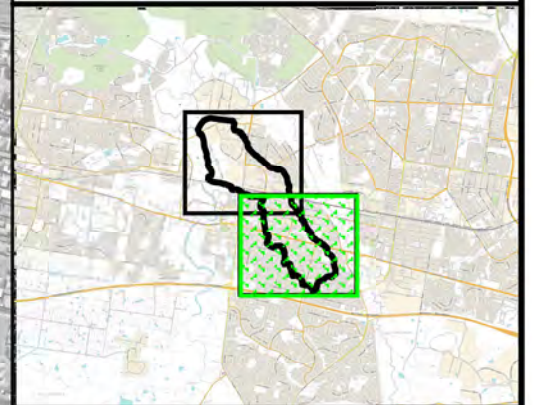
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 12 Peak Floodwater Depths for the 0.5% AEP Flood.wor













**Little Creek Catchment Floodplain
Risk Management Study and Plan**



LEGEND

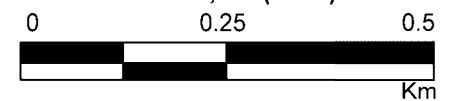
Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:




Scale 1:9,000 (at A3)



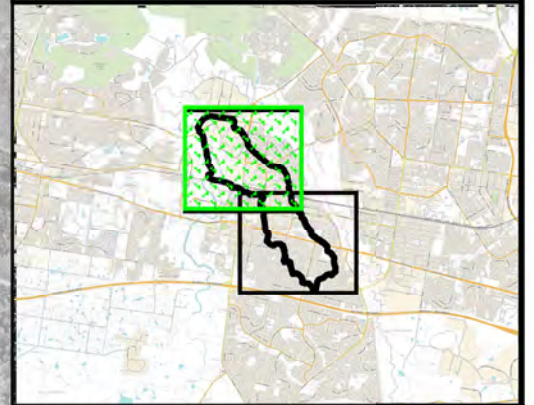
**Figure 13.1
Peak Floodwater
Depths for the
0.2% AEP Flood**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000











File Name: Figure 13 Peak Floodwater Depths for the 0.2% AEP Flood.wor





LEGEND

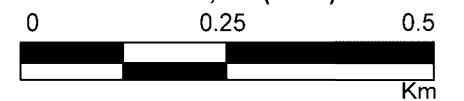
Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0

Notes:




Scale 1:9,000 (at A3)

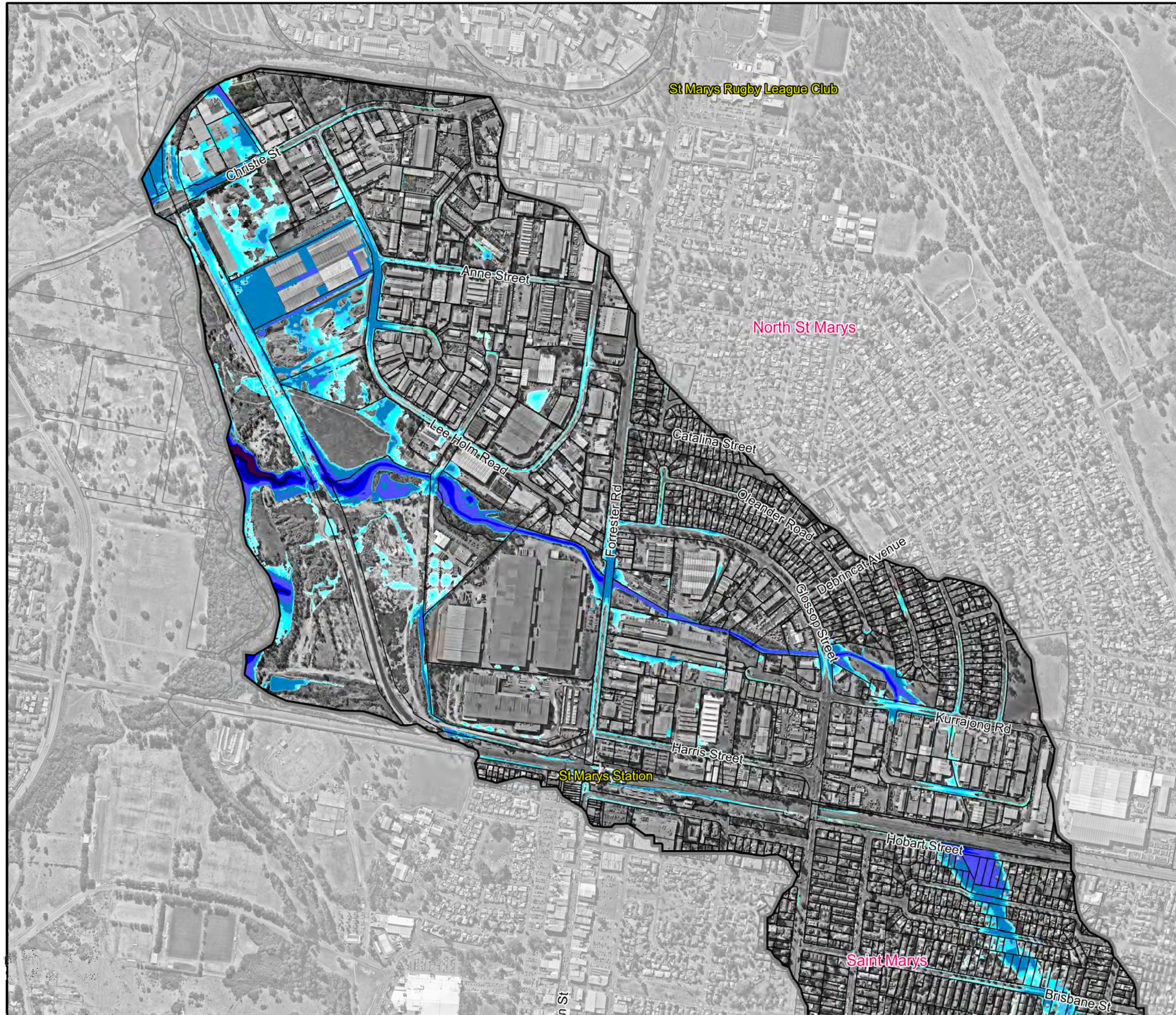


**Figure 13.2
Peak Floodwater
Depths for the
0.2% AEP Flood**

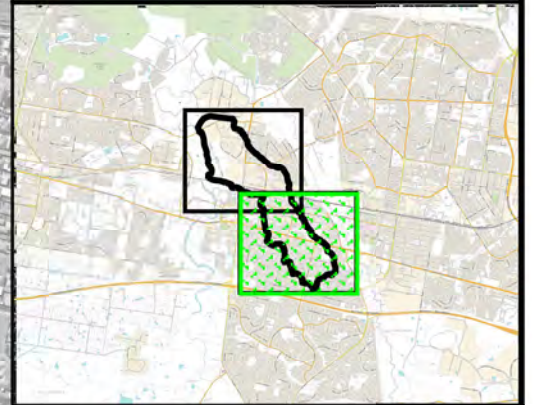
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 13 Peak Floodwater Depths for the 0.2% AEP Flood.wor













Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0



Scale 1:9,000 (at A3)

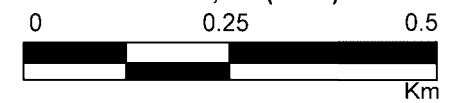
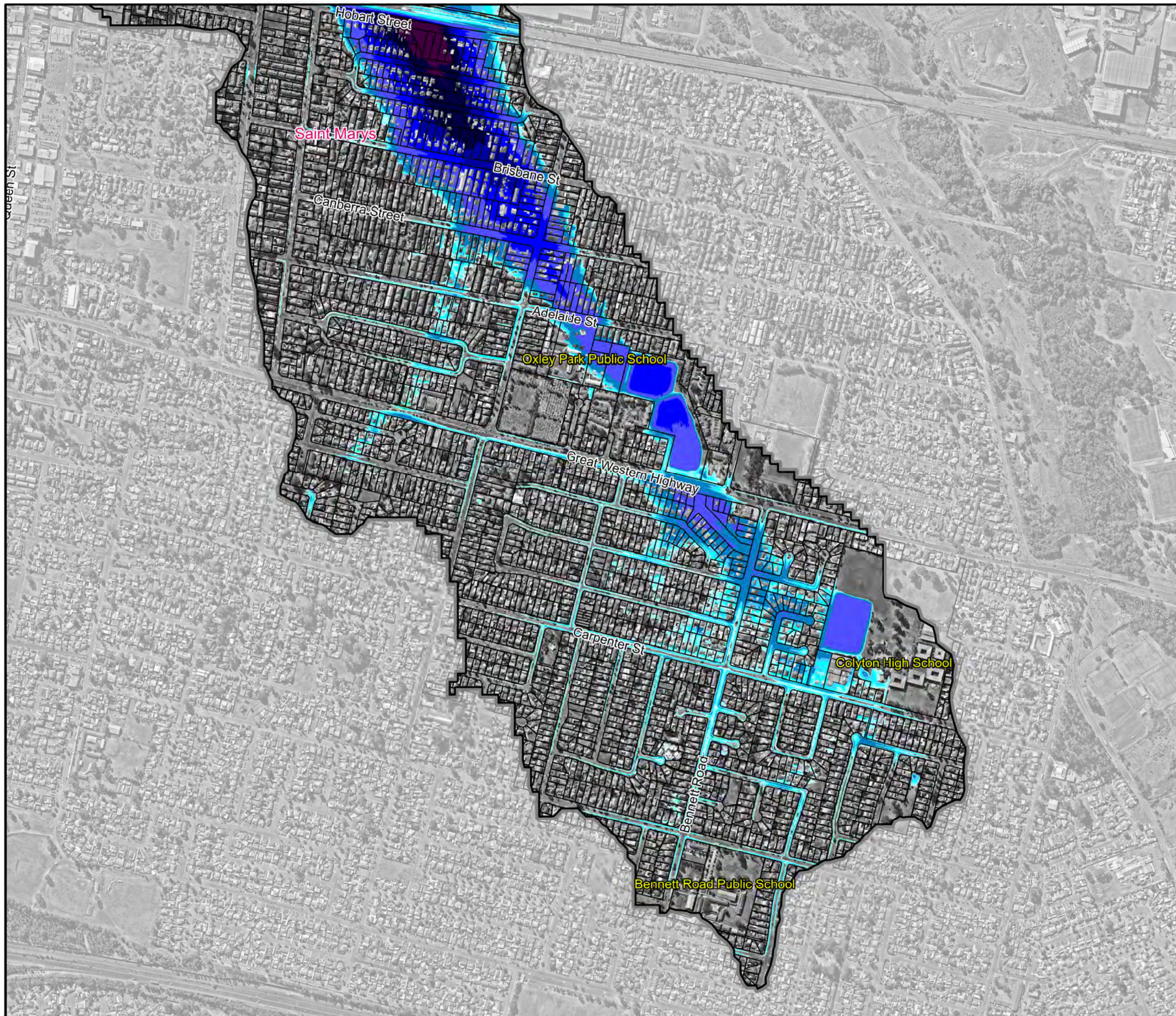


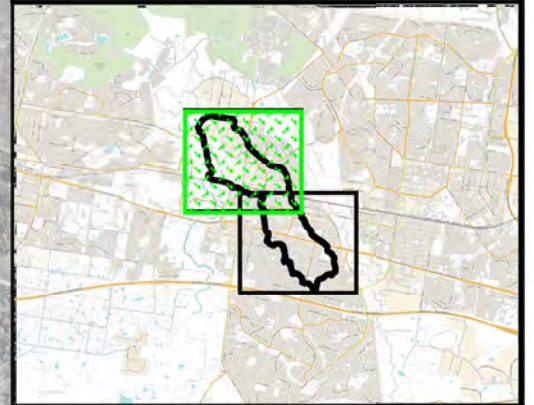
Figure 14.1
Peak Floodwater
Depths for the
PMF

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000











File Name: Figure 14 Peak Floodwater Depths for the PMF.wor





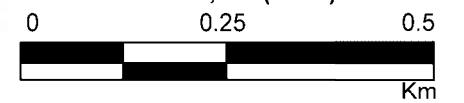
LEGEND

Depths (m)

	0.15 to 0.2
	0.2 to 0.3
	0.3 to 0.4
	0.4 to 0.5
	0.5 to 1.0
	1.0 to 2.0
	2.0 to 3.0
	3.0 to 4.0
	4.0 to 5.0
	> 5.0




Scale 1:9,000 (at A3)

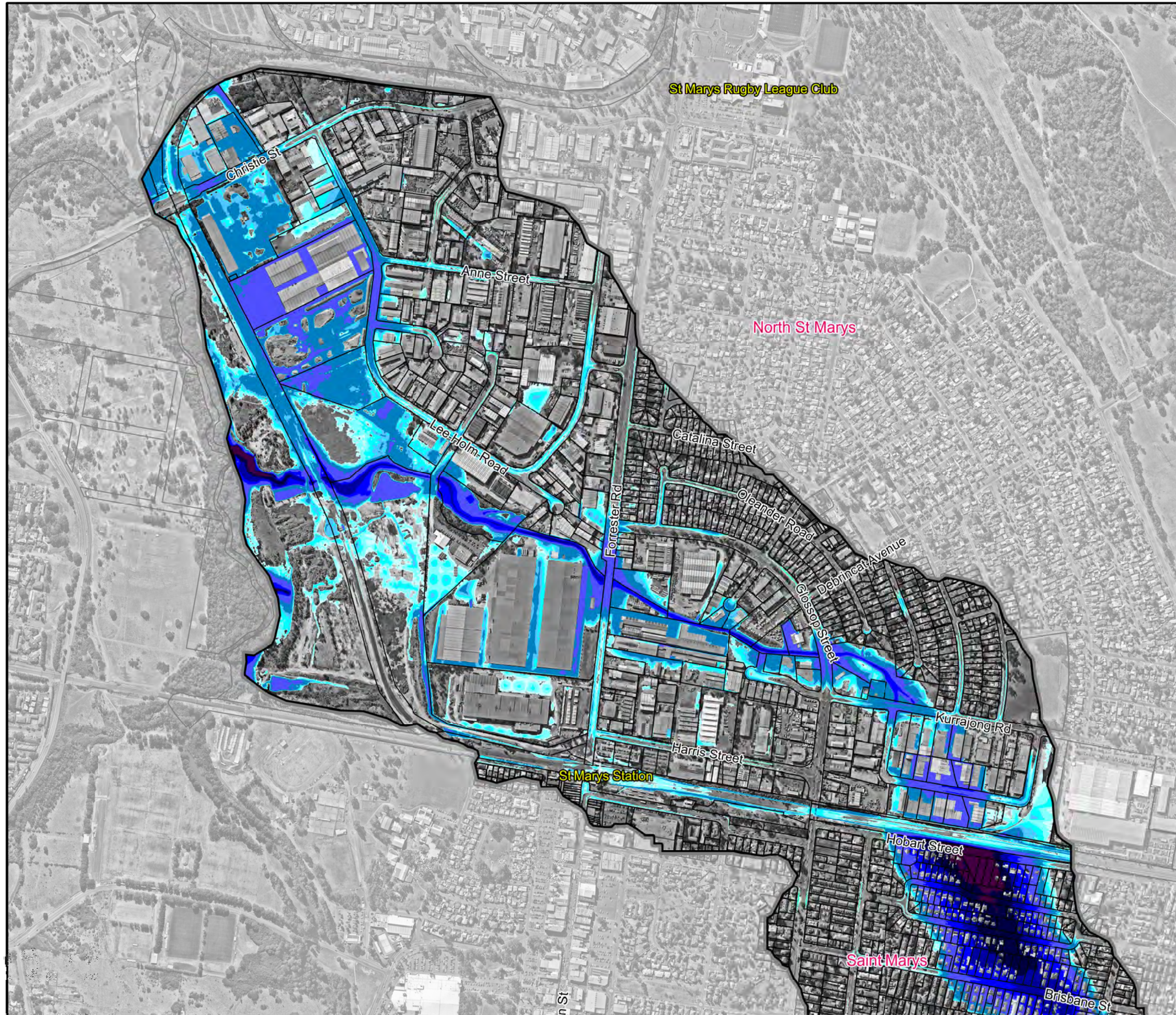


**Figure 14.2
Peak Floodwater
Depths for the
PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

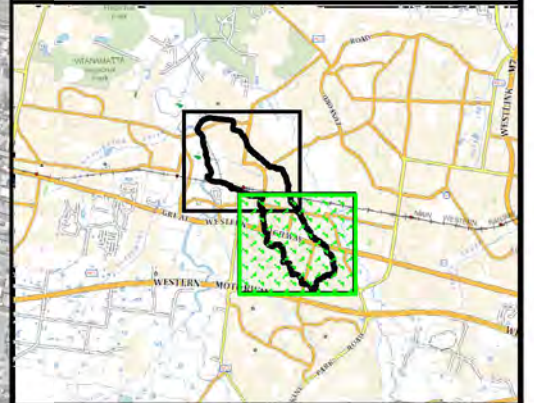
File Name: Figure 14 Peak Floodwater Depths for the PMF.wor











FLOODWATER LEVEL MAPS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

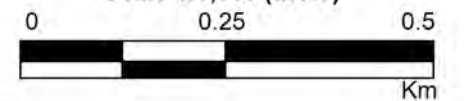



Figure 15.1
Peak Floodwater Levels for the 0.5EY Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 15 Peak Floodwater Levels for the 0.5EY Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:



Scale 1:9,000 (at A3)

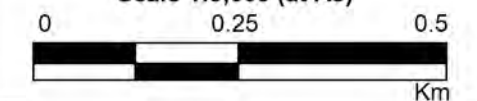



Figure 15.2
Peak Floodwater Levels for the 0.5EY Flood

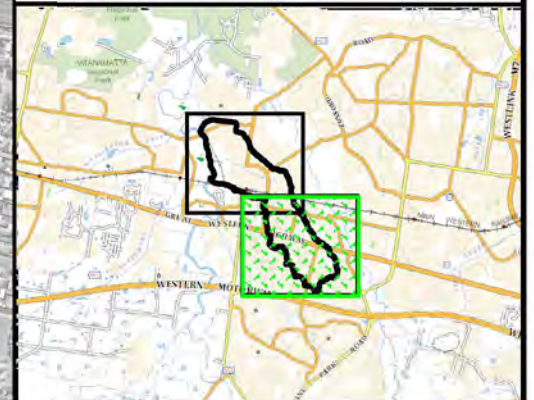
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 15 Peak Floodwater Levels for the 0.5EY Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

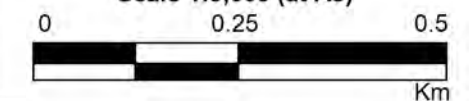



Figure 16.1
Peak Floodwater Levels for the 20% AEP Flood

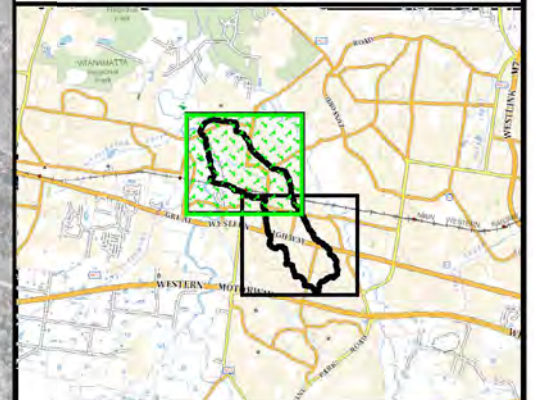
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 16 Peak Floodwater Levels for the 20% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

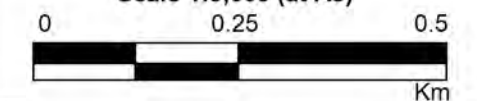



Figure 16.2
Peak Floodwater Levels for the 20% AEP Flood

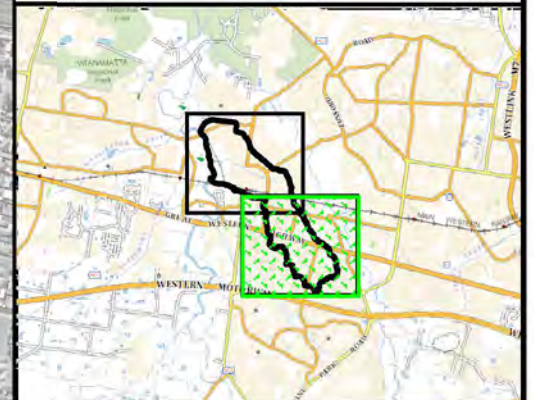
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 16 Peak Floodwater Levels for the 20% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

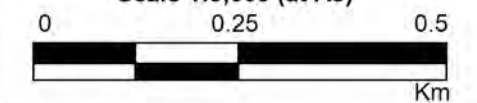



Figure 17.1
Peak Floodwater Levels for the 10% AEP Flood

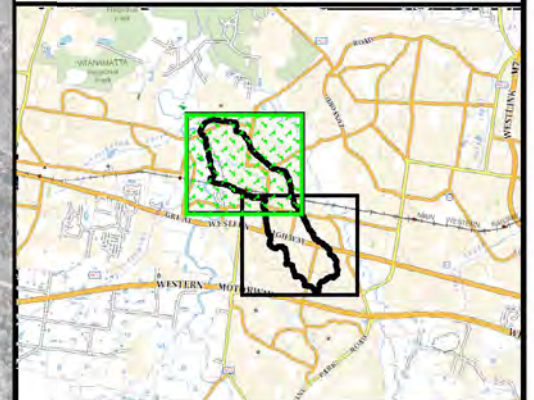
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 17 Peak Floodwater Levels for the 10% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

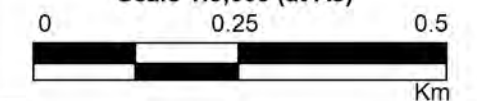



Figure 17.2
Peak Floodwater Levels for the 10% AEP Flood

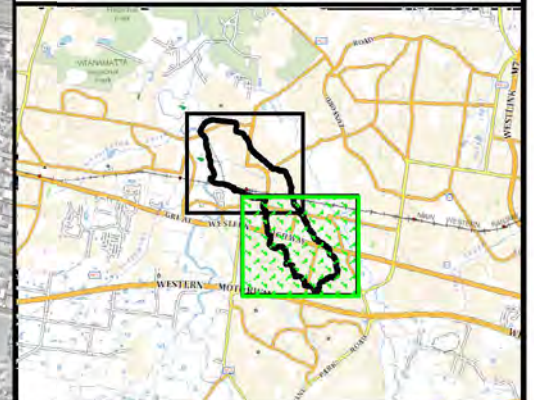
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 17 Peak Floodwater Levels for the 10% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

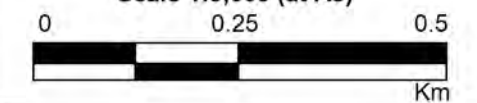



Figure 18.1
Peak Floodwater Levels for the 5%AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 18 Peak Floodwater Levels for the 5%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:



Scale 1:9,000 (at A3)

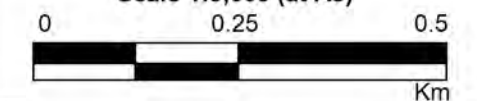



Figure 18.2
Peak Floodwater Levels for the 5% AEP Flood

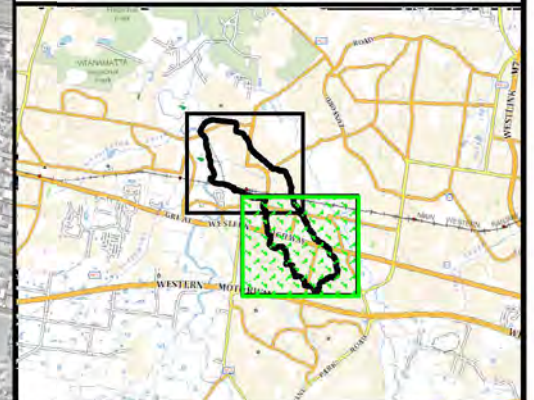
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 18 Peak Floodwater Levels for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:

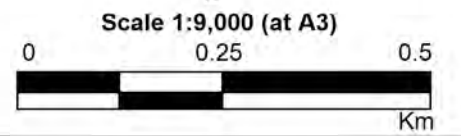
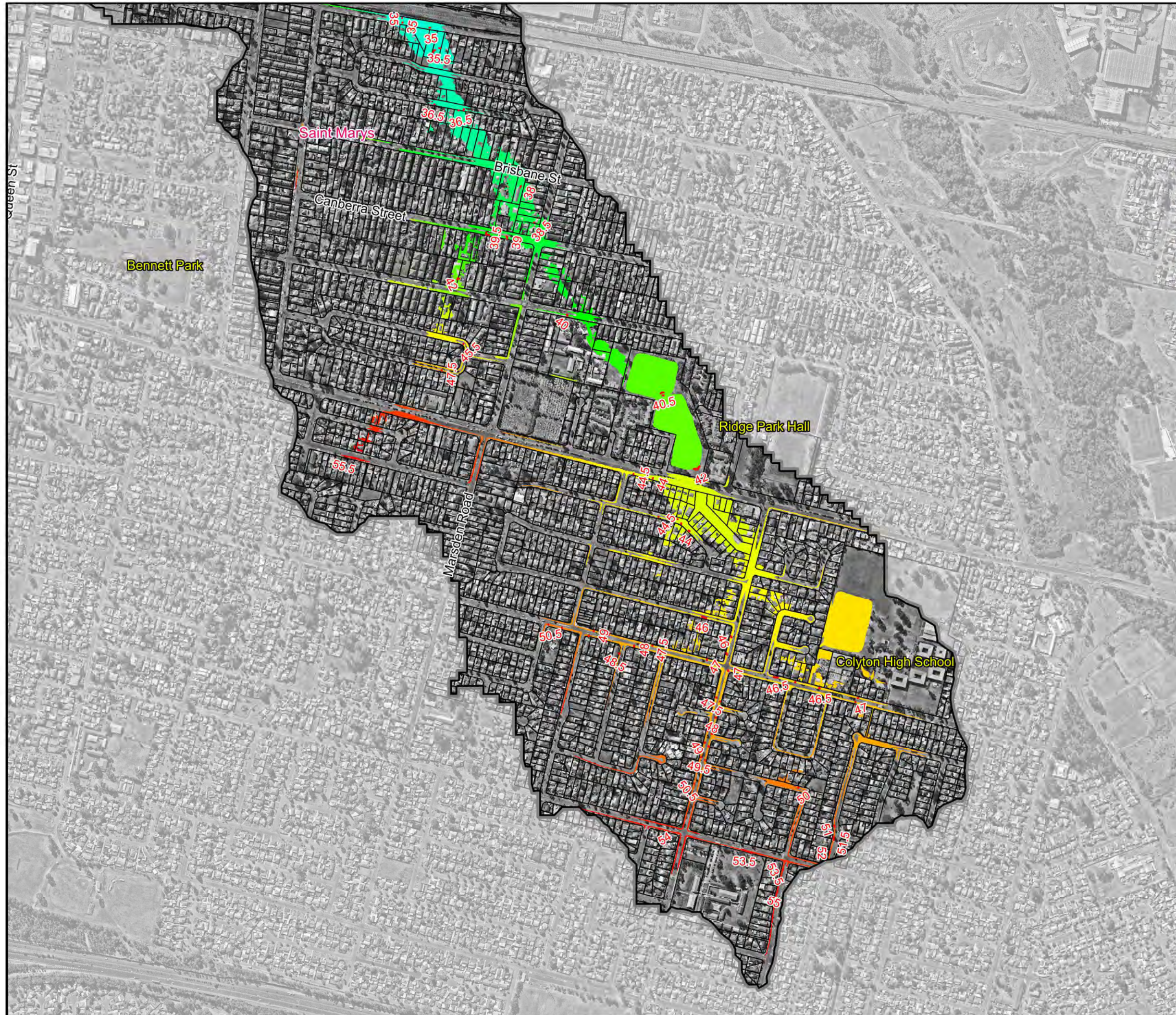


Figure 19.1
Peak Floodwater Levels for the 2%AEP Flood

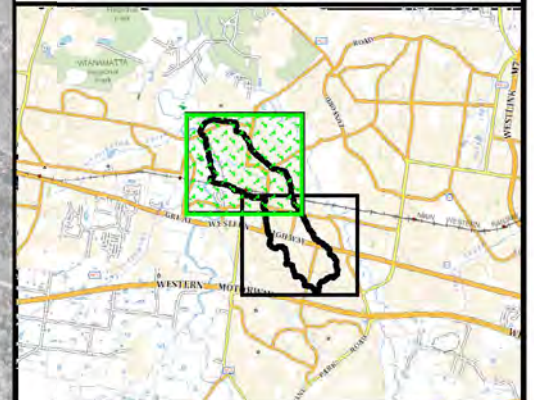
Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000









File Name: Figure 19 Peak Floodwater Levels for the 2%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

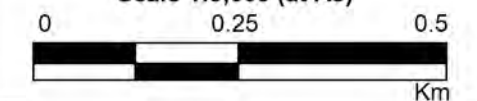



Figure 19.2
Peak Floodwater Levels for the 2% AEP Flood

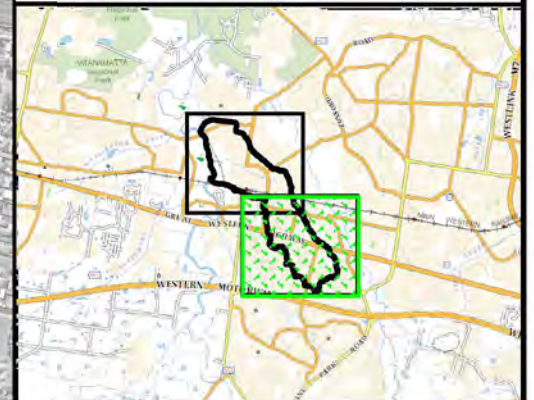
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 19 Peak Floodwater Levels for the 2% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

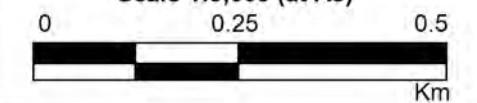

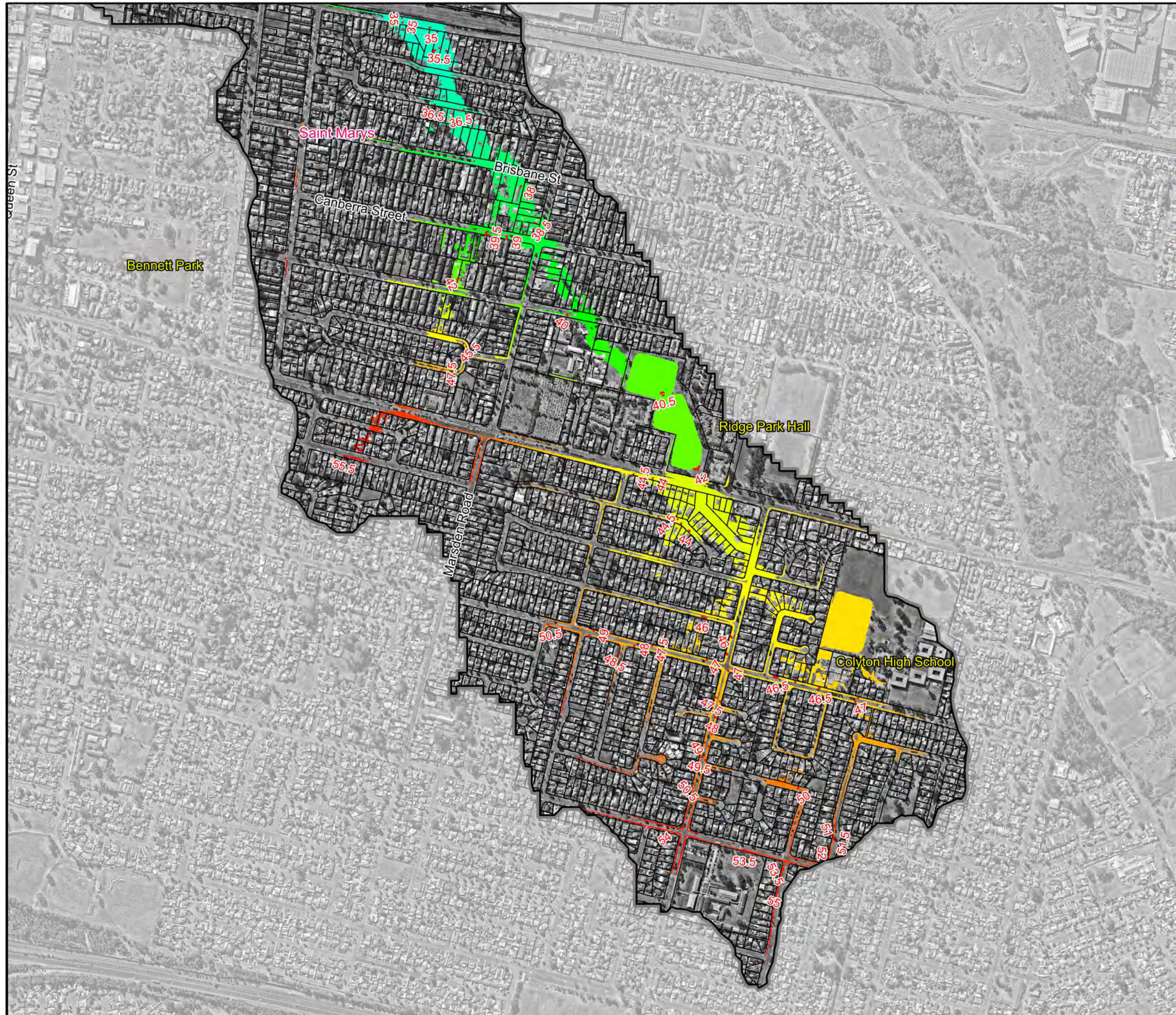


Figure 20.1
Peak Floodwater Levels for the 1%AEP Flood

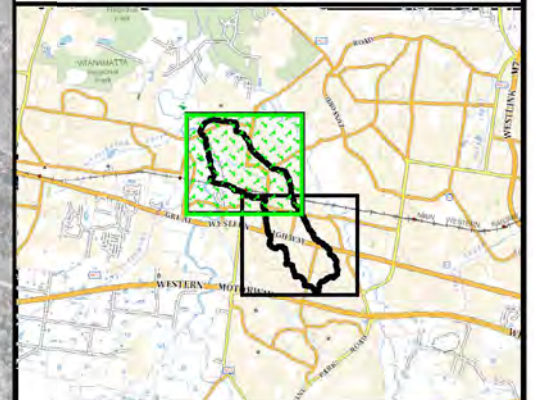
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 20 Peak Floodwater Levels for the 1%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:

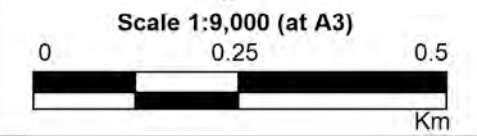


Figure 20.2
Peak Floodwater Levels for the 1%AEP Flood

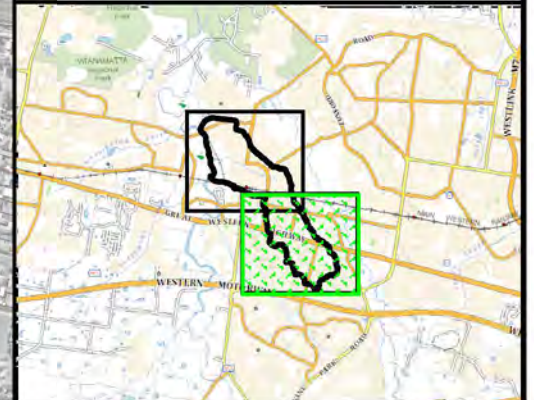
Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000









File Name: Figure 20 Peak Floodwater Levels for the 1%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

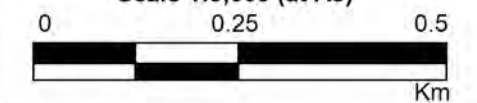
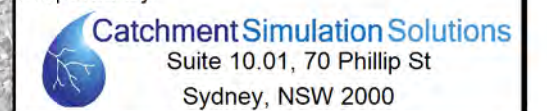
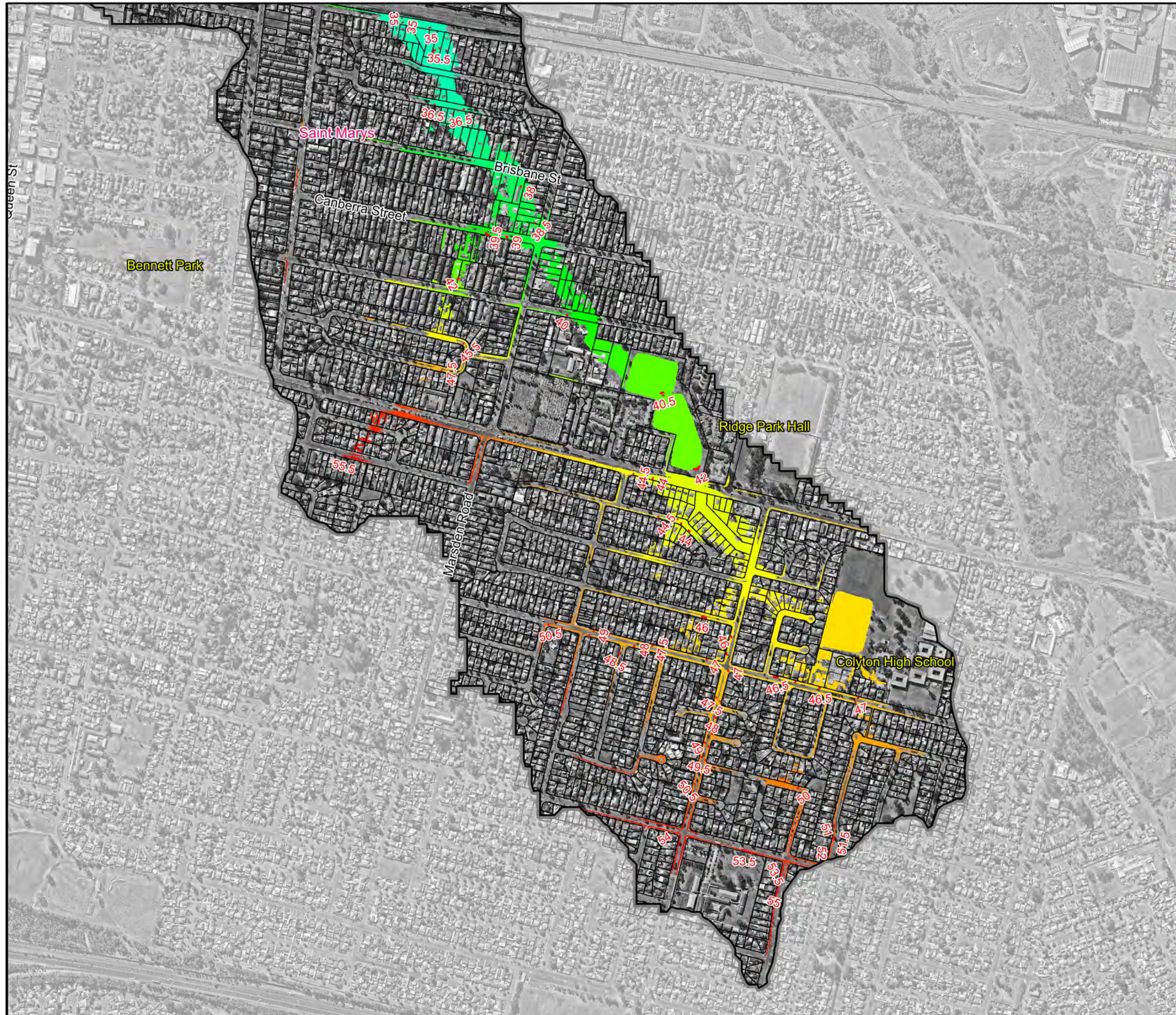


Figure 21.1
Peak Floodwater Levels for the 0.5% AEP Flood

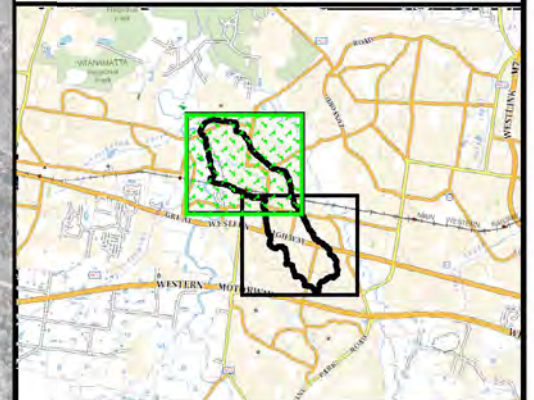
Prepared By:











File Name: Figure 21 Peak Floodwater Levels for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:



Scale 1:9,000 (at A3)

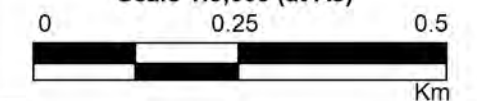



Figure 21.2
Peak Floodwater Levels for the 0.5% AEP Flood

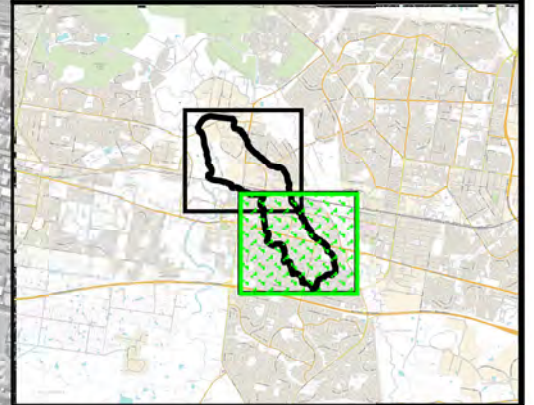
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 21 Peak Floodwater Levels for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

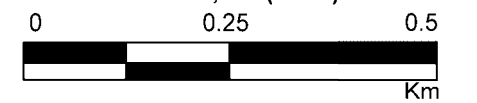
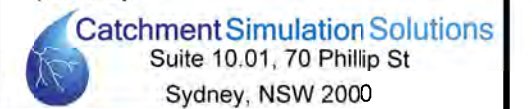


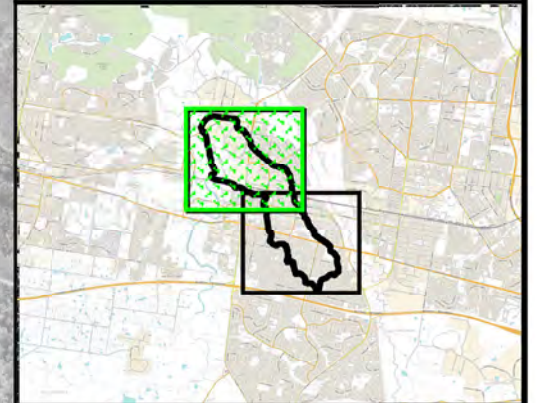
Figure 22.1
Peak Floodwater Levels for the 0.2% AEP Flood

Prepared By:











File Name: Figure 22 Peak Floodwater Levels for the 0.2% AEP Flood.wor

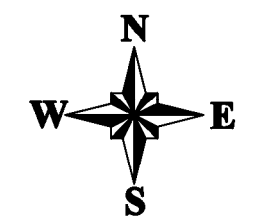




LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:



Scale 1:9,000 (at A3)

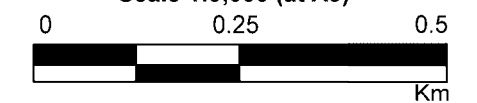



Figure 22.2
Peak Floodwater Levels for the 0.2%AEP Flood

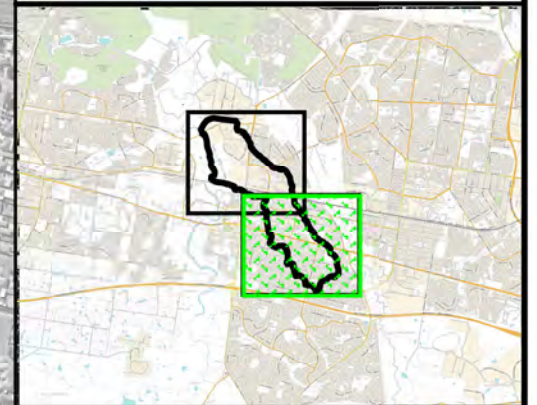
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000









File Name: Figure 22 Peak Floodwater Levels for the 0.2%AEP Flood.wor



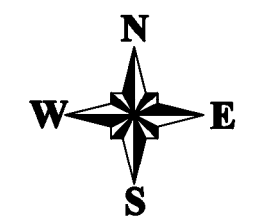
Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour
Peak Flood Level (mAHD)	
	25
	30
	35
	40
	45
	50
	55

Notes:



Scale 1:9,000 (at A3)

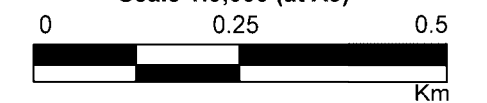
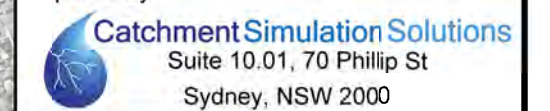
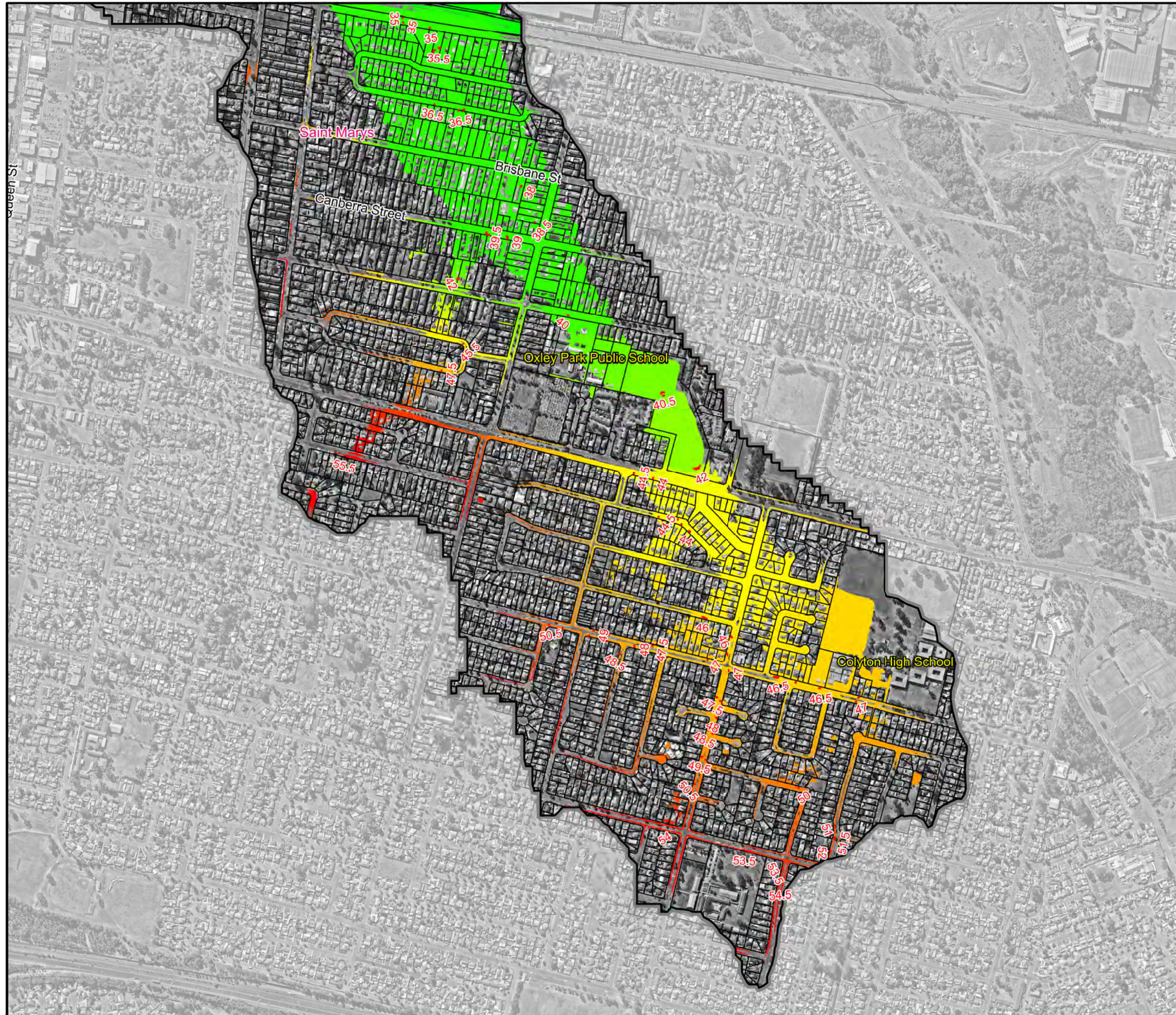


Figure 23.1
Peak Floodwater
Levels for the
PMF

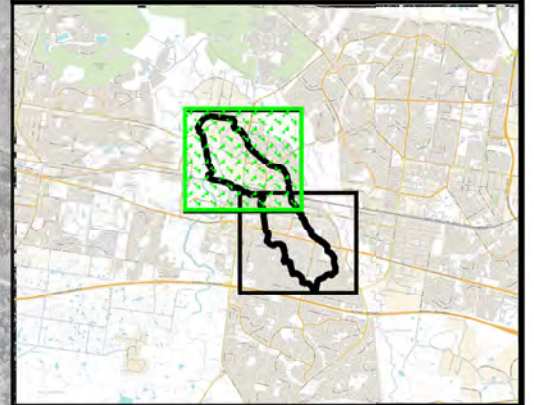
Prepared By:











File Name: Figure 23 Peak Floodwater Levels for the PMF.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

	Peak Flood Level Contour		
Peak Flood Level (mAHD)			
	25		45
	30		50
	35		55
	40		

Notes:



Scale 1:9,000 (at A3)

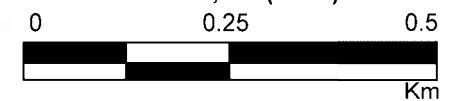



Figure 23.2
Peak Floodwater Levels for the PMF

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

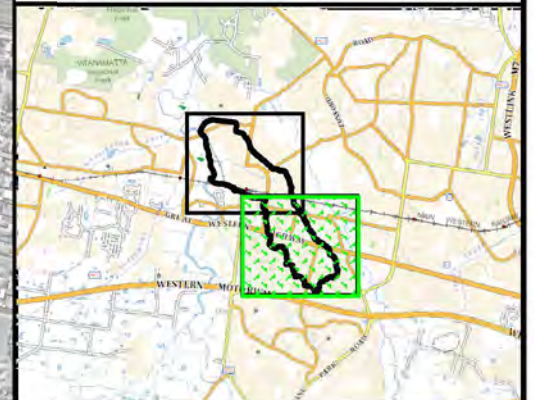
File Name: Figure 23 Peak Floodwater Levels for the PMF.wor



FLOODWATER VELOCITY MAPS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

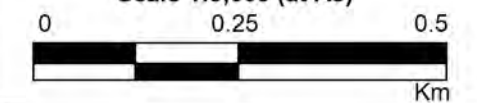



Figure 24.1
Peak Floodwater
Velocities for the
0.5EY Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 24 Peak Flood Velocities for the 0.5EY Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:

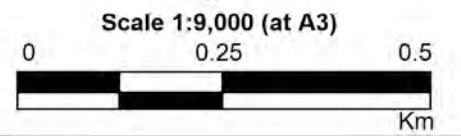



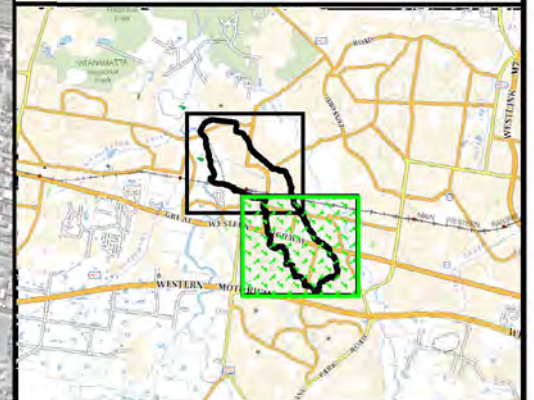
Figure 24.2
Peak Floodwater
Velocities for the
0.5EY Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 24 Peak Flood Velocities for the 0.5EY Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:

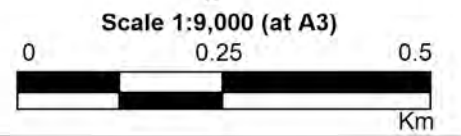



Figure 25.1
Peak Floodwater Velocities for the 20% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 25 Peak Flood Velocities for the 20% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

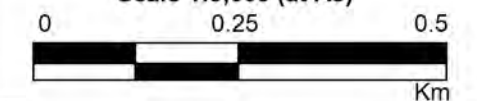



Figure 25.2
Peak Floodwater
Velocities for the
20% AEP Flood

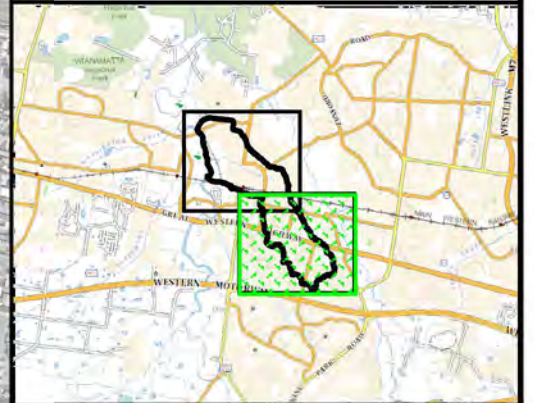
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 25 Peak Flood Velocities for the 20% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

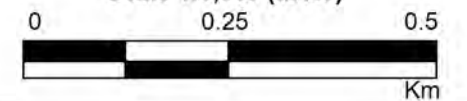



Figure 26.1
Peak Floodwater
Velocities for the
10% AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 26 Peak Flood Velocities for the 10% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

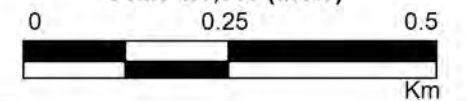



Figure 26.2
Peak Floodwater
Velocities for the
10% AEP Flood

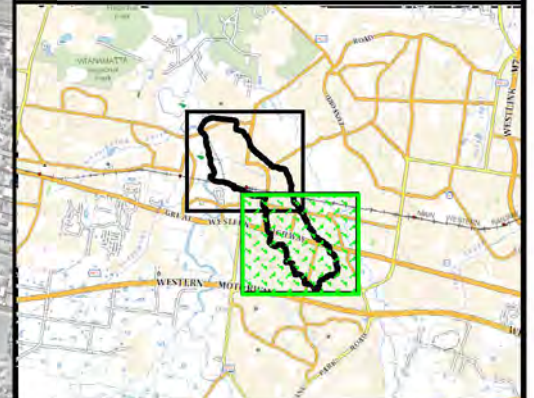
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 26 Peak Flood Velocities for the 10% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

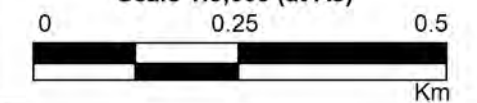



Figure 27.1
Peak Floodwater
Velocities for the
5%AEP Flood

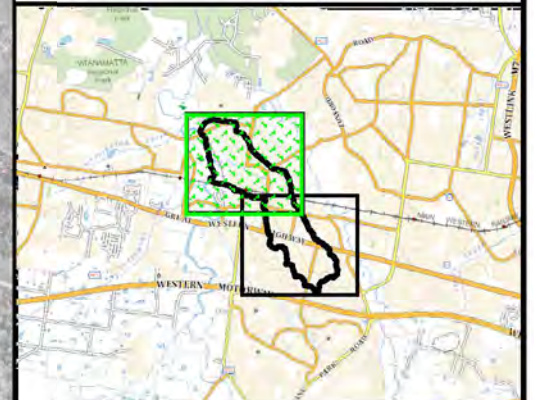
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 27 Peak Flood Velocities for the 5%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:

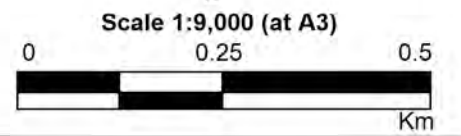



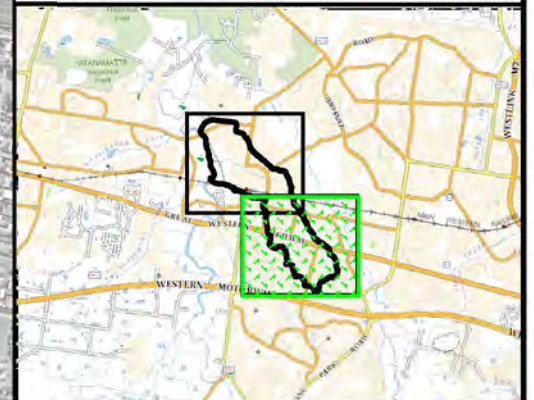
Figure 27.2
Peak Floodwater
Velocities for the
5% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 27 Peak Flood Velocities for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:

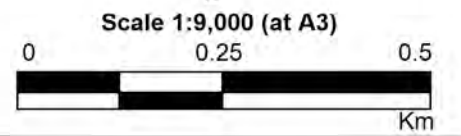



Figure 28.1
Peak Floodwater Velocities for the 2%AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 28 Peak Flood Velocities for the 2%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

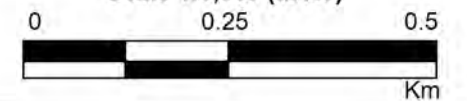



Figure 28.2
Peak Floodwater
Velocities for the
2% AEP Flood

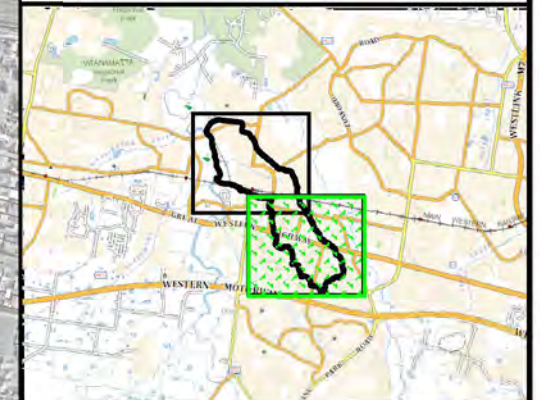
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 28 Peak Flood Velocities for the 2% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

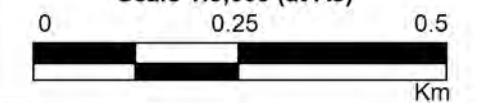



Figure 29.1
Peak Floodwater
Velocities for the
1%AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 29 Peak Flood Velocities for the 1%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:

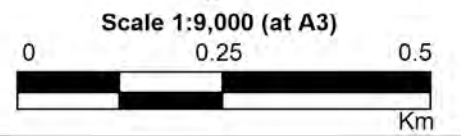



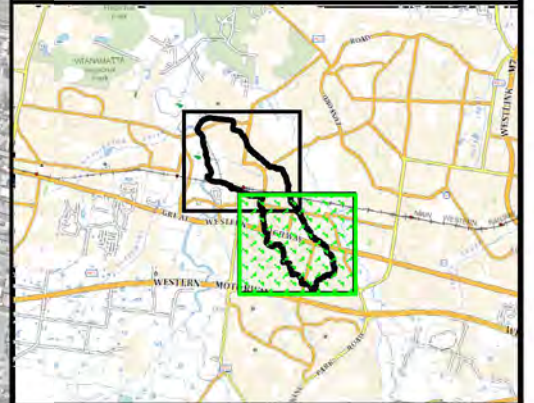
Figure 29.2
Peak Floodwater
Velocities for the
1%AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 29 Peak Flood Velocities for the 1%AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

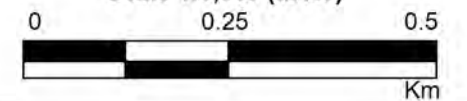



Figure 30.1
Peak Floodwater
Velocities for the
0.5% AEP Flood

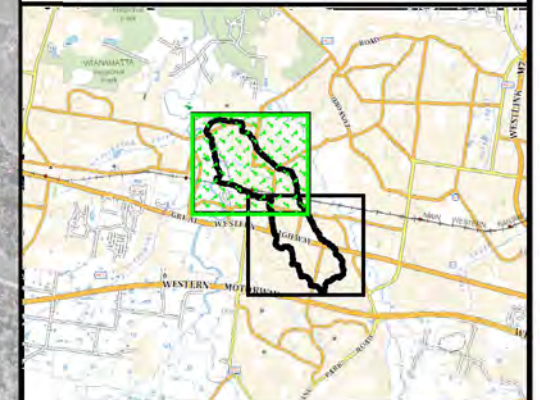
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 30 Peak Flood Velocities for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

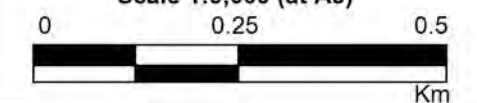



Figure 30.2
Peak Floodwater
Velocities for the
0.5% AEP Flood

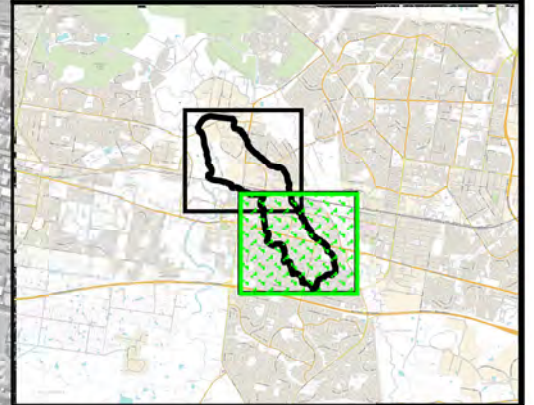
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 30 Peak Flood Velocities for the 0.5% AEP Flood.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:



Scale 1:9,000 (at A3)

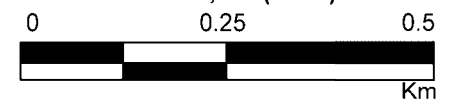



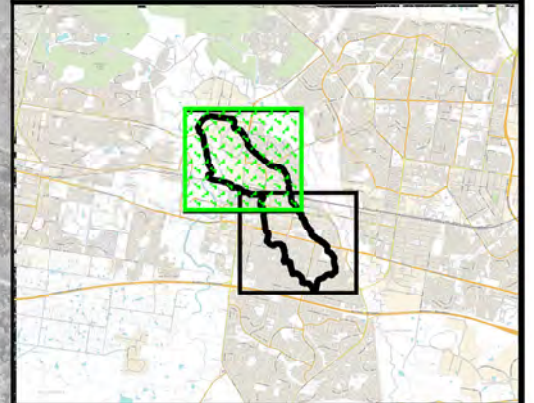
Figure 31.1
Peak Floodwater
Velocities for the
0.2% AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 31 Peak Flood Velocities for the 0.2% AEP Flood.wor





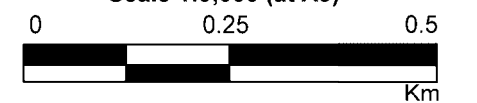
LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:




Scale 1:9,000 (at A3)



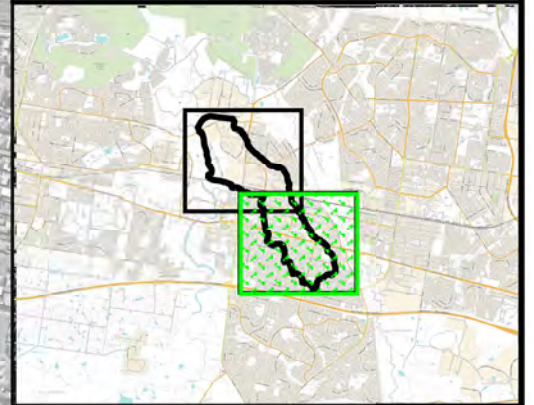
**Figure 31.2
Peak Floodwater
Velocities for the
0.2% AEP Flood**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 31 Peak Flood Velocities
for the 0.2% AEP Flood.wor





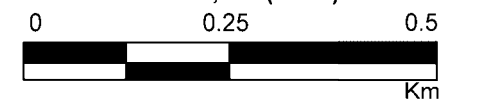
LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:




Scale 1:9,000 (at A3)



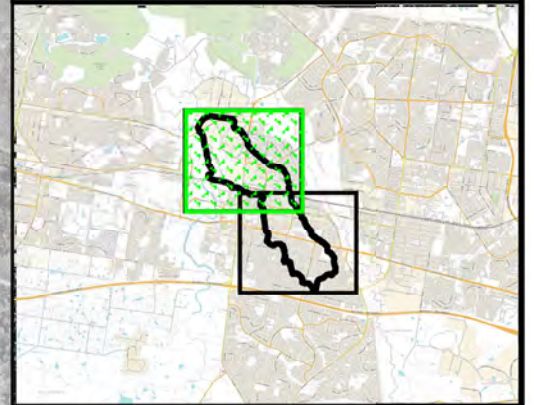
**Figure 32.1
Peak Floodwater
Velocities for the
PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 32 Peak Flood Velocities for the PMF.wor





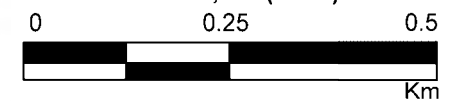
LEGEND

Velocities (m/s)	Velocity Vector
0.00 to 0.25	→ 1 m/s
0.25 to 0.50	→ 2 m/s
0.50 to 1.00	→ 4 m/s
1.00 to 2.00	→ 4 m/s
> 2.00	→ 4 m/s

Notes:




Scale 1:9,000 (at A3)



**Figure 32.2
Peak Floodwater
Velocities for the
PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

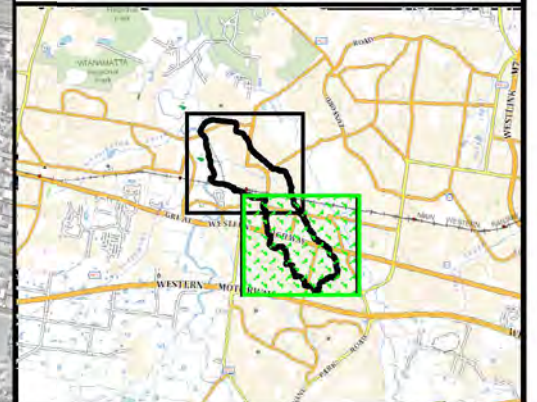
File Name: Figure 32 Peak Flood Velocities for the PMF.wor



FLOOD HAZARD MAPS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

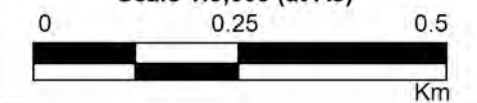



Figure 33.1
Flood Hazard for the 5% AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 33 Flood Hazard for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

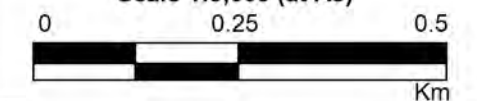



Figure 33.2
Flood Hazard for the 5% AEP Flood

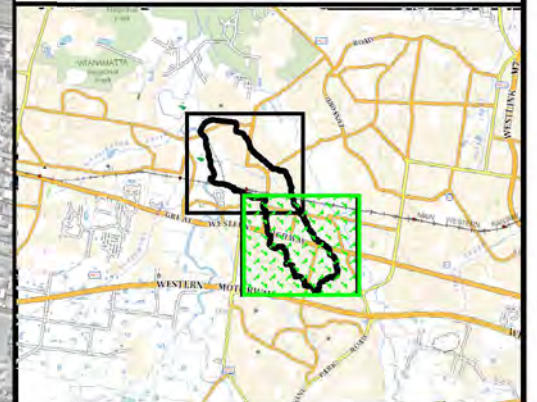
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 33 Flood Hazard for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

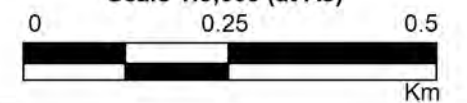



Figure 34.1
Flood Hazard for the 1% AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 34 Flood Hazard for the 1% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

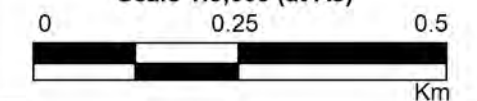



Figure 34.2
Flood Hazard for the 1% AEP Flood

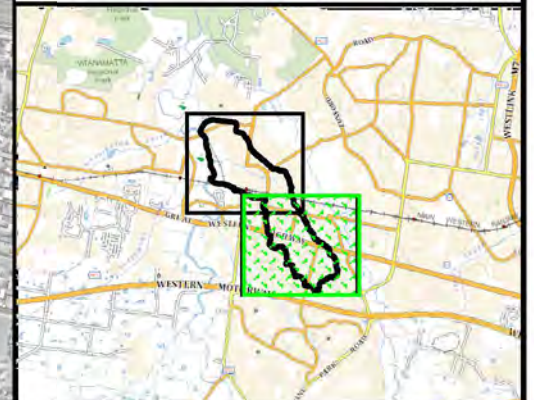
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 34 Flood Hazard for the 1% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

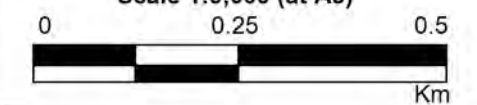



Figure 35.1
Flood Hazard for the 0.5% AEP Flood

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 35 Flood Hazard for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

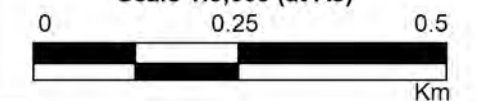



Figure 35.2
Flood Hazard for the 0.5% AEP Flood

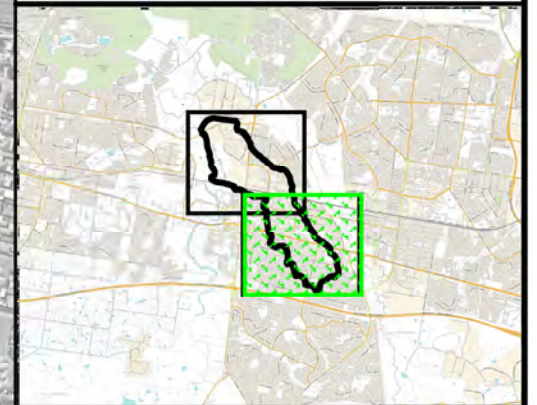
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 35 Flood Hazard for the 0.5% AEP Flood.wor



Little Creek Catchment Floodplain Risk Management Study and Plan

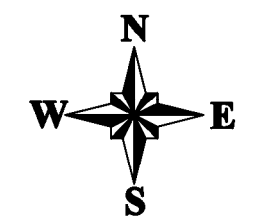


LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

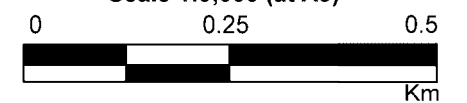



Figure 36.1
Flood Hazard for the 0.2% AEP Flood

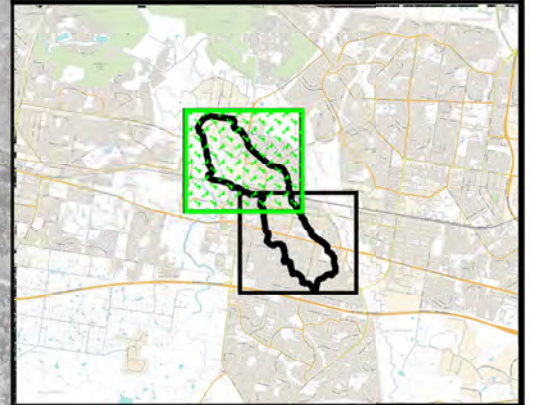
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 36 Flood Hazard for the 0.2% AEP Flood.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

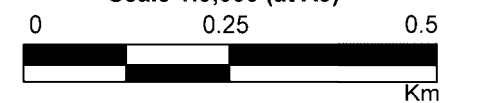



Figure 36.2
Flood Hazard for the 0.2% AEP Flood

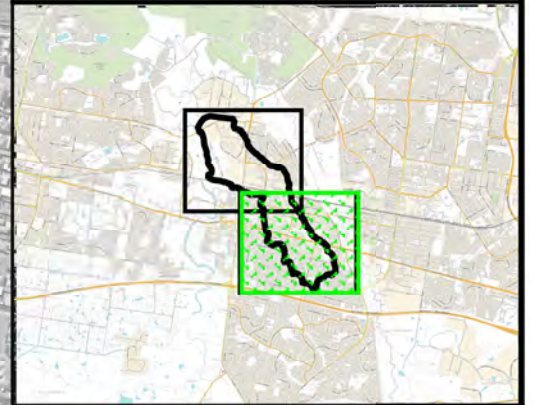
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 36 Flood Hazard for the 0.2% AEP Flood.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

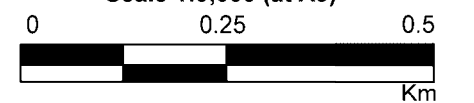
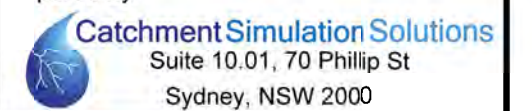
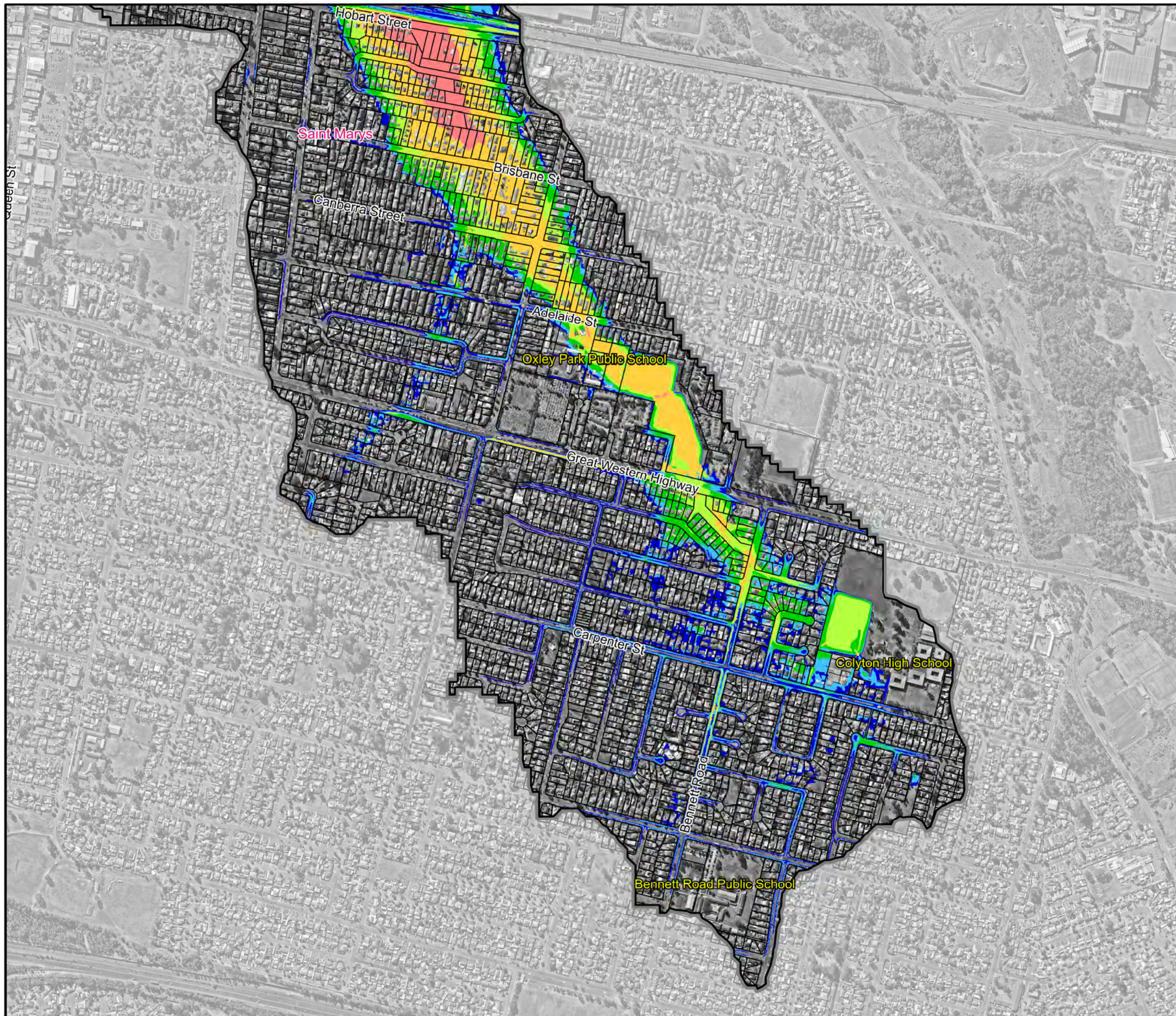


Figure 37.1
Flood Hazard for the PMF

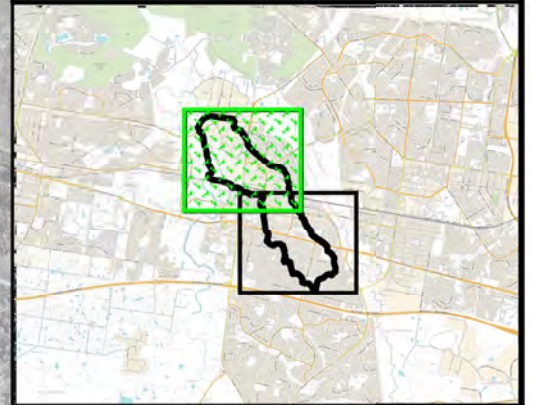
Prepared By:



File Name: Figure 37 Flood Hazard for the PMF.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

Hazard Categories

- H1 - Generally Safe
- H2 - Unsafe for small vehicles
- H3 - Unsafe for vehicles, children and elderly
- H4 - Unsafe for people and vehicles
- H5 - Unsafe for people and vehicles. Buildings require special design
- H6 - Unsafe for people and vehicles. All buildings vulnerable to failure

Notes:



Scale 1:9,000 (at A3)

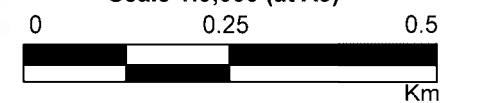


Figure 37.2
Flood Hazard for the PMF

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

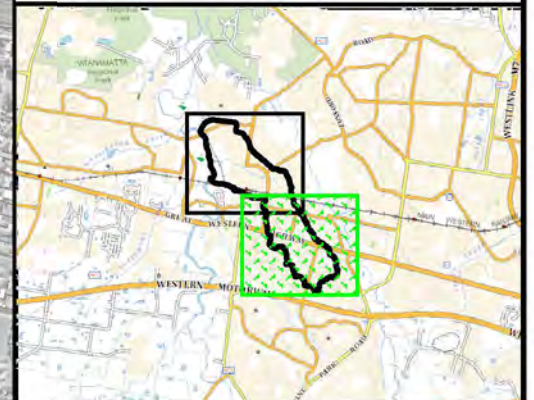
File Name: Figure 37 Flood Hazard for the PMF.wor



HYDRAULIC CATEGORY MAPS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:



Scale 1:9,000 (at A3)

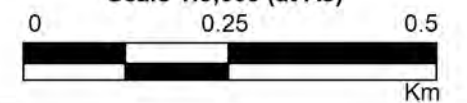



Figure 38.1
Hydraulic Categories
for the 5%AEP

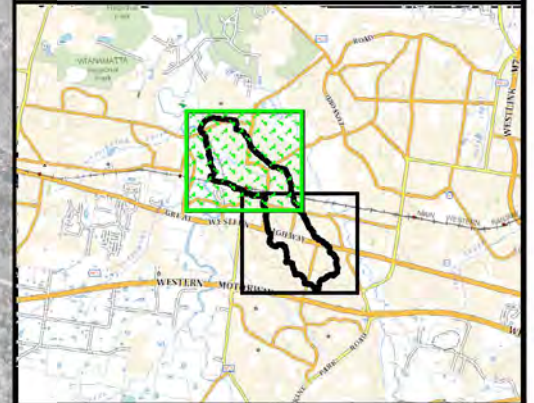
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 38 Hydraulic Categories for the 5%AEP.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:



Scale 1:9,000 (at A3)

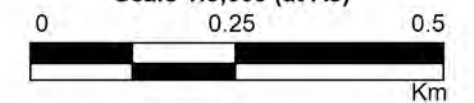



Figure 38.2
Hydraulic Categories
for the 5%AEP

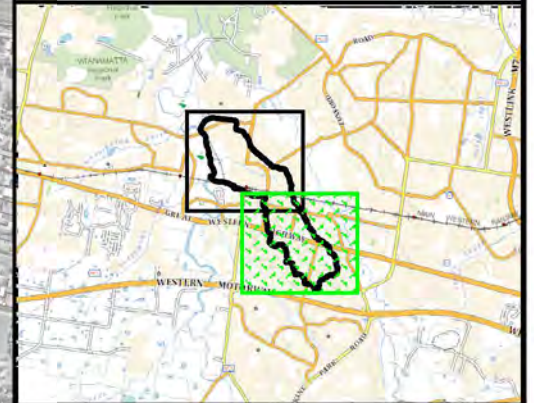
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 38 Hydraulic Categories for the 5%AEP.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Hydraulic Categories
- Flood Fringe
 - Flood Storage
 - Floodway

Notes:



Scale 1:9,000 (at A3)

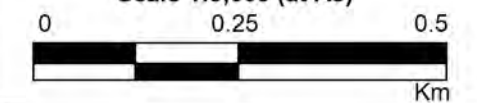



Figure 39.1
Hydraulic Categories
for the 1%AEP

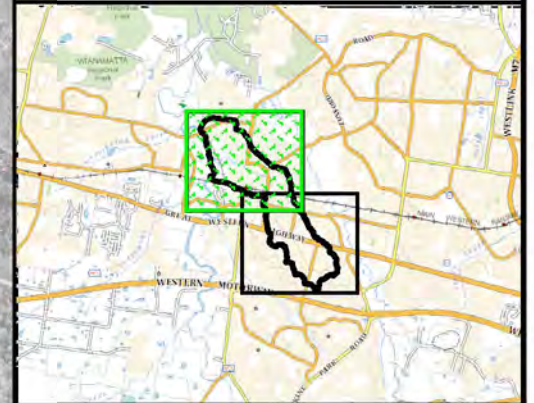
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 39 Hydraulic Categories for the 1%AEP.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:



Scale 1:9,000 (at A3)

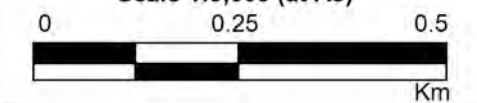



Figure 39.2
Hydraulic Categories
for the 1%AEP

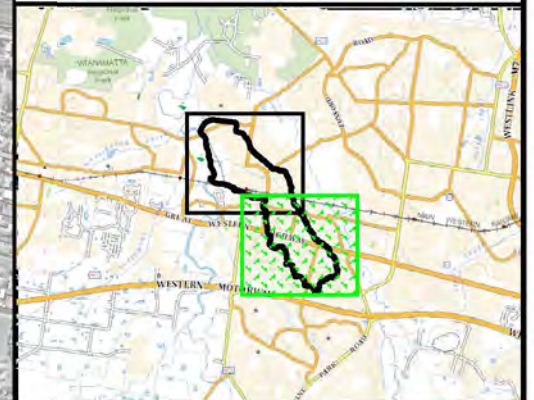
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 39 Hydraulic Categories for the 1%AEP.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:



Scale 1:9,000 (at A3)

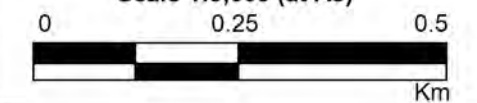



Figure 40.1
Hydraulic Categories
for the 0.5%AEP

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 40 Hydraulic Categories for the 0.5%AEP.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:



Scale 1:9,000 (at A3)

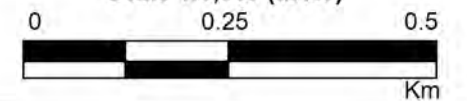



Figure 40.2
Hydraulic Categories
for the 0.5%AEP

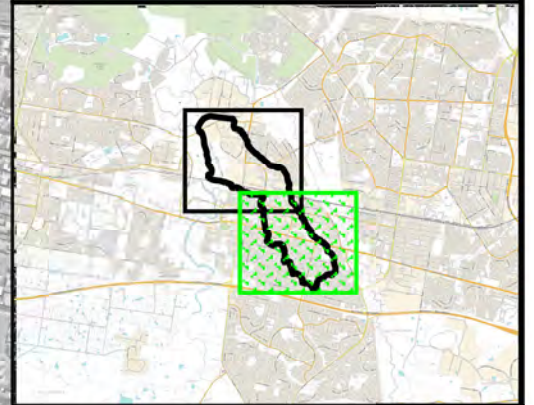
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 40 Hydraulic Categories for the 0.5%AEP.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

- Hydraulic Categories
- Flood Fringe
 - Flood Storage
 - Floodway

Notes:



Scale 1:9,000 (at A3)

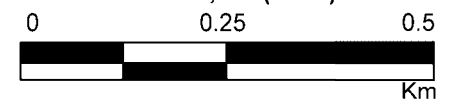
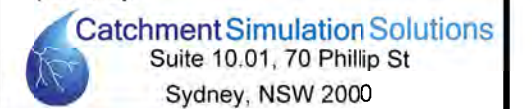


Figure 41.1
Hydraulic Categories
for the 0.2%AEP

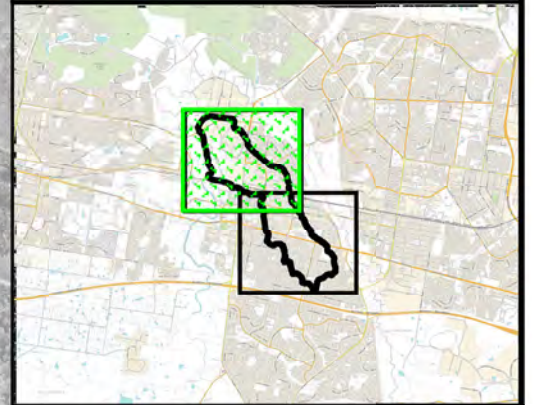
Prepared By:



File Name: Figure 41 Hydraulic Categories for the 0.2%AEP.wor



Little Creek Catchment Floodplain Risk Management Study and Plan



LEGEND

- Hydraulic Categories
- Flood Fringe
 - Flood Storage
 - Floodway

Notes:



Scale 1:9,000 (at A3)

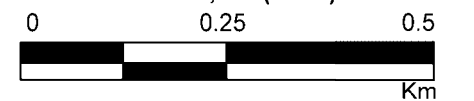


Figure 41.2
Hydraulic Categories
for the 0.2%AEP

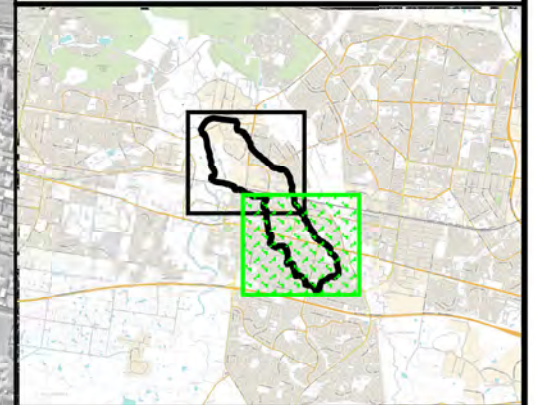
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 41 Hydraulic Categories for the 0.2%AEP.wor



**Little Creek Catchment Floodplain
Risk Management Study and Plan**

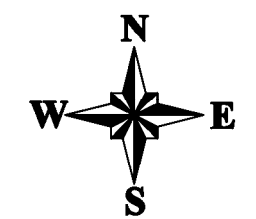


LEGEND

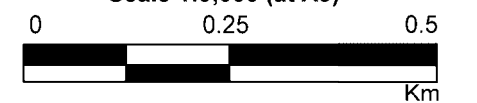
Hydraulic Categories

-  Flood Fringe
-  Flood Storage
-  Floodway

Notes:




Scale 1:9,000 (at A3)



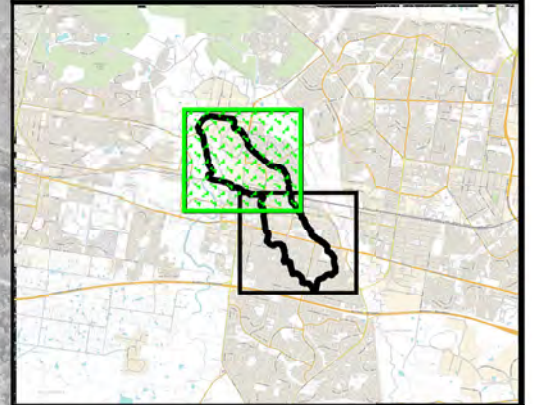
**Figure 42.1
Hydraulic Categories
for the PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 42 Hydraulic Categories for the PMF.wor





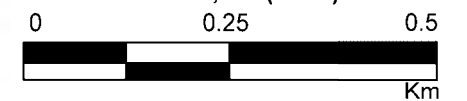
LEGEND

- Hydraulic Categories
- Flood Fringe
 - Flood Storage
 - Floodway

Notes:




Scale 1:9,000 (at A3)



**Figure 42.2
Hydraulic Categories
for the PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

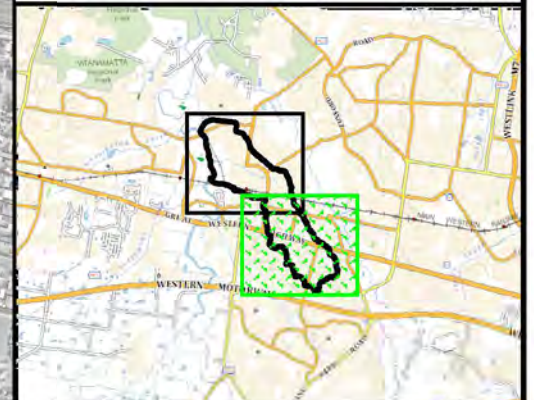
File Name: Figure 42 Hydraulic Categories for the PMF.wor



EMERGENCY RESPONSE PRECINCT CLASSIFICATIONS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location
- 16 Road Overtopping Points

Notes:

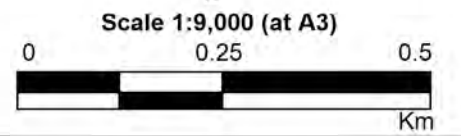



Figure 43.1
Emergency Response
Classifications for the
5% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 43 Emergency Response Classifications for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location**
- Road Overtopping Points

Notes:



Scale 1:9,000 (at A3)

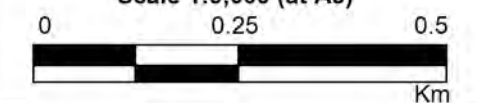

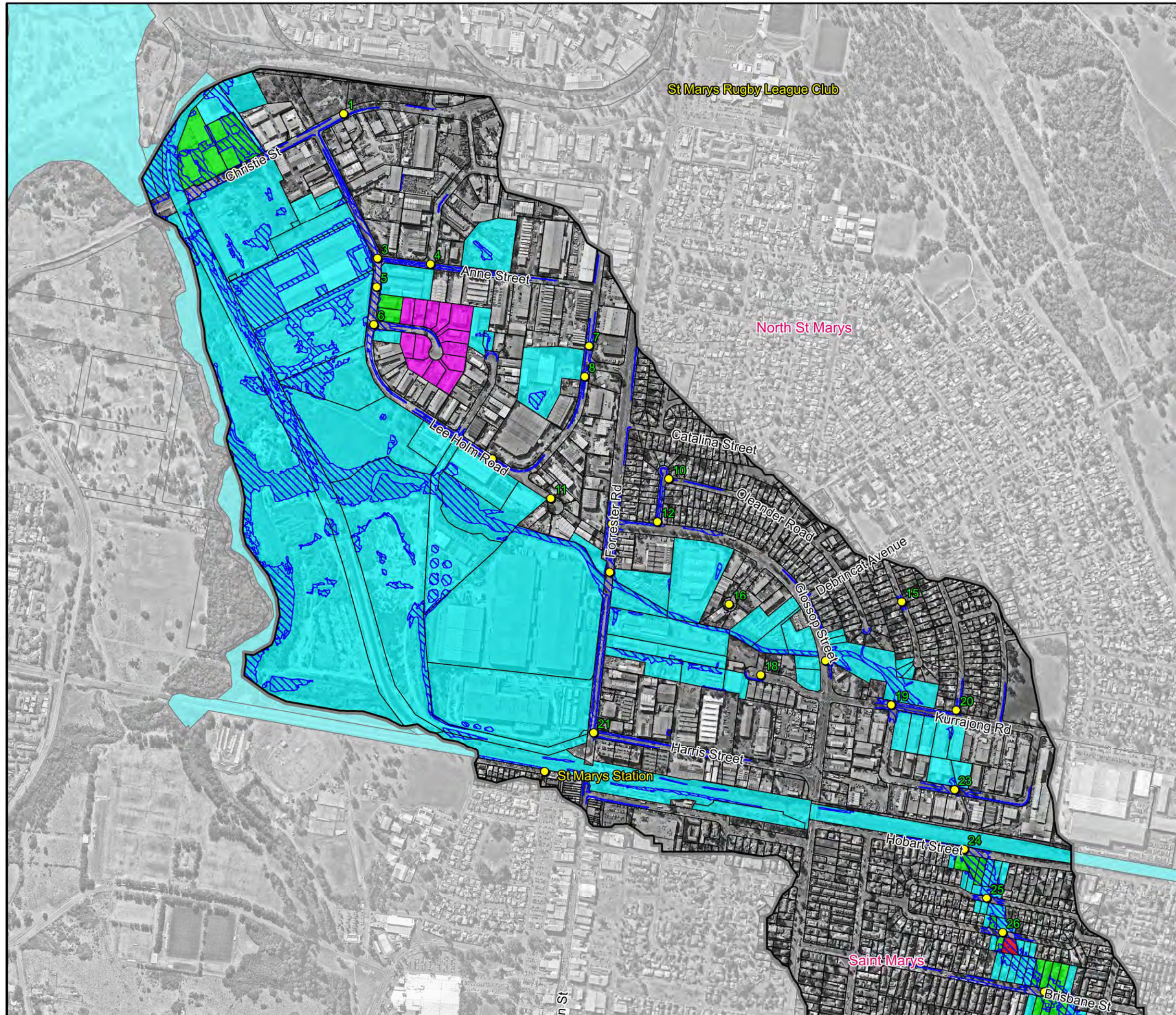


Figure 43.2
Emergency Response
Classifications for the
5% AEP Flood

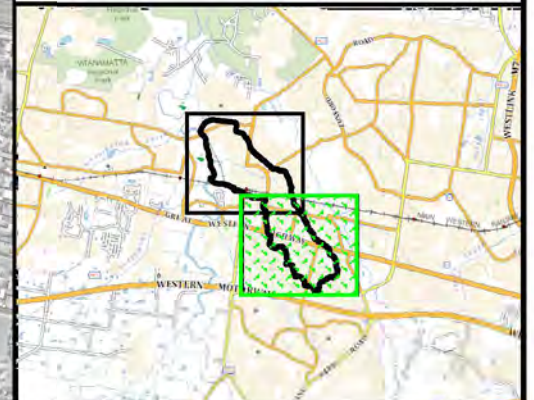
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 43 Emergency Response Classifications for the 5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location
- Road Overtopping Points

Notes:

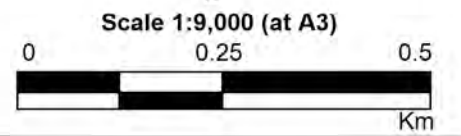



Figure 44.1
Emergency Response
Classifications for the
1% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 44 Emergency Response Classifications for the 1% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location**
- Road Overtopping Points

Notes:



Scale 1:9,000 (at A3)

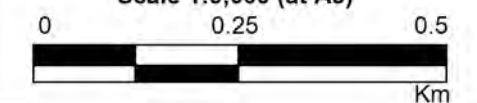

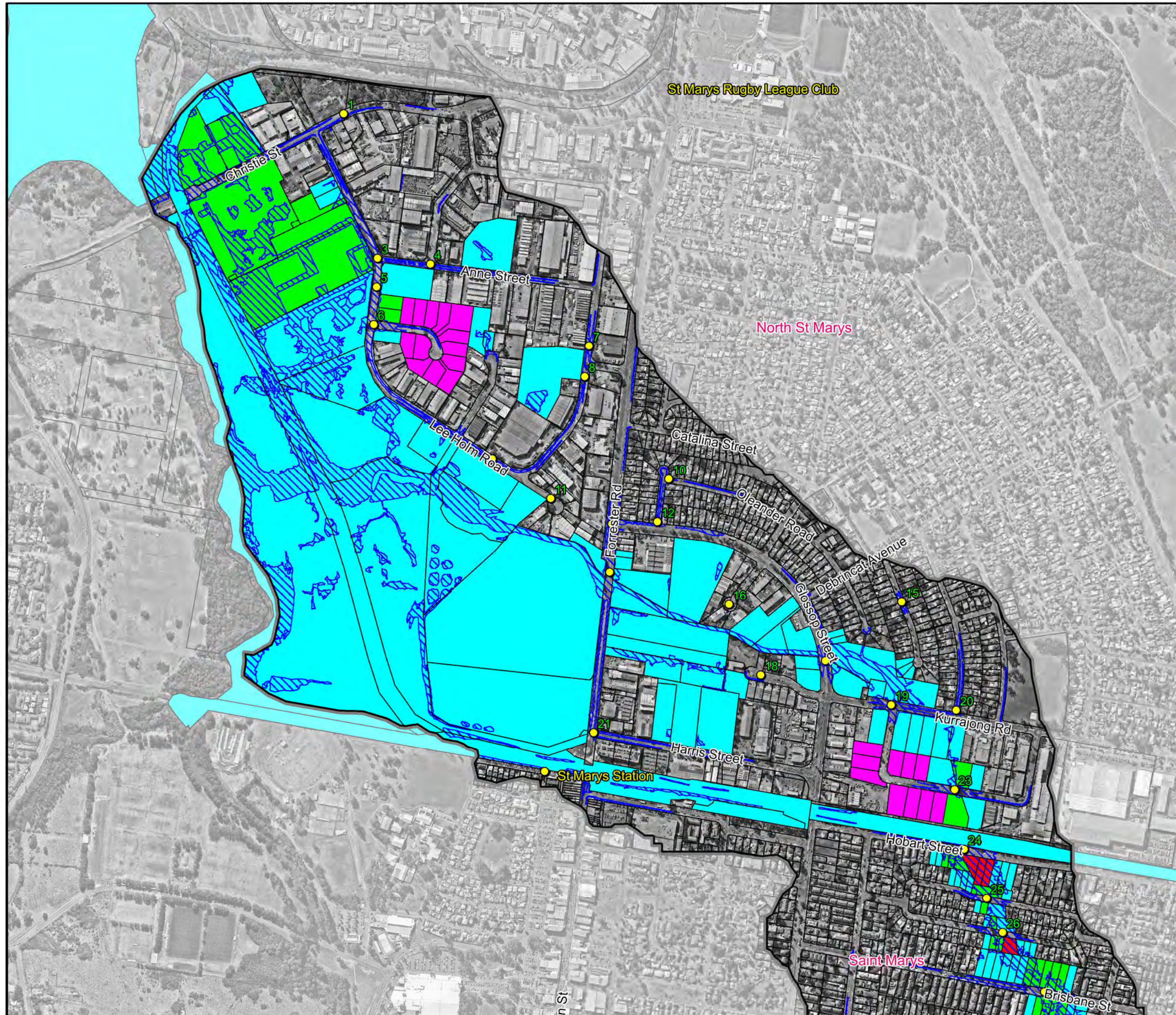


Figure 44.2
Emergency Response
Classifications for the
1% AEP Flood

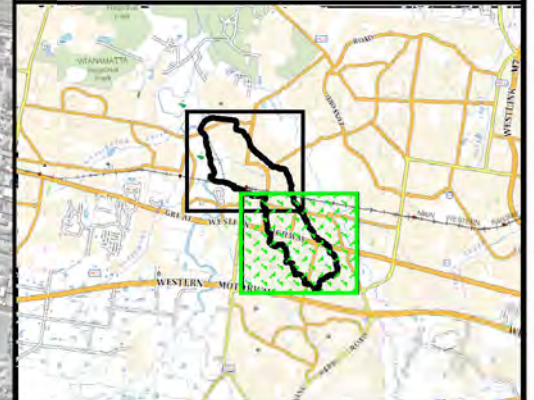
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 44 Emergency Response Classifications for the 1% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location
- Road Overtopping Points

Notes:

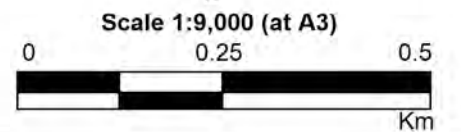



Figure 45.1
Emergency Response
Classifications for the
0.5% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 45 Emergency Response Classifications for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location
- Road Overtopping Points

Notes:



Scale 1:9,000 (at A3)

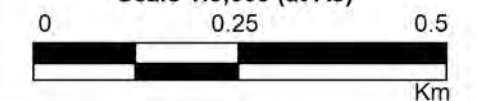

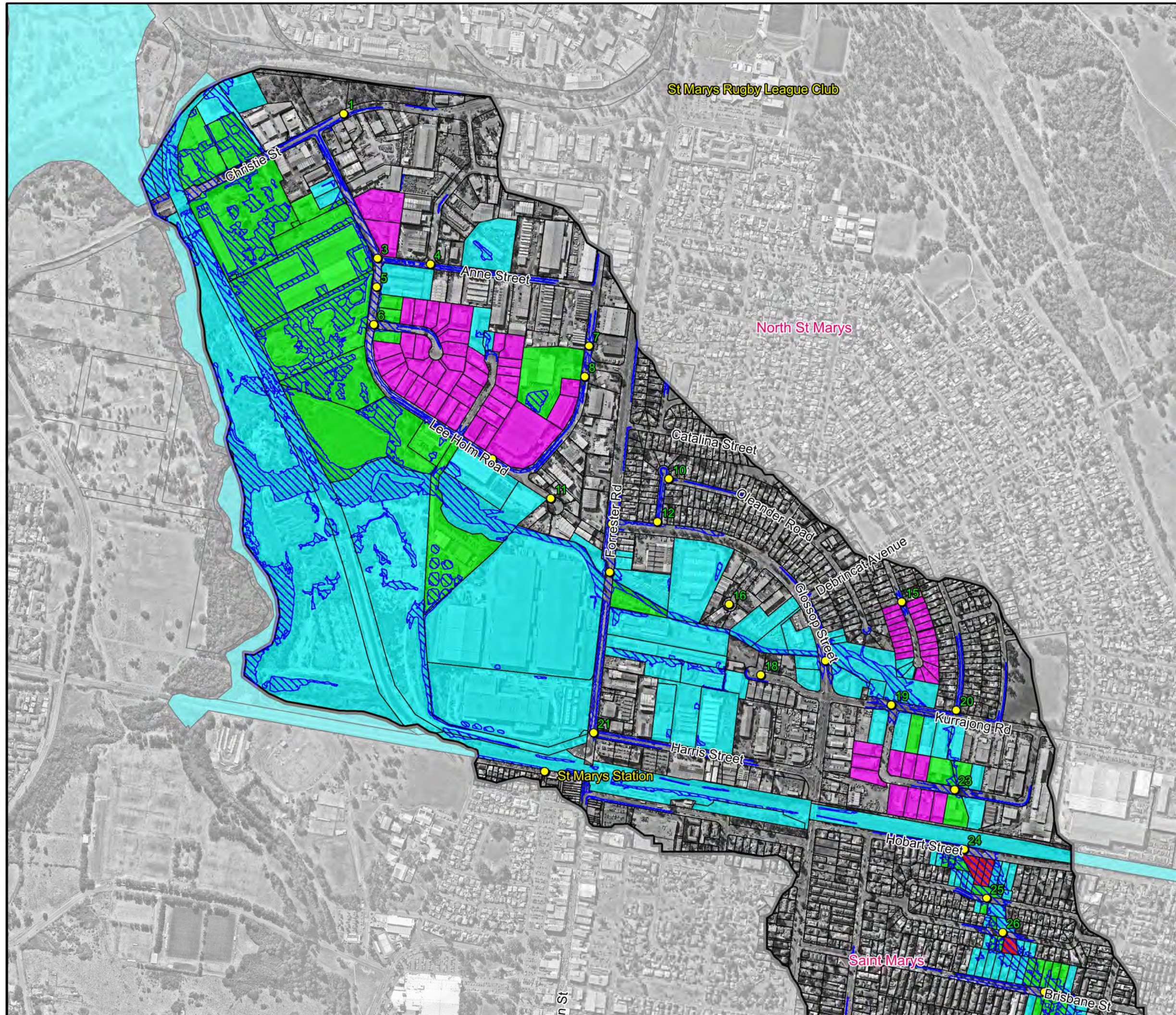


Figure 45.2
Emergency Response
Classifications for the
0.5% AEP Flood

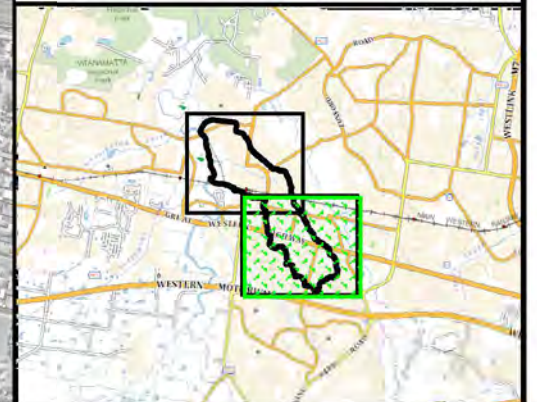
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 45 Emergency Response Classifications for the 0.5% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location
- Road Overtopping Points

Notes:

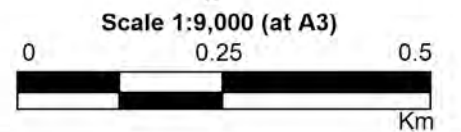



Figure 46.1
Emergency Response
Classifications for the
0.2% AEP Flood

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 46 Emergency Response Classifications for the 0.2% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location**
- Road Overtopping Points

Notes:

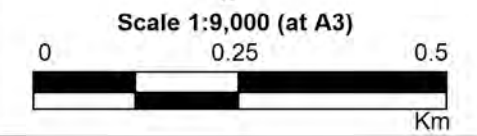

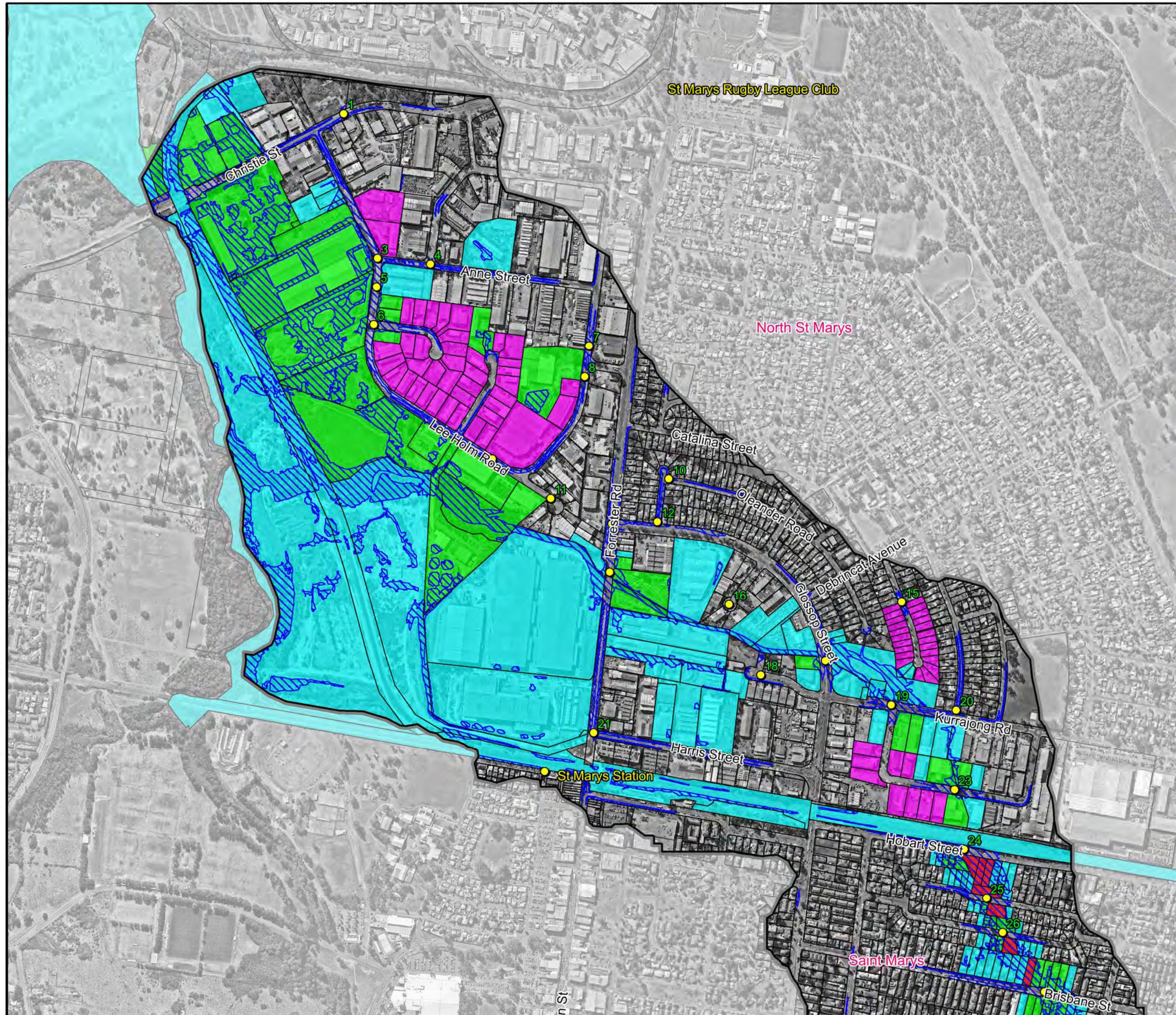


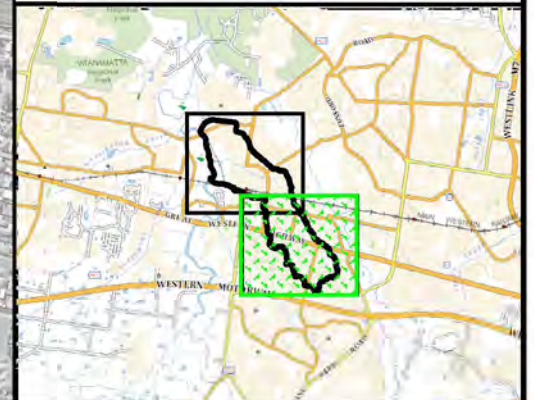
Figure 46.2
Emergency Response
Classifications for the
0.2% AEP Flood

Prepared By:

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 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 46 Emergency Response Classifications for the 0.2% AEP Flood.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location**
- Road Overtopping Points

Notes:

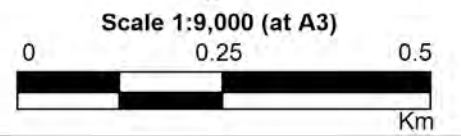



Figure 47.1
Emergency Response
Classifications for the
PMF

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 47 Emergency Response Classifications for the PMF.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- Flooded Isolated Submerged
 - Flooded Exit Route Overland Escape
 - Flooded Isolated Elevated
 - Flooded Exit Route Rising Road
 - Indirect Consequences
 - No Flood Impacts
 - Inundation Extent
- Road Overtopping Location**
- Road Overtopping Points

Notes:



Scale 1:9,000 (at A3)

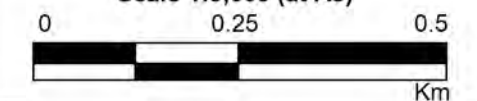

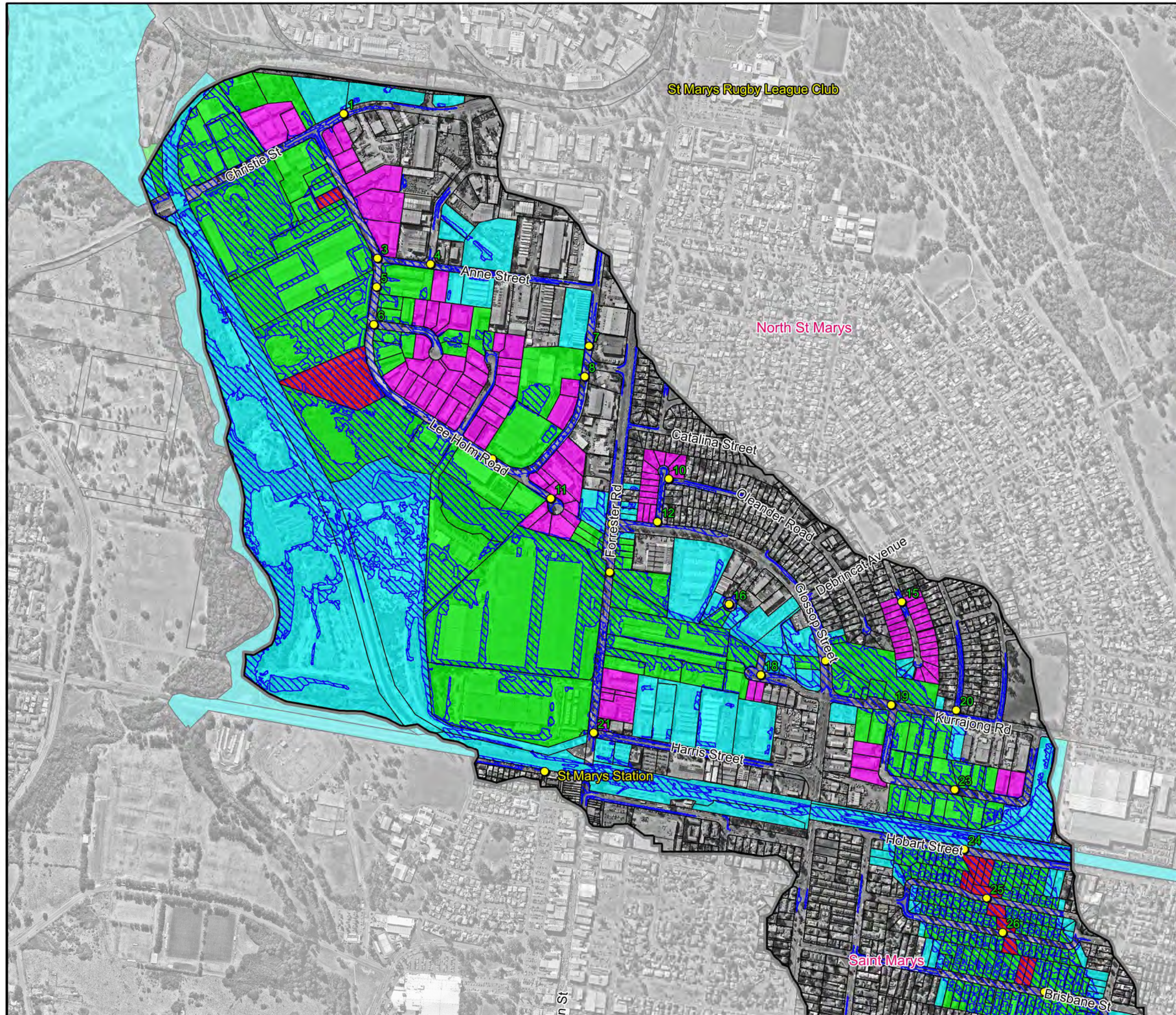


Figure 47.2
Emergency Response
Classifications for the
PMF

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

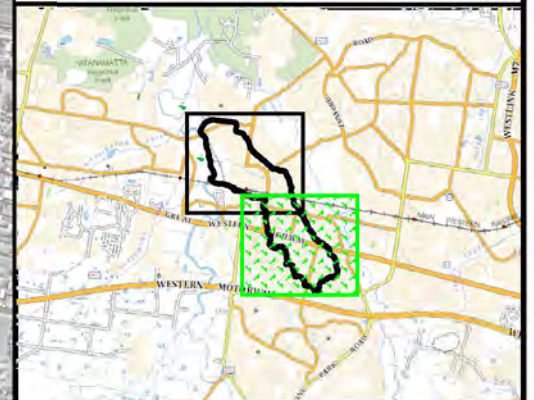
File Name: Figure 47 Emergency Response Classifications for the PMF.wor













MISCELLANEOUS MAPS



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
- Frequency of Above Floor Flooding
-  0.5 EY
-  20% AEP
-  10% AEP
-  5% AEP
-  2% AEP
-  1% AEP
-  0.5% AEP
-  0.2% AEP
-  PMF

Notes:



Scale 1:9,000 (at A3)

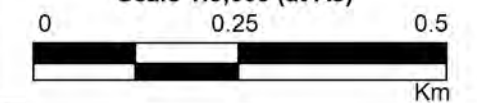



Figure 48.1
Frequency of Above Floor Flooding

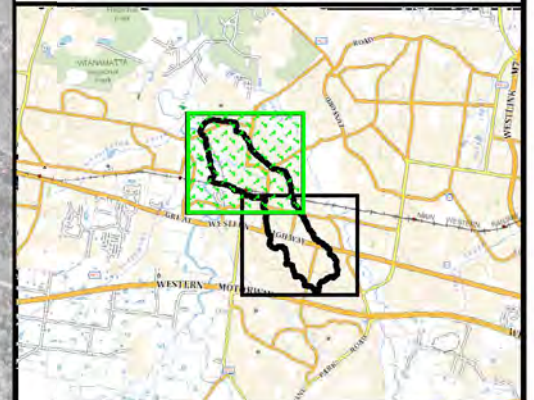
Prepared By:

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Suite 10.01, 70 Phillip St
Sydney, NSW 2000











File Name: Figure 48 Frequency of Above Floor Flooding.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
- Frequency of Above Floor Flooding
-  0.5 EY
-  20% AEP
-  10% AEP
-  5% AEP
-  2% AEP
-  1% AEP
-  0.5% AEP
-  0.2% AEP
-  PMF

Notes:



Scale 1:9,000 (at A3)

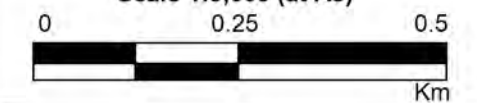



Figure 48.2
Frequency of Above Floor Flooding

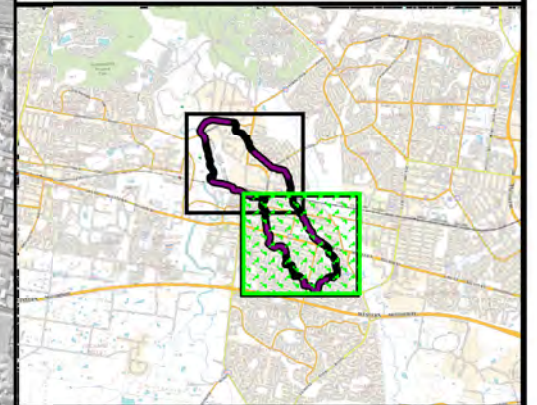
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000








File Name: Figure 48 Frequency of Above Floor Flooding.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  5%AEP Flood Extent
-  1%AEP Flood Extent
-  PMF Flood Extent
-  Critical Facility
- Vulnerable Facility
 -  School
 -  Child Care Centre
 -  Church

Notes:



Scale 1:9,000 (at A3)

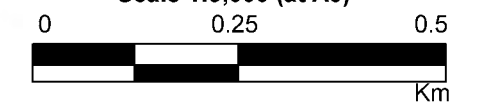

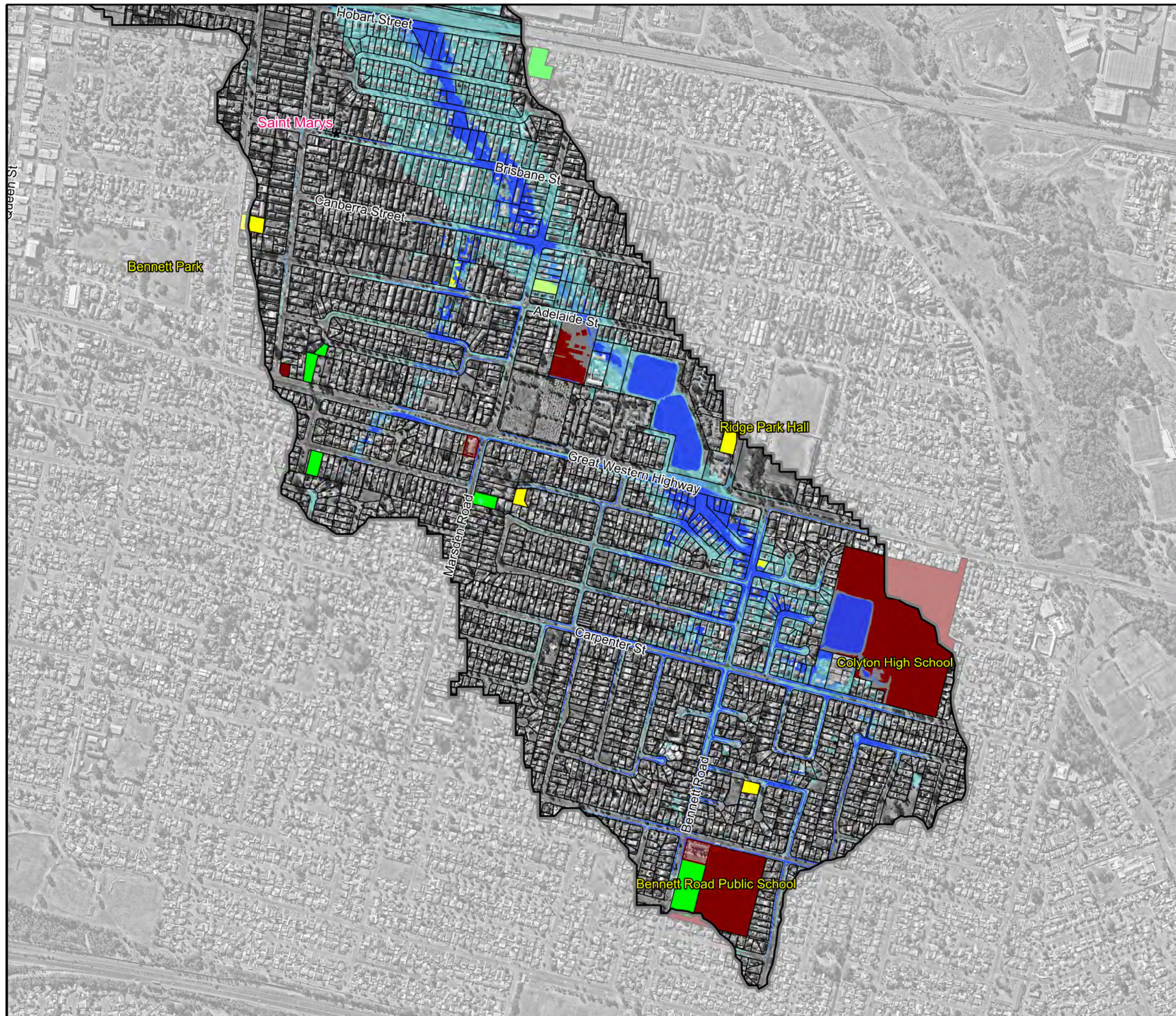


Figure 49.1
Flood Affection of
Vulnerable and
Critical Facilities

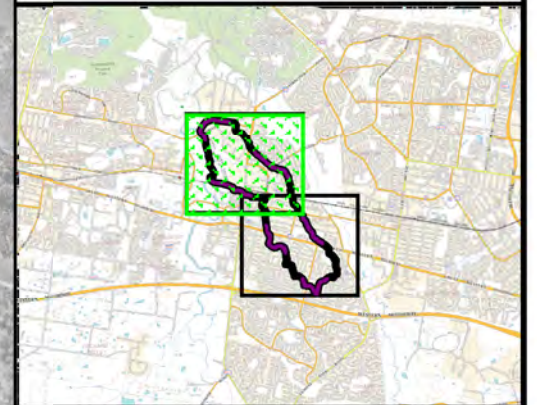
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 49 Flood Affection of Vulnerable and Critical Facilities



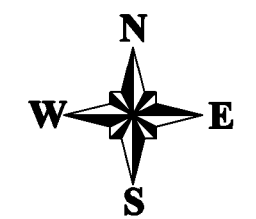
Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- 5%AEP Flood Extent
- 1%AEP Flood Extent
- PMF Flood Extent
- Critical Facility
- Vulnerable Facility
- School
- Child Care Centre
- Church

Notes:



Scale 1:9,000 (at A3)

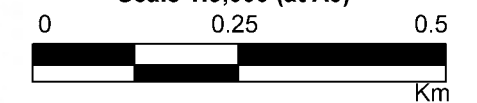

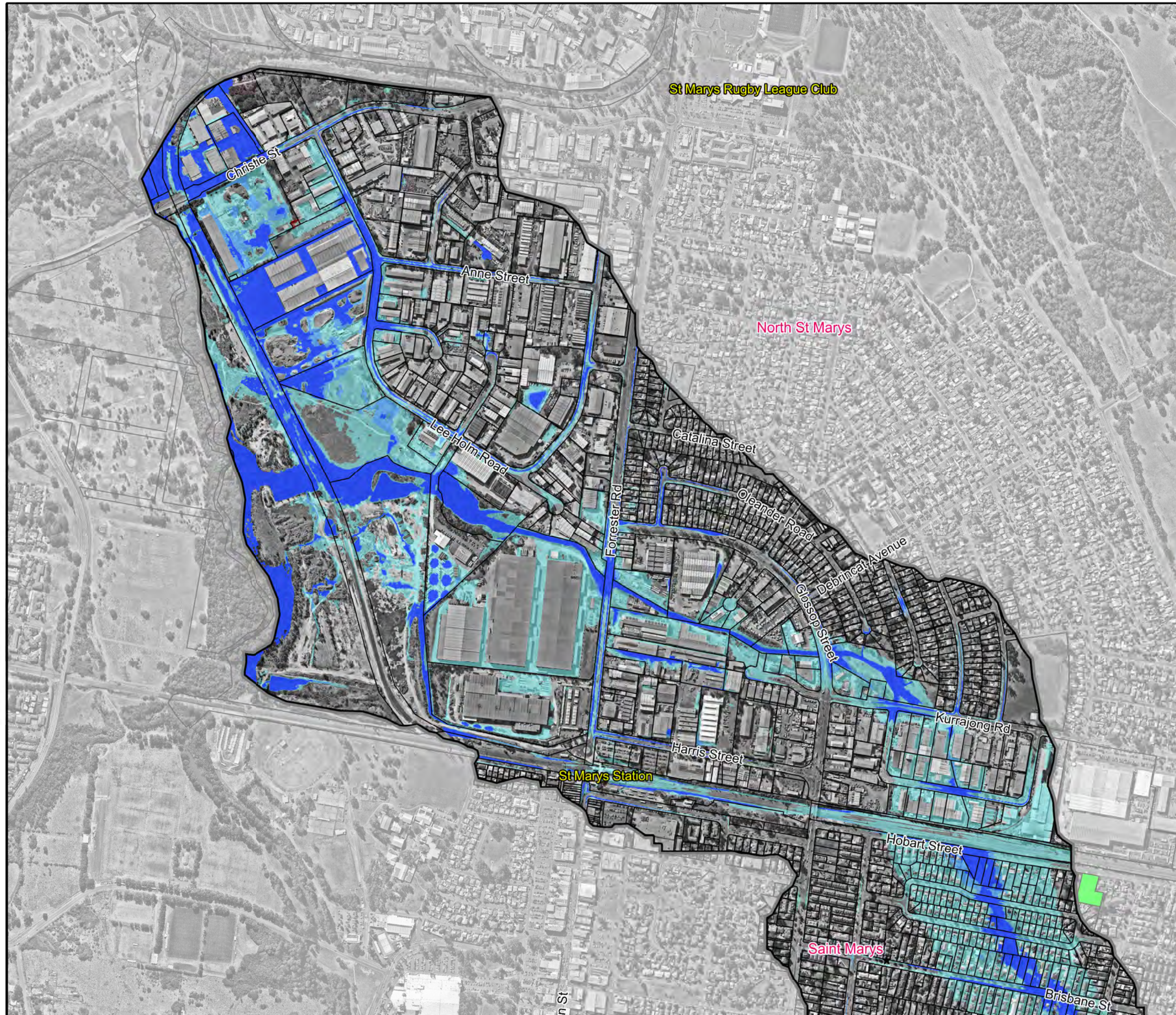


Figure 49.2
Flood Affection of
Vulnerable and
Critical Facilities

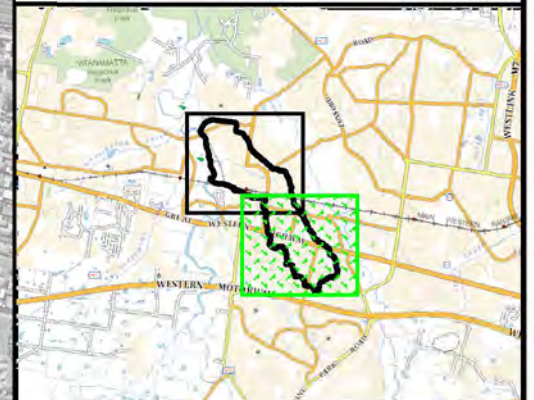
Prepared By:

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Sydney, NSW 2000








File Name: Figure 49 Flood Affection of Vulnerable and Critical Facilities



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
- Potential Future Catchment Impervious percentage
-  5
-  65
-  70
-  75
-  85
-  95

Notes:



Scale 1:9,000 (at A3)

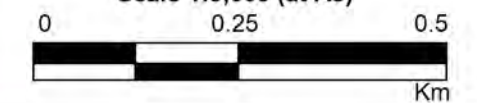

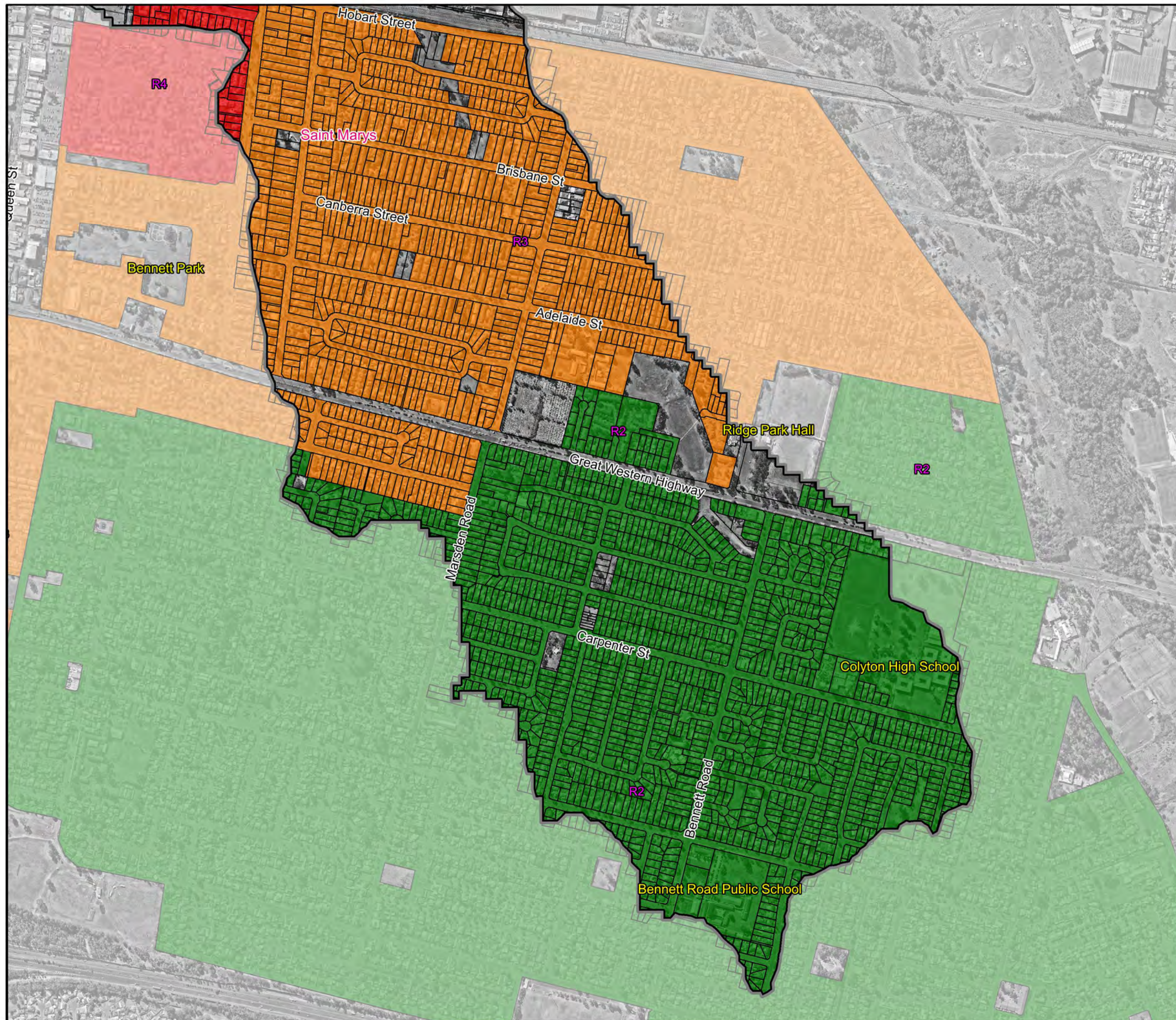


Figure 50.1
Potential Future
Catchment Land Use

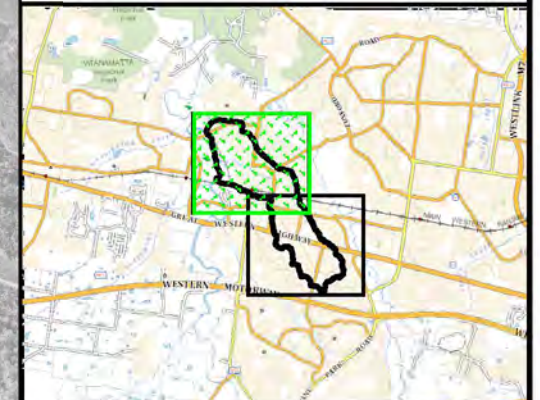
Prepared By:

 **Catchment Simulation Solutions**
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Sydney, NSW 2000








File Name: Figure 50 Potential Future Catchment Land Use.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Study Area
Potential Future Catchment Impervious percentage	
	5
	65
	70
	75
	85
	95

Notes:



Scale 1:9,000 (at A3)

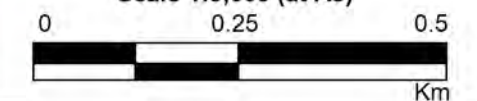

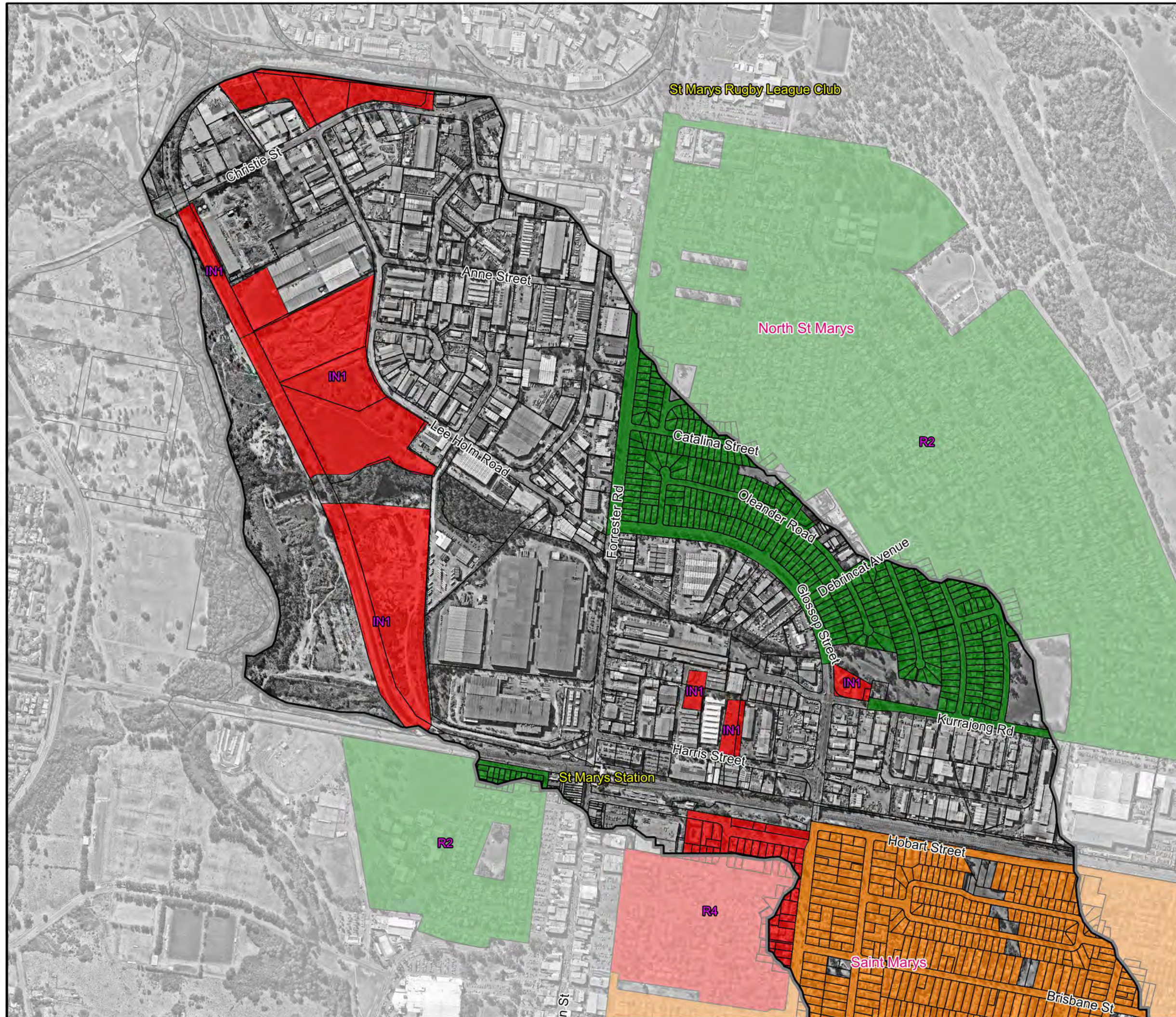


Figure 50.2
Potential Future
Catchment Land Use

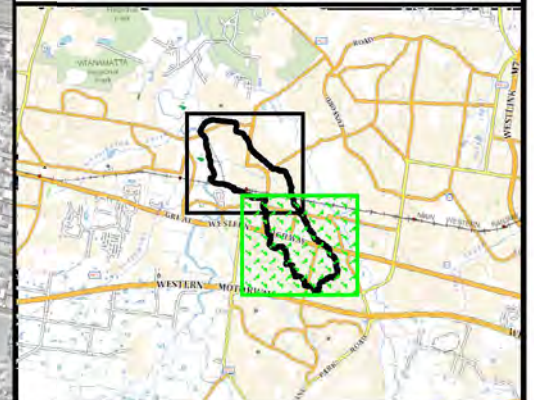
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000




File Name: Figure 50 Potential Future Catchment Land Use.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
-  Flood control lot
-  Areas where Complying Development Certificate cannot be issued (floodway, flood storage, high flood hazard, major flow path or high risk area)

Notes:



Scale 1:9,000 (at A3)

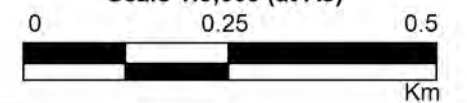



Figure 51.1
Complying
Development Areas

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Sydney, NSW 2000




File Name: Figure 51 Complying development areas.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
-  Flood control lot
-  Areas where Complying Development Certificate cannot be issued (floodway, flood storage, high flood hazard, major flow path or high risk area)

Notes:

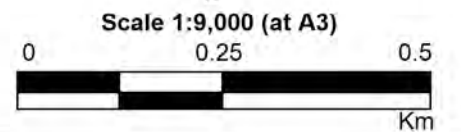

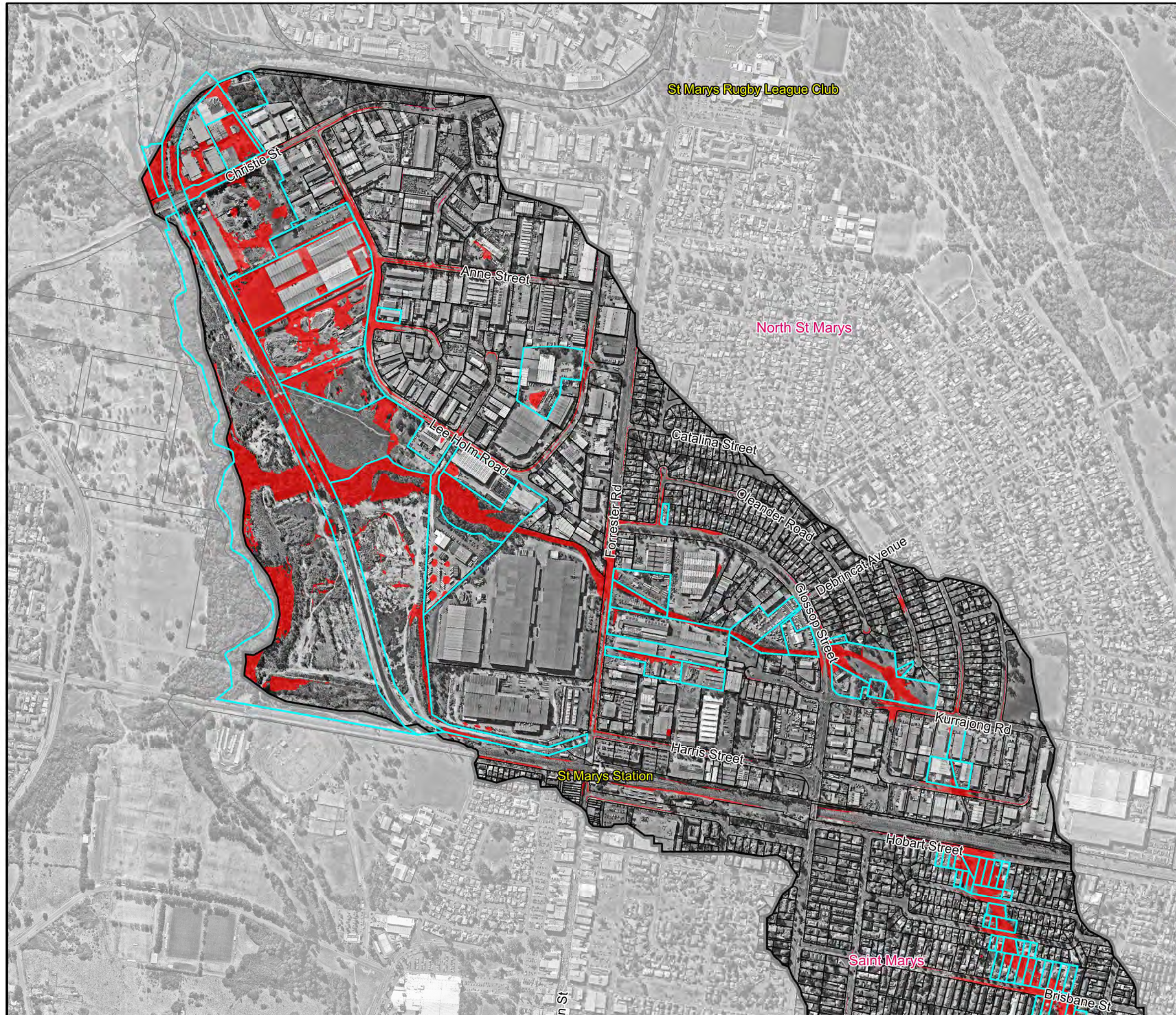


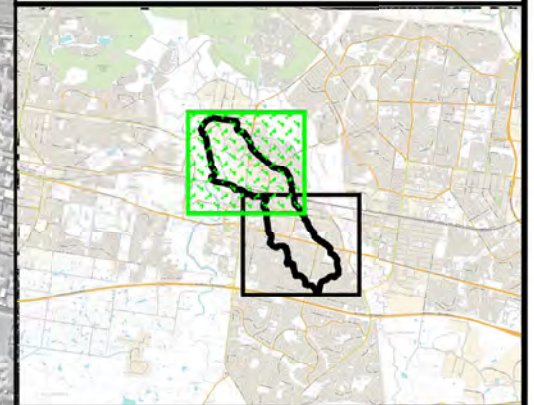
Figure 51.2
Complying
Development Areas

Prepared By:
 **Catchment Simulation Solutions**
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000




File Name: Figure 51 Complying development areas.wor



Little Creek Catchment Flood Risk Management Study and Plan



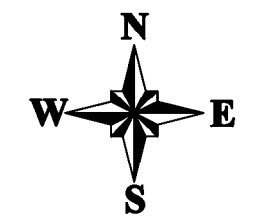
LEGEND

-  Study Area
-  Existing FPA #
-  Recommended FPA *

Notes:

Existing FPA is based on the 1% AEP flood + 0.5m freeboard.

* Recommended FPA is based on the 1% AEP flood (or 0.5% AEP flood in Brisbane St to Hobart St area + 0.5m freeboard or properties exposed to H4 internal hazard during the PMF.



Scale 1:9,000 (at A3)

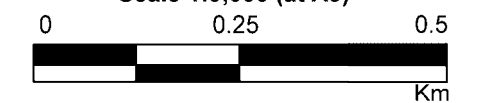

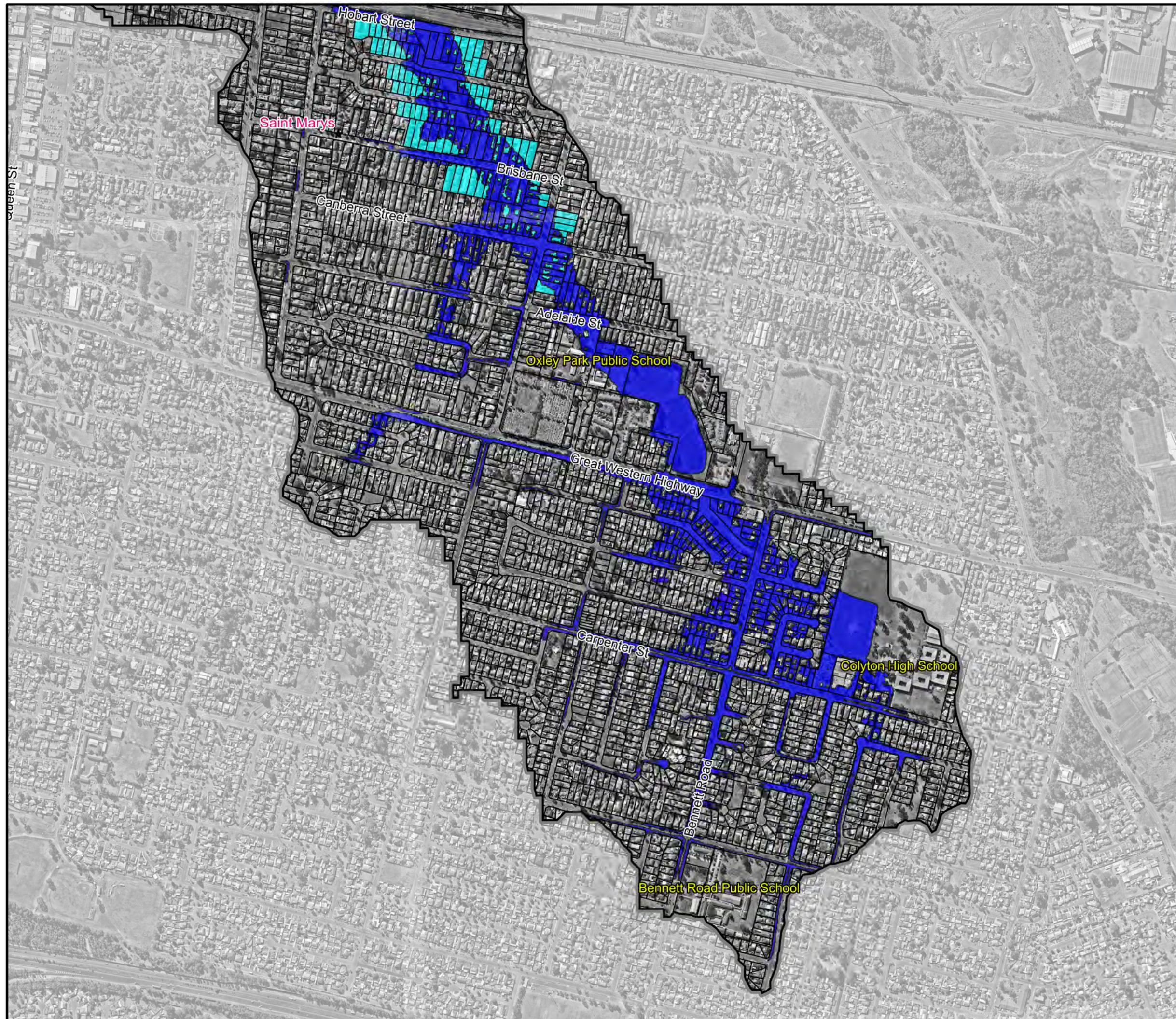


Figure 52.1
Flood Planning Area

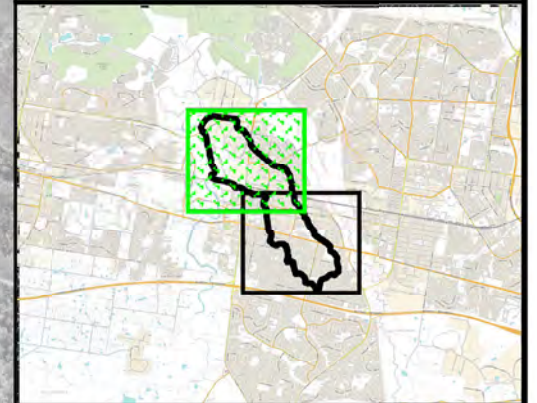
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000




File Name: Figure 52 Flood Planning Area



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  Study Area
-  Existing FPA #
-  Recommended FPA *

Notes:

Existing FPA is based on the 1% AEP flood + 0.5m freeboard.

* Recommended FPA is based on the 1% AEP flood (or 0.5% AEP flood in Brisbane St to Hobart St area + 0.5m freeboard or properties exposed to H4 internal hazard during the PMF.



Scale 1:9,000 (at A3)

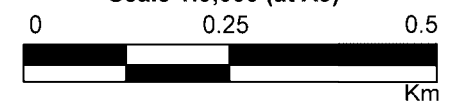
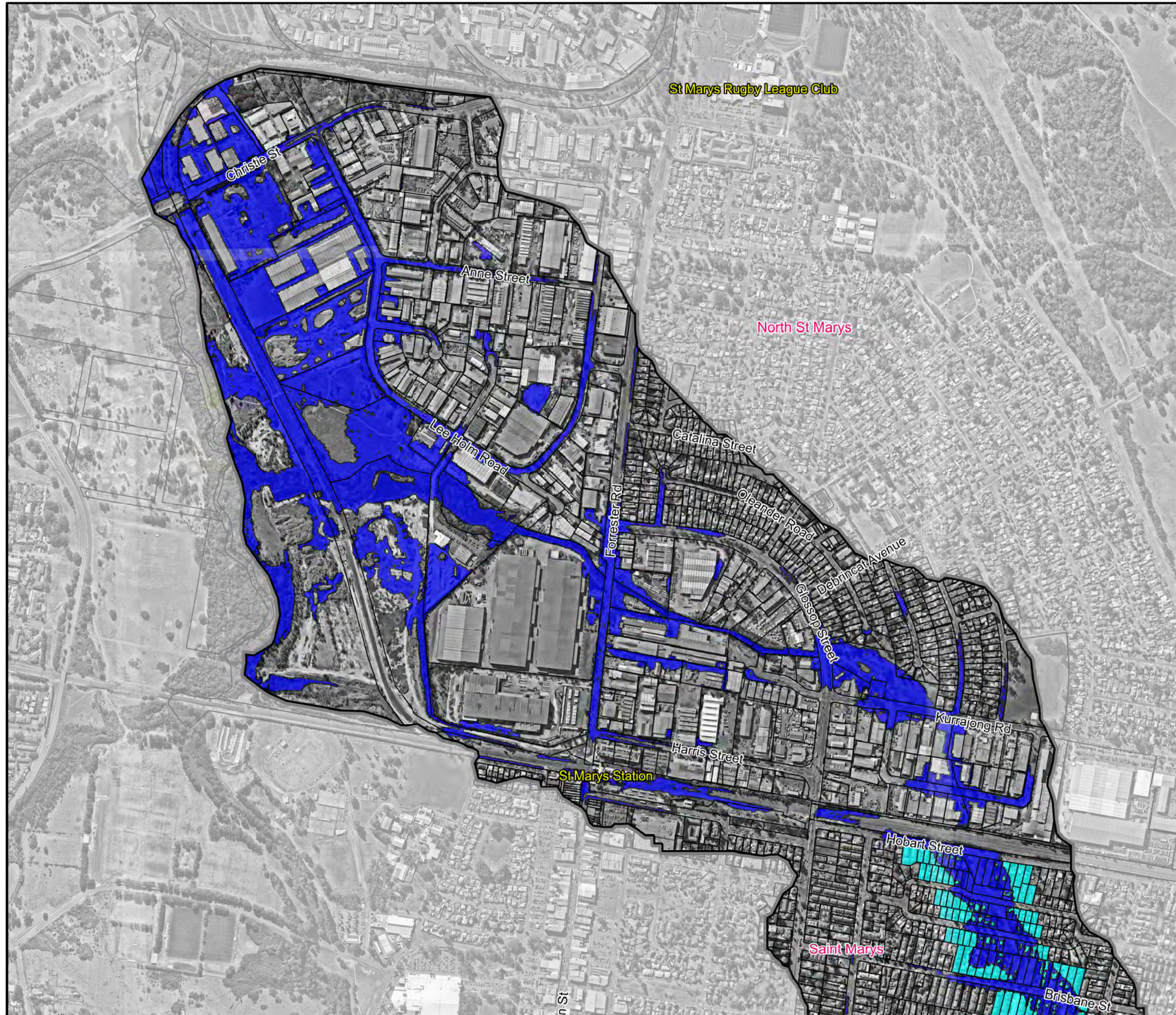


Figure 52.2
Flood Planning Area

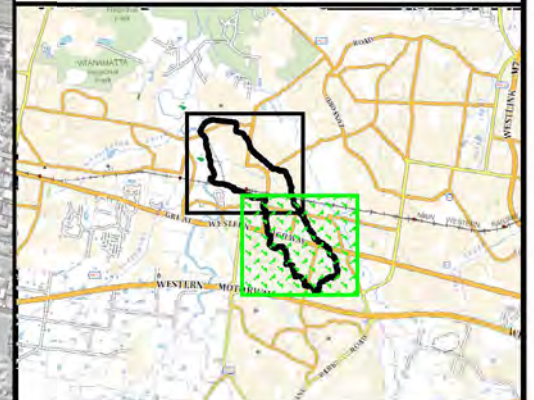
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000














File Name: Figure 52 Flood Planning Area



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	Catchment Boundary
Land Zone	
Residential	Business / Mixed Use
 R2	 B1
 R3	 B4
 R4	Industrial
Environmental	 IN1
 E2	Special Activities
Recreation	 SP1
 RE1	 SP2
 RE2	
Hazard	
	H4-H6 Hazard

Notes:



Scale 1:9,000 (at A3)

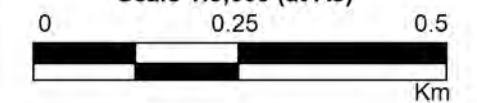

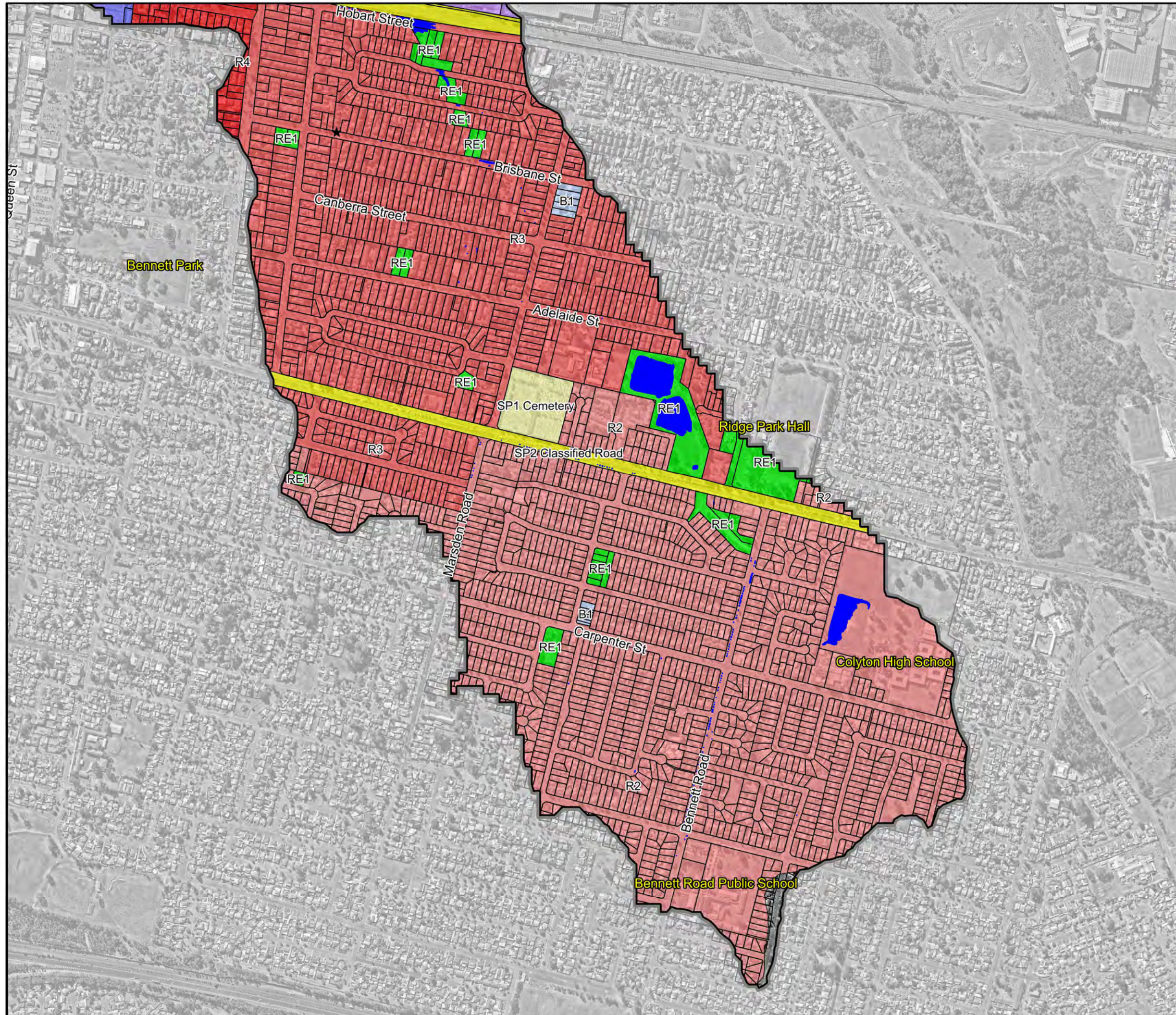


Figure 53.1
Land Use Zones
with 1%AEP National
Hazards

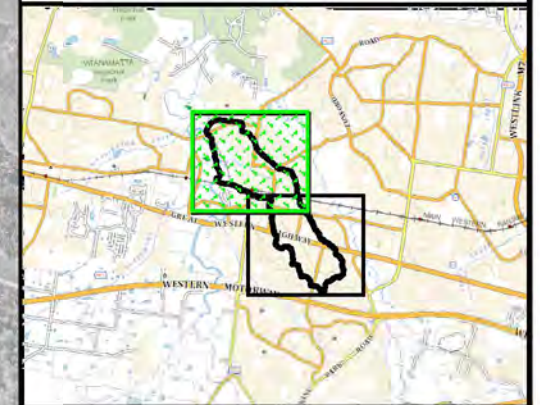
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000


File Name: Figure 53 Land Use Zones with 1%AEP National Hazards.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

 Catchment Boundary	
Land Zone	
Residential	Business / Mixed Use
R2	B1
R3	B4
R4	Industrial
Environmental	Special Activities
E2	SP1
Recreation	SP2
RE1	
RE2	
Hazard	
 H4-H6 Hazard	

Notes:



Scale 1:9,000 (at A3)

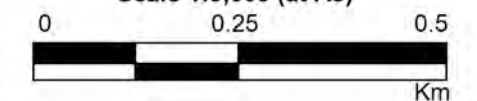

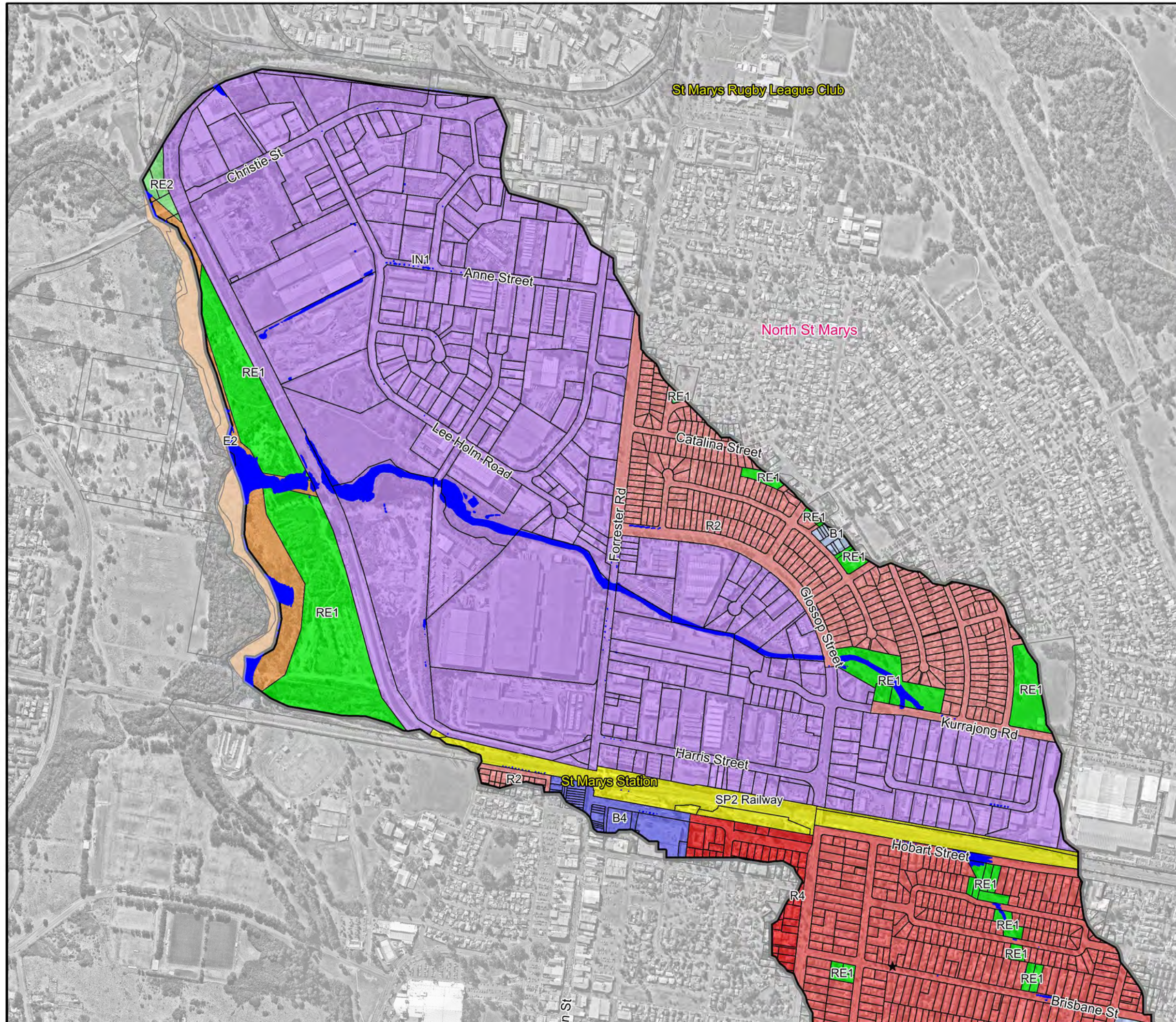


Figure 53.2
Land Use Zones
with 1%AEP National
Hazards

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000



File Name: Figure 53 Land Use Zones with 1%AEP National Hazards.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

 Catchment Boundary	
Land Zone	
Residential	Business / Mixed Use
R2	B1
R3	B4
R4	Industrial
Environmental	IN1
E2	Special Activities
Recreation	SP1
RE1	SP2
RE2	
Hazard	
 H4-H6 Hazard	

Notes:



Scale 1:9,000 (at A3)

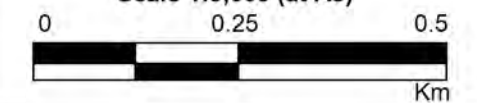

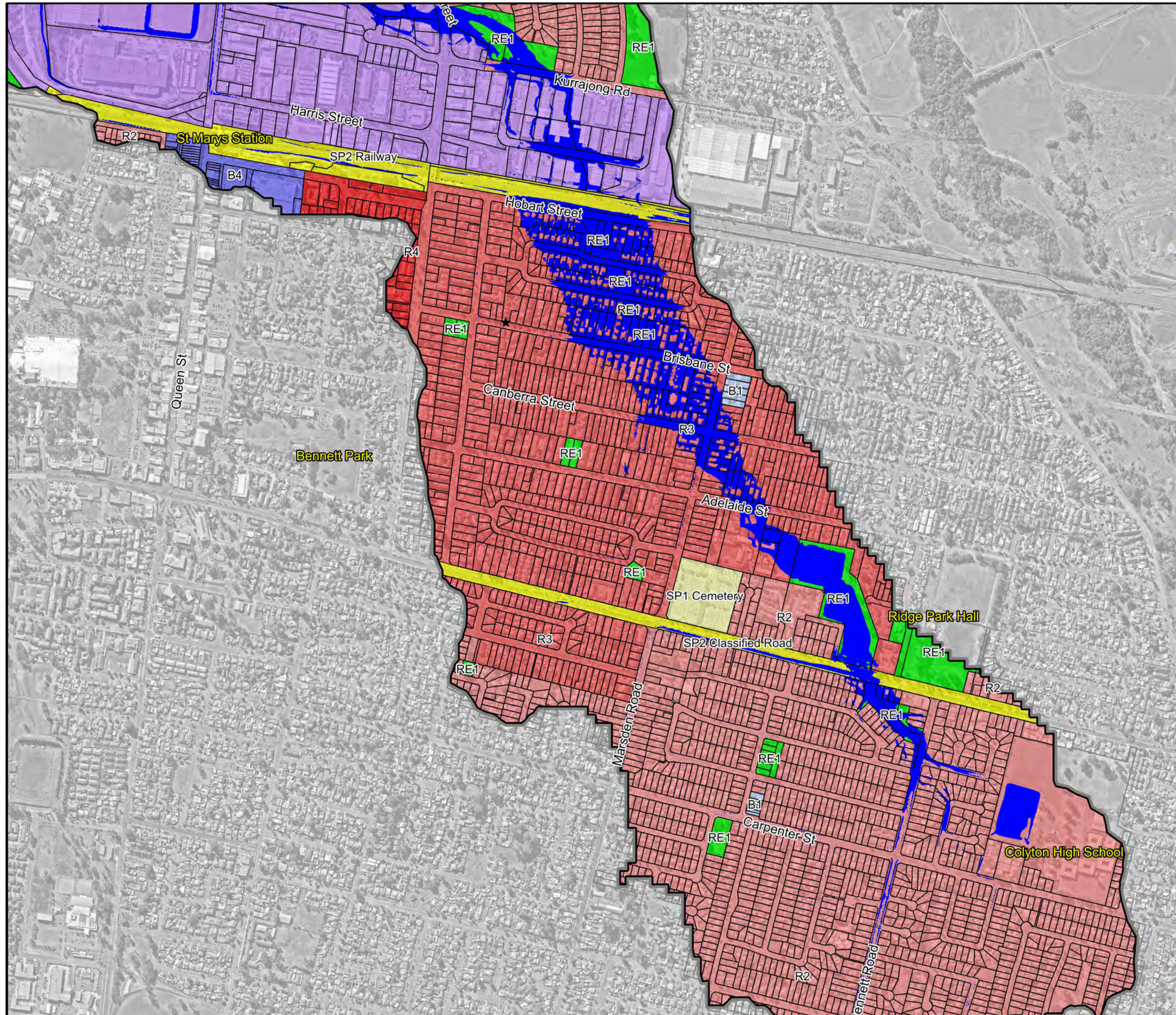


Figure 54.1
Land Use Zones
with PMF National
Hazards

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000



File Name: Figure 54 Land Use Zones with PMF National Hazards.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

 Catchment Boundary	
Land Zone	
Residential	Business / Mixed Use
R2	B1
R3	B4
R4	Industrial
Environmental	Special Activities
E2	SP1
Recreation	SP2
RE1	
RE2	
Hazard	
 H4-H6 Hazard	

Notes:



Scale 1:9,000 (at A3)

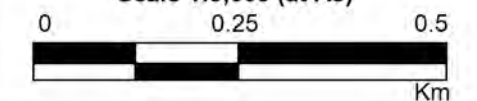

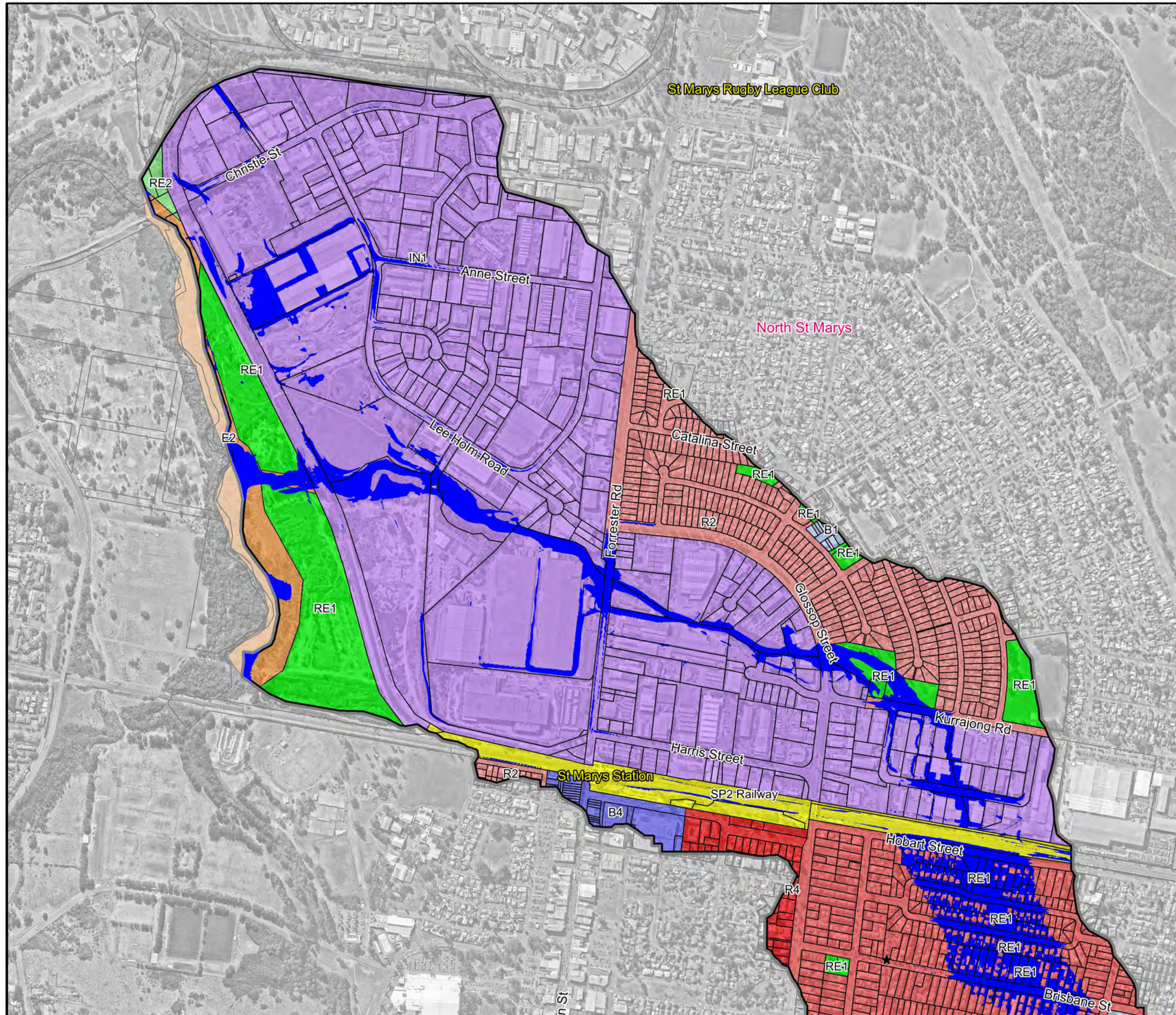


Figure 54.2
Land Use Zones
with PMF National
Hazards

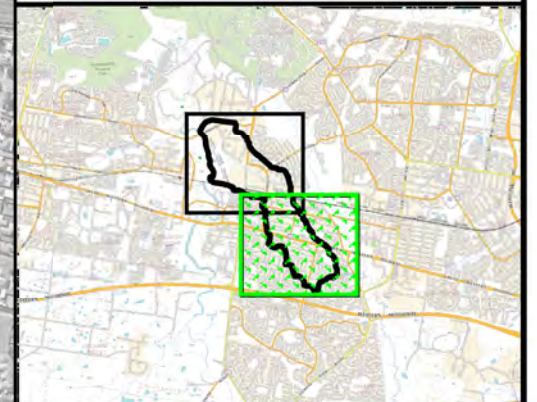
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 54 Land Use Zones with PMF National Hazards.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

FPCC Category 1:

- 1A
- 1B

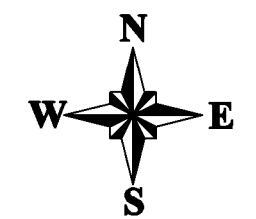
FPCC Category 2:

- 2A
- 2B
- 2C
- 2D
- 2E

FPCC Category 3

FPCC Category 4

Notes:



Scale 1:9,000 (at A3)

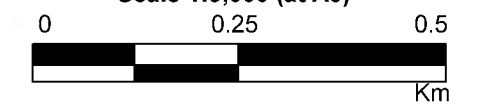

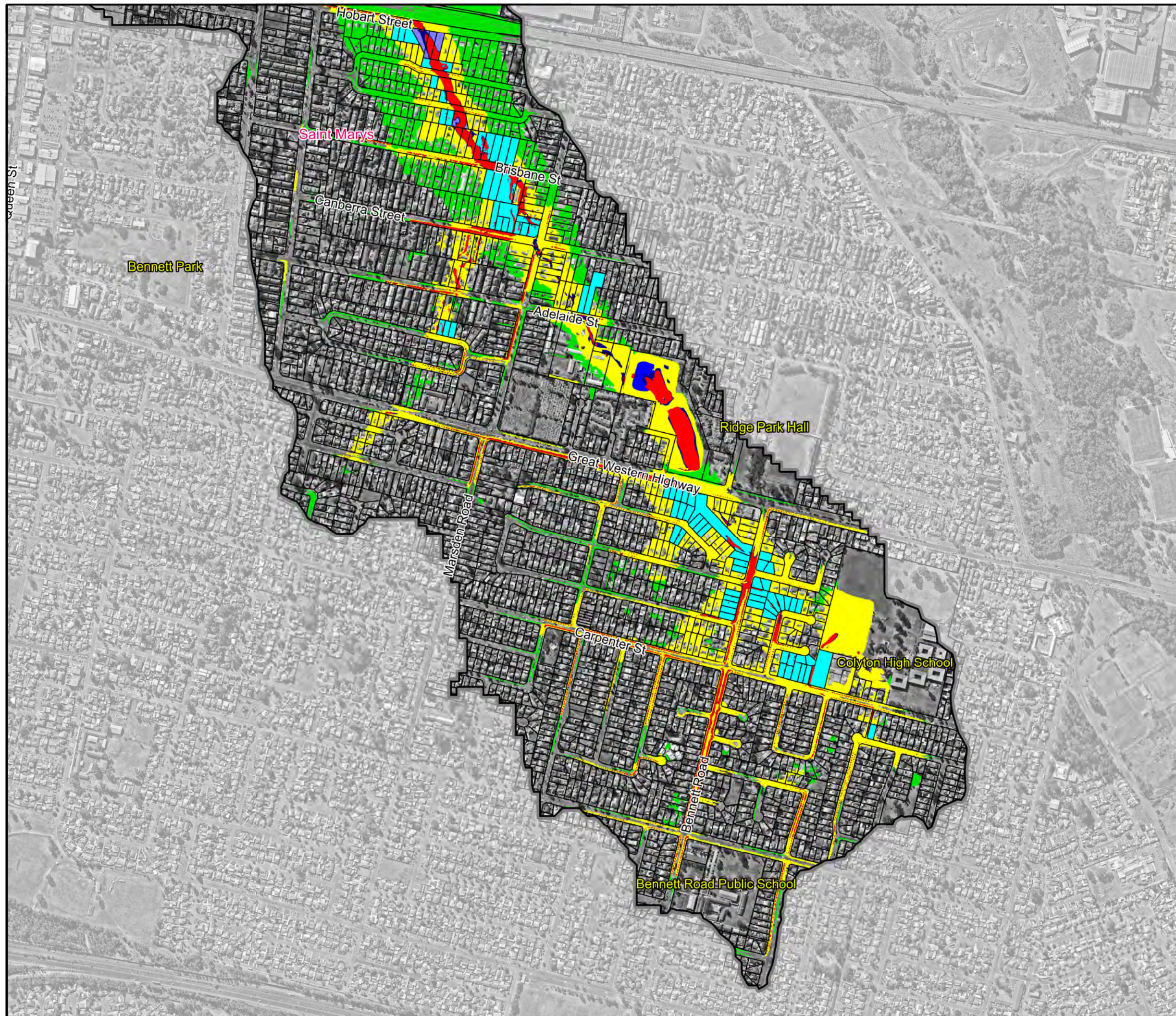


Figure 55.1
Flood Planning
Constraints Mapping

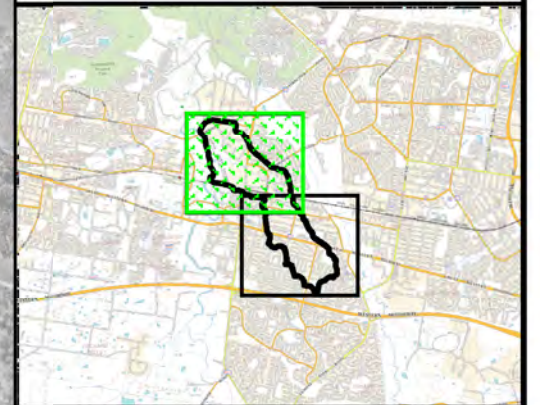
Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 55 Flood Planning Constraints Mapping



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

- FPCC Category 1:
- 1A
 - 1B
- FPCC Category 2:
- 2A
 - 2B
 - 2C
 - 2D
 - 2E
- FPCC Category 3
- FPCC Category 4

Notes:

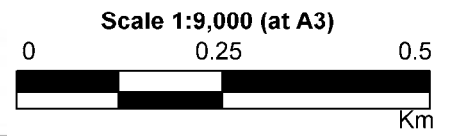
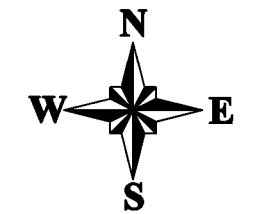



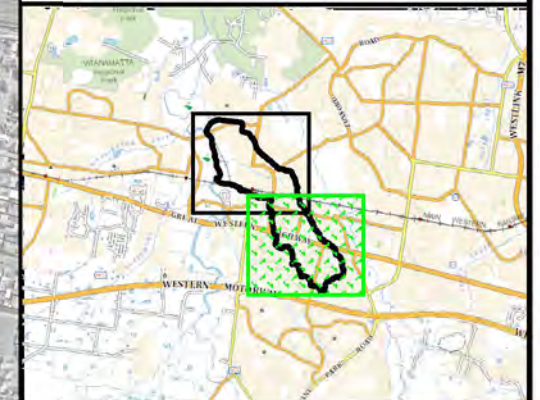
Figure 55.2
Flood Planning
Constraints Mapping

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000











File Name: Figure 55 Flood Planning Constraints Mapping



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

-  LEP Zone
- FPC Category**
- Category 1**
-  1A
-  1B
-  Category 3
-  Category 4
- Category 2**
-  2A
-  2B
-  2C
-  2D
-  2E

Notes:



Scale 1:9,000 (at A3)

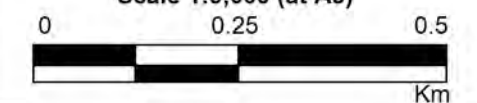

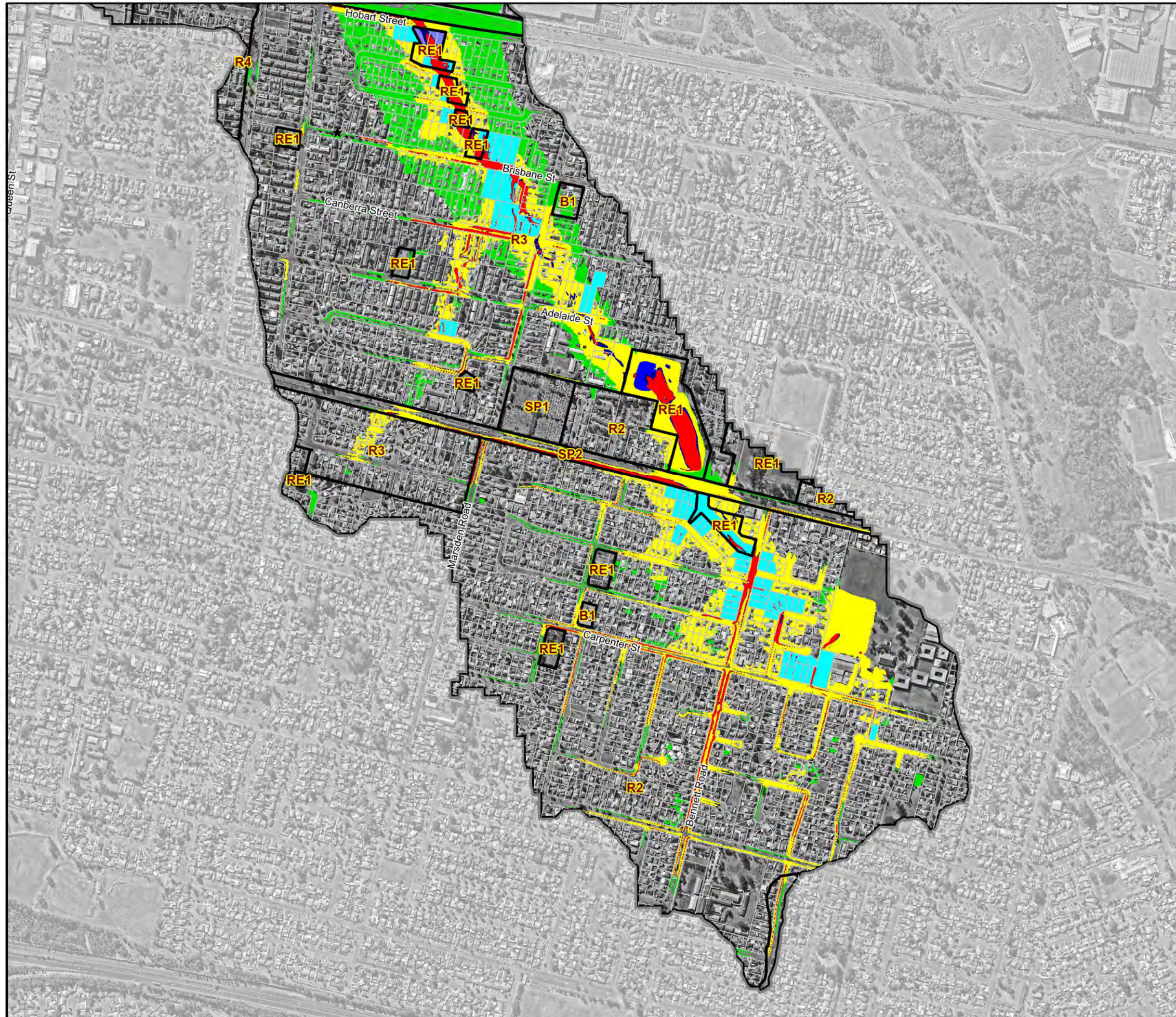


Figure 56.1
Flood Planning
Constraints Mapping with
Land Use Zones

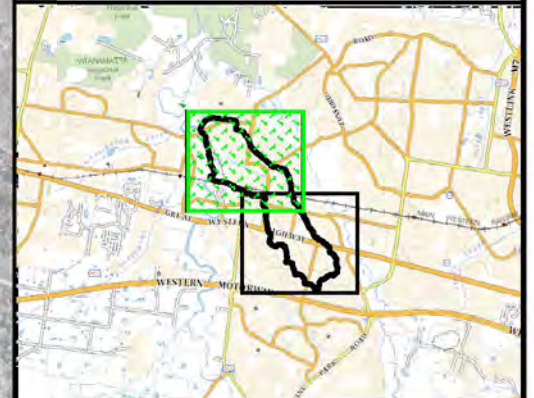
Prepared By:

 **Catchment Simulation Solutions**
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Sydney, NSW 2000











File Name: Figure 56 Flood Planning Constraints Mapping with land use Zones.wor



Little Creek Catchment Flood Risk Management Study and Plan



LEGEND

	LEP Zone
FPCC Category	
Category 1	
	1A
	1B
Category 2	
	2A
	2B
	2C
	2D
	2E
	Category 3
	Category 4

Notes:

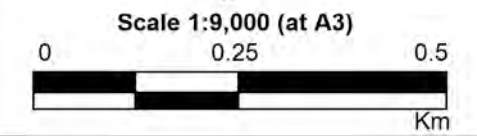



Figure 56.2
Flood Planning Constraints Mapping with Land Use Zones

Prepared By:

Catchment Simulation Solutions
 Suite 10.01, 70 Phillip St
 Sydney, NSW 2000

File Name: Figure 56 Flood Planning Constraints Mapping with land use Zones.wor



PRELIMINARY CONCEPT DESIGNS FOR FLOOD RISK MANAGEMENT OPTIONS





LEGEND

- Existing Pits
 - Existing Stormwater Network
 - ▲ Stormwater Pit Upgrades
 - Culvert Upgrades
- Upgrade Details*
- Existing 5% AEP Inundation Extent
 - Existing 1% AEP Inundation Extent

Notes:



Scale 1:1000 (at A3)

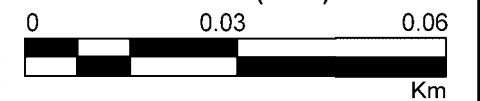



Figure 57:
**FM1: Great Western
Highway Culvert Upgrade**

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 57 FM1 Great Western
Highway Culvert Upgrade.wor





LEGEND

- Existing Pits
 - Existing Stormwater Network
 - ▲ Stormwater Pit Upgrades
 - Culvert Upgrades
- Upgrade Details*
- Existing 5%AEP Inundation Extent
 - Existing 1%AEP Inundation Extent

Notes:



Scale 1:550 (at A3)

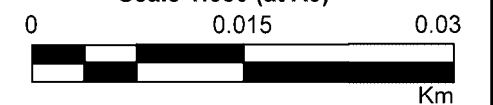
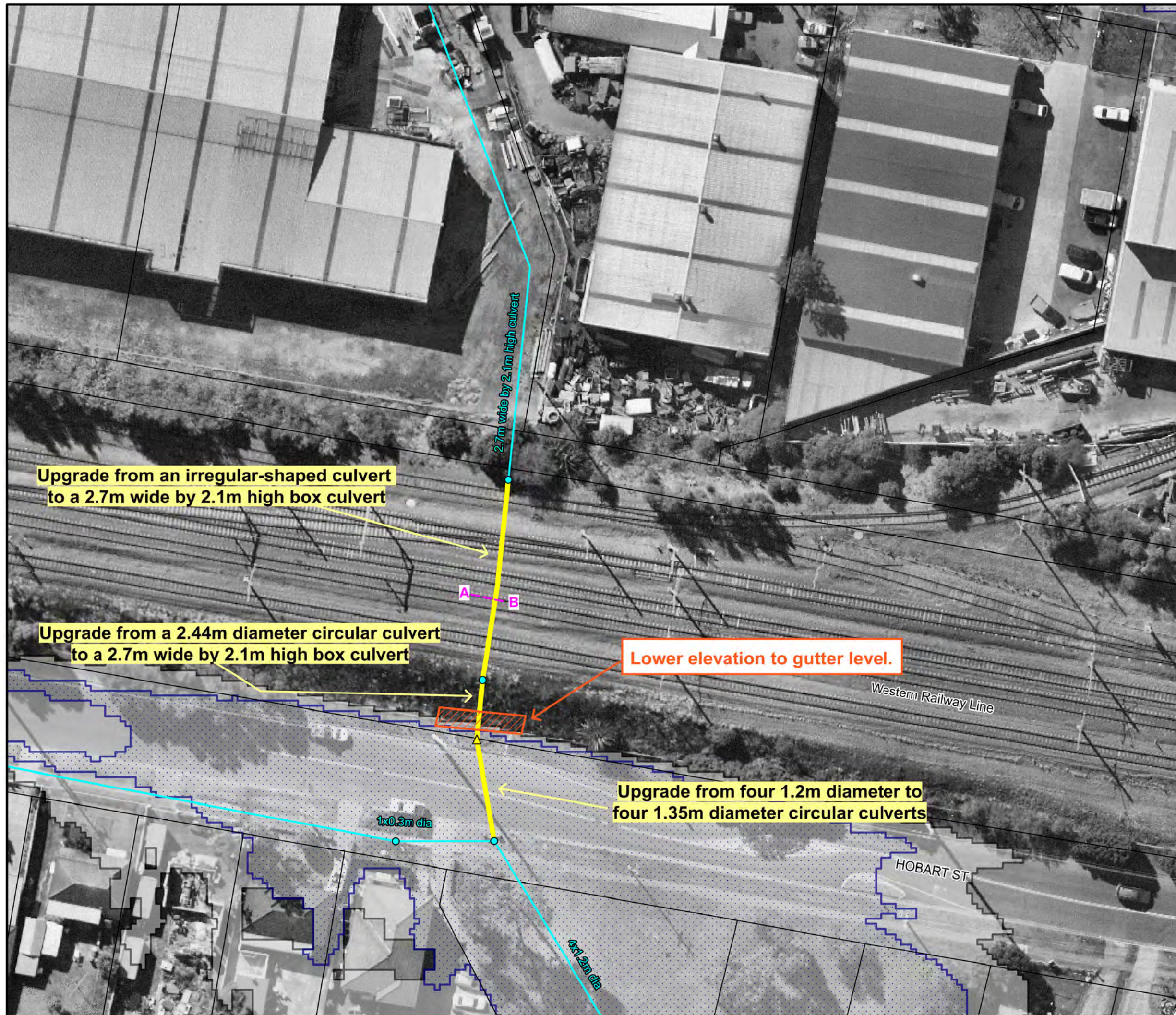


Figure 58:
**FM2: Railway/Hobart
Street Culvert Upgrade**

Prepared By:








File Name: Figure 58 FM2 Railway_Hobart
Street Culvert Upgrade.wor





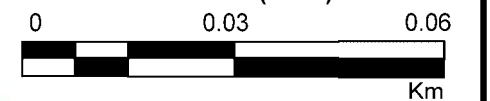
LEGEND

-  Existing Pits
-  Existing Stormwater Network
-  Culvert Upgrades
- Upgrade Details**
-  Existing 5%AEP Inundation Extent
-  Existing 1%AEP Inundation Extent

Notes:



Scale 1:1000 (at A3)



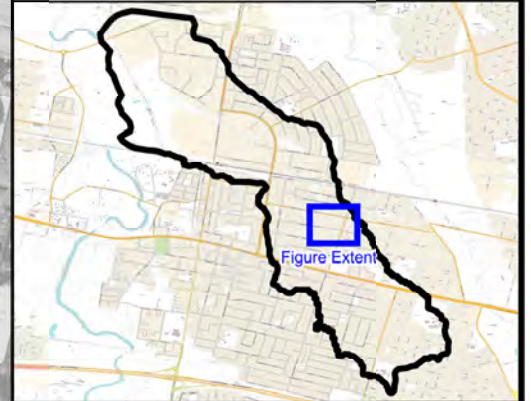
**Figure 59:
FM3: Glossop Street
Culvert Upgrades**

Prepared By:














File Name: Figure 59 FM3 Glossop Street
Culvert Upgrade.wor





LEGEND

-  Existing Pits
-  Existing Stormwater Network
-  New Stormwater Pit
-  New Stormwater Pipe
-  Addition Details
-  Stormwater Pipe Removal
-  Removal Details
-  Stormwater Pipe Upgrades
-  Upgrade Details
-  Existing 5%AEP Inundation Extent
-  Existing 1%AEP Inundation Extent

Notes:



Scale 1:1500 (at A3)

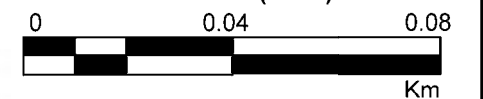



Figure 60:
FM4: Canberra, Sydney and Brisbane Streets Stormwater Upgrade

Prepared By:

 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: FM4: Canberra, Sydney and Brisbane Streets Stormwater Upgrade.wor





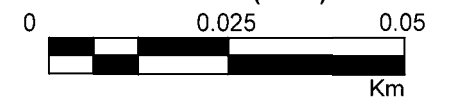
LEGEND

- Existing Pits
- Existing Stormwater Network
- Existing Culvert
- ▲ New Stormwater Pit
- New Stormwater Pipe
- Addition Details**
- ▲ Stormwater Pit Removal
- Stormwater Pipe Removal
- Removal Details**
- ▲ Stormwater Pit Upgrades
- Stormwater Pipe Upgrades
- Upgrade Details**
- Existing 5%AEP Inundation Extent
- Existing 1%AEP Inundation Extent

Notes:



Scale 1:1000 (at A3)

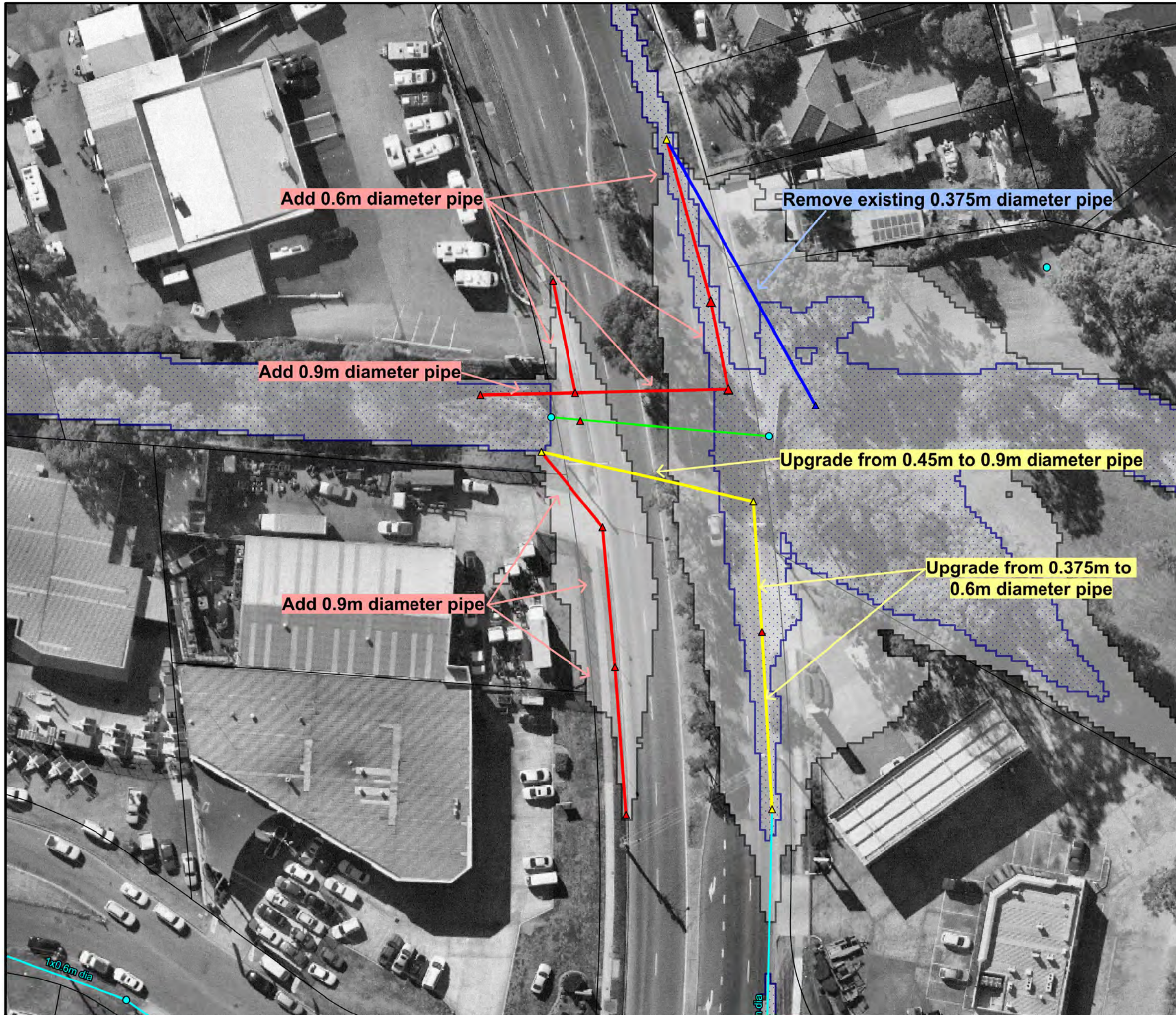


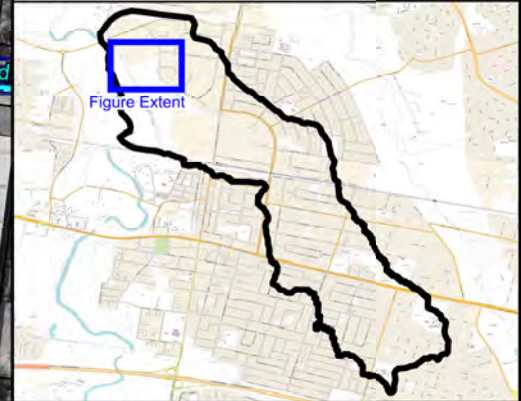
**Figure 61:
FM5: Glossop Street
Stormwater Upgrade**

Prepared By:

Catchment Simulation Solutions
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 61 FM5: Glossop Street Stormwater Upgrade.wor





LEGEND

- Existing Pits
- Existing Stormwater Network
- ▲ New Stormwater Pit
- New Stormwater Pipe
- Stormwater Pipe Removal
- Stormwater Pipe Upgrades
- Existing 5% AEP Inundation Extent
- Existing 1% AEP Inundation Extent

Notes:



Scale 1:2000 (at A3)

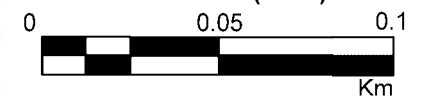
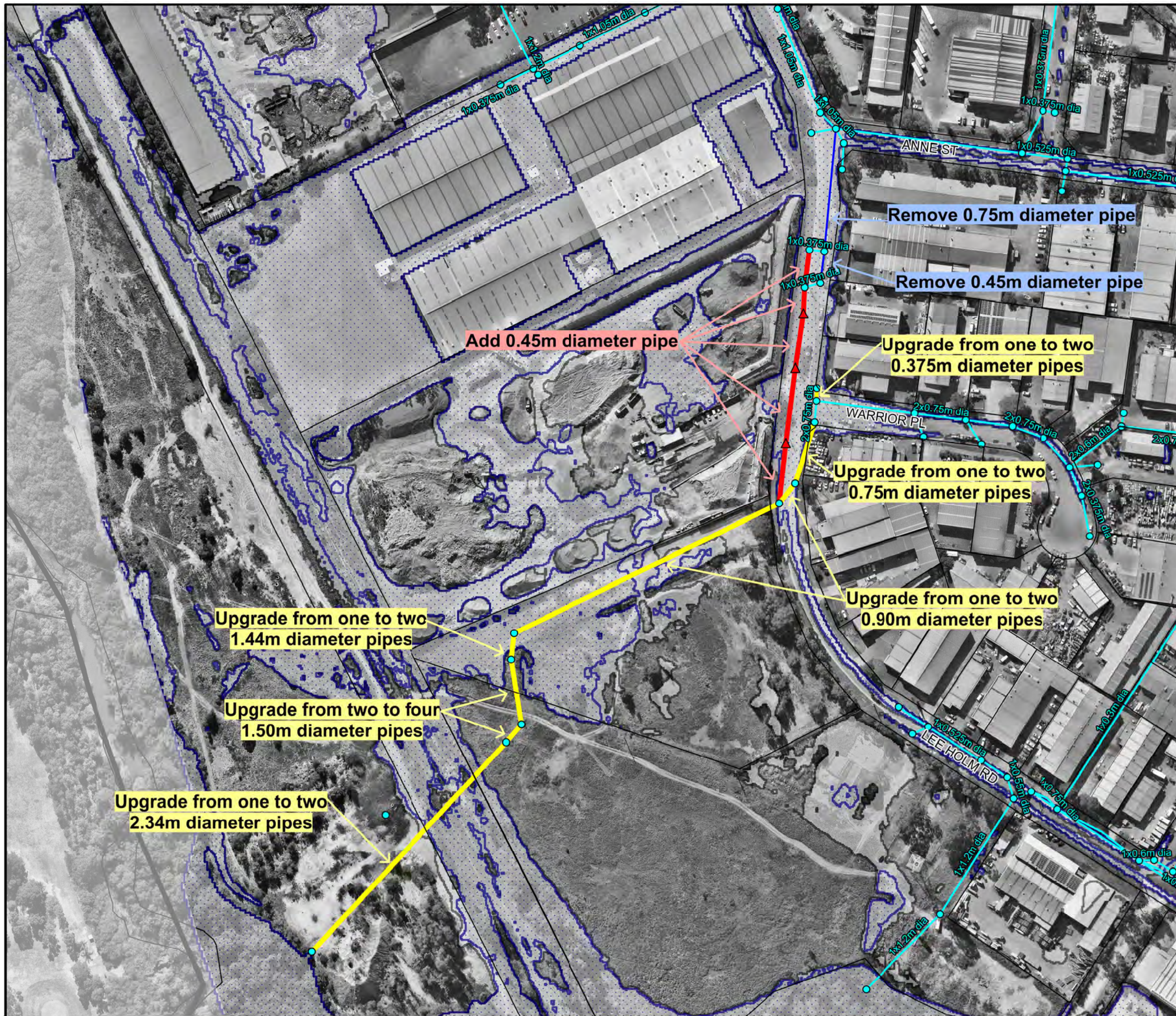


Figure 62:
FM6: Lee Holm Drive Stormwater Upgrade

Prepared By:

Catchment Simulation Solutions
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figures 62 FM6 Lee Holm Drive Stormwater Upgrade.wor





LEGEND

- Existing Pits
- Existing Stormwater Network
- Changes to Existing Stormwater Network
- Existing 5% AEP Inundation Extent
- Existing 1% AEP Inundation Extent

Terrain Differences

From Depth	To Depth	Colour	Depth Range	Volume
-2.50	-2.00	Dark Green	-2.50 to -2.00	416m ³ CUT
-2.00	-1.50	Medium Green	-2.00 to -1.50	5590m ³ CUT
-1.50	-1.00	Bright Green	-1.50 to -1.00	8969m ³ CUT
-1.00	-0.50	Light Green	-1.00 to -0.50	5075m ³ CUT
-0.50	0.00	Very Light Green	-0.50 to 0.00	5115m ³ CUT
0.00	0.50	Orange	0.00 to 0.50	0m ³ FILL

Preliminary Cut Volume = 22155m³
Preliminary Fill Volume = 0m³

Notes:

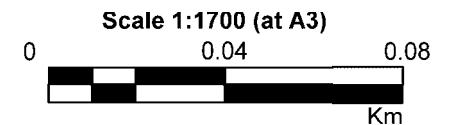
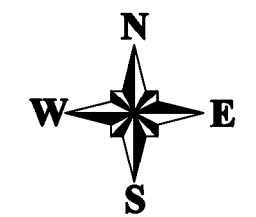
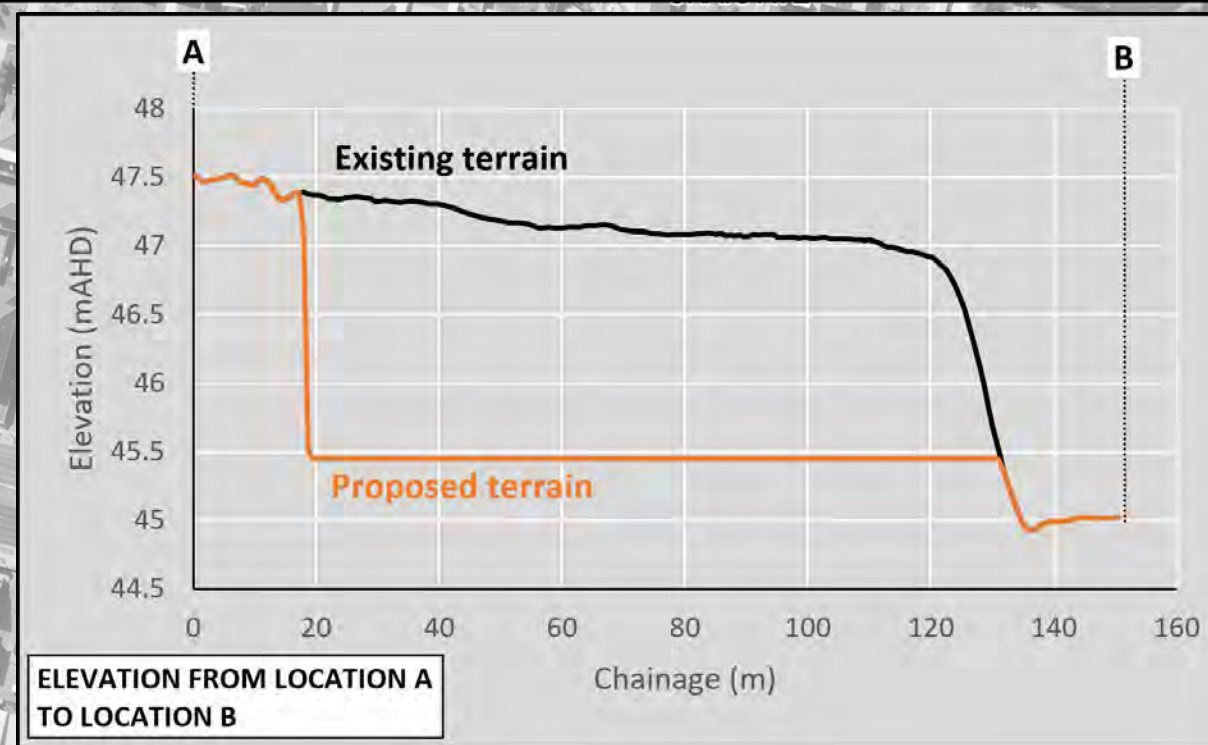


Figure 63:
FM7: Colyton High School Basin Augmentation

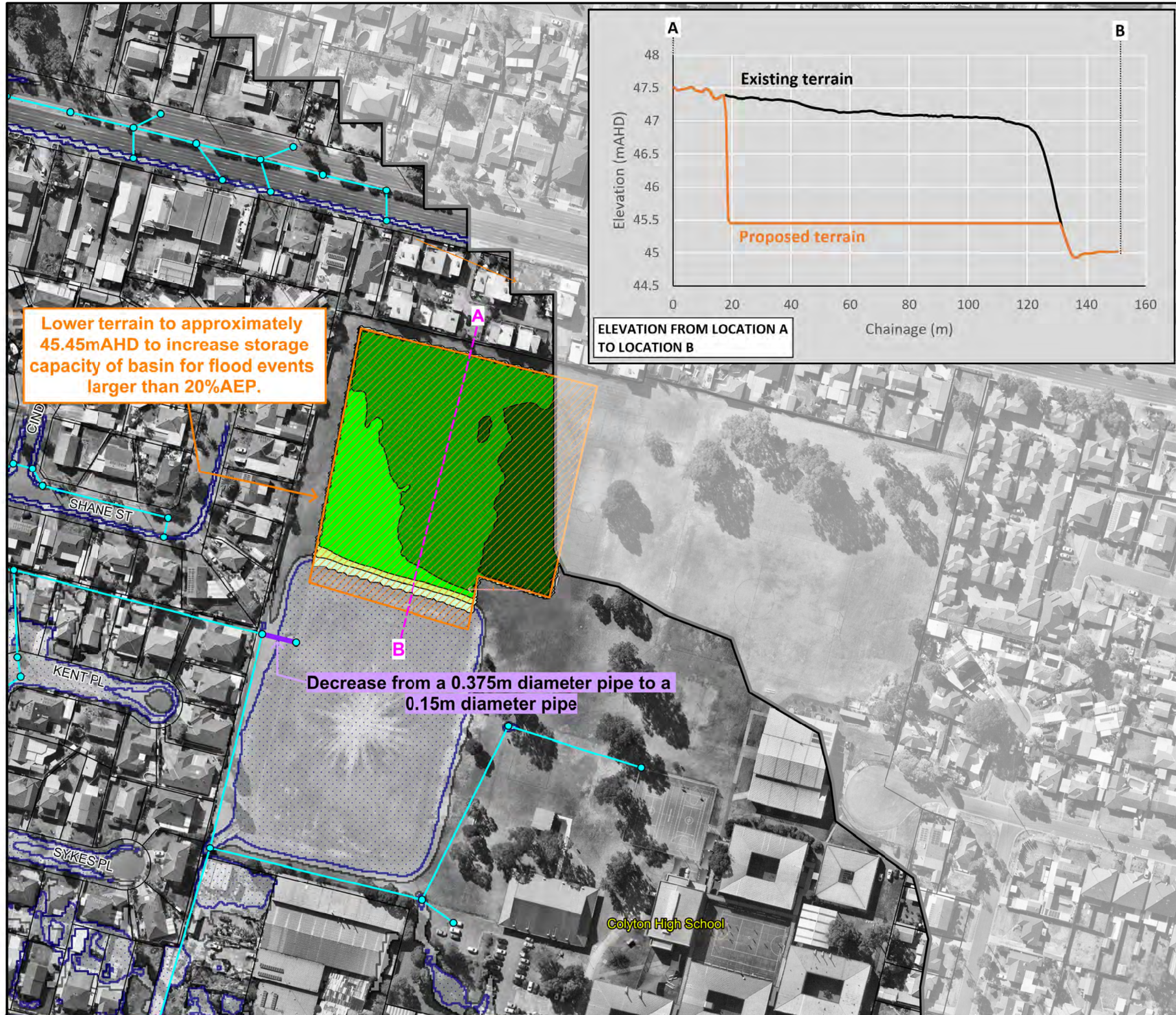
Prepared By:
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Sydney, NSW 2000

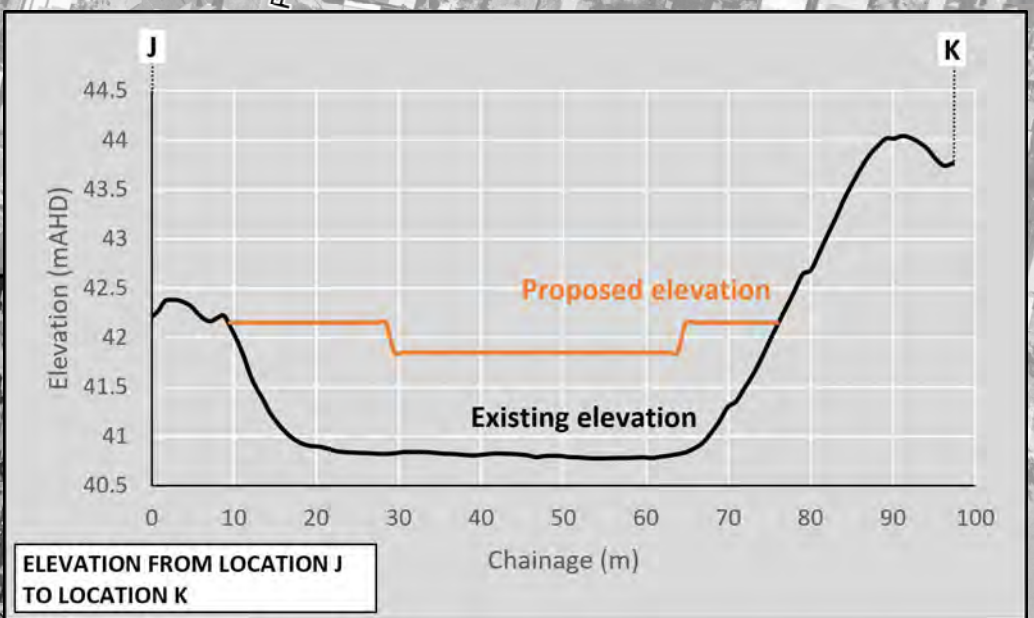
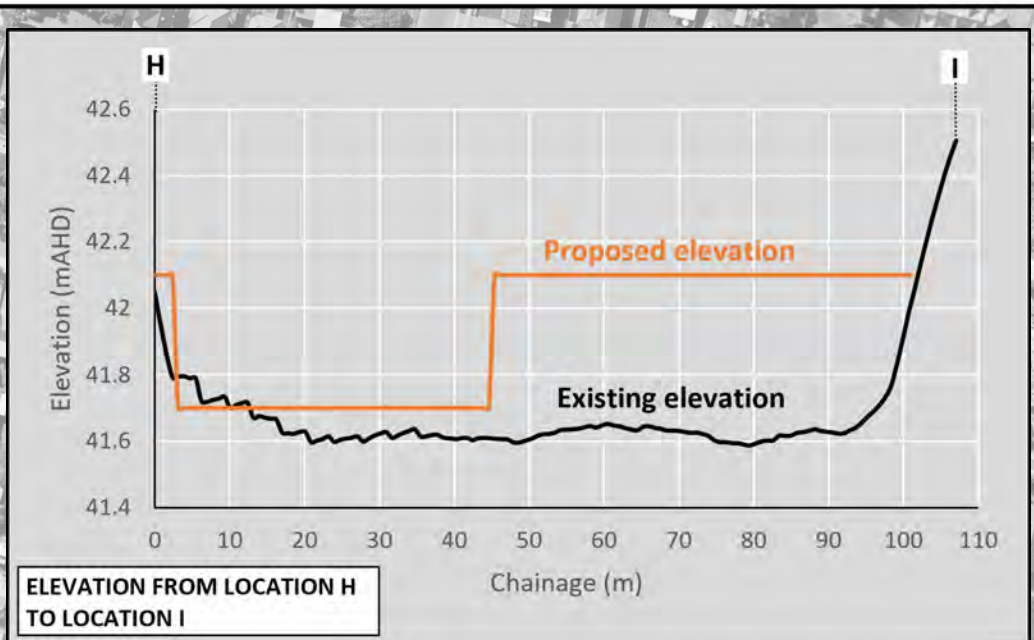
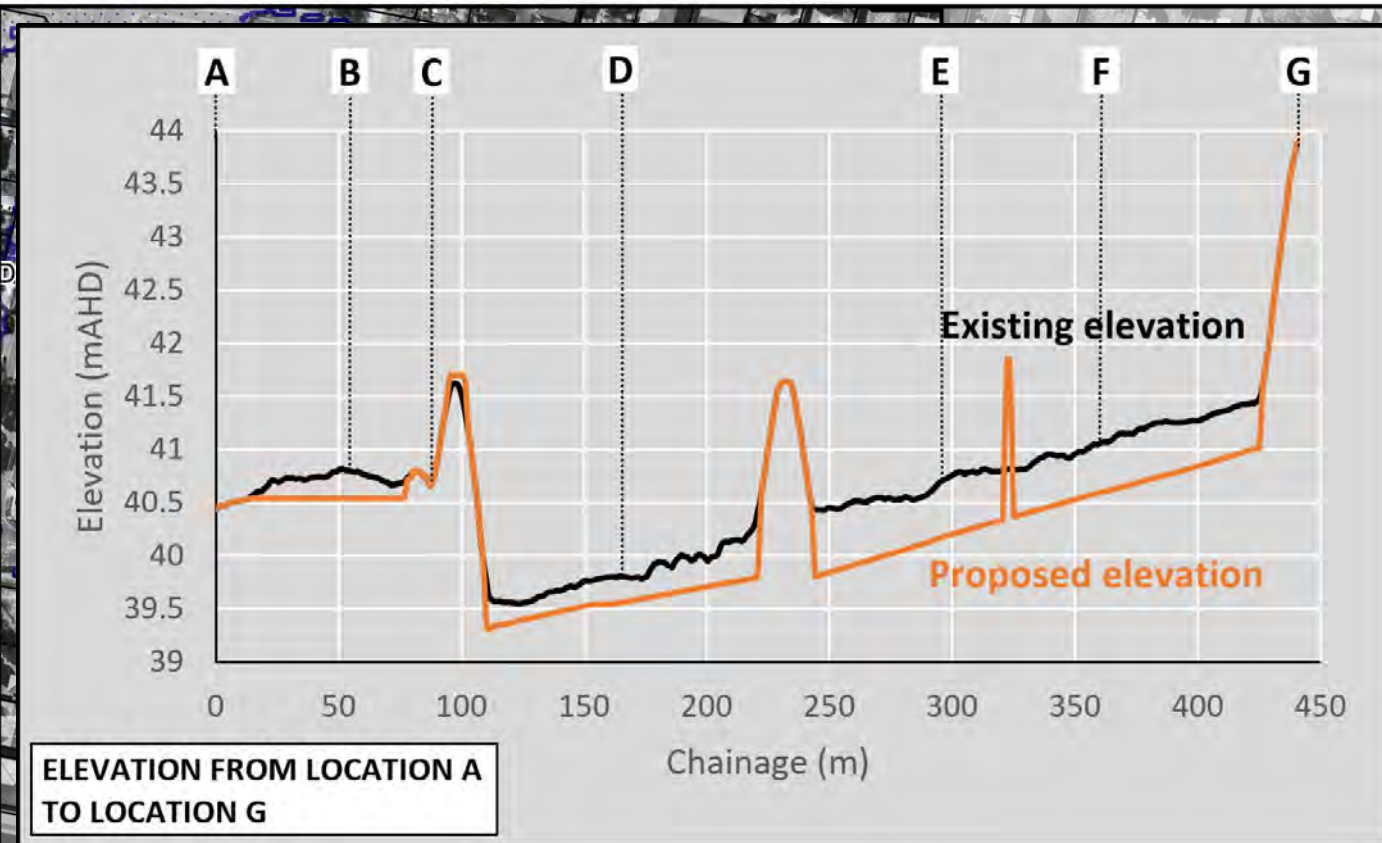
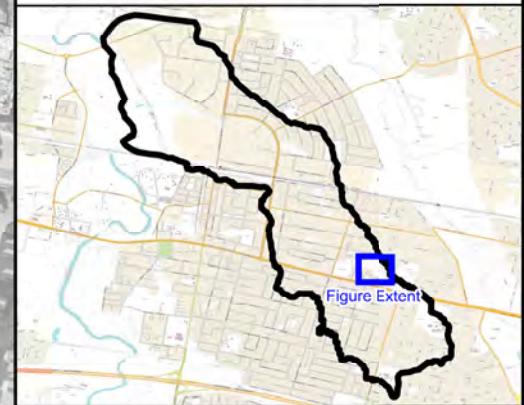
File Name: Figure 63: FM7: Colyton High School Basin Augmentation.wor



Lower terrain to approximately 45.45mAHD to increase storage capacity of basin for flood events larger than 20% AEP.

Decrease from a 0.375m diameter pipe to a 0.15m diameter pipe





LEGEND

- New culvert
- Proposed Spillway
- Existing 5% AEP Inundation Extent
- Existing 1% AEP Inundation Extent

Terrain Differences





From Depth	To Depth	Colour	Depth Range	Volume
-1.00	-0.50	CUT		418m ³ CUT
-0.50	0.00	CUT		863m ³ CUT
0.00	0.50	FILL		179m ³ FILL
0.50	1.00	FILL		71m ³ FILL
1.00	1.50	FILL		14m ³ FILL

Preliminary Cut Volume = 7049m³
 Preliminary Fill Volume = 264m³
 Preliminary Net Volume = -6785m³

Notes:



LEGEND

-  Existing Pits
-  Existing Stormwater Network
-  Existing 5%AEP Inundation Extent
-  Existing 1%AEP Inundation Extent

Notes:



Scale 1:800 (at A3)

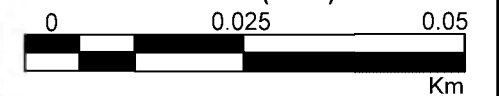


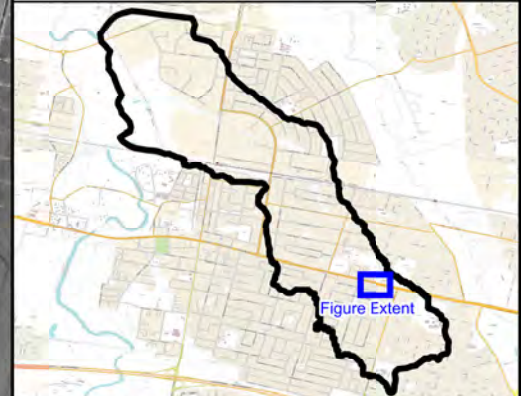
Figure 65:
FM9: Great Western Highway Median Modifications

Prepared By:







File Name: Figure 65 FM9 Great Western Highway Median Modifications.wor





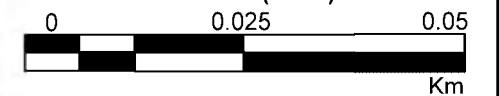
LEGEND

-  Existing Pits
-  Existing Stormwater Network
-  Existing 5%AEP Inundation Extent
-  Existing 1%AEP Inundation Extent

Notes:




Scale 1:800 (at A3)



**Figure 66:
RM8: Great Western
Highway Roadway
Modifications**

Prepared By:






 **Catchment Simulation Solutions**
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Figure 66 RM8 Great Western
Highway Roadway Modifications.wor





LEGEND

-  Existing Pits
-  Existing Stormwater Network
-  Existing Culvert
-  Existing 5% AEP Inundation Extent
-  Existing 1% AEP Inundation Extent

Notes:



Scale 1:1000 (at A3)

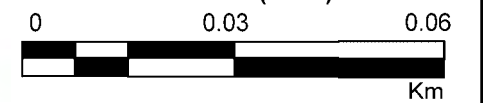


Figure 67:
RM9: Glossop Street
Roadway Modification

Prepared By:



File Name: Figure 67 RM9 Glossop Street Roadway Modification.wor

