



Review of Whites Creek

Floodplain Risk Management Study & Plan

Final Report
Volume 2 of 2: Figures



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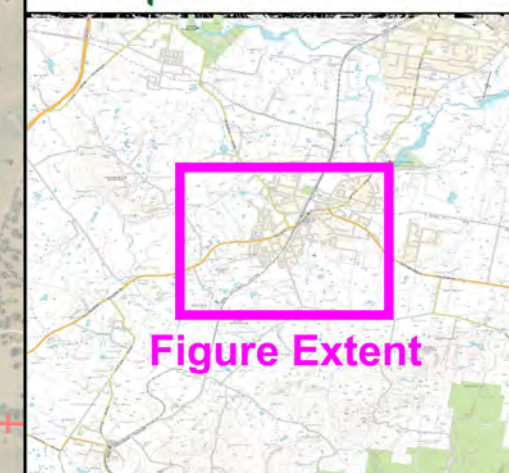
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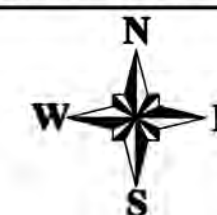




LEGEND

-  Catchment Boundary
-  Waterway
-  Railway
-  Stormwater Pipes and Structures

Notes:
Aerial photograph date: Jan 2009

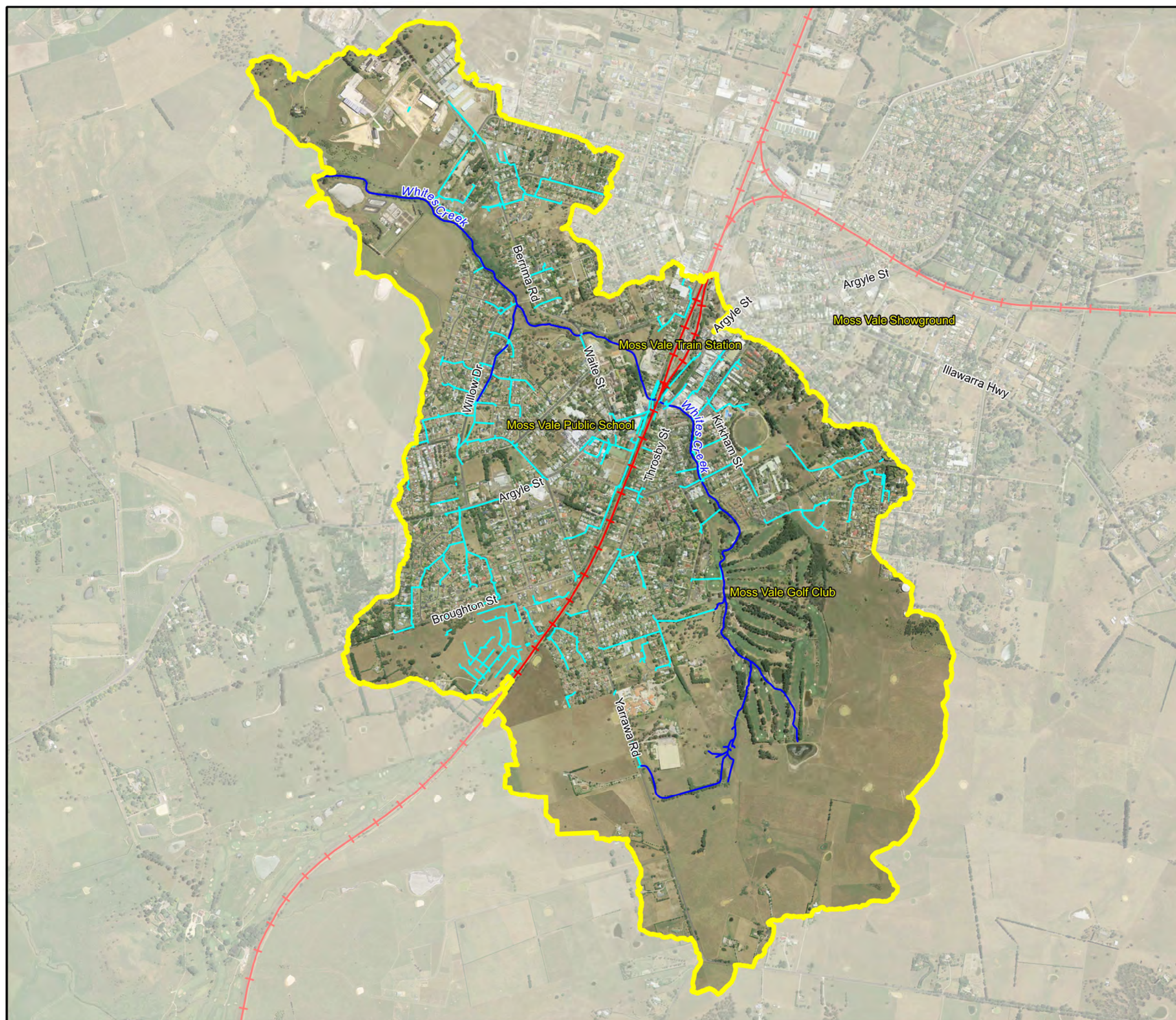


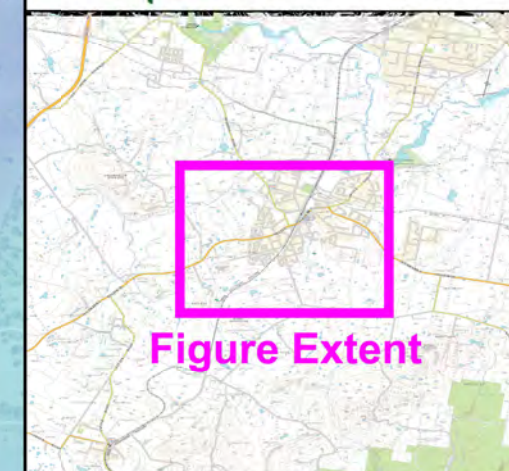
Scale 1:16,800 (at A3)
0 0.45 0.90
Km

**Figure 1:
Whites Creek
Catchment**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig - Whites Creek
Catchment.wor





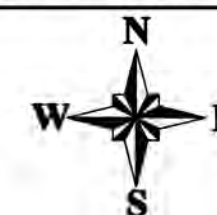
LEGEND

Elevation (mAHD)

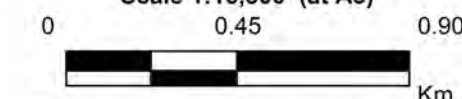


Notes:

Aerial photograph date: Jan 2009




Scale 1:16,800 (at A3)

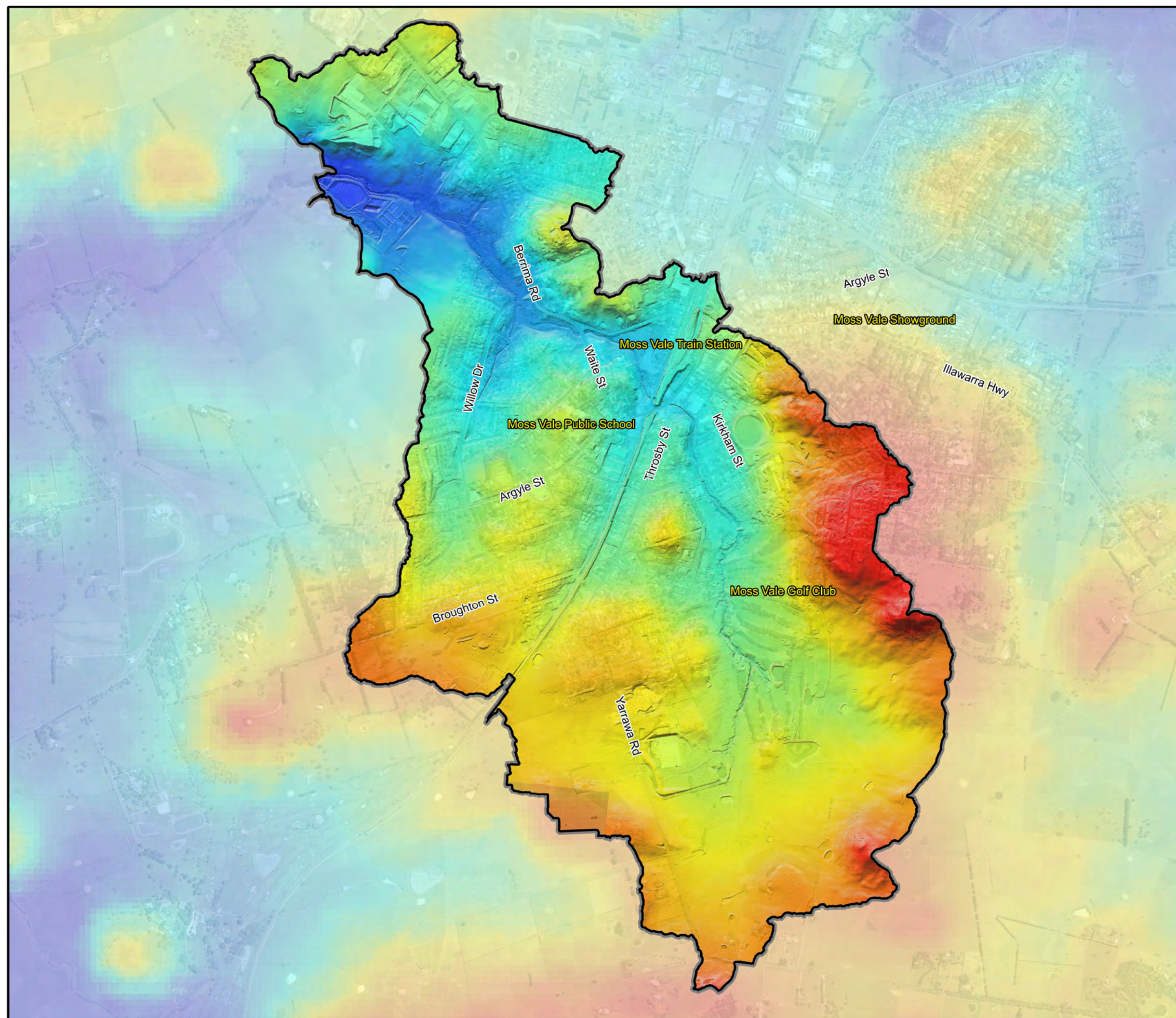


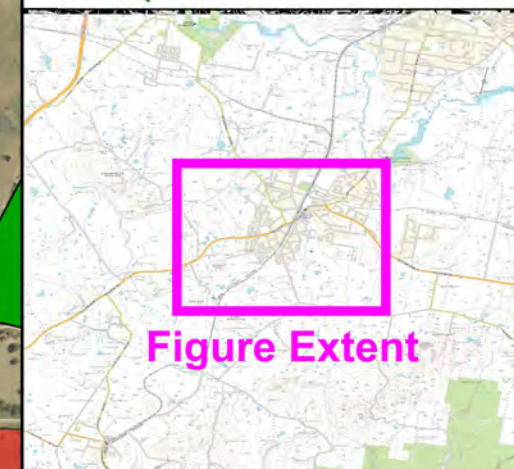
**Figure 2:
Ground Surface
Elevations**

Prepared By:

 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig - Ground Surface
Elevations.wor






LEGEND

-  Aboriginal Heritage Site
-  Heritage Items Listed Under the NSW Heritage Act
-  Heritage Items Listed by Local Government and State Agencies
-  Heritage Conservation Area

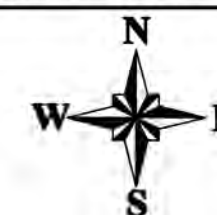
EPBC Act List of Threatened

Ecological Communities Classification

-  Southern Highlands Shale Forest and Woodland of the Sydney Basin Bioregion (Critically Endangered)
-  Temperate Highland Peat Swamps on Sandstone

Notes:

Aerial photograph date: Jan 2009



Scale 1:16,800 (at A3)

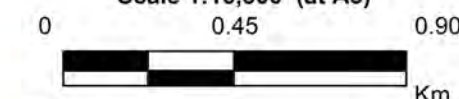

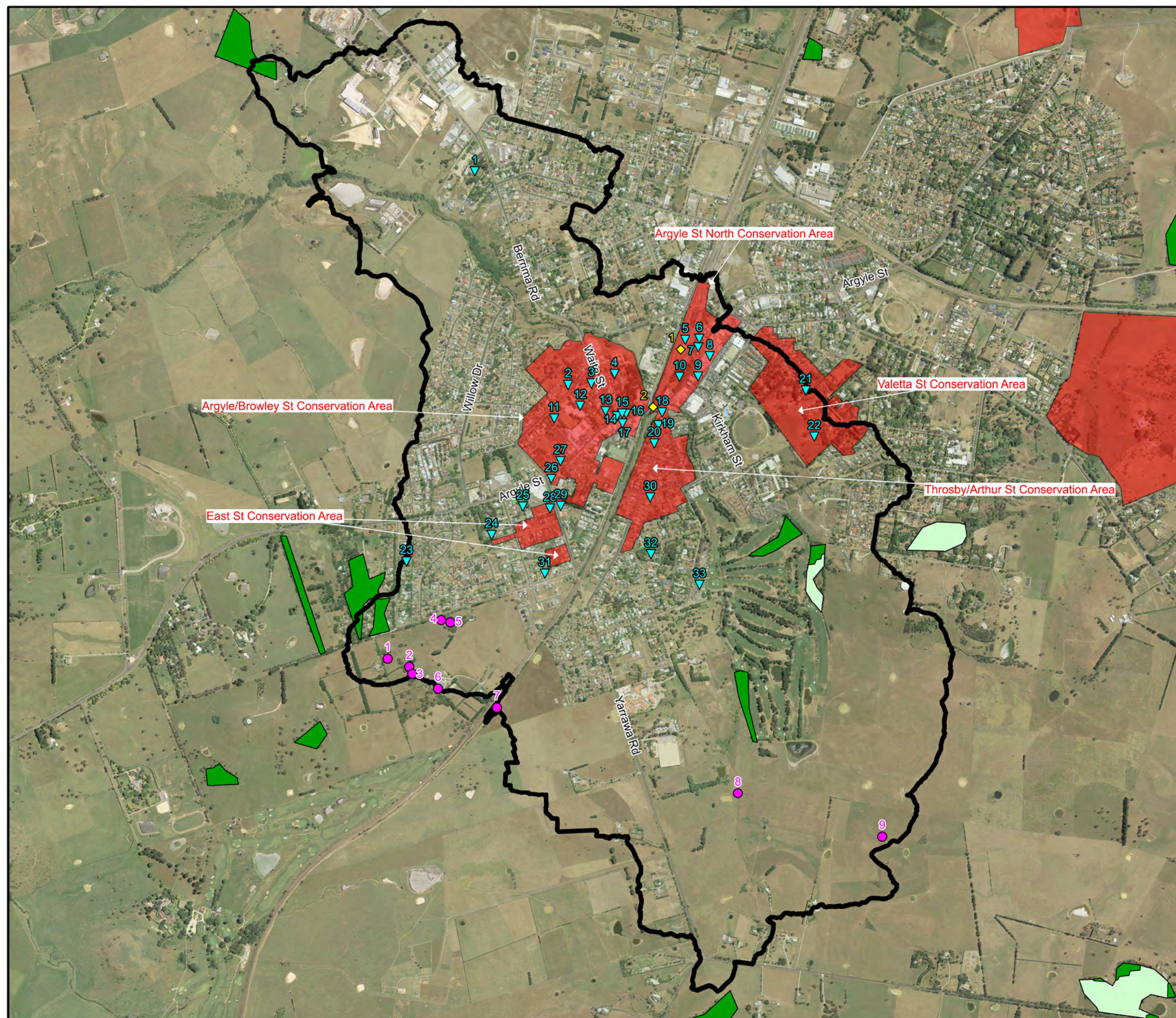


Figure 3: Environmental Constraints and Heritage Sites

Prepared By:

 **Catchment Simulation Solutions**
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Sydney, NSW 2000

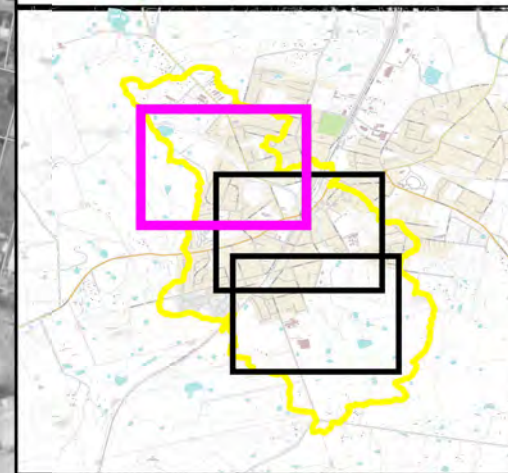
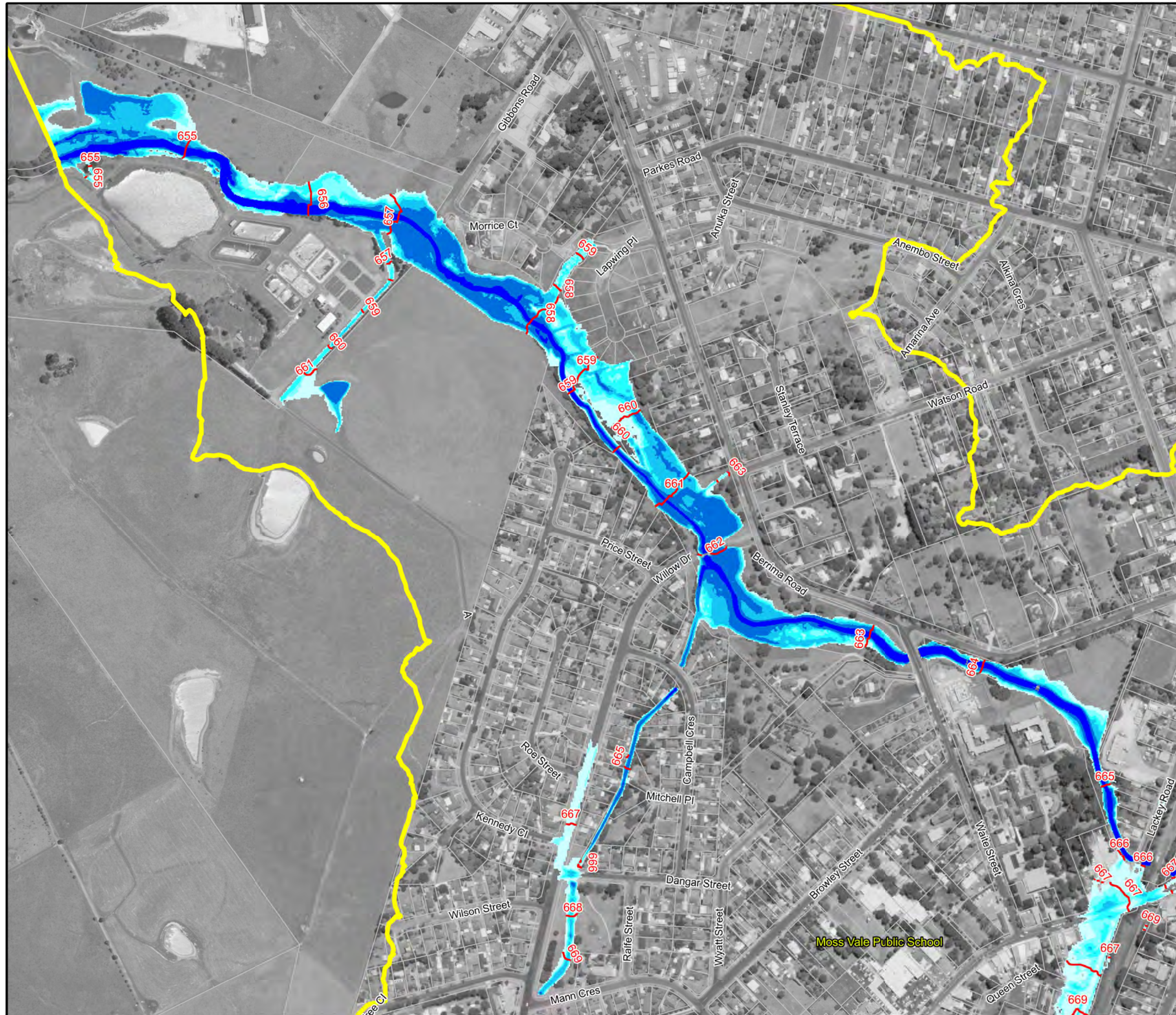
File Name: Fig - Environmental Constraints and Heritage Sites.wor





FLOODWATER DEPTH AND LEVEL MAPS





LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

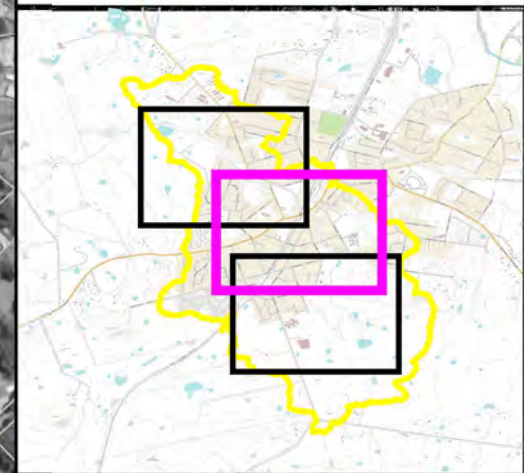
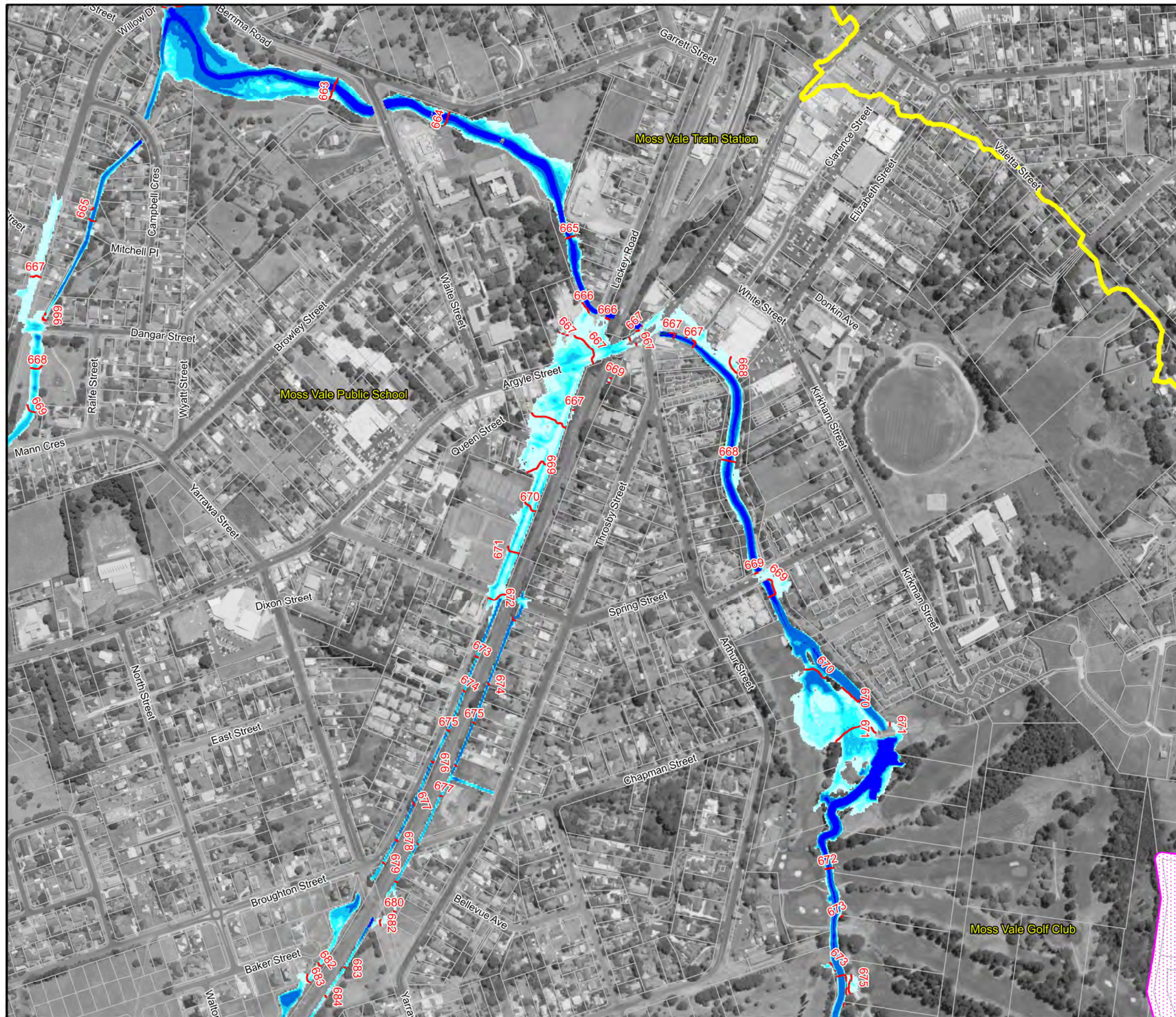
North Arrow

N
W E
S

**Figure 4.1:
Floodwater Depths and
Levels for the
20% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 4.1- Floodwater Depth
and Levels for the 20% AEP Flood.wor



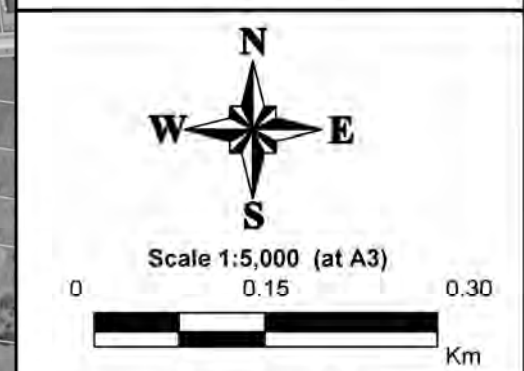
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHd)

Depths (m)

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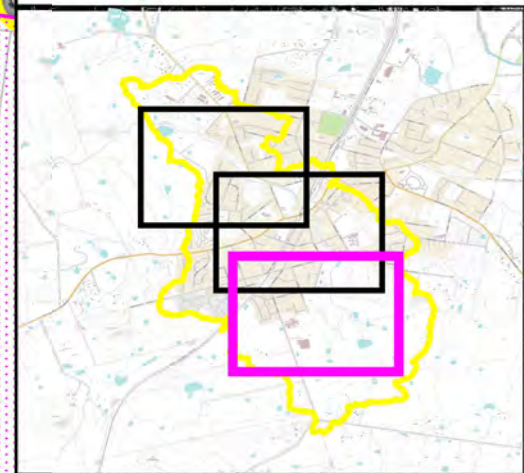
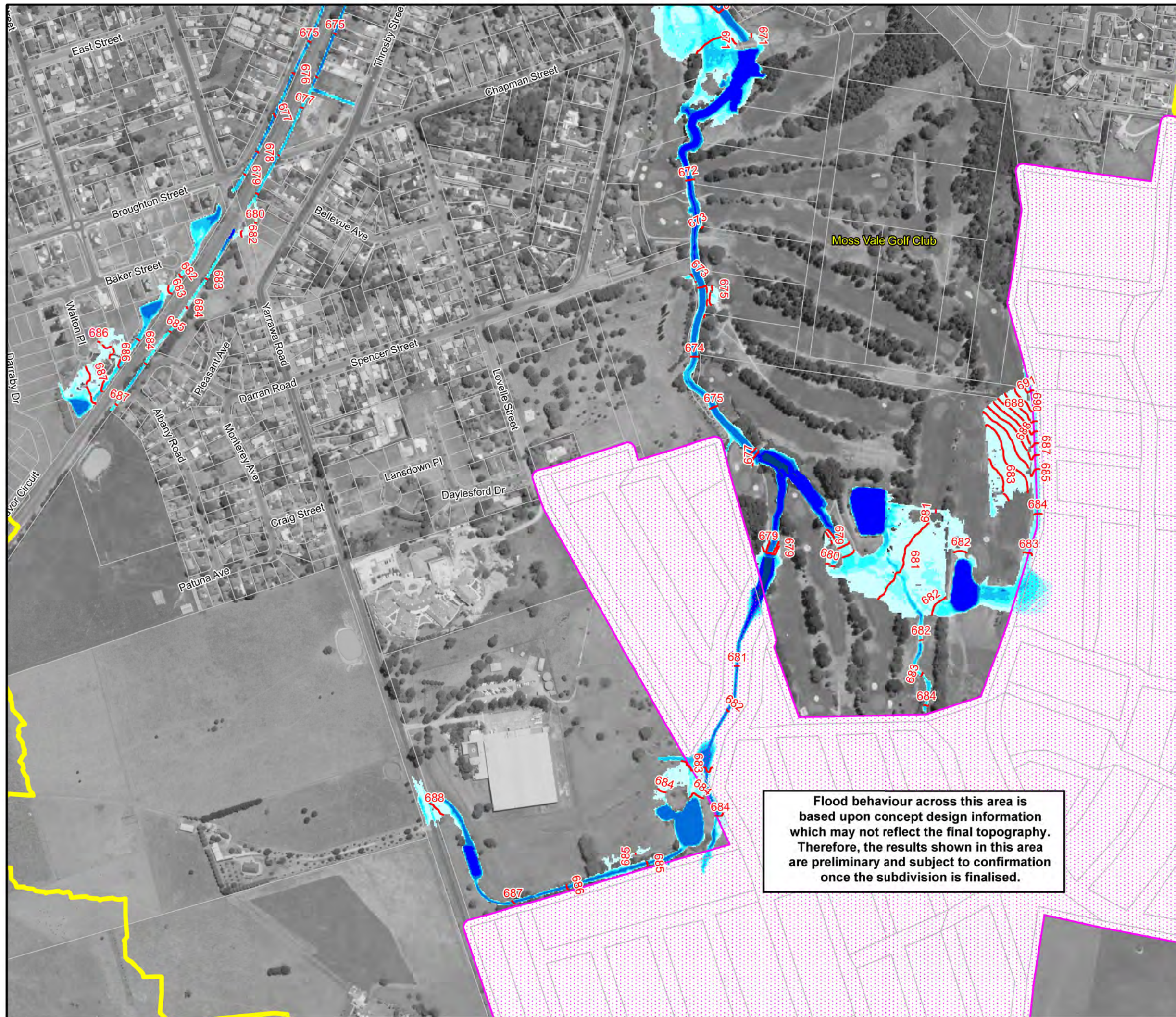
Notes:
Aerial photograph date: Jan 2009



**Figure 4.2:
Floodwater Depths and
Levels for the
20% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 4.2- Floodwater Depth
and Levels for the 20% AEP Flood.wor



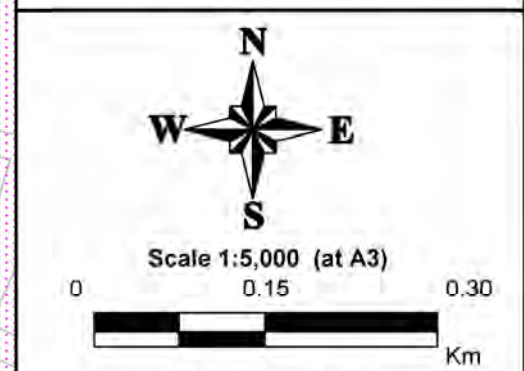
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

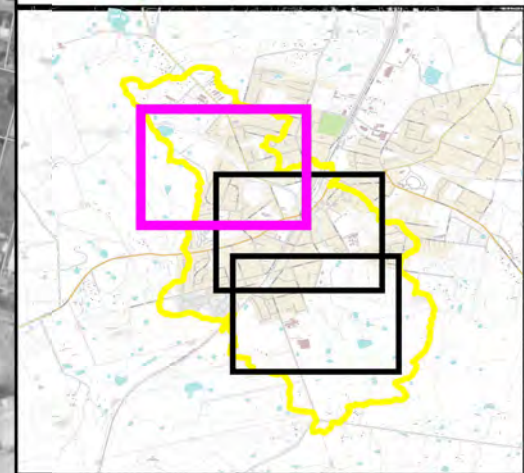
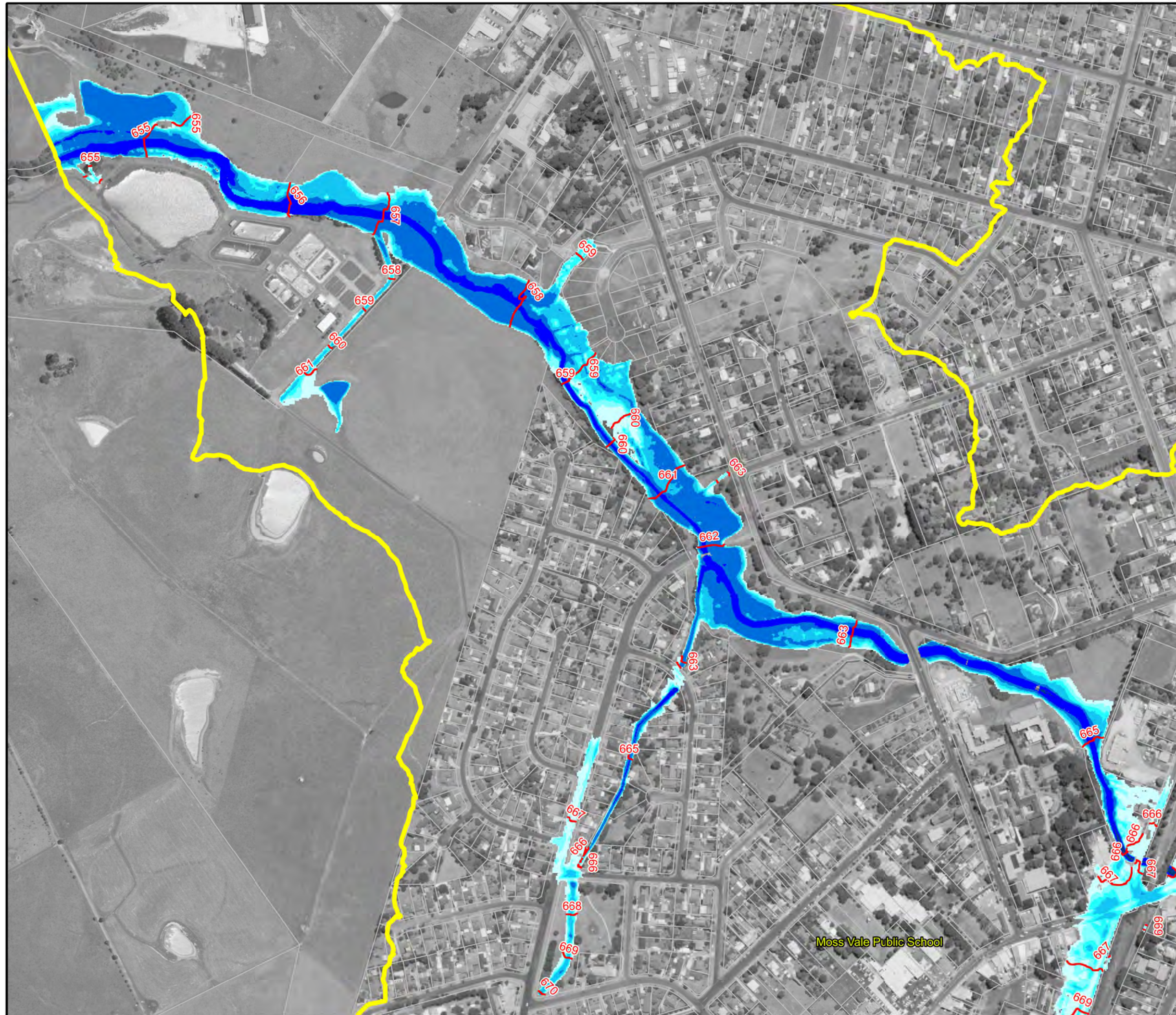
- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009



Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

Figure 4.3:
Floodwater Depths and Levels for the 20% AEP Flood



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

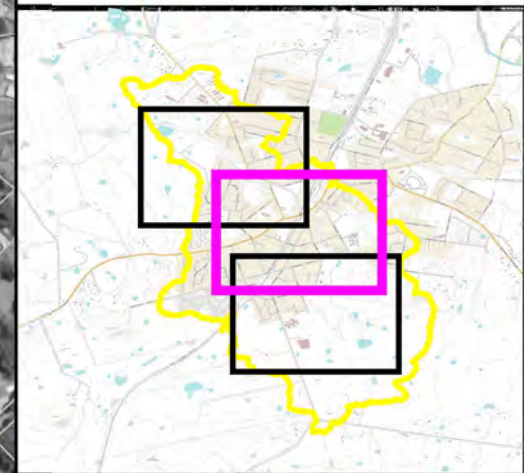
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 5.1:
Floodwater Depths and
Levels for the
10% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 5.1- Floodwater Depth
and Levels for the 10% AEP Flood.wor



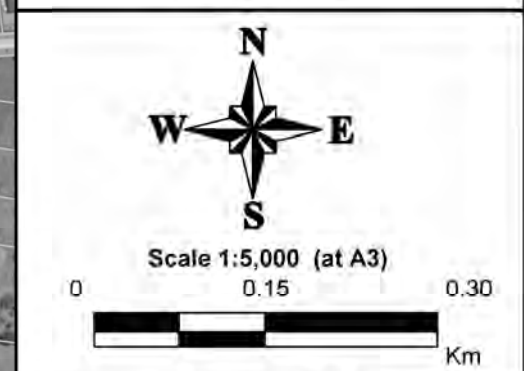
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

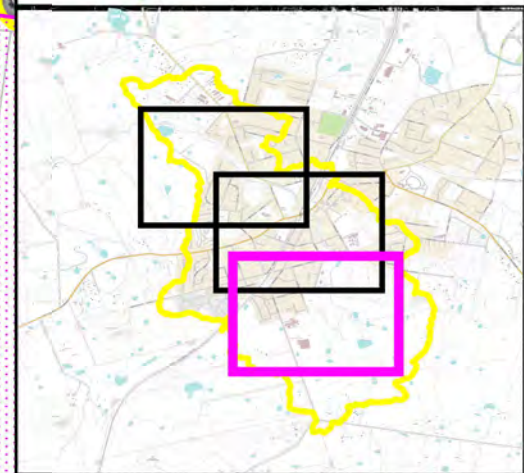
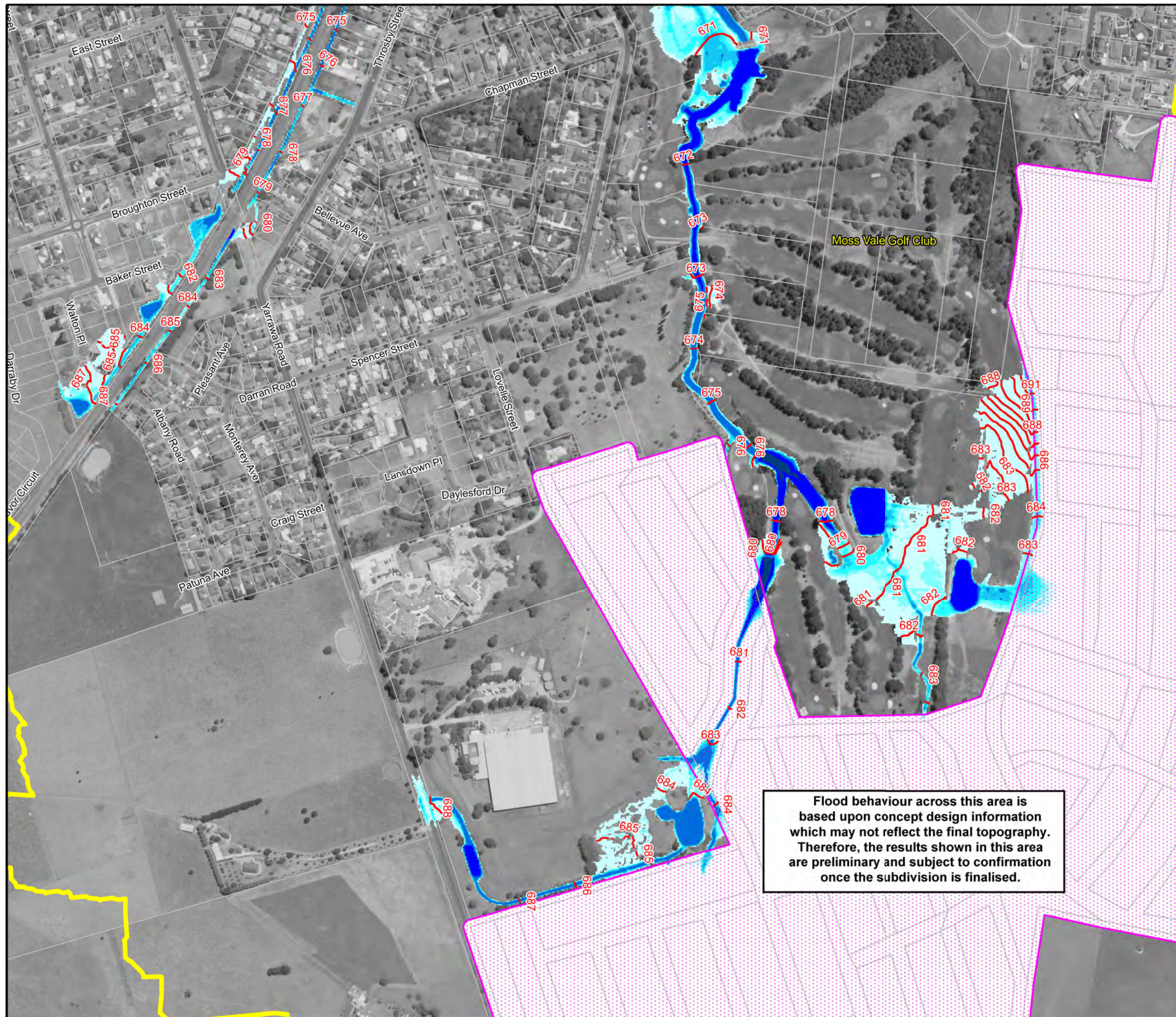
Notes:
Aerial photograph date: Jan 2009



**Figure 5.2:
Floodwater Depths and
Levels for the
10% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 5.2- Floodwater Depth
and Levels for the 10% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

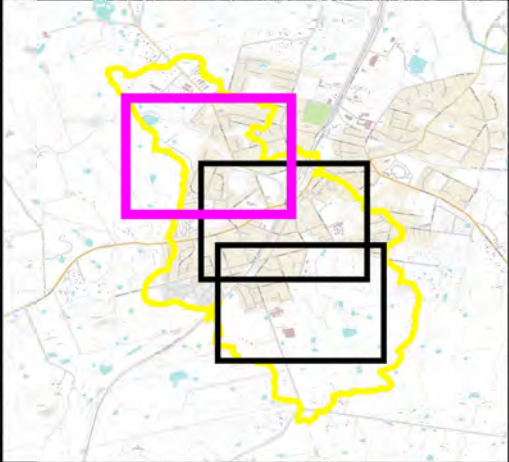
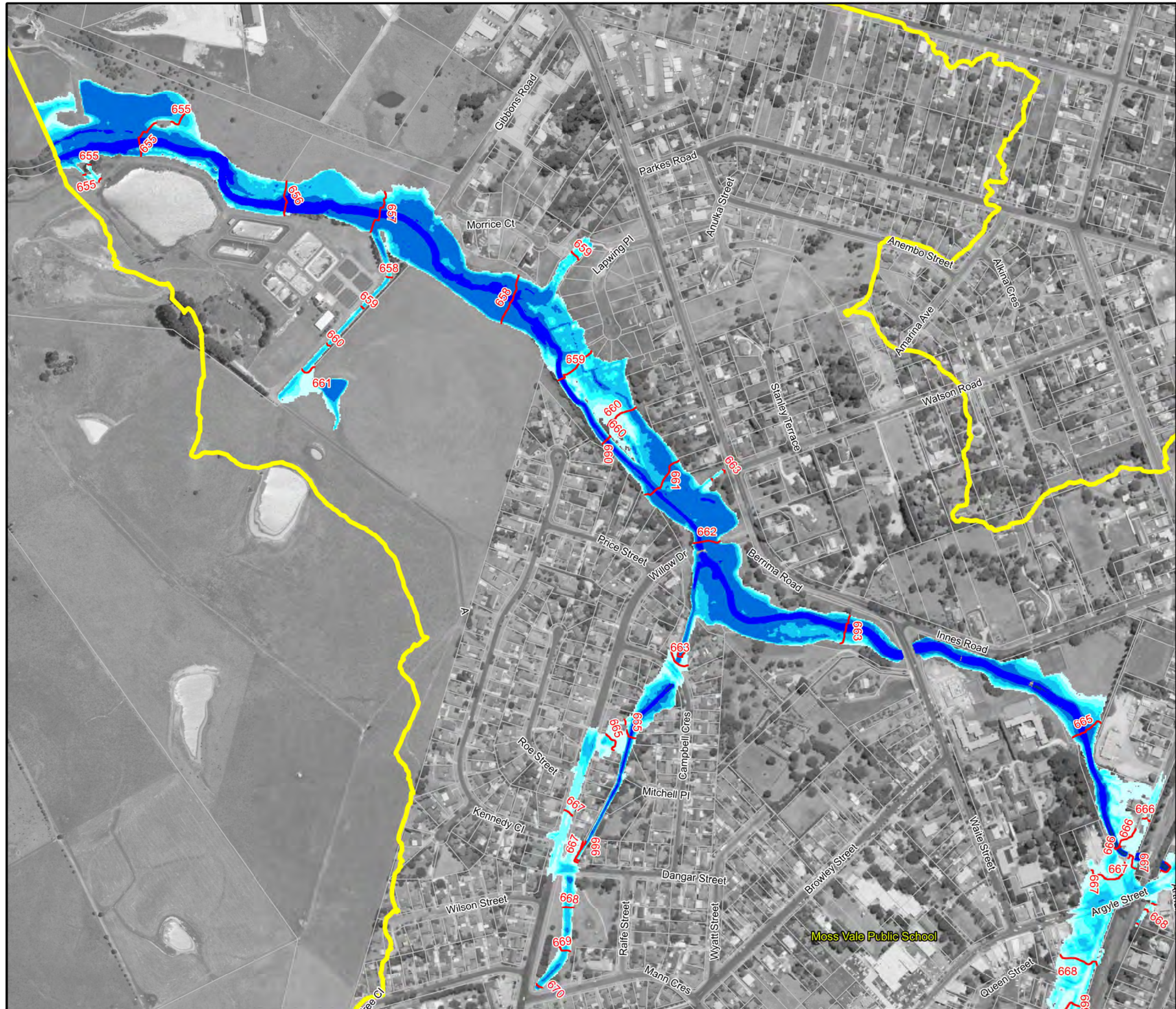
North arrow pointing North (N), South (S), East (E), and West (W).

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 5.3:
Floodwater Depths and
Levels for the
10% AEP Flood**

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.



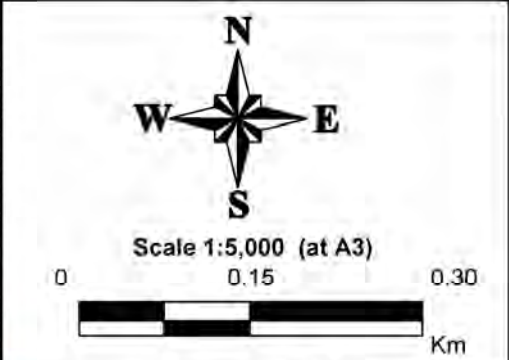
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
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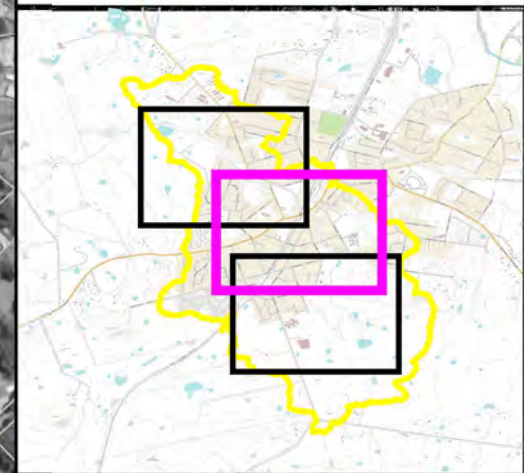
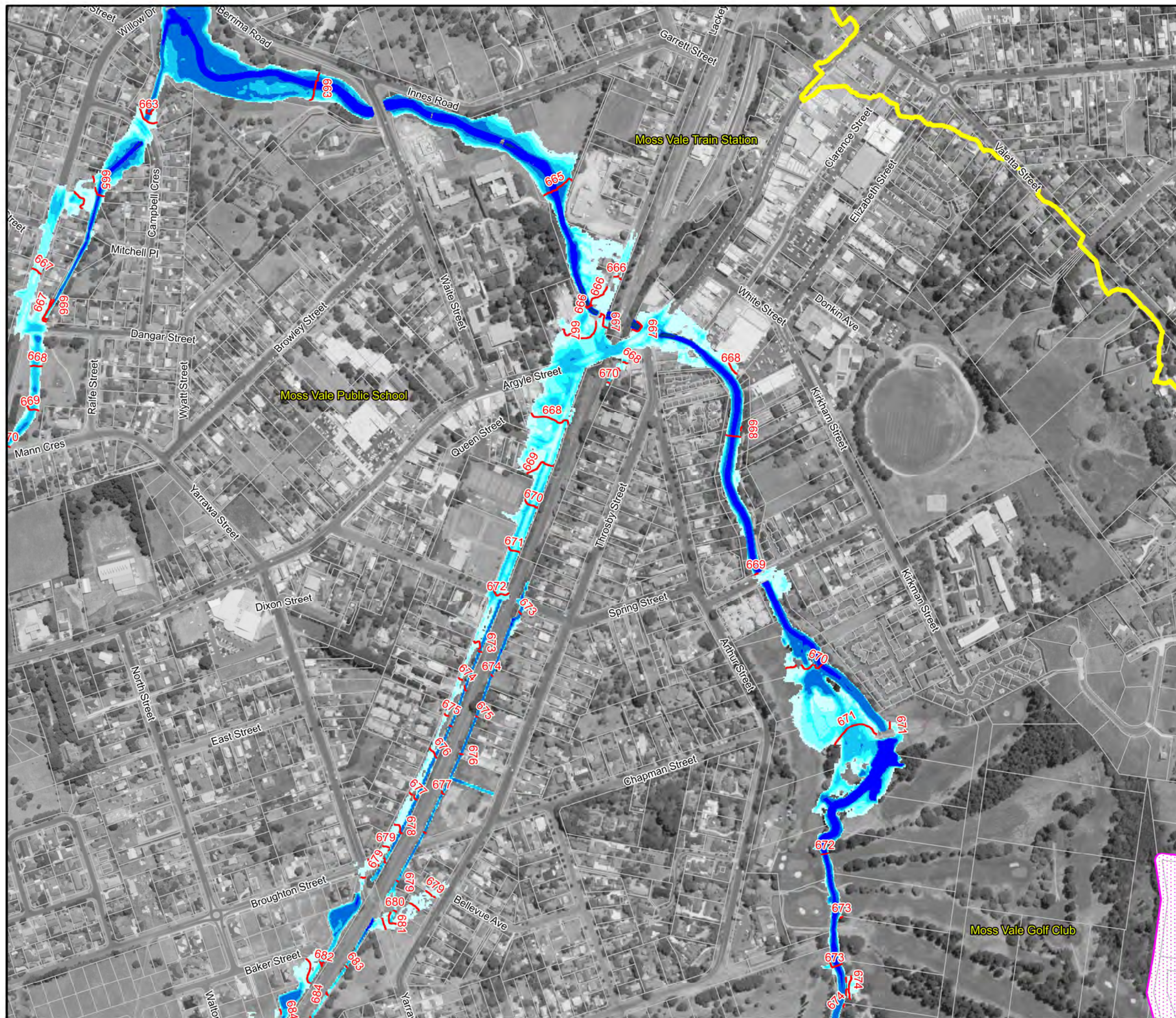
Notes:
Aerial photograph date: Jan 2009



**Figure 6.1:
Floodwater Depths and
Levels for the
5% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
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Sydney, NSW 2000

File Name: Fig 6.1- Floodwater Depth
and Levels for the 5% AEP Flood.wor



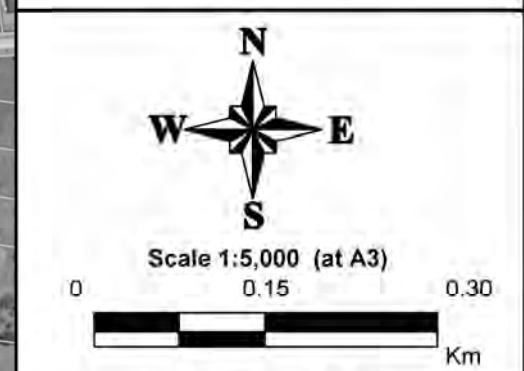
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

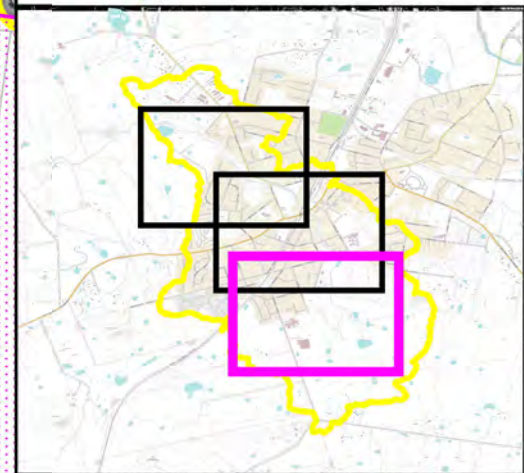
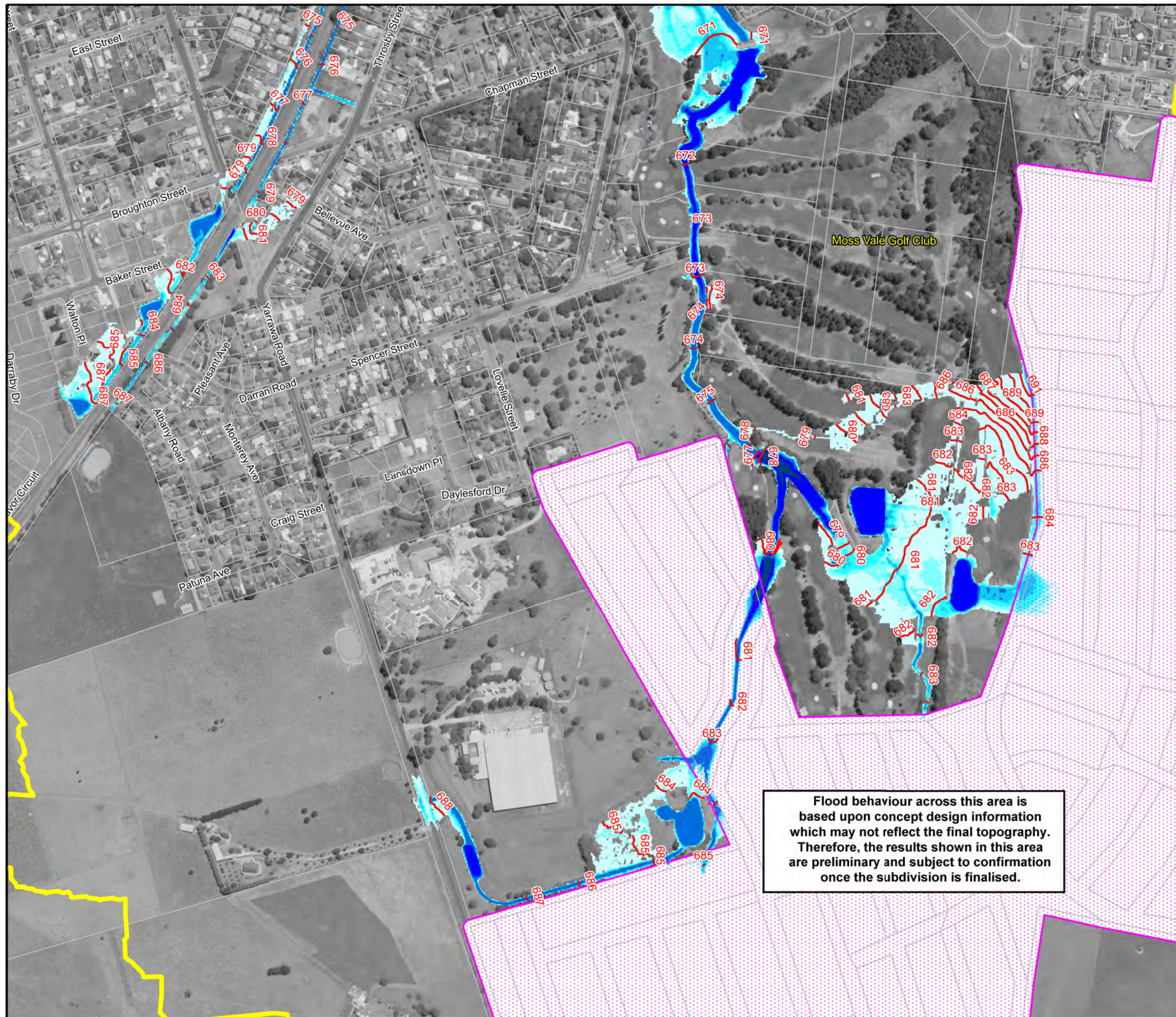
Notes:
Aerial photograph date: Jan 2009



**Figure 6.2:
Floodwater Depths and
Levels for the
5% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 6.2- Floodwater Depth
and Levels for the 5% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

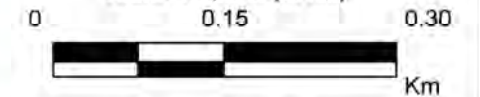
- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)



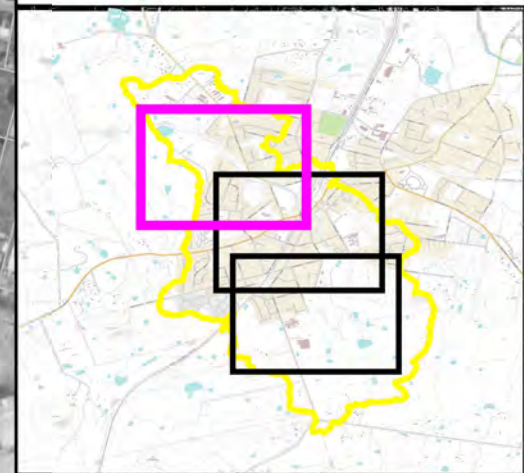
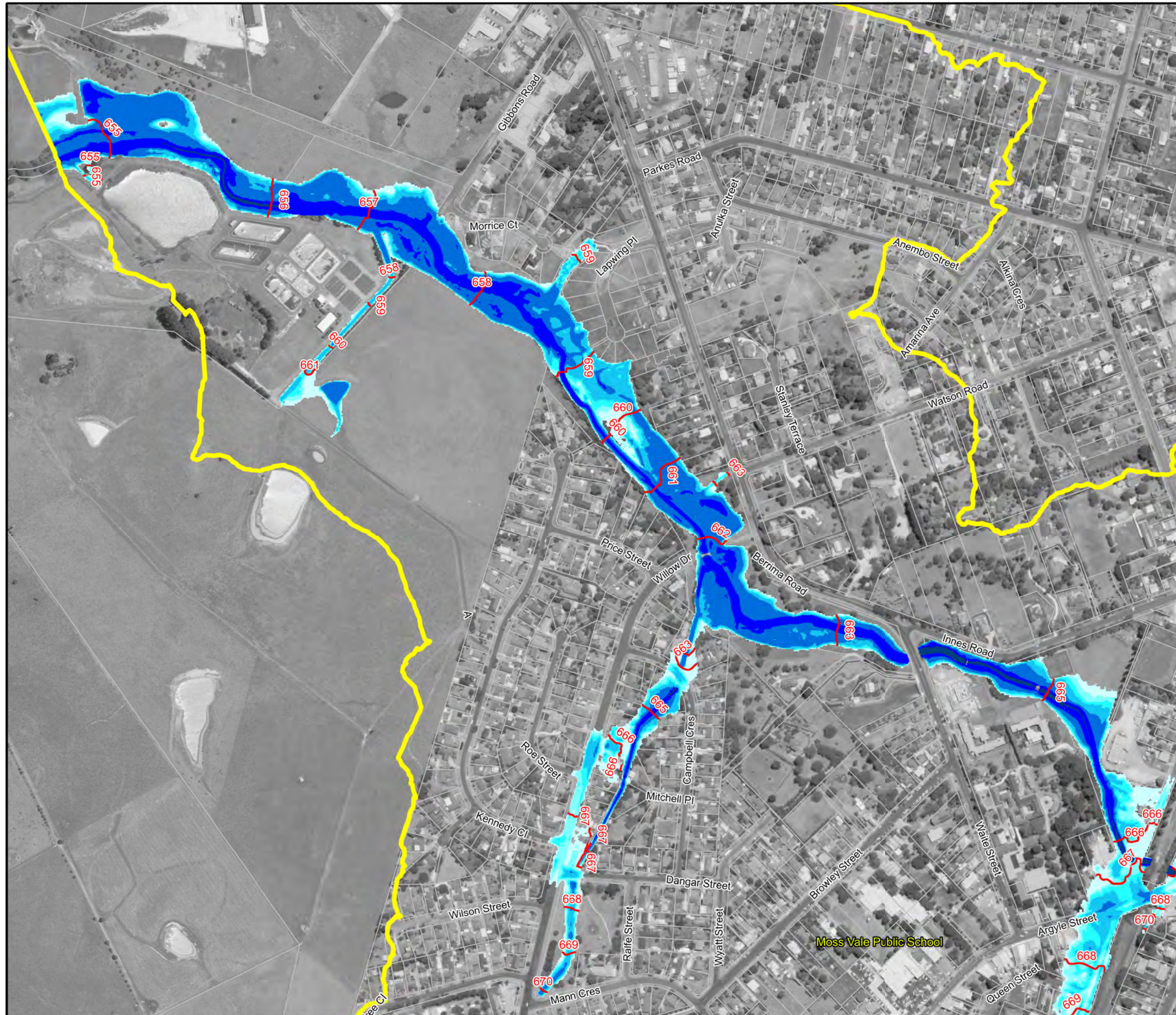
**Figure 6.3:
Floodwater Depths and
Levels for the
5% AEP Flood**

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 6.3- Floodwater Depth
and Levels for the 5% AEP Flood.wor

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

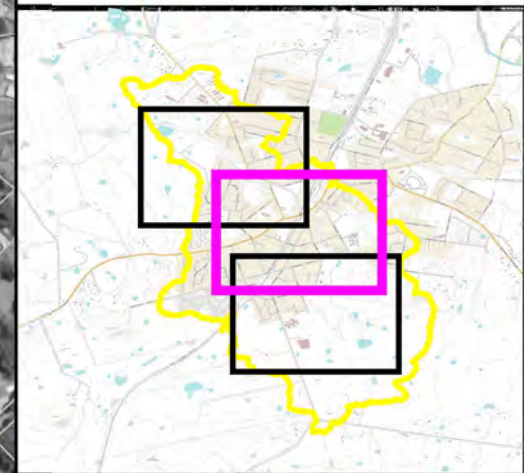
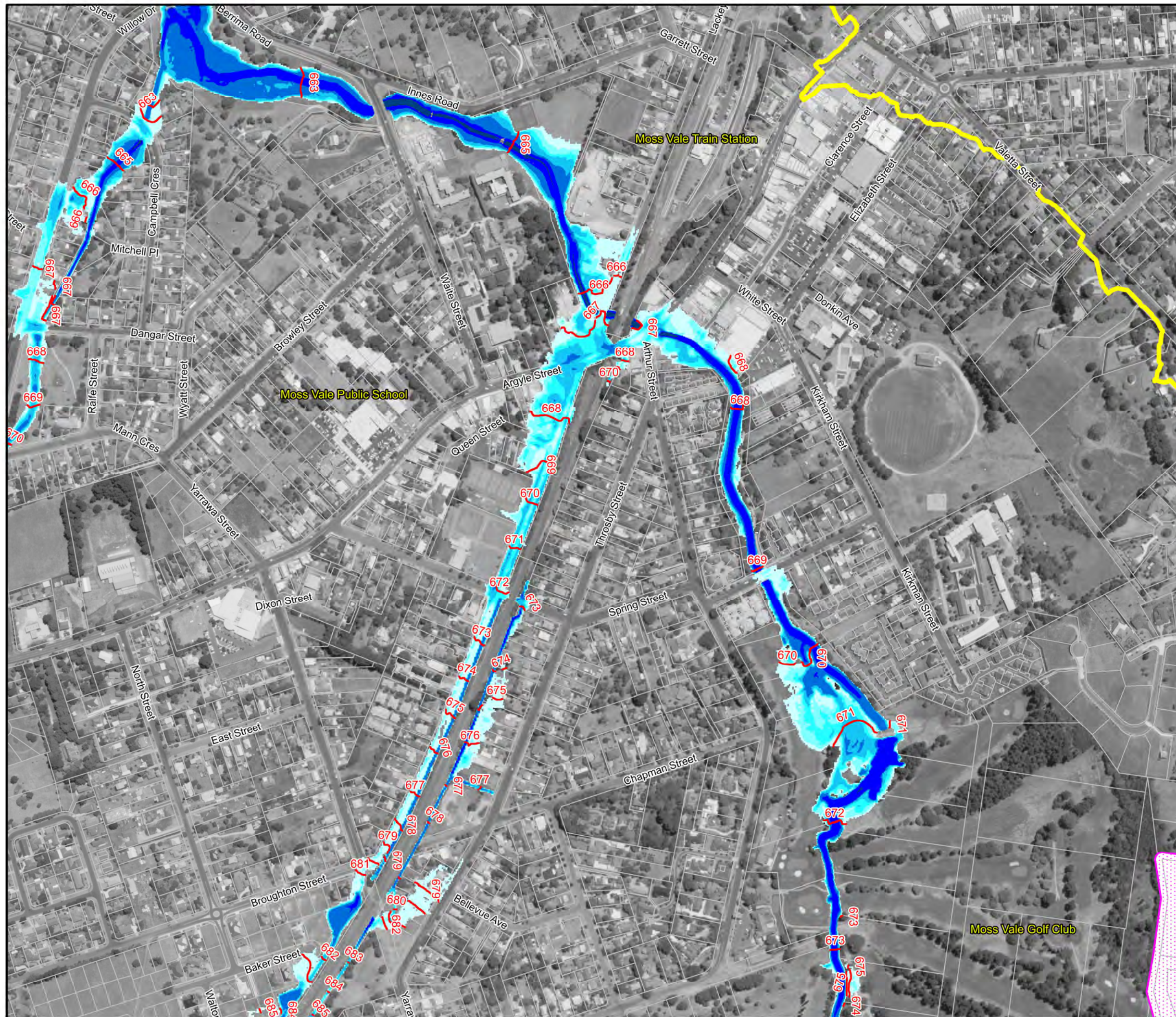
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 7.1:
Floodwater Depths and
Levels for the
2% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 7.1- Floodwater Depth
and Levels for the 2% AEP Flood.wor



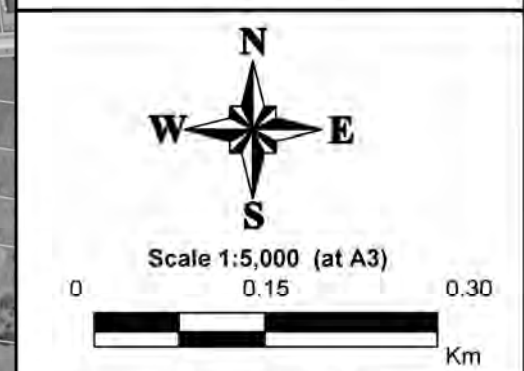
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

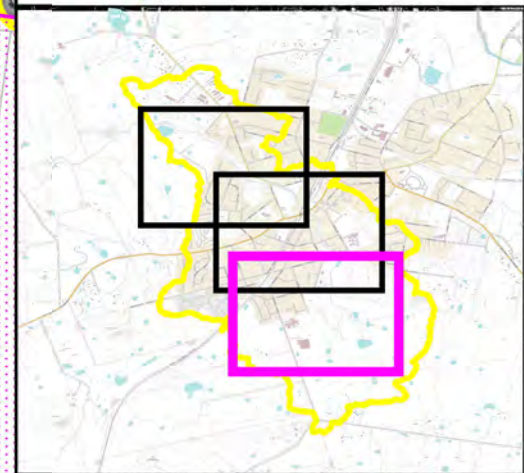
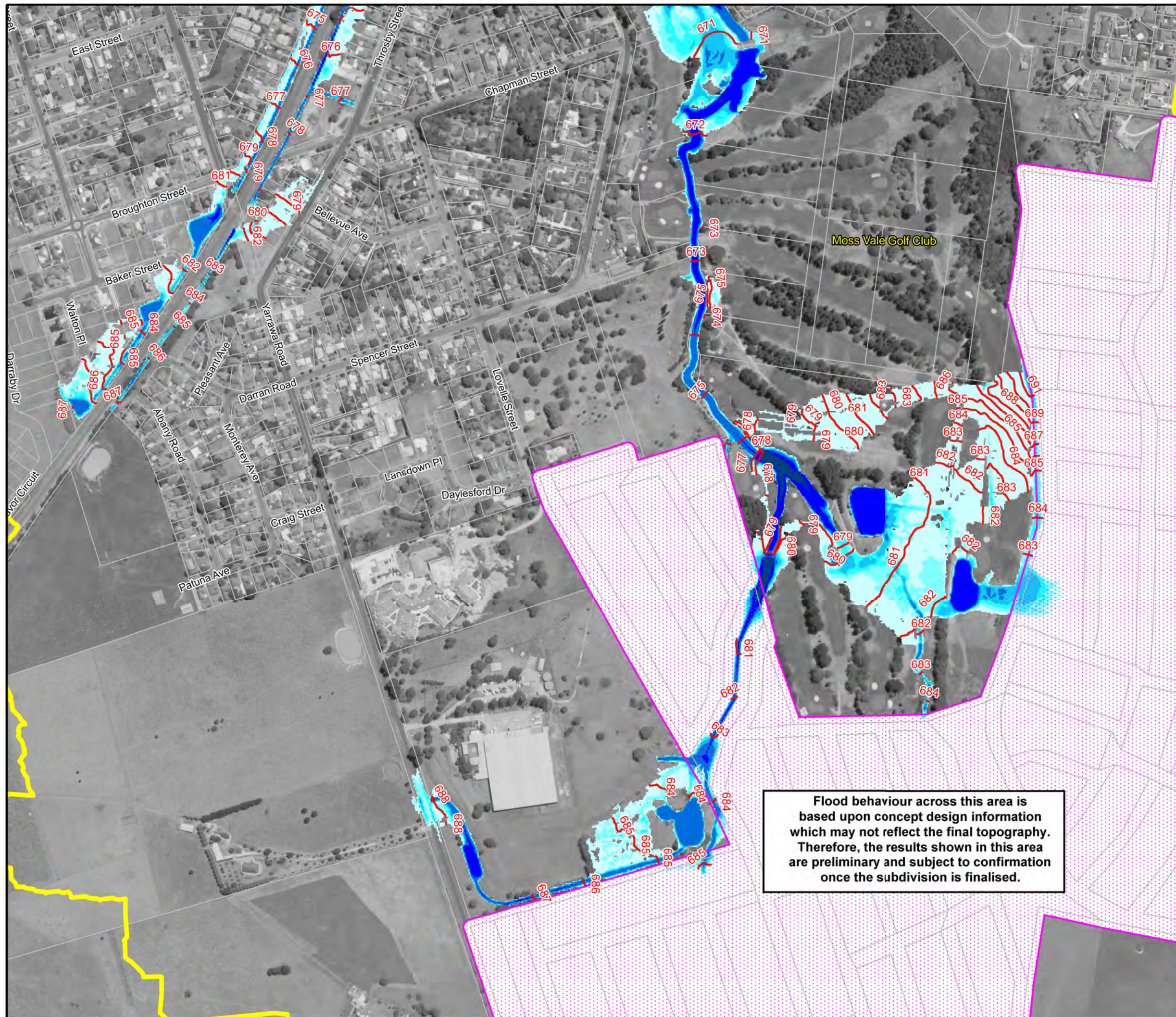
Notes:
Aerial photograph date: Jan 2009



**Figure 7.2:
Floodwater Depths and
Levels for the
2% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 7.2- Floodwater Depth
and Levels for the 2% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHd)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
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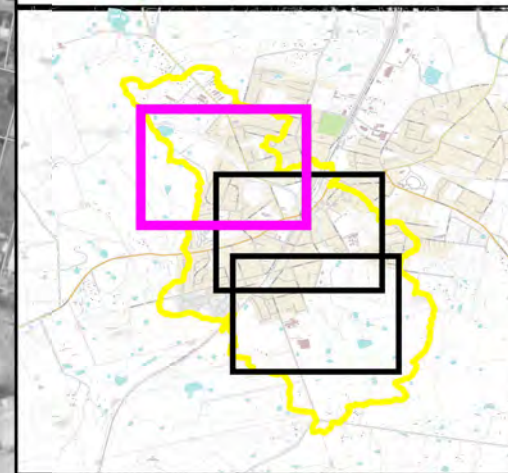
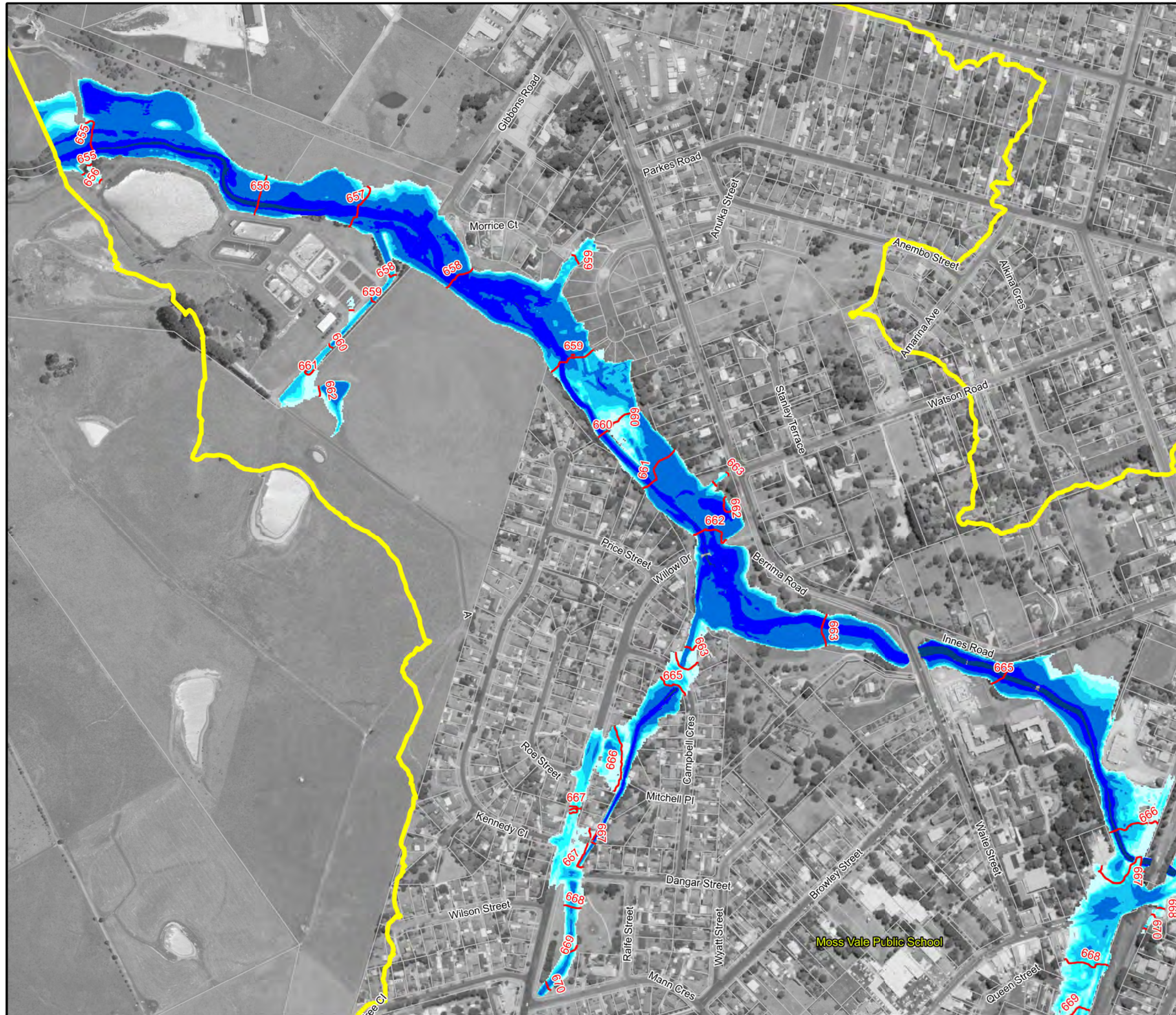
Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 7.3:
Floodwater Depths and
Levels for the
2% AEP Flood**



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

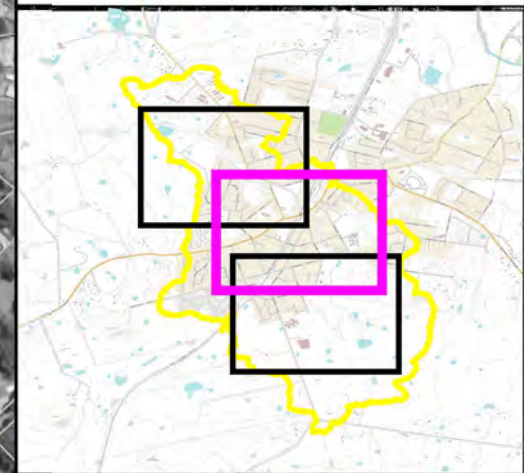
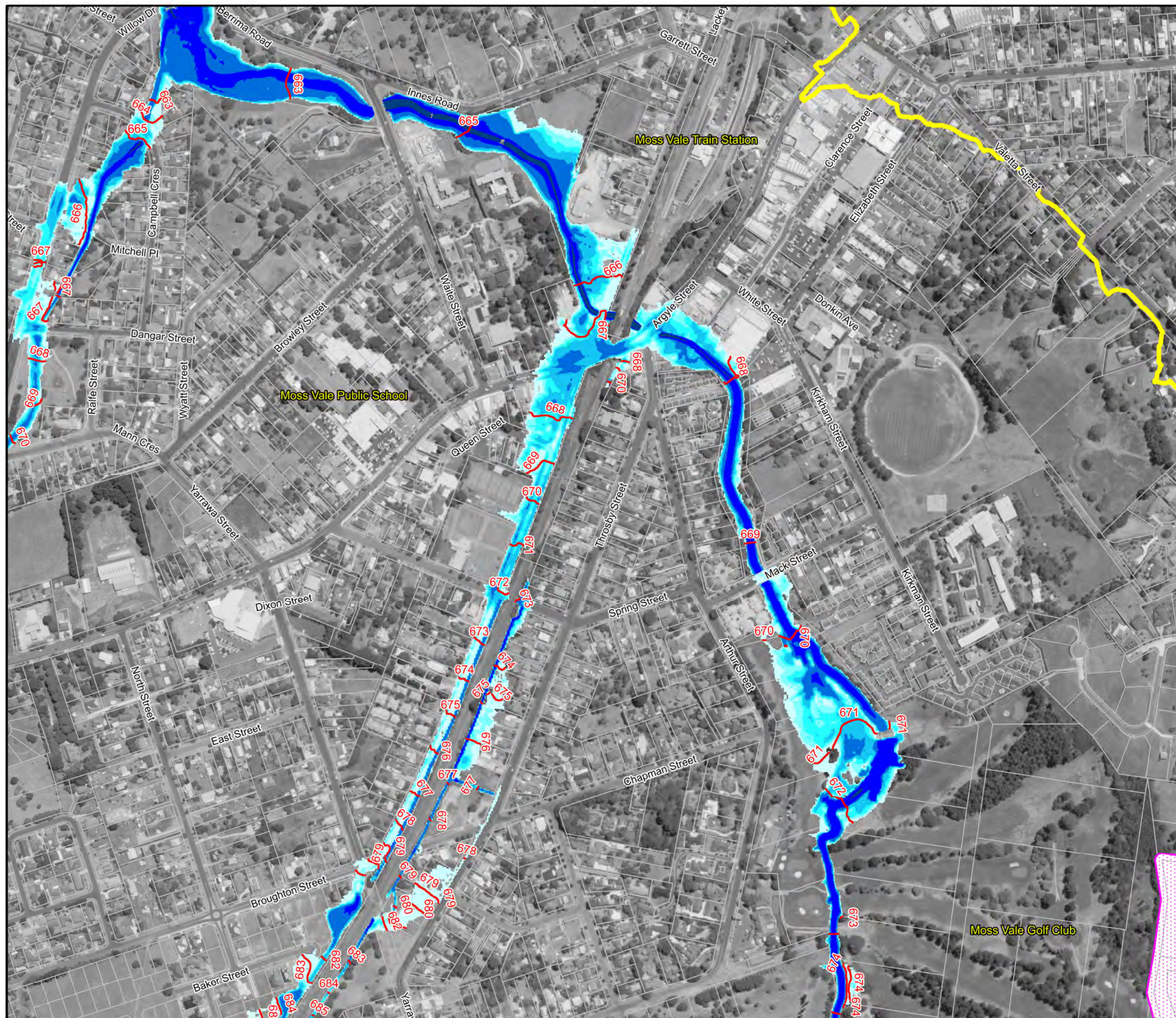
North Arrow

N
W E
S

**Figure 8.1:
Floodwater Depths and
Levels for the
1% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 8.1- Floodwater Depth
and Levels for the 1% AEP Flood.wor



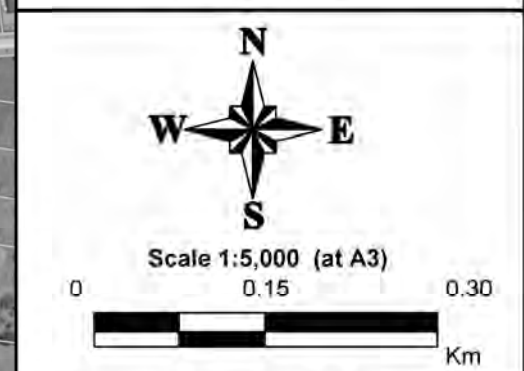
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- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

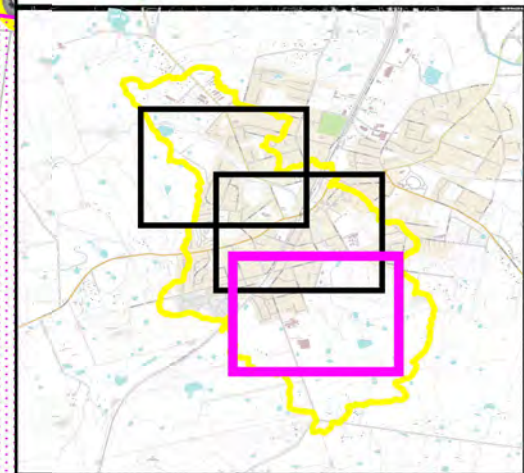
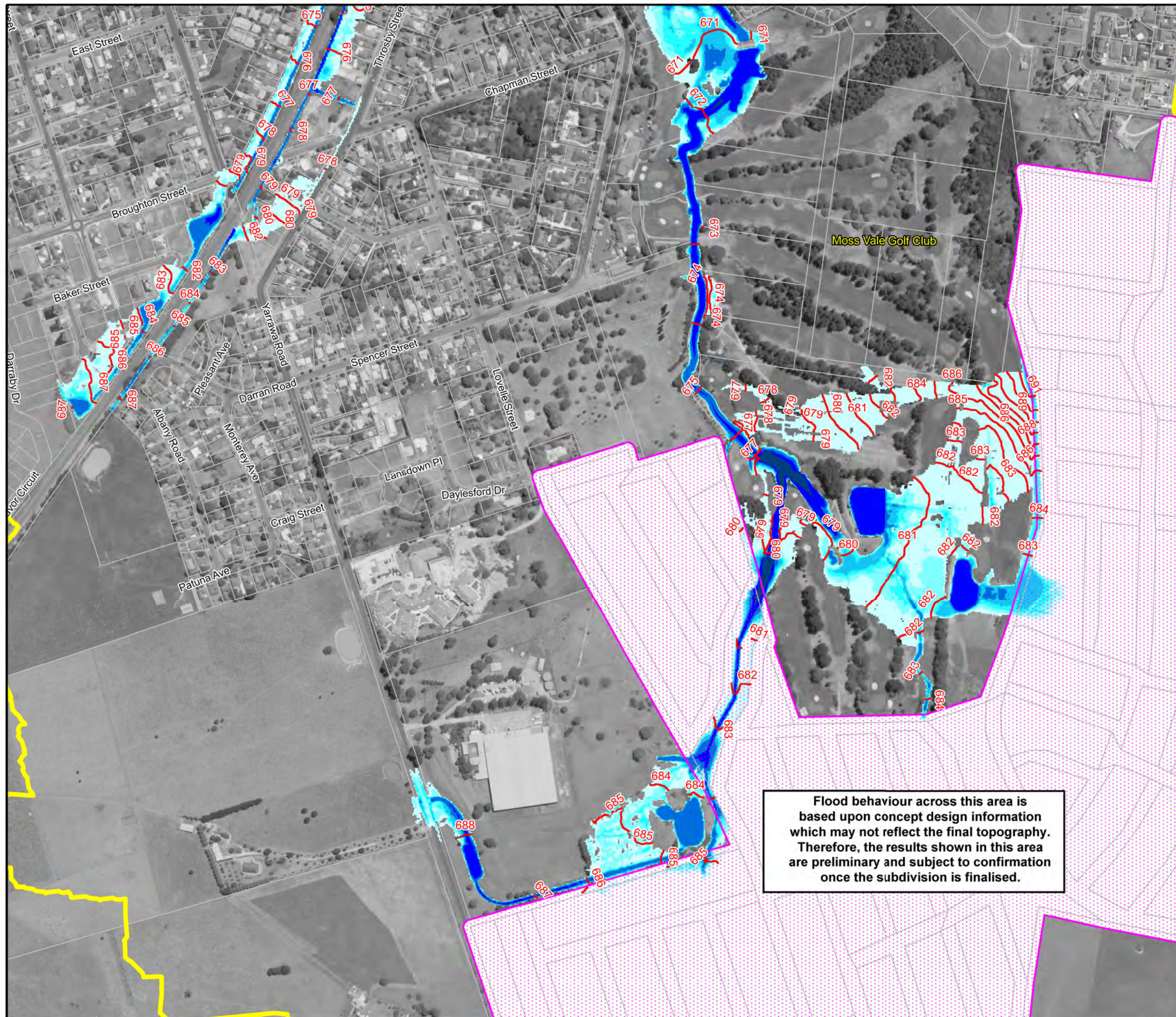
Notes:
Aerial photograph date: Jan 2009



**Figure 8.2:
Floodwater Depths and
Levels for the
1% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 8.2- Floodwater Depth
and Levels for the 1% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)

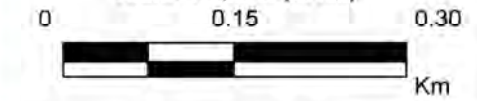
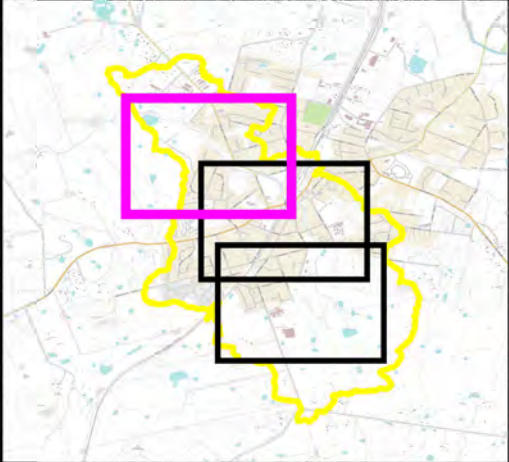
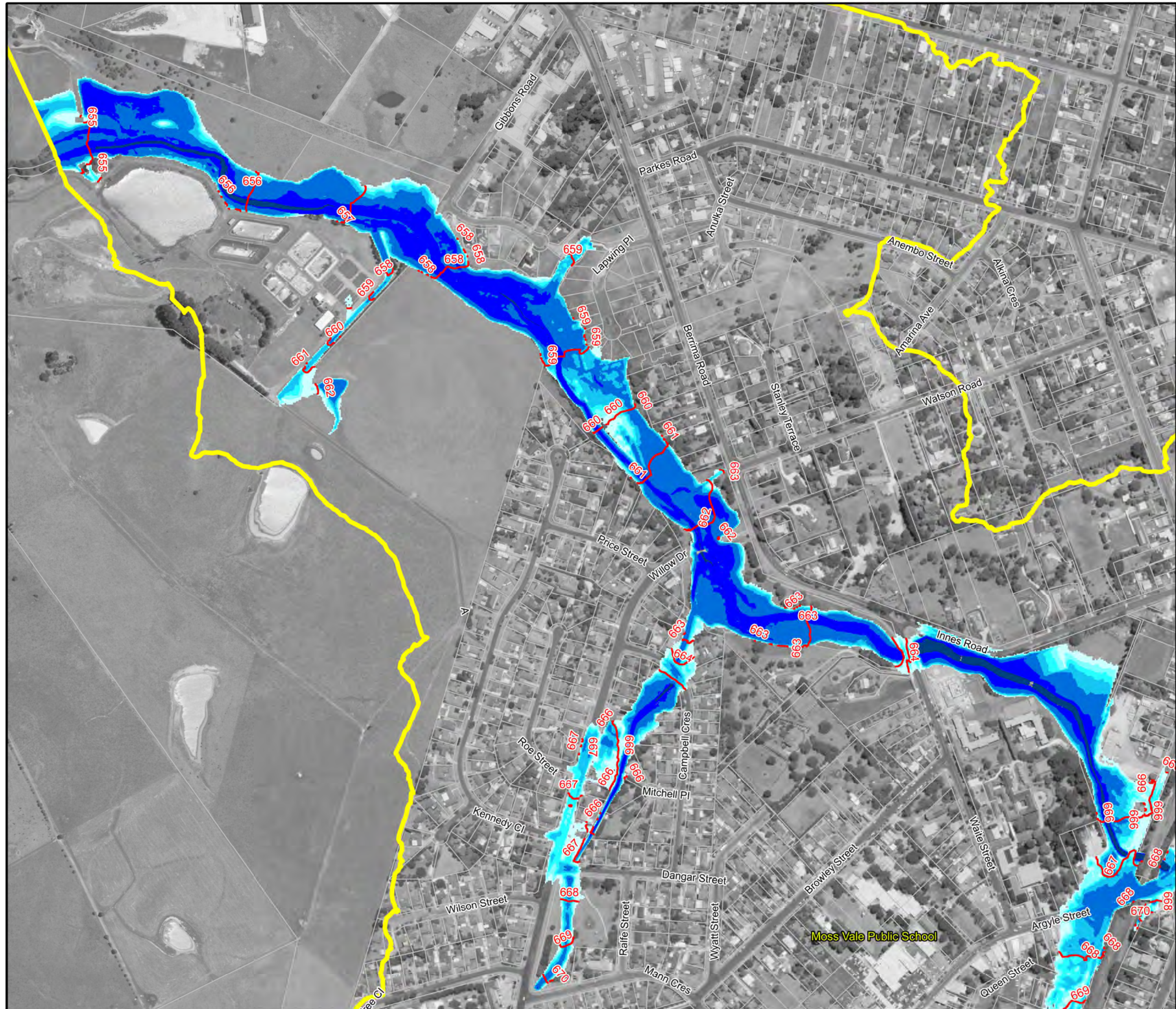


Figure 8.3:
Floodwater Depths and
Levels for the
1% AEP Flood

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 8.3- Floodwater Depth
and Levels for the 1% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

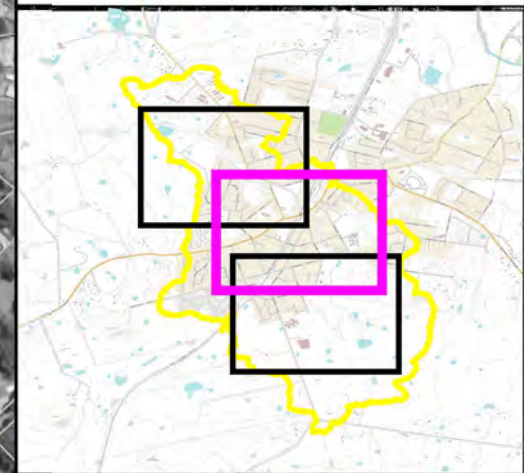
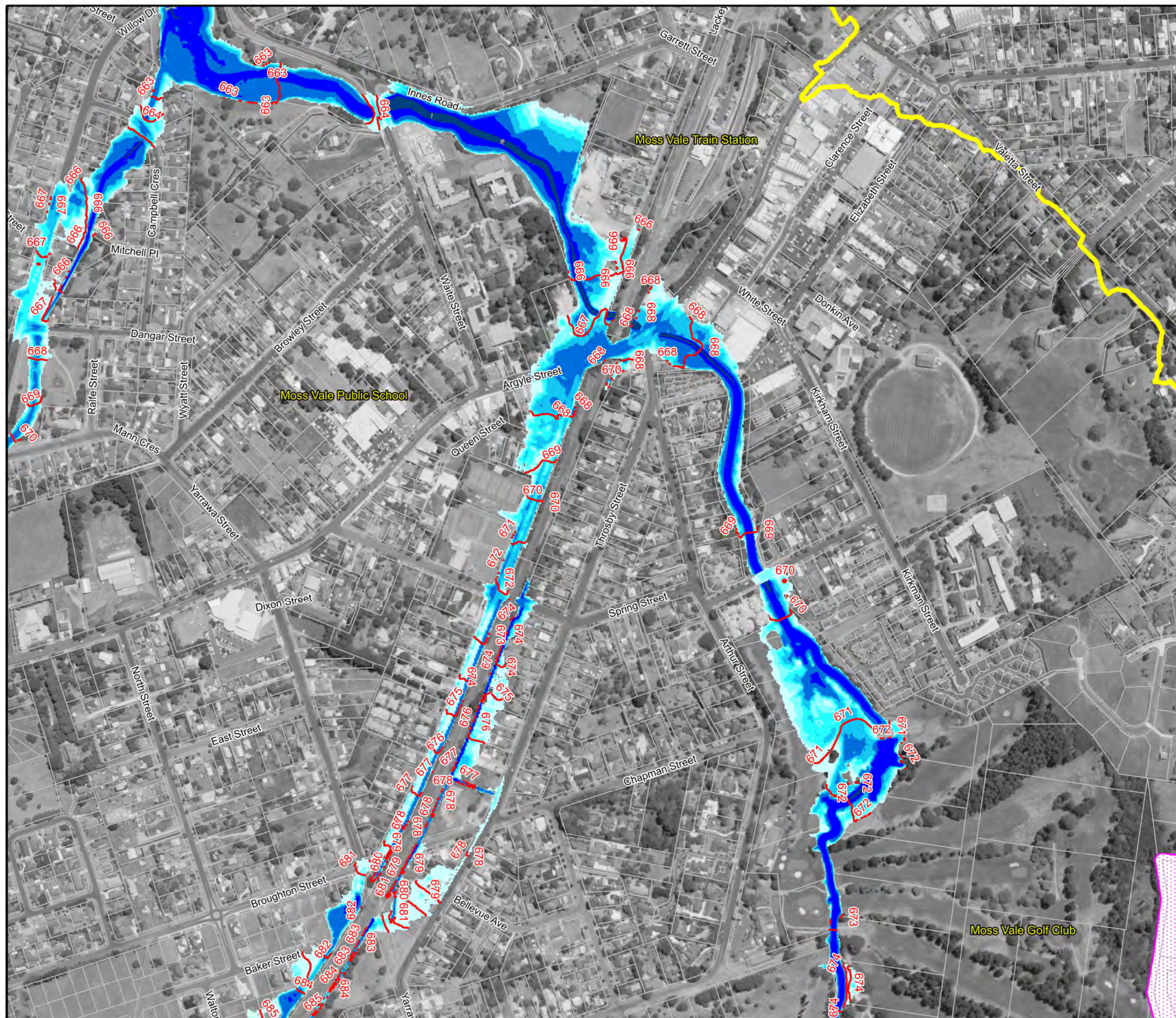
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 9.1:
Floodwater Depths and
Levels for the
0.5% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 9.1- Floodwater Depth
and Levels for the 0.5% AEP Flood.wor



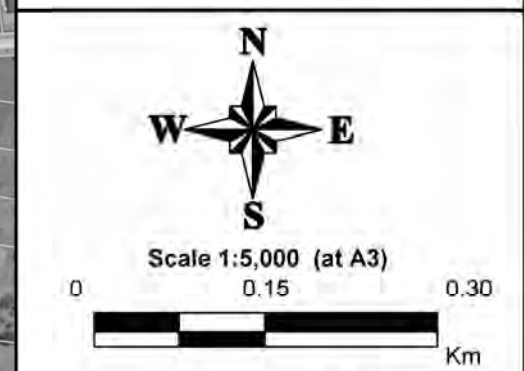
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

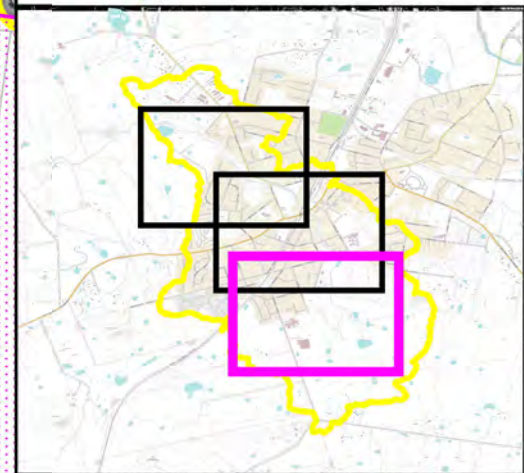
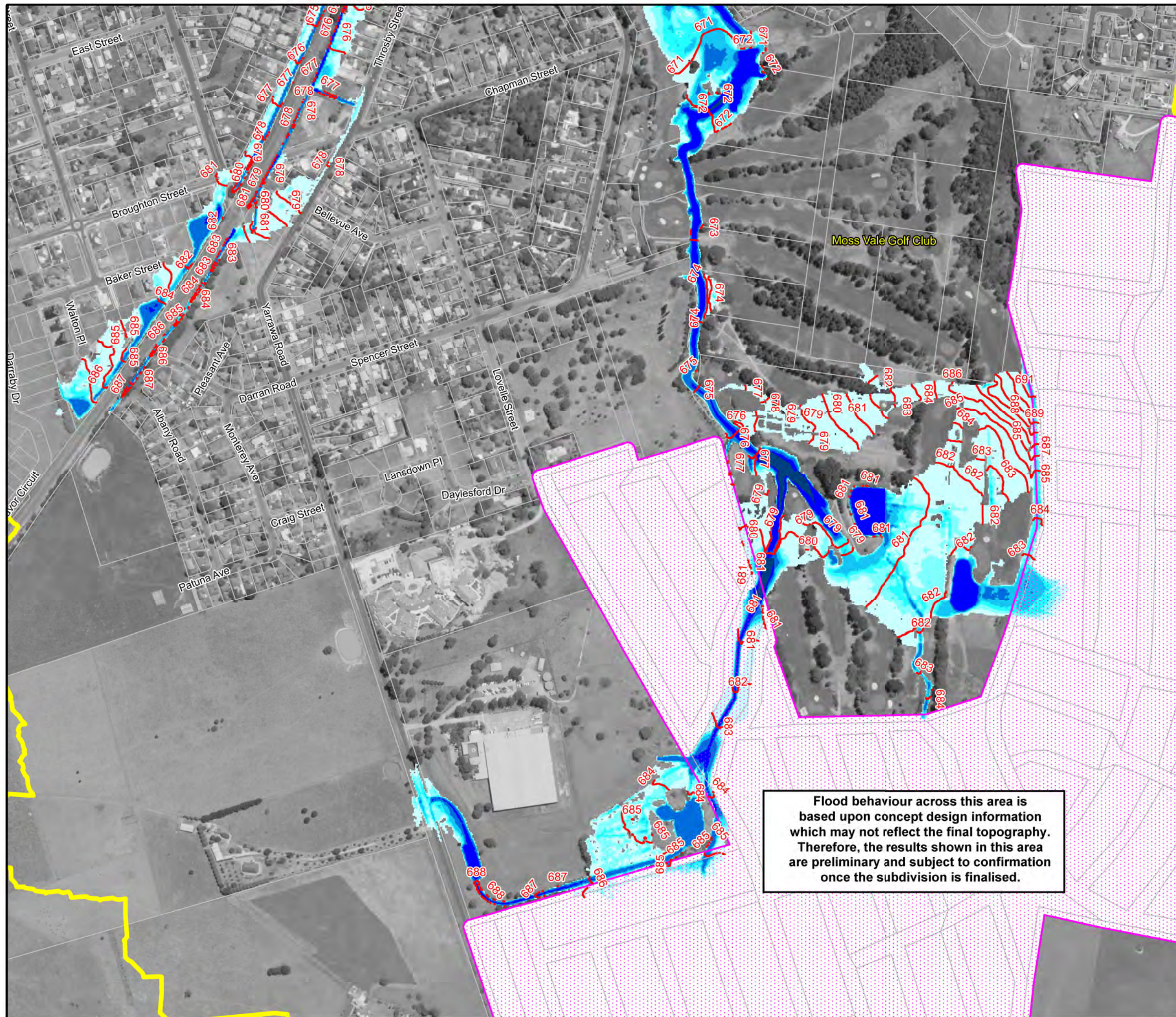
Notes:
Aerial photograph date: Jan 2009



**Figure 9.2:
Floodwater Depths and
Levels for the
0.5% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 9.2- Floodwater Depth
and Levels for the 0.5% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHd)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

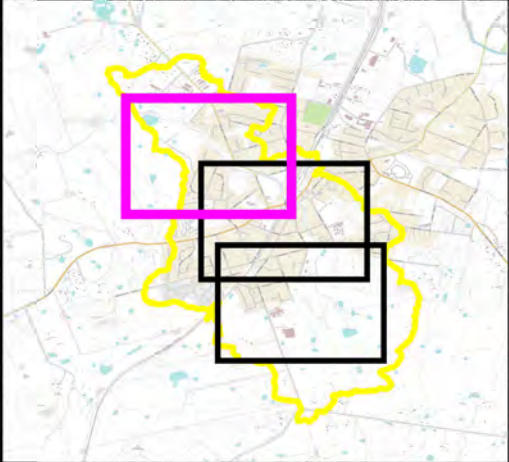
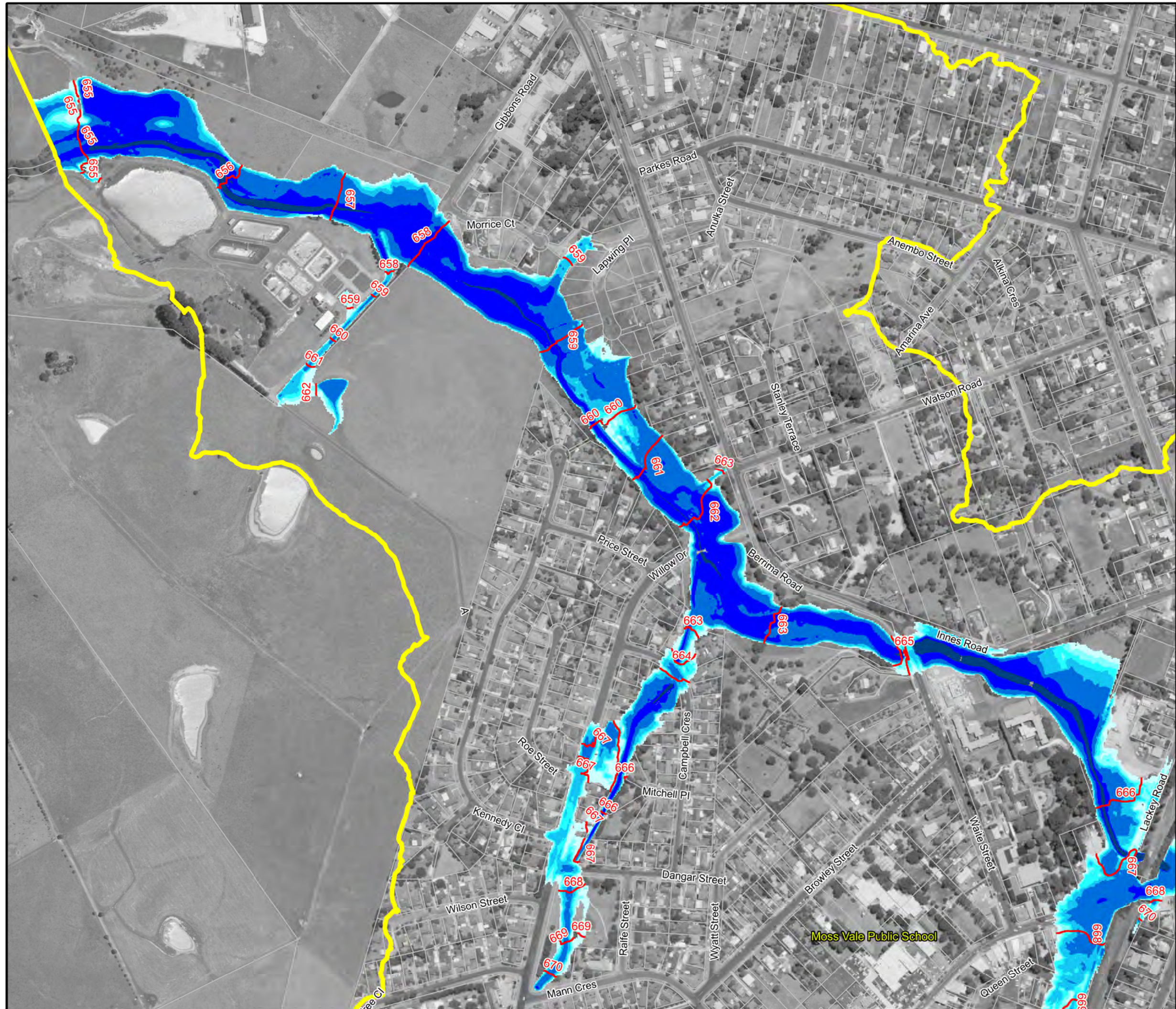
North Arrow

**Figure 9.3:
Floodwater Depths and
Levels for the
0.5% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 9.3- Floodwater Depth
and Levels for the 0.5% AEP Flood.wor

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

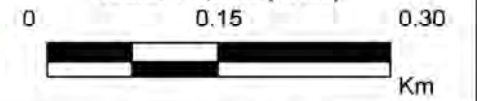
- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)

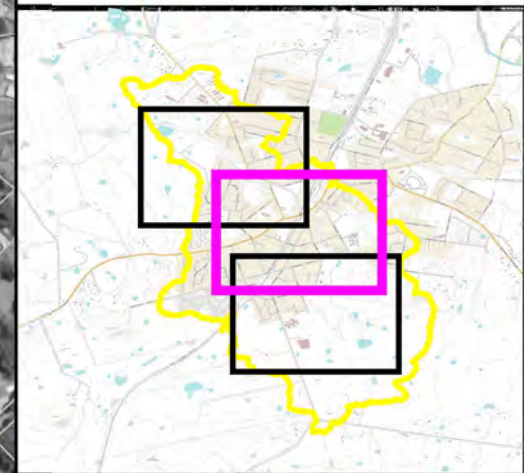
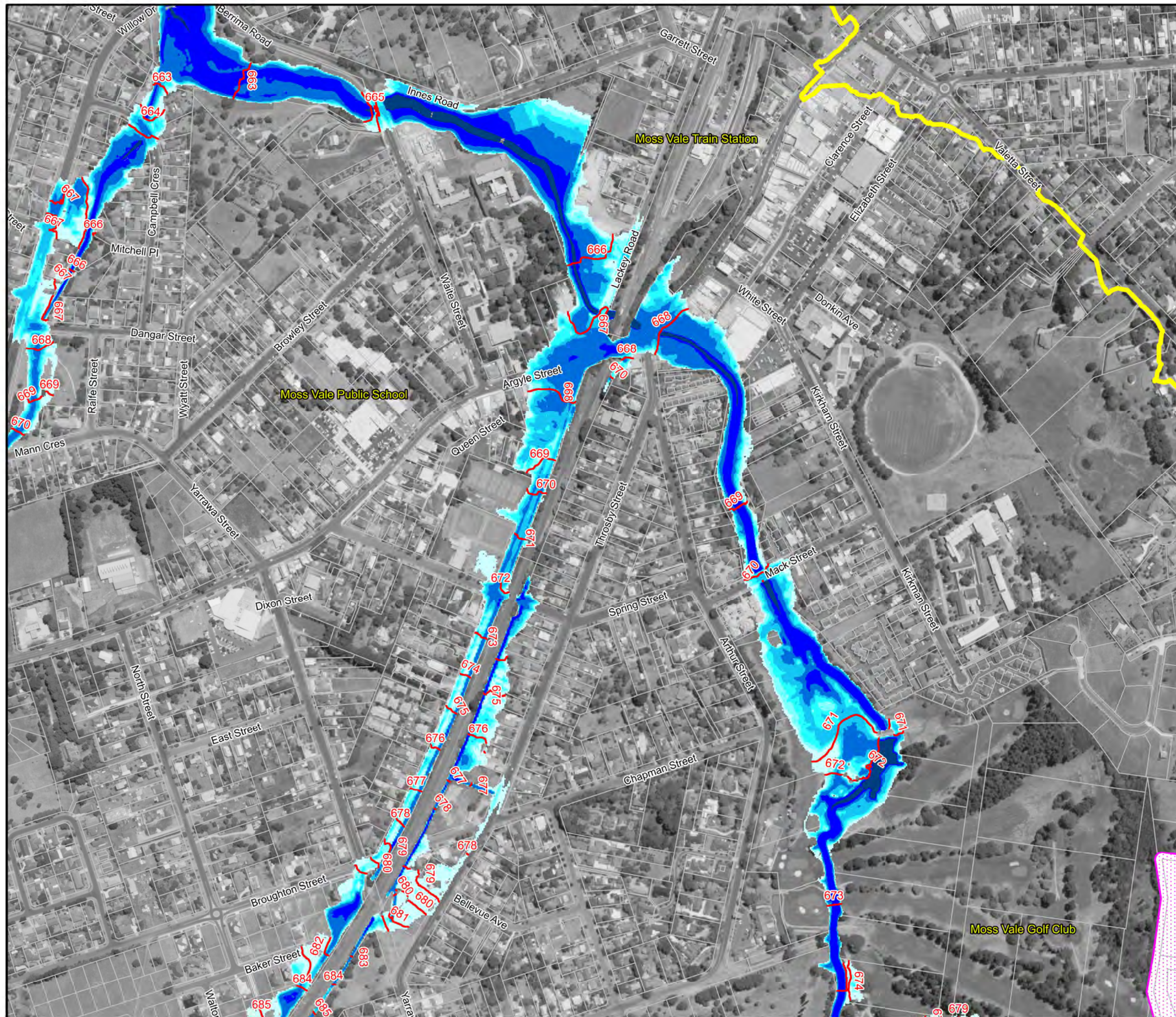


**Figure 10.1:
Floodwater Depths and
Levels for the
0.2% AEP Flood**

Prepared By:

Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 10.1- Floodwater Depth
and Levels for the 0.2% AEP Flood.wor



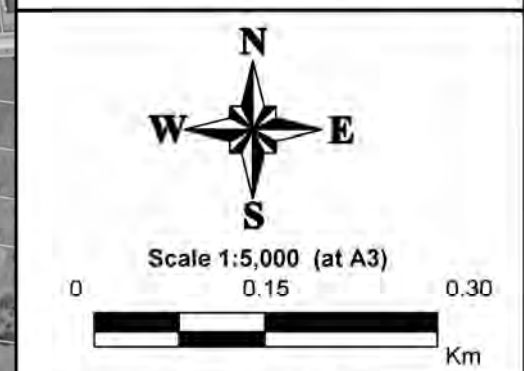
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAH)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

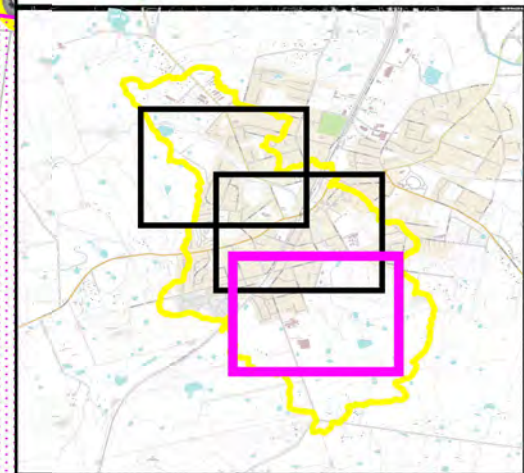
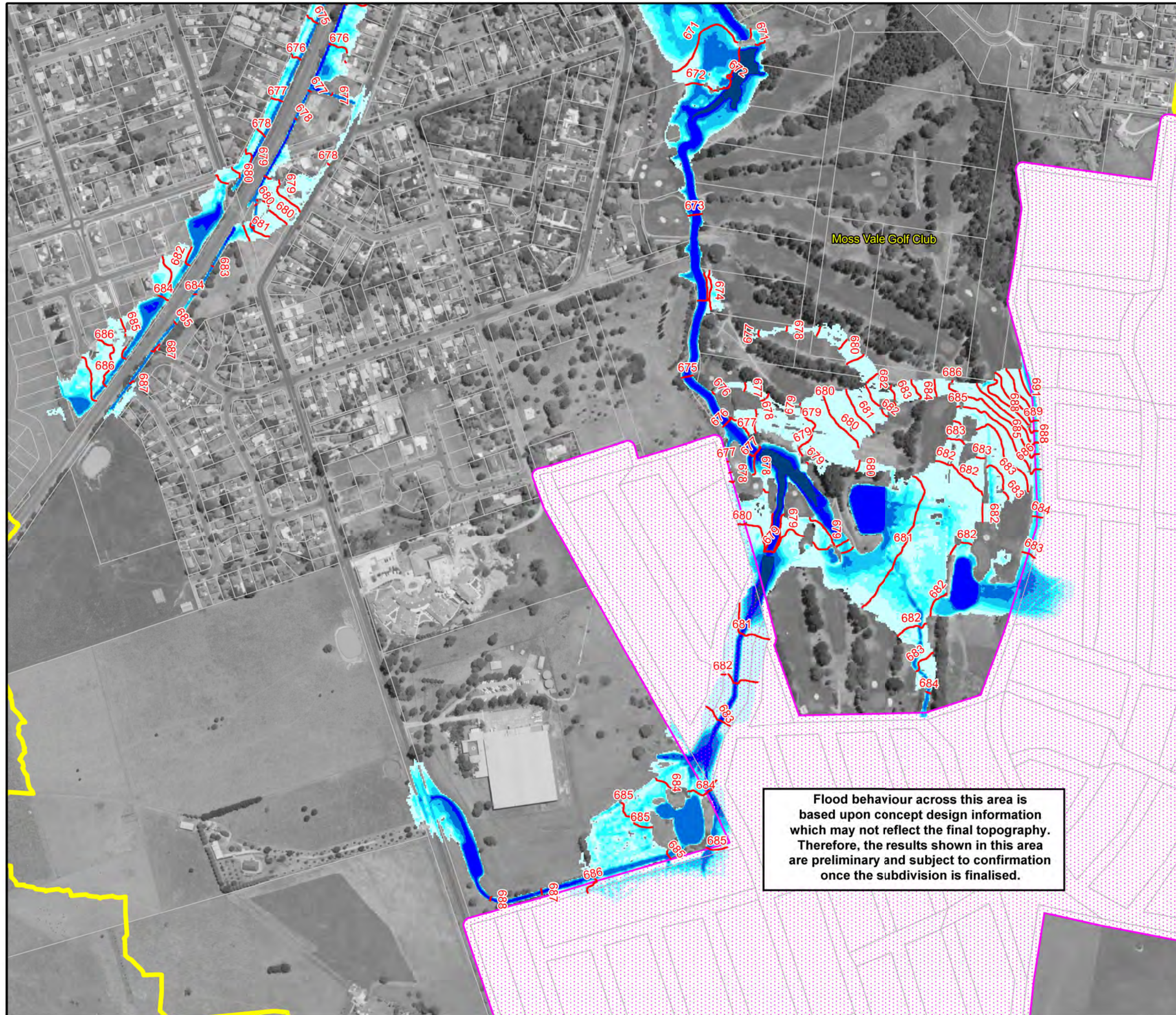
Notes:
Aerial photograph date: Jan 2009



**Figure 10.2:
Floodwater Depths and
Levels for the
0.2% AEP Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 10.2- Floodwater Depth
and Levels for the 0.2% AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

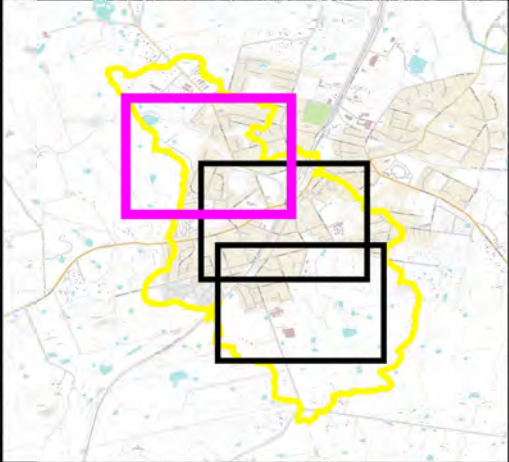
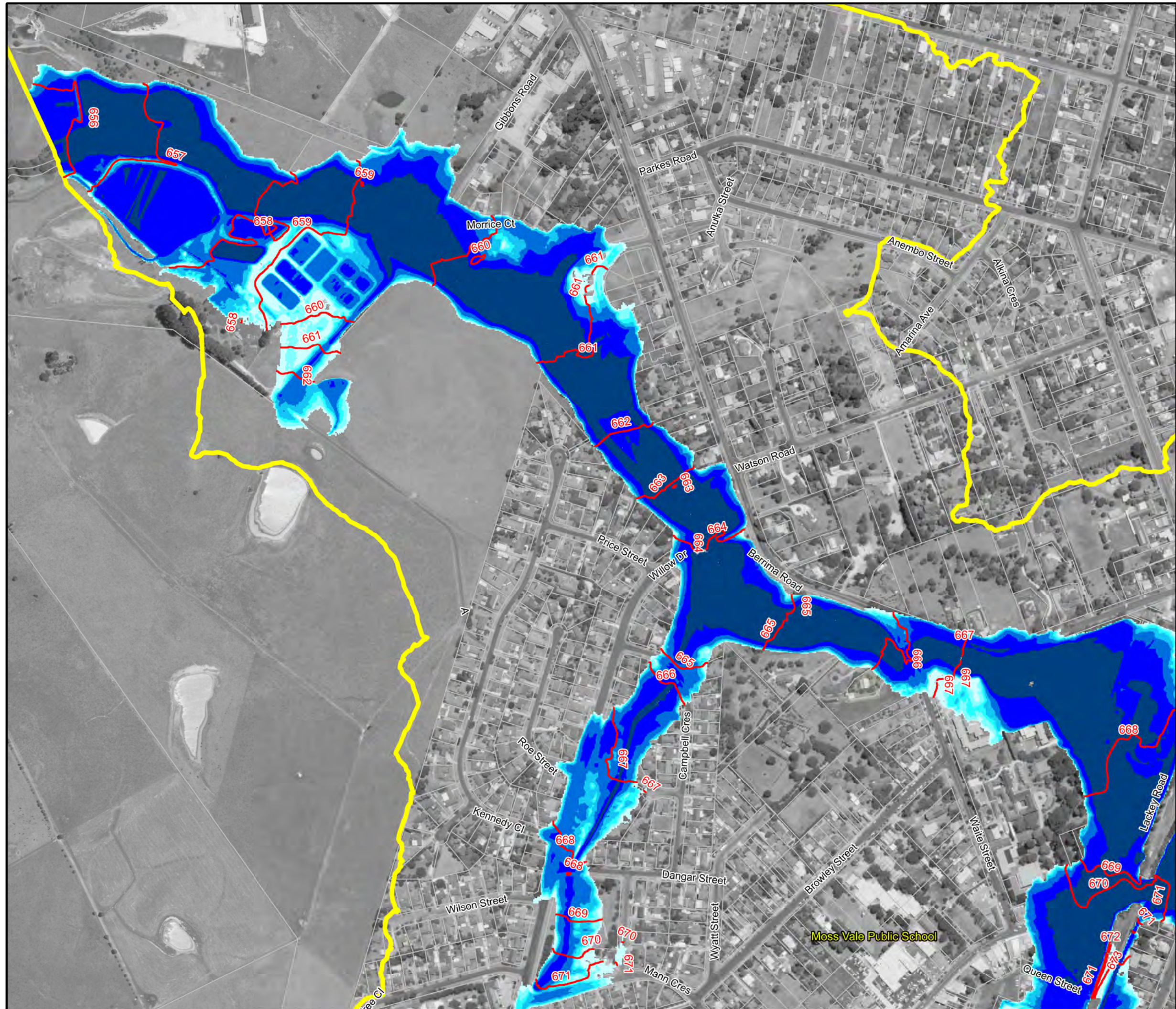
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

North Arrow

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 10.3:
Floodwater Depths and
Levels for the
0.2% AEP Flood**



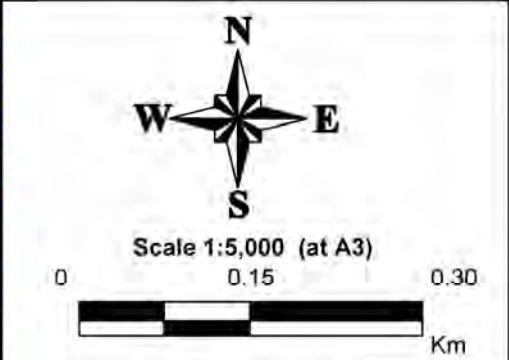
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

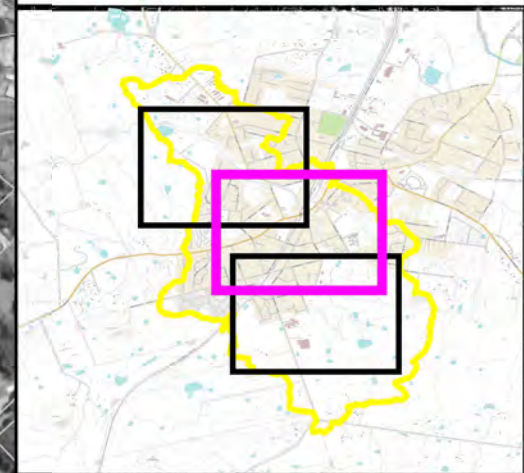
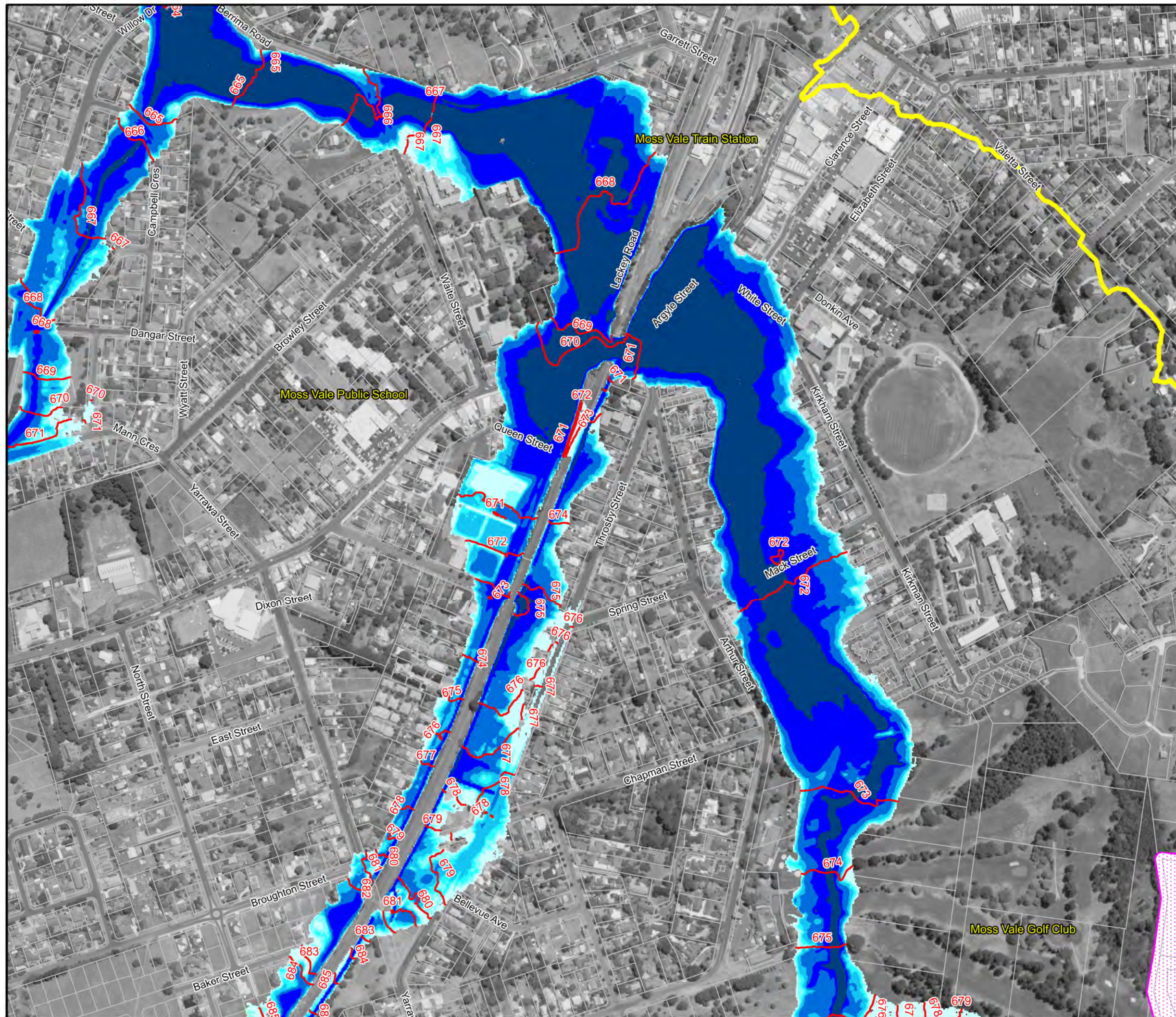
Notes:
Aerial photograph date: Jan 2009



**Figure 11.1:
Floodwater Depths and
Levels for the
PMF Flood**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 11.1- Floodwater Depth
and Levels for the PMF Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHd)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

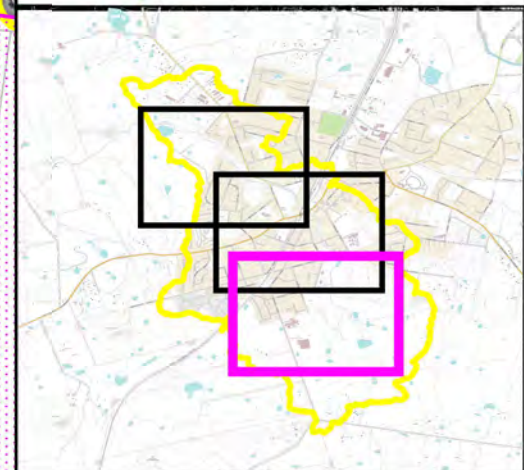
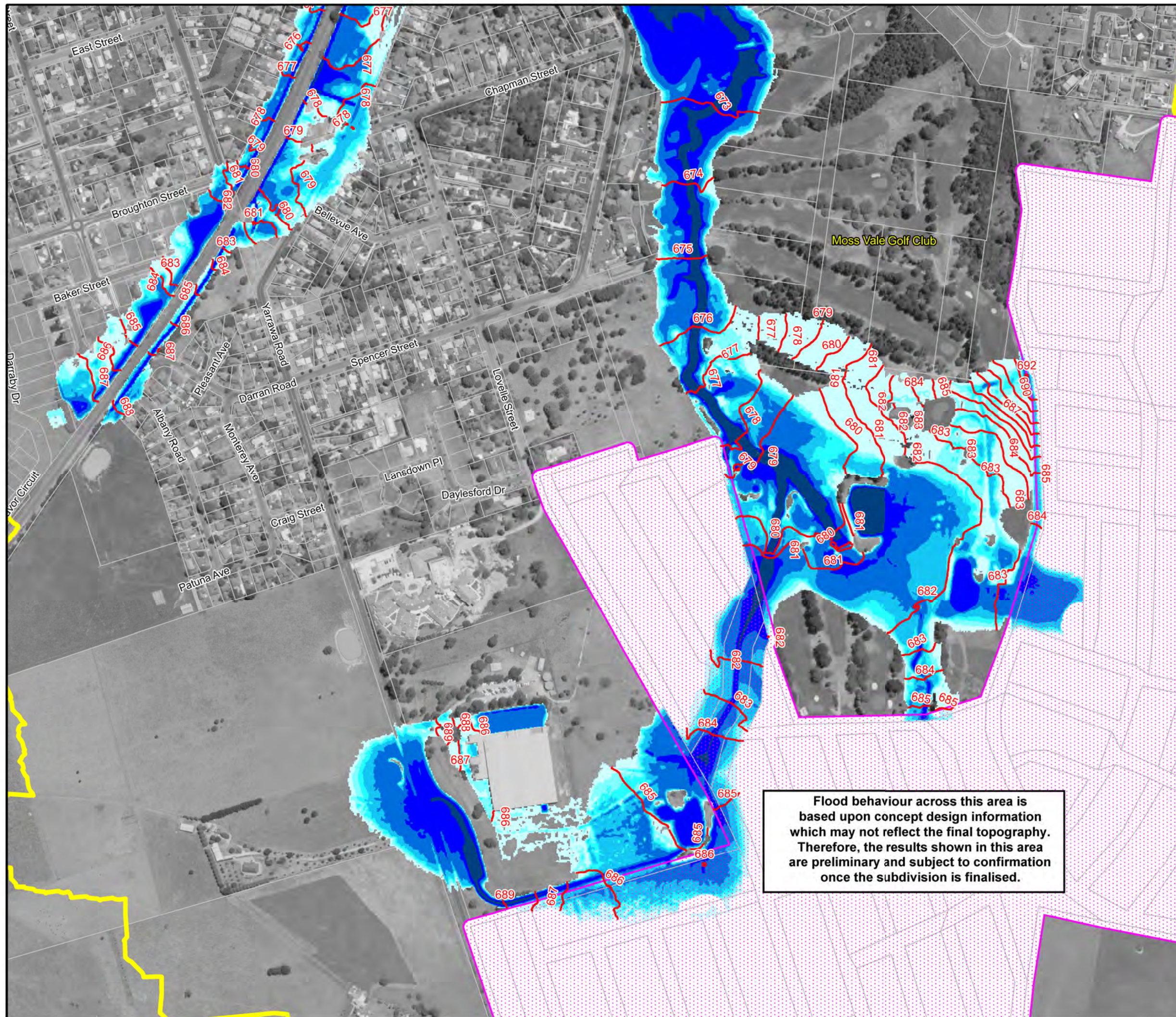
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

Figure 11.2: Floodwater Depths and Levels for the PMF Flood

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 11.2- Floodwater Depth and Levels for the PMF Flood.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

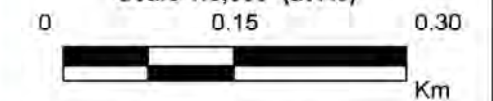
- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)



**Figure 11.3:
Floodwater Depths and
Levels for the
PMF Flood**

Prepared By:

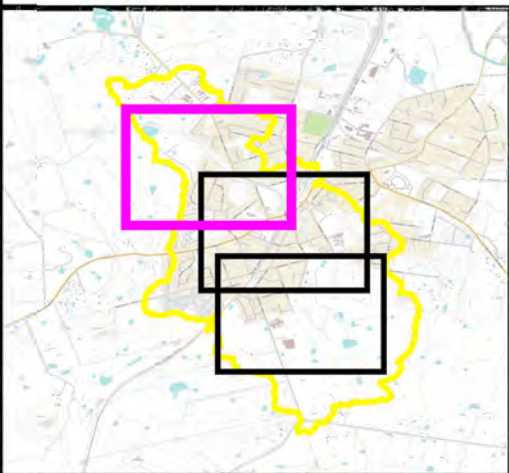
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 11.3- Floodwater Depth
and Levels for the PMF Flood.wor



FLOOD HAZARD MAPS





LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

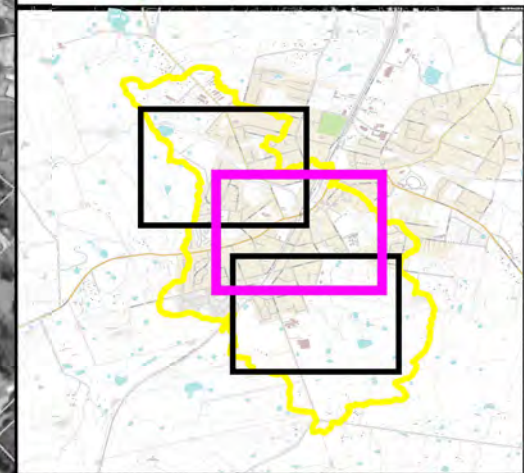
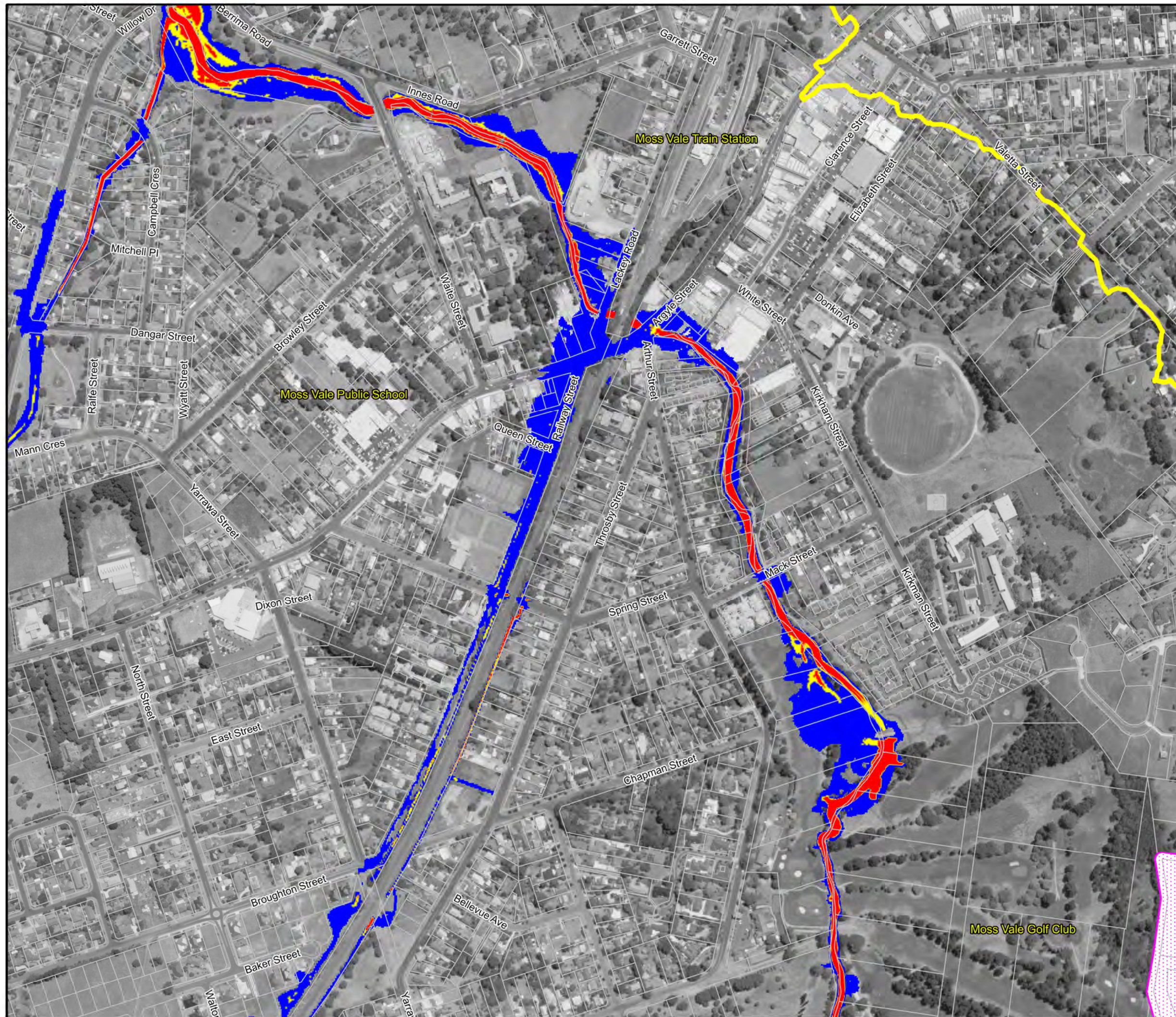
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 12.1:
10% AEP
Flood Hazard**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 12.1- 10% AEP
Flood Hazard.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:

Aerial photograph date: Jan 2009

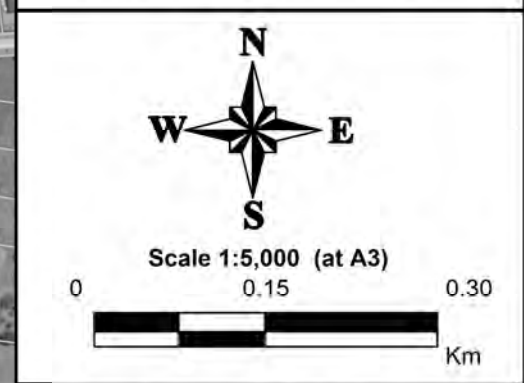
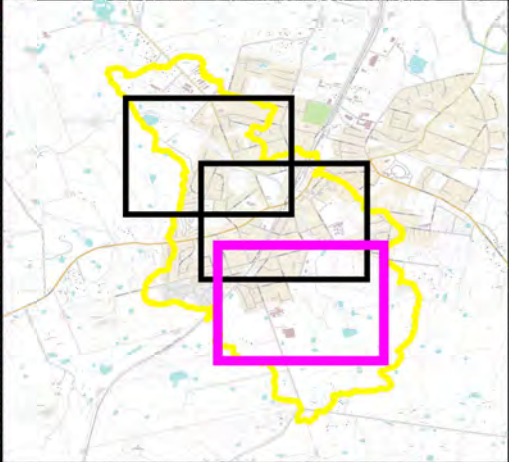
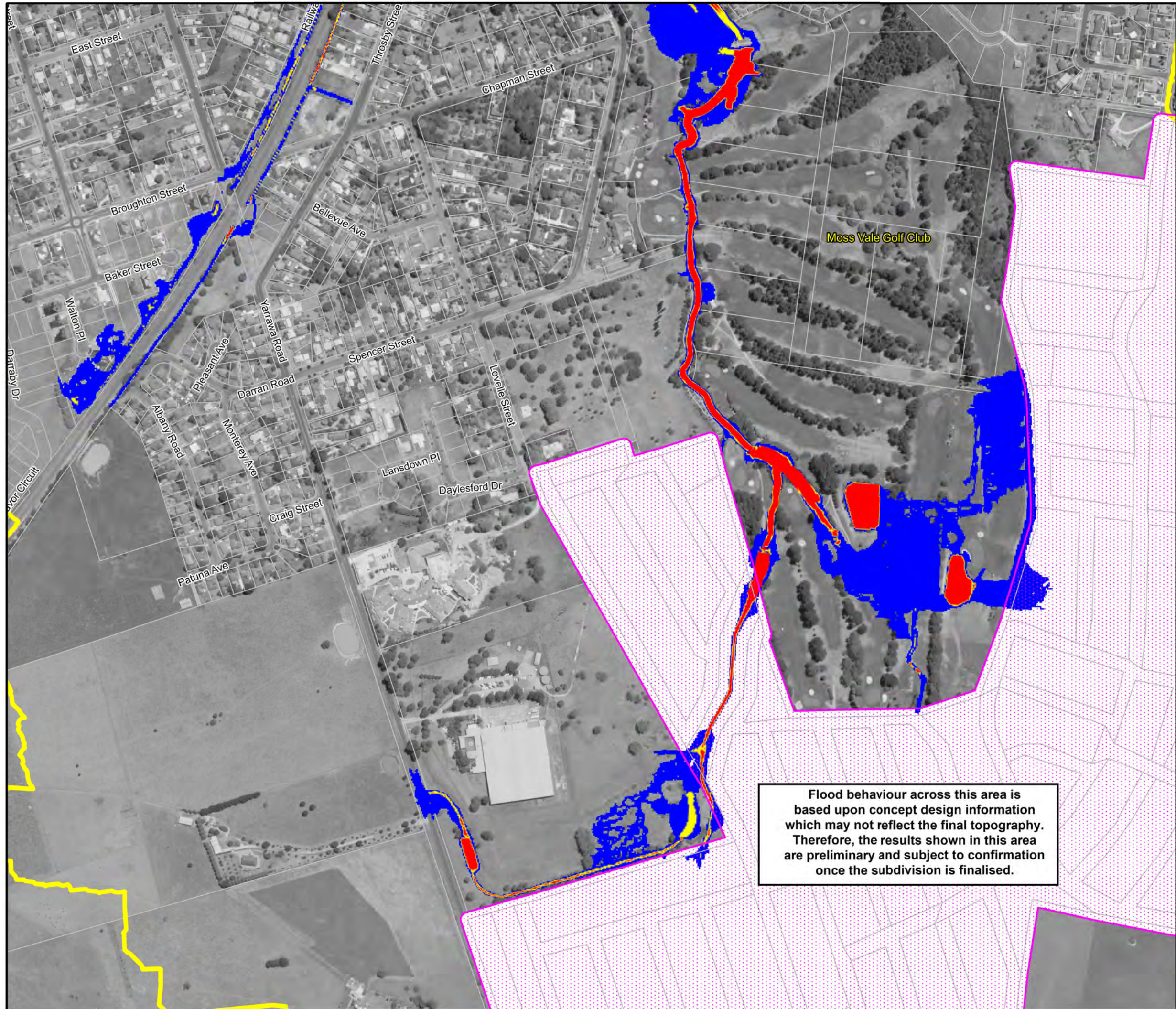


Figure 12.2:
10% AEP
Flood Hazard

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

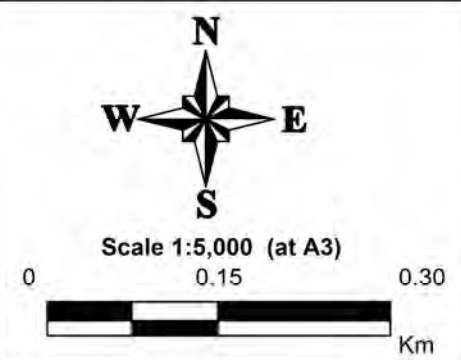
File Name: Fig 12.2- 10% AEP
Flood Hazard.wor



LEGEND

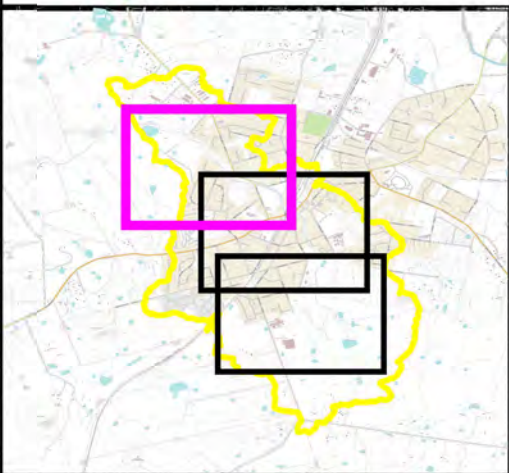
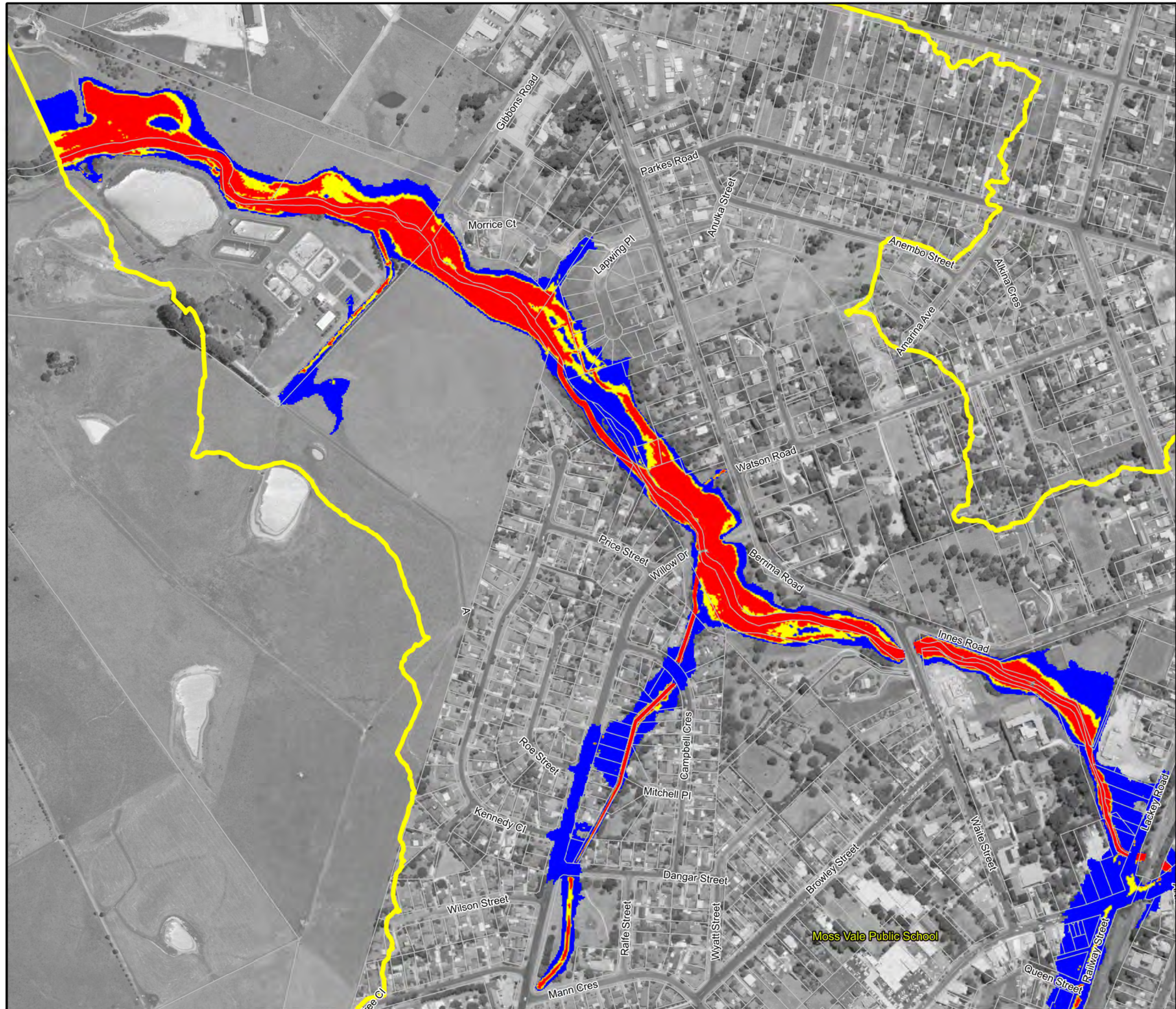
- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Hazard Categories
 - Low
 - Transition
 - High

Notes:
Aerial photograph date: Jan 2009



**Figure 12.3:
10% AEP
Flood Hazard**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 12.3- 10% AEP
Flood Hazard.wor



LEGEND

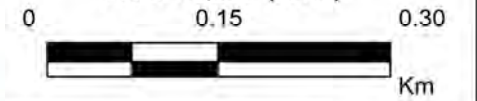
- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Hazard Categories
 - Low
 - Transition
 - High

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)

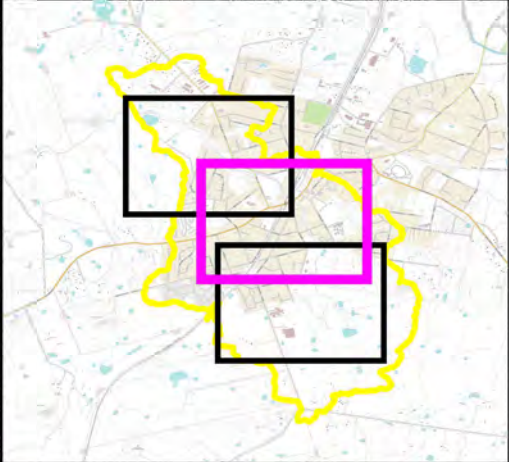


**Figure 13.1:
1% AEP
Flood Hazard**

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

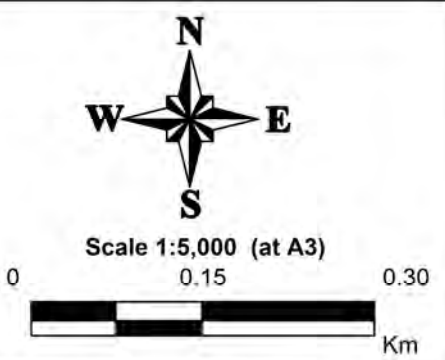
File Name: Fig 13.1- 1% AEP
Flood Hazard.wor



LEGEND

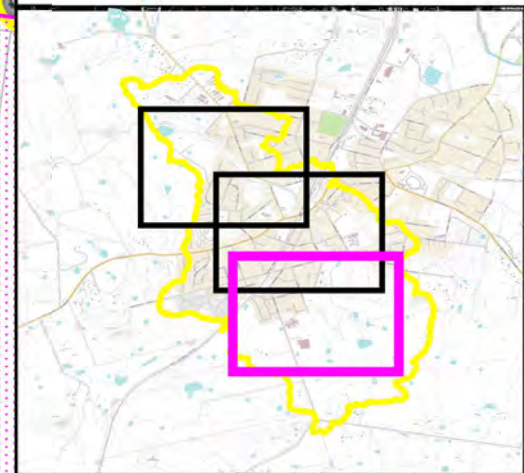
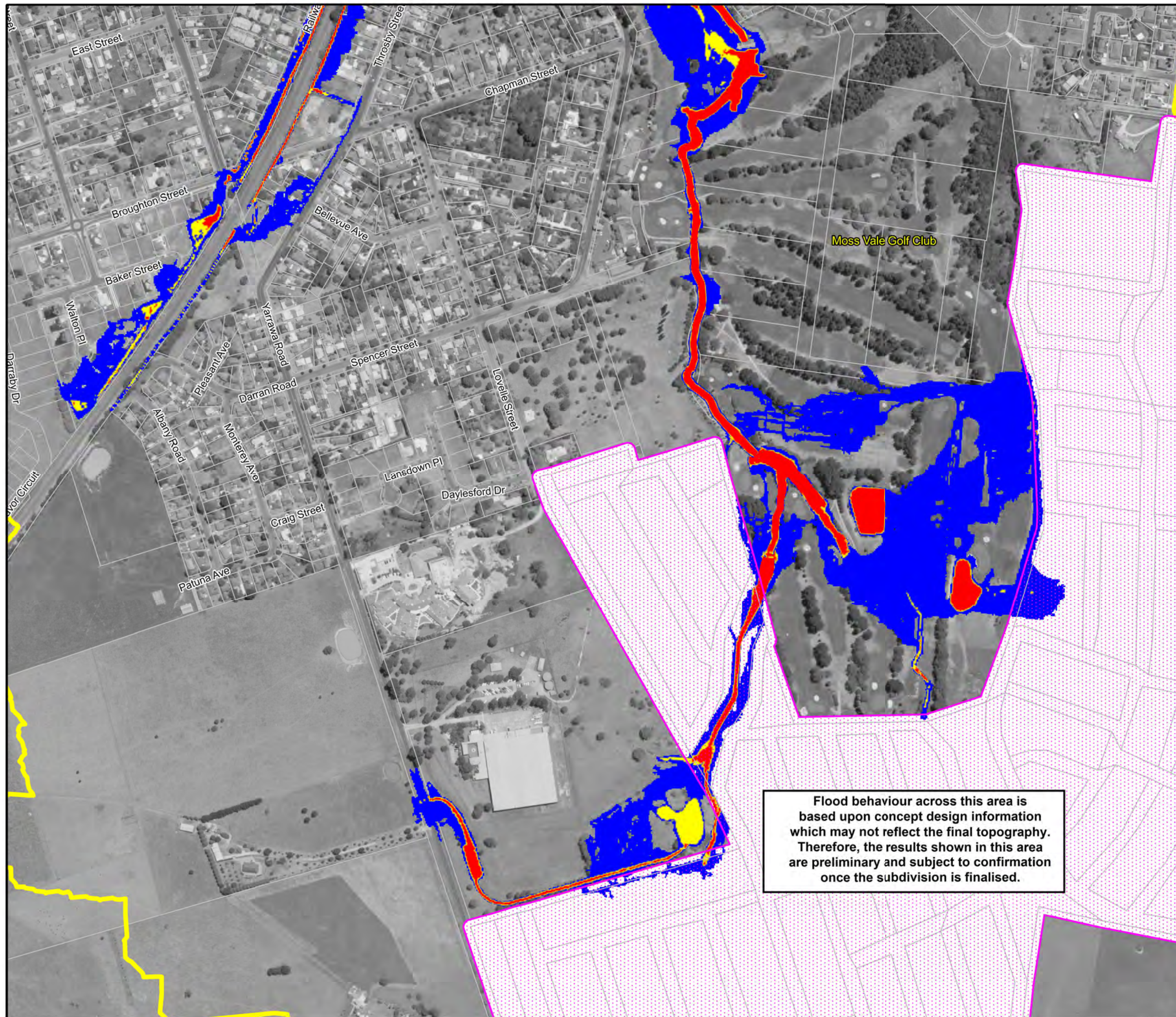
- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Hazard Categories
 - Low
 - Transition
 - High

Notes:
Aerial photograph date: Jan 2009



**Figure 13.2:
1% AEP
Flood Hazard**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 13.2- 1% AEP
Flood Hazard.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

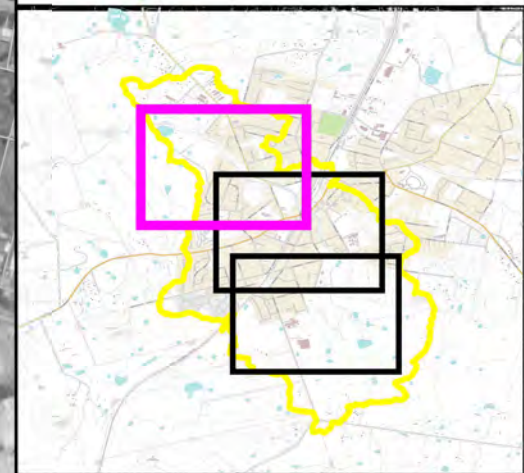
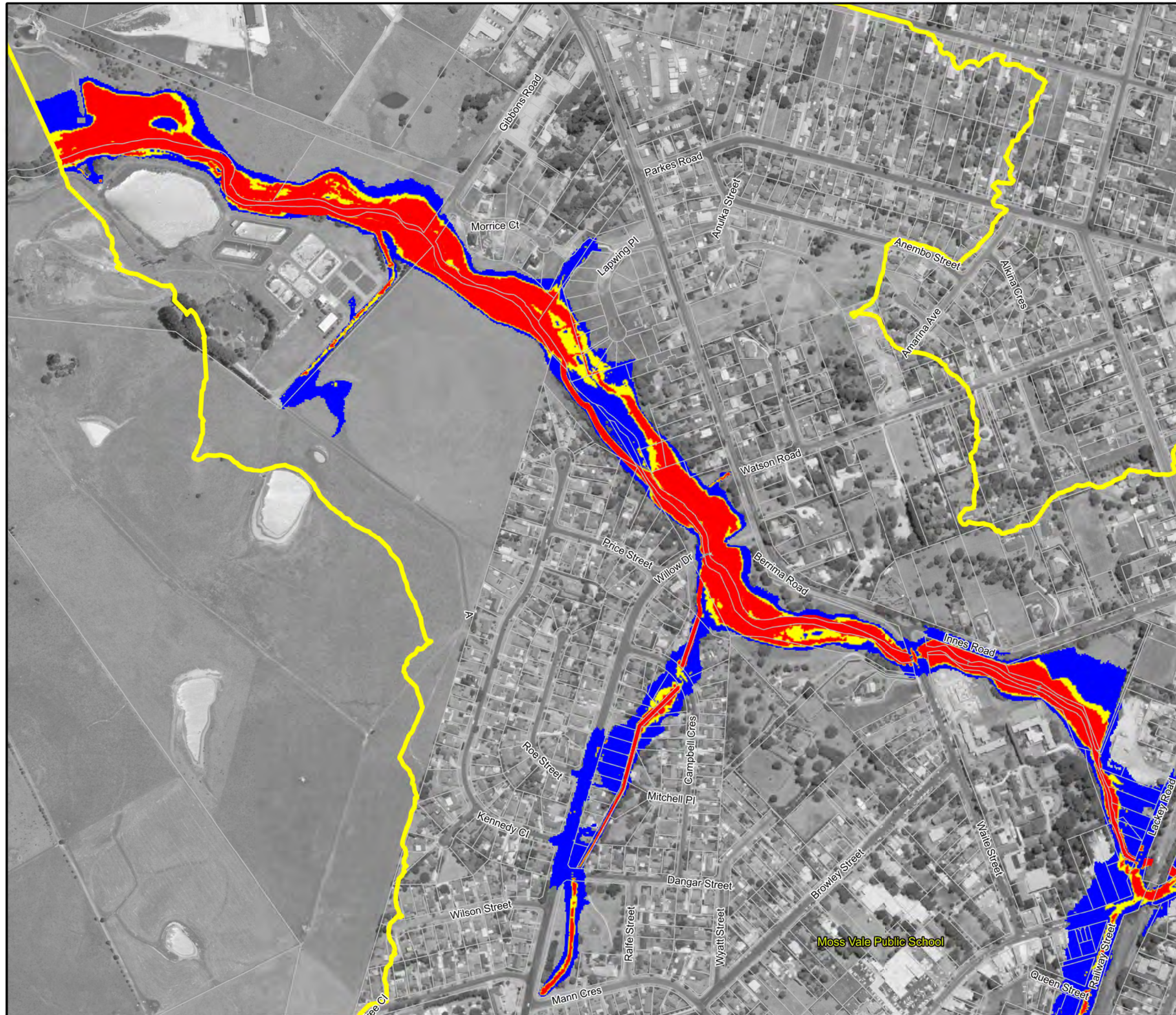
- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 13.3:
1% AEP
Flood Hazard**



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:

Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

Scale 1:5,000 (at A3)

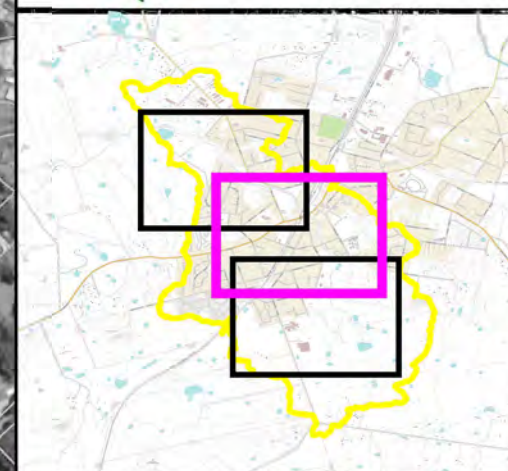
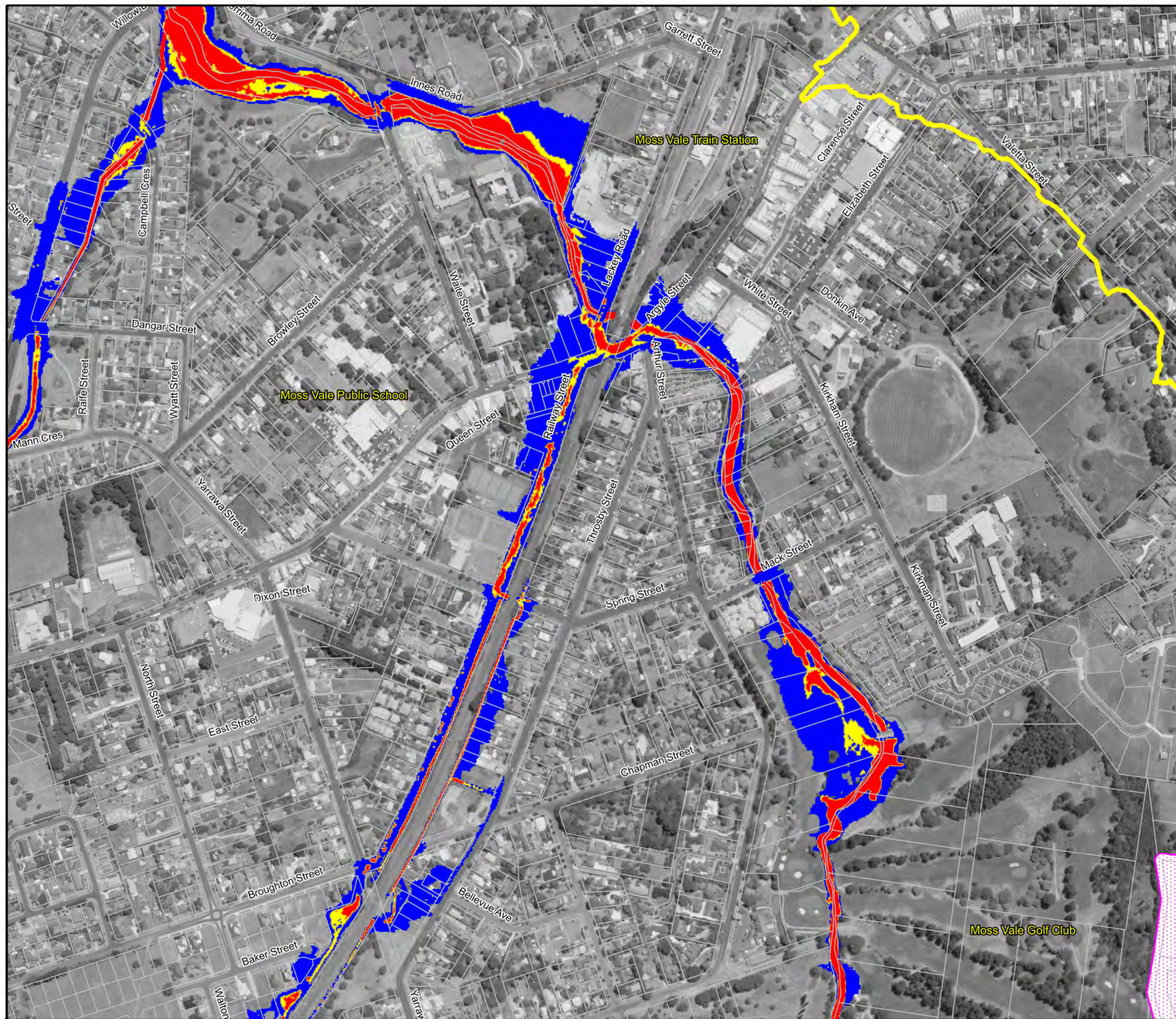
0 0.15 0.30 Km

Figure 14.1:
0.5% AEP
Flood Hazard

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 14.1- 0.5% AEP
Flood Hazard.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Hazard Categories
 - Low
 - Transition
 - High

Notes:

Aerial photograph date: Jan 2009



Scale 1:5,000 (at A3)

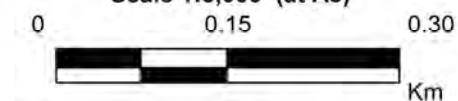
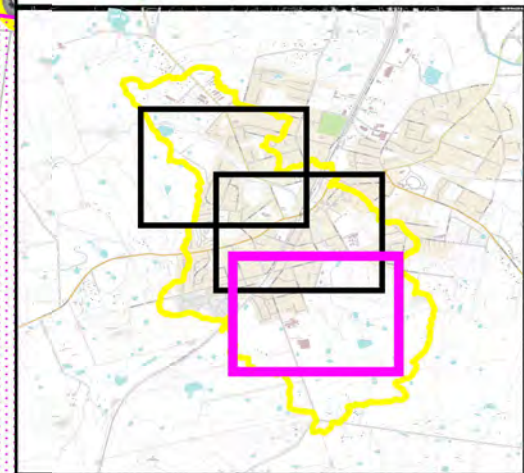
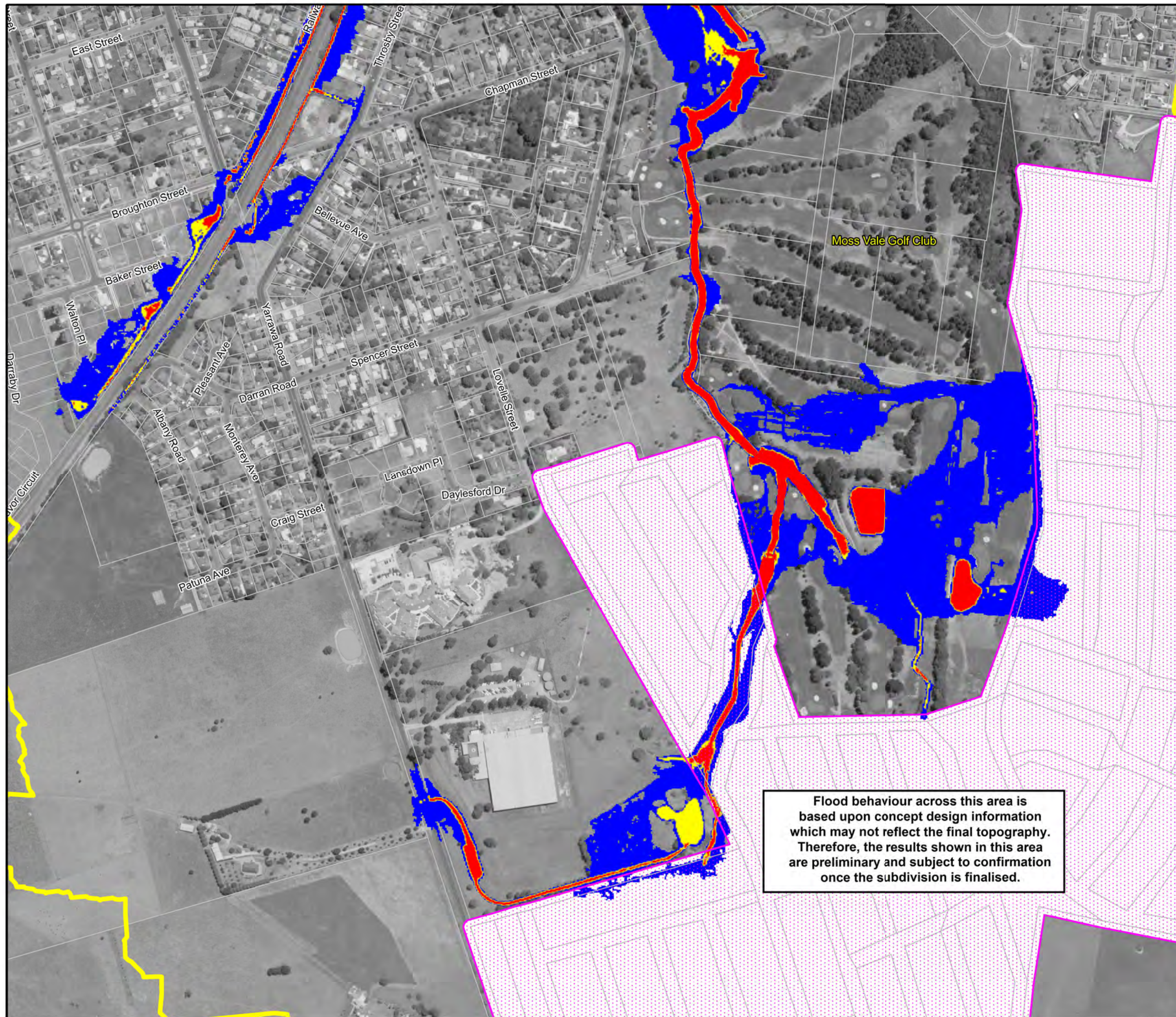


Figure 14.2:
0.5% AEP
Flood Hazard

Prepared By:

CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 14.2- 0.5% AEP
Flood Hazard.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

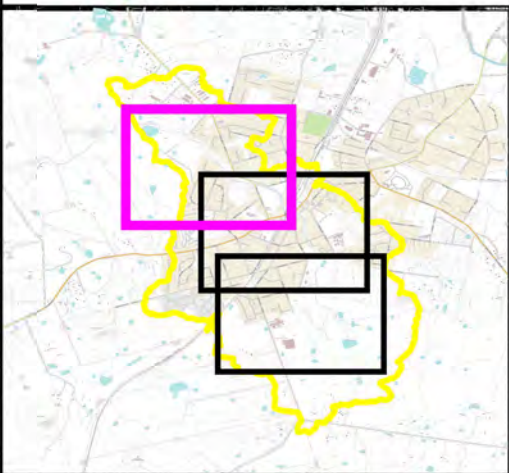
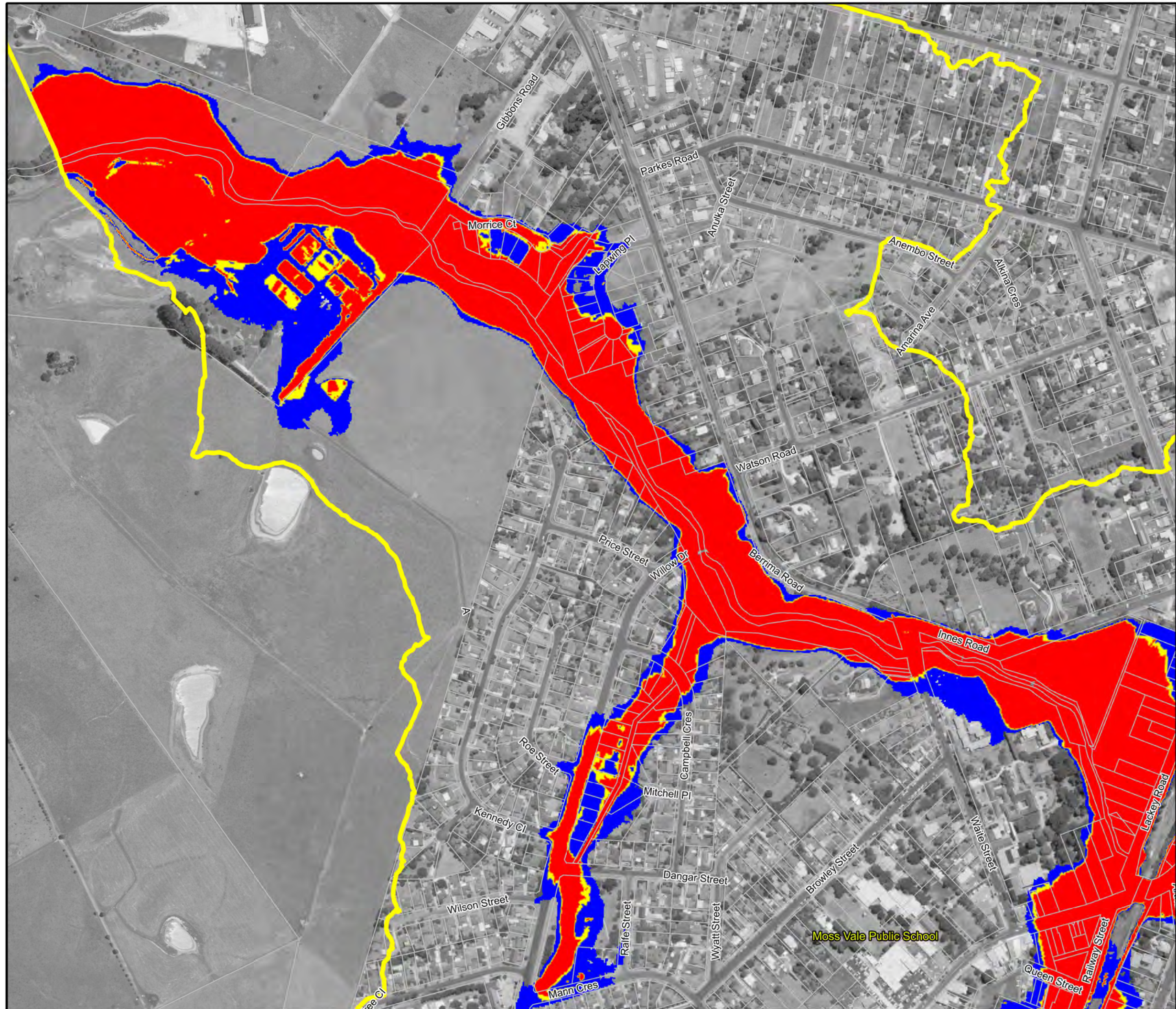
- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 14.3:
0.5% AEP
Flood Hazard**



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

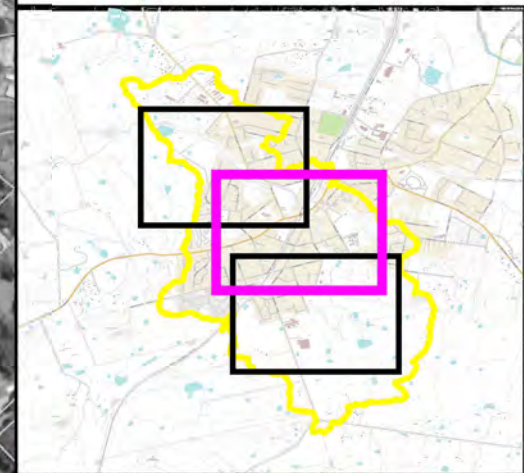
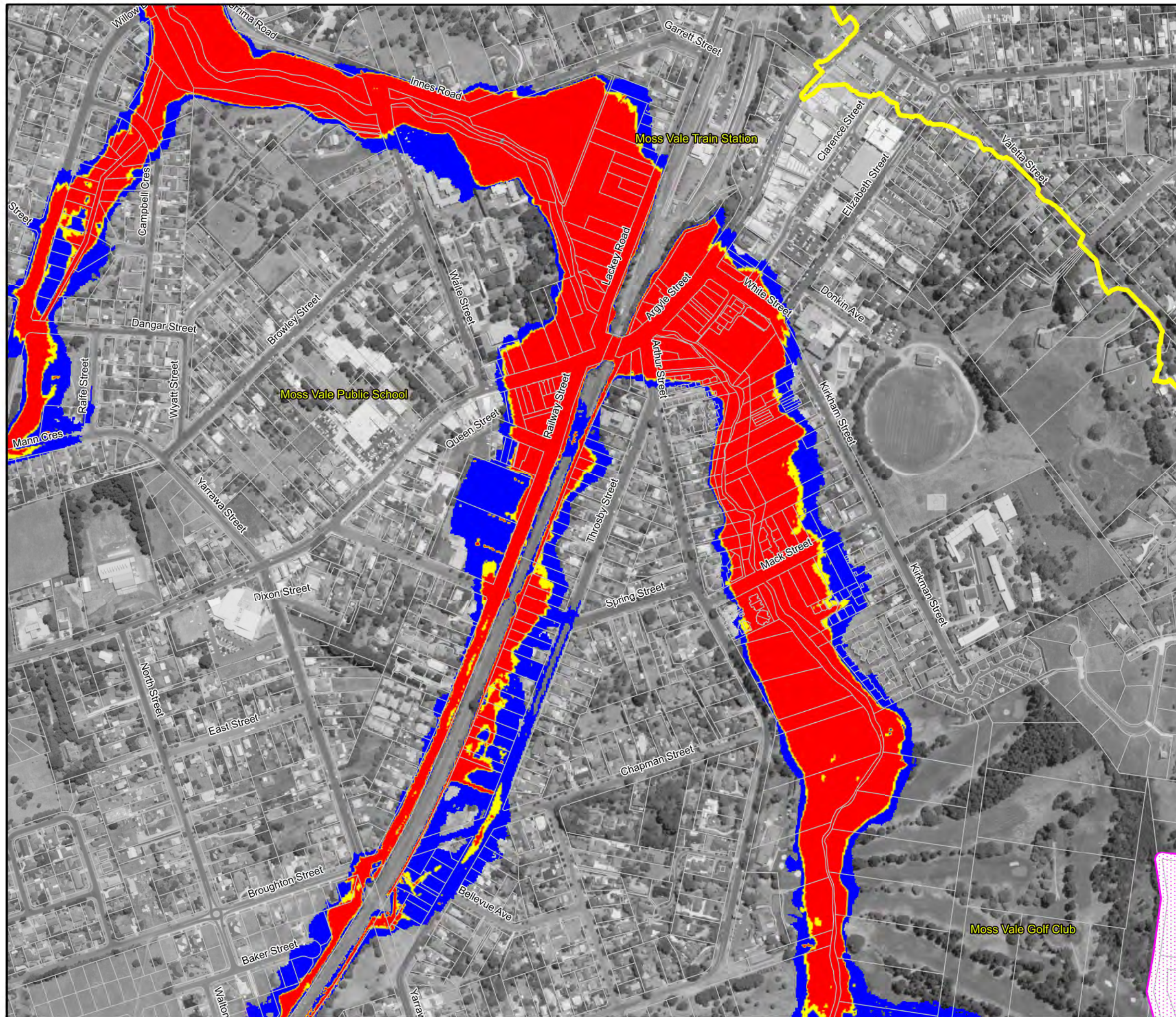
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 15.1:
PMF Flood
Hazard**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 15.1- PMF
Flood Hazard.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

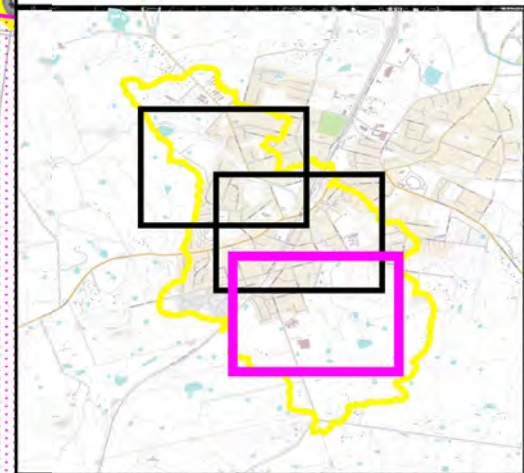
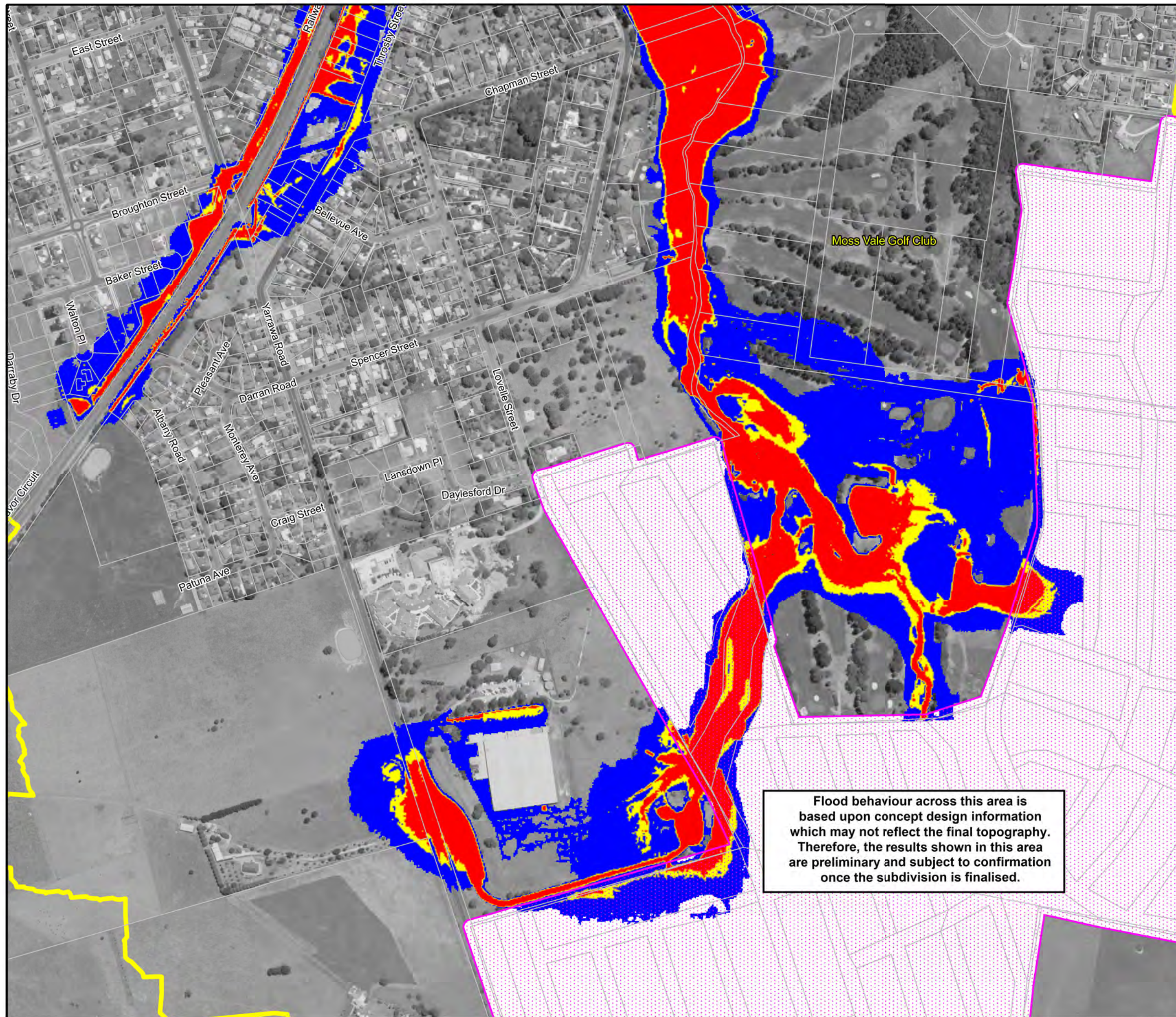
Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 15.2:
PMF Flood
Hazard**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 15.2- PMF
Flood Hazard.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

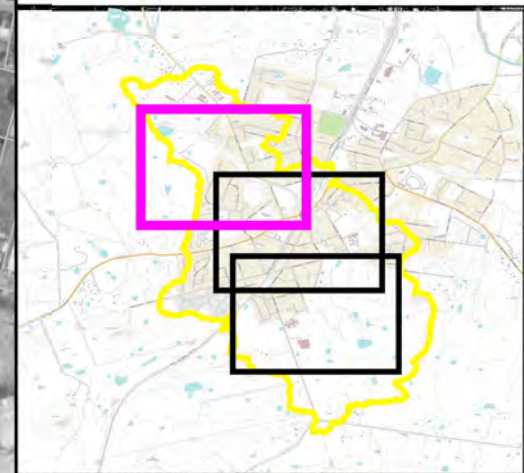
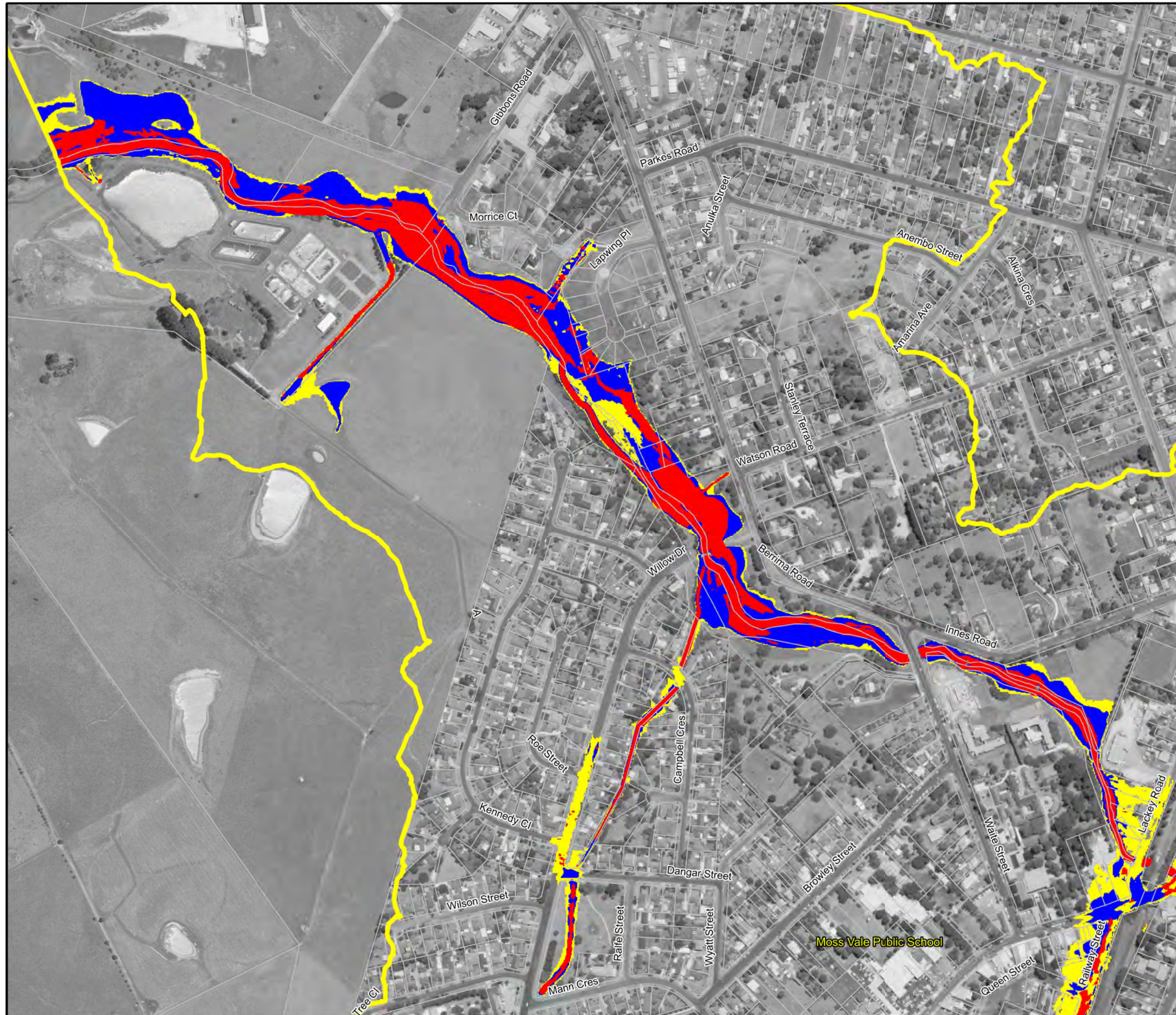
**Figure 15.3:
PMF Flood
Hazard**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 15.3- PMF
Flood Hazard.wor



HYDRAULIC CATEGORY MAPS





LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

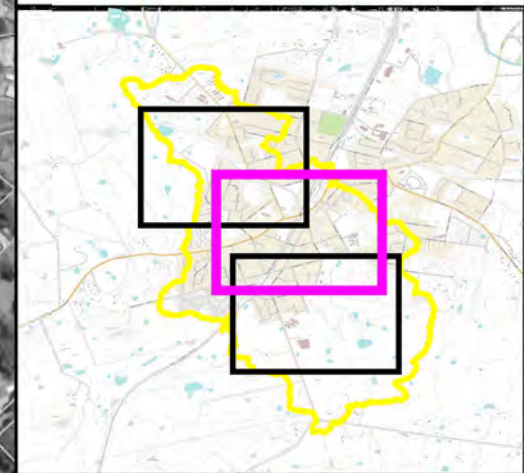
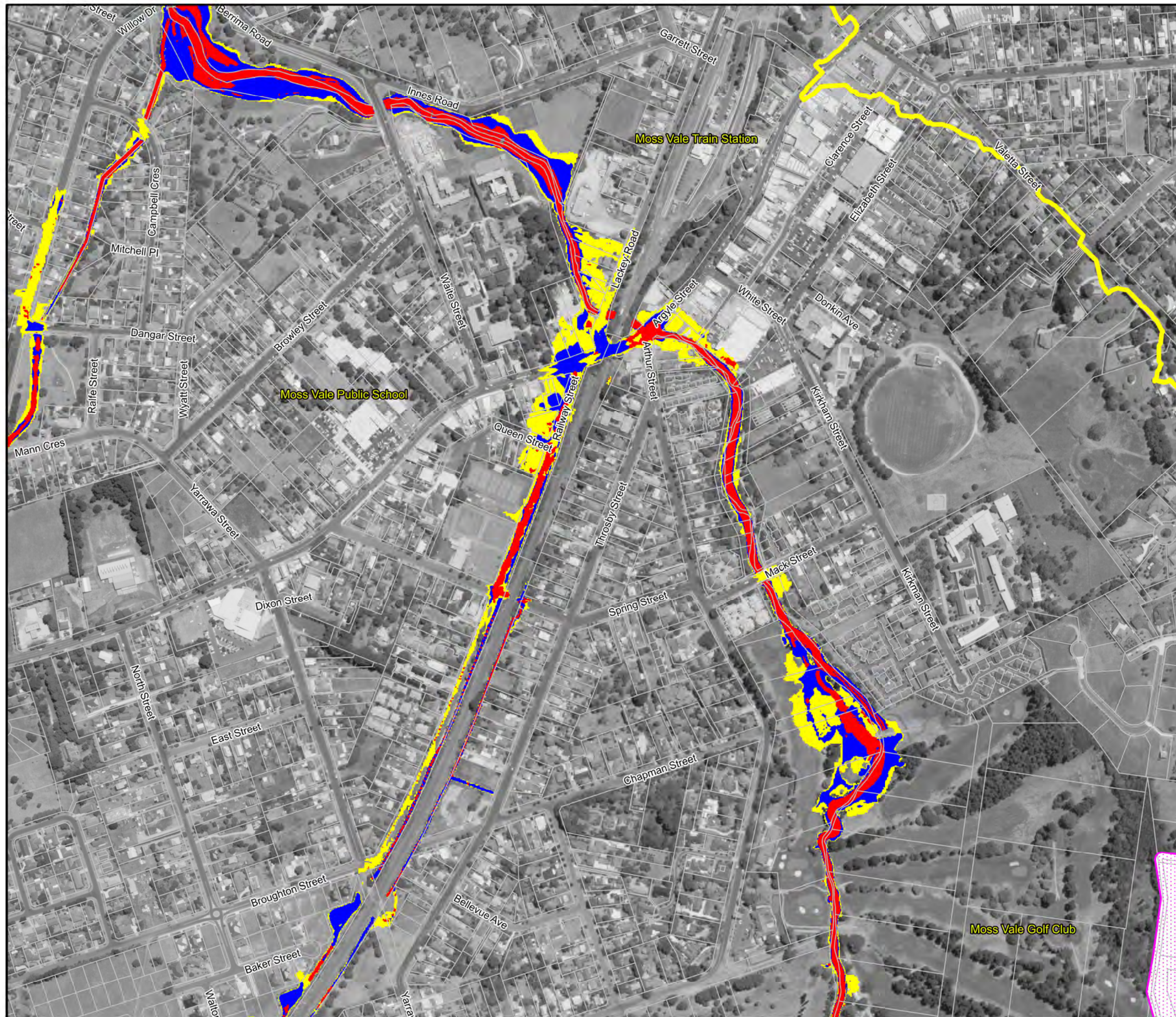
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 16.1:
10% AEP
Hydraulic Categories**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 16.1- 10% AEP
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

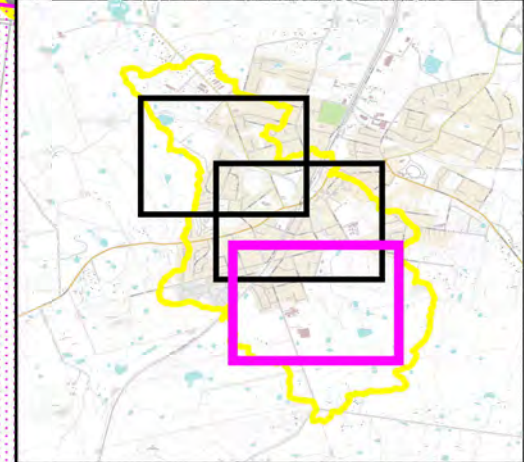
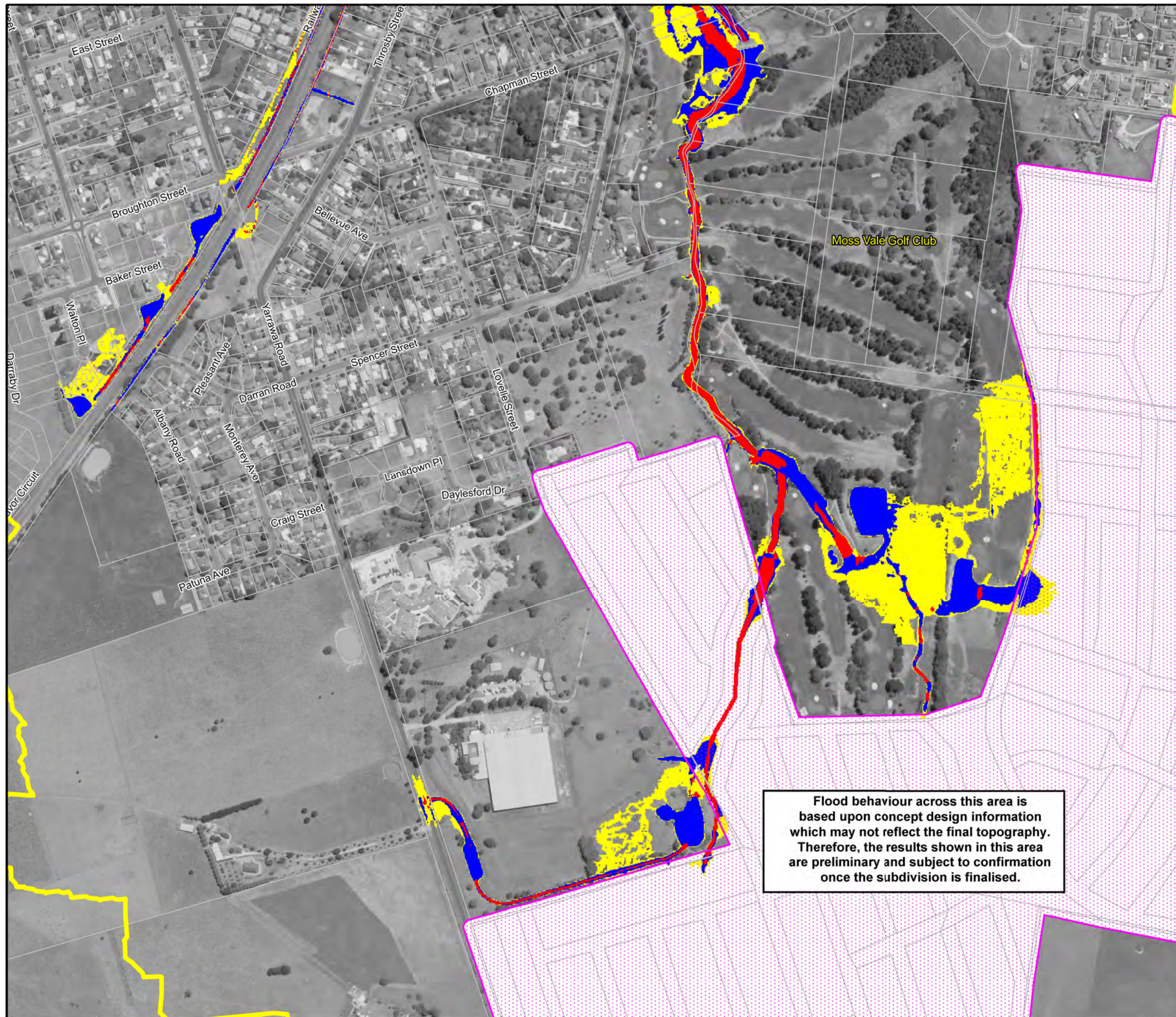
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 16.2:
10% AEP
Hydraulic Categories**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 16.2- 10% AEP
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

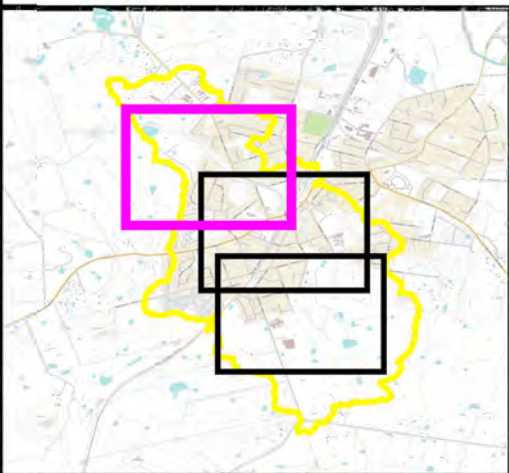
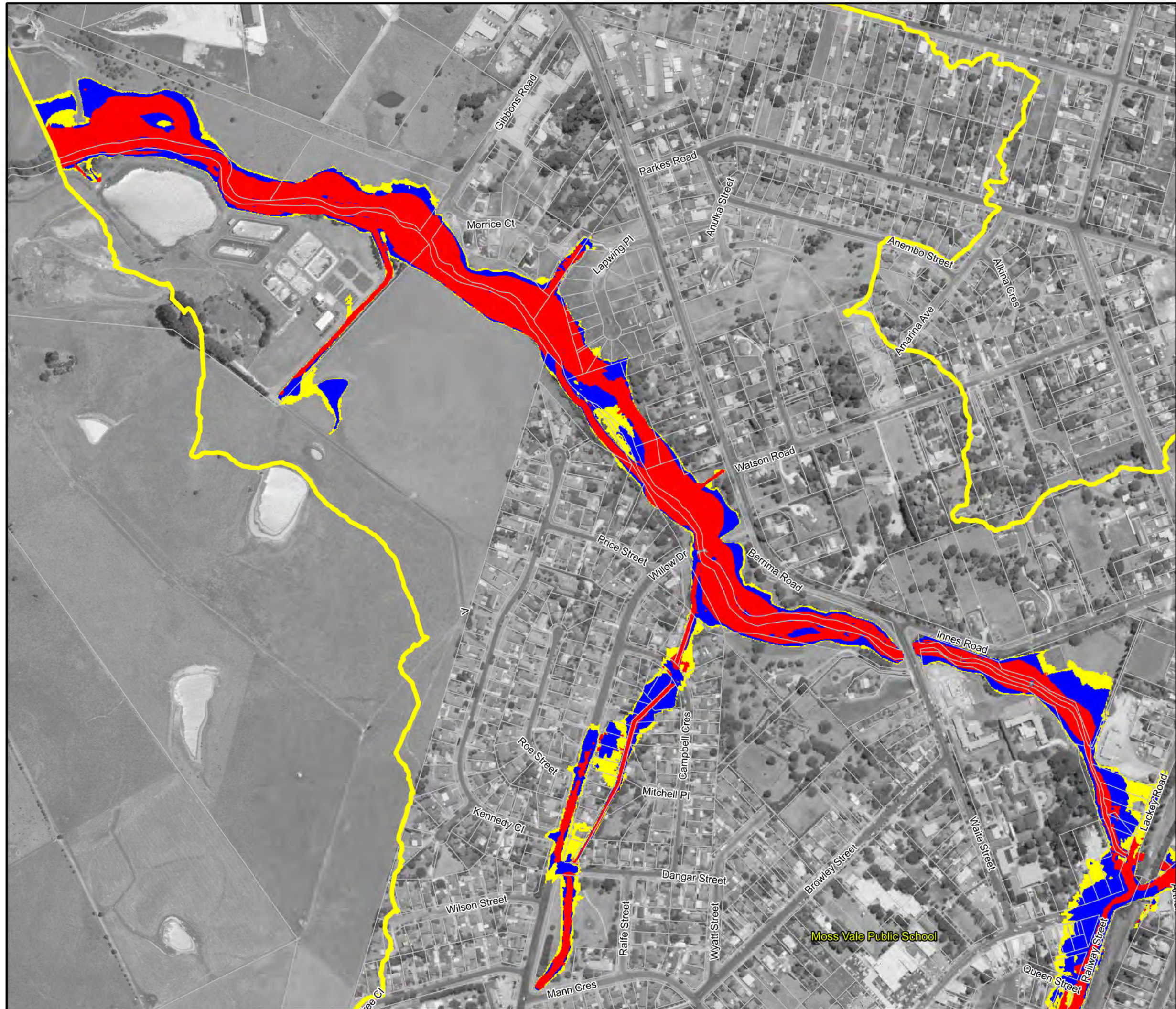
Scale 1:5,000 (at A3)

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 16.3:
10% AEP
Hydraulic Categories**

Prepared By:
 Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 16.3- 10% AEP
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

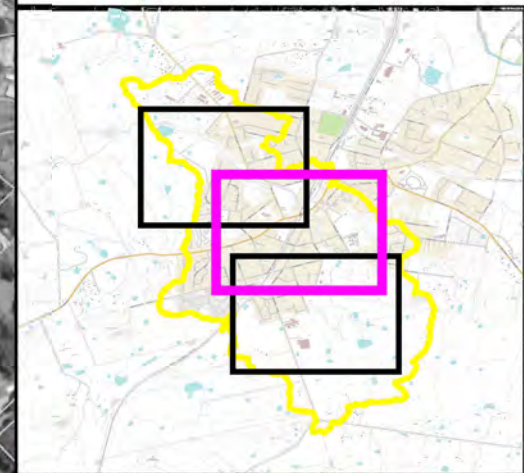
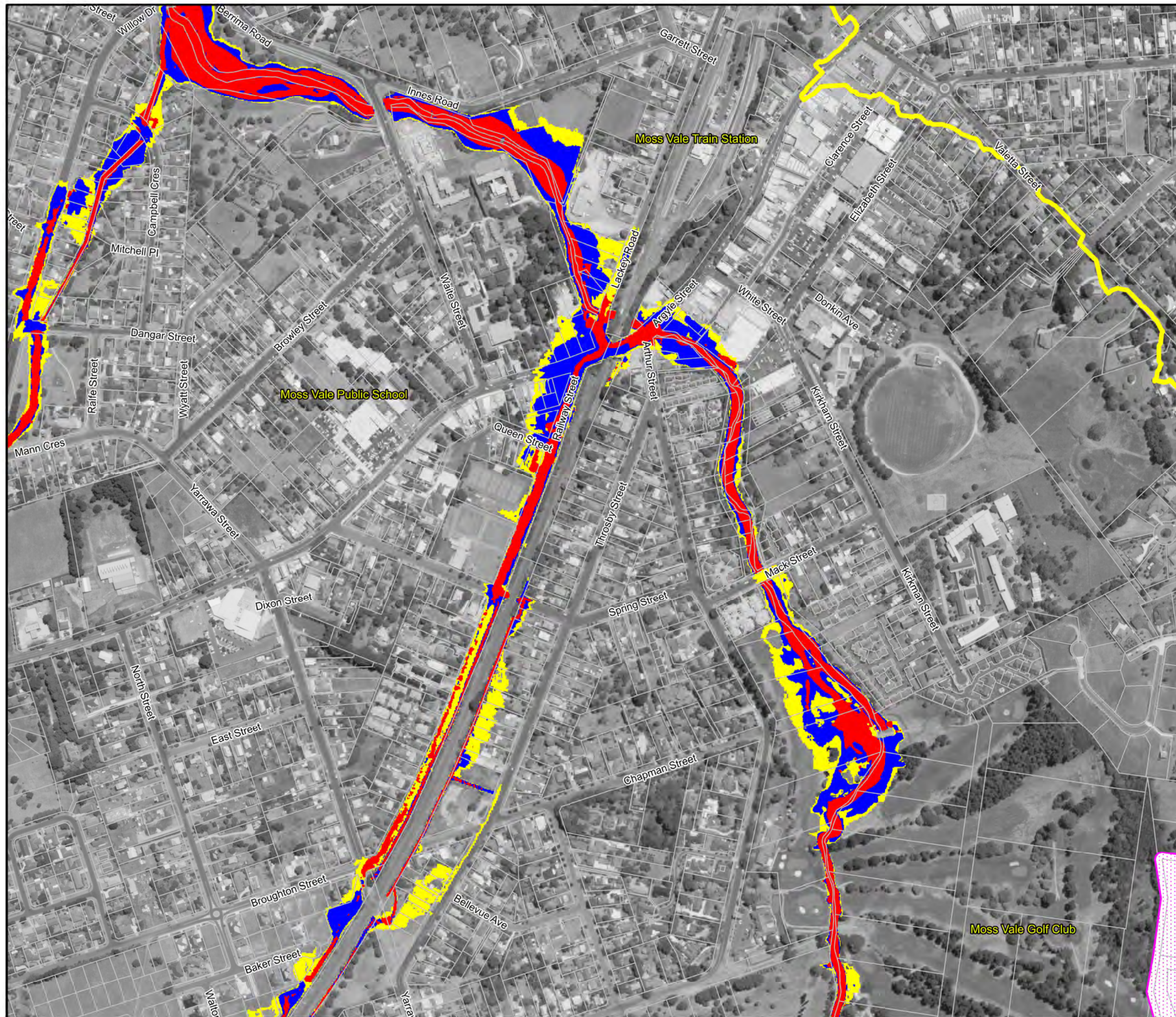
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 17.1:
1% AEP
Hydraulic Categories**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 17.1- 1% AEP
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

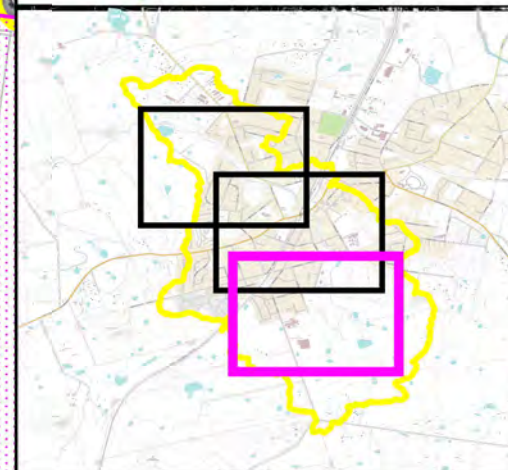
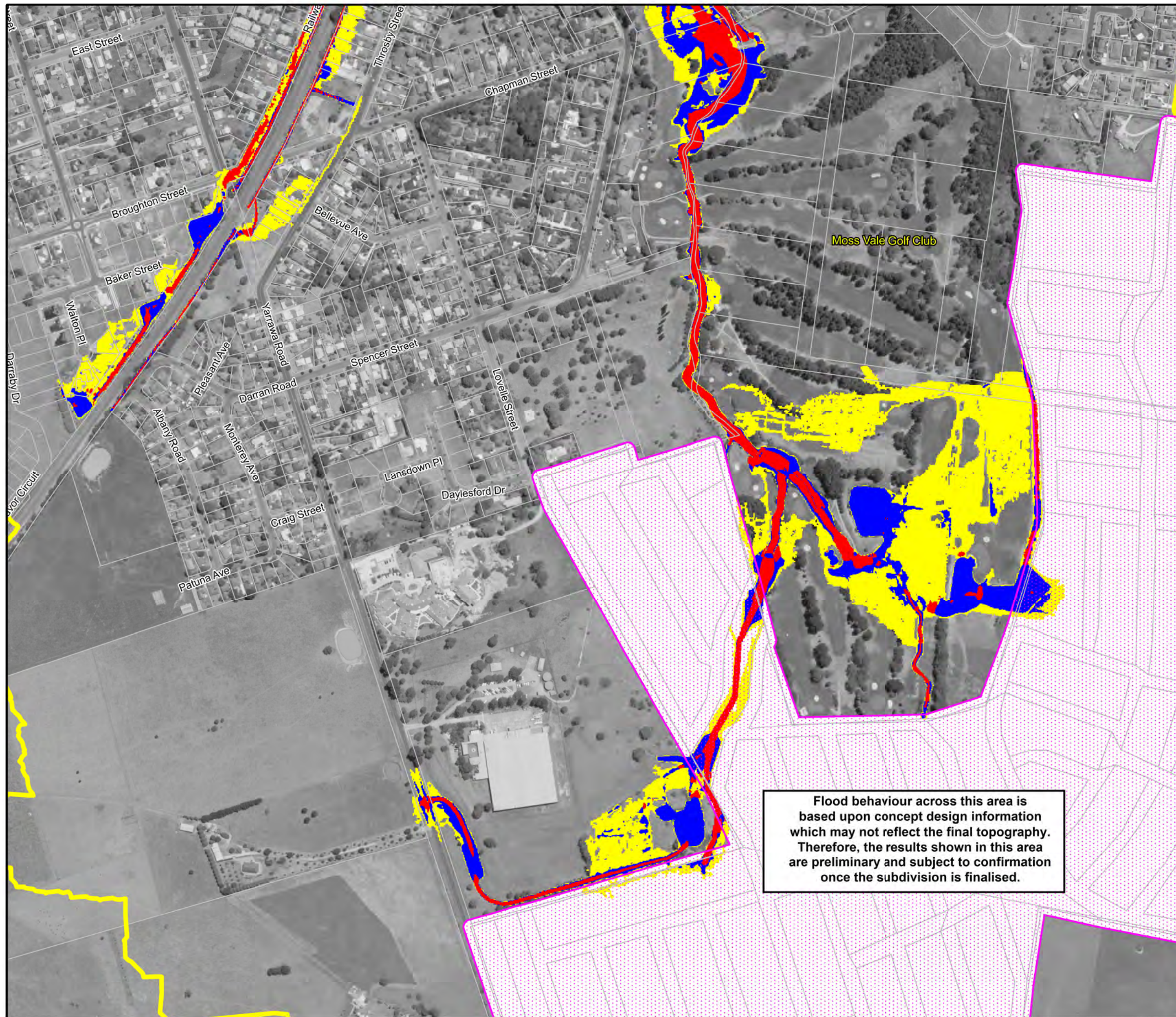
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 17.2:
1% AEP
Hydraulic Categories**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 17.2- 1% AEP
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

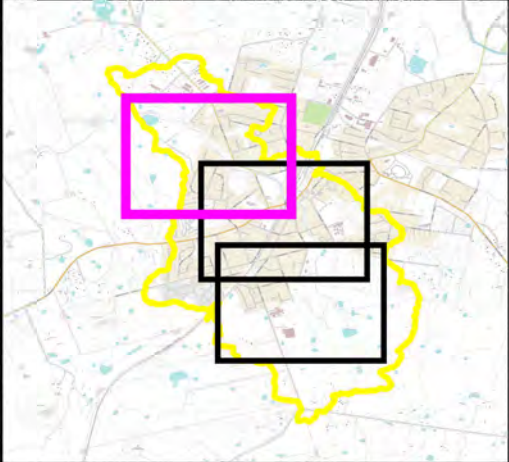
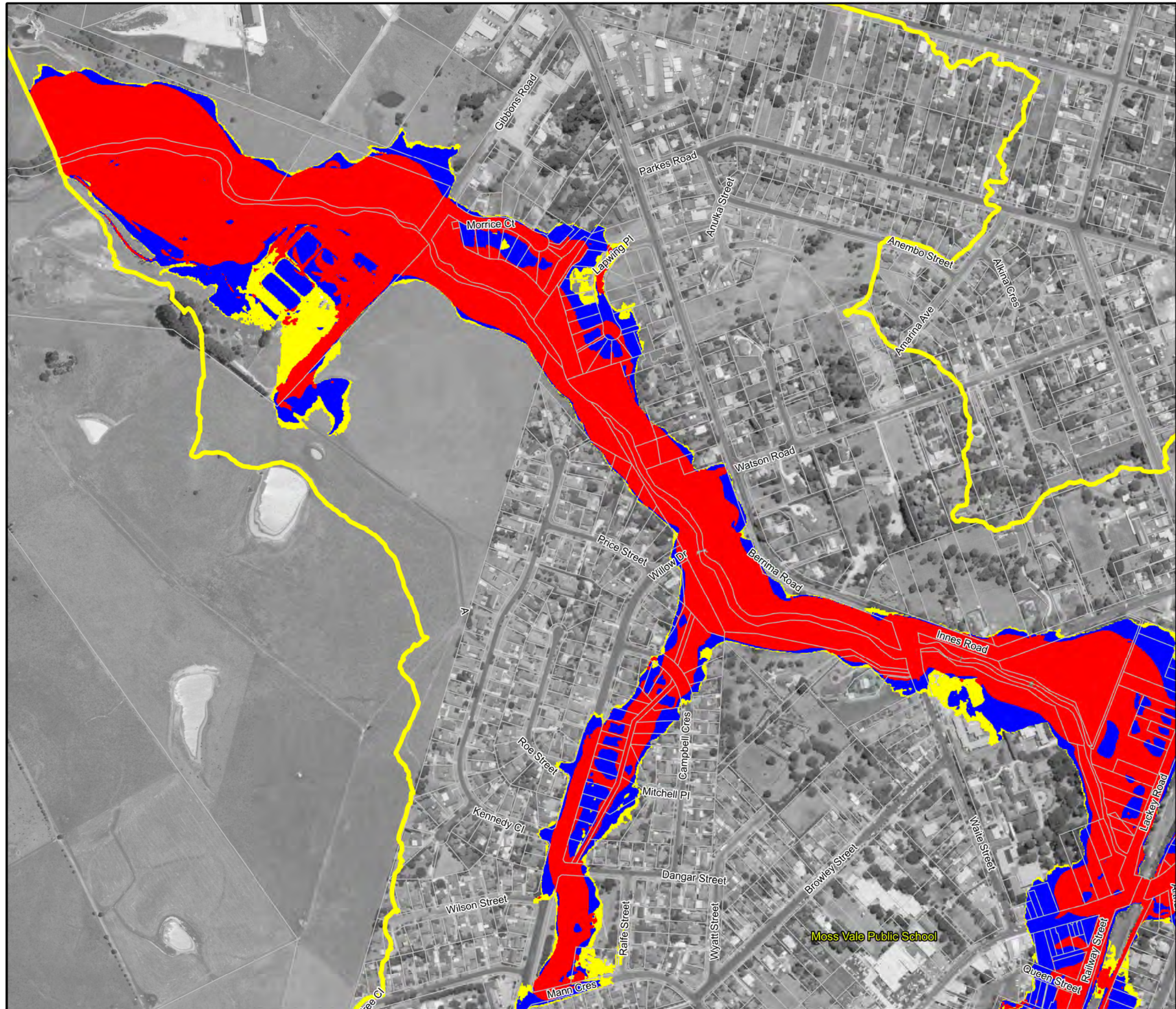
0 0.15 0.30 Km

**Figure 17.3:
1% AEP
Hydraulic Categories**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 17.3- 1% AEP
Hydraulic Categories.wor

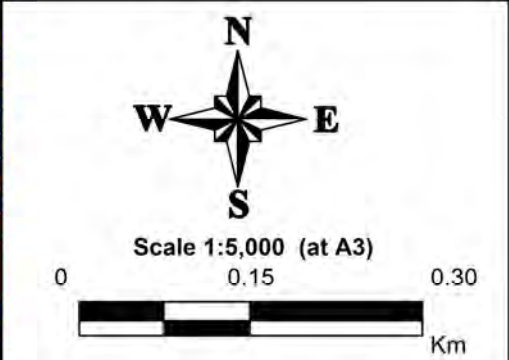
Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.



LEGEND

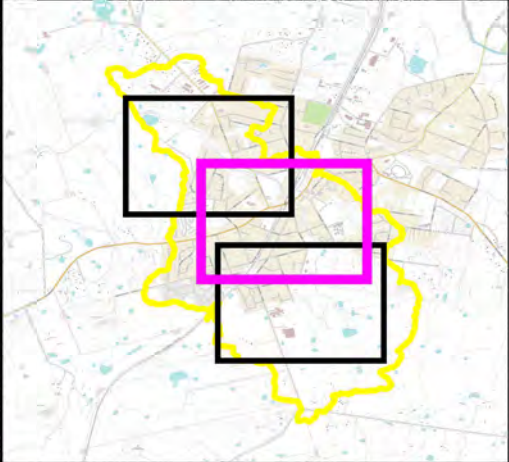
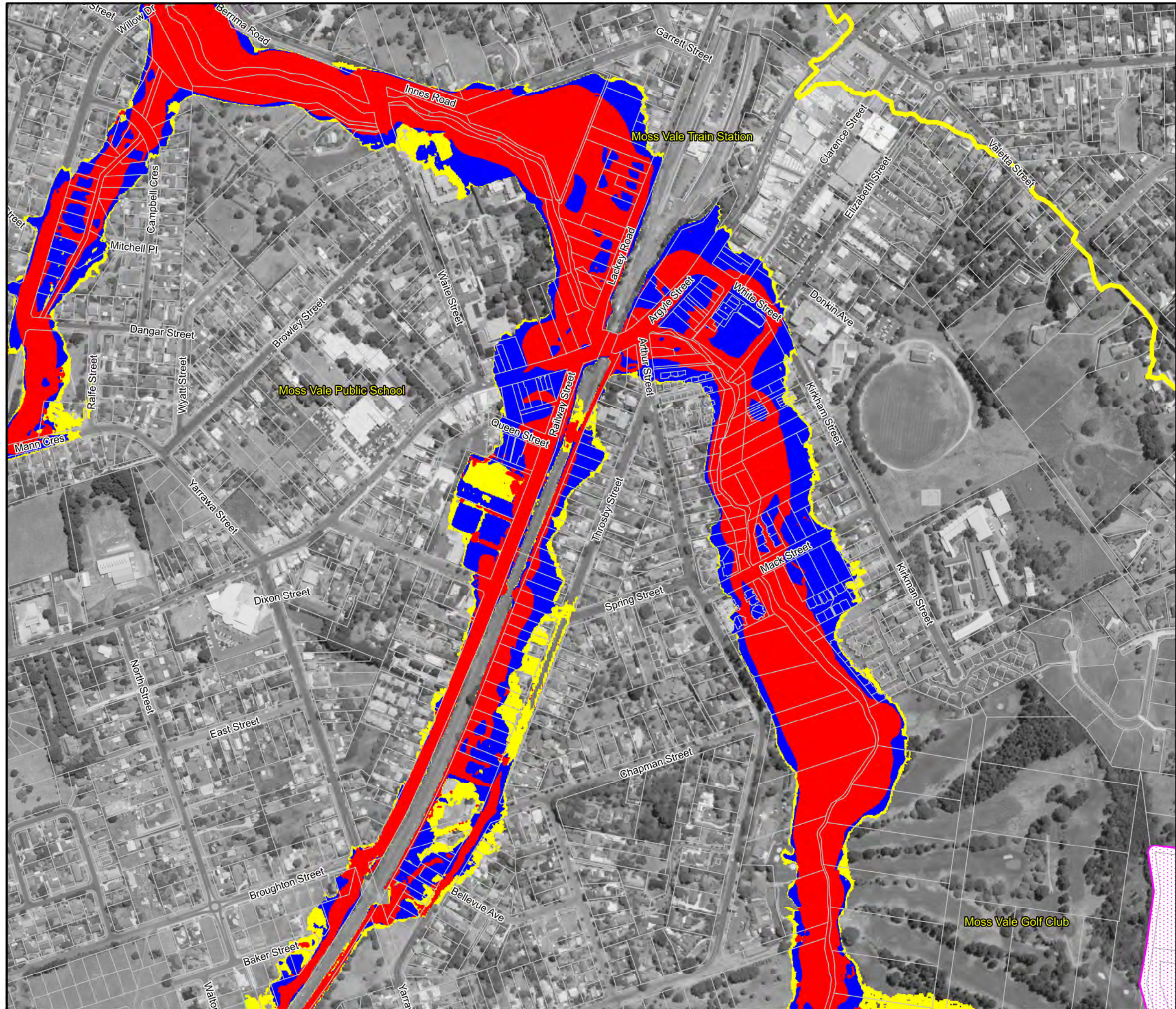
- Whites Creek Study Area
- Hydraulic Categories
 - Flood Fringe
 - Flood Storage
 - Floodway

Notes:
Aerial photograph date: Jan 2009



**Figure 18.1:
PMF Hydraulic
Categories**

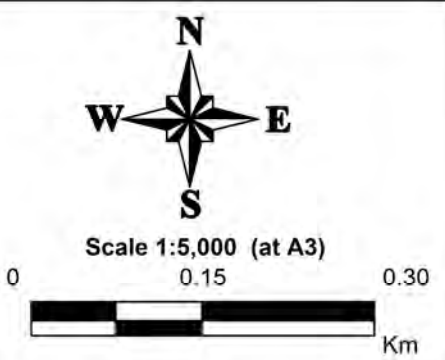
Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 18.1- PMF
Hydraulic Categories.wor



LEGEND

- Whites Creek Study Area
- Hydraulic Categories
 - Flood Fringe
 - Flood Storage
 - Floodway

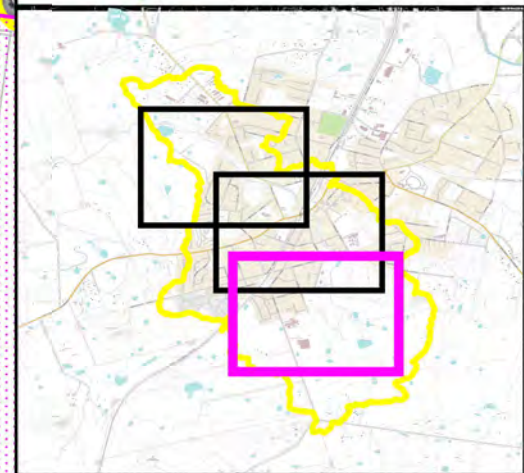
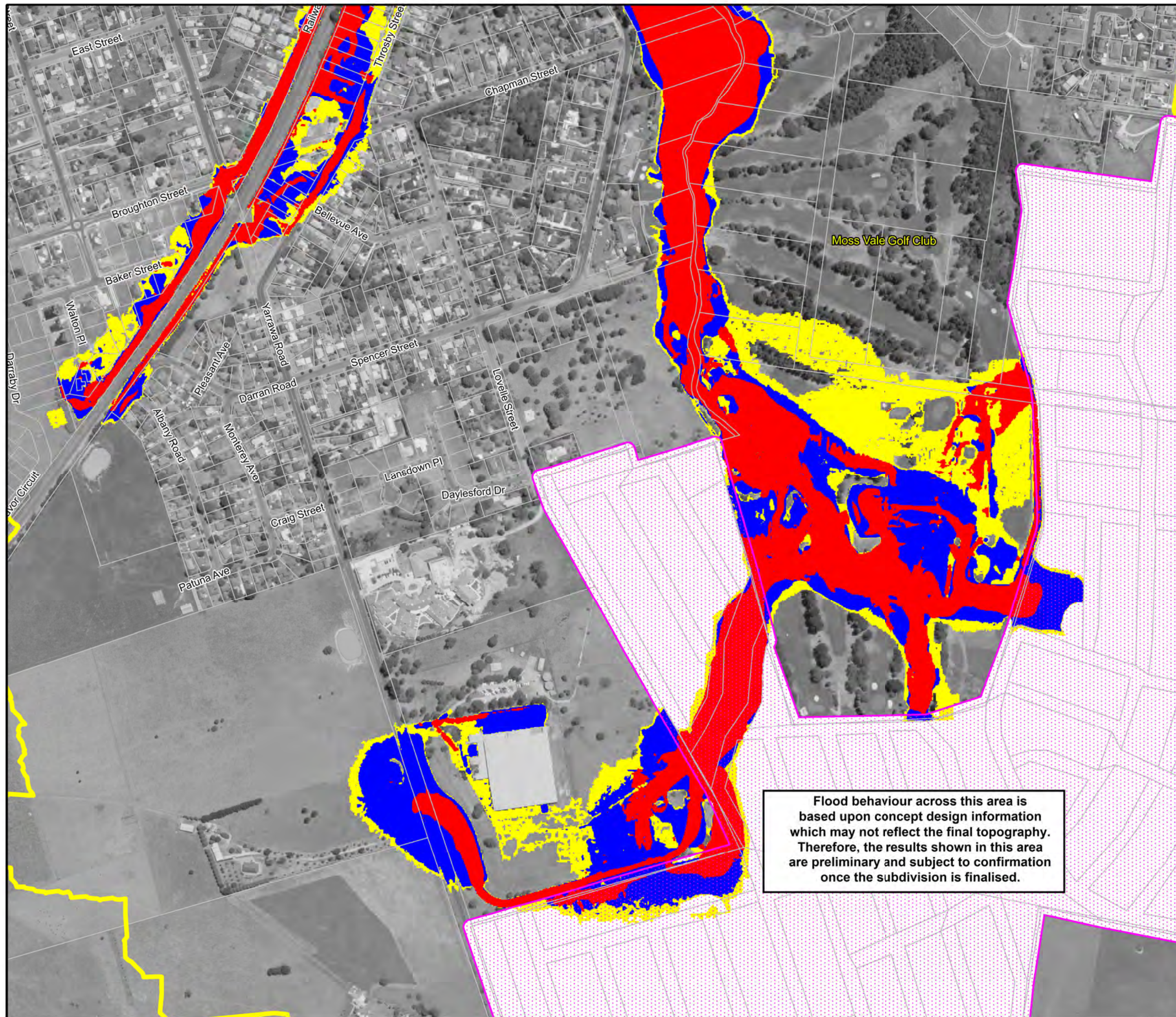
Notes:
Aerial photograph date: Jan 2009



**Figure 18.2:
PMF Hydraulic
Categories**

Prepared By:
 Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 18.2- PMF
Hydraulic Categories.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway


Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 18.3:
PMF Hydraulic
Categories**

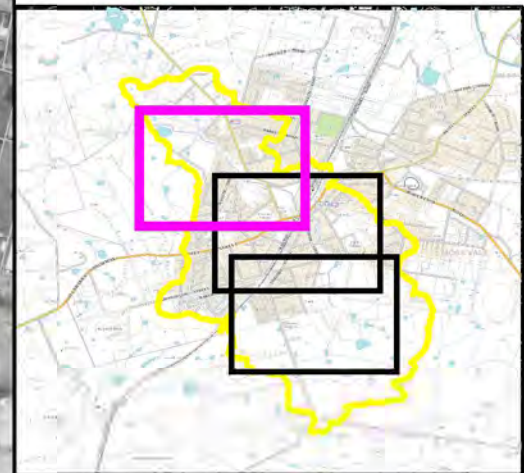
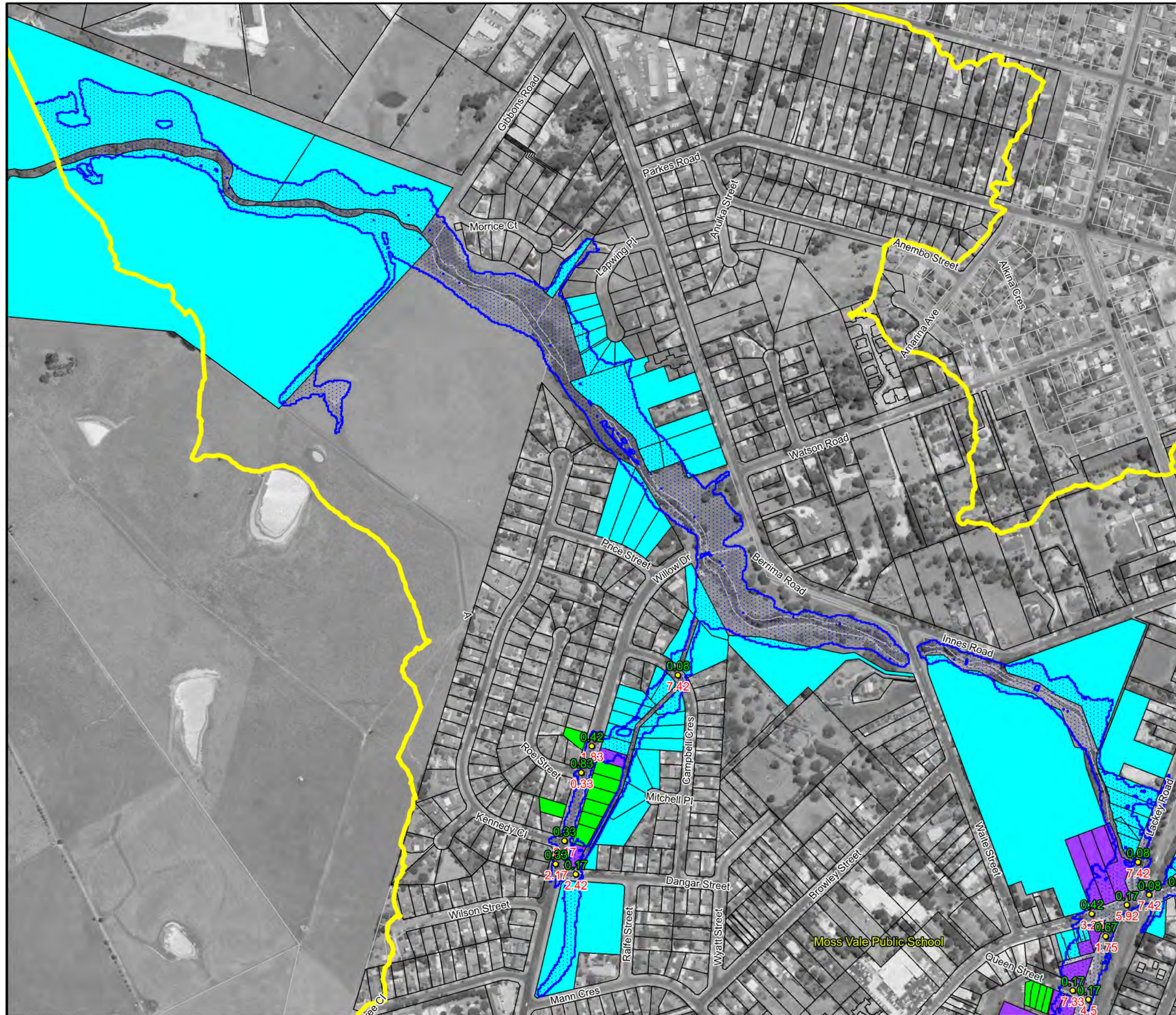
Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 18.3- PMF Hydraulic Categories.wor



EMERGENCY RESPONSE PRECINCT CLASSIFICATIONS





LEGEND

- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

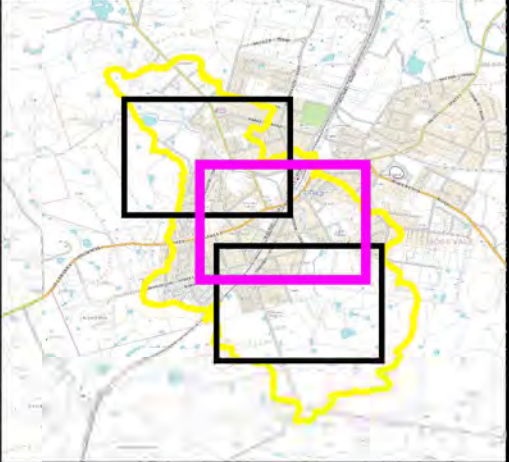
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 19.1:
Emergency Response
Classification for the
5% AEP Flood**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

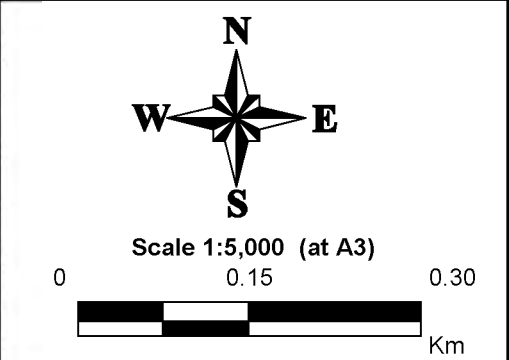
File Name: Fig 19.1- Emergency Response
Classification for the 5%AEP Flood.wor



LEGEND

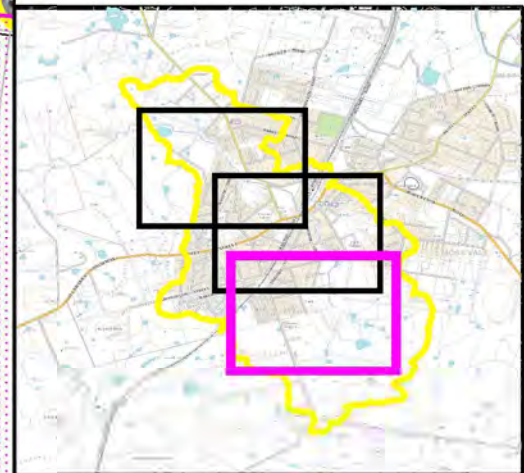
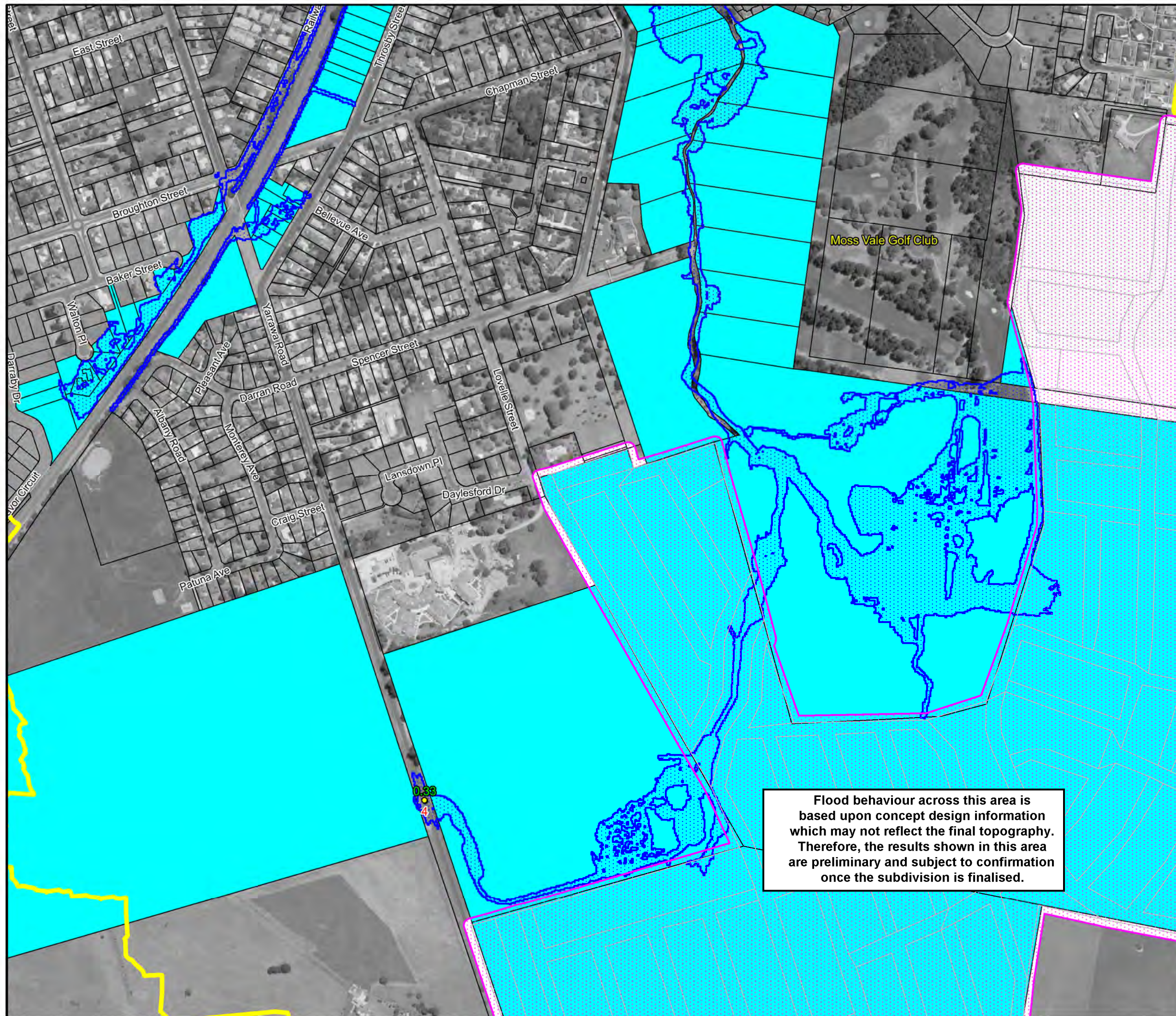
- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications**
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location**
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009



**Figure 19.2:
Emergency Response
Classification for the
5% AEP Flood**

Prepared By:
 Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 19.2- Emergency Response
Classification for the 5%AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Inundation Extent

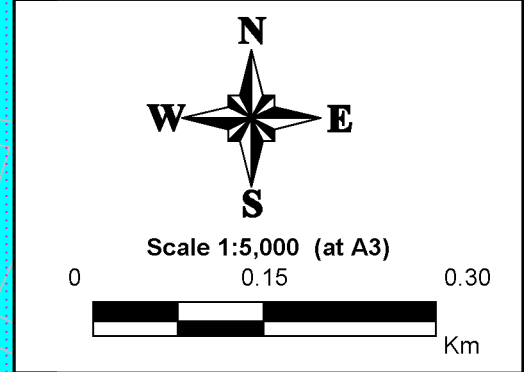
Emergency Response Classifications

- Flood Isolated Submerged
- Flood Isolated Elevated
- Flooded Exit Route Overland Escape
- Flooded Exit Rising Road Egress
- Indirect Consequences
- No Flood Impacts

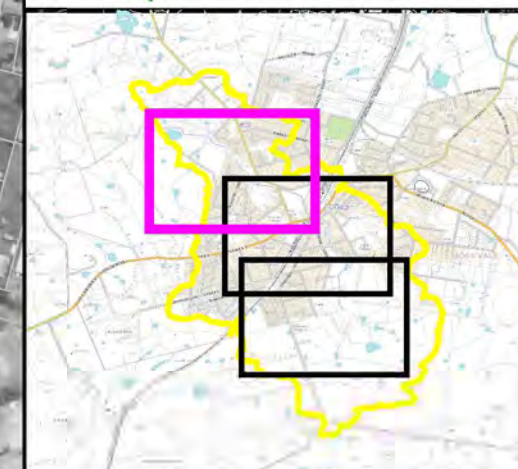
Road Overtopping Location

- Time Road First Cut (hours)
- Duration Cut (hours)


Notes:
Aerial photograph date: Jan 2009




**Figure 19.3:
Emergency Response
Classification for the
5% AEP Flood**





LEGEND


 Whites Creek Study Area

 Inundation Extent


Emergency Response Classifications

 Flood Isolated Submerged

 Flood Isolated Elevated


 Flooded Exit Route Overland Escape


 Flooded Exit Rising Road Egress

 Indirect Consequences

 No Flood Impacts

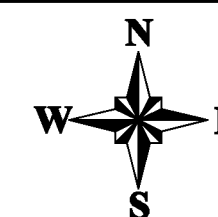
Road Overtopping Location

 6.5 Time Road First Cut (hours)

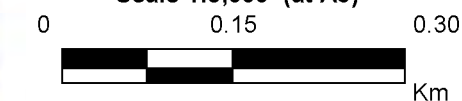
 1.0 Duration Cut (hours)

Notes:

Aerial photograph date: Jan 2009




Scale 1:5,000 (at A3)

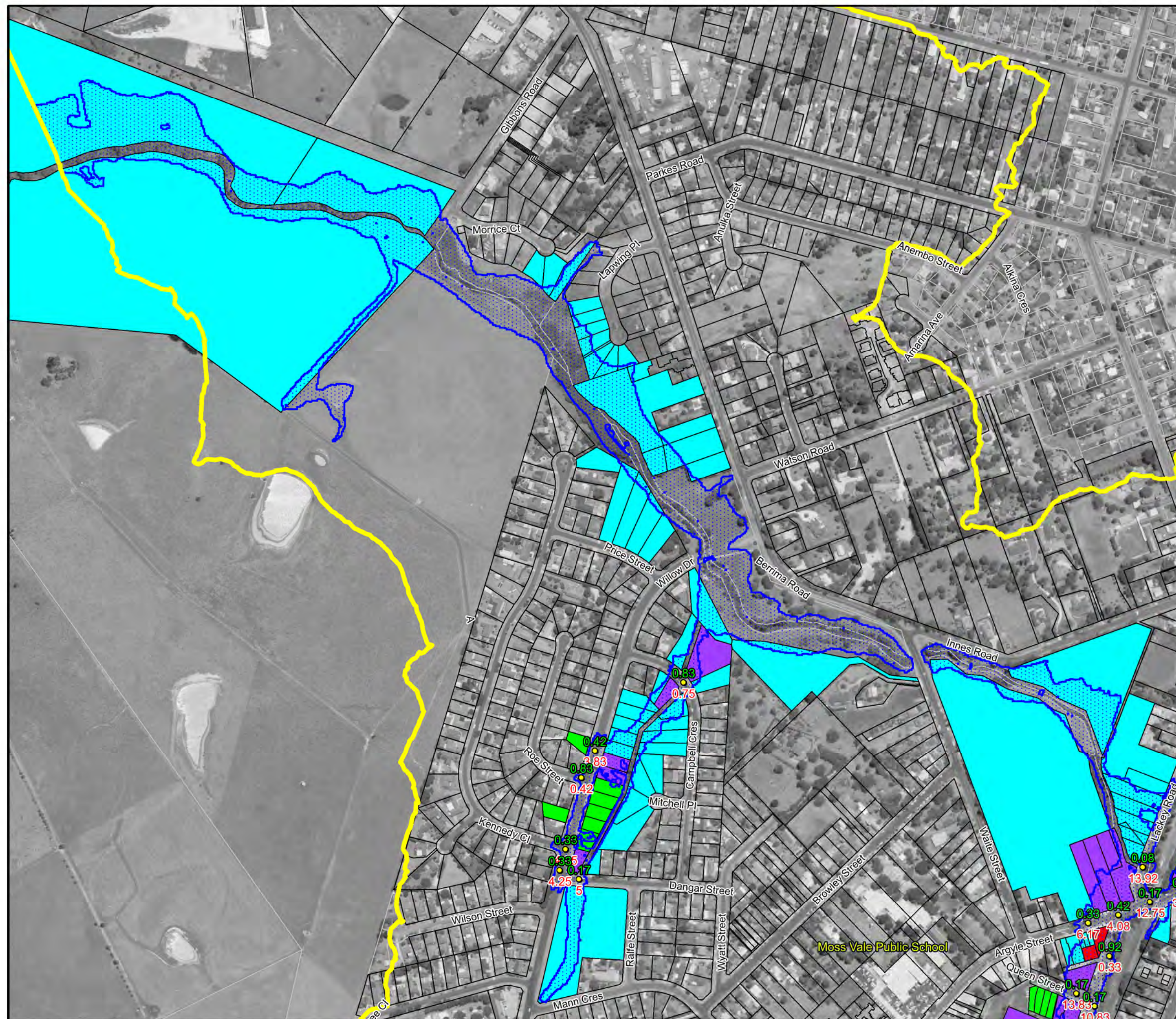


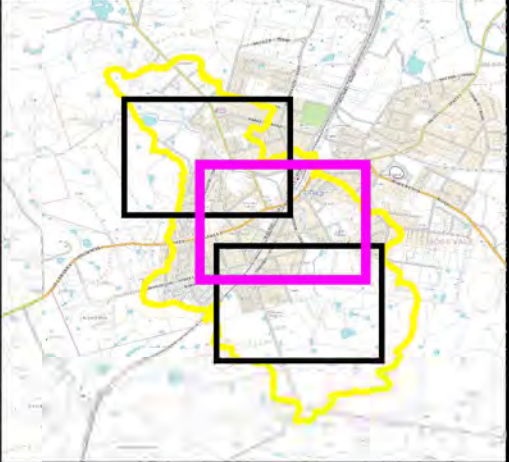
**Figure 20.1:
Emergency Response
Classification for the
2% AEP Flood**

Prepared By:

 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 20.1- Emergency Response
Classification for the 2%AEP Flood.wor

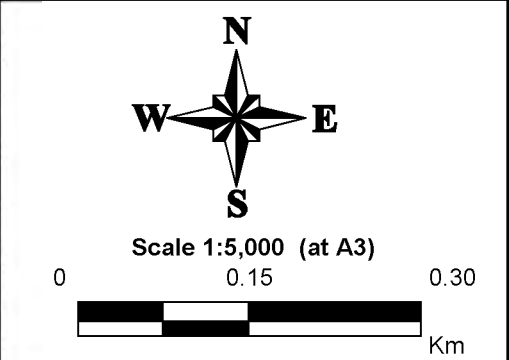




LEGEND

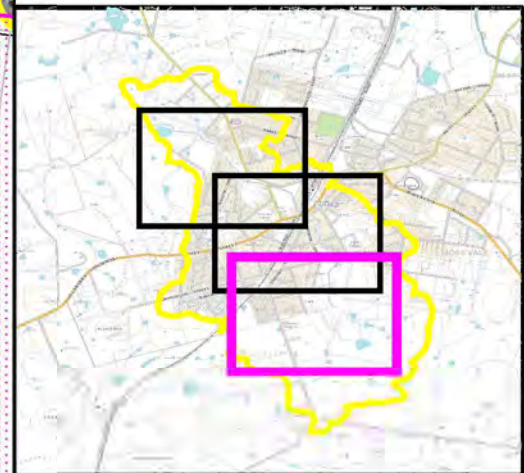
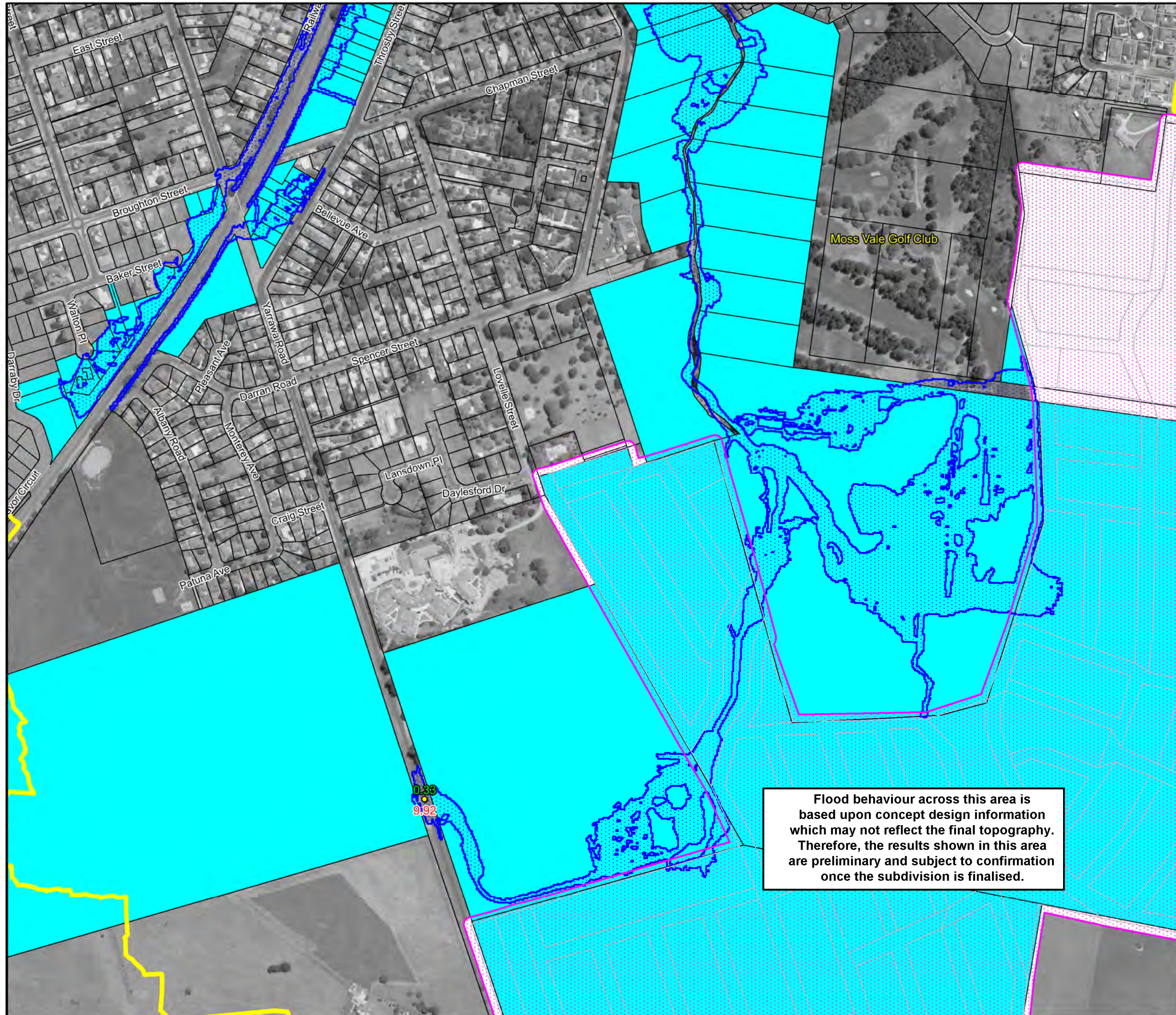
- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009



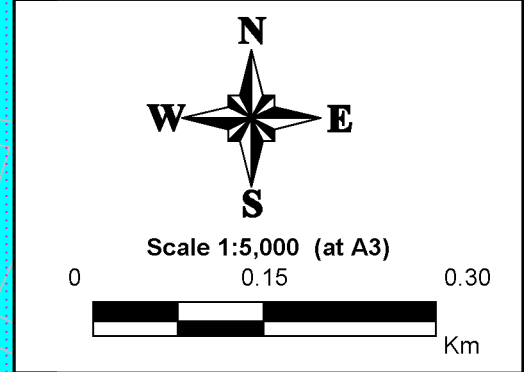
**Figure 20.2:
Emergency Response
Classification for the
2% AEP Flood**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 20.2- Emergency Response
Classification for the 2%AEP Flood.wor




- LEGEND**
- Whites Creek Study Area
 - Inundation Extent
 - Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
 - Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

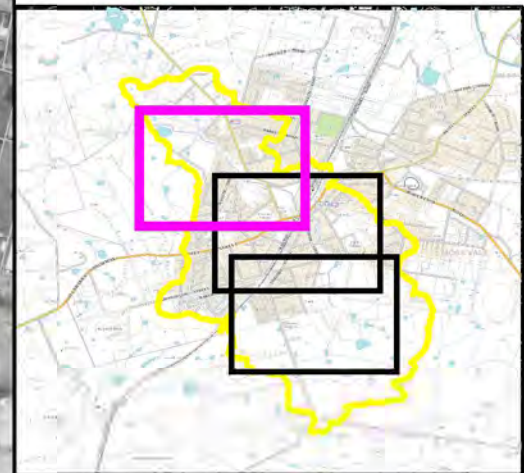
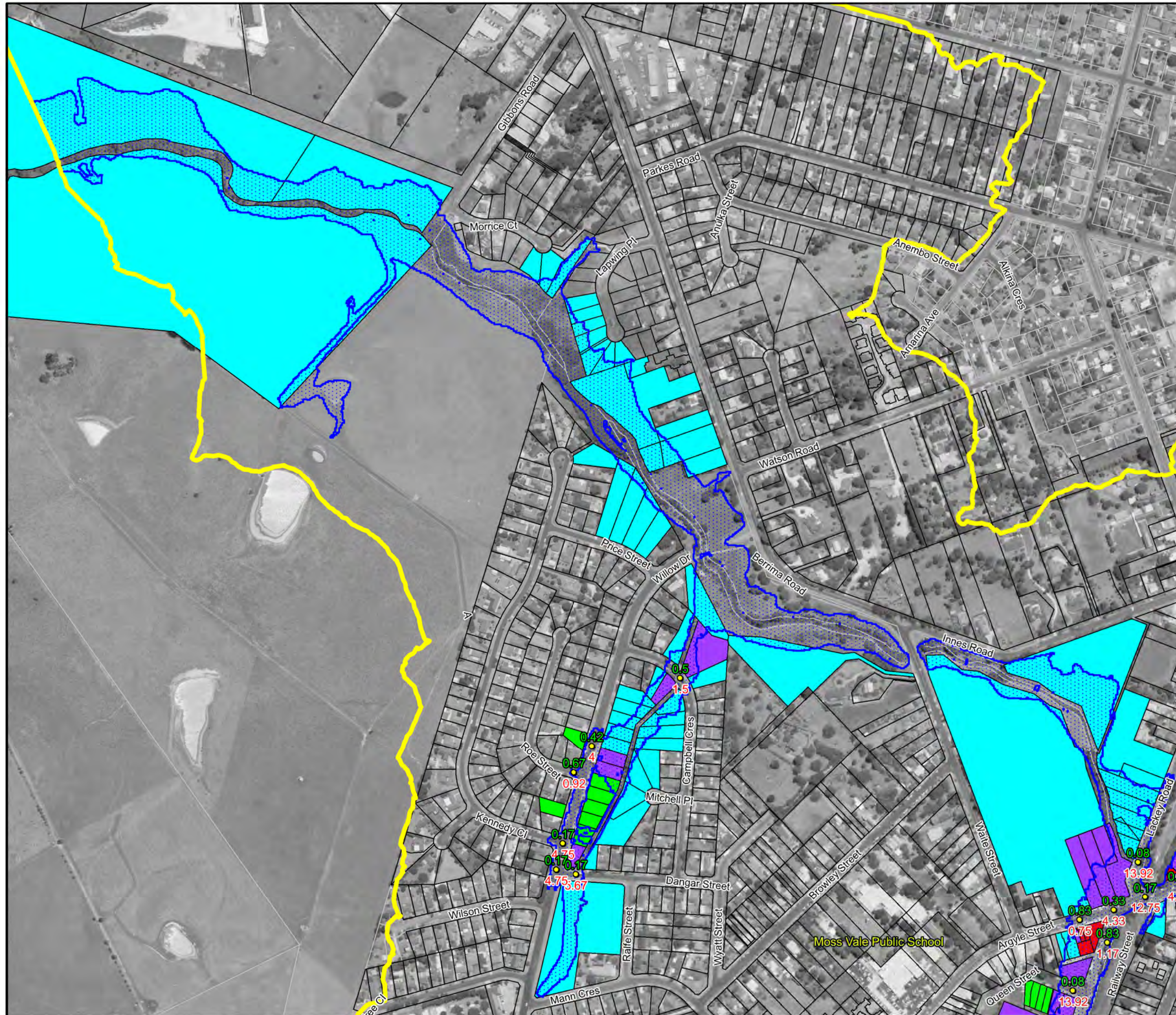


Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 20.3:
Emergency Response
Classification for the
2% AEP Flood**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 20.3- Emergency Response Classification for the 2%AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

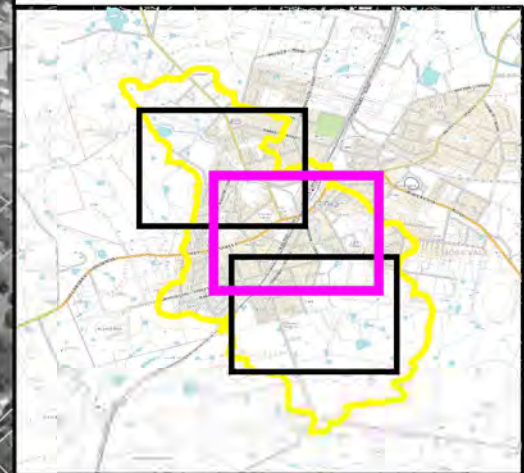
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 21.1:
Emergency Response
Classification for the
1% AEP Flood**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 21.1- Emergency Response Classification for the 1%AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

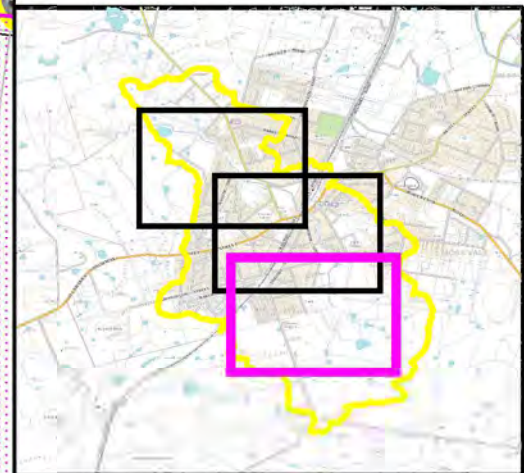
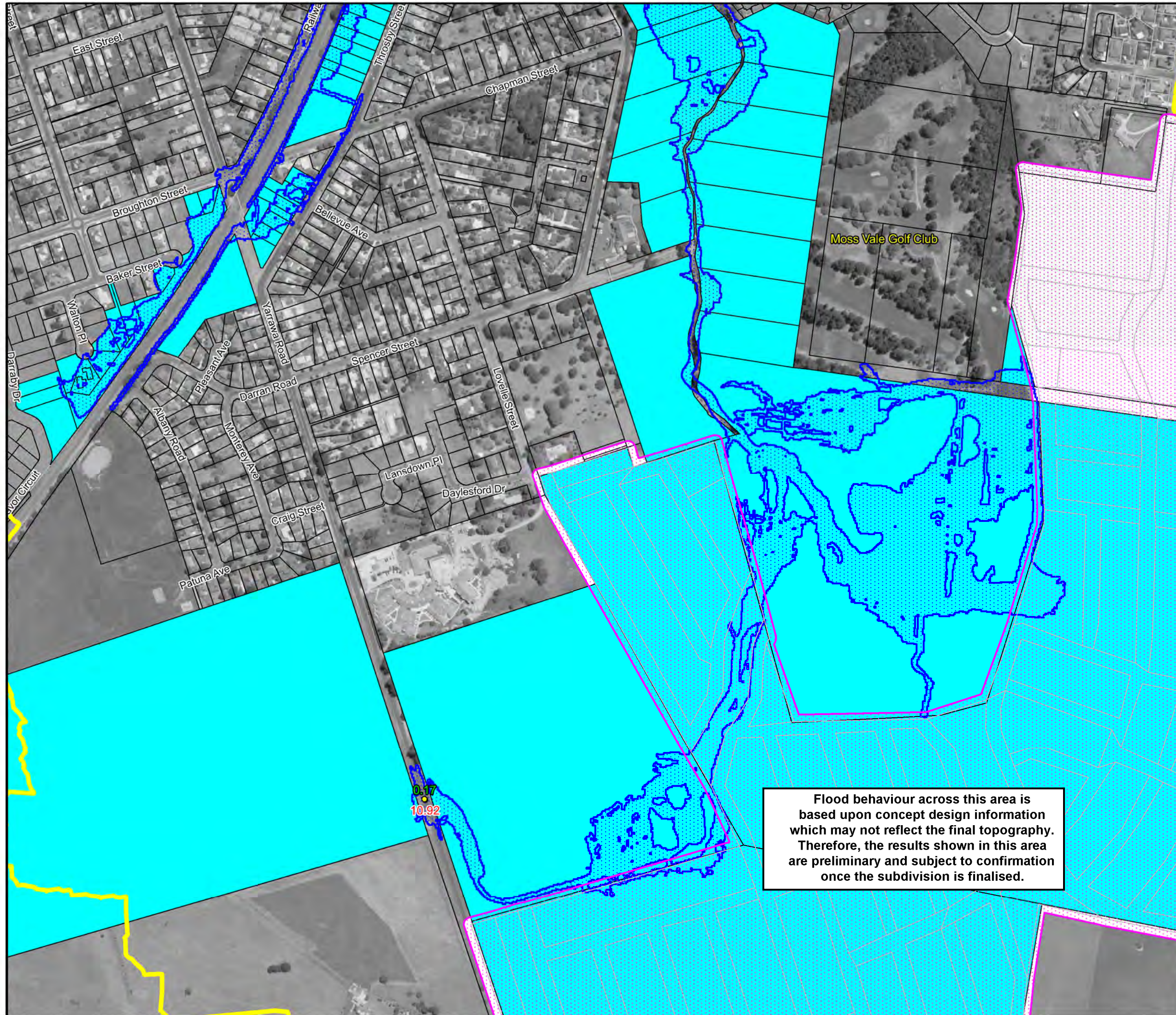
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 21.2:
Emergency Response
Classification for the
1% AEP Flood**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 21.2- Emergency Response
Classification for the 1%AEP Flood.wor



LEGEND

- Whites Creek Study Area
- Inundation Extent

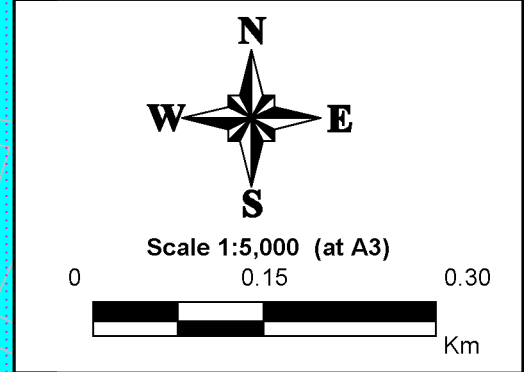
Emergency Response Classifications

- Flood Isolated Submerged
- Flood Isolated Elevated
- Flooded Exit Route Overland Escape
- Flooded Exit Rising Road Egress
- Indirect Consequences
- No Flood Impacts

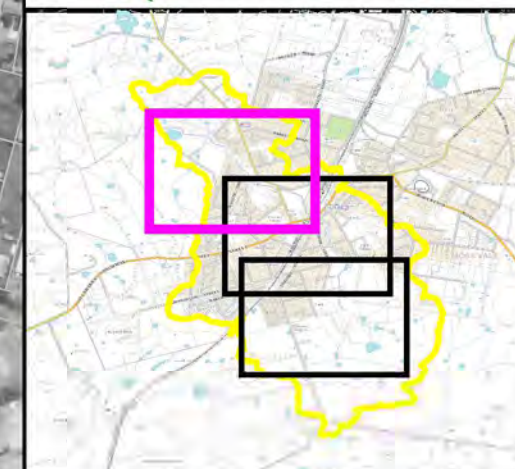
Road Overtopping Location

- Time Road First Cut (hours)
- Duration Cut (hours)


Notes:
Aerial photograph date: Jan 2009




**Figure 21.3:
Emergency Response
Classification for the
1% AEP Flood**





LEGEND


 Whites Creek Study Area


 Inundation Extent


Emergency Response Classifications


 Flood Isolated Submerged

 Flood Isolated Elevated


 Flooded Exit Route Overland Escape


 Flooded Exit Rising Road Egress

 Indirect Consequences

 No Flood Impacts

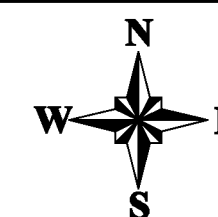
Road Overtopping Location

 0.5 Time Road First Cut (hours)

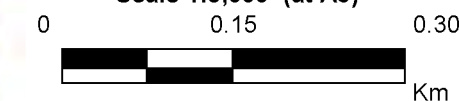
 1.0 Duration Cut (hours)

Notes:

Aerial photograph date: Jan 2009




Scale 1:5,000 (at A3)

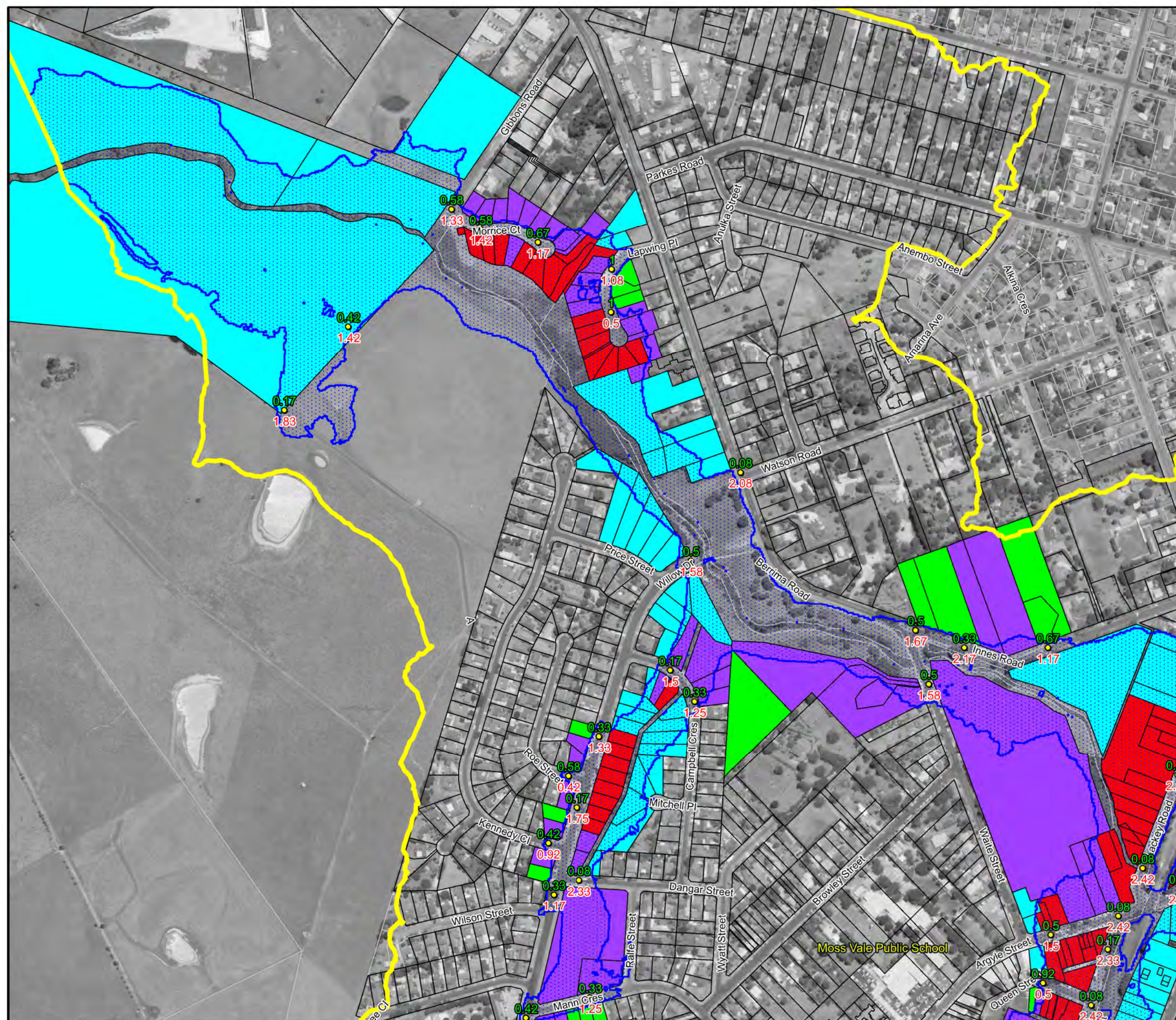


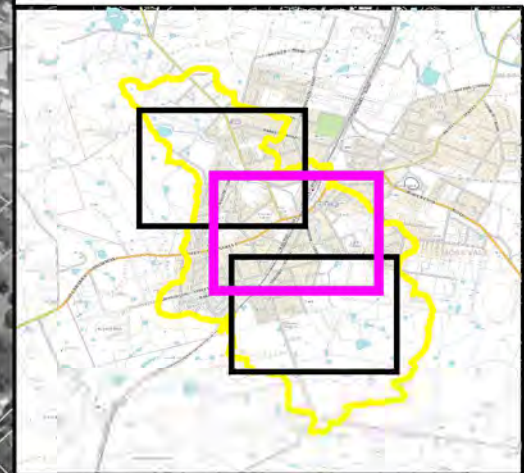
**Figure 22.1:
Emergency Response
Classification for the
PMF**

Prepared By:

 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 22.1- Emergency Response
Classification for the PMF.wor





LEGEND

- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), West (W), East (E), and South (S).

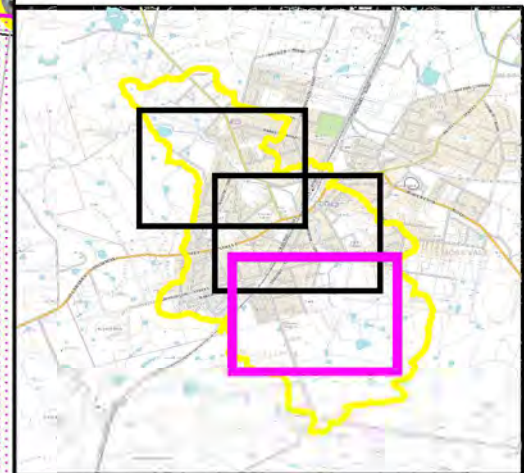
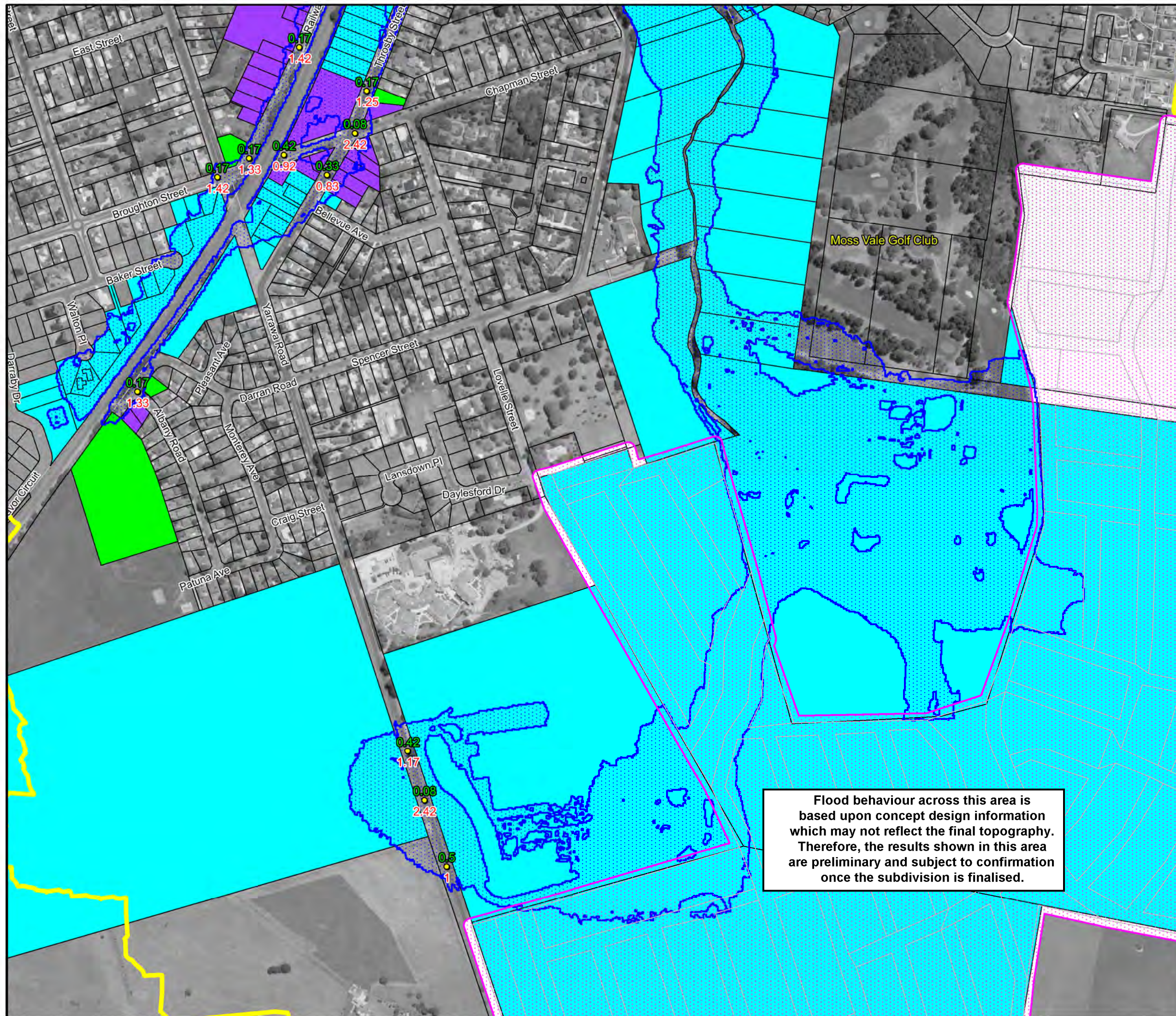
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 22.2:
Emergency Response
Classification for the
PMF**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 22.2- Emergency Response Classification for the PMF.wor



LEGEND

- Whites Creek Study Area
- Inundation Extent
- Emergency Response Classifications
 - Flood Isolated Submerged
 - Flood Isolated Elevated
 - Flooded Exit Route Overland Escape
 - Flooded Exit Rising Road Egress
 - Indirect Consequences
 - No Flood Impacts
- Road Overtopping Location
 - Time Road First Cut (hours)
 - Duration Cut (hours)

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 22.3:
Emergency Response
Classification for the
PMF**

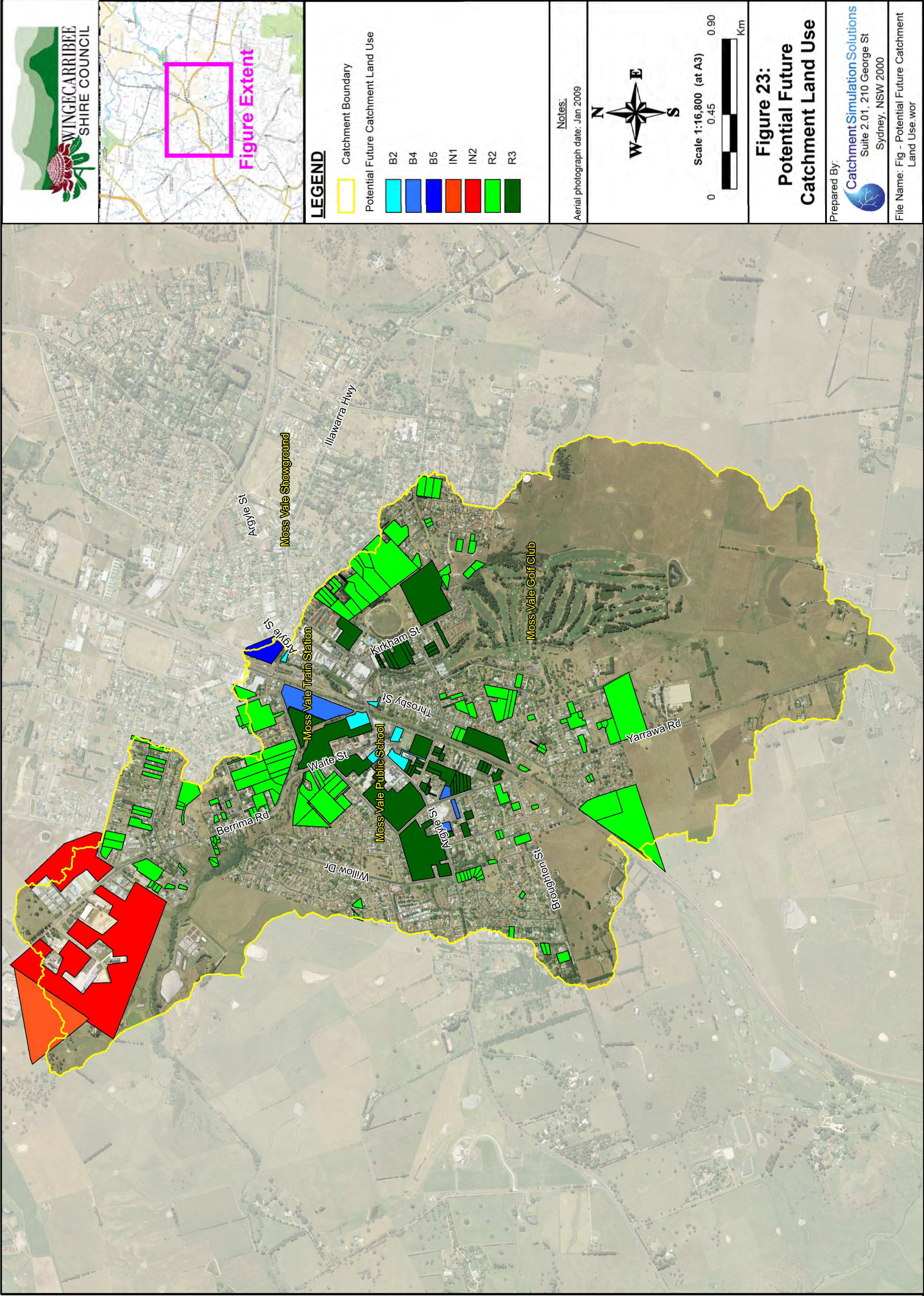
Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

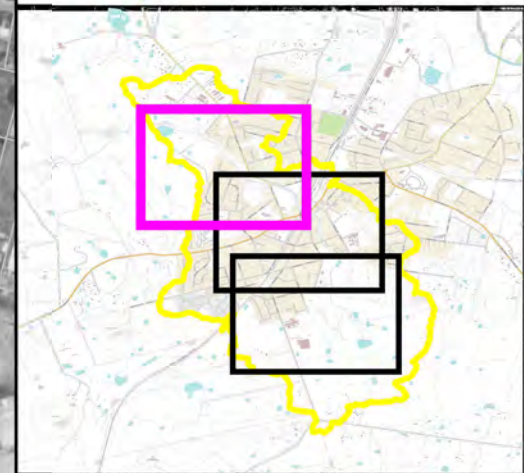
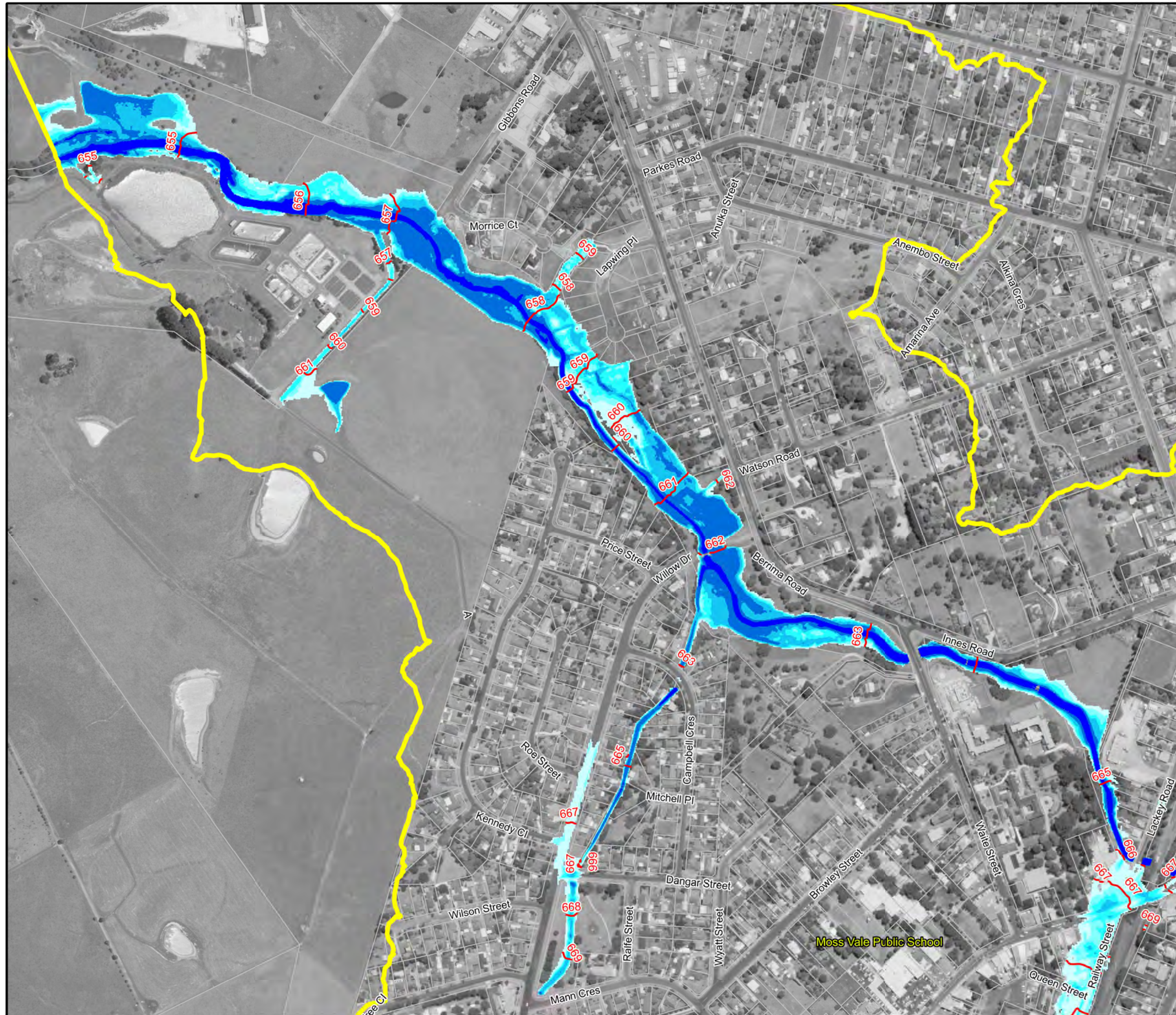
File Name: Fig 22.3- Emergency Response Classification for the PMF.wor



FUTURE CATCHMENT MAPS







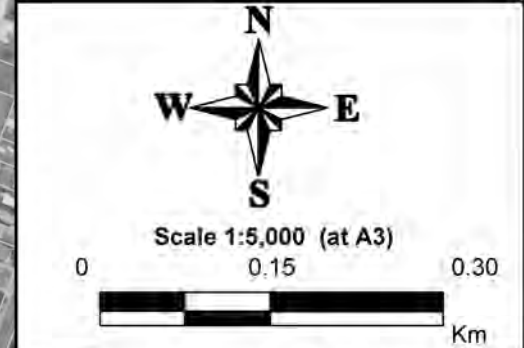
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

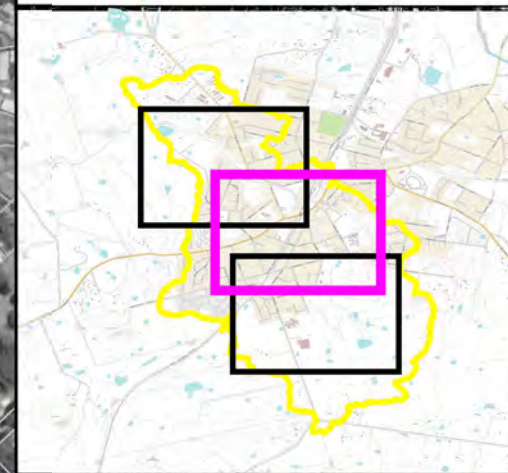
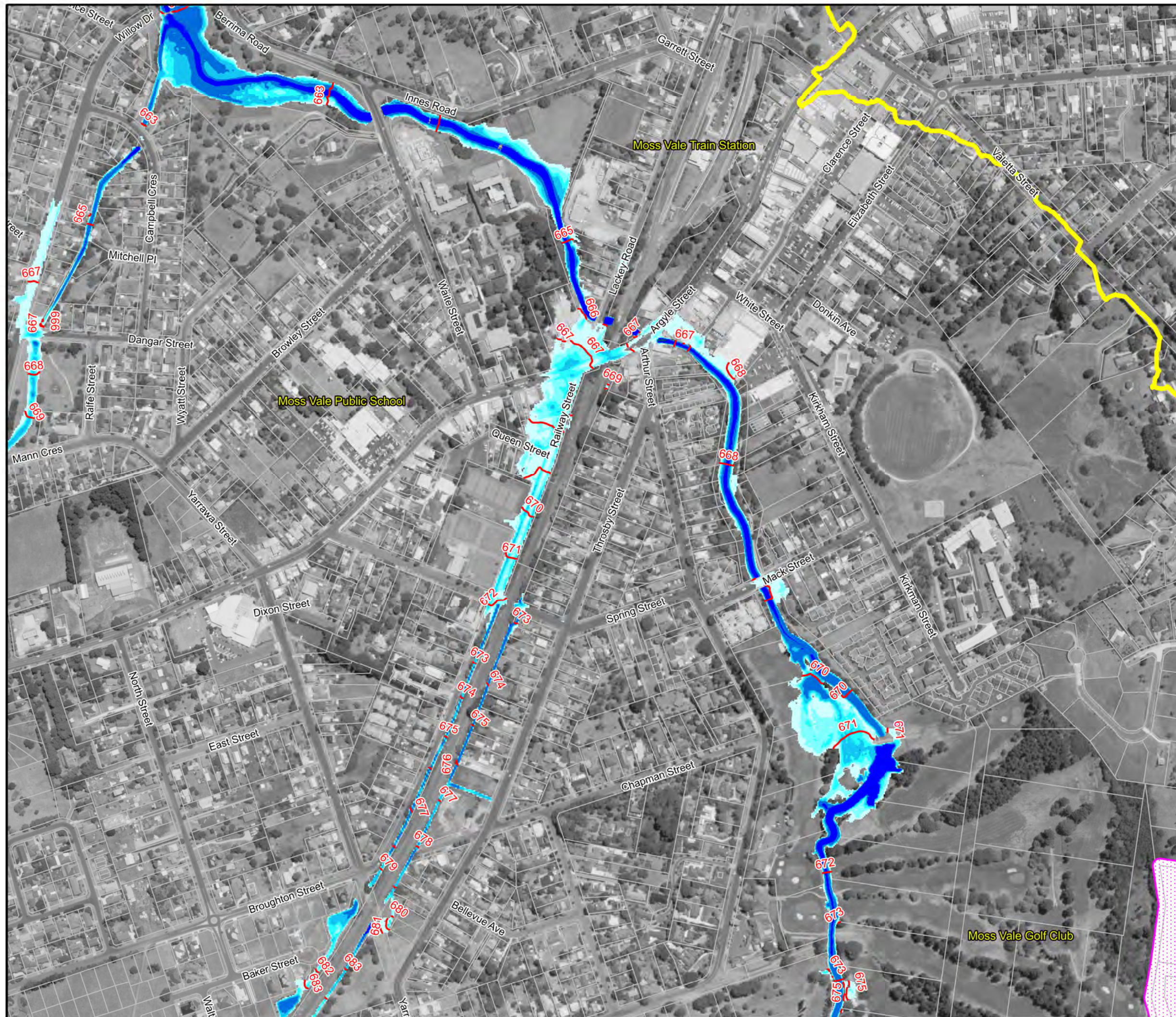
Notes:
Aerial photograph date: Jan 2009



**Figure 24.1:
Floodwater Depths and
Levels for the 20% AEP
Flood for Future
Catchment Conditions**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 24.1- Floodwater Depth, and Levels
20% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:

Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

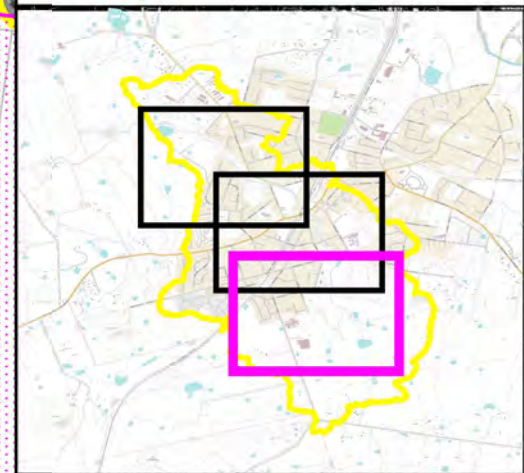
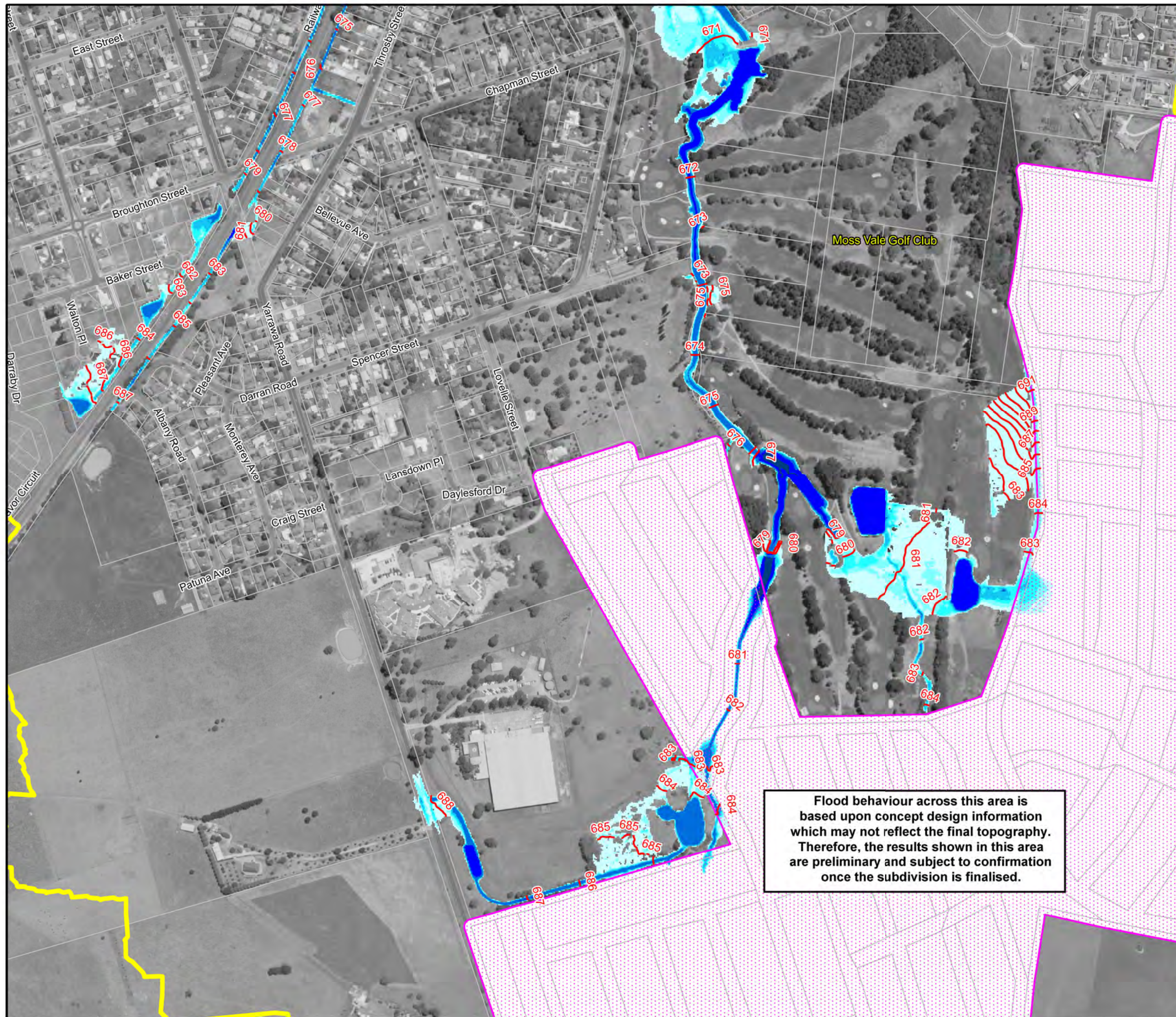
0 0.15 0.30 Km

Figure 24.2:
Floodwater Depths and Levels for the 20% AEP Flood for Future Catchment Conditions

Prepared By:

Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 24.2- Floodwater Depth, and Levels
20% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

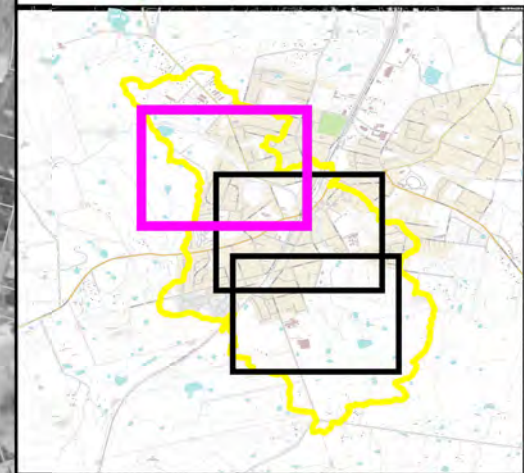
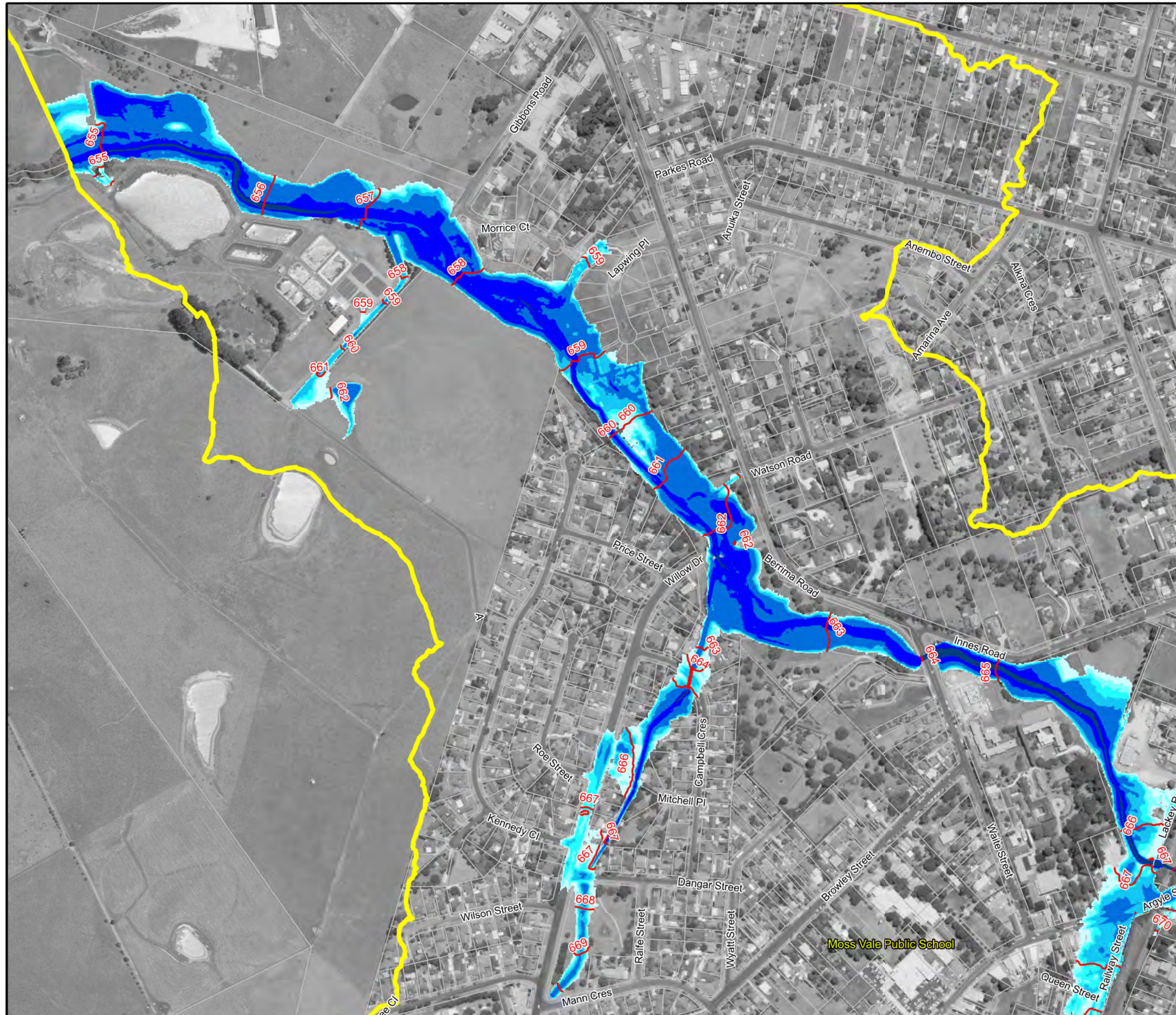
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 24.3:
Floodwater Depths and
Levels for the 20% AEP
Flood for Future
Catchment Conditions**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 24.3- Floodwater Depth, and Levels
20% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

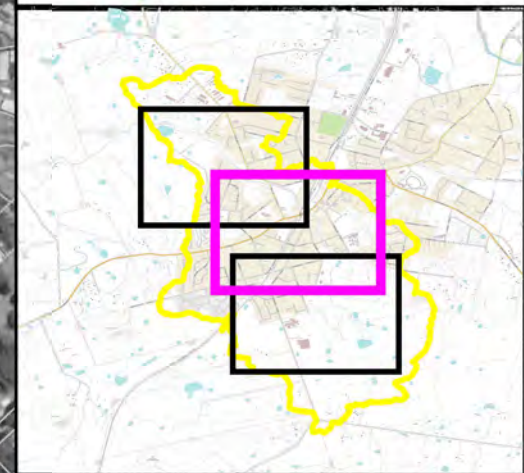
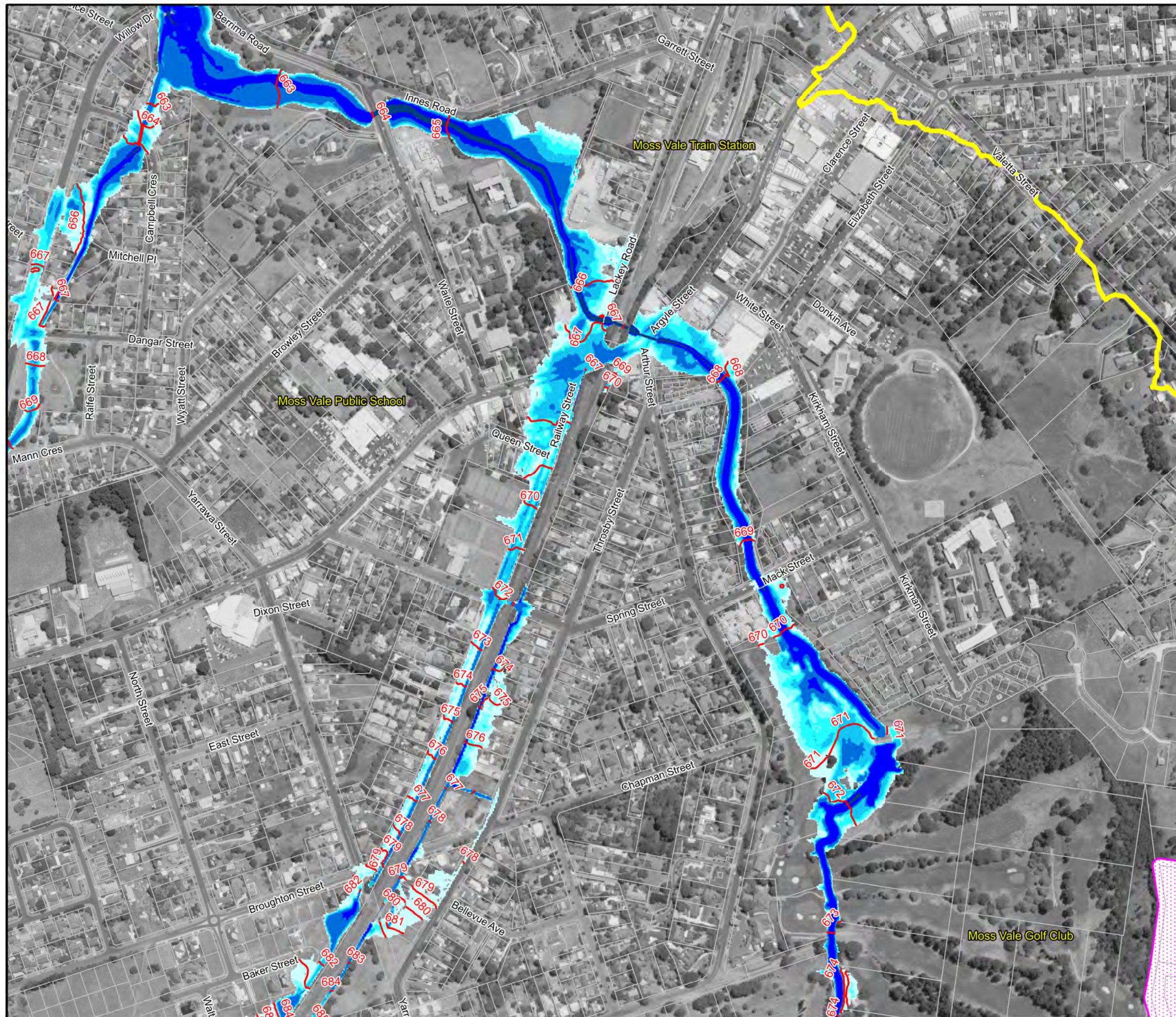
North Arrow

N
W E
S

**Figure 25.1:
Floodwater Depths and
Levels for the 1% AEP
Flood for Future
Catchment Conditions**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 25.1- Floodwater Depth, and Levels
1% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

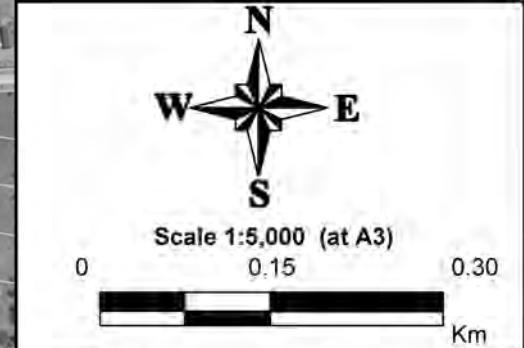
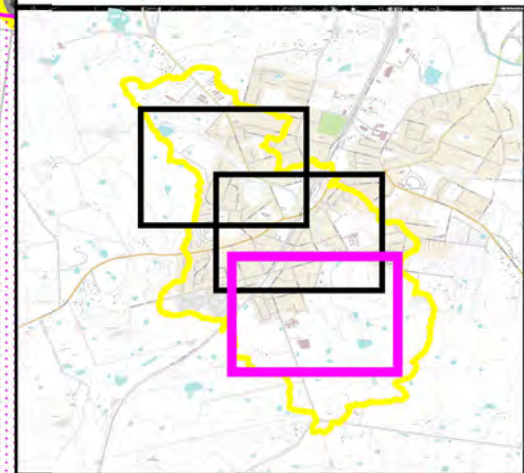
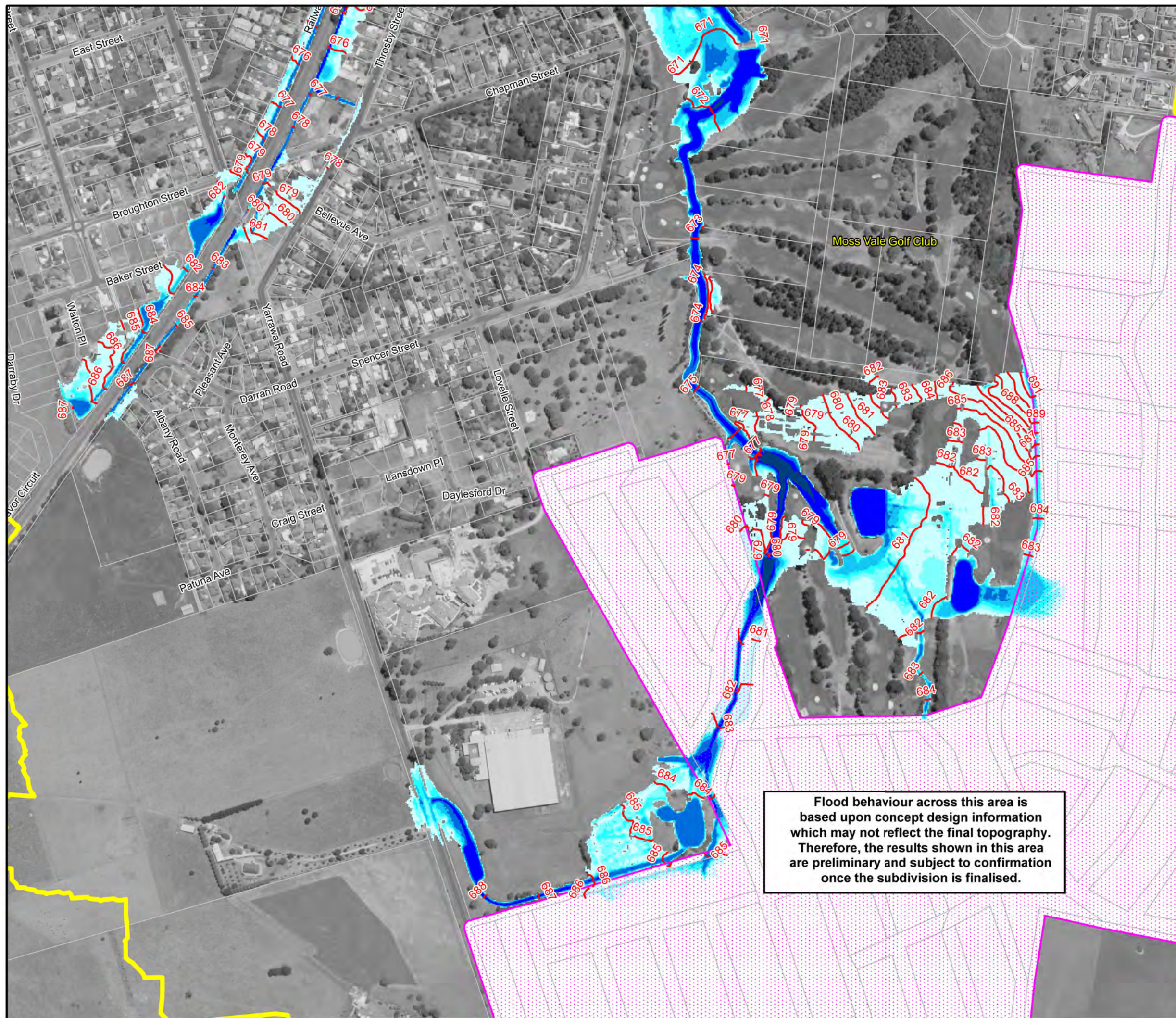


Figure 25.2:
Floodwater Depths and Levels for the 1% AEP Flood for Future Catchment Conditions

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 25.2- Floodwater Depth, and Levels
1% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- Peak Water Level Contour (mAHd)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

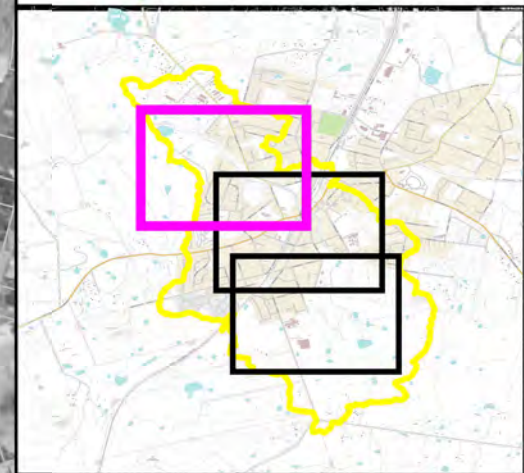
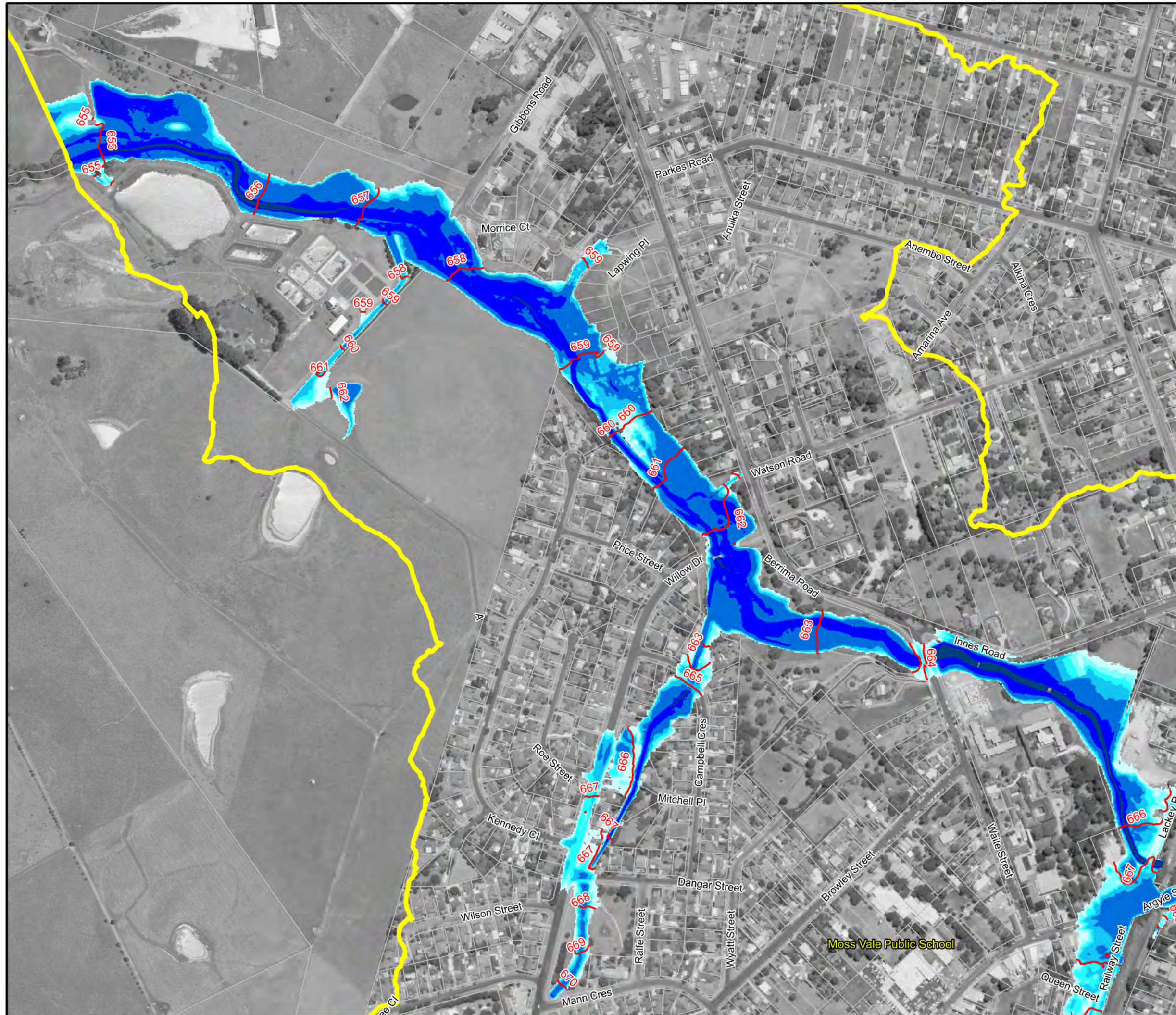
0 0.15 0.30 Km

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 25.3:
Floodwater Depths and
Levels for the 1% AEP
Flood for Future
Catchment Conditions**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 25.3- Floodwater Depth, and Levels
1% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

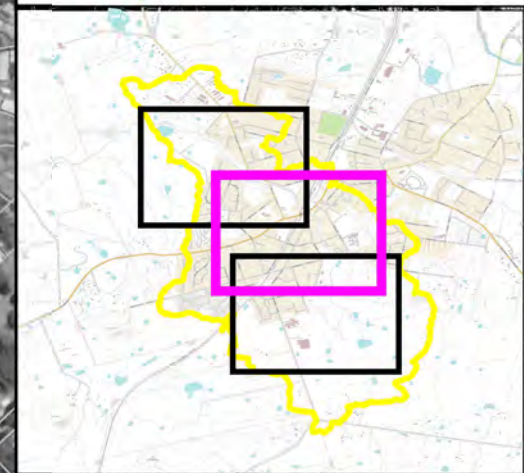
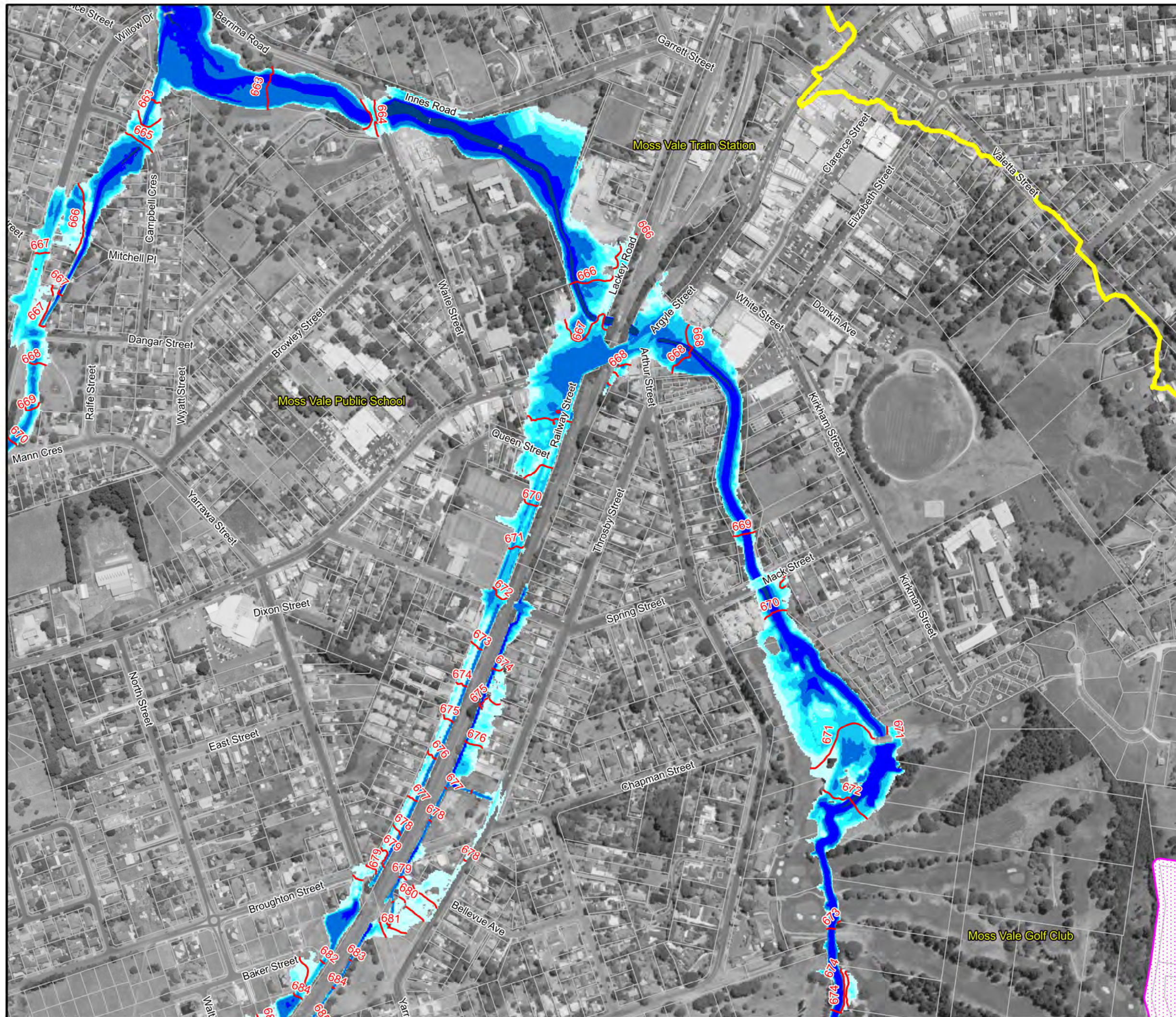
North Arrow

N
W E
S

**Figure 26.1:
Floodwater Depths and
Levels for the 0.5% AEP
Flood for Future
Catchment Conditions**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 26.1- Floodwater Depth, and Levels
0.5% AEP Flood for Future Catchment Conditions.wor



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHD)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

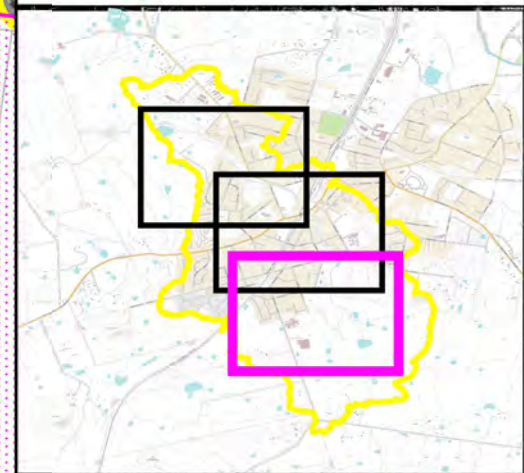
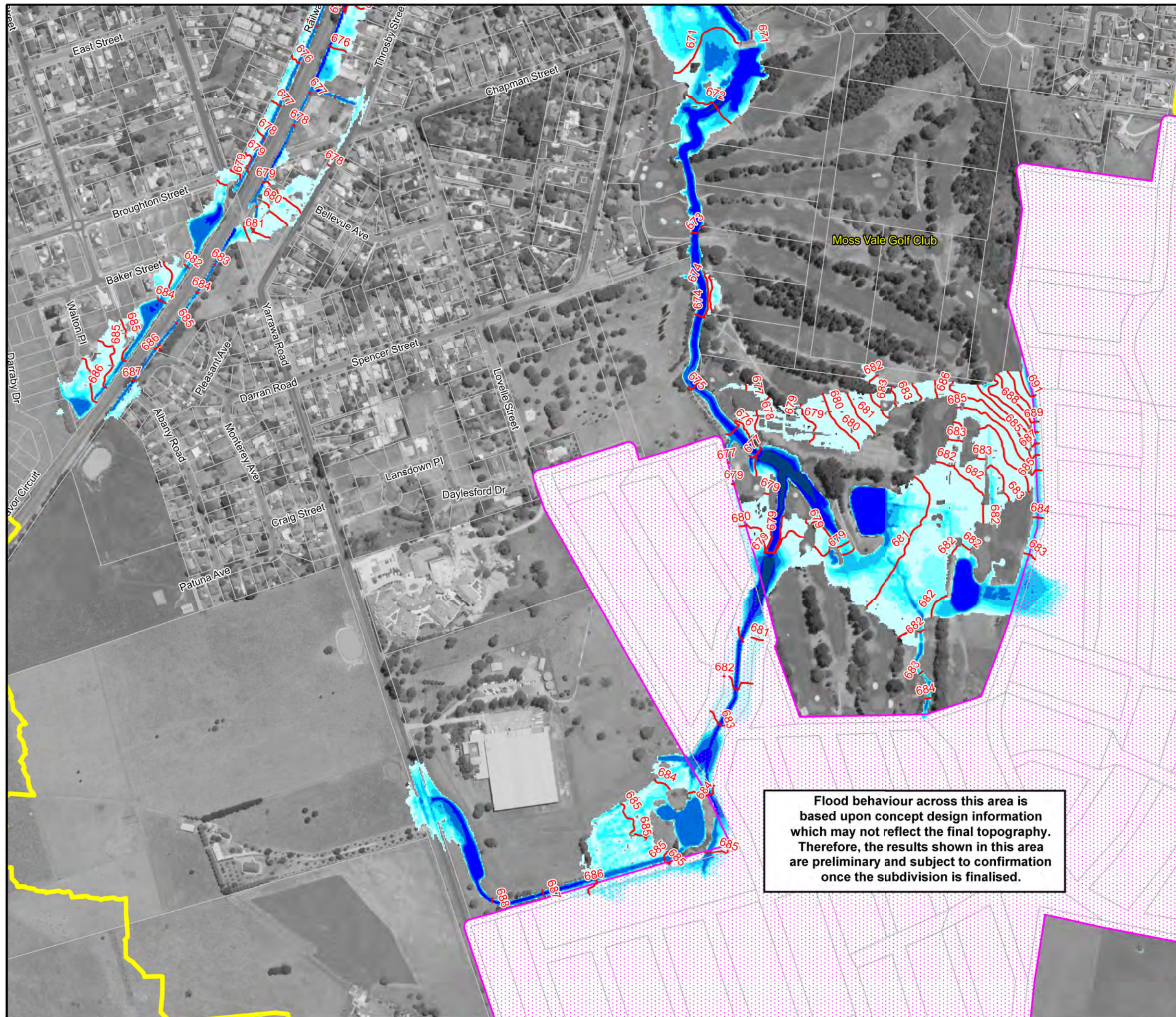
0 0.15 0.30 Km

Scale bar

Figure 26.2:
Floodwater Depths and Levels for the 0.5% AEP Flood for Future Catchment Conditions

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 26.2- Floodwater Depth, and Levels
0.5% AEP Flood for Future Catchment Conditions.wor



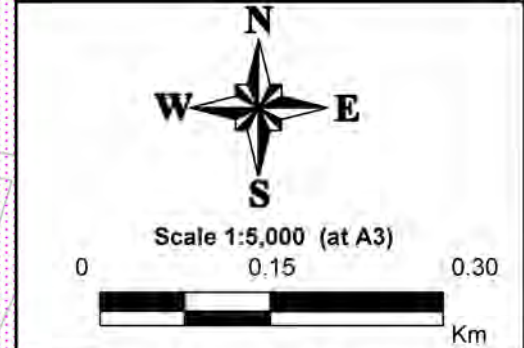
LEGEND

- Whites Creek Study Area
- Future Development Area (Elevation Assumed)
- 630 Peak Water Level Contour (mAHd)

Depths (m)

- <=0.1
- 0.1 to 0.2
- 0.2 to 0.3
- 0.3 to 0.5
- 0.5 to 1.0
- 1.0 to 2.0
- >2.0

Notes:
Aerial photograph date: Jan 2009

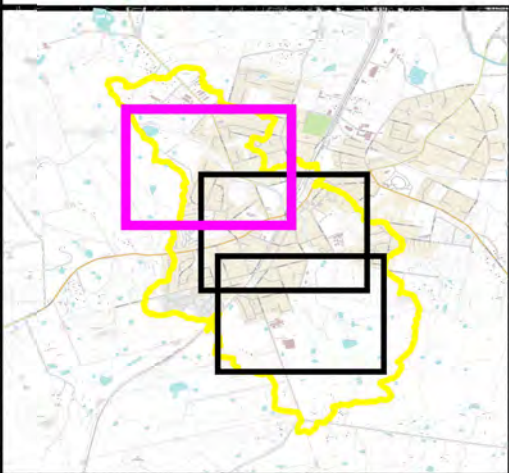
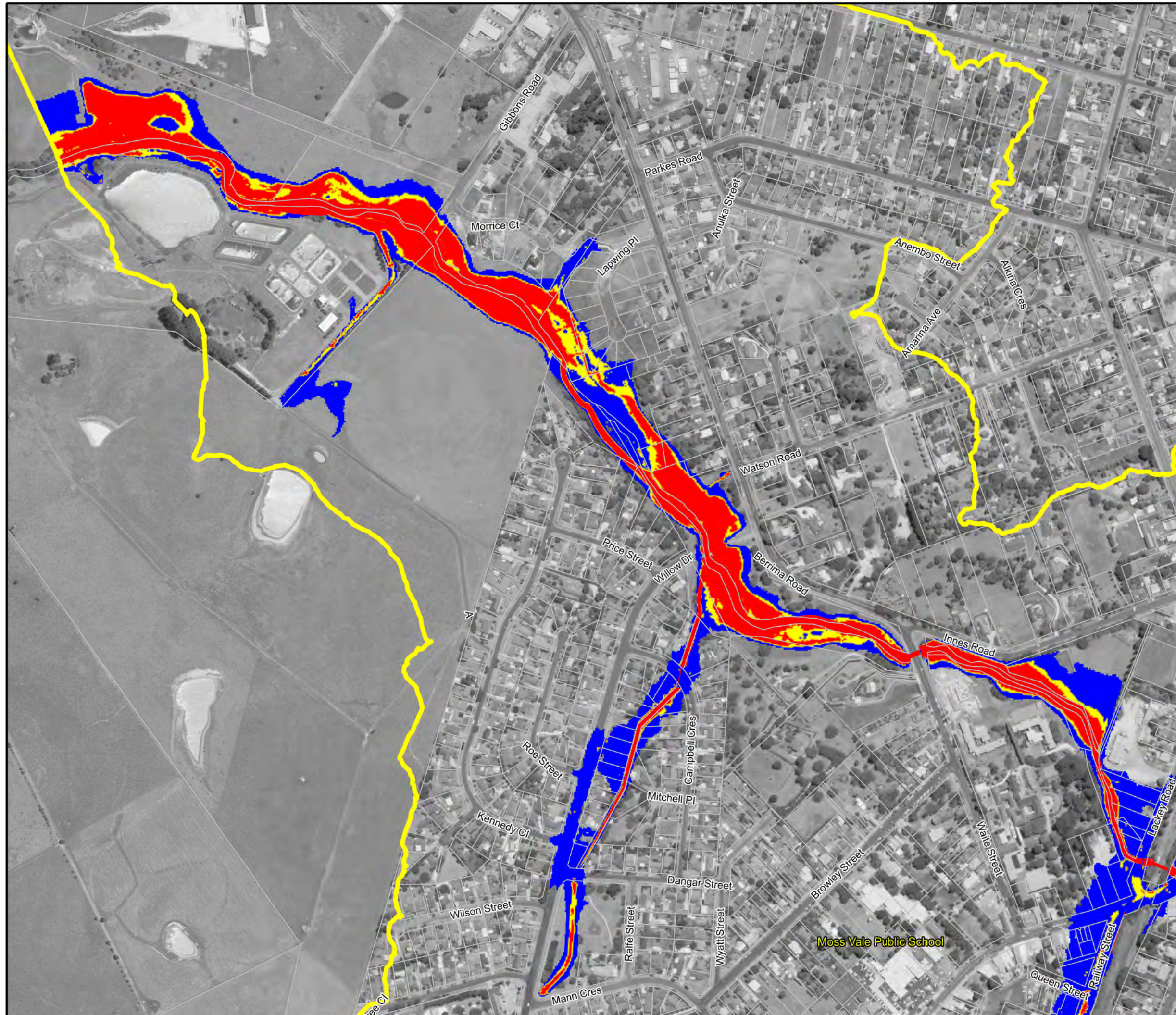


Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

Figure 26.3:
Floodwater Depths and Levels for the 0.5% AEP Flood for Future Catchment Conditions

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 26.3- Floodwater Depth, and Levels
0.5% AEP Flood for Future Catchment Conditions.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

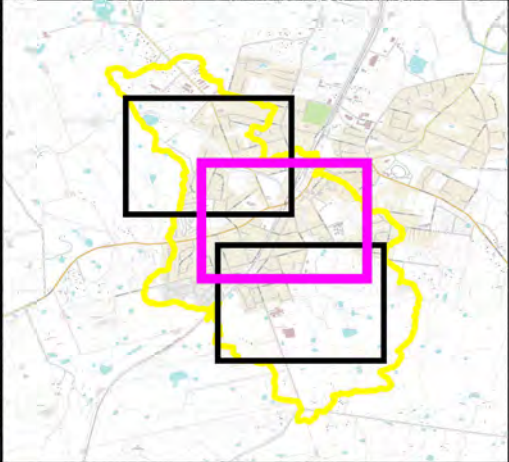
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 27.1:
1% AEP Flood Hazard
for Future Catchment
Conditions**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

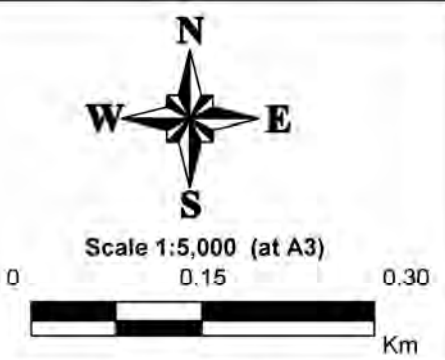
File Name: Fig 27.1- 1% AEP Flood Hazard
for Future Catchment Conditions.wor



LEGEND

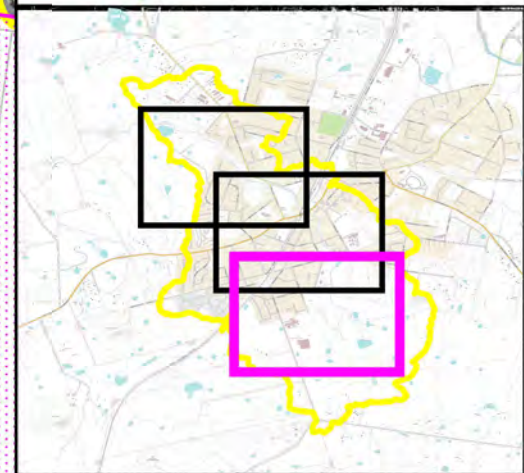
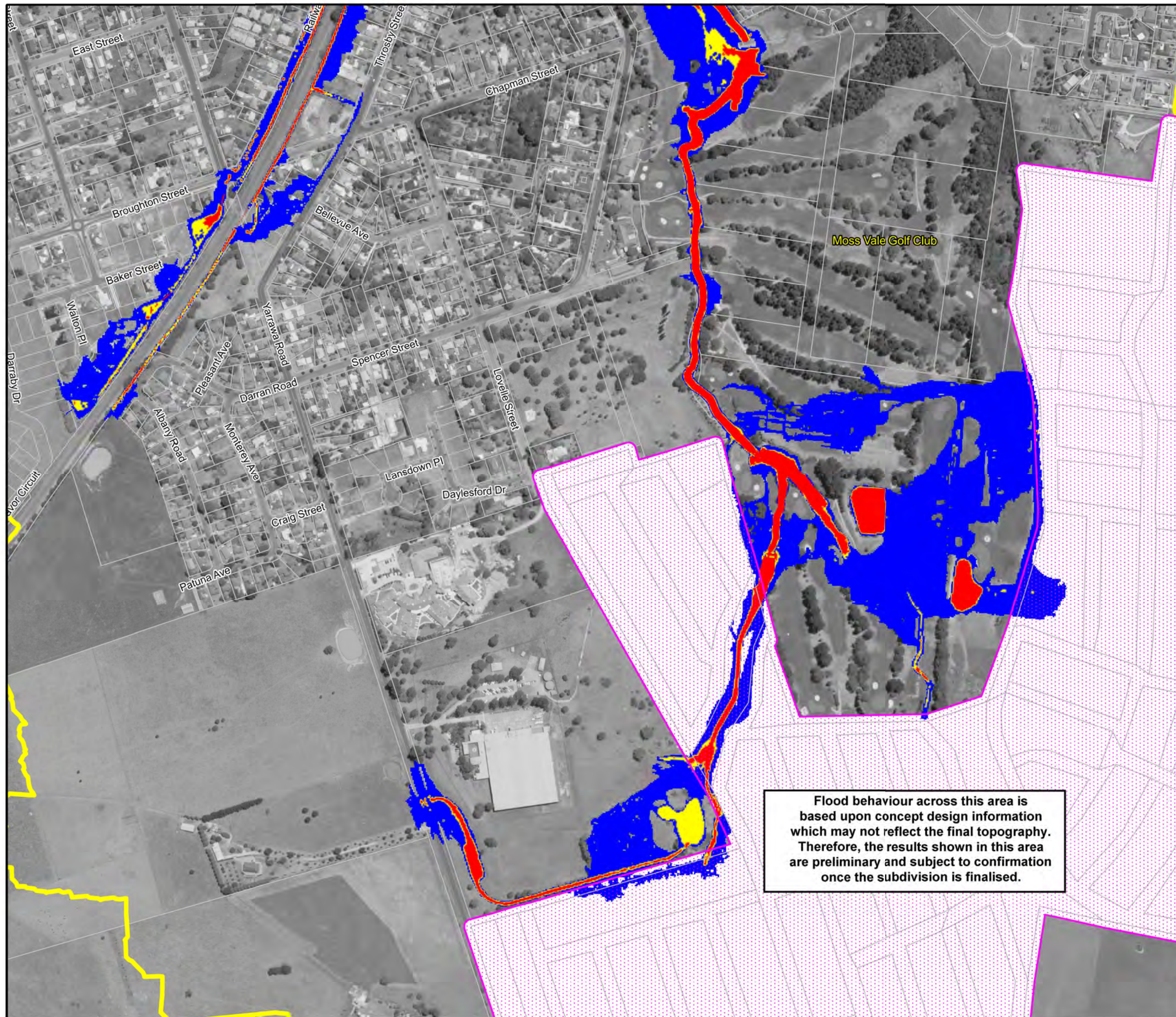
- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Hazard Categories
 - Low
 - Transition
 - High

Notes:
Aerial photograph date: Jan 2009



**Figure 27.2:
1% AEP Flood Hazard
for Future Catchment
Conditions**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Fig 27.2- 1% AEP Flood Hazard
for Future Catchment Conditions.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Hazard Categories

- Low
- Transition
- High

Notes:
Aerial photograph date: Jan 2009

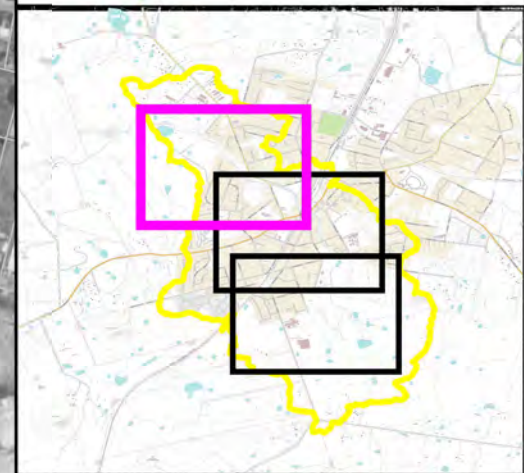
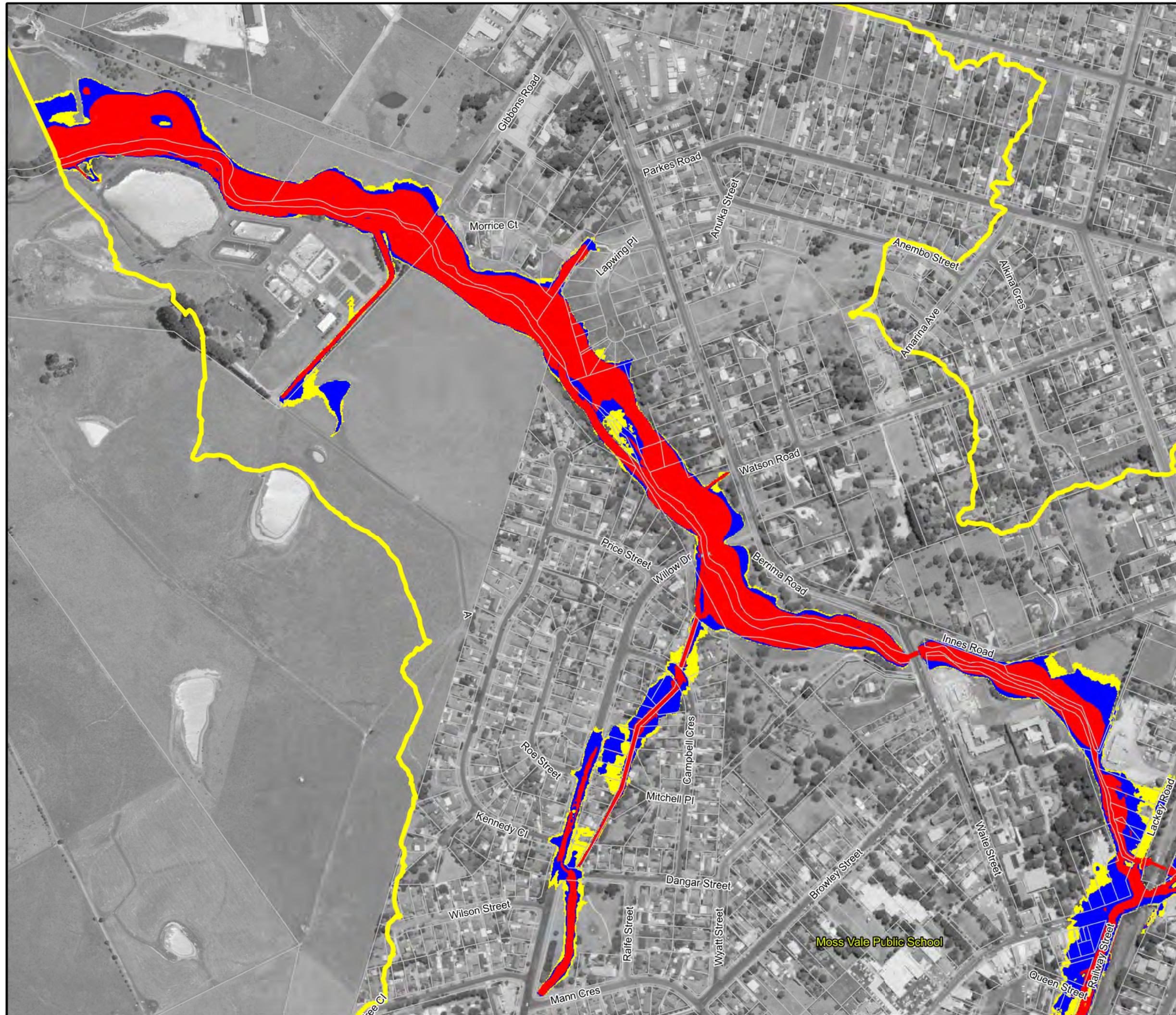
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 27.3:
1% AEP Flood Hazard
for Future Catchment
Conditions**

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 27.3- 1% AEP Flood Hazard
for Future Catchment Conditions.wor



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

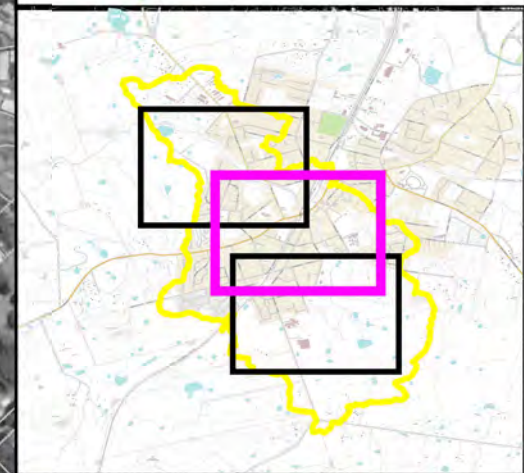
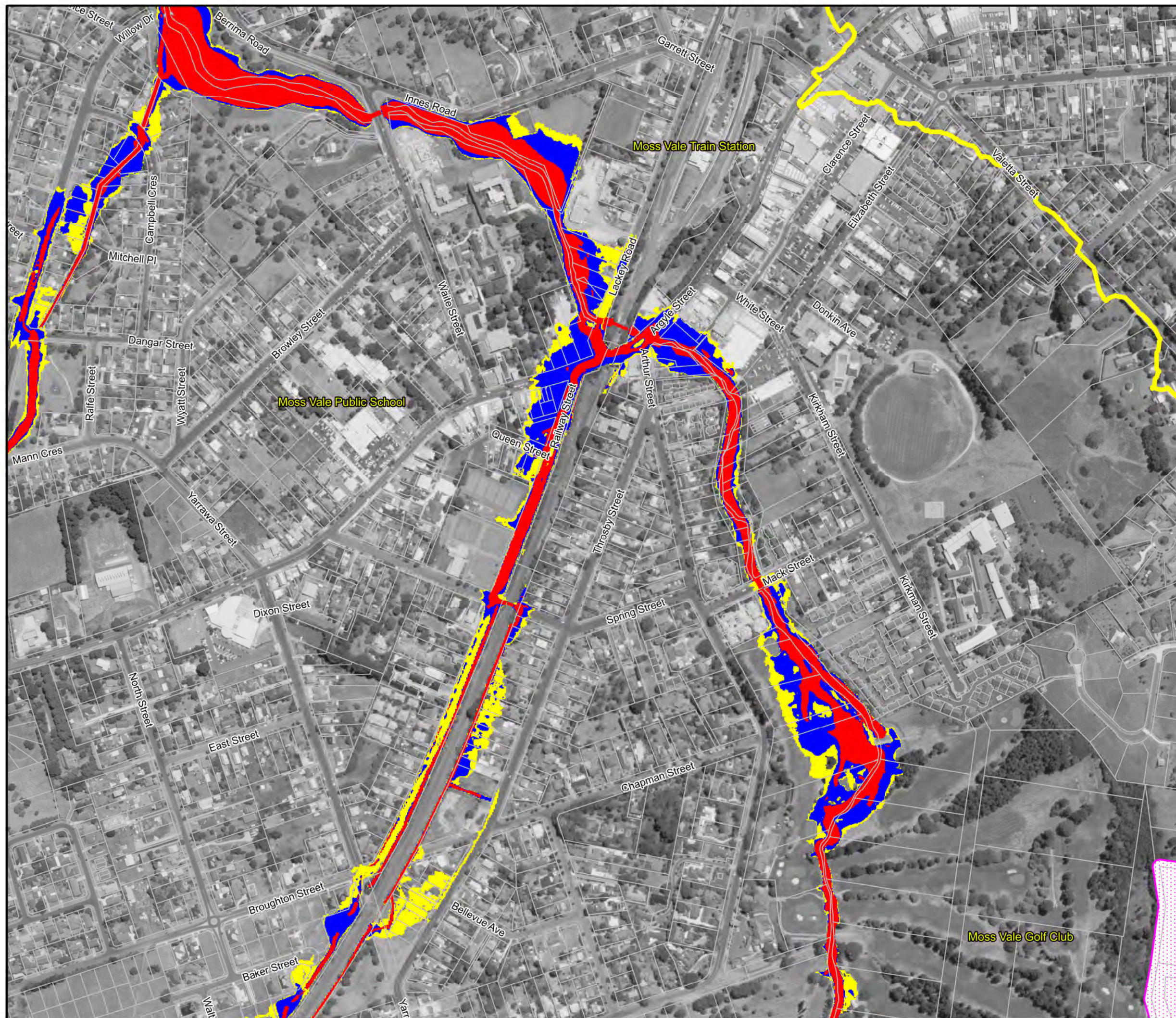
Scale 1:5,000 (at A3)

0 0.15 0.30 Km


Figure 28.1:
1% AEP Hydraulic
Categories for Future
Catchment Conditions

Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000




File Name: Fig 28.1- 1% AEP Hydraulic
Categories for Future Catchment Conditions.w




LEGEND

 Whites Creek Study Area

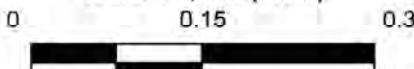
Hydraulic Categories

-  Flood Fringe
-  Flood Storage
-  Floodway

Notes:
Aerial photograph date: Jan 2009




Scale 1:5,000 (at A3)

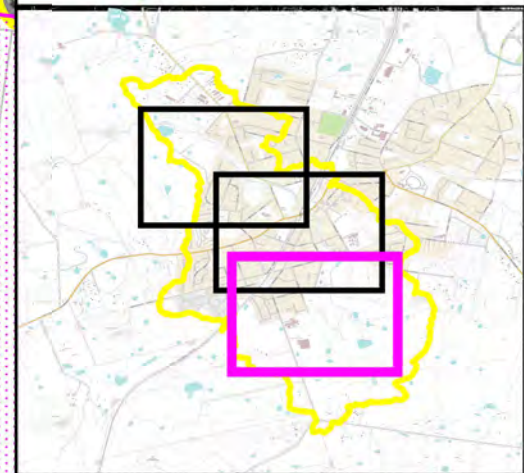
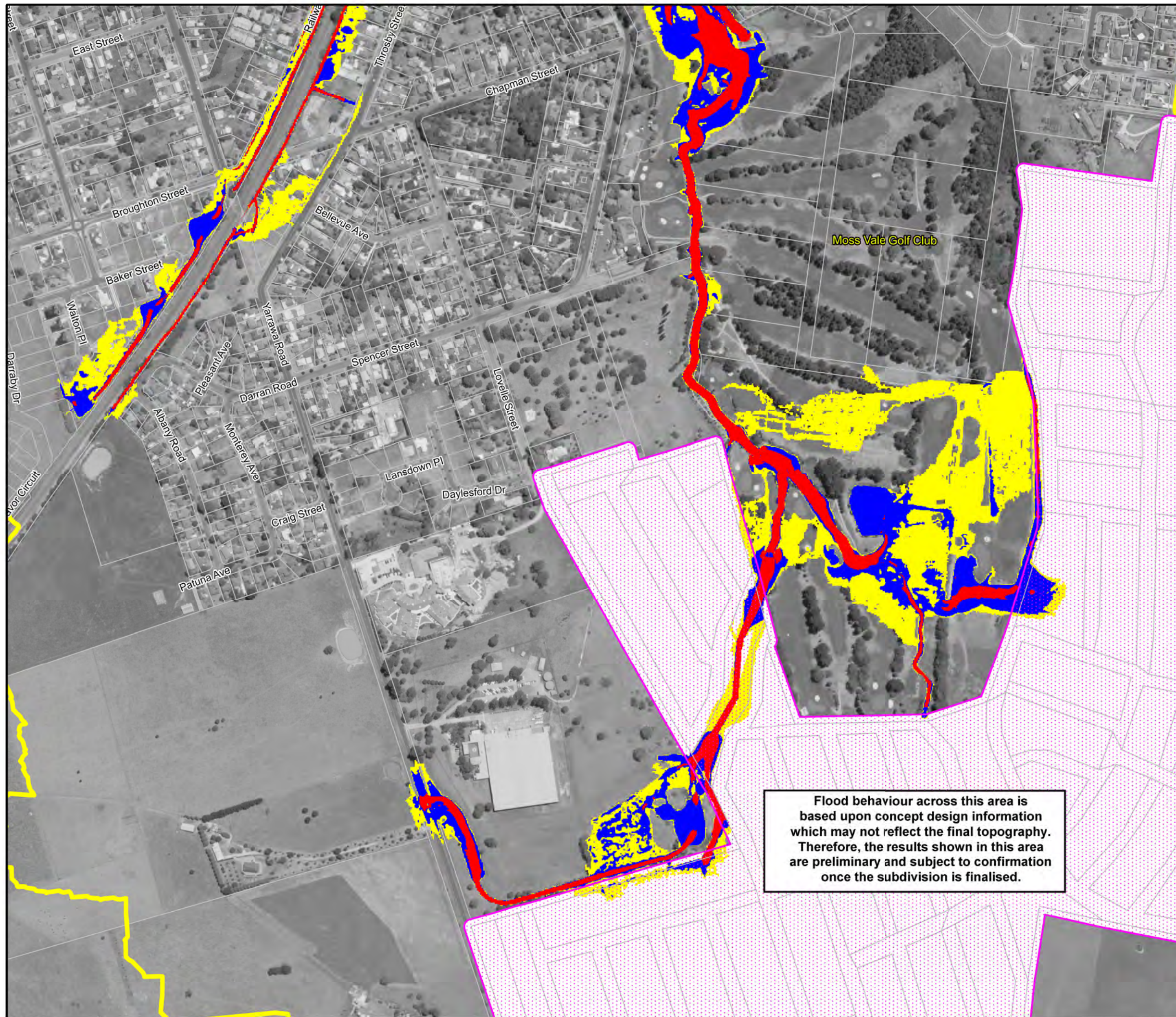


0 0.15 0.30 Km

**Figure 28.2:
1% AEP Hydraulic
Categories for Future
Catchment Conditions**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 28.2- 1% AEP Hydraulic
Categories for Future Catchment Conditions.w



LEGEND

Whites Creek Study Area

Hydraulic Categories

- Flood Fringe
- Flood Storage
- Floodway

Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

Figure 28.3:
1% AEP Hydraulic
Categories for Future
Catchment Conditions

Prepared By:

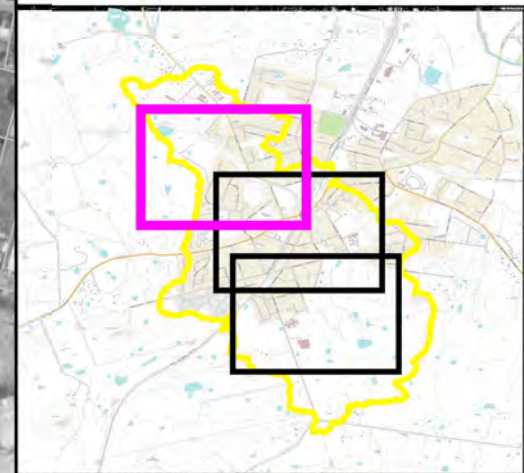
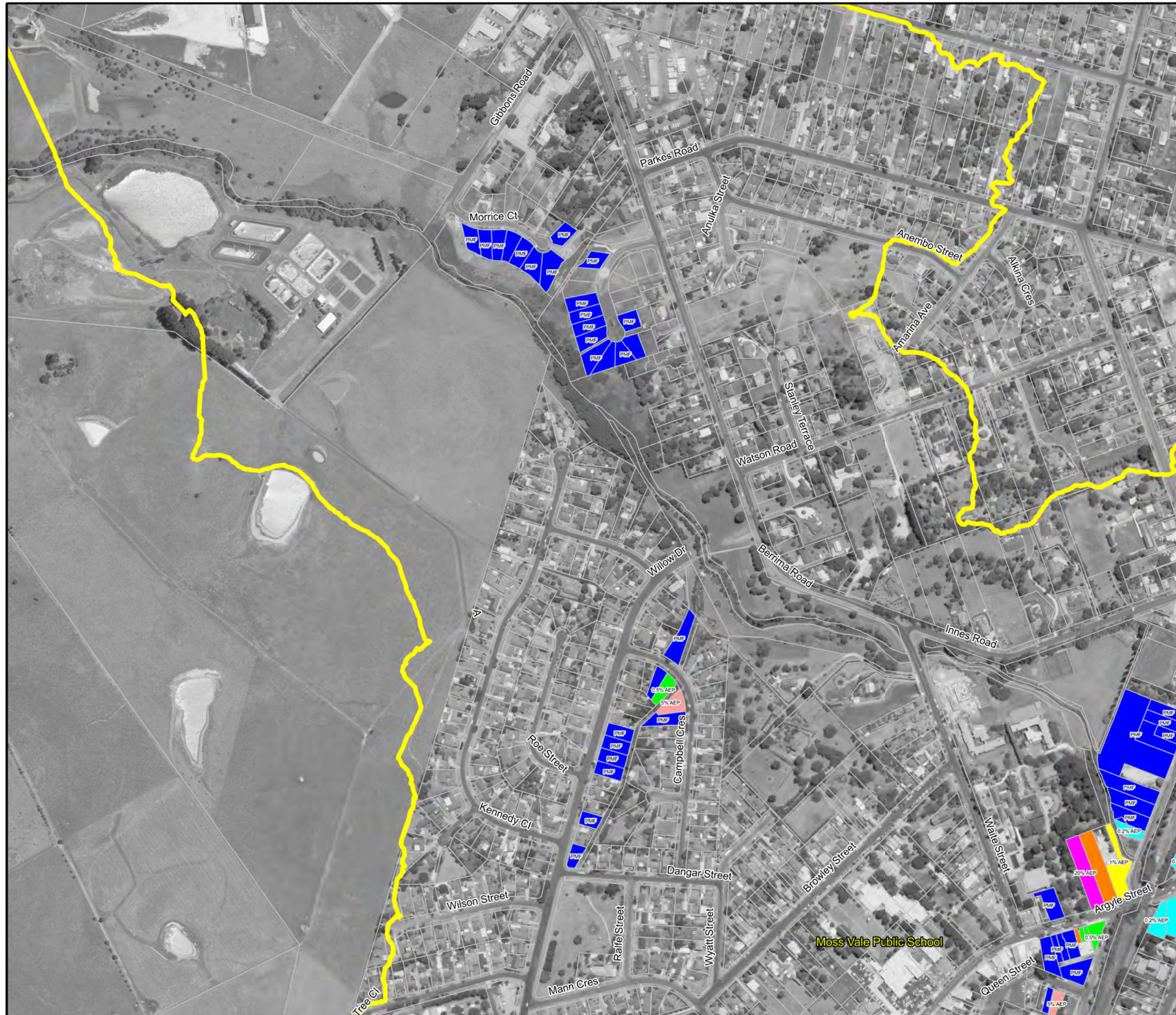
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig 28.3- 1% AEP Hydraulic Categories for Future Catchment Conditions.w



MISCELLANEOUS MAPS





LEGEND

Whites Creek Study Area

Frequency of Above Floor Flooding

- 20%AEP
- 10%AEP
- 5%AEP
- 2%AEP
- 1%AEP
- 0.5%AEP
- 0.2%AEP
- PMF

Notes:
Aerial photograph date: Jan 2009

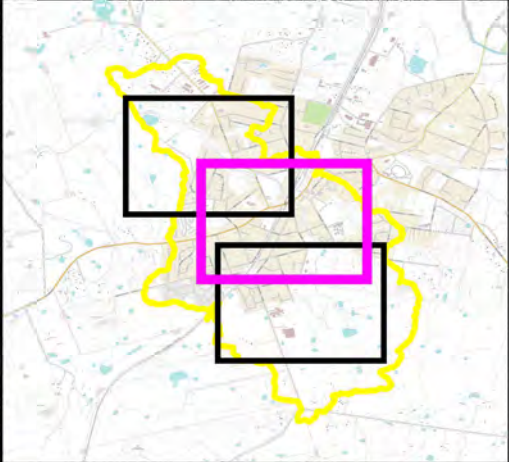
North arrow pointing North (N), South (S), East (E), and West (W).

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 29.1:
Frequency of Above
Floor Flooding**

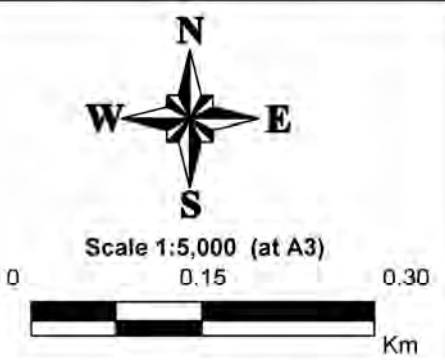
Prepared By:
CatchmentSimulationSolutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Frequency of Above Floor
Flooding.wor




LEGEND

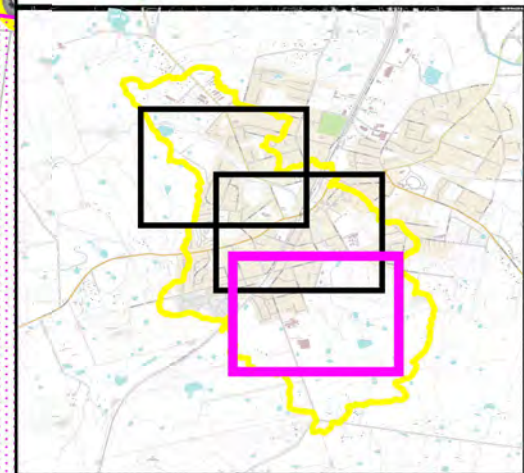
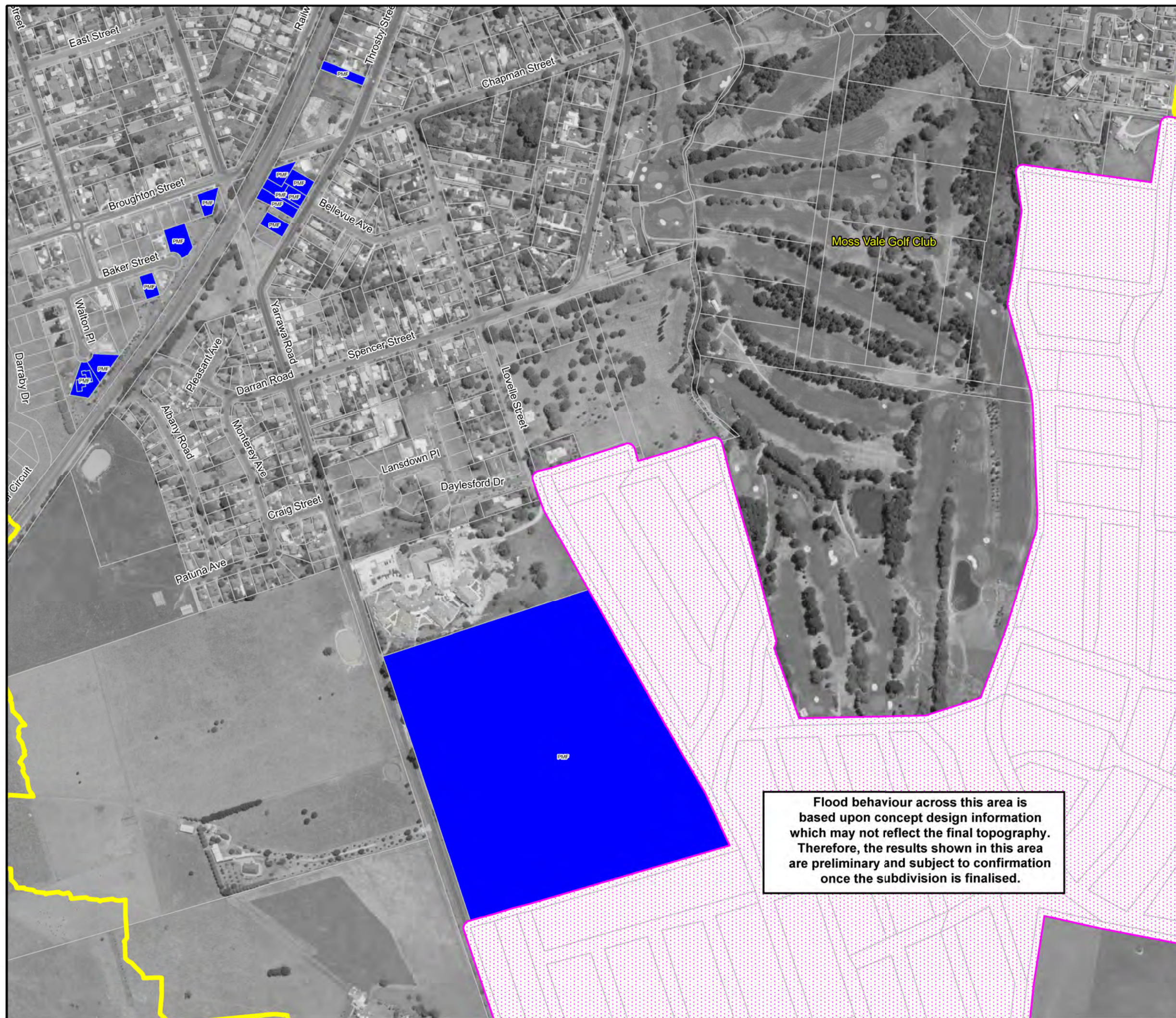
- Whites Creek Study Area
- Frequency of Above Floor Flooding
 - 20%AEP
 - 10%AEP
 - 5%AEP
 - 2%AEP
 - 1%AEP
 - 0.5%AEP
 - 0.2%AEP
 - PMF

Notes:
Aerial photograph date: Jan 2009



**Figure 29.2:
Frequency of Above
Floor Flooding**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Frequency of Above Floor Flooding.wor



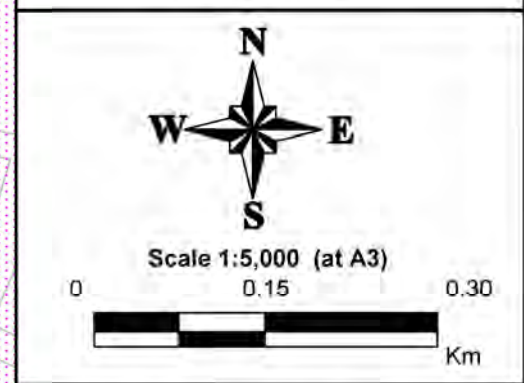
LEGEND

Whites Creek Study Area

Frequency of Above Floor Flooding

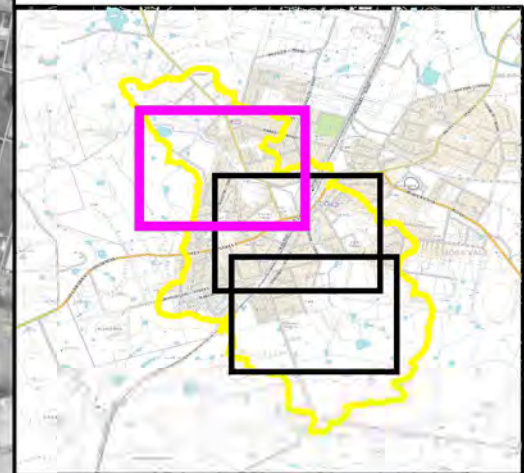
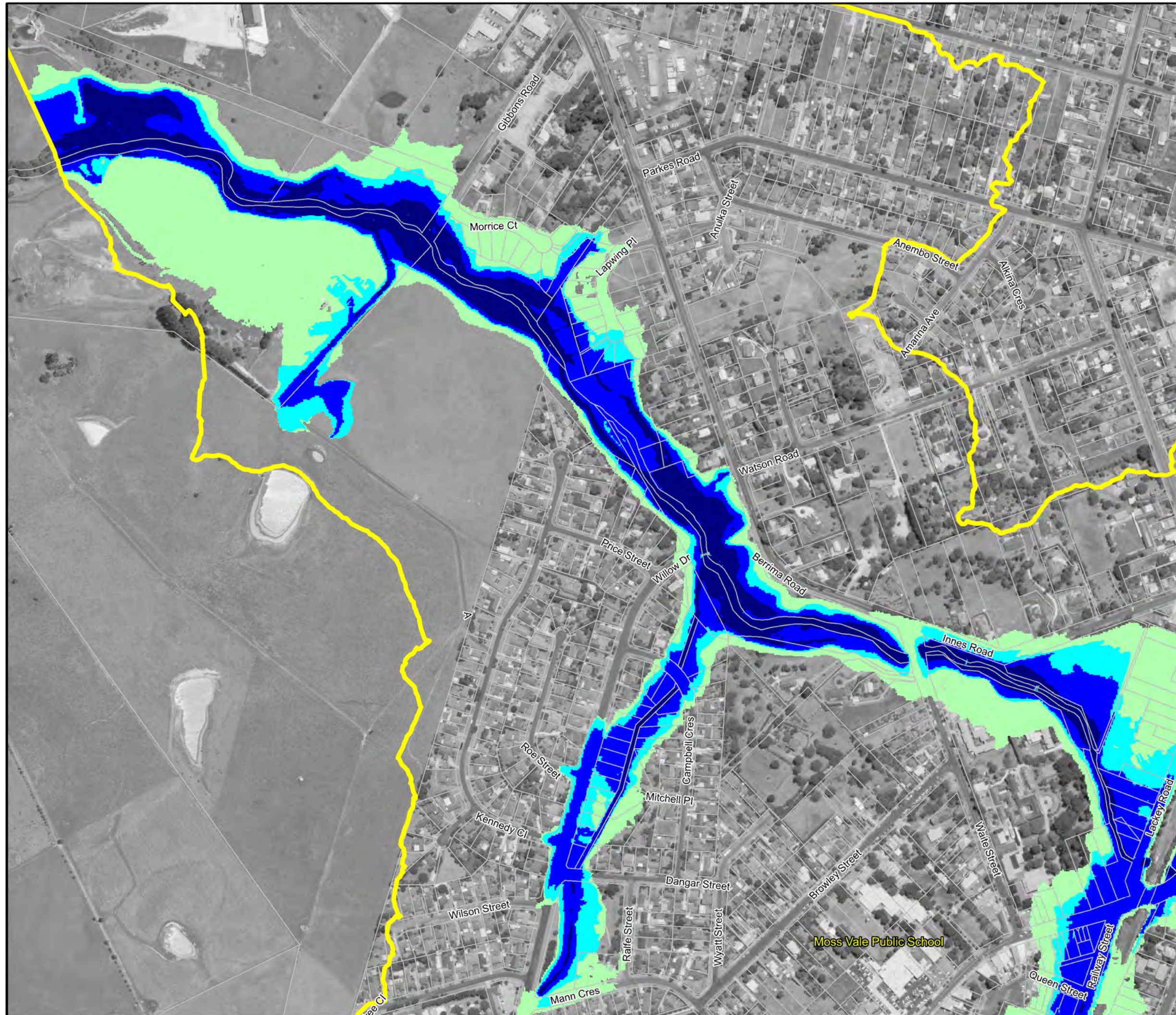
- 20%AEP
- 10%AEP
- 5%AEP
- 2%AEP
- 1%AEP
- 0.5%AEP
- 0.2%AEP
- PMF

Notes:
Aerial photograph date: Jan 2009



Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.

**Figure 29.3:
Frequency of Above
Floor Flooding**



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Flood Risk Precincts

High Flood Risk Precinct
Land below the 1% AEP flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties

Medium Flood Risk Precinct
Land below the 1% AEP flood that is not subject to a high hydraulic hazard or where there are no significant evacuation difficulties

Fringe Low Flood Risk Precinct
Land between the 1% AEP flood extent and a level 0.5m in elevation above the 1% AEP flood

Low Flood Risk Precinct
Land with a low probability of flooding lying above a level 0.5m above the 1% AEP flood and below the probable maximum flood (PMF)

Notes:
Aerial photograph date: Jan 2009

North arrow pointing North (N), South (S), East (E), and West (W).

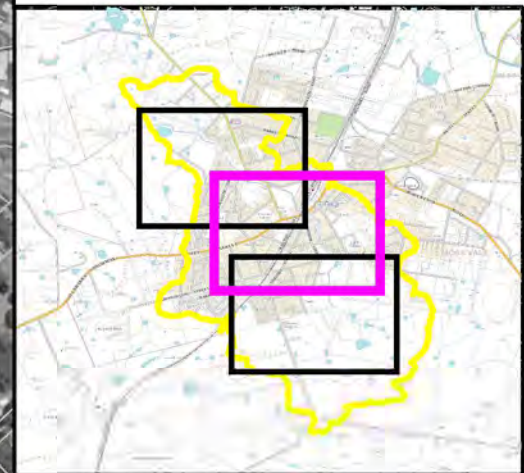
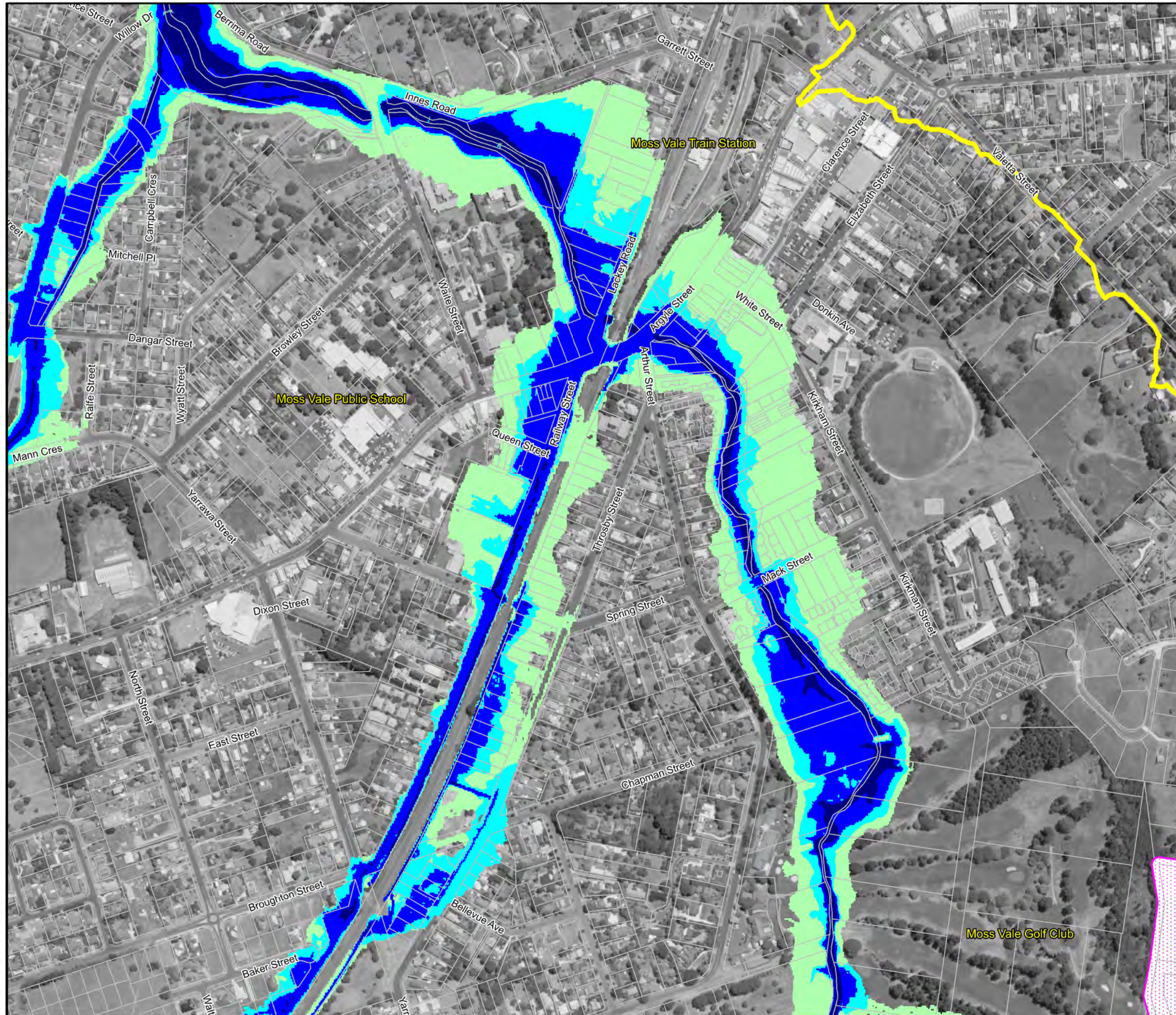
Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 30.1:
Flood Risk
Precincts**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Flood Risk Precincts.wor



LEGEND

Whites Creek Study Area

Future Development Area (Elevations Assumed)

Flood Risk Precincts

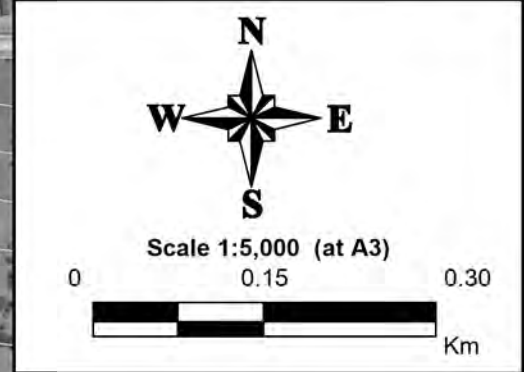
High Flood Risk Precinct
Land below the 1% AEP flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties

Medium Flood Risk Precinct
Land below the 1% AEP flood that is not subject to a high hydraulic hazard or where there are no significant evacuation difficulties

Fringe Low Flood Risk Precinct
Land between the 1% AEP flood extent and a level 0.5m in elevation above the 1% AEP flood

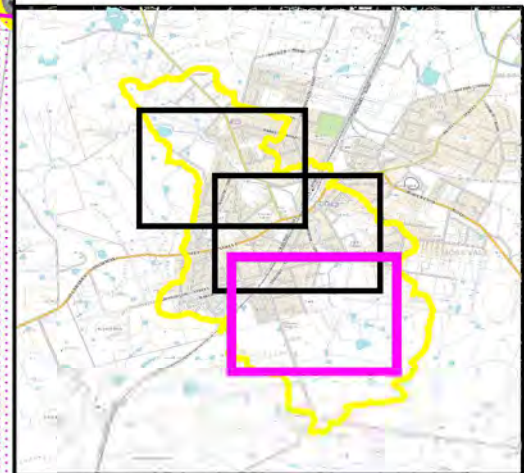
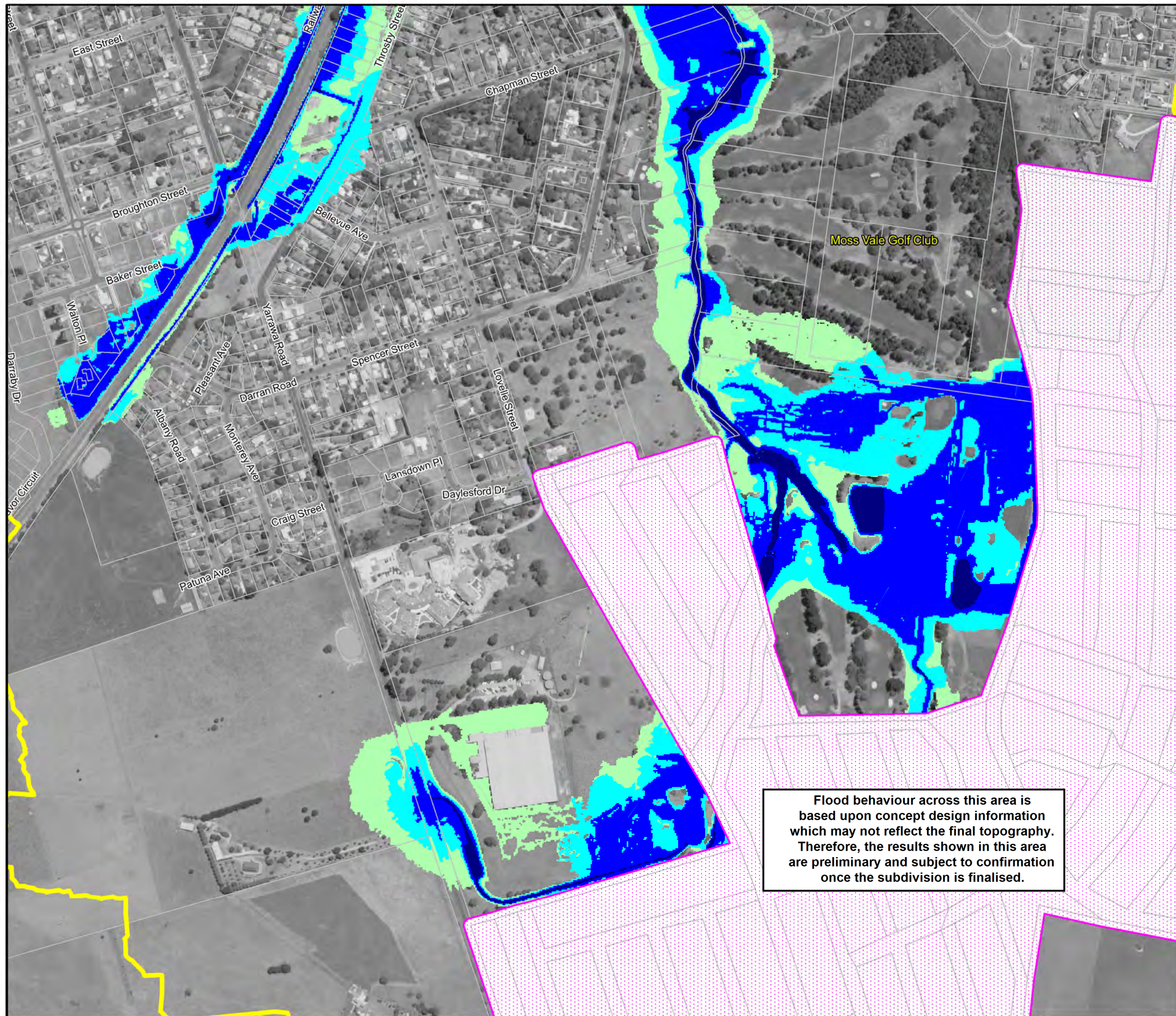
Low Flood Risk Precinct
Land with a low probability of flooding lying above a level 0.5m above the 1% AEP flood and below the probable maximum flood (PMF)

Notes:
Aerial photograph date: Jan 2009



**Figure 30.2:
Flood Risk
Precincts**

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Flood Risk Precincts.wor



LEGEND

Whites Creek Study Area

Future Development Area
(Elevations Assumed)

Flood Risk Precincts

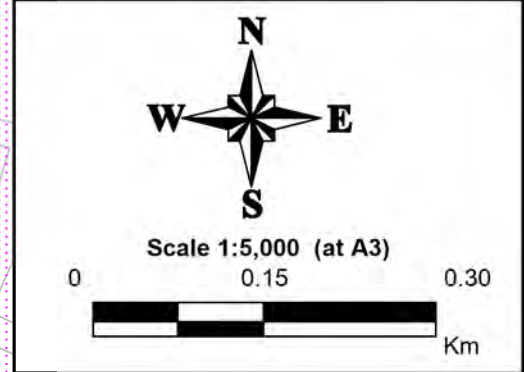
High Flood Risk Precinct
Land below the 1% AEP flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties

Medium Flood Risk Precinct
Land below the 1% AEP flood that is not subject to a high hydraulic hazard or where there are no significant evacuation difficulties

Fringe Low Flood Risk Precinct
Land between the 1% AEP flood extent and a level 0.5m in elevation above the 1% AEP flood

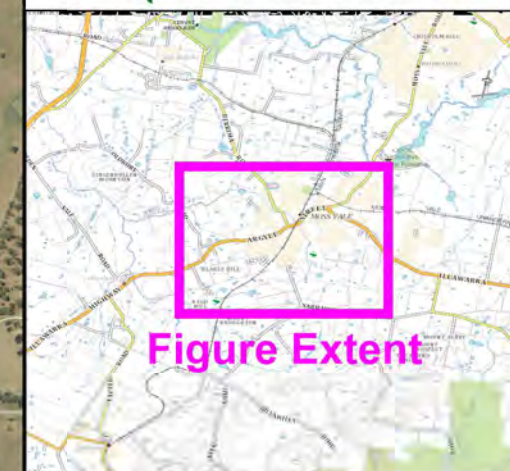
Low Flood Risk Precinct
Land with a low probability of flooding lying above a level 0.5m above the 1% AEP flood and below the probable maximum flood (PMF)

Notes:
Aerial photograph date: Jan 2009



**Figure 30.3:
Flood Risk
Precincts**

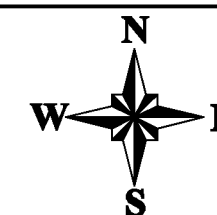
Flood behaviour across this area is based upon concept design information which may not reflect the final topography. Therefore, the results shown in this area are preliminary and subject to confirmation once the subdivision is finalised.



LEGEND


-  Catchment Boundary
-  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:
Aerial photograph date: Jan 2009

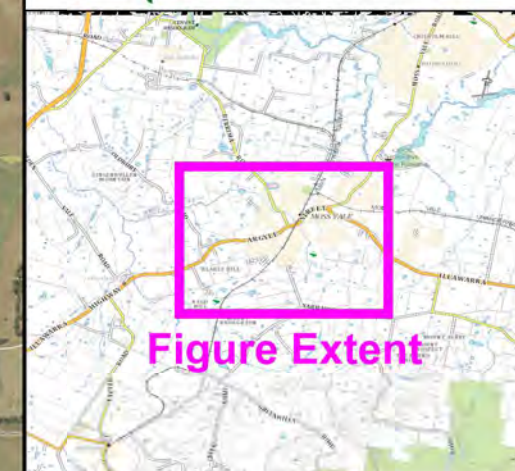


Scale 1:16,800 (at A3)
0 0.45 0.90
Km

Figure 31: Complying Development Assessment

Prepared By:
 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Complying Development
Assessment.wor



LEGEND

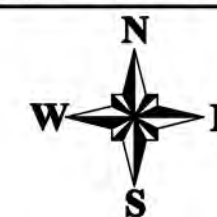
 Catchment Boundary

LEP Zone

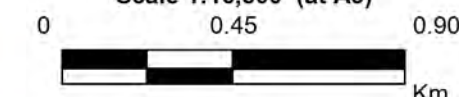
 B1	 IN1	 RE2
 B2	 IN2	 RU2
 B4	 IN3	 RU4
 B5	 R2	 SP1
 E1	 R3	 SP2
 E2	 R5	 SP3
 E3	 RE1	

Notes:

Aerial photograph date: Jan 2009




Scale 1:16,800 (at A3)

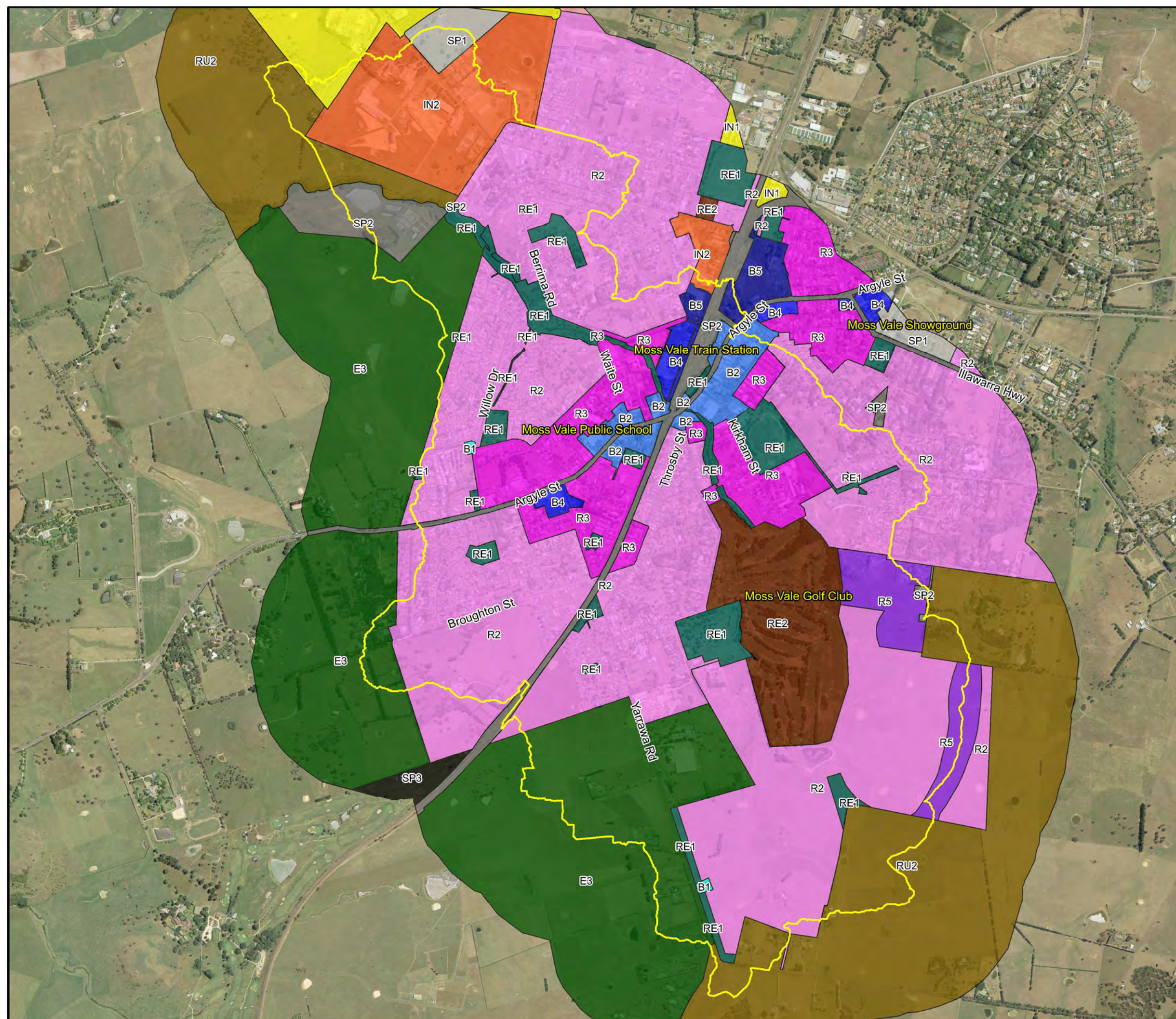


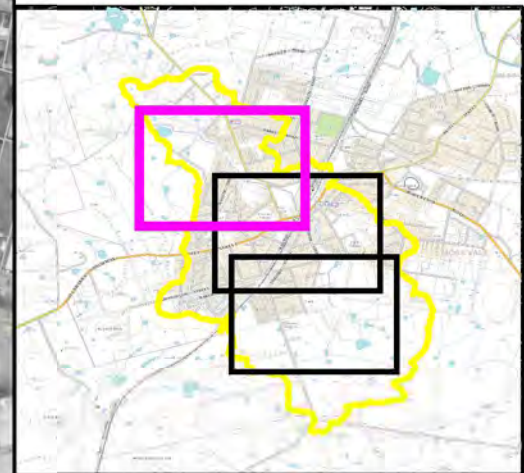
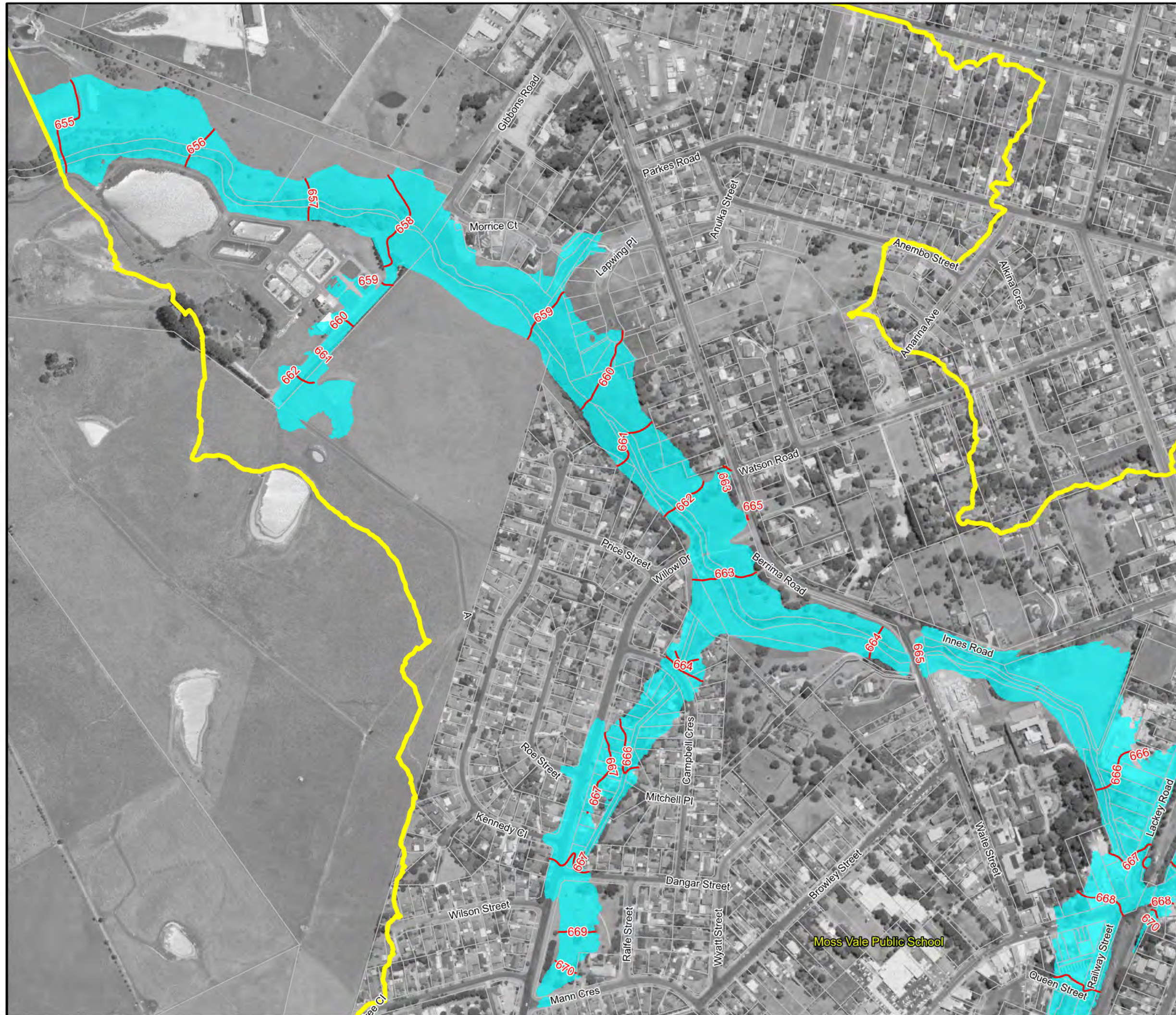
**Figure 32:
Existing LEP
Zoning**

Prepared By:

 **Catchment Simulation Solutions**
Suite 2.01, 210 George St
Sydney, NSW 2000

File Name: Fig - Existing LEP Zoning.wor





LEGEND

- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Flood Planning Area
- Flood Planning Level

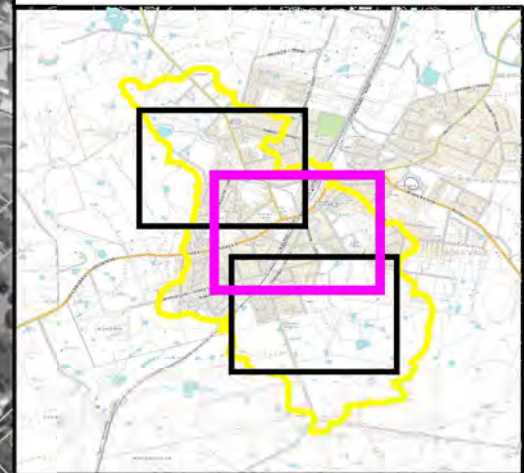
Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 33.1:
Flood Planning
Area**

Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Flood Planning Area.w



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Flood Planning Area
- Flood Planning Level

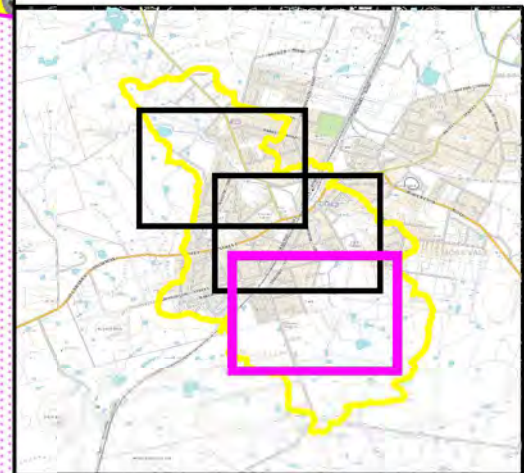
Notes:
Aerial photograph date: Jan 2009

Scale 1:5,000 (at A3)

0 0.15 0.30 Km

**Figure 33.2:
Flood Planning
Area**

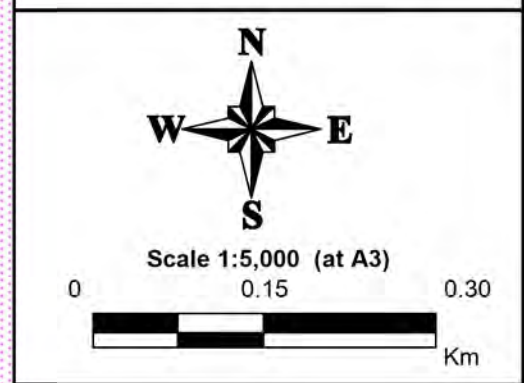
Prepared By:
Catchment Simulation Solutions
Suite 2.01, 210 George St
Sydney, NSW 2000
File Name: Flood Planning Area.wd



LEGEND

- Whites Creek Study Area
- Future Development Area (Elevations Assumed)
- Flood Planning Area
- 662 Flood Planning Level

Notes:
Aerial photograph date: Jan 2009

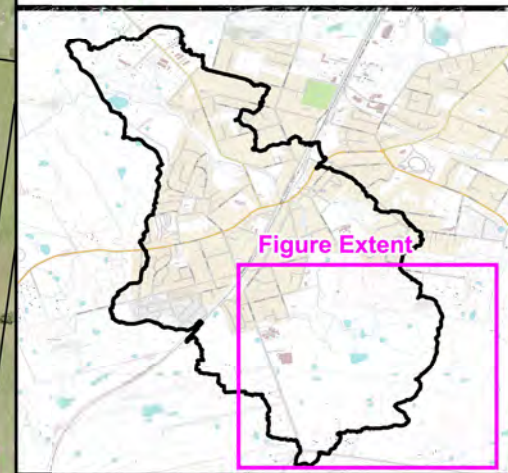
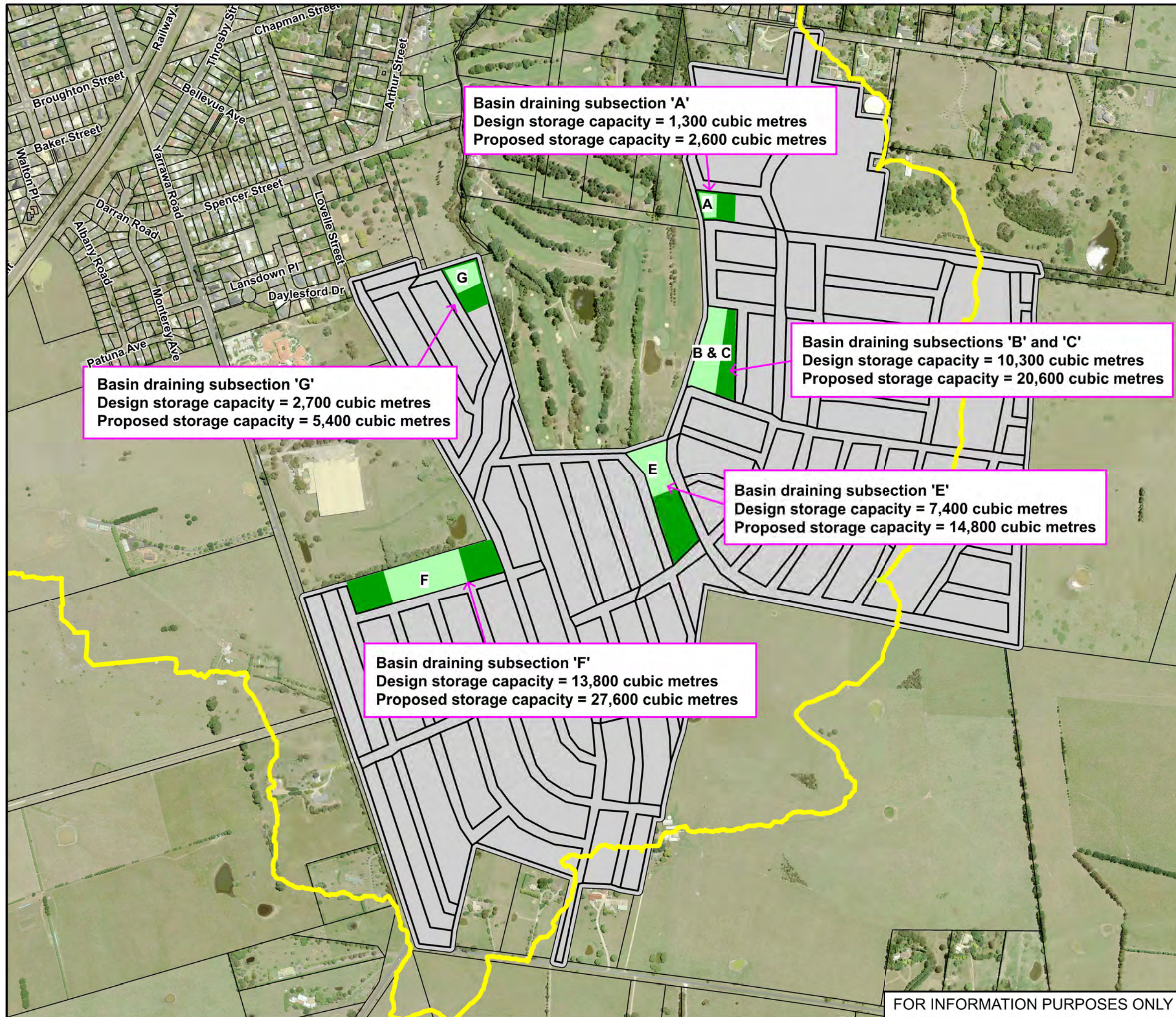


**Figure 33.3:
Flood Planning
Area**



CONCEPT DESIGNS FOR FLOOD RISK MANAGEMENT OPTIONS





LEGEND

- Indicative Chelsea Gardens / Coomungie Development Area
- Whites Creek Catchment Extent

Concept Design Features

- Indicative Basin Footprint Before Proposed Modifications
- Indicative Basin Footprint After Proposed Modifications

Notes:
 Aerial photograph date: 2013

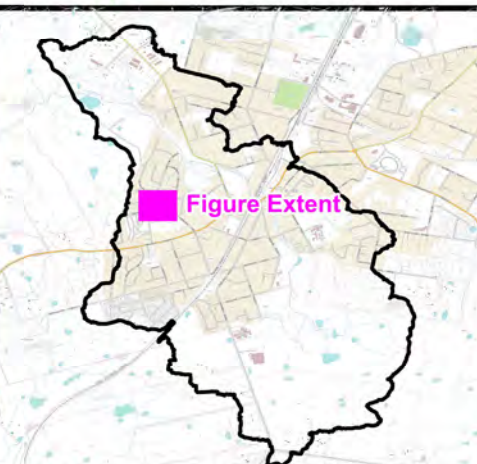
Scale 1:7,400 (at A3)

Figure 34: Concept Design to Modify the Proposed Chelsea Gardens/Coomungie Detention Basins (FM1)

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

File Name: Fig 34 - Concept Design FM1.wor

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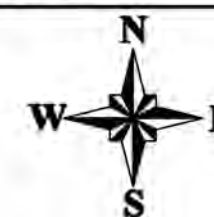
LEGEND

Terrain Differences

From Depth	To Depth	Colour	Depth Range	Volume
-1.50	-1.00	Dark Green	0m3	CUT
-1.00	-0.50	Green	0m3	CUT
-0.50	0.00	Light Green	0m3	CUT
0.00	0.50	Orange	188m3	FILL
0.50	1.00	Dark Orange	104m3	FILL
1.00	1.50	Dark Red	48m3	FILL
Preliminary Cut Volume = 0m3				
Preliminary Fill Volume = 340m3				
Preliminary Net Volume = 340m3				

Notes:

Aerial photograph date: 2013



Scale 1:650 (at A3)

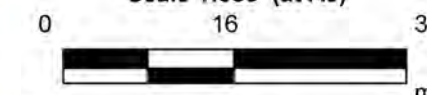



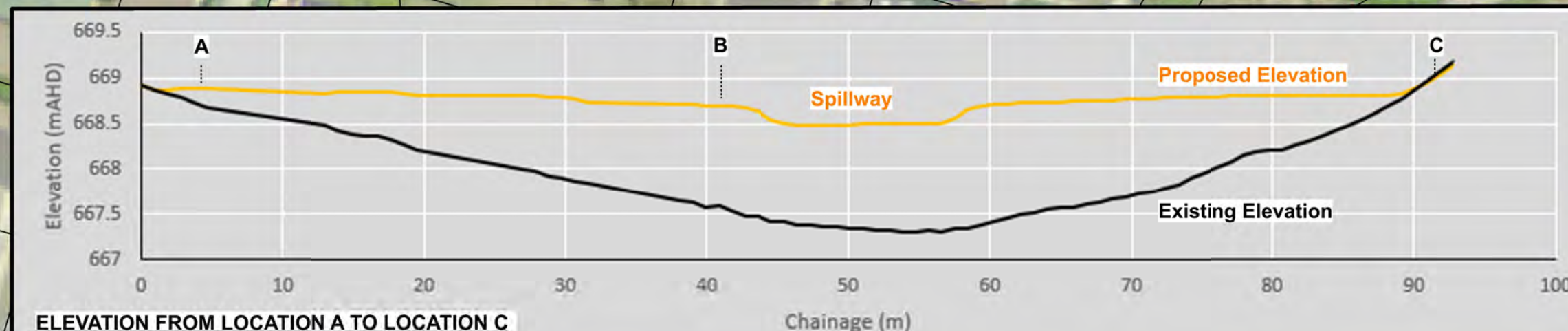
Figure 35: Concept Design for the New Detention Basin within Broulee Park (FM2)

Prepared By:

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

File Name: Fig 35- Concept Design FM2.wor

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Create an embankment at 668.8 mAHD

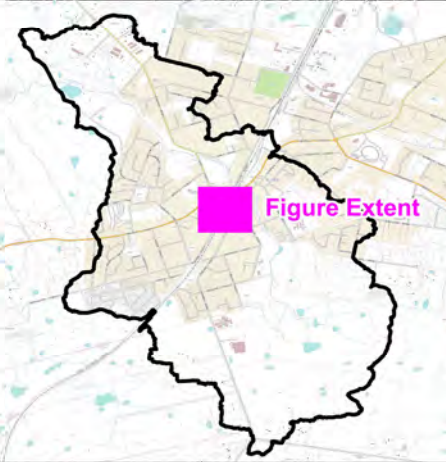
Spillway at elevation 668.5 mAHD

Broulee Park

Wilson Street

Dangar Street

Ralfe Street



LEGEND

- Existing Stormwater Network
- Upgrades to Existing Stormwater Network
- Additions to Existing Stormwater Network
- Pits Upgraded with Double Inlet Size

Notes:
Aerial photograph date: 2013

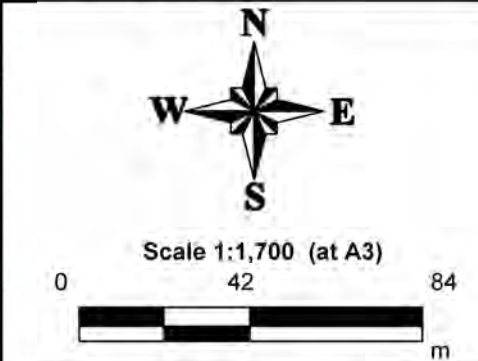
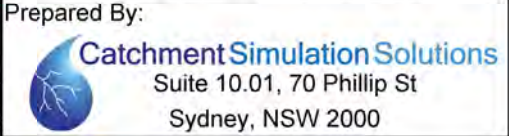
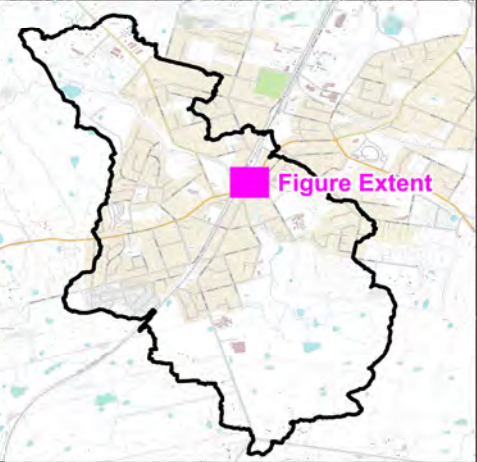
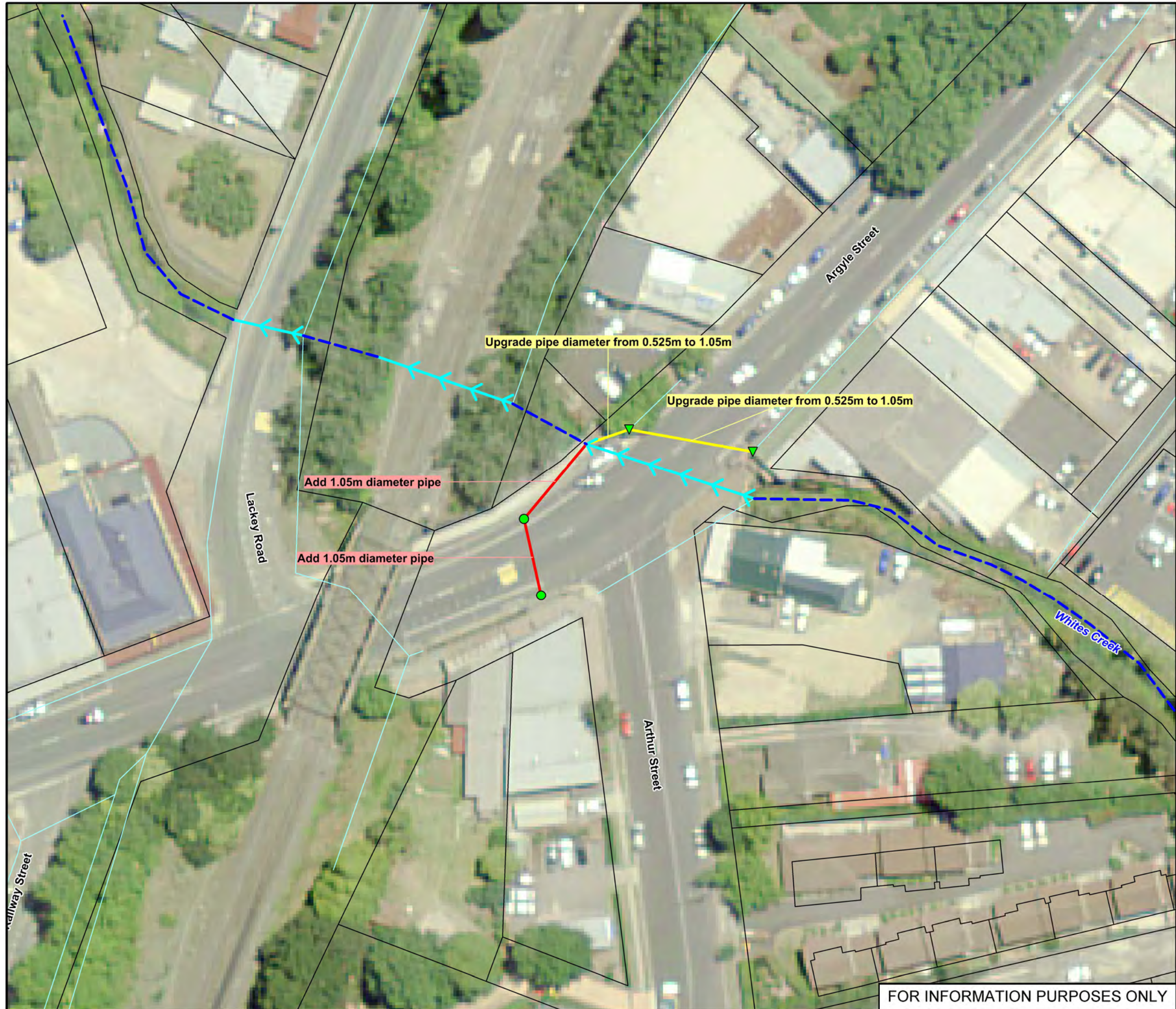


Figure 36: Concept Design to Upgrade Stormwater System along Railway Street (near Argyle Street) (FM3)

Prepared By:

Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Fig 36 - Concept Design FM3.wor

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LEGEND

- Existing Channel Alignment
- Existing Structures
- Existing Stormwater Network
- Concept Design Features**
 - Upgrades to Existing Stormwater Network
 - Additions to Existing Stormwater Network
 - Pit Upgrades with Double Inlet Size
 - Additional Pit Installed (Assumed 2.4m Kerb Lintel inlet)

Notes:
Aerial photograph date: 2013



Scale 1:620 (at A3)

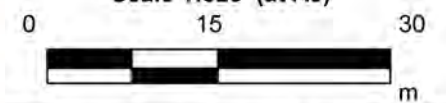
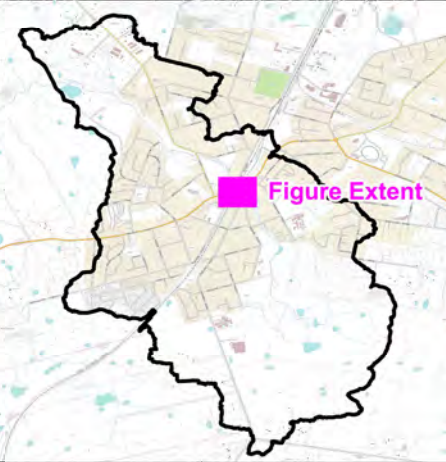
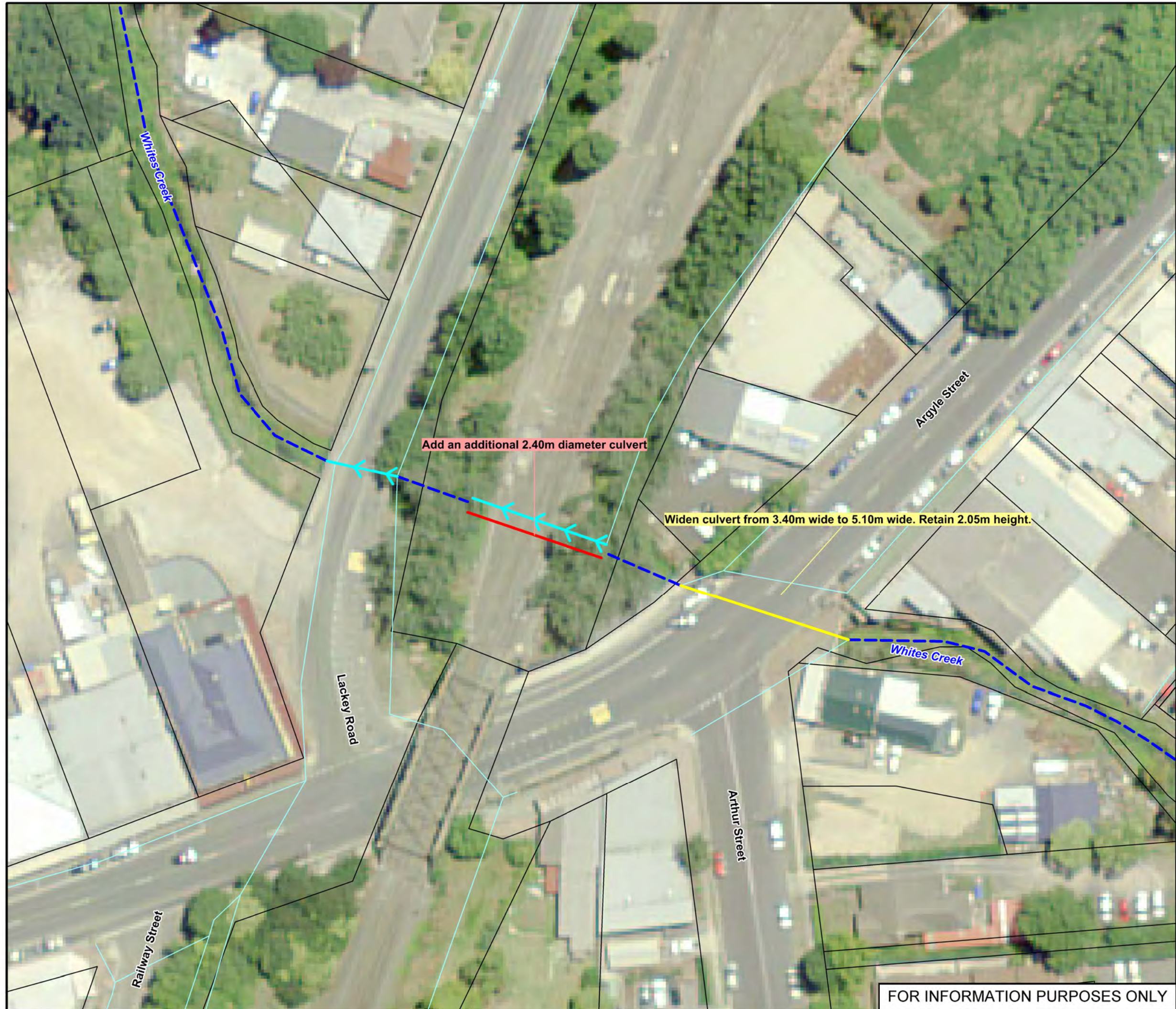


Figure 37: Concept Design to Upgrade Stormwater System along Argyle Street near Railway Street and Arthur Street (FM4)

Prepared By:
CatchmentSimulationSolutions
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Fig 37 - Concept Design FM4.wor

FOR INFORMATION PURPOSES ONLY



LEGEND

- Existing Channel Alignment
- Existing Structures
- Existing Stormwater Network
- Concept Design Features
 - Upgrades to Existing Stormwater Network
 - Additions to Existing Stormwater Network

Notes:
Aerial photograph date: 2013

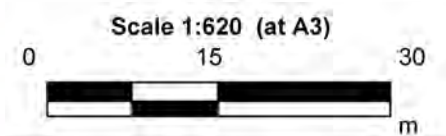
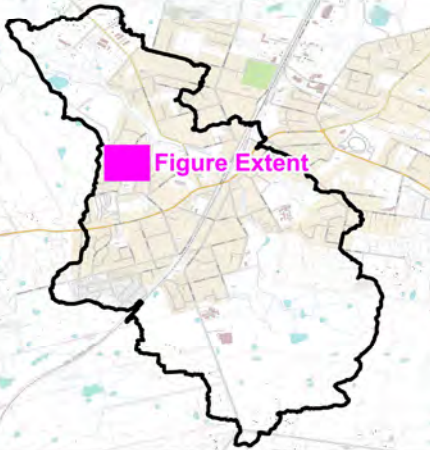


Figure 38: Concept Design to Upgrade Culverts along Whites Creek at Argyle Street and the Railway (FM5)

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

File Name: Fig 38 - Concept Design FM5.wor

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LEGEND

- Existing Stormwater Network
- Upgrades to Existing Stormwater Network
- Upgrade Details
- Additions to Existing Stormwater Network
- New Pipe Details
- Pits Upgraded with Double Inlet Size

Notes:
Aerial photograph date: 2013

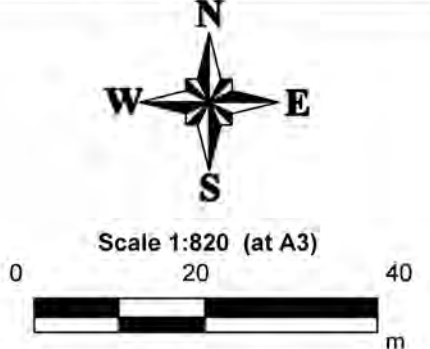
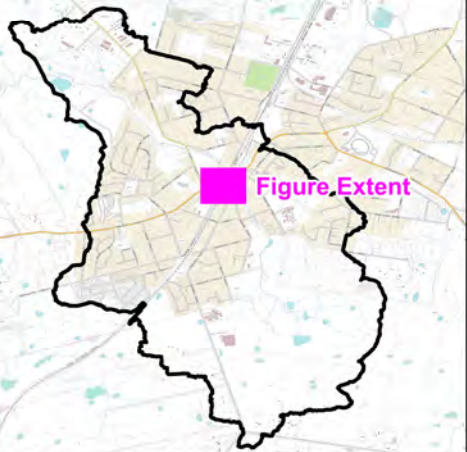
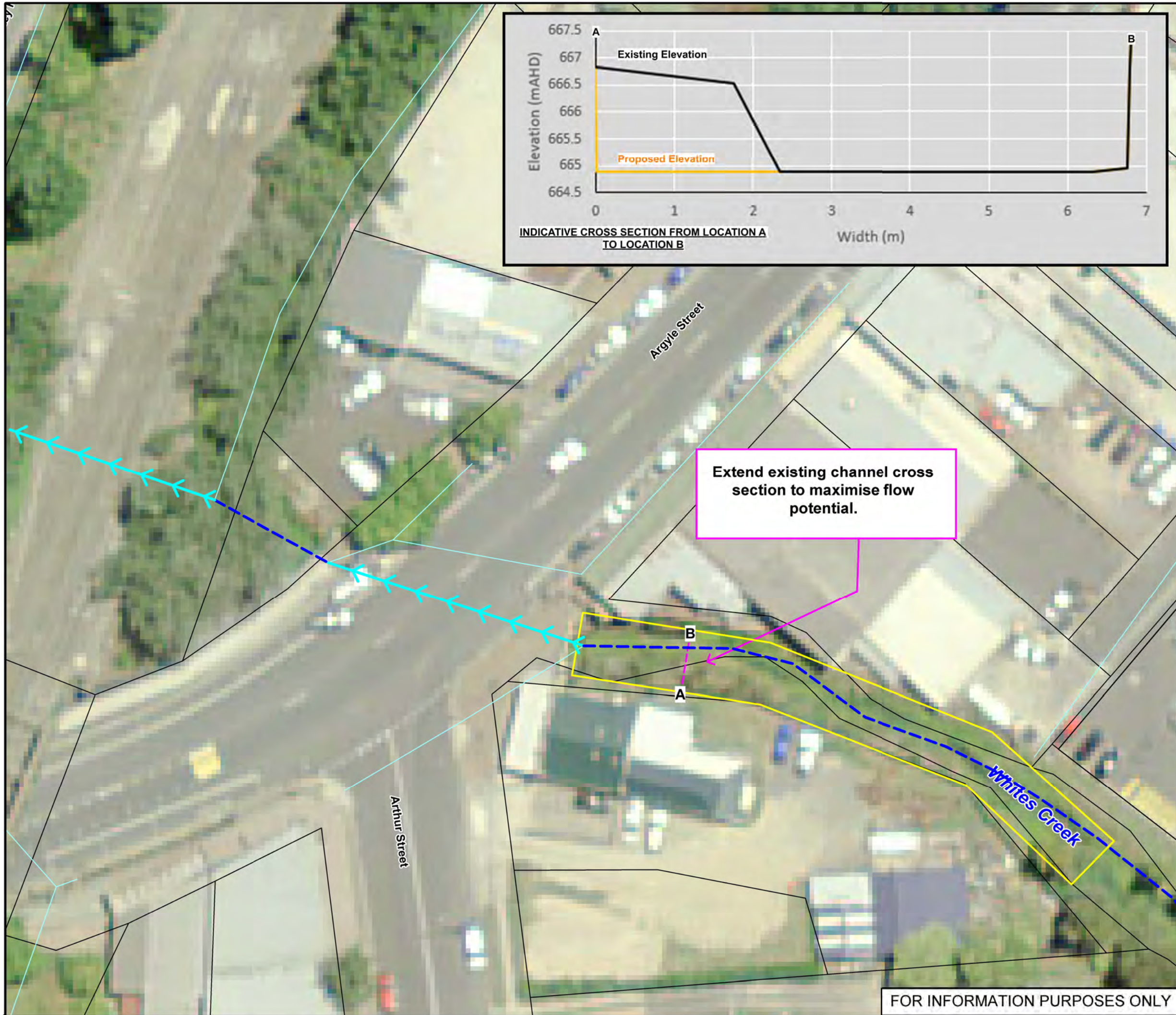


Figure 39: Concept Design to Upgrade Stormwater System on Willow Drive and Dangar Street (FM6)

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

File Name: Fig 39 - Concept Design FM6.wor

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LEGEND

- Existing Channel Alignment
- Existing Structures
- Existing Stormwater Network
- Channel Section to Upgrade

Notes:
Aerial photograph date: Jan 2009

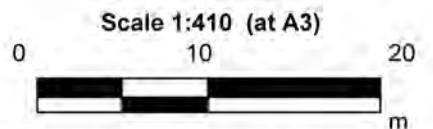


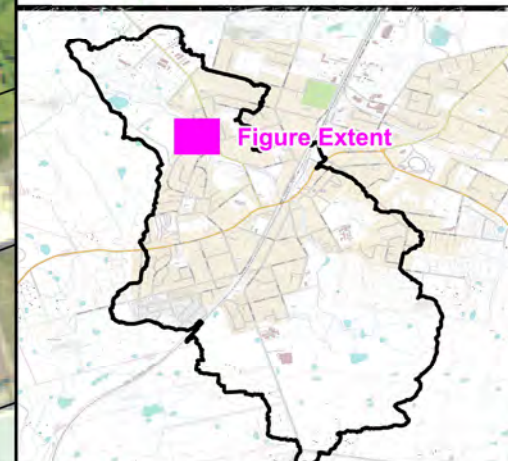
Figure 40: Concept Design for the Channel Reshaping of Whites Creek Upstream of Argyle Street (FM7)

Prepared By:


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

File Name: Fig 40 - Concept Design
FM7.wor







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LEGEND

 Extent of Changes for "Option A"

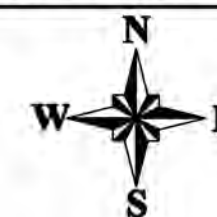
Terrain Differences for "Option B"

From Depth	To Depth	Colour	Depth Range	Volume
-1.50	-1.00		0m3	CUT
-1.00	-0.50		619m3	CUT
-0.50	0.00		2478m3	CUT
0.00	0.50		660m3	FILL
0.50	1.00		240m3	FILL
1.00	1.50		0m3	FILL

Preliminary Cut Volume = -3097m3
Preliminary Fill Volume = 900m3
Preliminary Net Volume = -2197m3

Notes:

Aerial photograph date: Jan 2009



Scale 1:1,100 (at A3)

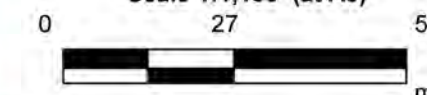



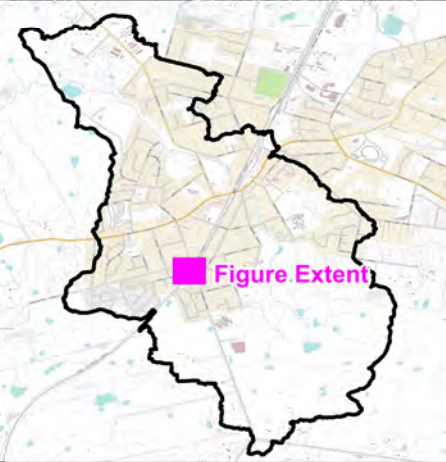
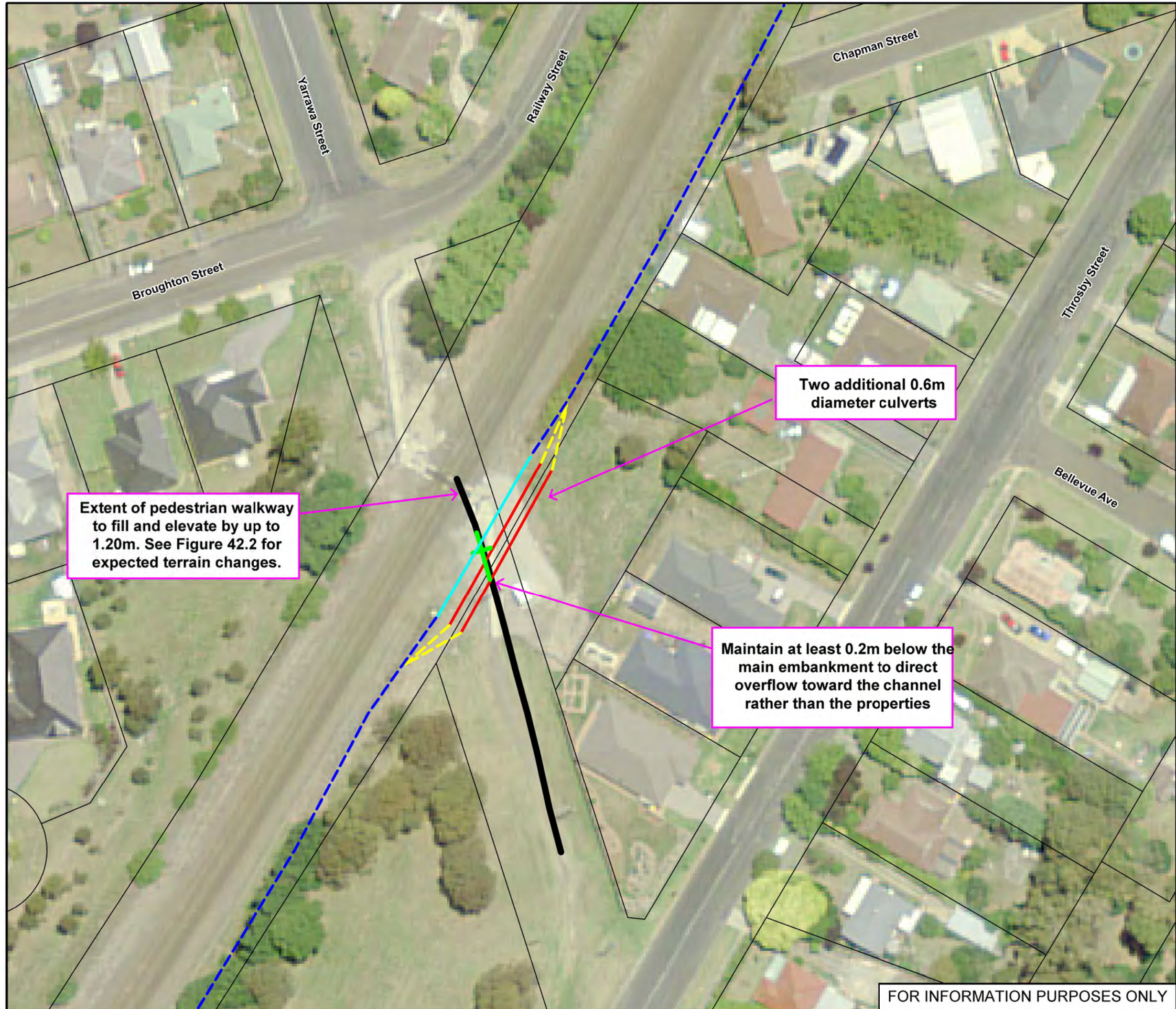
Figure 41: Concept Design to Lower Floodplain Elevations of Whites Creek between 6-12 Berrima Road (FM8)

Prepared By:

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

File Name: Fig 41 - Concept Design
FM8.wor

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LEGEND

- Existing Channel
- Existing Culvert
- Proposed Pedestrian Walkway Alignment
- + Proposed Spillway
- Additional Culvert
- Channel Extension

Notes:
Aerial photograph date: 2013

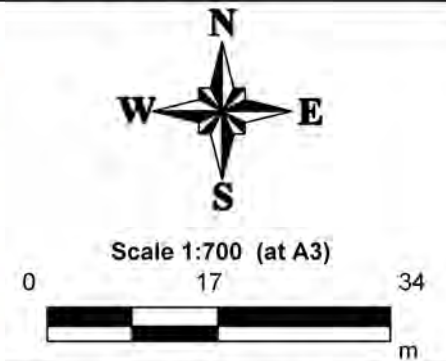
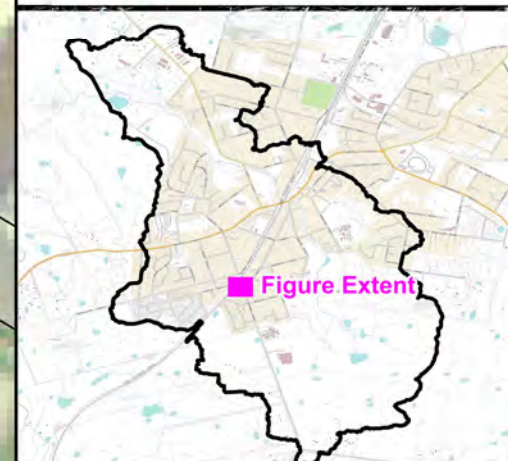


Figure 42.1: Concept Design to Elevate Pedestrian Walkway in Walton Park between Railway and Throsby Street (FM9)

Prepared By:
CatchmentSimulationSolutions
Suite 10.01, 70 Phillip St
Sydney, NSW 2000

File Name: Fig 42.1 - Concept Design
FM9.wor

FOR INFORMATION PURPOSES ONLY



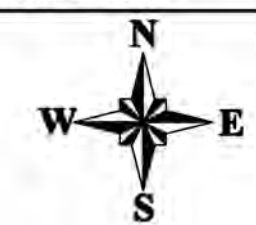
LEGEND

Terrain Differences

From Depth	To Depth	Colour	Depth Range	Volume
-1.20	-0.80	Dark Green	13m3	CUT
-0.80	-0.40	Green	23m3	CUT
-0.40	0.00	Light Green	25m3	CUT
0.00	0.40	Orange	126m3	FILL
0.40	0.80	Brown	95m3	FILL
0.80	1.20	Dark Brown	48m3	FILL
Preliminary Cut Volume = -61m3				
Preliminary Fill Volume = 269m3				
Preliminary Net Volume = 208m3				

Notes:

Aerial photograph date: 2013



Scale 1:410 (at A3)

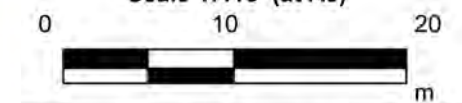



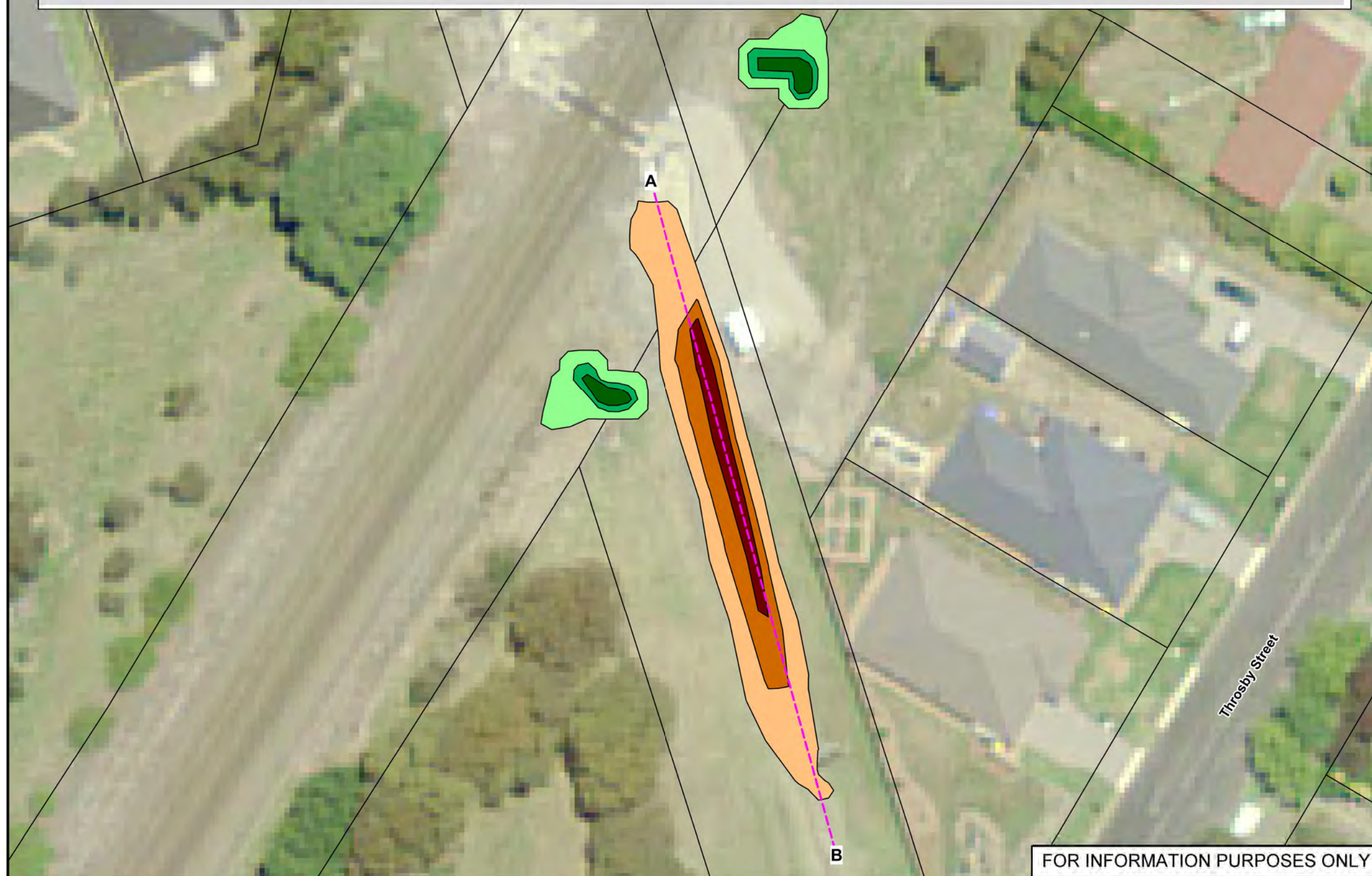
Figure 42.2: Concept Design to Elevate Pedestrian Walkway in Walton Park between Railway and Throsby Street (FM9)

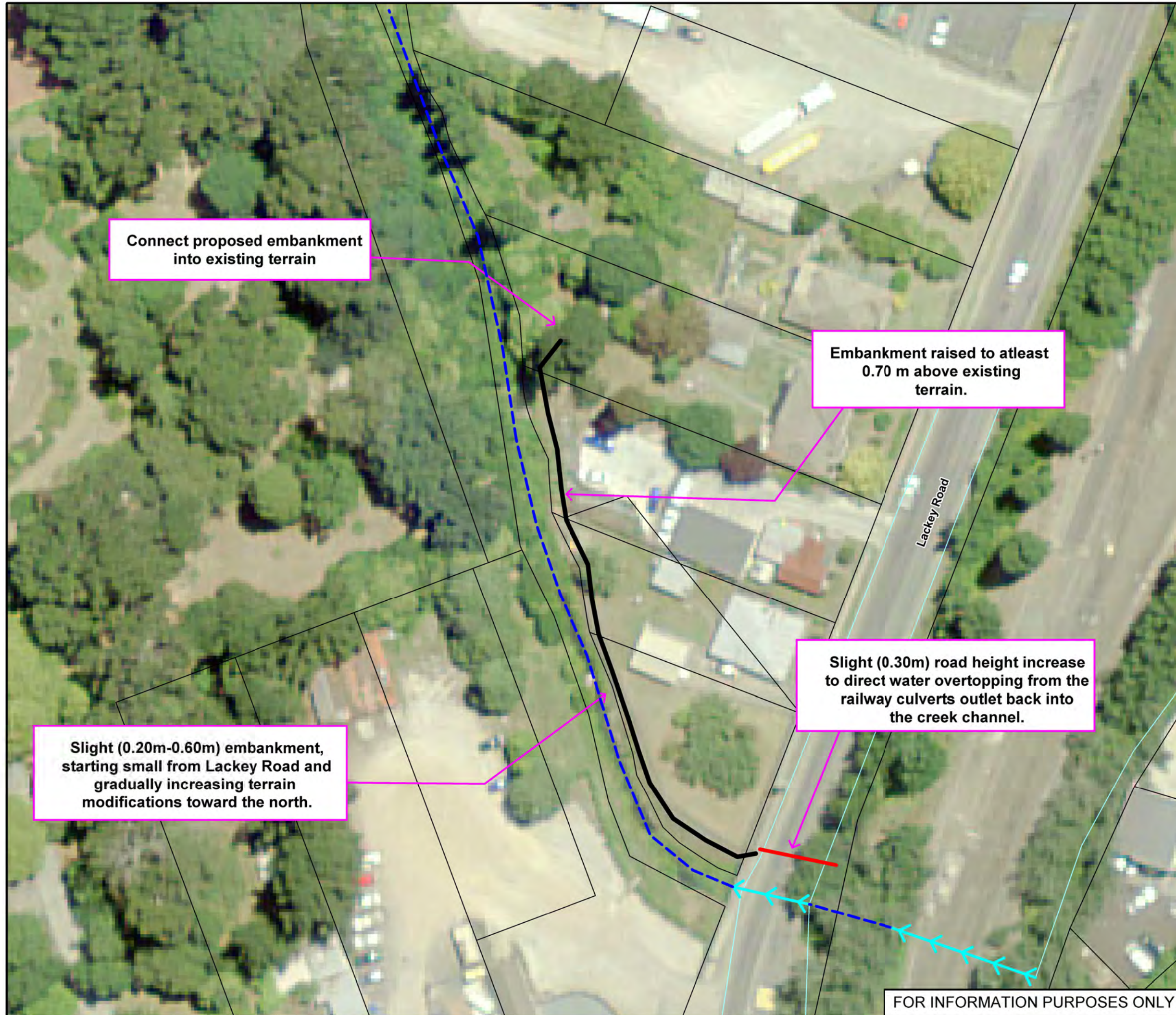
Prepared By:

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

File Name: Fig 42.2 - Concept Design FM9.wor

FOR INFORMATION PURPOSES ONLY



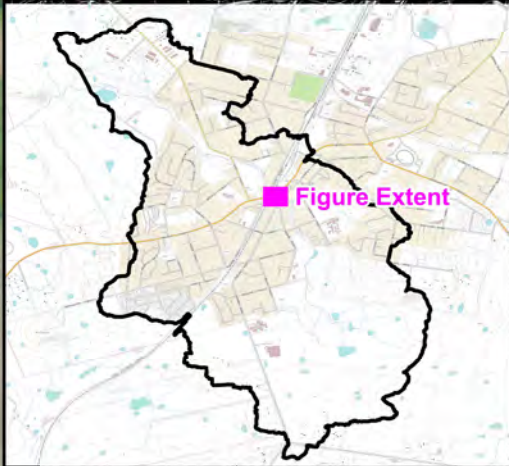


Connect proposed embankment into existing terrain

Embankment raised to atleast 0.70 m above existing terrain.

Slight (0.30m) road height increase to direct water overtopping from the railway culverts outlet back into the creek channel.

Slight (0.20m-0.60m) embankment, starting small from Lackey Road and gradually increasing terrain modifications toward the north.



LEGEND

- Existing Channel Alignment
- Existing Structures
- Existing Stormwater Network
- Proposed Levee
- Elevated Road Section

Notes:
Aerial photograph date: 2013

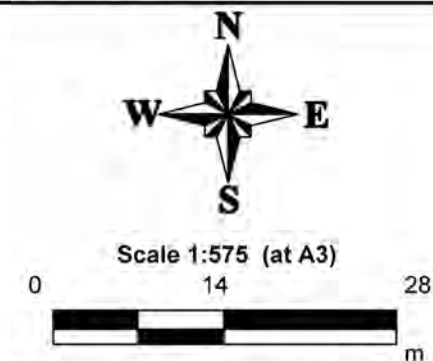
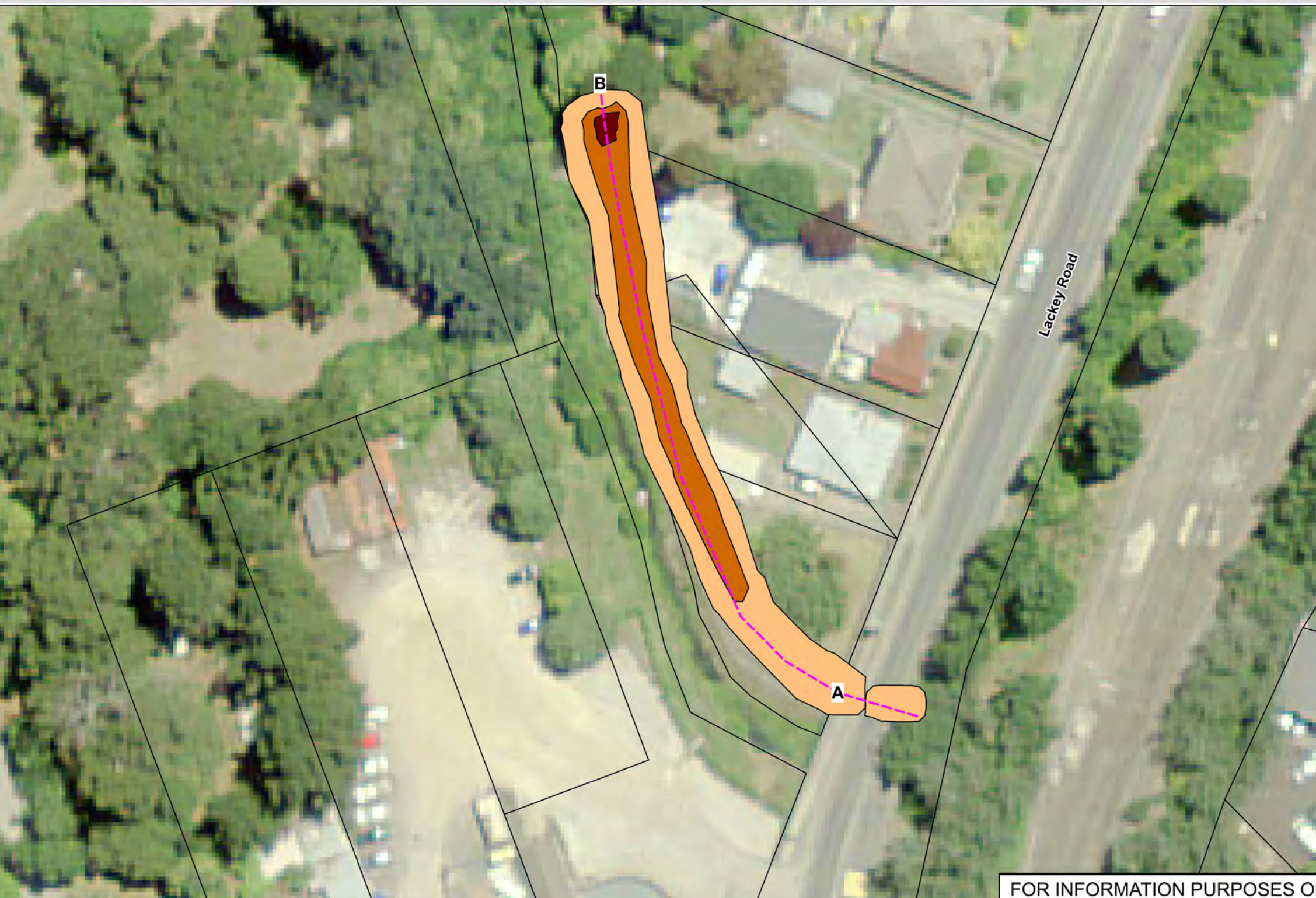
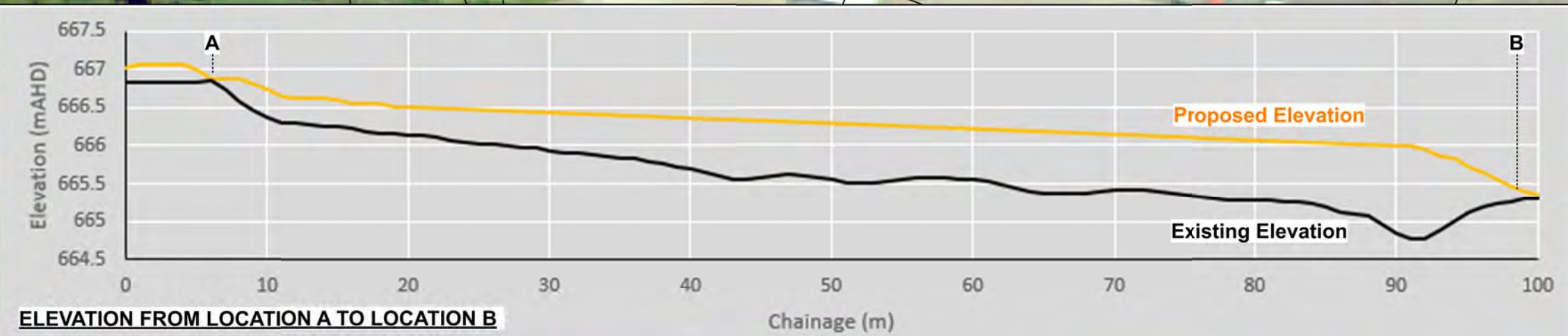
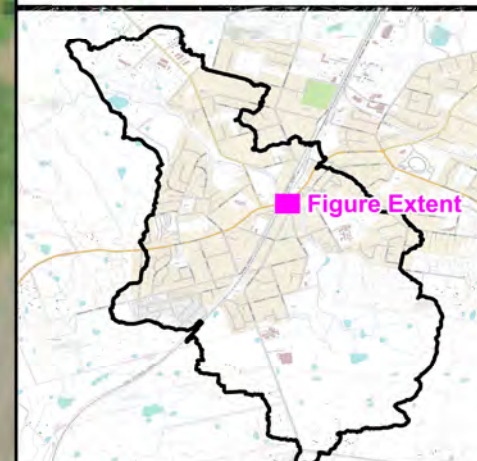


Figure 43.1: Concept Design to Construct Levee on Eastern Bank of Whites Creek near 201-207 Lackey Road (FM10)

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

File Name: Fig 43.1 - Concept Design FM10.wor

FOR INFORMATION PURPOSES ONLY



LEGEND

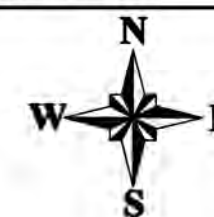
Terrain Differences

From Depth	To Depth	Colour	Depth Range	Volume
-1.50	-1.00	Dark Green	0m3	CUT
-1.00	-0.50	Green	0m3	CUT
-0.50	0.00	Light Green	0m3	CUT
0.00	0.50	Orange	241m3	FILL
0.50	1.00	Dark Orange	48m3	FILL
1.00	1.50	Dark Red	7m3	FILL

Preliminary Cut Volume = 0m3
Preliminary Fill Volume = 297m3
Preliminary Net Volume = 297m3

Notes:

Aerial photograph date: 2013



Scale 1:575 (at A3)

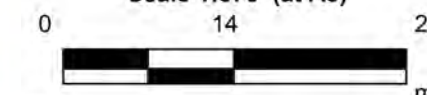



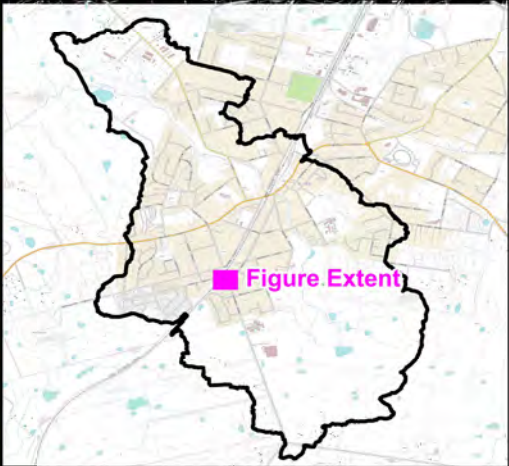
Figure 43.2: Concept Design to Construct Bund/Levee on Eastern Bank of Whites Creek near 201-207 Lackey Road (FM10)

Prepared By:


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

File Name: Fig 43.2 - Concept Design
FM10.wor

FOR INFORMATION PURPOSES ONLY



LEGEND

 Extent of Embankment Changes

Notes:
Aerial photograph date: 2013

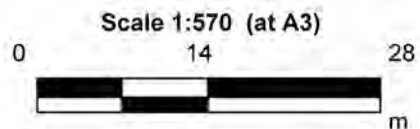

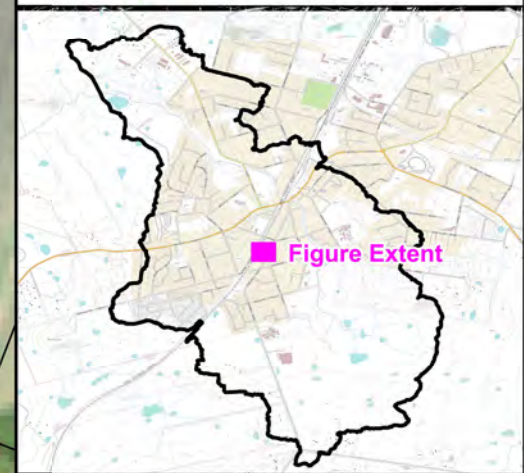


Figure 44: Concept Design to Modify Existing Overland Flowpath and/or Existing Levee at 71-77 Throsby Street (FM11)

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File Name: Fig 44 - Concept Design FM11.wor

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LEGEND

— Extent of Embankment Changes

Notes:
Aerial photograph date: 2013

Scale 1:570 (at A3)

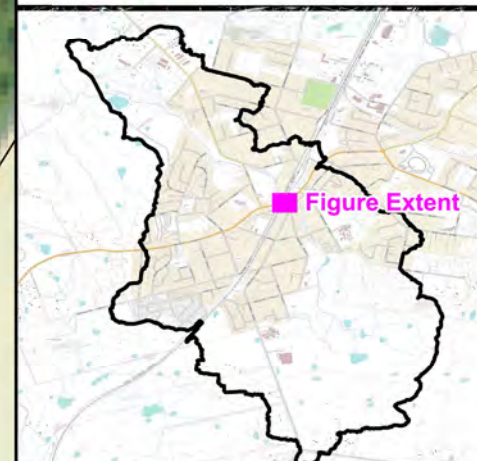
0 14 28 m

Figure 45: Concept Design to Construct bund wall/levee on Bank of Railway Swale at rear of 51-55 Throsby Street (FM12)

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File Name: Fig 45 - Concept Design FM12.wor

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LEGEND

Terrain Differences

From Depth	To Depth	Colour	Depth Range	Volume
-0.90	-0.60	Dark Green	7m3	CUT
-0.60	-0.30	Green	27m3	CUT
-0.30	0.00	Light Green	87m3	CUT
0.00	0.30	Orange	0m3	FILL
0.30	0.60	Dark Orange	0m3	FILL
0.60	0.90	Red	0m3	FILL

Preliminary Cut Volume = 121m3
Preliminary Fill Volume = 0m3
Preliminary Net Volume = -121m3

Notes:

Aerial photograph date: 2013



Scale 1:500 (at A3)

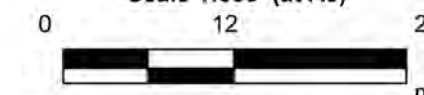



Figure 46: Concept Design for the Regrading of Lackey Road from Argyle Street to Whites Creek (FM13)

Prepared By:

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Sydney, NSW 2000

File Name: Fig 46 - Concept Design
FM13.wor



Lower terrain, regrade and seal to provide scour protection.

Incorporate existing driveway into the regraded terrain. Lower and adapt existing kerbs to avoid water pooling on the road.

Gradually grade the slope down, heading up Lackey Road toward Whites Creek. Maintain acceptable road slopes so road is still trafficable.

Start regrade from the low point where water gathers between Lackey Road and Argyle Street.

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