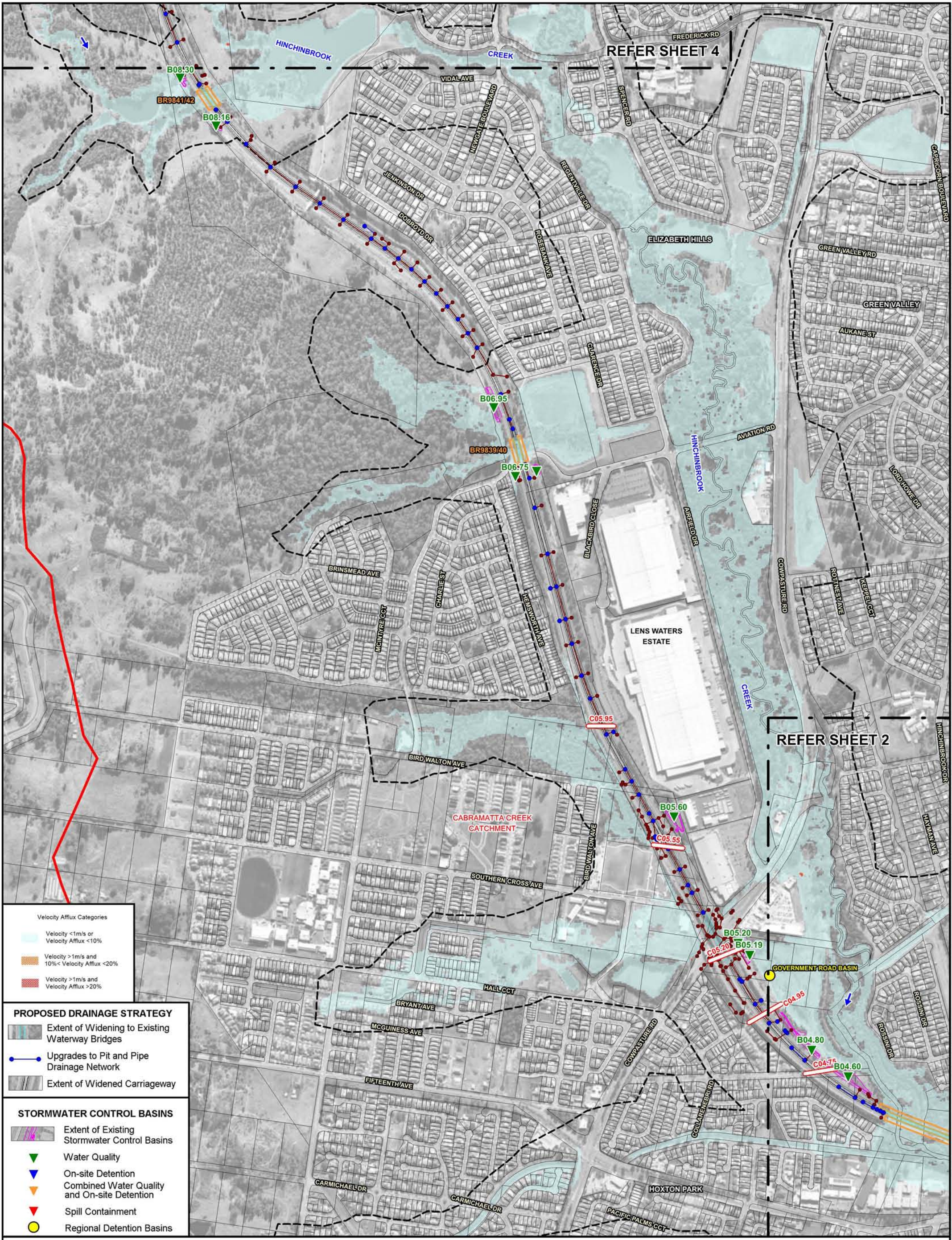




Appendix G - Part 4

Surface Water and Flooding Impact Assessment



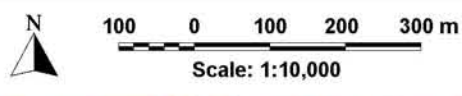
REFER SHEET 4

REFER SHEET 2

- Velocity Afflux Categories
- Velocity <1m/s or Velocity Afflux <10%
 - Velocity >1m/s and 10% < Velocity Afflux <20%
 - Velocity >1m/s and Velocity Afflux >20%

- PROPOSED DRAINAGE STRATEGY
- Extent of Widening to Existing Waterway Bridges
 - Upgrades to Pit and Pipe Drainage Network
 - Extent of Widened Carriageway

- STORMWATER CONTROL BASINS
- Extent of Existing Stormwater Control Basins
 - Water Quality
 - On-site Detention
 - Combined Water Quality and On-site Detention
 - Spill Containment
 - Regional Detention Basins



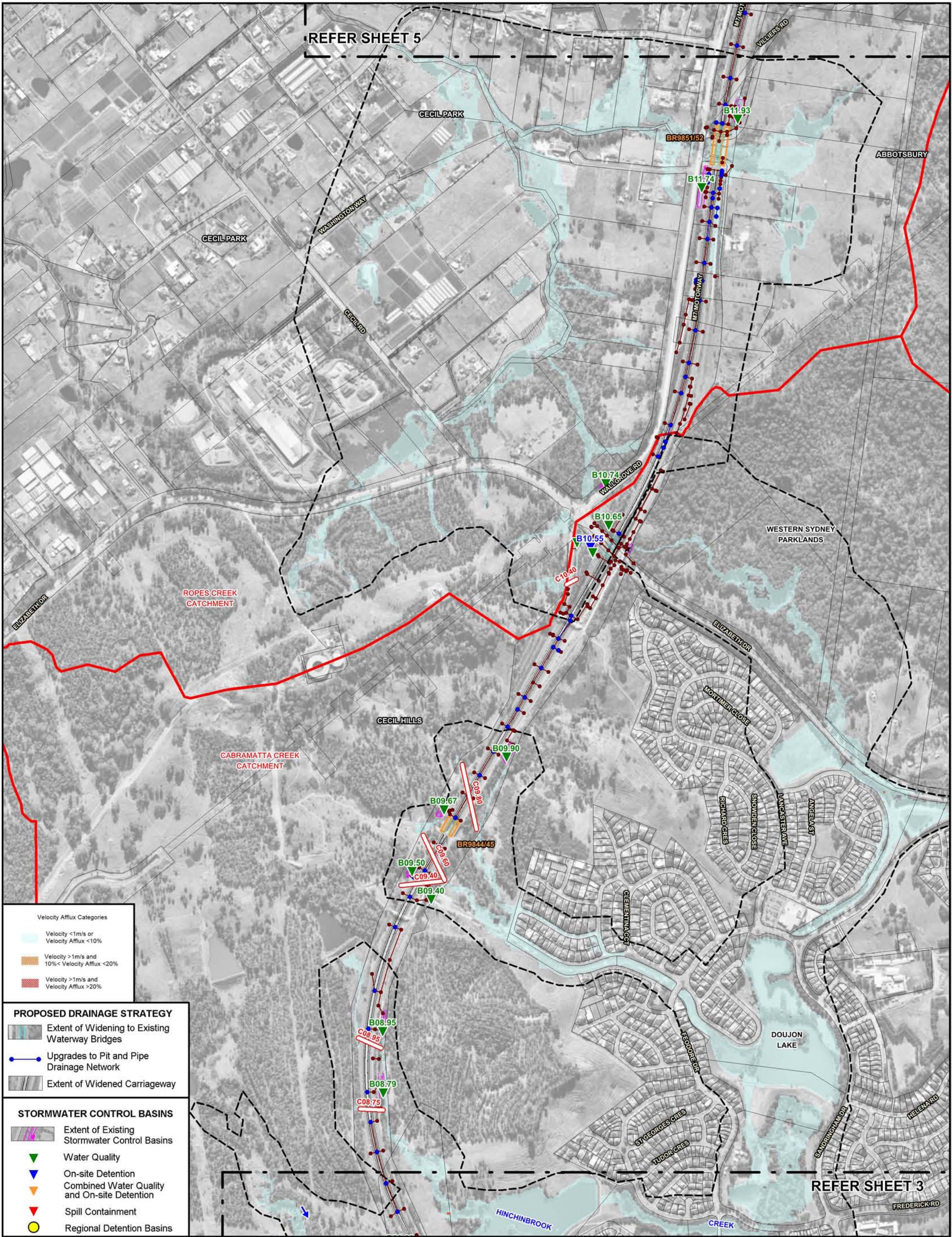
- LEGEND
- Extent of Major Catchments
 - Existing Bridge Waterway Crossing and Identifier
 - Existing M7 Motorway Pit and Pipe Drainage Network

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure C.18
(Sheet 3 of 8)

IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
5% AEP



Velocity Afflux Categories

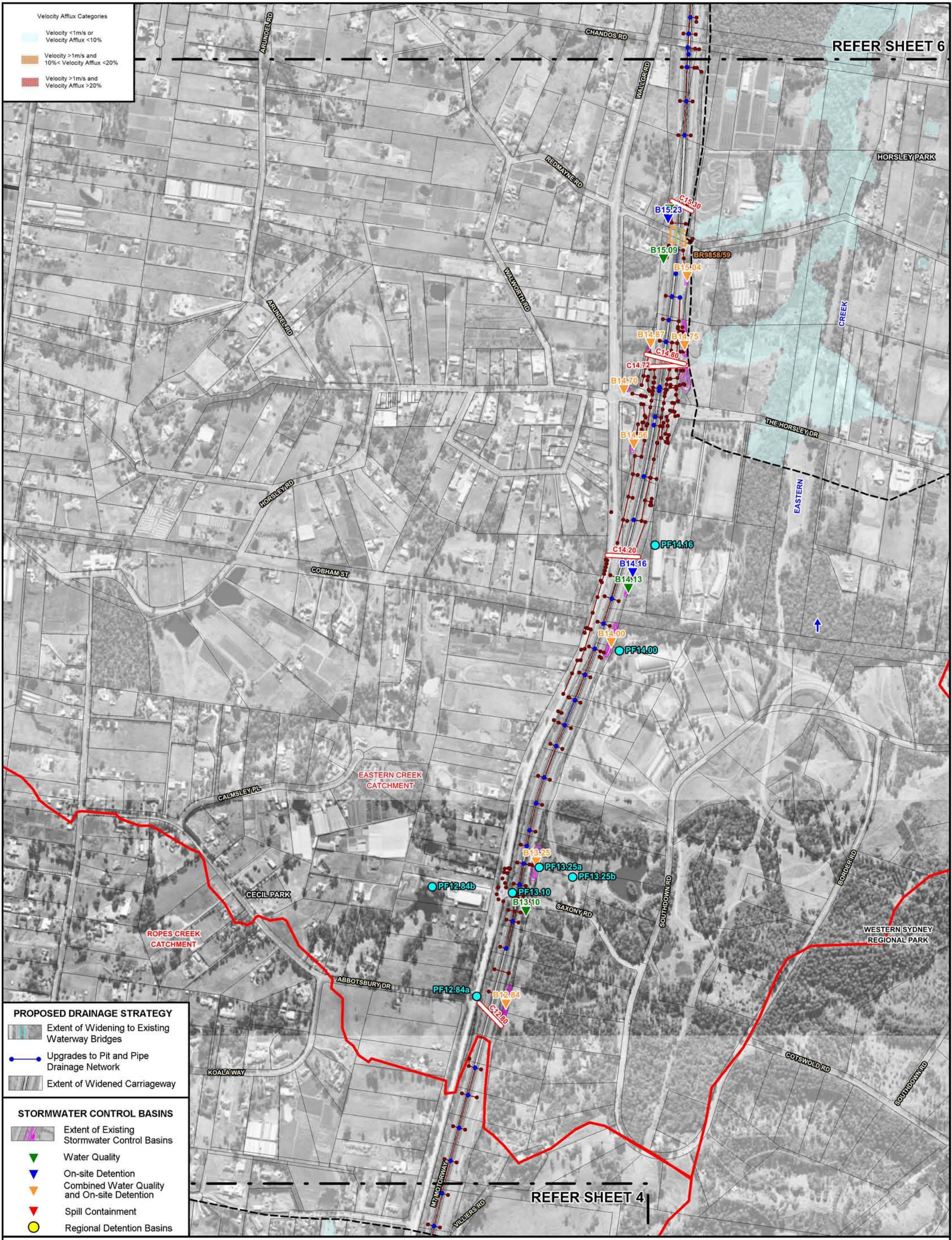
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- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins



Velocity Afflux Categories

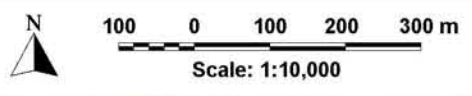
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- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins



LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- Peak Flow Location and Identifier

LEGEND

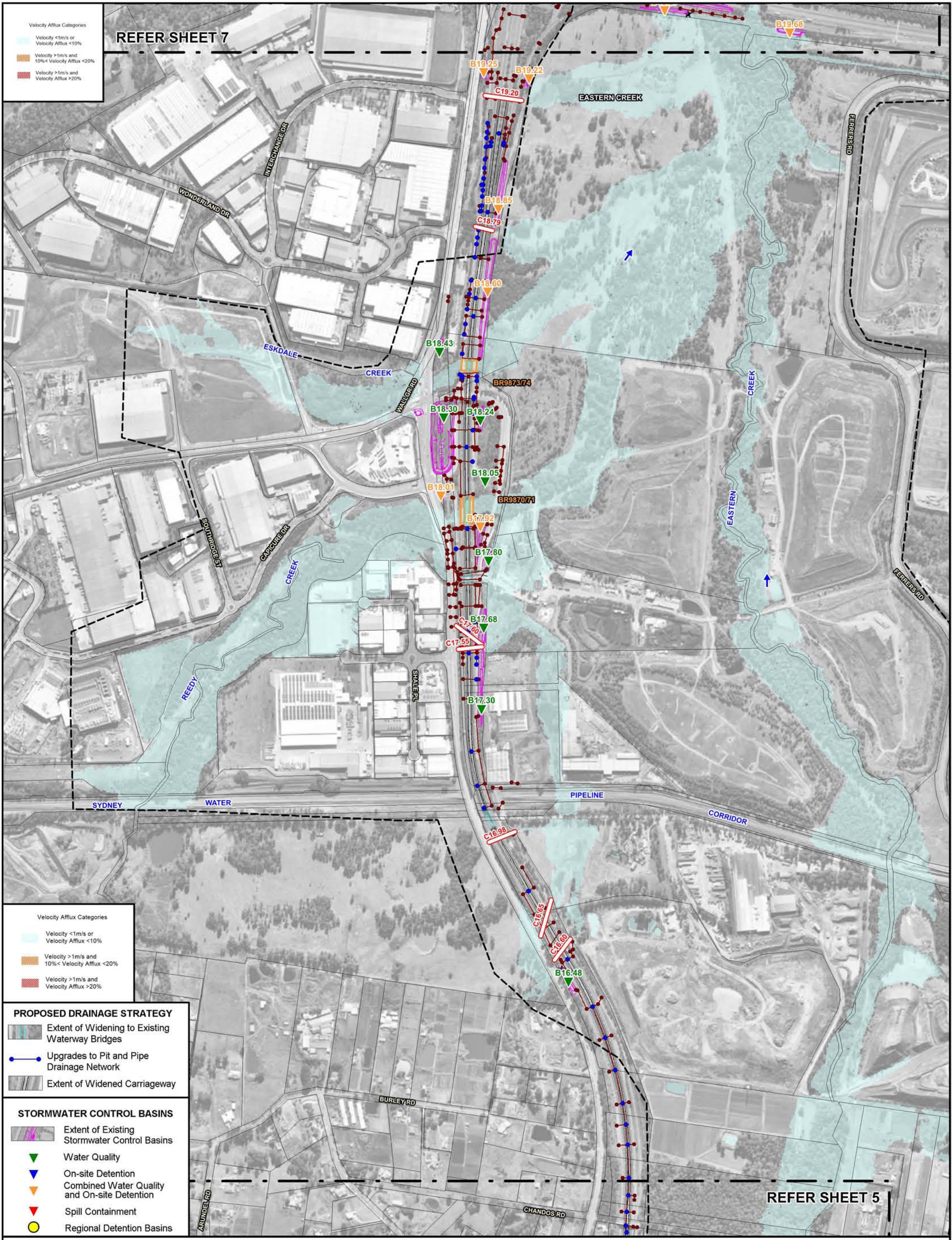
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
5% AEP

Figure C.18
(Sheet 5 of 8)





Velocity Afflux Categories

- Velocity <1m/s or Velocity Afflux <10%
- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

Velocity Afflux Categories

- Velocity <1m/s or Velocity Afflux <10%
- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

Scale: 1:10,000

100 0 100 200 300 m

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

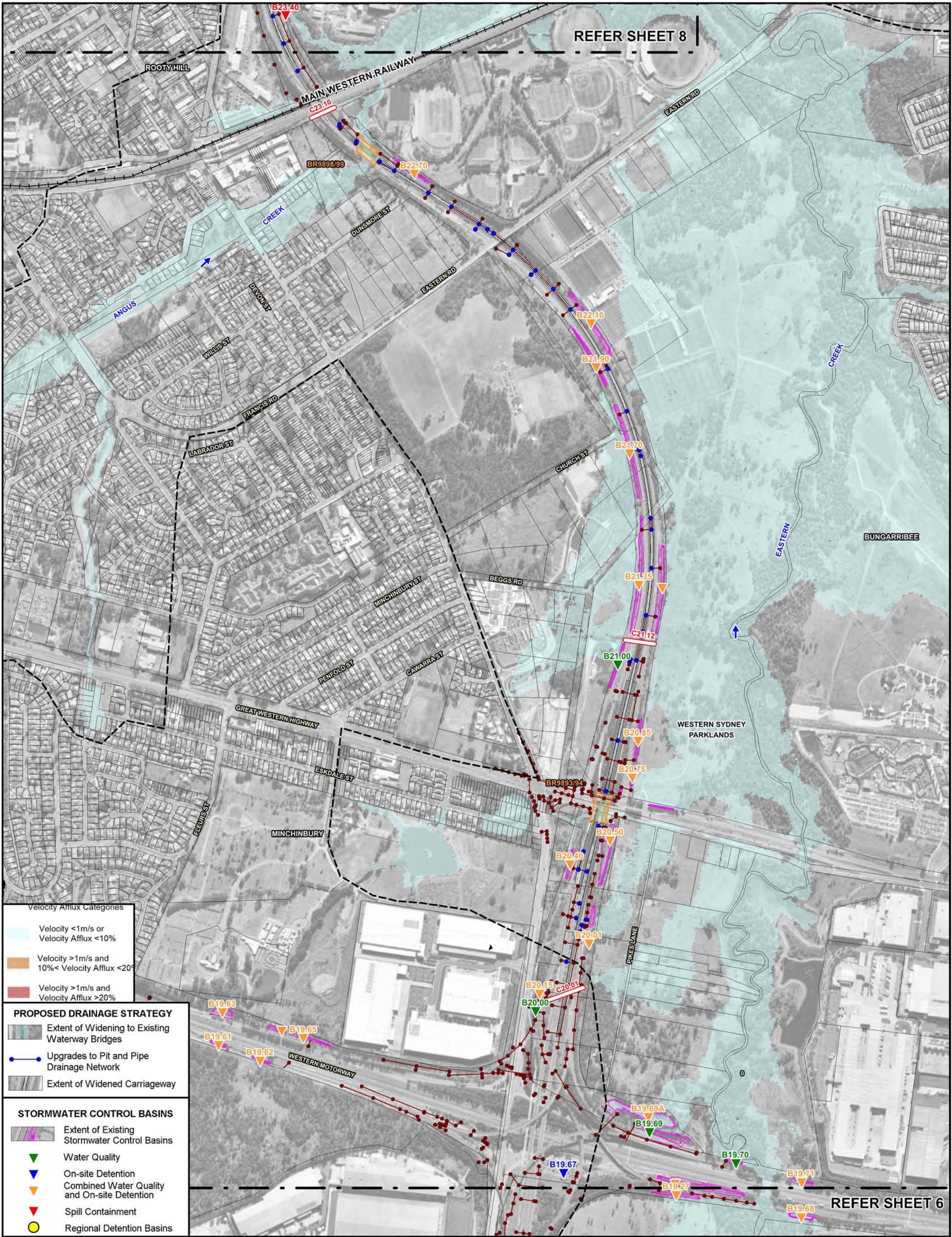
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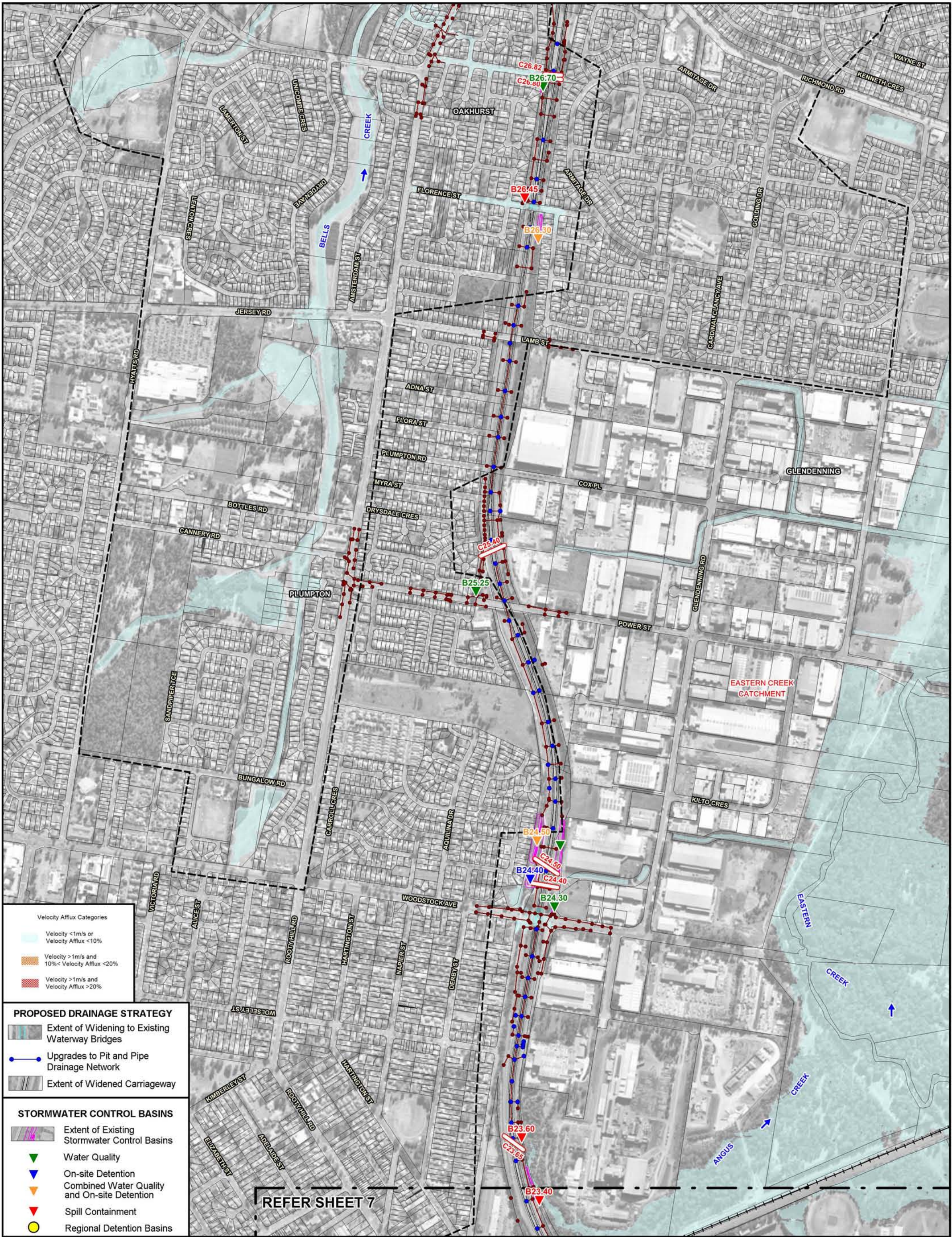
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
5% AEP

Figure C.18
(Sheet 6 of 8)





Velocity Afflux Categories

- Velocity <1m/s or Velocity Afflux <10%
- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

N
100 0 100 200 300 m
Scale: 1:10,000

Lyall & Associates

LEGEND

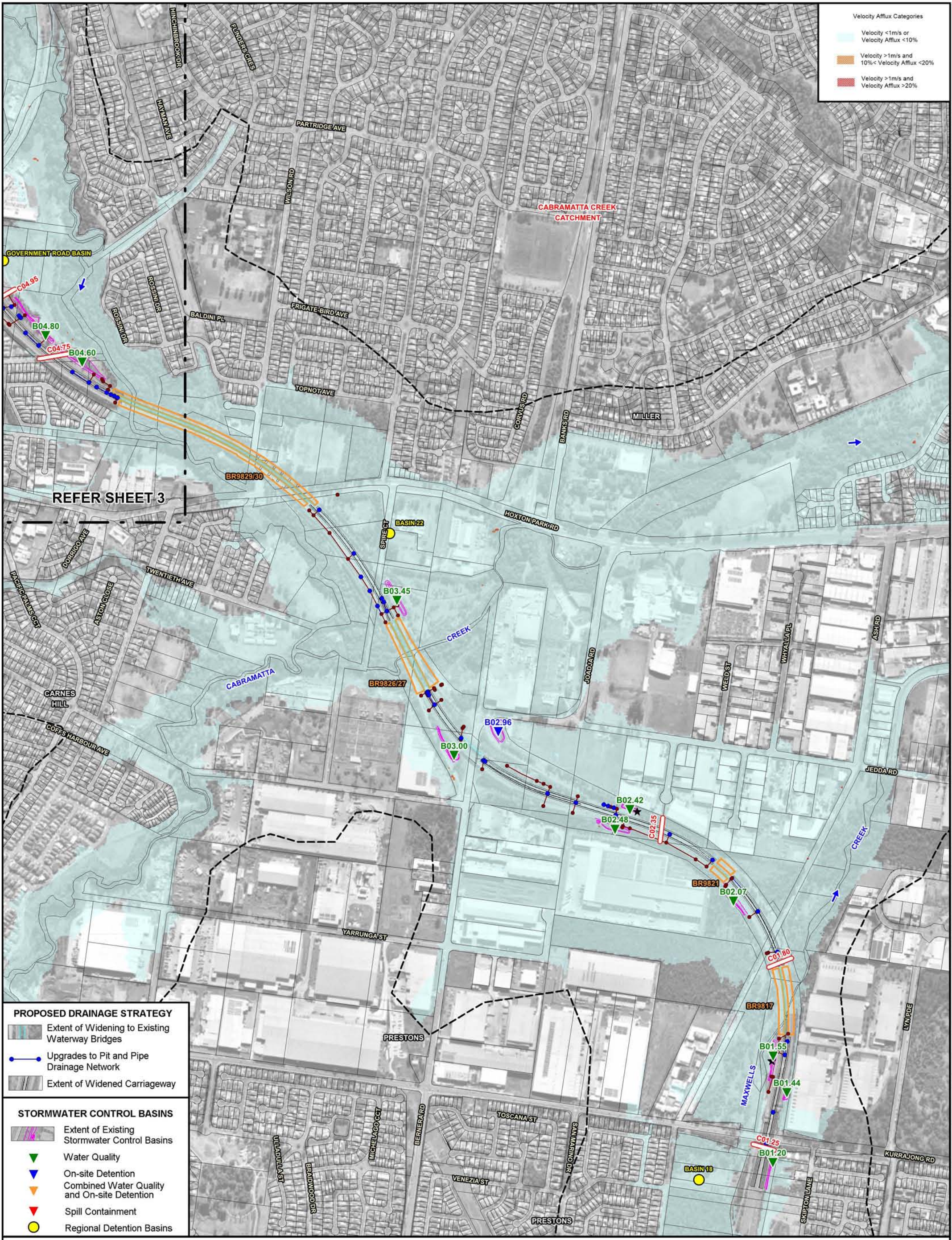
- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
5% AEP

Figure C.18
(Sheet 8 of 8)



Velocity Afflux Categories

- Velocity <1m/s or Velocity Afflux <10%
- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

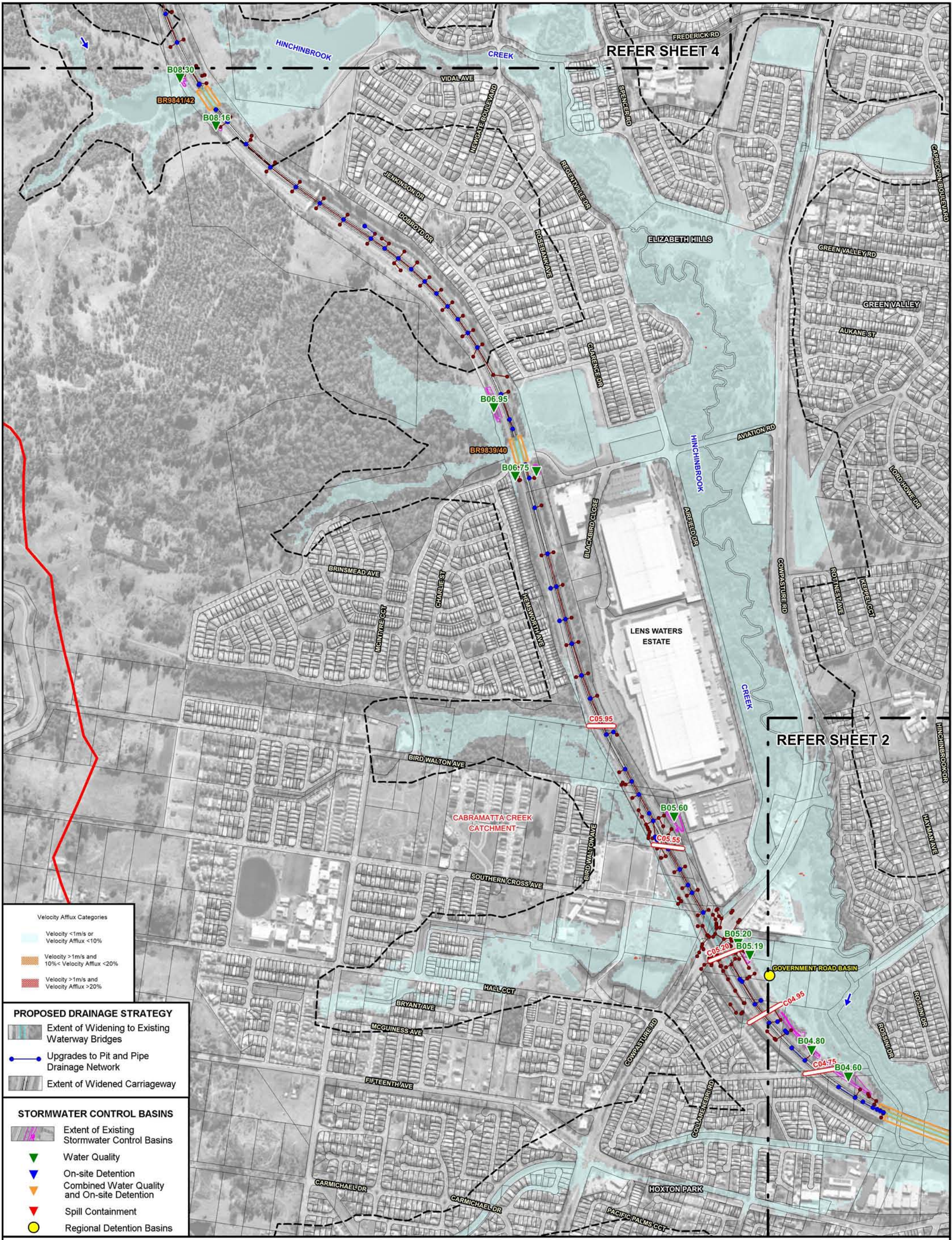
WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

Figure C.19
(Sheet 2 of 8)
IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
1% AEP

Scale: 1:10,000





Velocity Afflux Categories

- Velocity <1m/s or Velocity Afflux <10%
- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

N

100 0 100 200 300 m

Scale: 1:10,000

Lyall & Associates

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- C01.25
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING

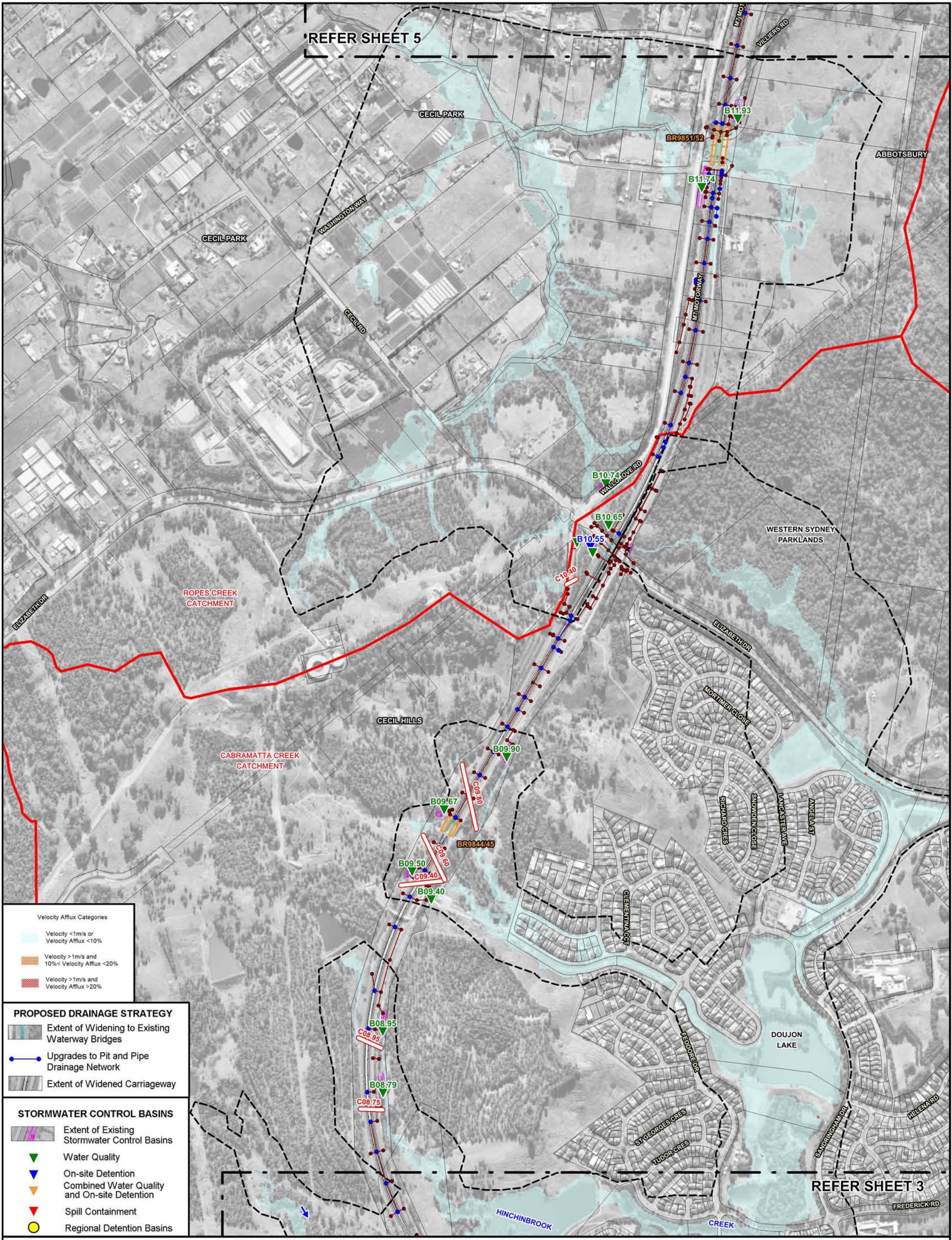
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

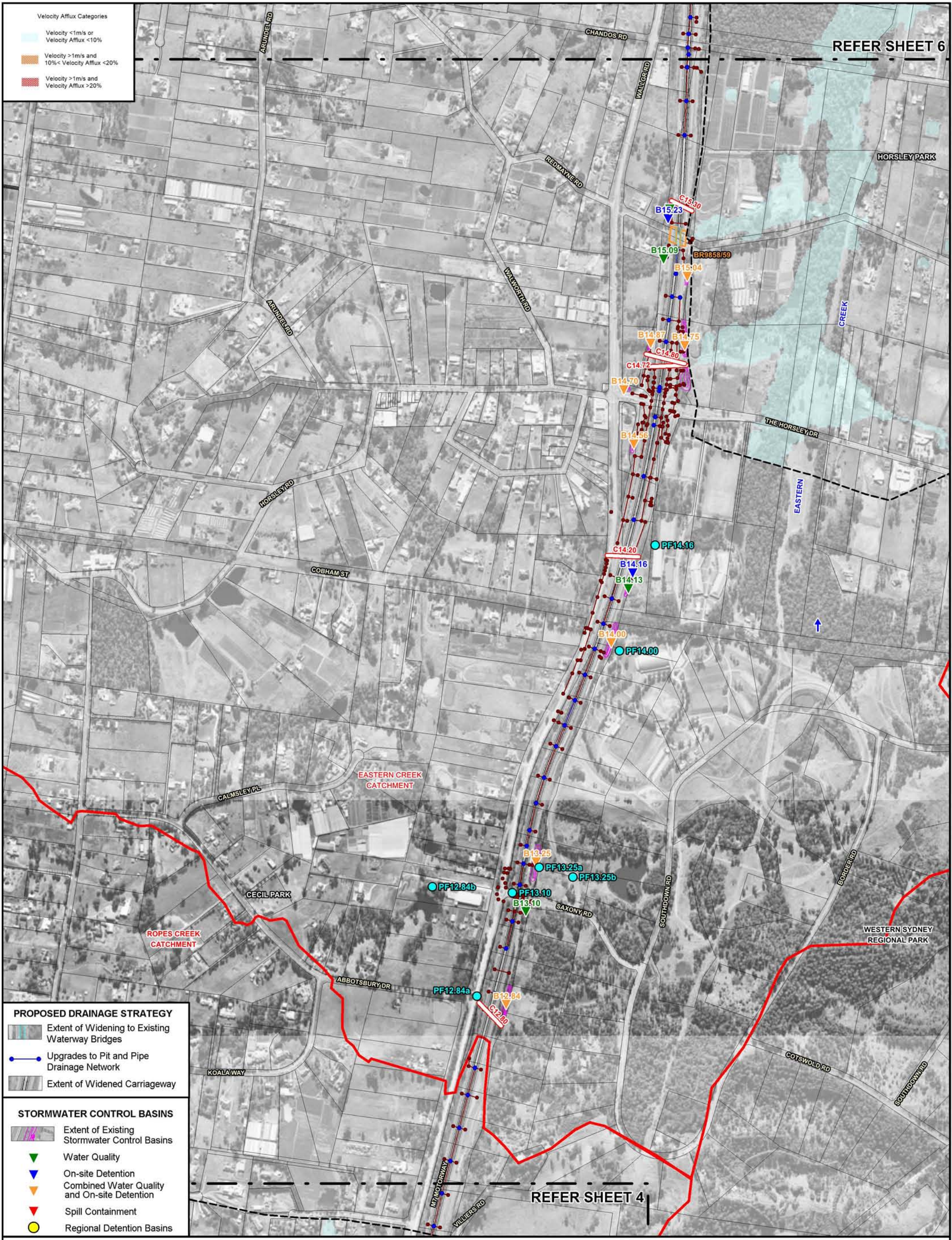
IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES

1% AEP

Figure C.19

(Sheet 3 of 8)





100 0 100 200 300 m
Scale: 1:10,000



LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- Peak Flow Location and Identifier

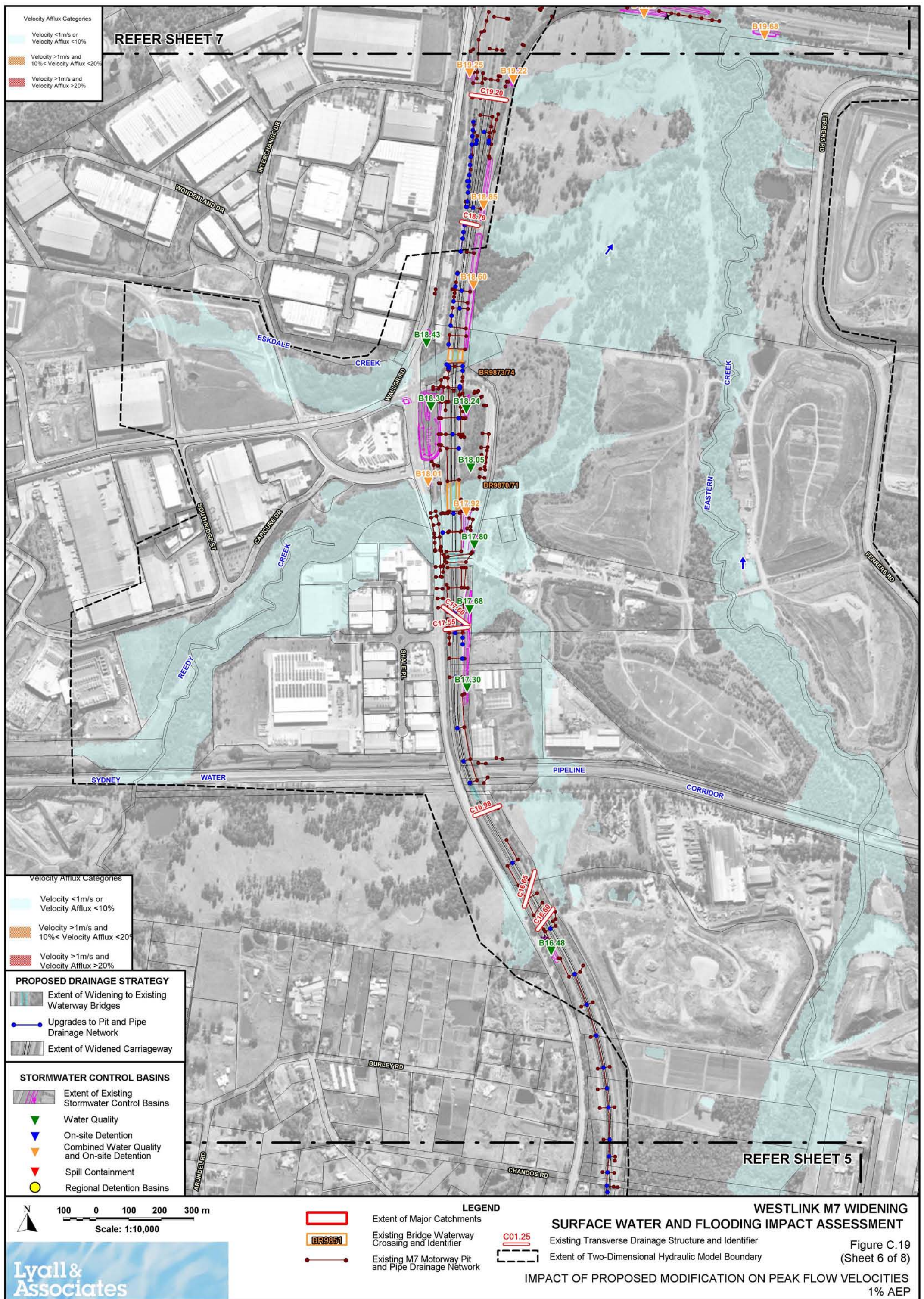
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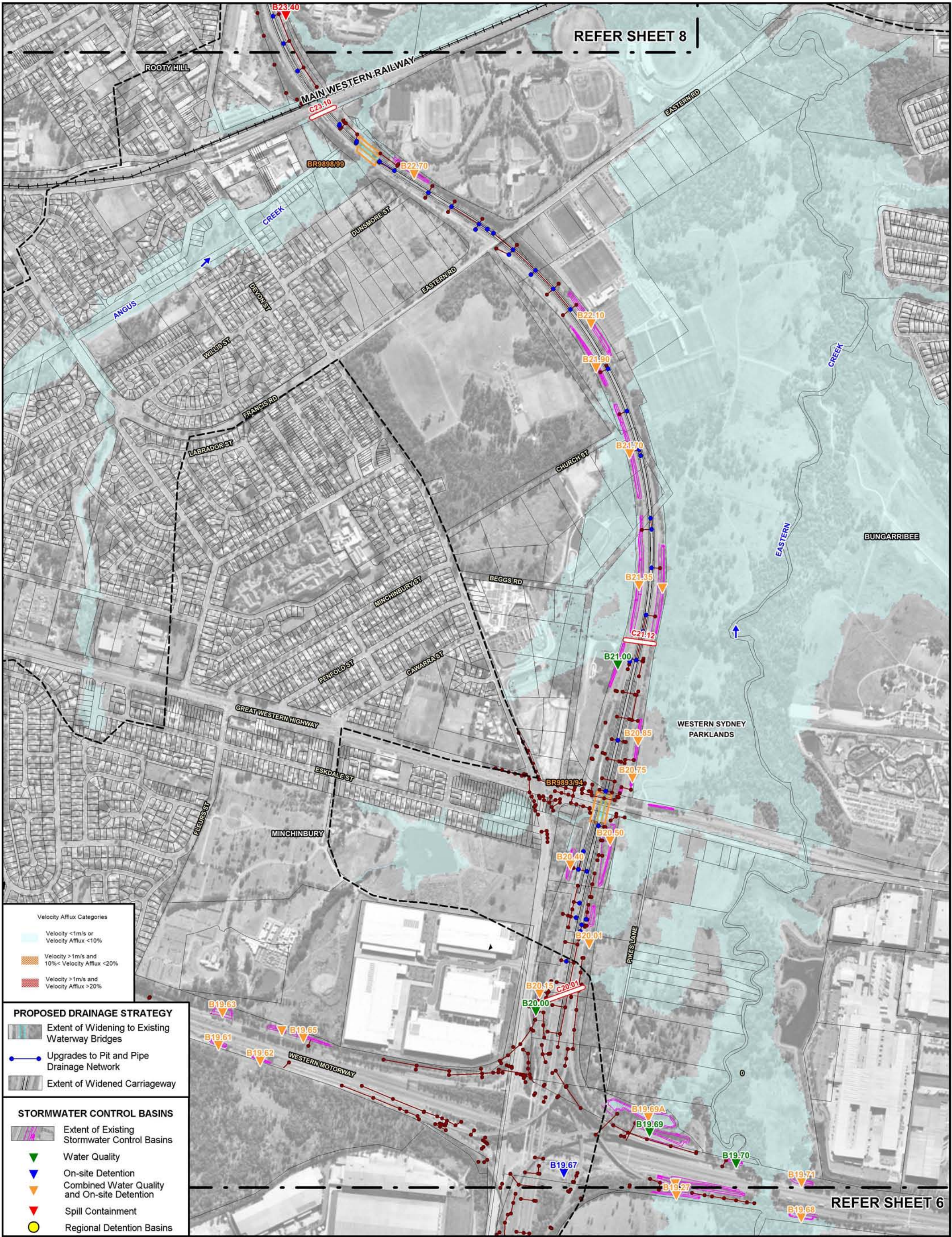
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

IMPACT OF PROPOSED MODIFICATION ON PEAK FLOW VELOCITIES
1% AEP

Figure C.19
(Sheet 5 of 8)





Velocity Afflux Categories

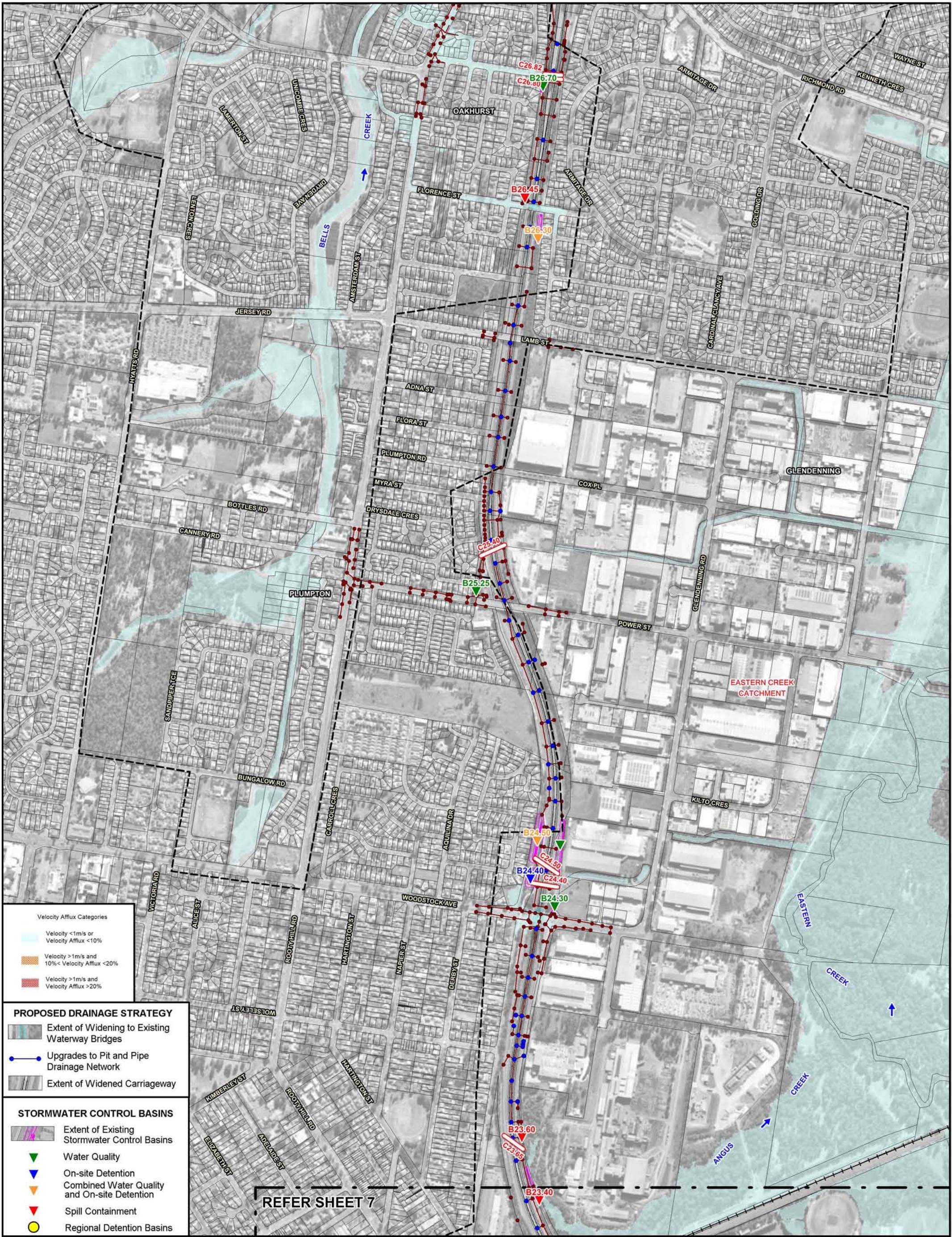
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- Velocity >1m/s and 10% < Velocity Afflux <20%
- Velocity >1m/s and Velocity Afflux >20%

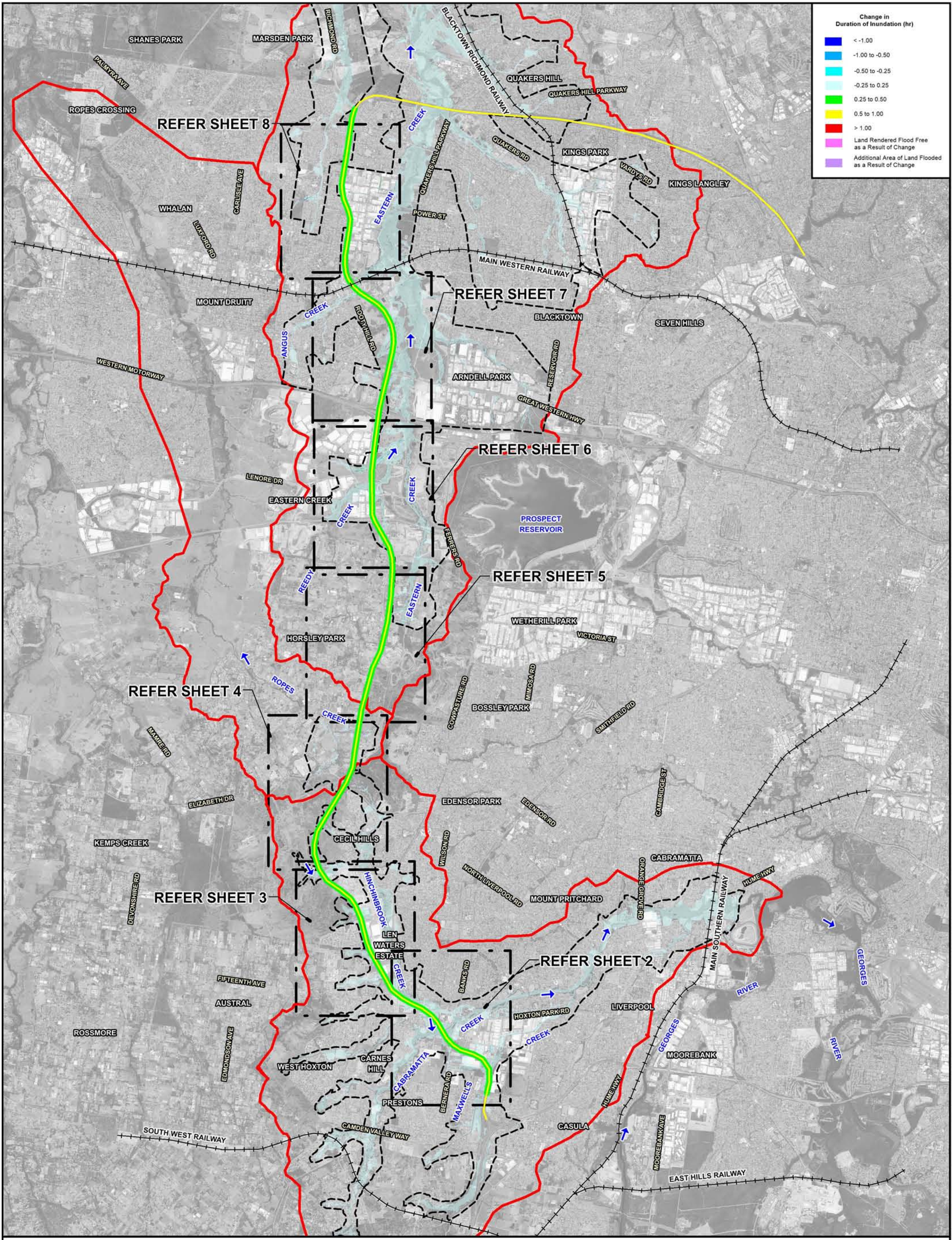
PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins





**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

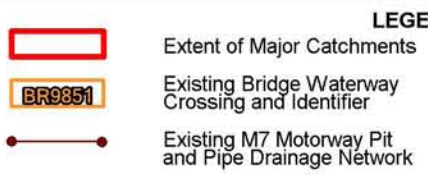
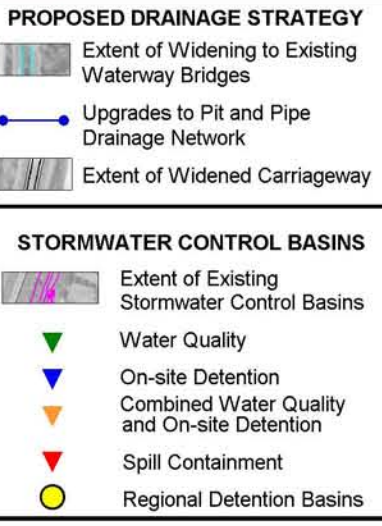
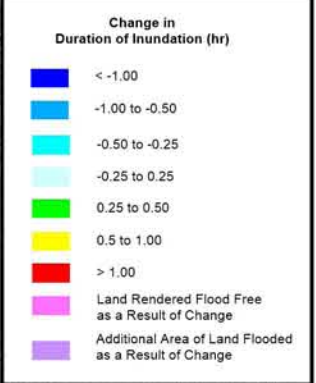
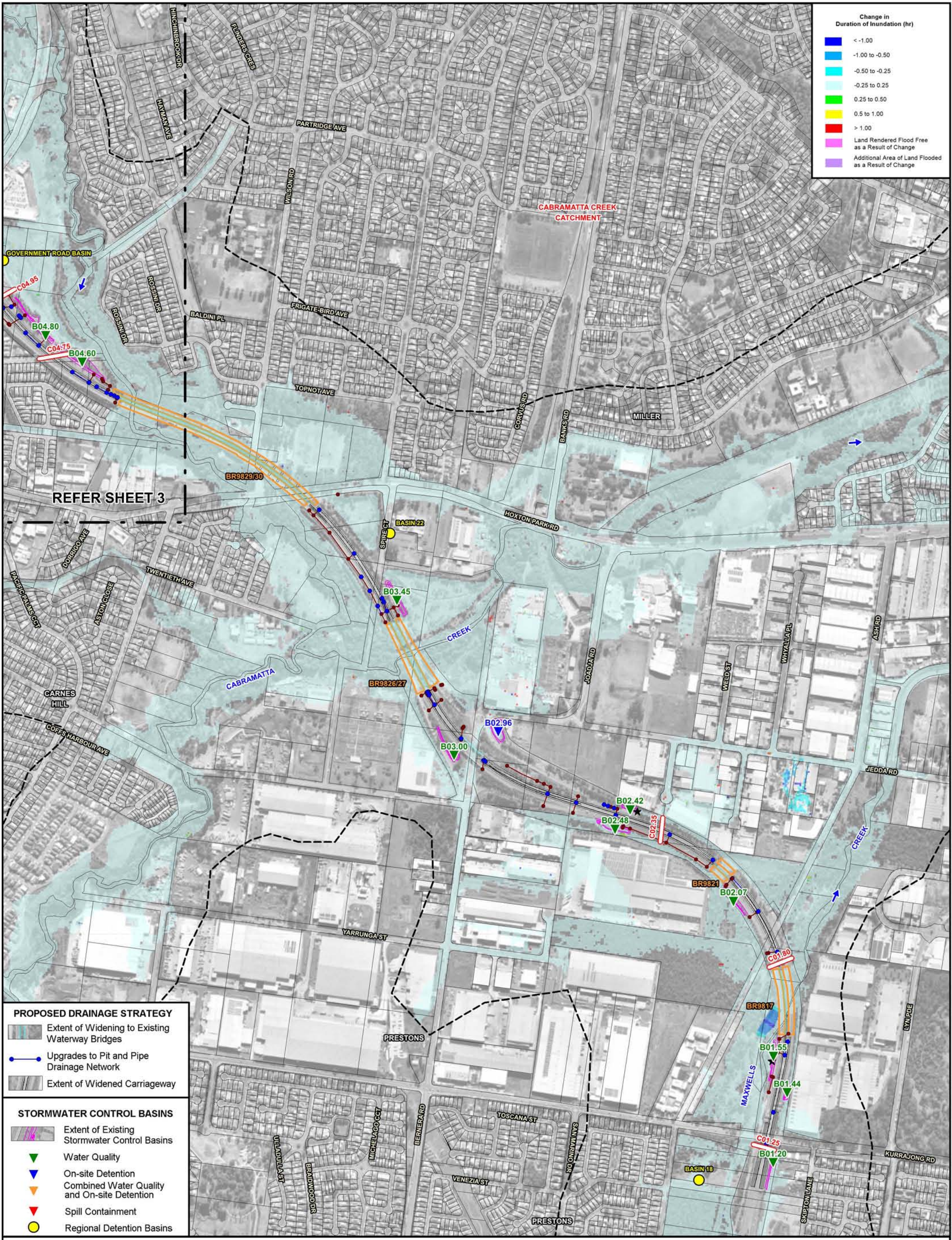
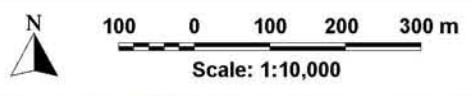
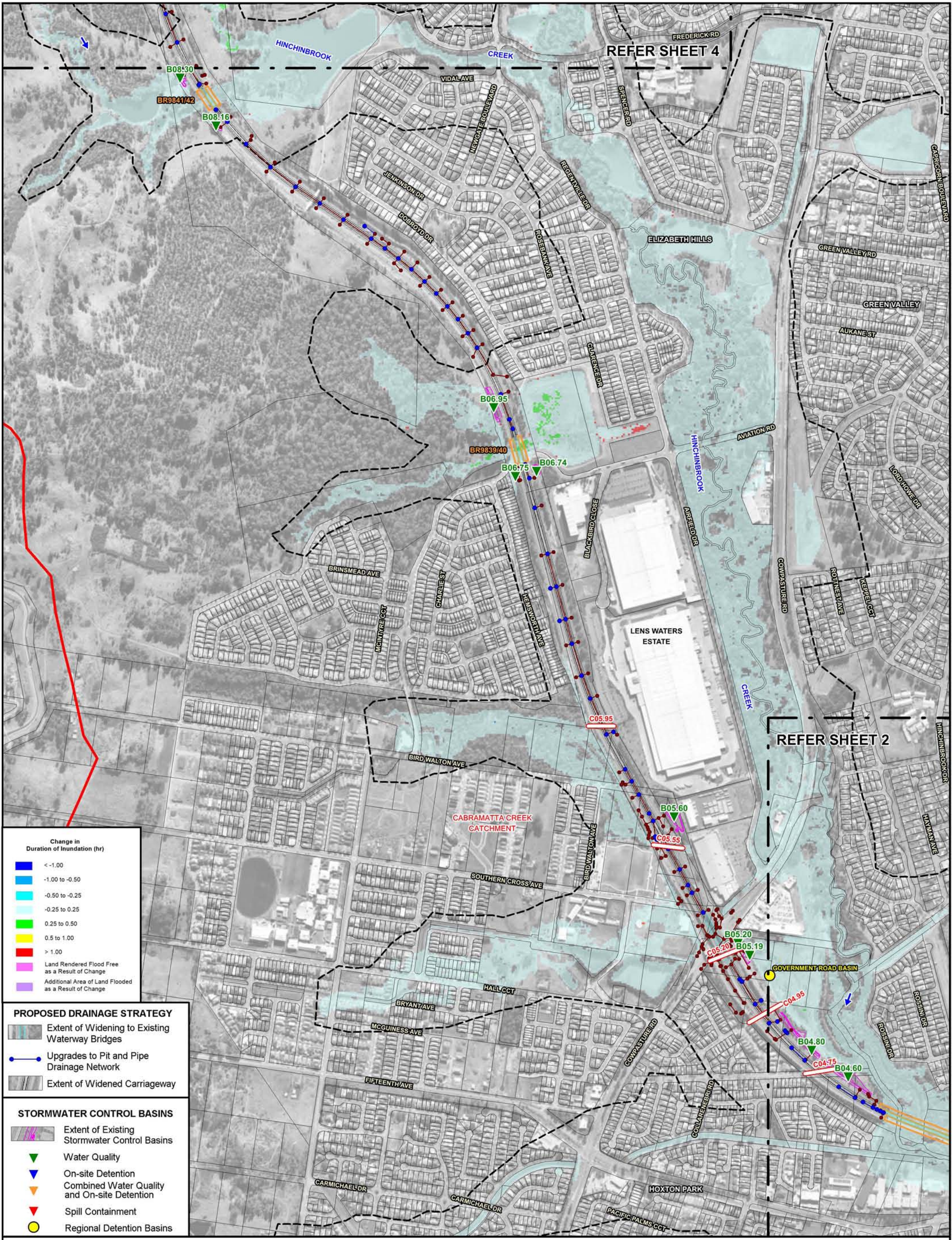


Figure C.20 (Sheet 2 of 8)

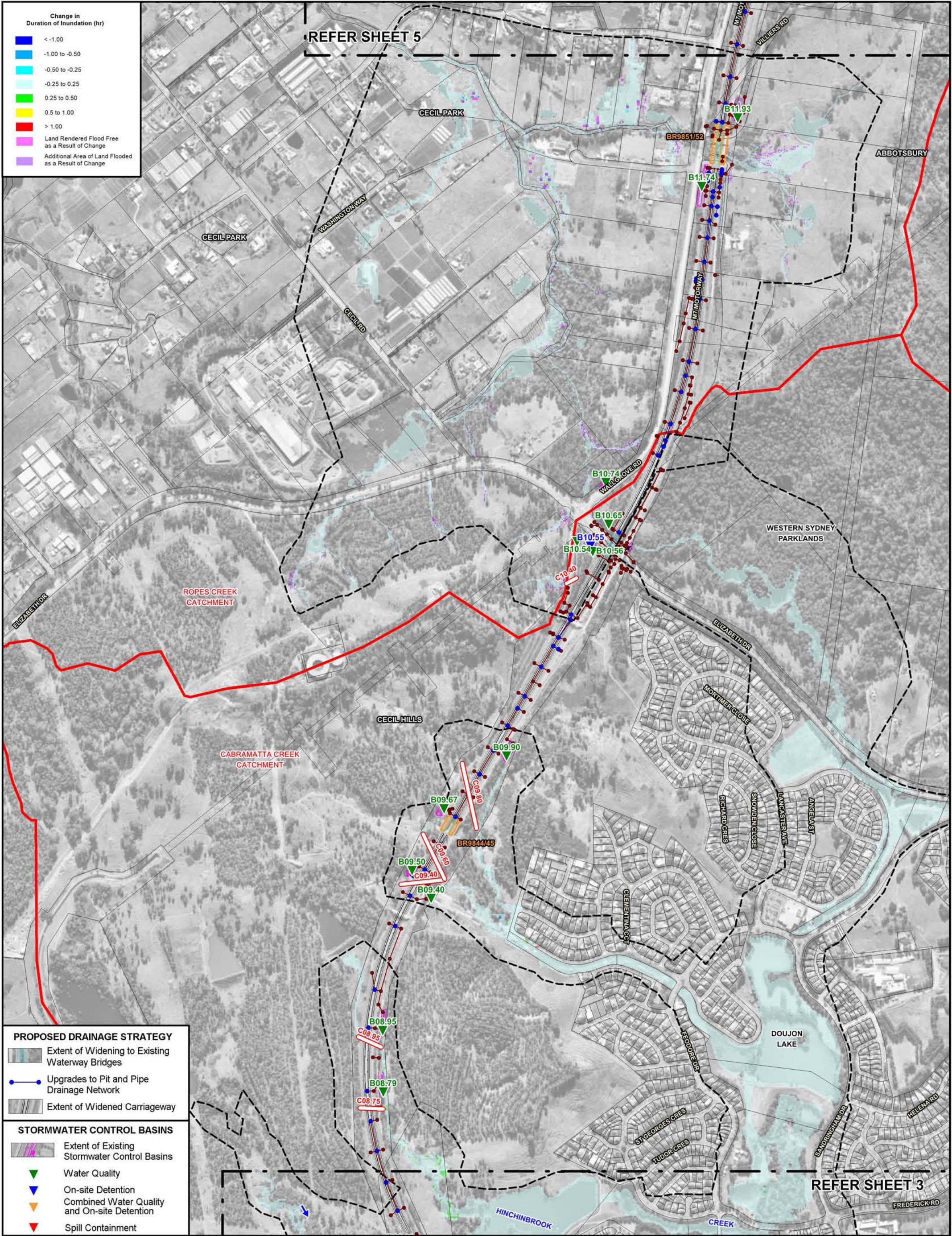
IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION
5% AEP





Scale: 1:10,000

Lyall & Associates

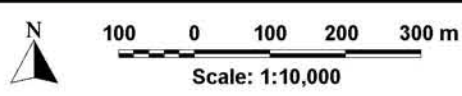


PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment



LEGEND

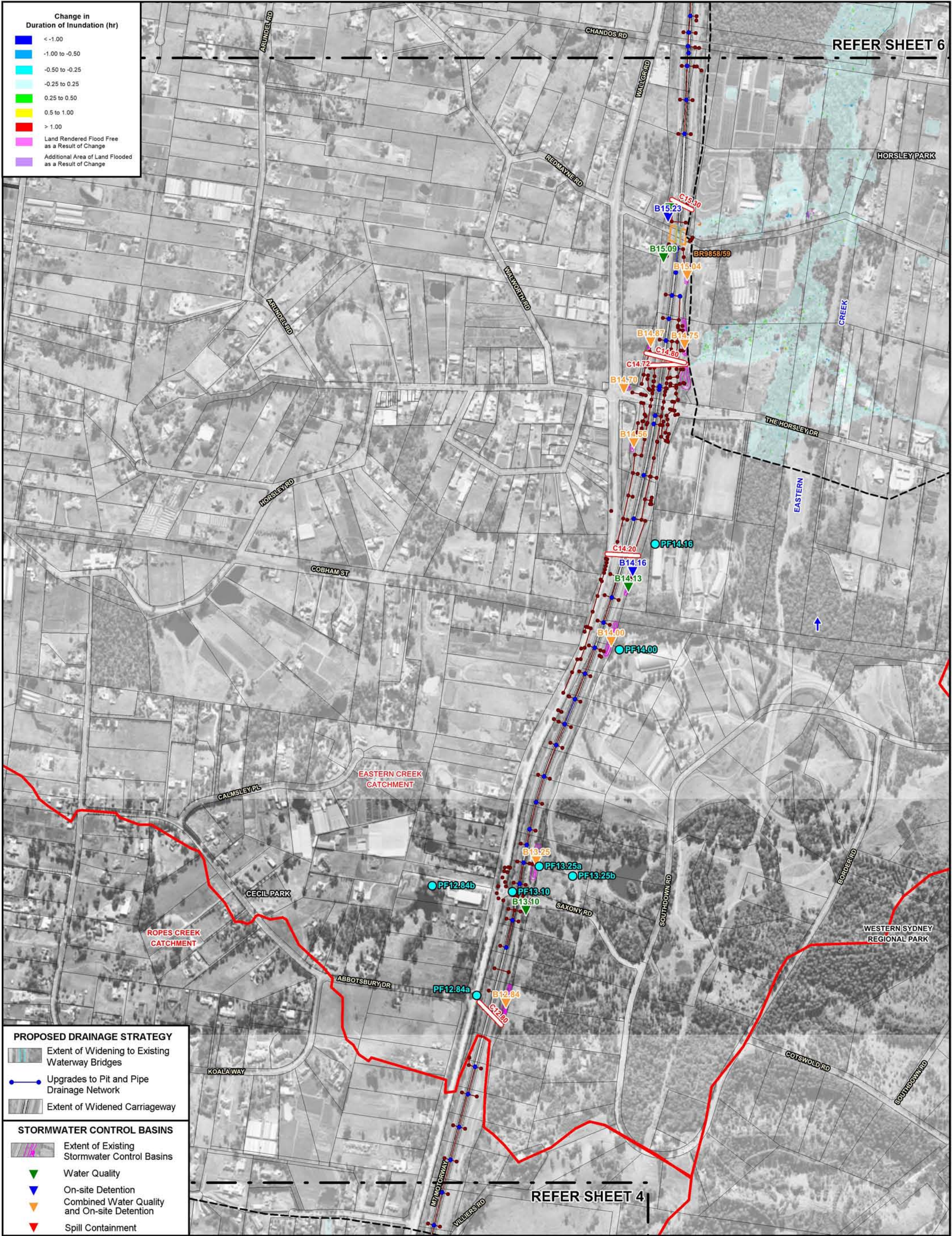
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- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

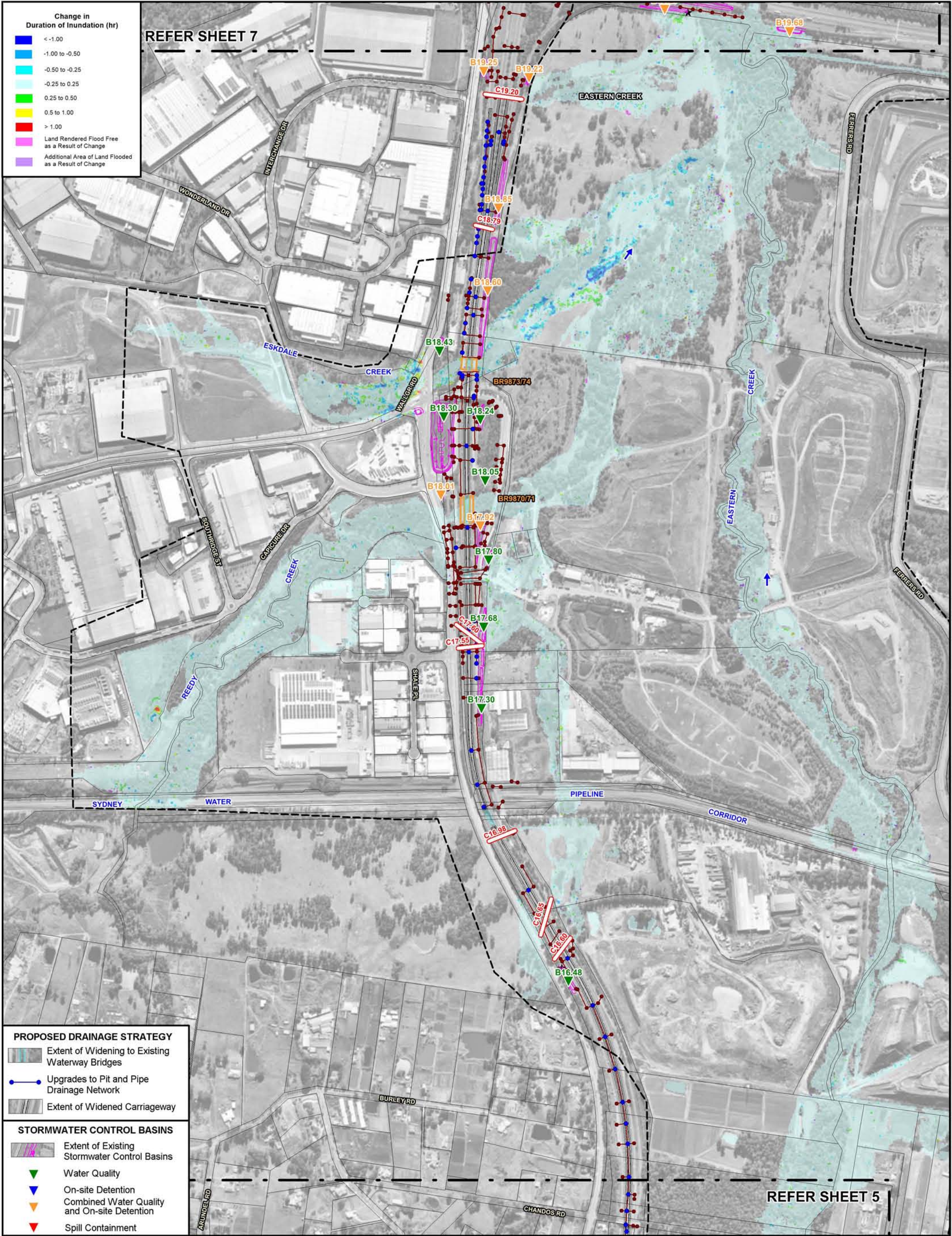
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION
5% AEP

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

Figure C.20
(Sheet 4 of 8)





Change in Duration of Inundation (hr)

- < -1.00
- 1.00 to -0.50
- 0.50 to -0.25
- 0.25 to 0.25
- 0.25 to 0.50
- 0.5 to 1.00
- > 1.00

Land Rendered Flood Free as a Result of Change

Additional Area of Land Flooded as a Result of Change

PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

N

100 0 100 200 300 m

Scale: 1:10,000

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

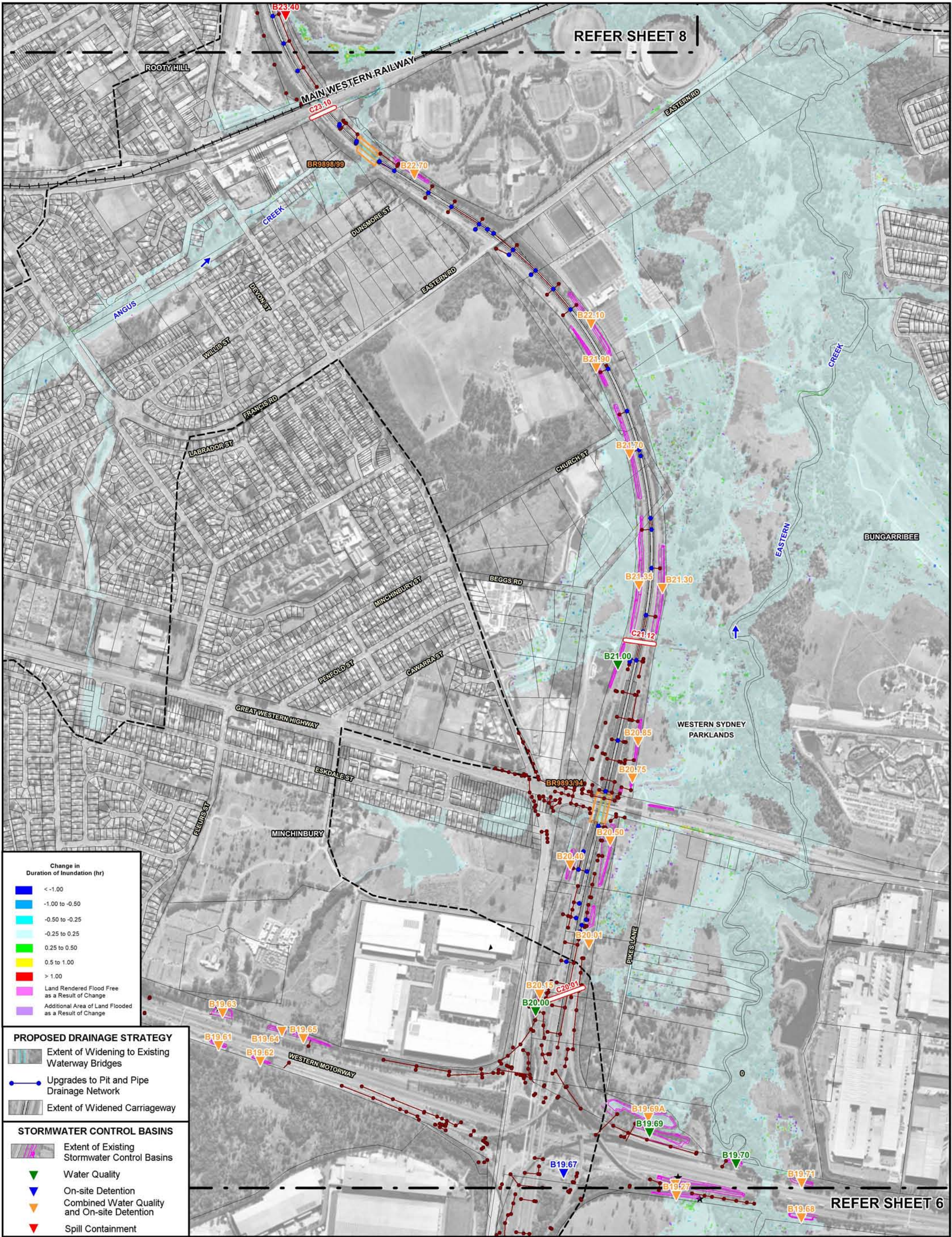
- C01.25 Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION 5% AEP

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure C.20 (Sheet 6 of 8)



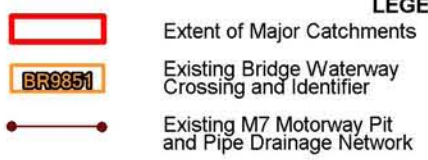
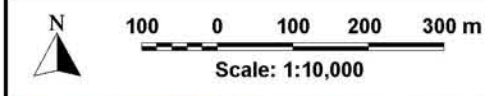
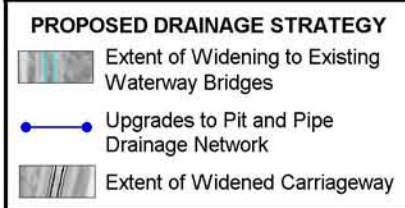
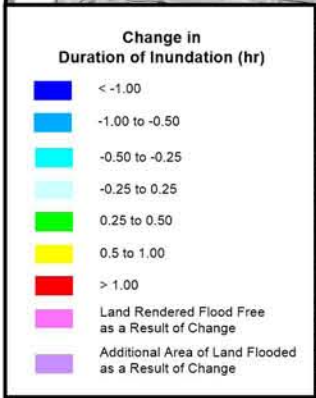
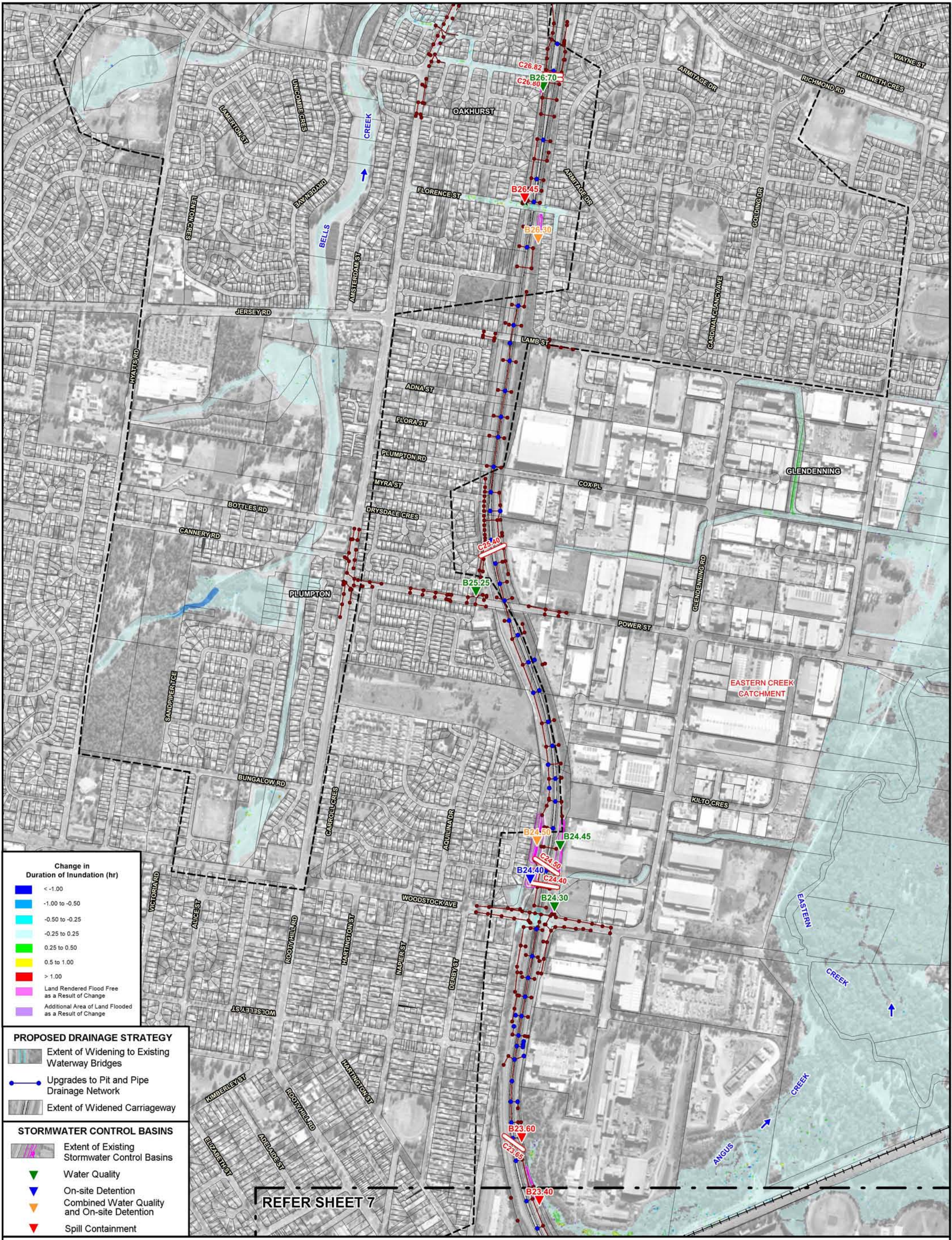


100 0 100 200 300 m
Scale: 1:10,000

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Figure C.20
(Sheet 7 of 8)

5% AEP

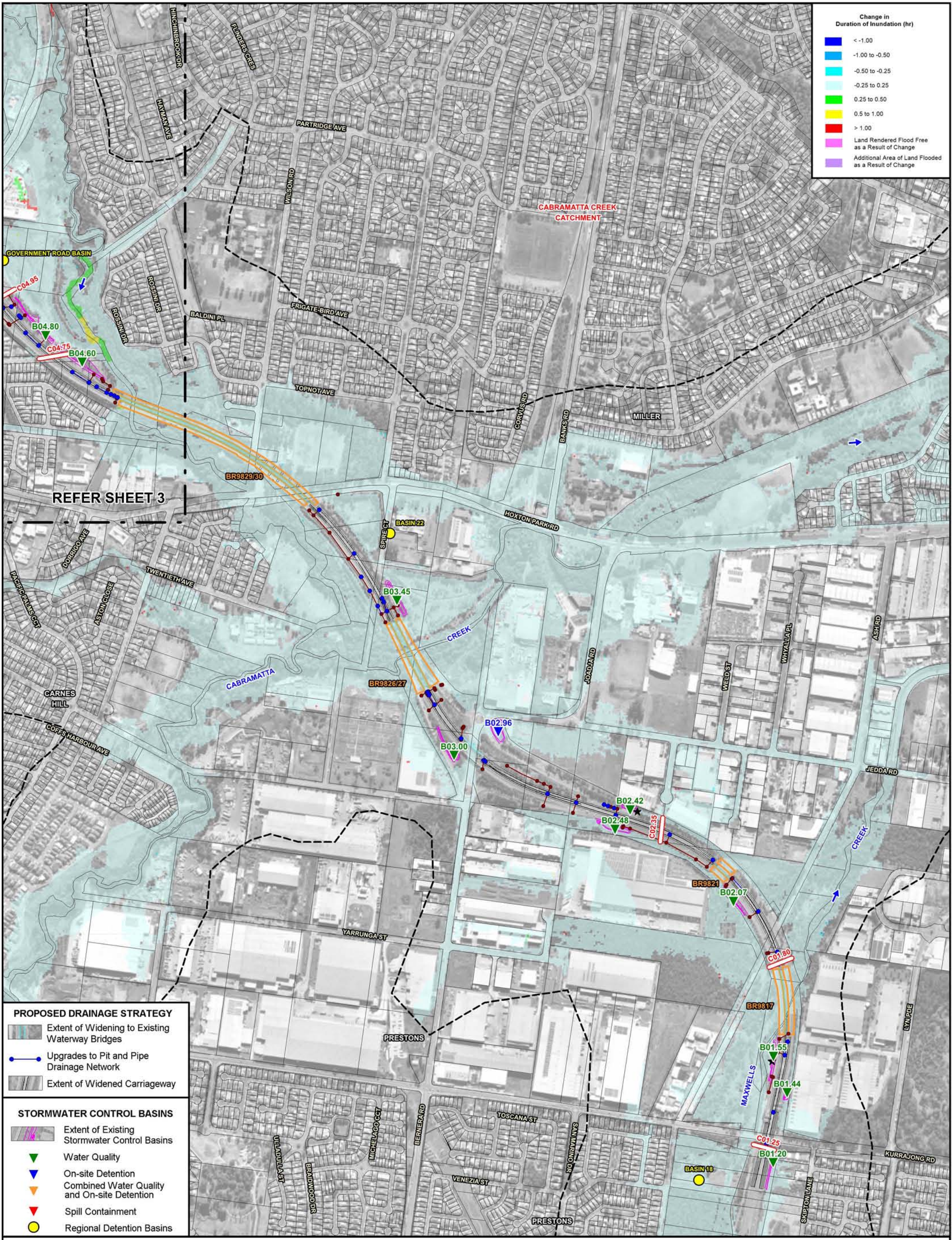


IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure C.20
(Sheet 8 of 8)

5% AEP



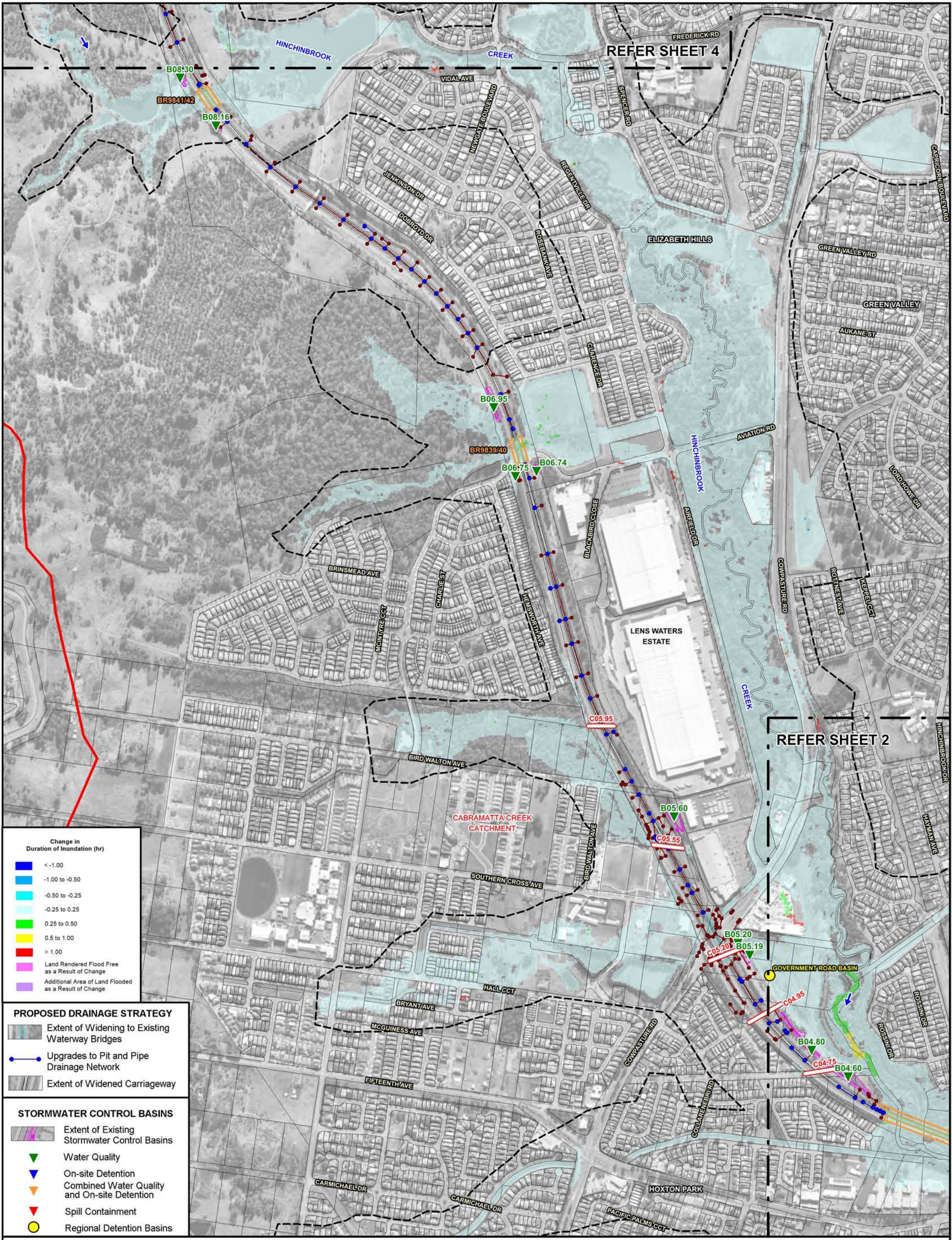
- PROPOSED DRAINAGE STRATEGY**
- Extent of Widening to Existing Waterway Bridges
 - Upgrades to Pit and Pipe Drainage Network
 - Extent of Widened Carriageway
- STORMWATER CONTROL BASINS**
- Extent of Existing Stormwater Control Basins
 - Water Quality
 - On-site Detention
 - Combined Water Quality and On-site Detention
 - Spill Containment
 - Regional Detention Basins

N
100 0 100 200 300 m
Scale: 1:10,000

- LEGEND**
- Extent of Major Catchments
 - Existing Bridge Waterway Crossing and Identifier
 - Existing M7 Motorway Pit and Pipe Drainage Network

- C01.25 Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

- Change in Duration of Inundation (hr)**
- < -1.00
 - 1.00 to -0.50
 - 0.50 to -0.25
 - 0.25 to 0.25
 - 0.25 to 0.50
 - 0.5 to 1.00
 - > 1.00
 - Land Rendered Flood Free as a Result of Change
 - Additional Area of Land Flooded as a Result of Change



Scale: 1:10,000



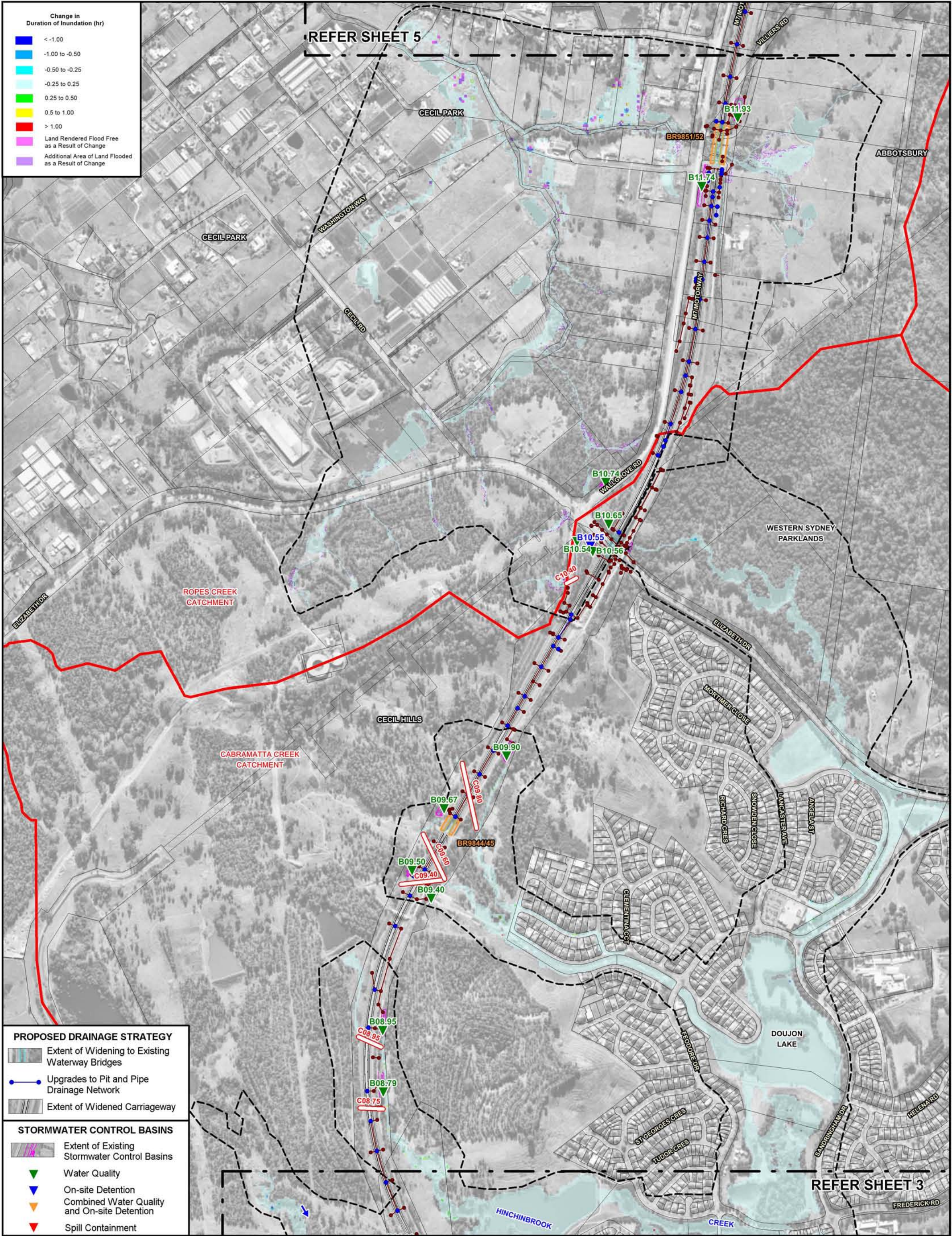
LEGEND
Extent of Major Catchments
Existing Bridge Waterway Crossing and Identifier
Existing M7 Motorway Pit and Pipe Drainage Network

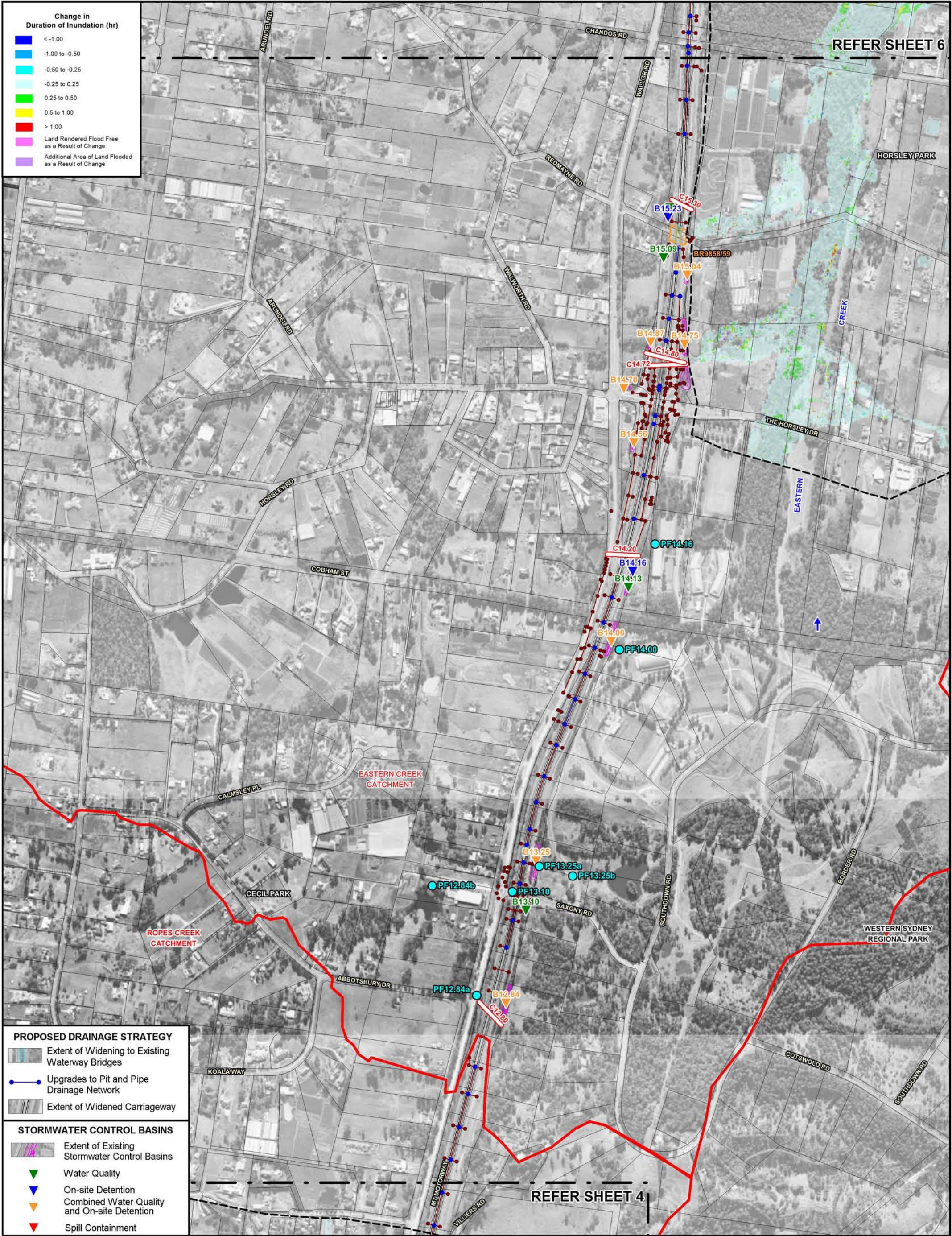
LEGEND
C01.25 Existing Transverse Drainage Structure and Identifier
Extent of Two-Dimensional Hydraulic Model Boundary

IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION
1% AEP

WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure C.21
(Sheet 3 of 8)





PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

Scale: 1:10,000

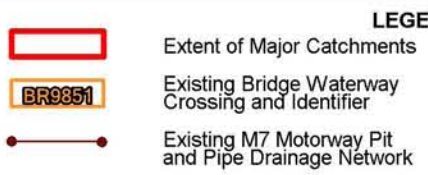
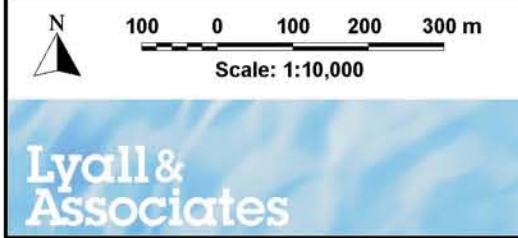
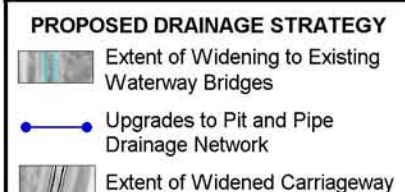
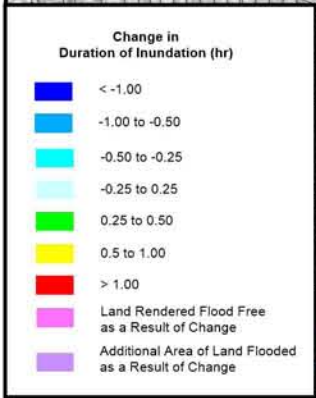
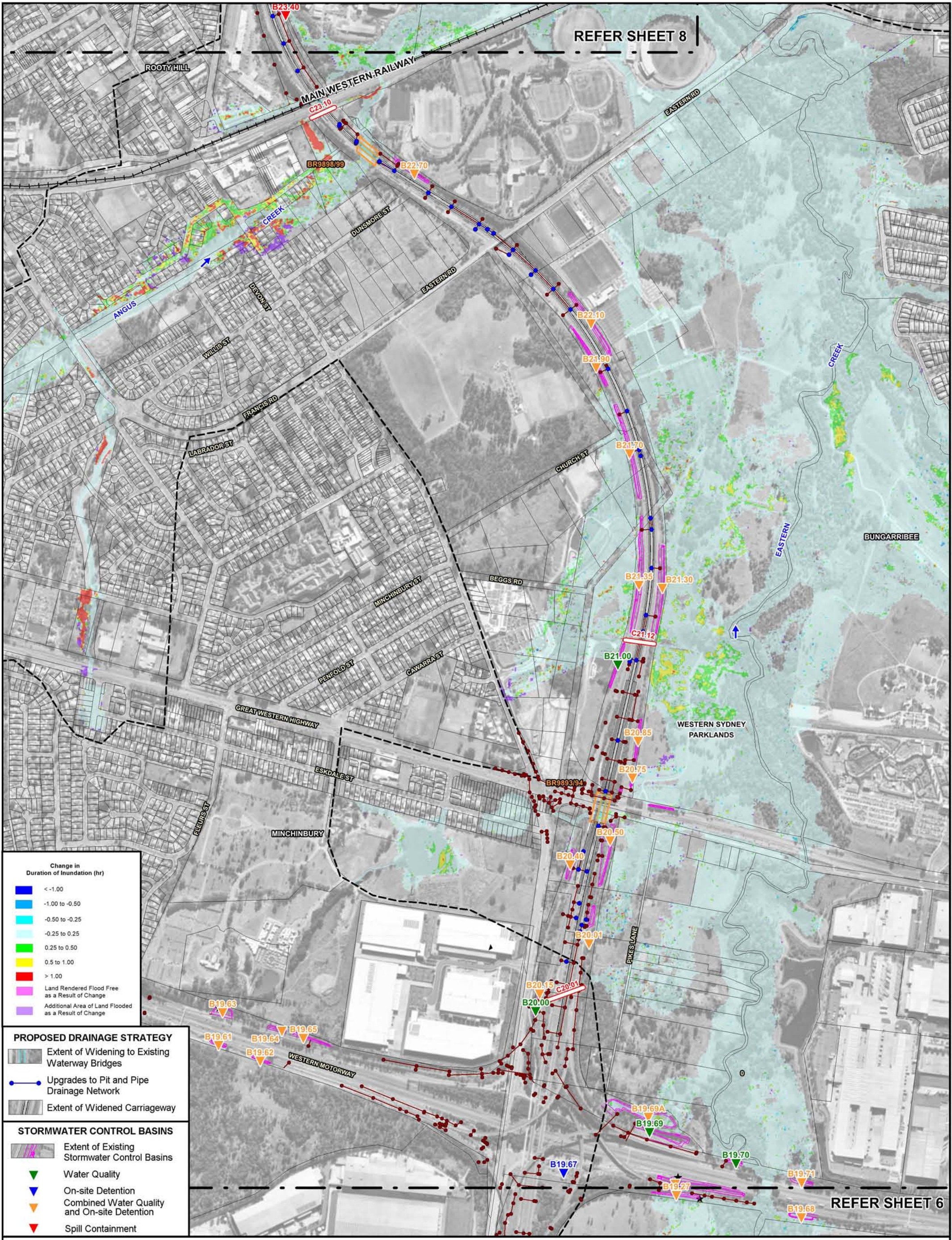
Lyall & Associates

- LEGEND**
- Extent of Major Catchments
 - Existing Bridge Waterway Crossing and Identifier
 - Existing M7 Motorway Pit and Pipe Drainage Network
 - Peak Flow Location and Identifier

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT
IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION
1% AEP

Figure C.21
(Sheet 5 of 8)



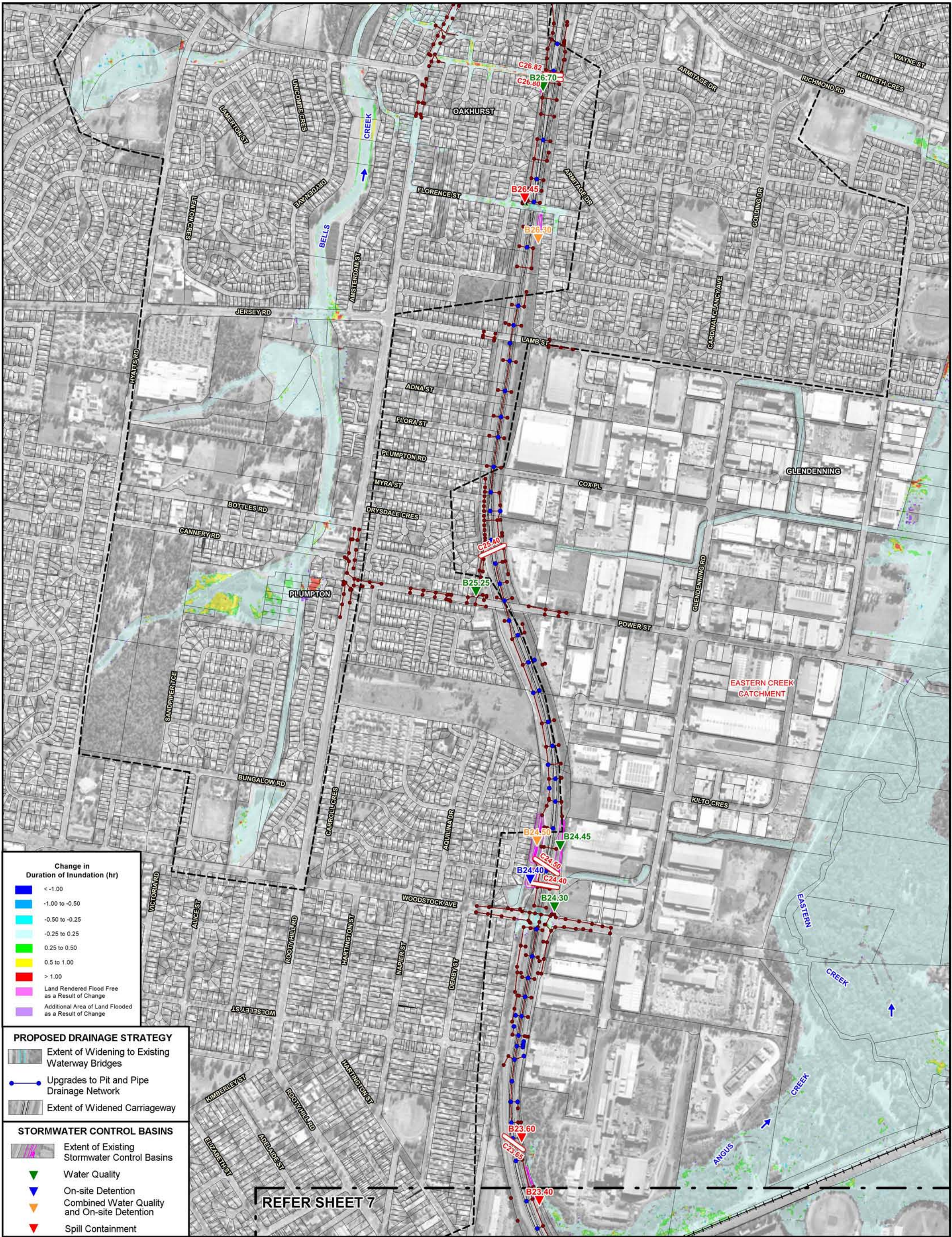
IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION 1% AEP

REFER SHEET 8

REFER SHEET 6

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure C.21
(Sheet 7 of 8)



N
100 0 100 200 300 m
Scale: 1:10,000

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

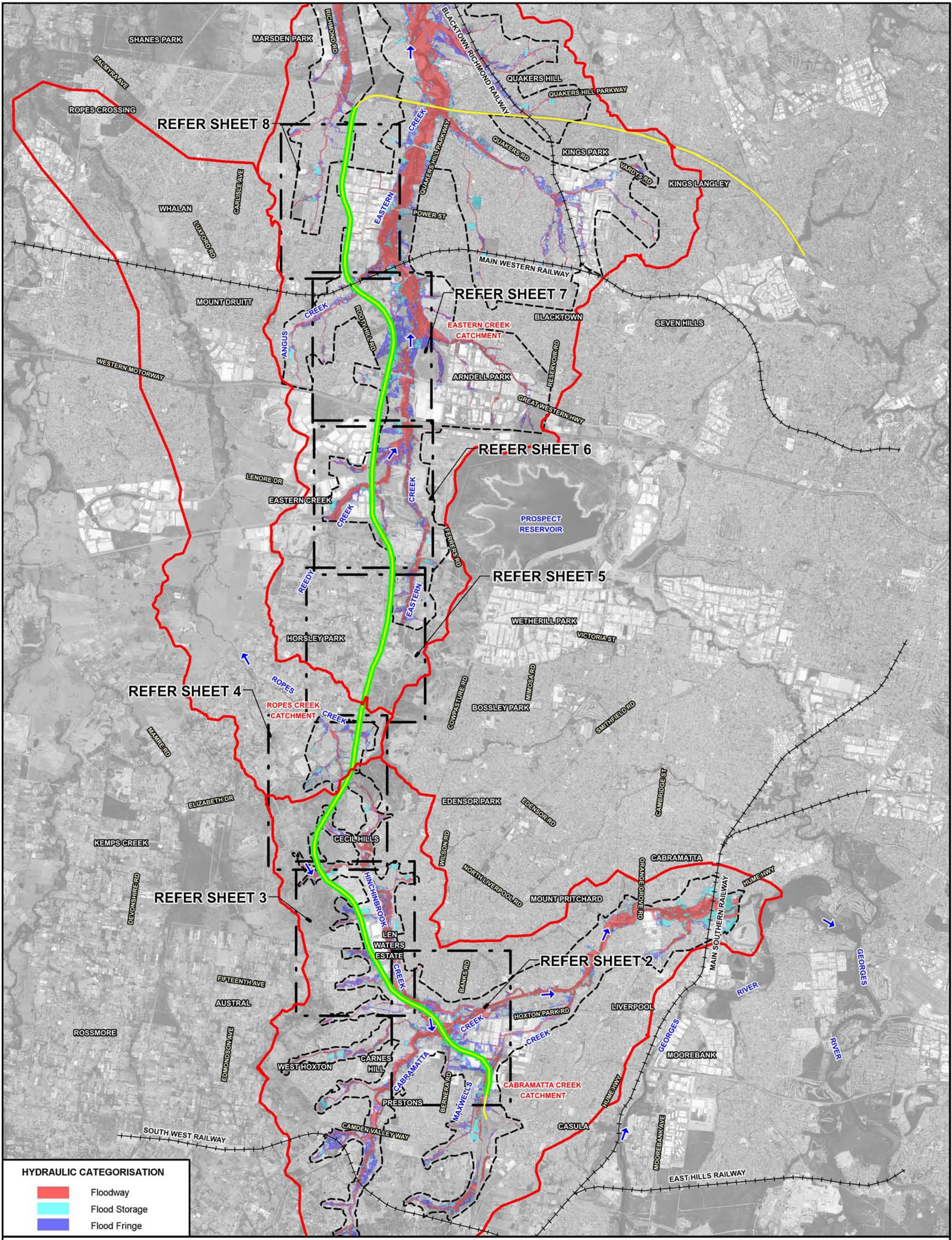
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

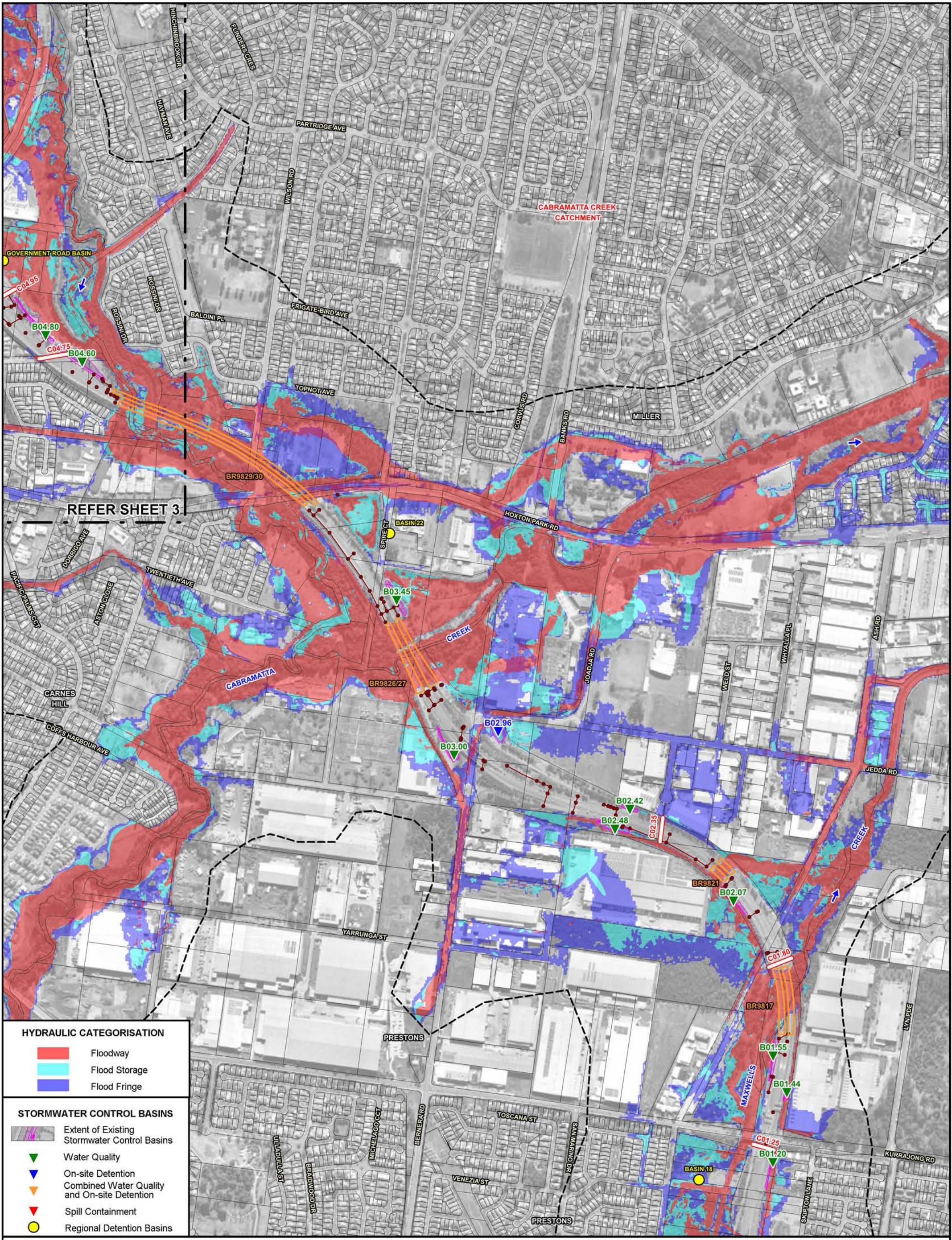
IMPACT OF PROPOSED MODIFICATION ON DURATION OF INUNDATION
1% AEP

Figure C.21
(Sheet 8 of 8)

Lyall & Associates

ANNEXURE D
FIGURES SHOWING THE PRELIMINARY HYDRAULIC CATEGORISATION
AND PROVISIONAL HAZARD CLASSIFICATION OF LAND - 1% AEP





HYDRAULIC CATEGORISATION

- Floodway
- Flood Storage
- Flood Fringe

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

N

100 0 100 200 300 m

Scale: 1:10,000

Lyall & Associates

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- C01.25
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING

SURFACE WATER AND FLOODING IMPACT ASSESSMENT

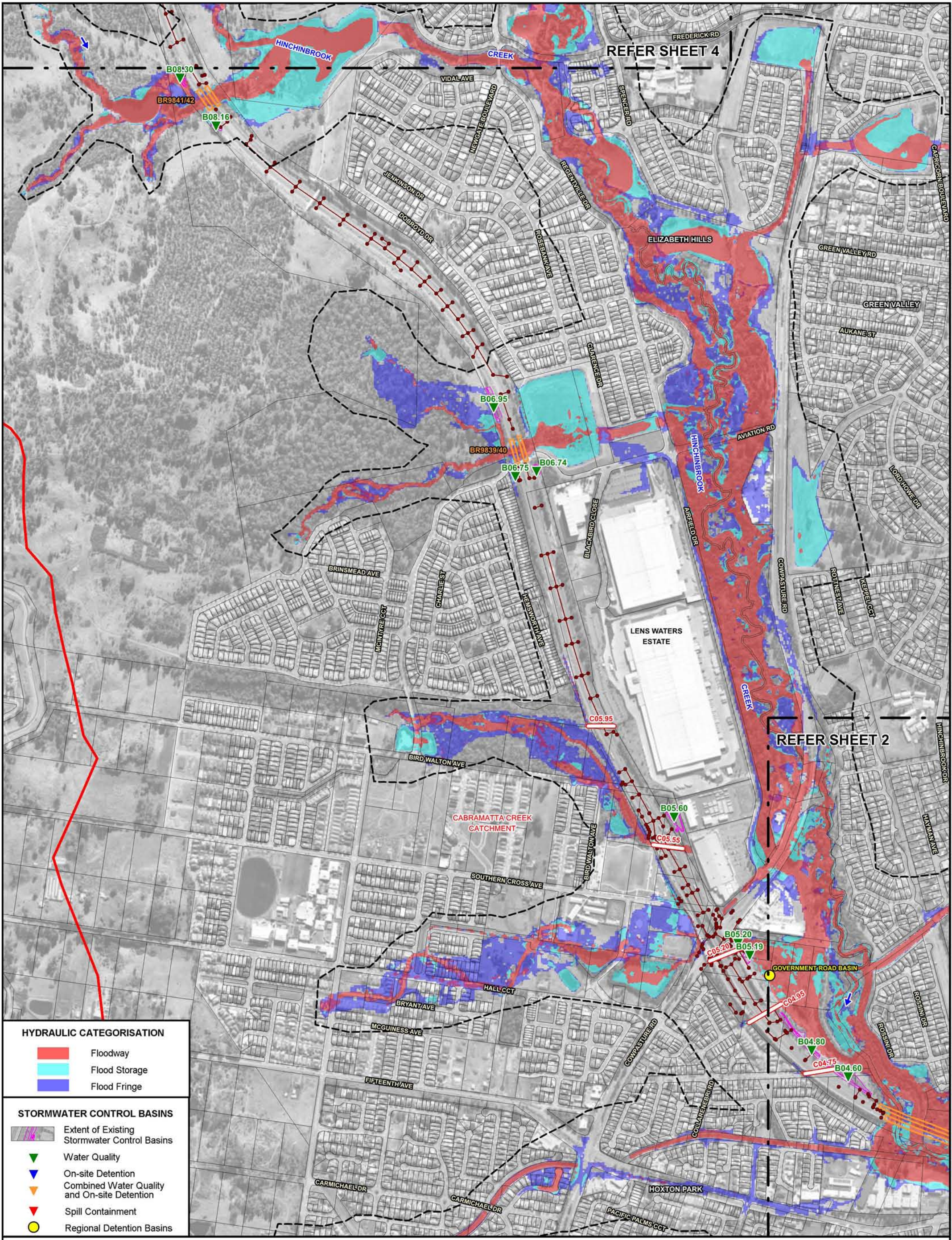
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PRELIMINARY HYDRAULIC CATEGORISATION

1% AEP

Figure D.1

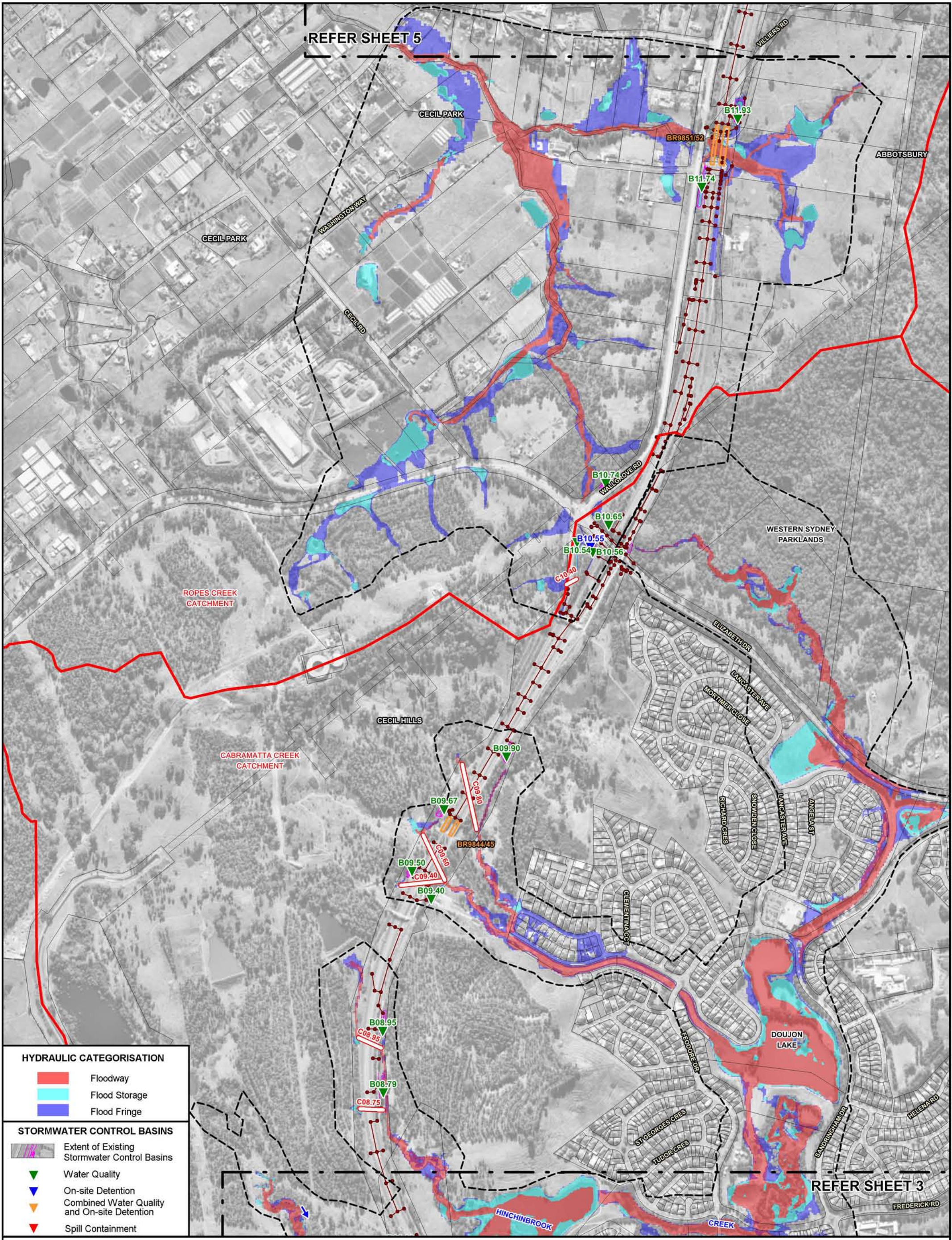
(Sheet 2 of 8)



Scale: 1:10,000



Figure D.1 (Sheet 3 of 8)



HYDRAULIC CATEGORISATION

- Floodway
- Flood Storage
- Flood Fringe

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

N
100 0 100 200 300 m
Scale: 1:10,000

Lyall & Associates

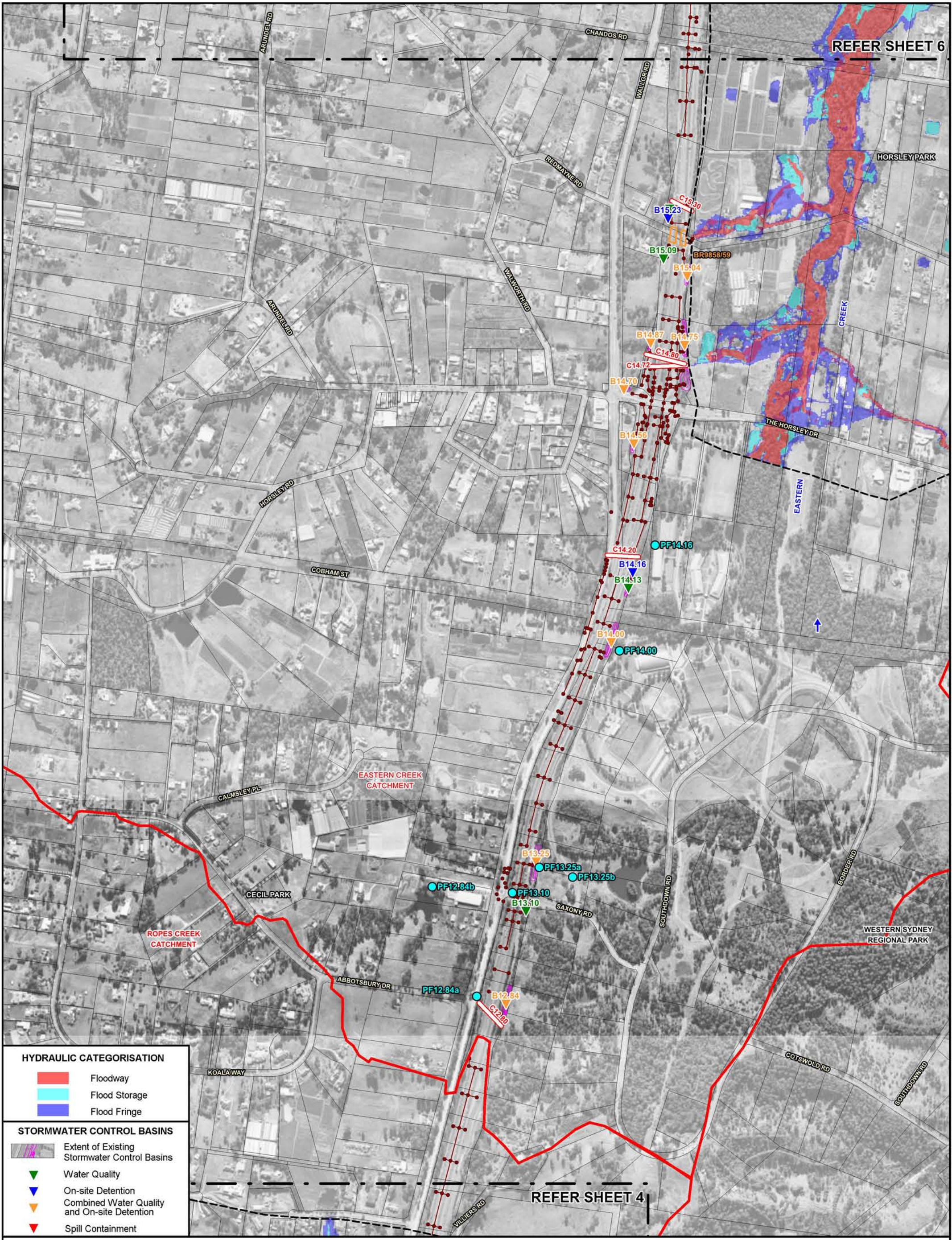
LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- C01.25
- Extent of Two-Dimensional Hydraulic Model Boundary

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

PRELIMINARY HYDRAULIC CATEGORISATION
1% AEP

Figure D.1
(Sheet 4 of 8)



HYDRAULIC CATEGORISATION

Floodway

Flood Storage

Flood Fringe

STORMWATER CONTROL BASINS

Extent of Existing Stormwater Control Basins

Water Quality

On-site Detention

Combined Water Quality and On-site Detention

Spill Containment

N

100 0 100 200 300 m

Scale: 1:10,000

Lyall & Associates

LEGEND

Extent of Major Catchments

BR9851

Existing Bridge Waterway Crossing and Identifier

Existing M7 Motorway Pit and Pipe Drainage Network

C01.25

Existing Transverse Drainage Structure and Identifier

Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING

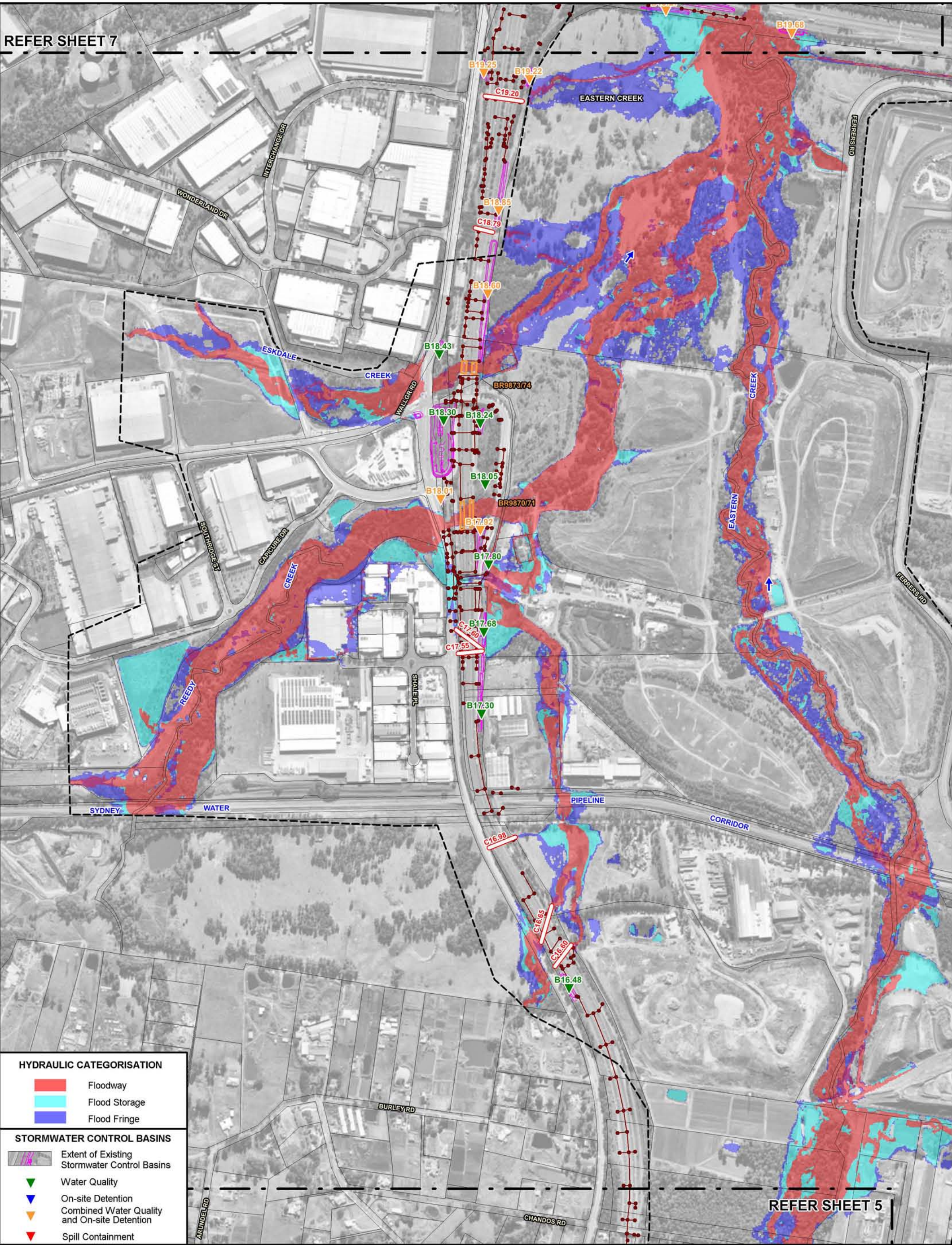
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

PRELIMINARY HYDRAULIC CATEGORISATION

1% AEP

Figure D.1
(Sheet 4 of 8)

REFER SHEET 7



HYDRAULIC CATEGORISATION

- Floodway
- Flood Storage
- Flood Fringe

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

C01.25

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

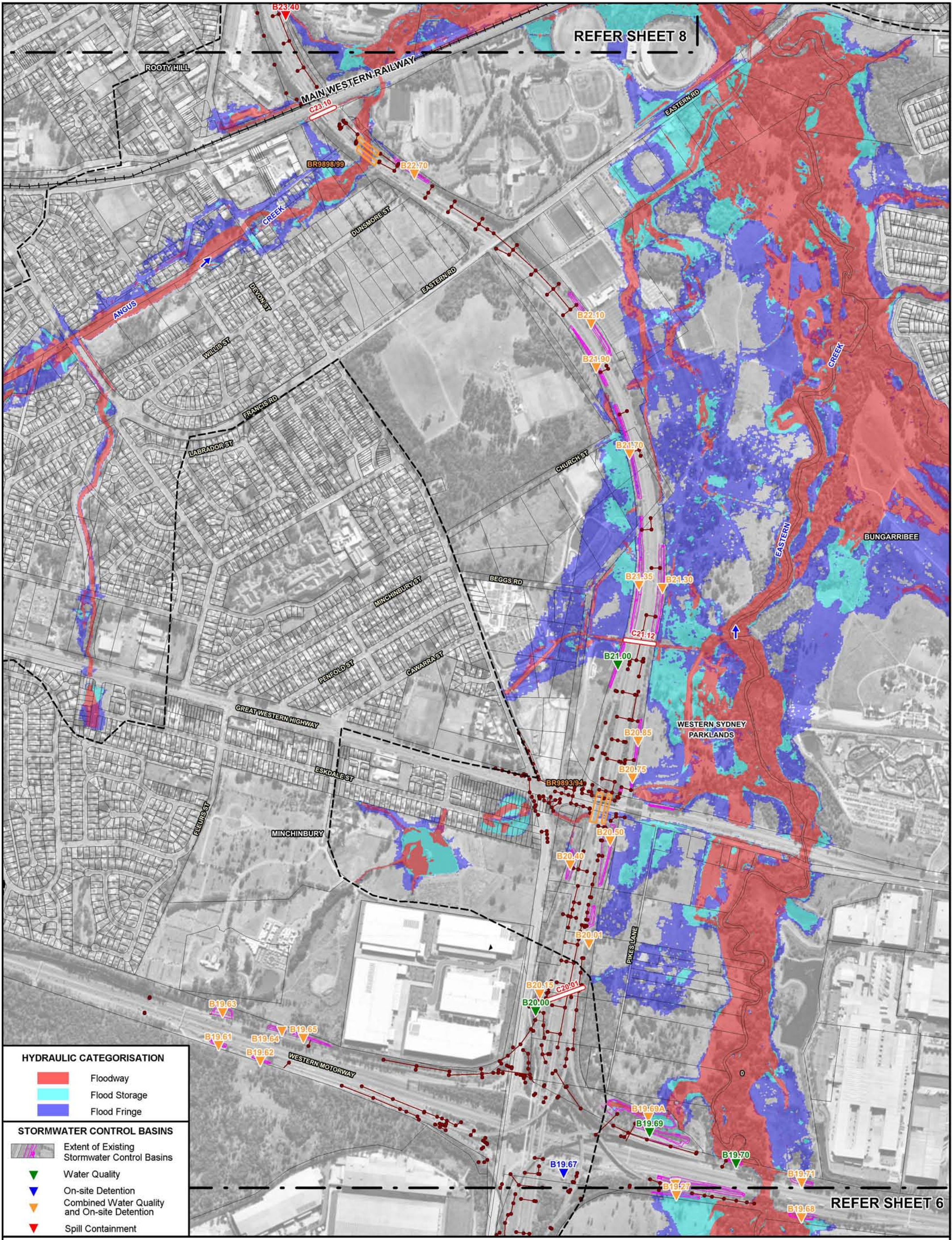
WESTLINK M7 WIDENING

SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure D.1
(Sheet 6 of 8)

PRELIMINARY HYDRAULIC CATEGORISATION
1% AEP

Lyall & Associates



HYDRAULIC CATEGORISATION

Floodway

Flood Storage

Flood Fringe

STORMWATER CONTROL BASINS

Extent of Existing Stormwater Control Basins

Water Quality

On-site Detention

Combined Water Quality and On-site Detention

Spill Containment

N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

Extent of Major Catchments

BR9851

Existing Bridge Waterway Crossing and Identifier

Existing M7 Motorway Pit and Pipe Drainage Network

C01.25

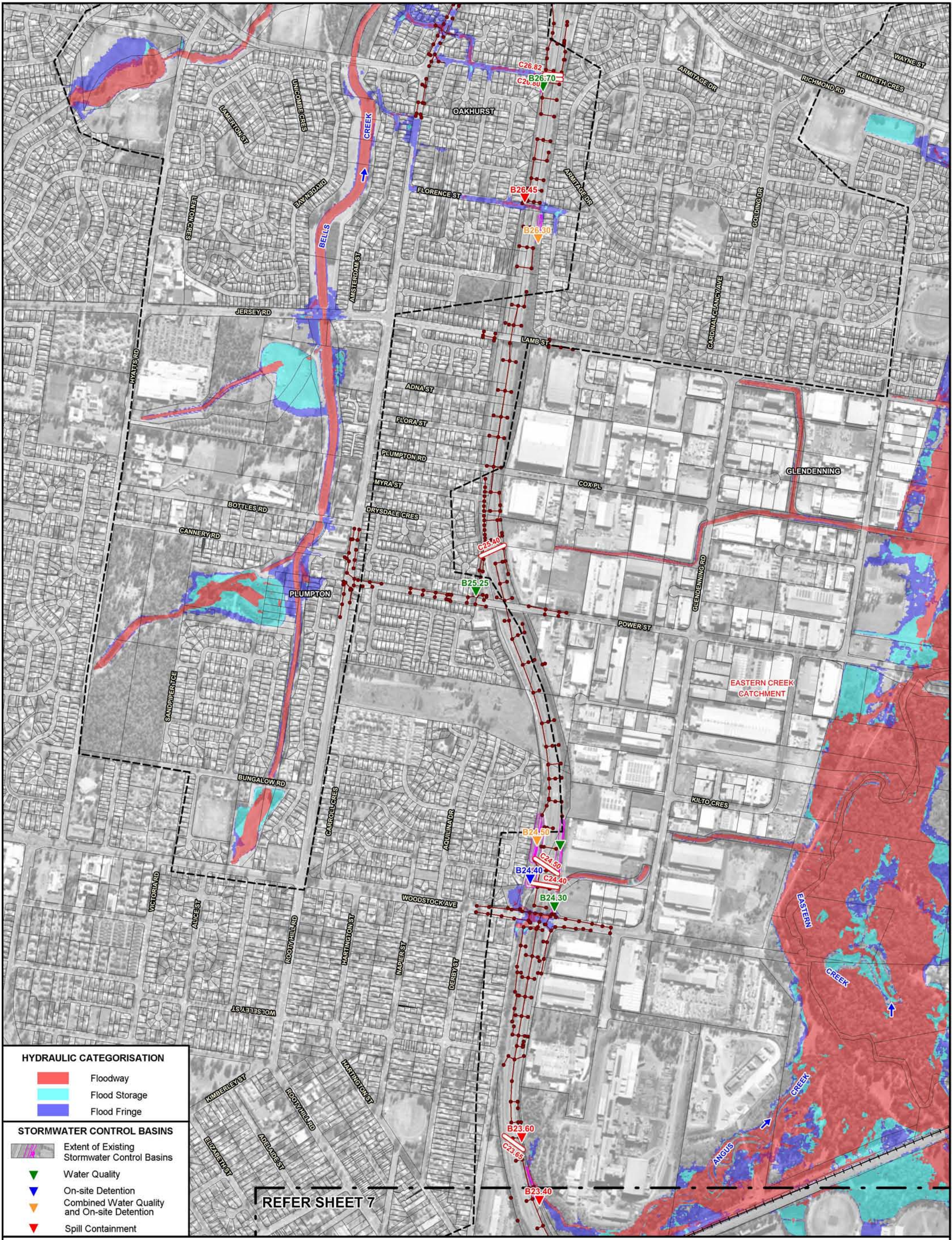
Existing Transverse Drainage Structure and IdentifierExtent of Two-Dimensional Hydraulic Model Boundary

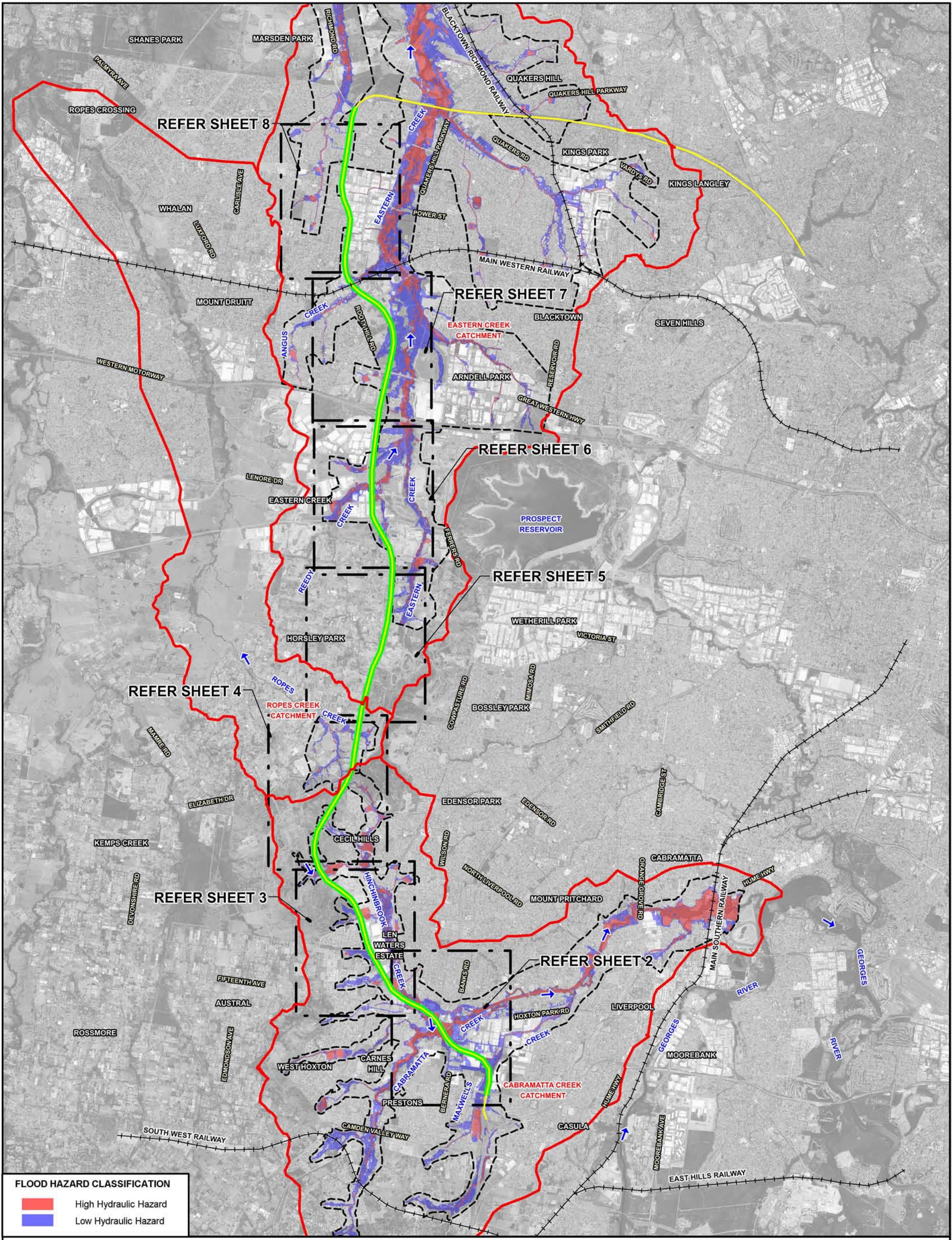
WESTLINK M7 WIDENING

SURFACE WATER AND FLOODING IMPACT ASSESSMENT

PRELIMINARY HYDRAULIC CATEGORISATION
1% AEP

Figure D.1
(Sheet 7 of 8)





FLOOD HAZARD CLASSIFICATION

	High Hydraulic Hazard
	Low Hydraulic Hazard

N
 800 0 800 1600 2400 m
 Scale: 1:80,000

LEGEND

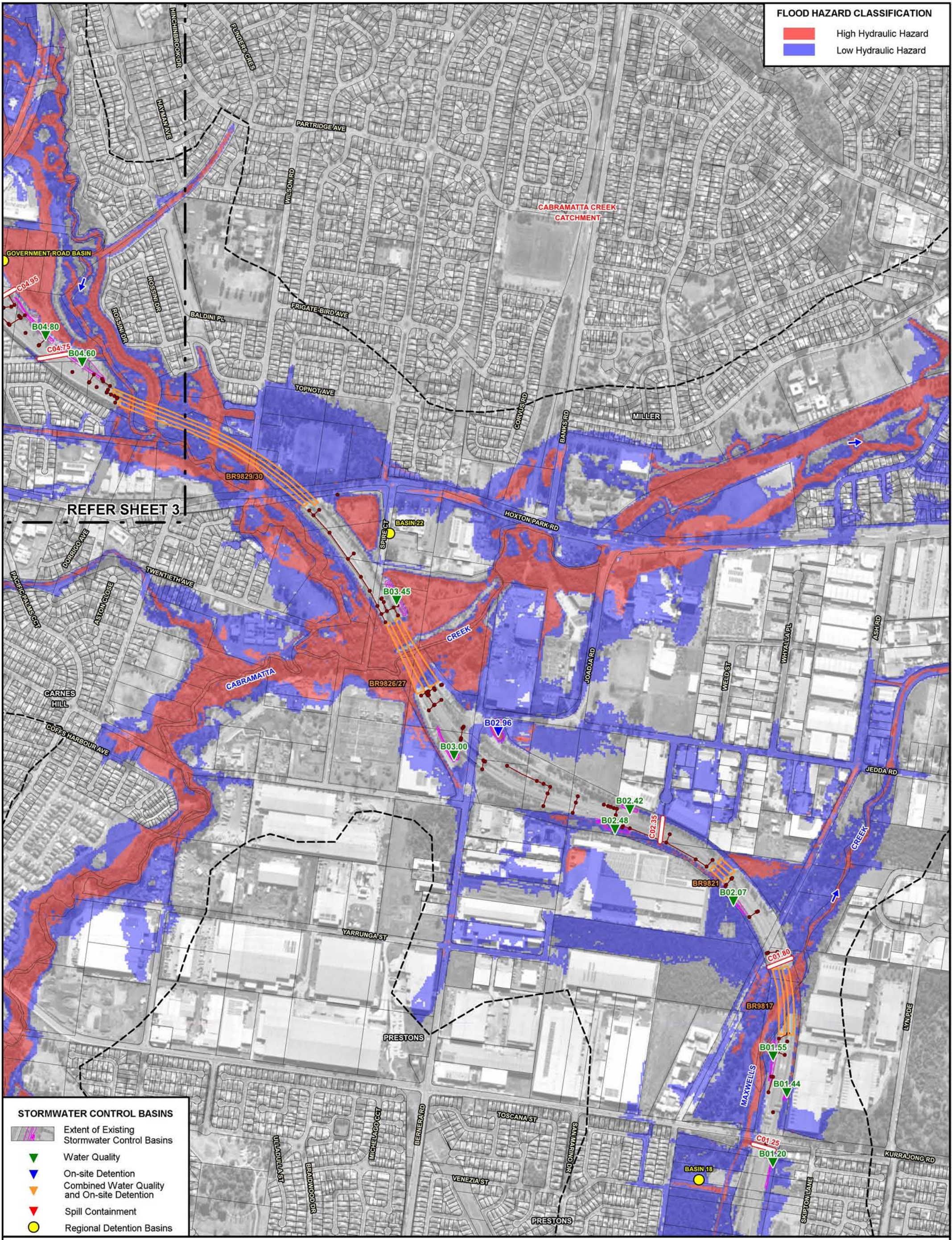
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	Extent of Two-Dimensional Hydraulic Model Boundary
	Extent of M7 Motorway Widening
	M7 Motorway

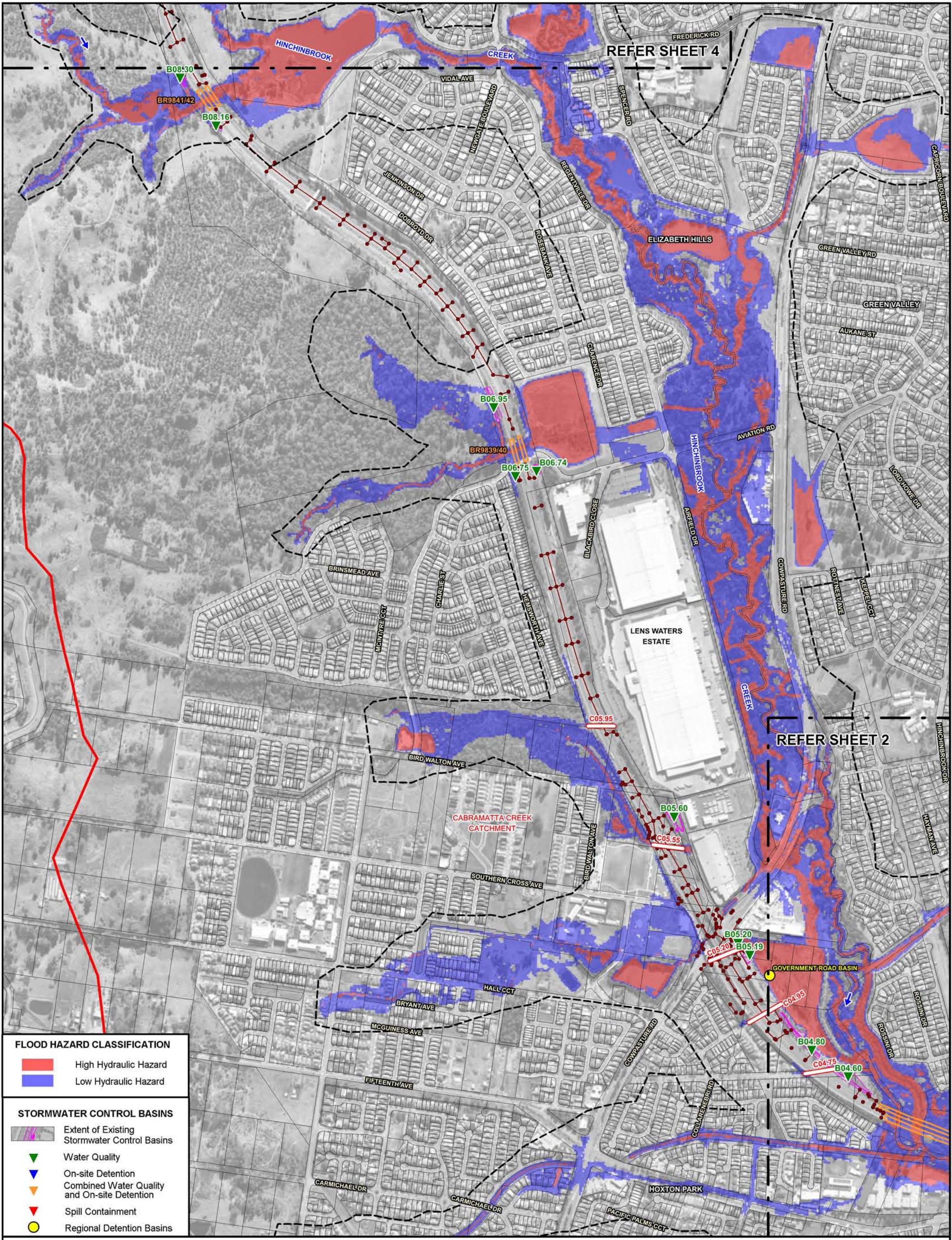
**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

Figure D.2
(Sheet 1 of 8)

PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP







FLOOD HAZARD CLASSIFICATION

- High Hydraulic Hazard
- Low Hydraulic Hazard

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment
- Regional Detention Basins

Scale: 1:10,000

Lyall & Associates

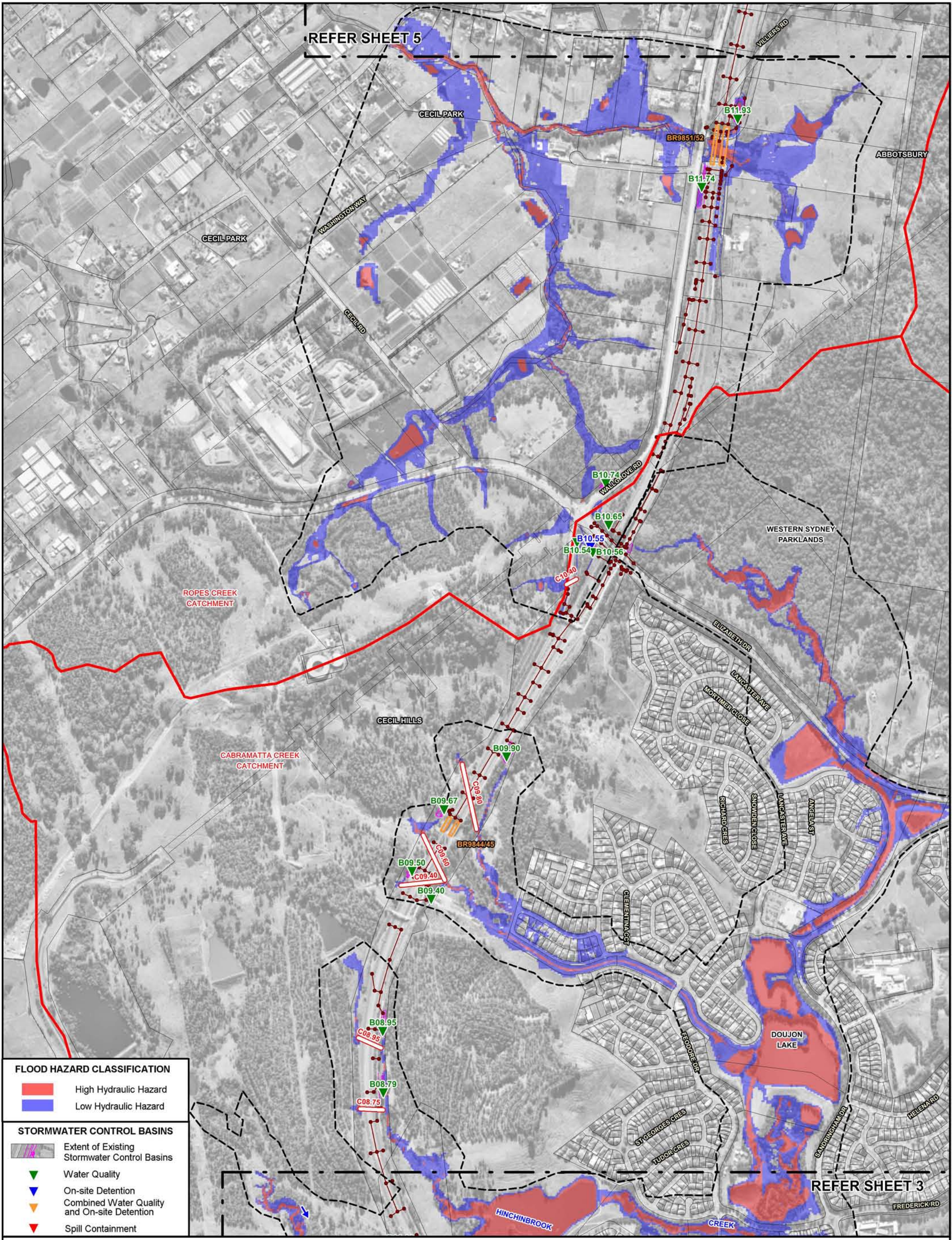
- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

LEGEND

- C01.25
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure D.2 (Sheet 3 of 8)
PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP



FLOOD HAZARD CLASSIFICATION

High Hydraulic Hazard

Low Hydraulic Hazard

STORMWATER CONTROL BASINS

Extent of Existing Stormwater Control Basins

Water Quality

On-site Detention

Combined Water Quality and On-site Detention

Spill Containment

Scale: 1:10,000

LEGEND

Extent of Major Catchments

Existing Bridge Waterway Crossing and Identifier

Existing M7 Motorway Pit and Pipe Drainage Network

C01.25

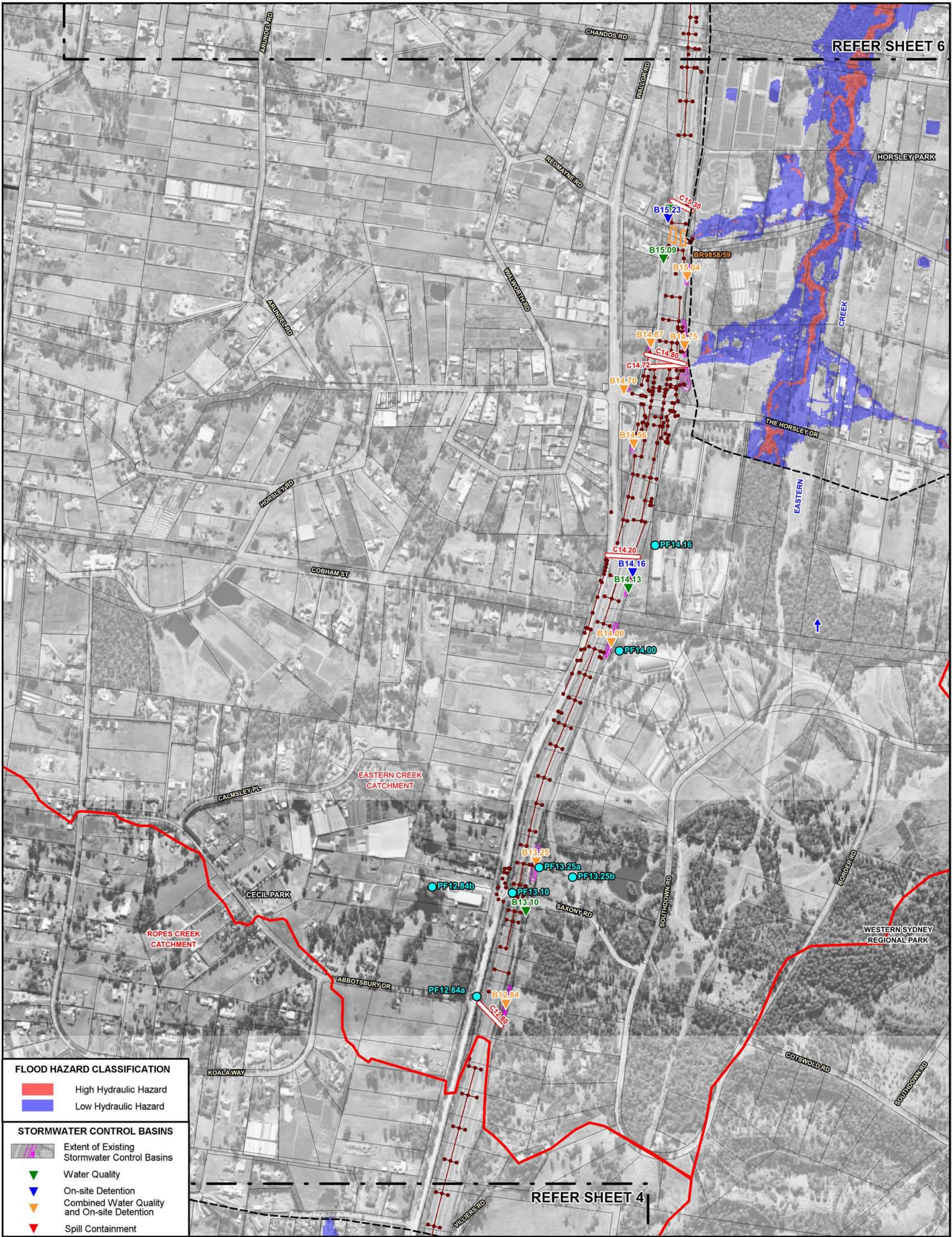
Existing Transverse Drainage Structure and Identifier

Extent of Two-Dimensional Hydraulic Model Boundary

**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP

Figure D.2
(Sheet 4 of 8)

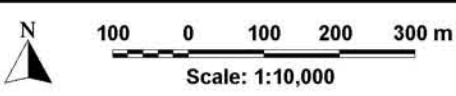


FLOOD HAZARD CLASSIFICATION

- High Hydraulic Hazard
- Low Hydraulic Hazard

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment



LEGEND

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- Peak Flow Location and Identifier

LEGEND

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

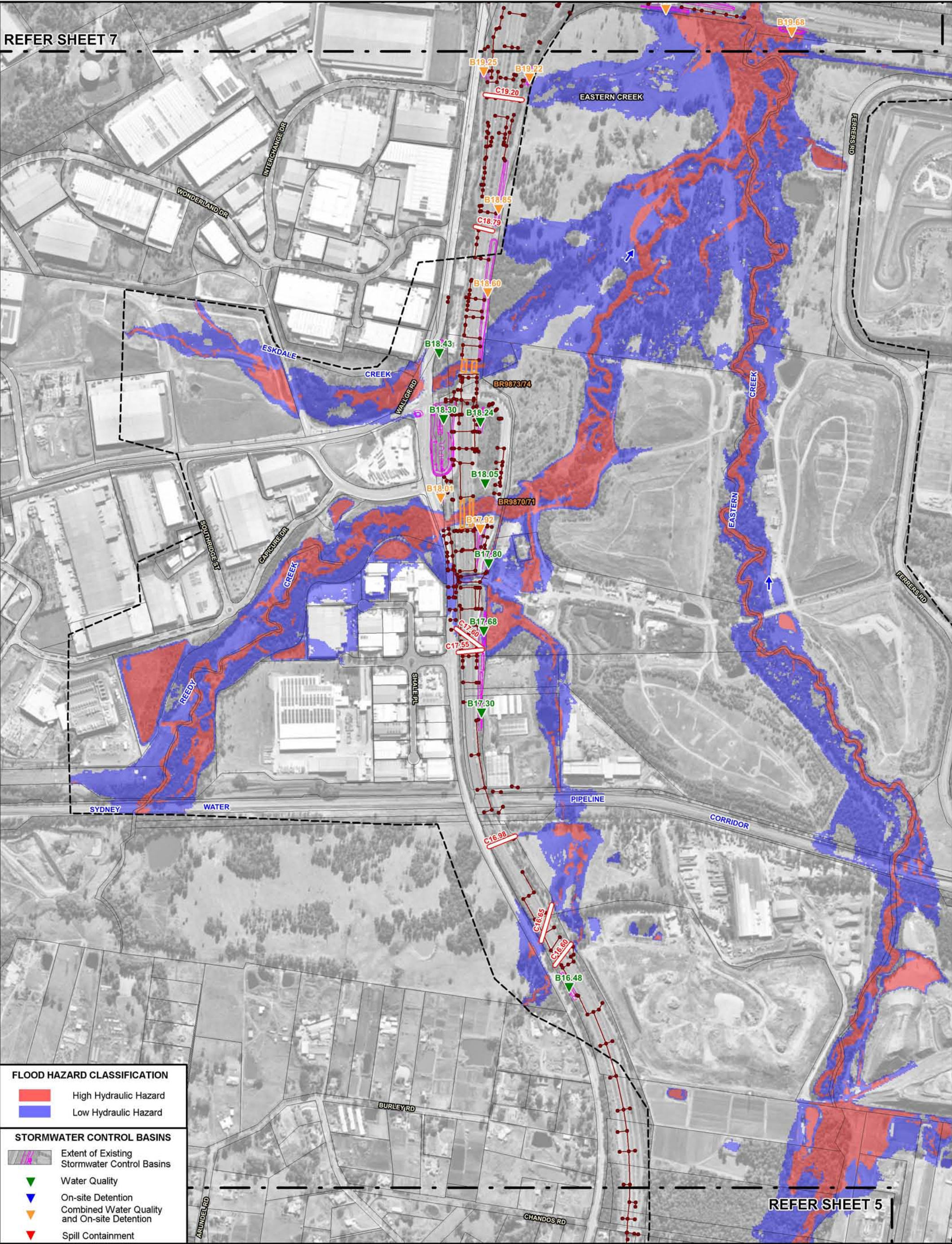
**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

Figure D.2
(Sheet 5 of 8)

**PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP**



REFER SHEET 7



REFER SHEET 5

FLOOD HAZARD CLASSIFICATION

- High Hydraulic Hazard
- Low Hydraulic Hazard

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

Scale: 1:10,000

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

LEGEND

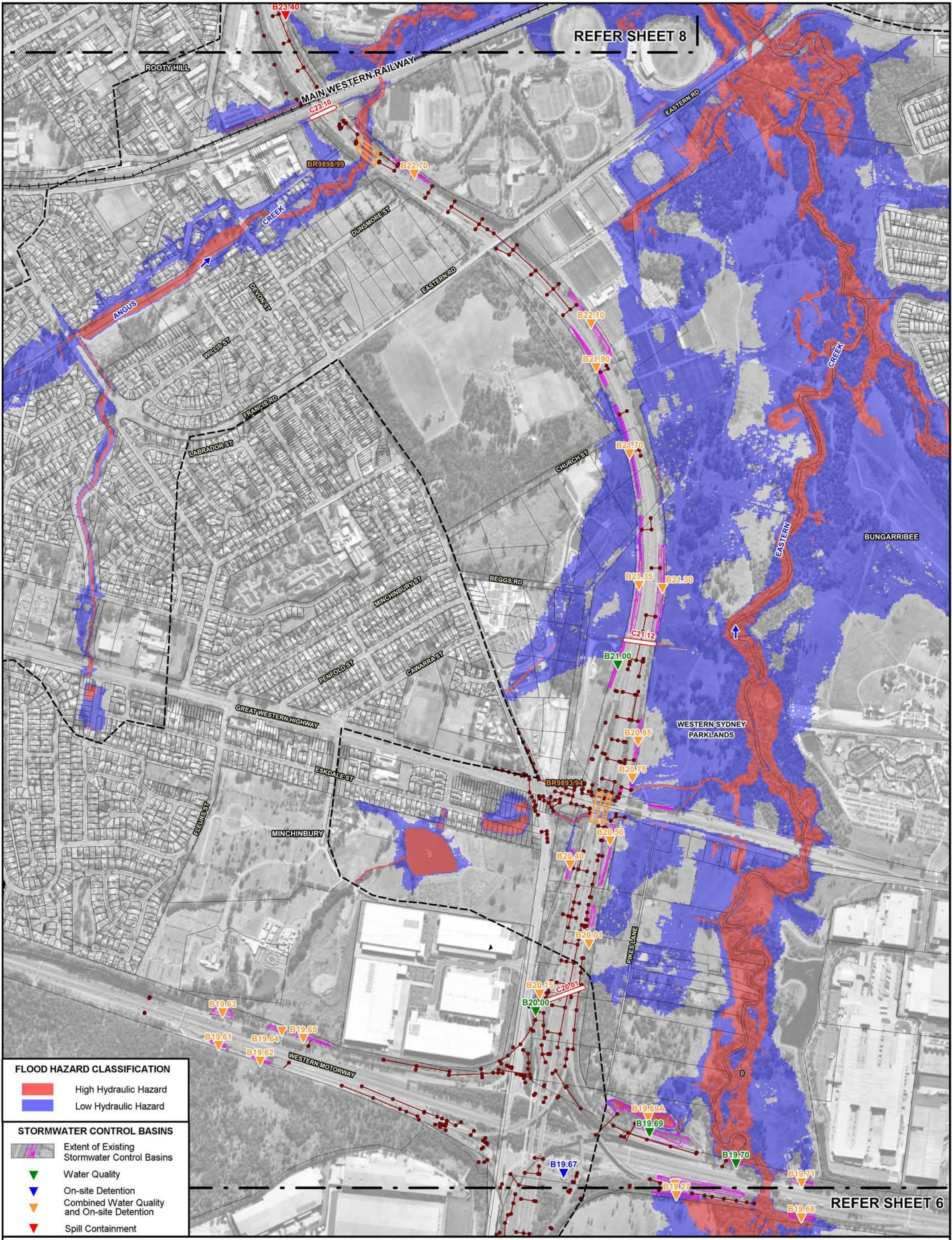
- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure D.2 (Sheet 6 of 8)

PROVISIONAL HAZARD CATEGORISATION PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP

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FLOOD HAZARD CLASSIFICATION

- High Hydraulic Hazard
- Low Hydraulic Hazard

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

Scale: 1:10,000

Lyall & Associates

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

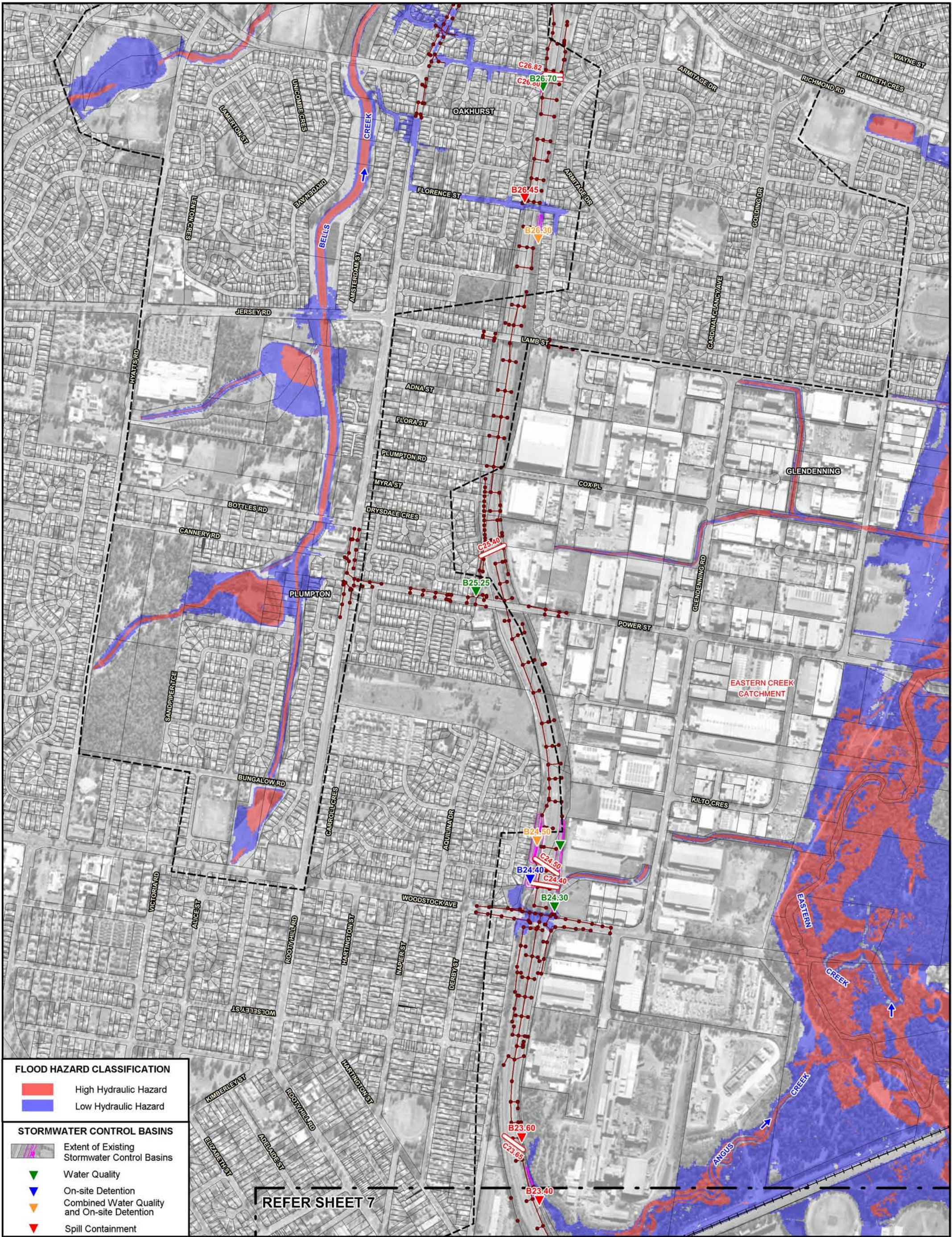
LEGEND

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

WESTLINK M7 WIDENING SURFACE WATER AND FLOODING IMPACT ASSESSMENT

PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP

Figure D.2
(Sheet 7 of 8)



FLOOD HAZARD CLASSIFICATION

- High Hydraulic Hazard
- Low Hydraulic Hazard

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

REFER SHEET 7

Scale: 1:10,000

- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network

LEGEND

- Existing Transverse Drainage Structure and Identifier
- Extent of Two-Dimensional Hydraulic Model Boundary

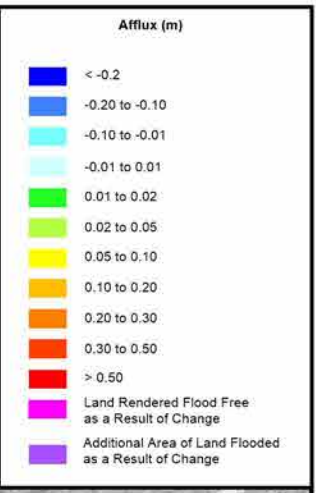
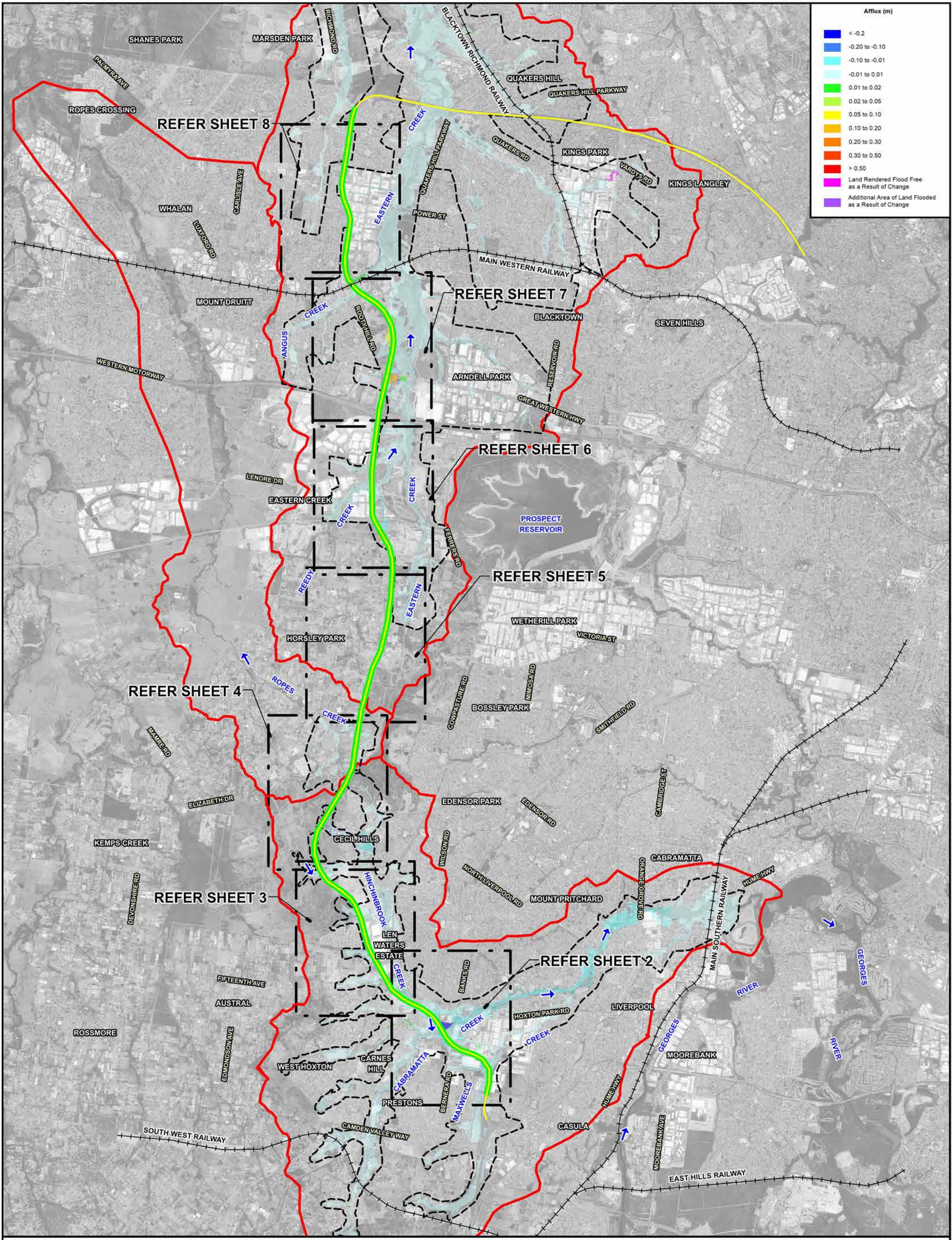
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure D.2
(Sheet 8 of 8)

PROVISIONAL HAZARD CATEGORISATION
PRE-PROPOSED MODIFICATION CONDITIONS - 1% AEP

Lyall & Associates

ANNEXURE E
FIGURES SHOWING THE IMPACT OF A PARTIAL BLOCKAGE OF THE
M7 MOTORWAY TRANSVERSE DRAINAGE STRUCTURES ON FLOOD
BEHAVIOUR – 1% AEP



N

800 0 800 1600 2400 m

Scale: 1:80,000

Lyall & Associates

LEGEND

Extent of Major Catchments

Extent of Two-Dimensional Hydraulic Model Boundary

Extent of M7 Motorway Widening

M7 Motorway

WESTLINK M7 WIDENING

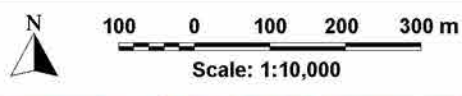
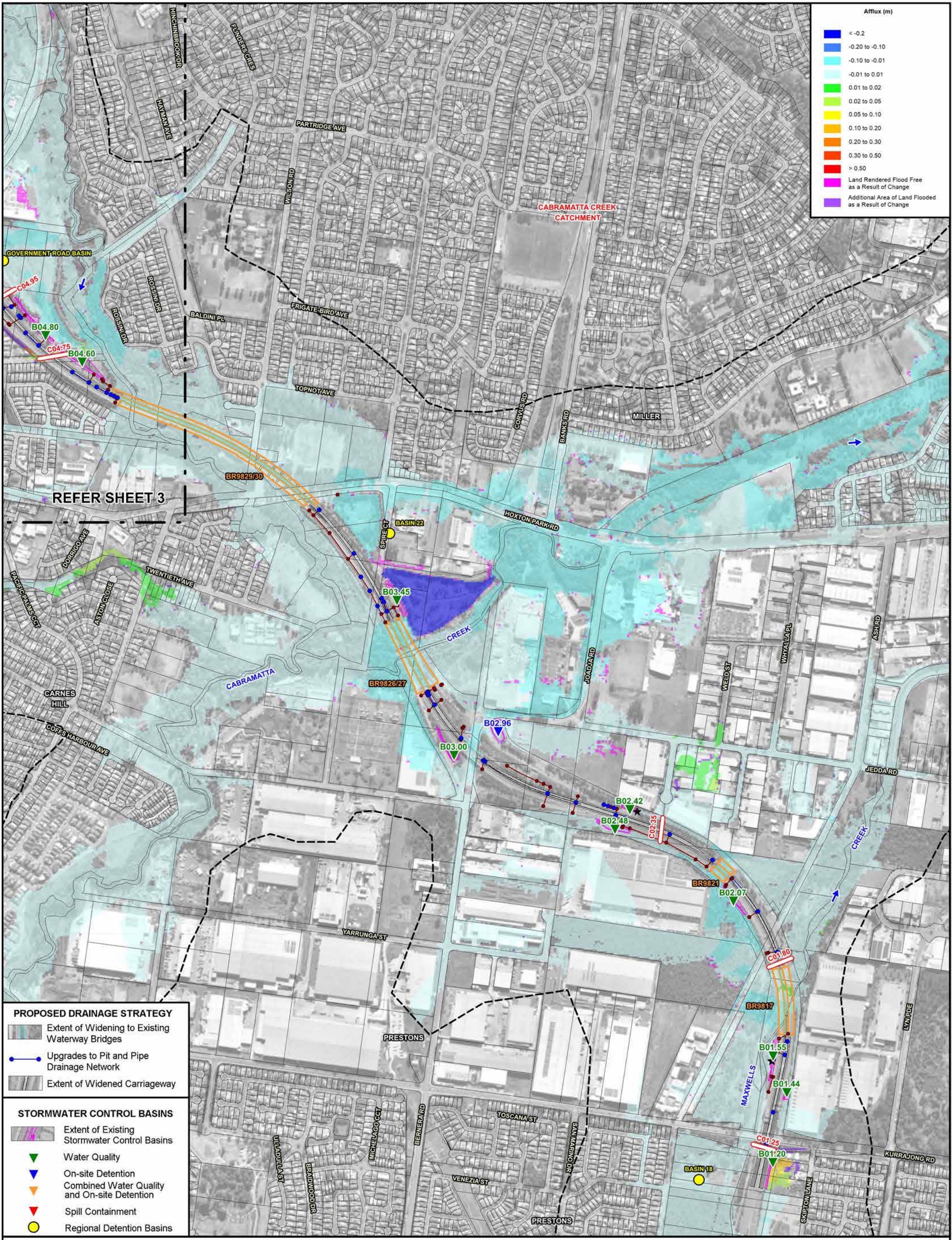
SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure E.1

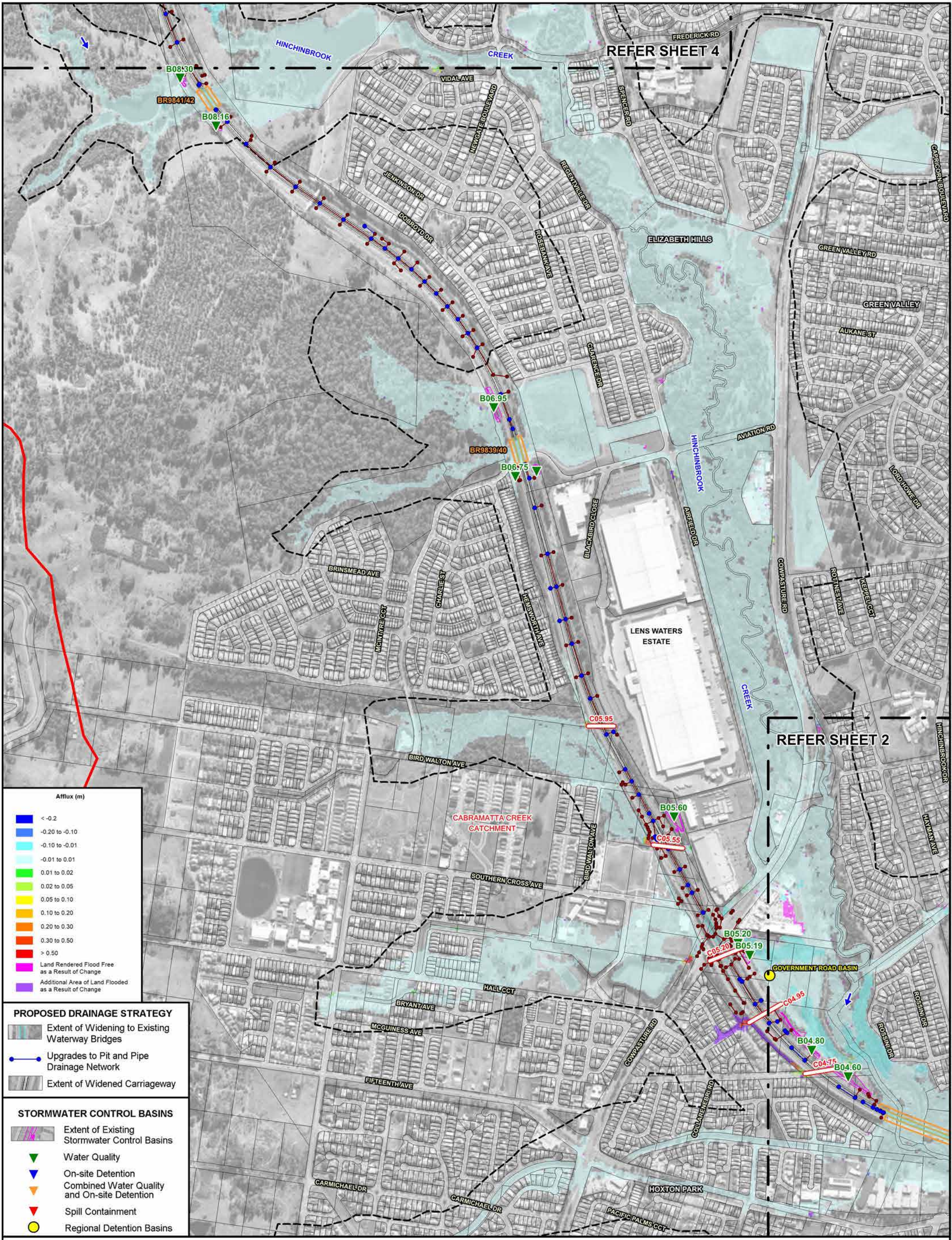
(Sheet 1 of 8)

IMPACT OF A PARTIAL BLOCKAGE ON FLOOD BEHAVIOUR

1% AEP



Lyall & Associates



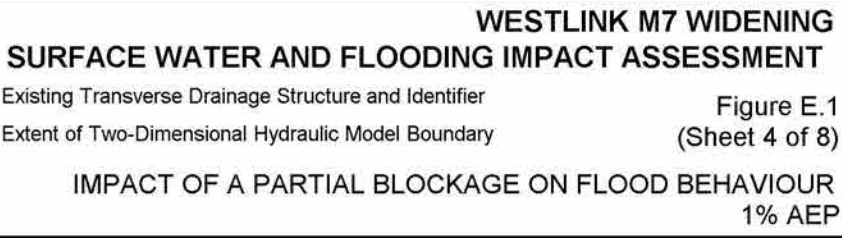
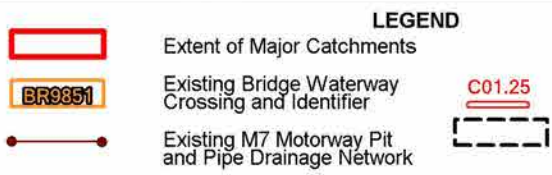
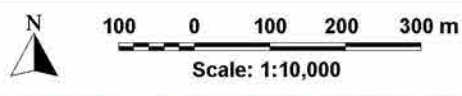
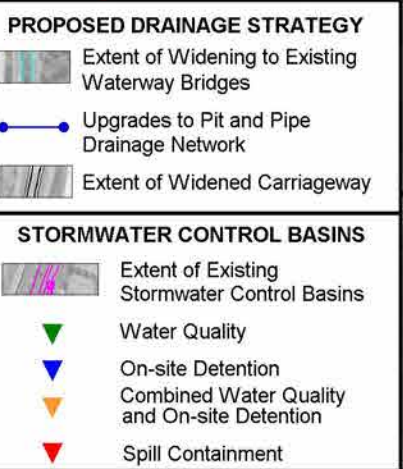
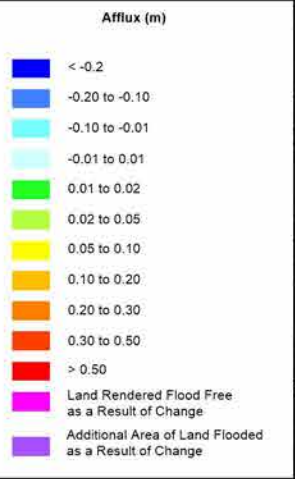
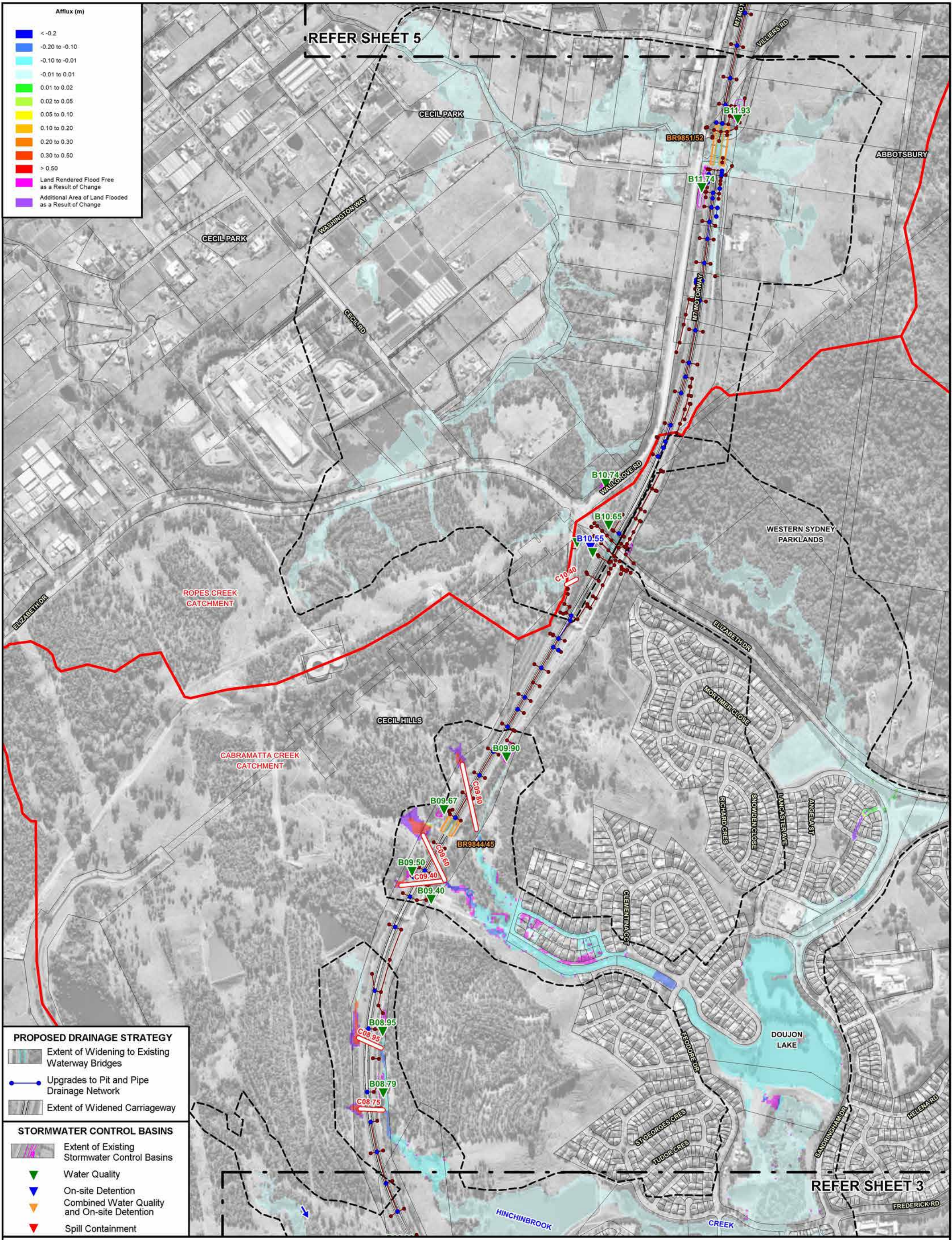
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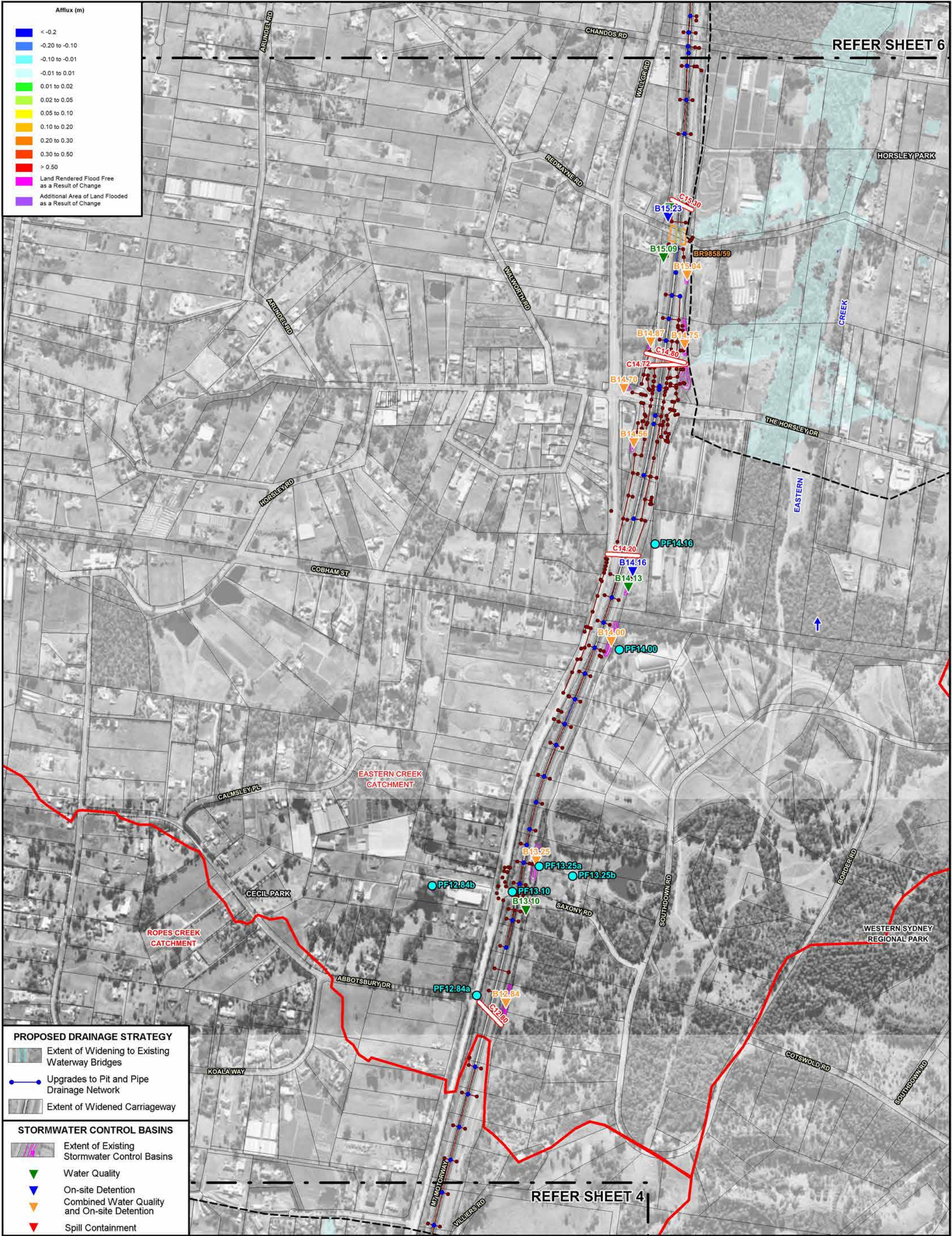


IMPACT OF A PARTIAL BLOCKAGE ON FLOOD BEHAVIOUR

1% AEP

Figure E.1
(Sheet 3 of 8)





PROPOSED DRAINAGE STRATEGY

- Extent of Widening to Existing Waterway Bridges
- Upgrades to Pit and Pipe Drainage Network
- Extent of Widened Carriageway

STORMWATER CONTROL BASINS

- Extent of Existing Stormwater Control Basins
- Water Quality
- On-site Detention
- Combined Water Quality and On-site Detention
- Spill Containment

N

100 0 100 200 300 m

Scale: 1:10,000

Lyall & Associates

LEGEND

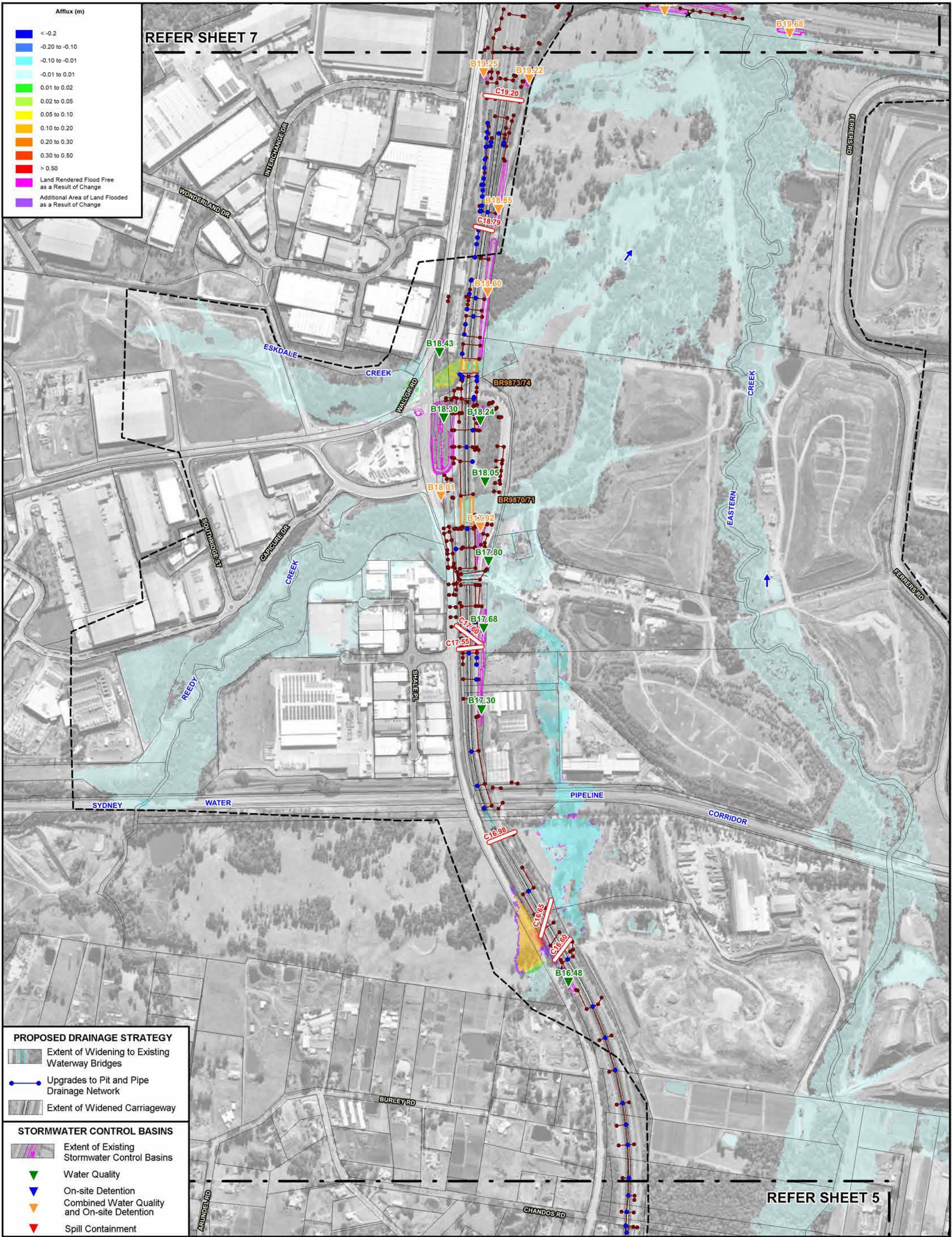
- Extent of Major Catchments
- Existing Bridge Waterway Crossing and Identifier
- Existing M7 Motorway Pit and Pipe Drainage Network
- Peak Flow Location and Identifier
- C01.25
- Extent of Two-Dimensional Hydraulic Model Boundary

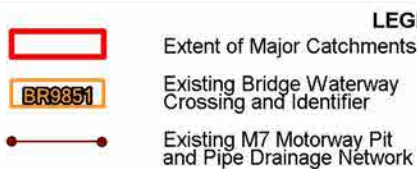
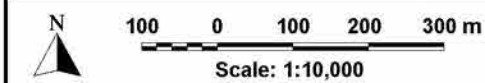
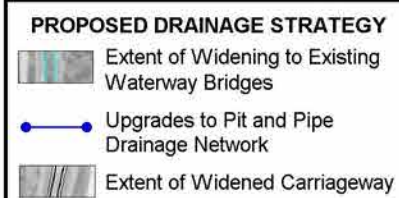
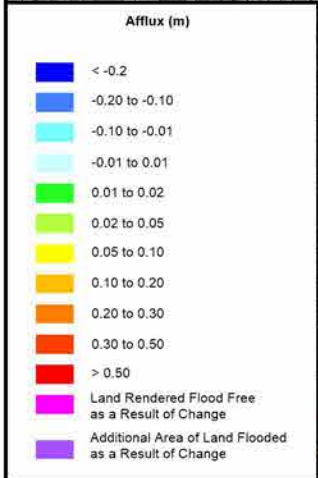
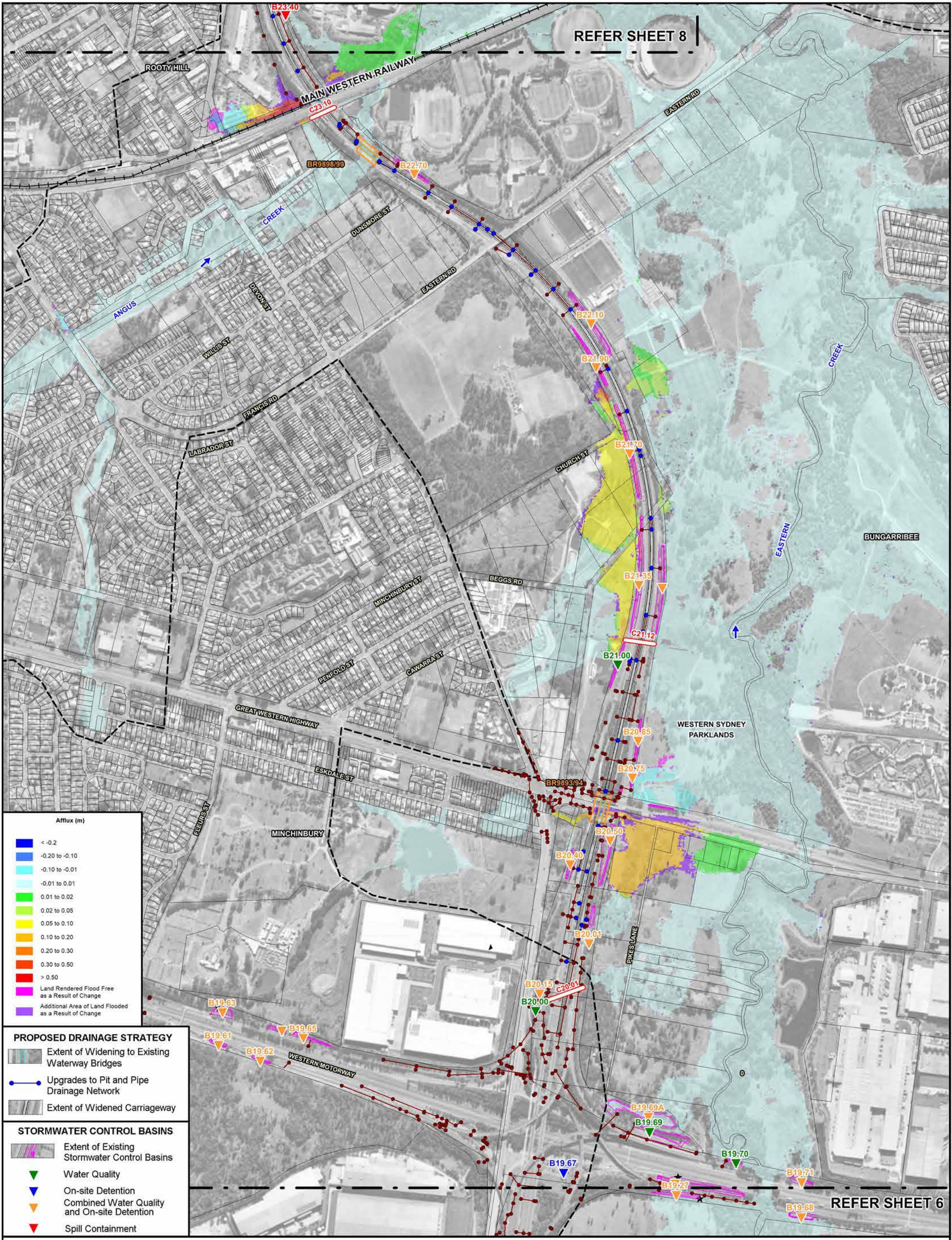
WESTLINK M7 WIDENING

SURFACE WATER AND FLOODING IMPACT ASSESSMENT

Figure E.1
(Sheet 5 of 8)

IMPACT OF A PARTIAL BLOCKAGE ON FLOOD BEHAVIOUR
1% AEP





**WESTLINK M7 WIDENING
SURFACE WATER AND FLOODING IMPACT ASSESSMENT**

IMPACT OF A PARTIAL BLOCKAGE ON FLOOD BEHAVIOUR
1% AEP

Figure E.1
(Sheet 7 of 8)

