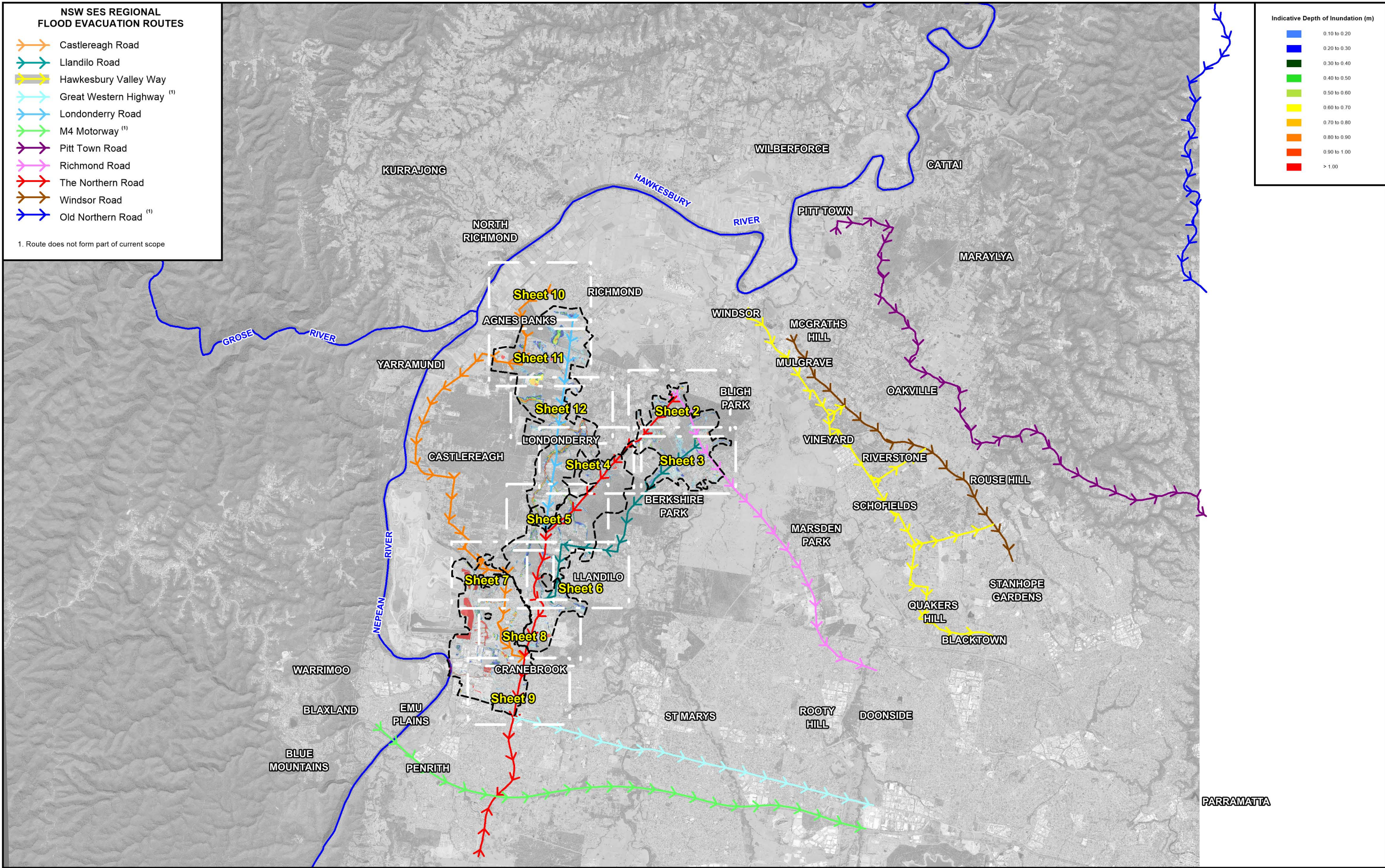
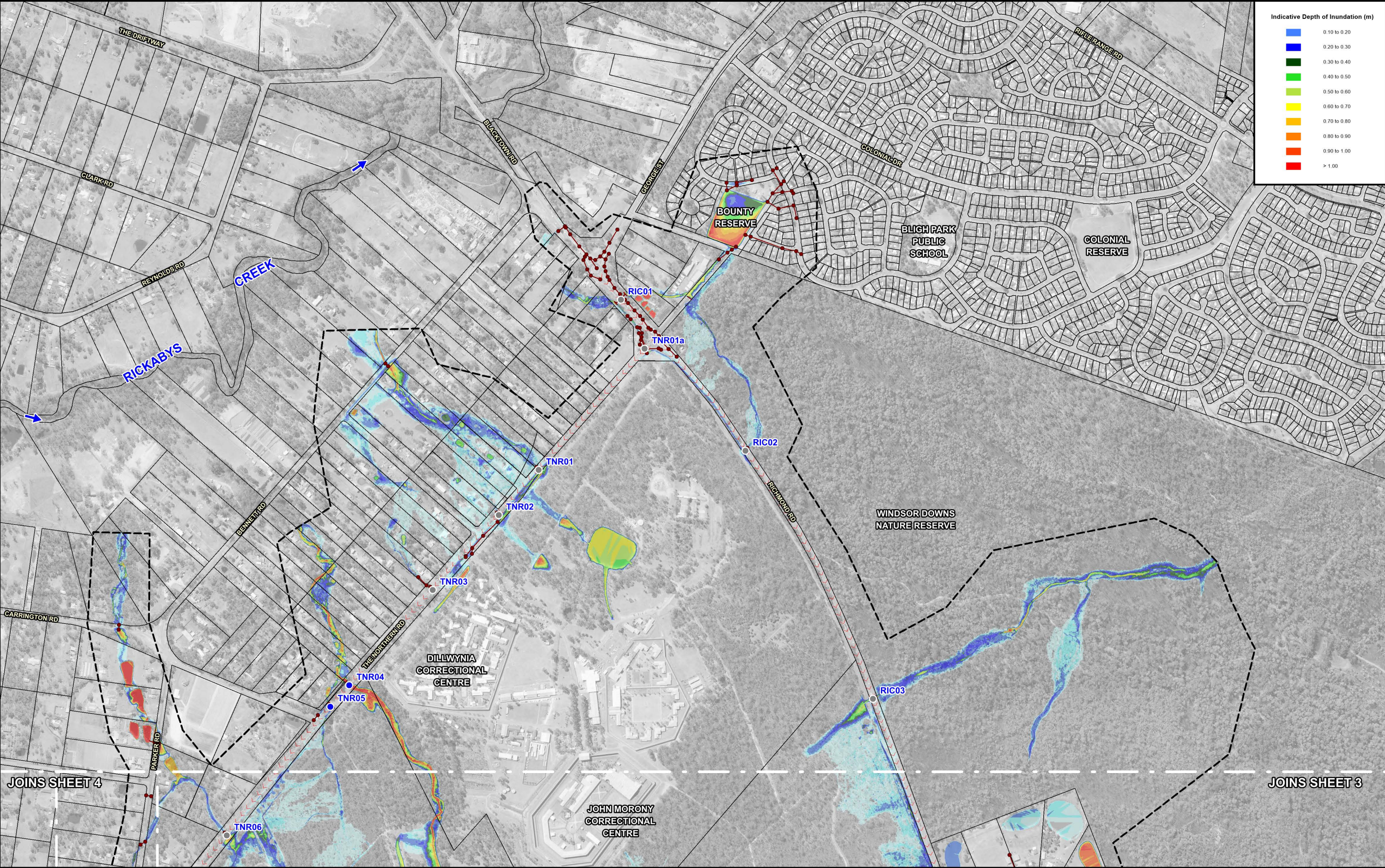


ANNEXURE D
FIGURES SHOWING PATTERNS OF MAINSTREAM FLOODING AND MAJOR
OVERLAND FLOW UNDER PRE-PROPOSAL CONDITIONS FOR DESIGN
STORMS WITH AEPS OF 20%, 5% AND 0.05%

LIST OF ANNEXURE D FIGURES

- D.01 Patterns of mainstream flooding and major overland flow – Pre-proposal conditions – 20% AEP (12 sheets)
- D.02 Patterns of mainstream flooding and major overland flow – Pre-proposal conditions – 5% AEP (12 sheets)
- D.03 Patterns of mainstream flooding and major overland flow – Pre-proposal conditions – 0.05% AEP (12 sheets)





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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER	
● TNR22	State Project - Drainage Improvements Not Required
● TNR24	State Project - Drainage Improvements Required
● CR32	Regional/Local Project - Drainage Improvements Not Required
● CR36	Regional/Local Project - Drainage Improvements Required

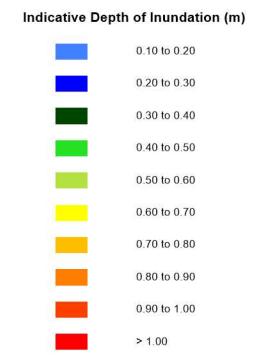
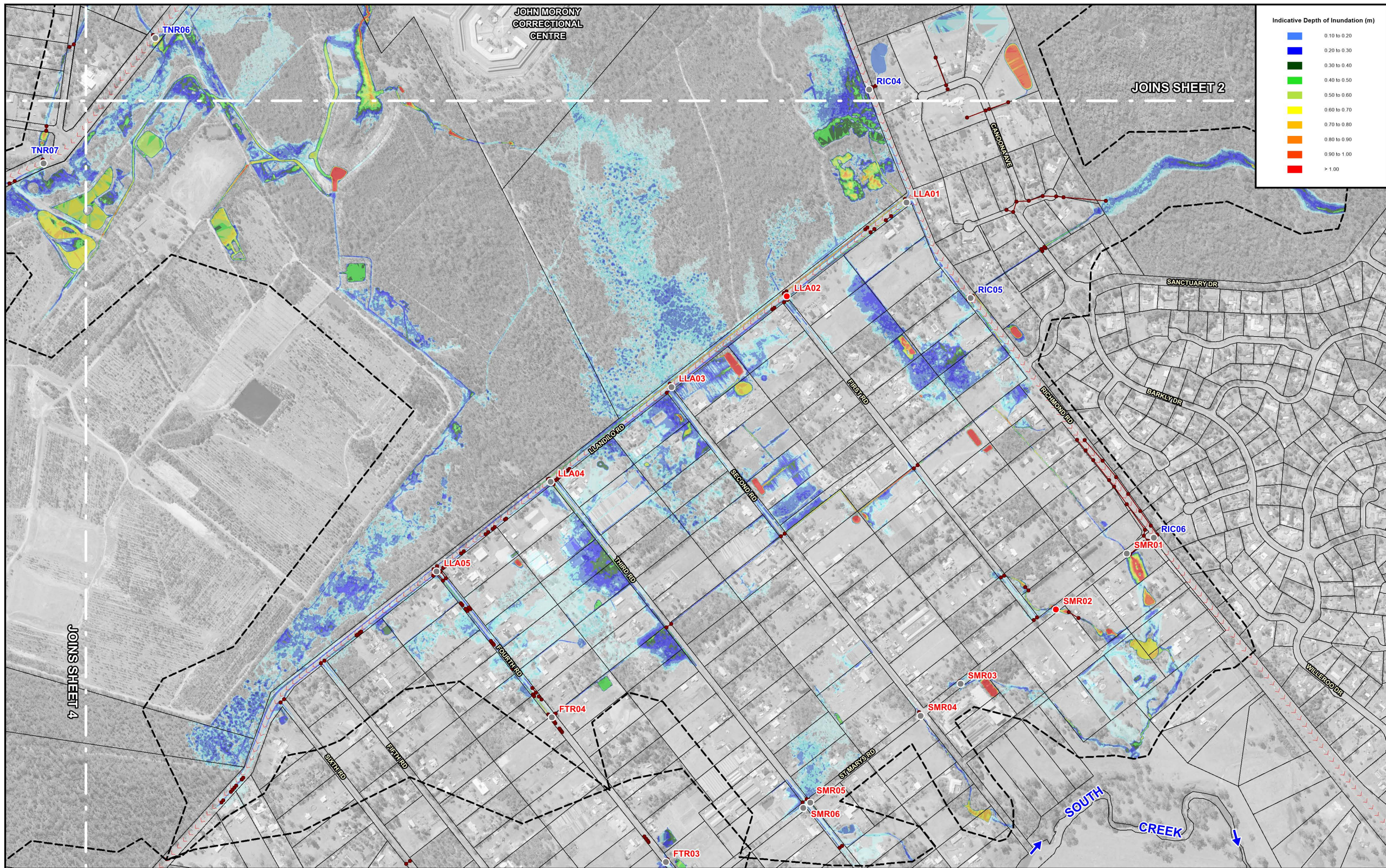
---	TUFLOW Model Boundary
>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 2 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER	
● TNR22	State Project - Drainage Improvements Not Required
● TNR24	State Project - Drainage Improvements Required
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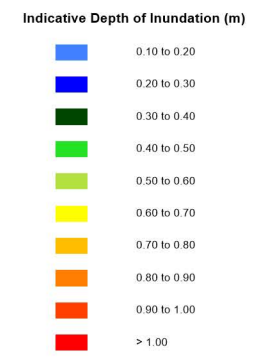
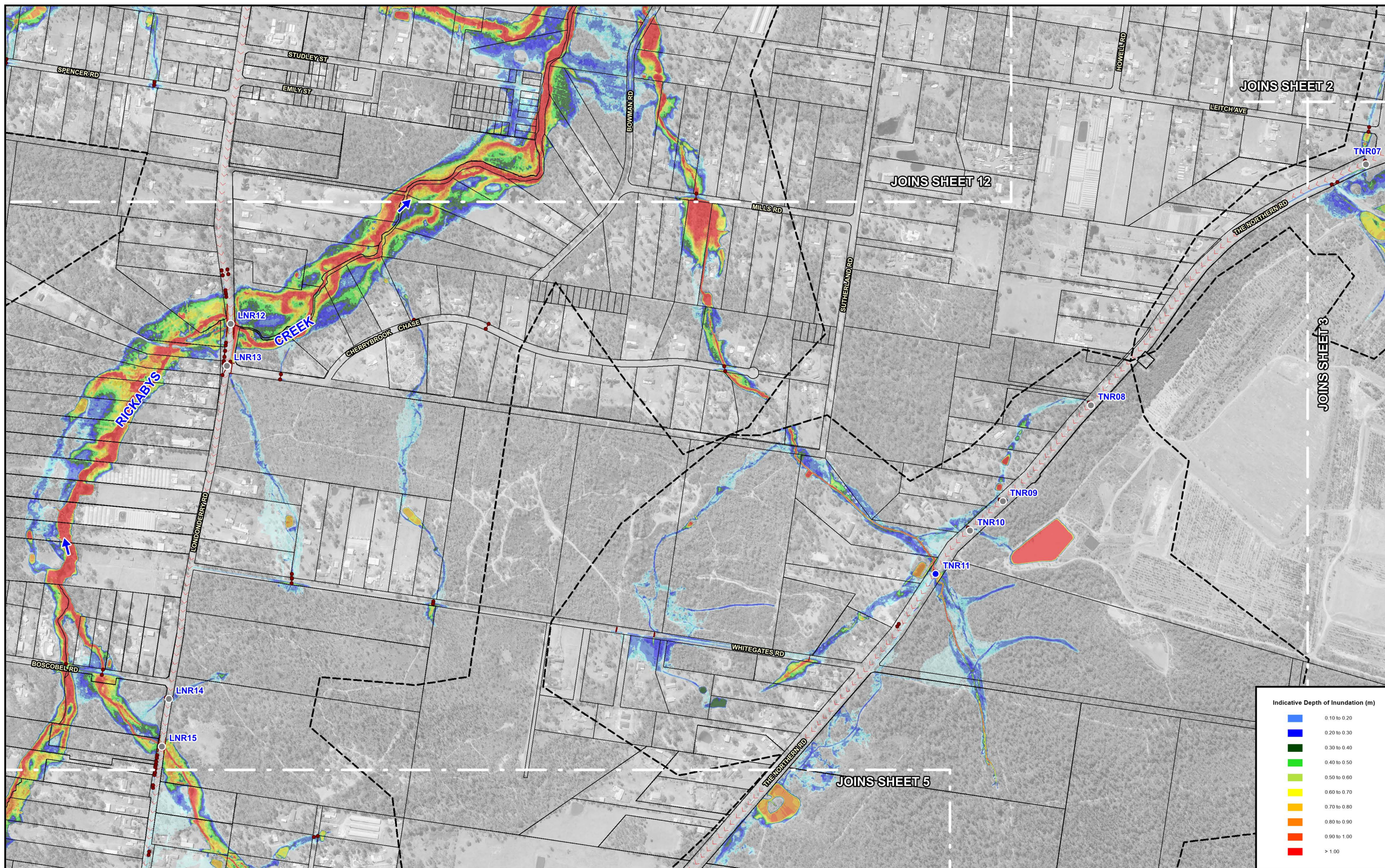
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TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 3 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

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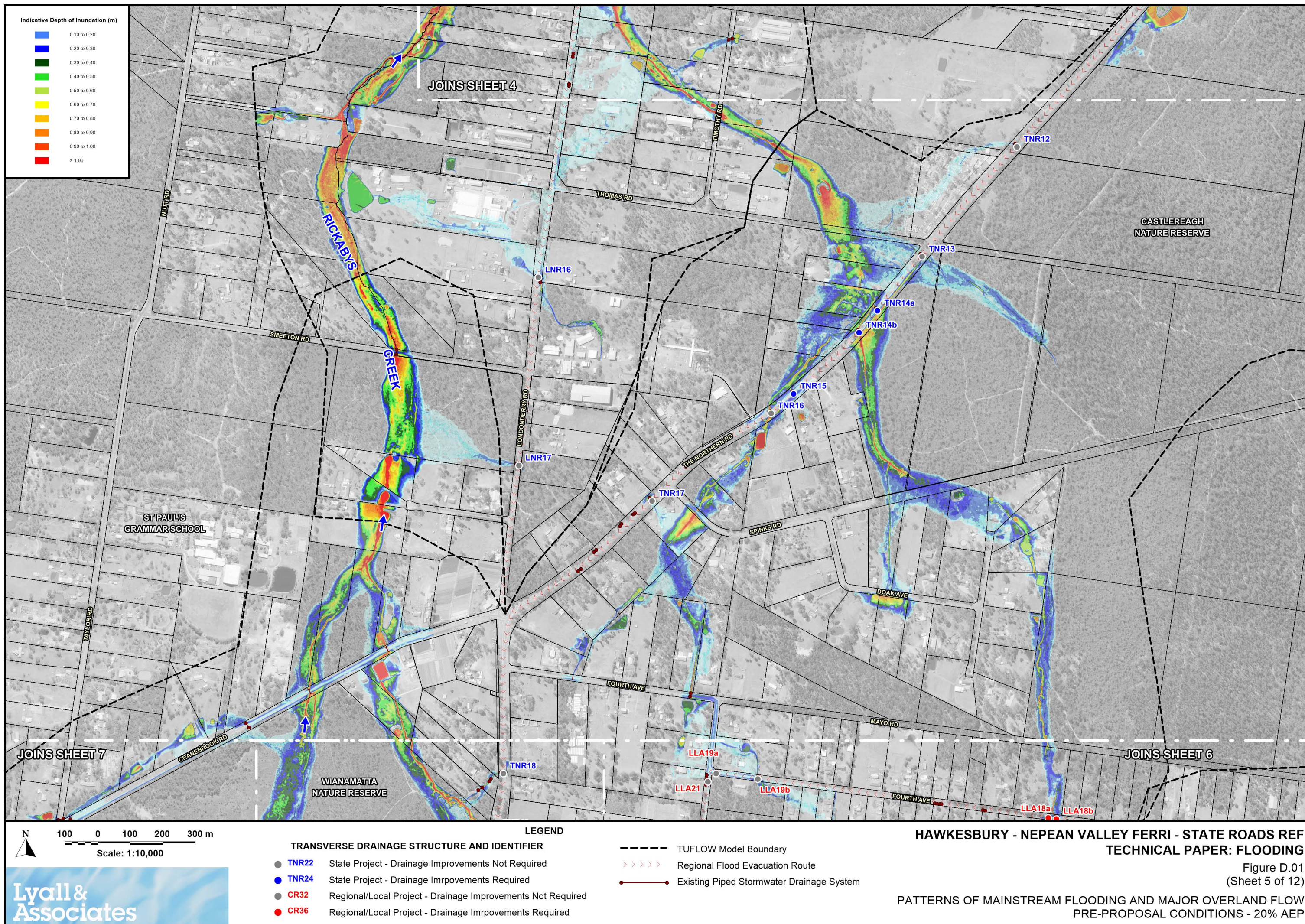
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- >>>> Regional Flood Evacuation Route
- Existing Piped Stormwater Drainage System

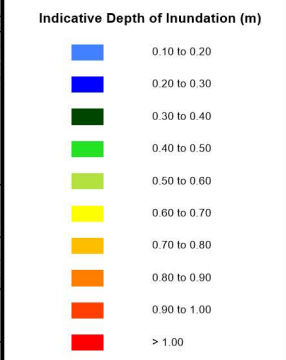
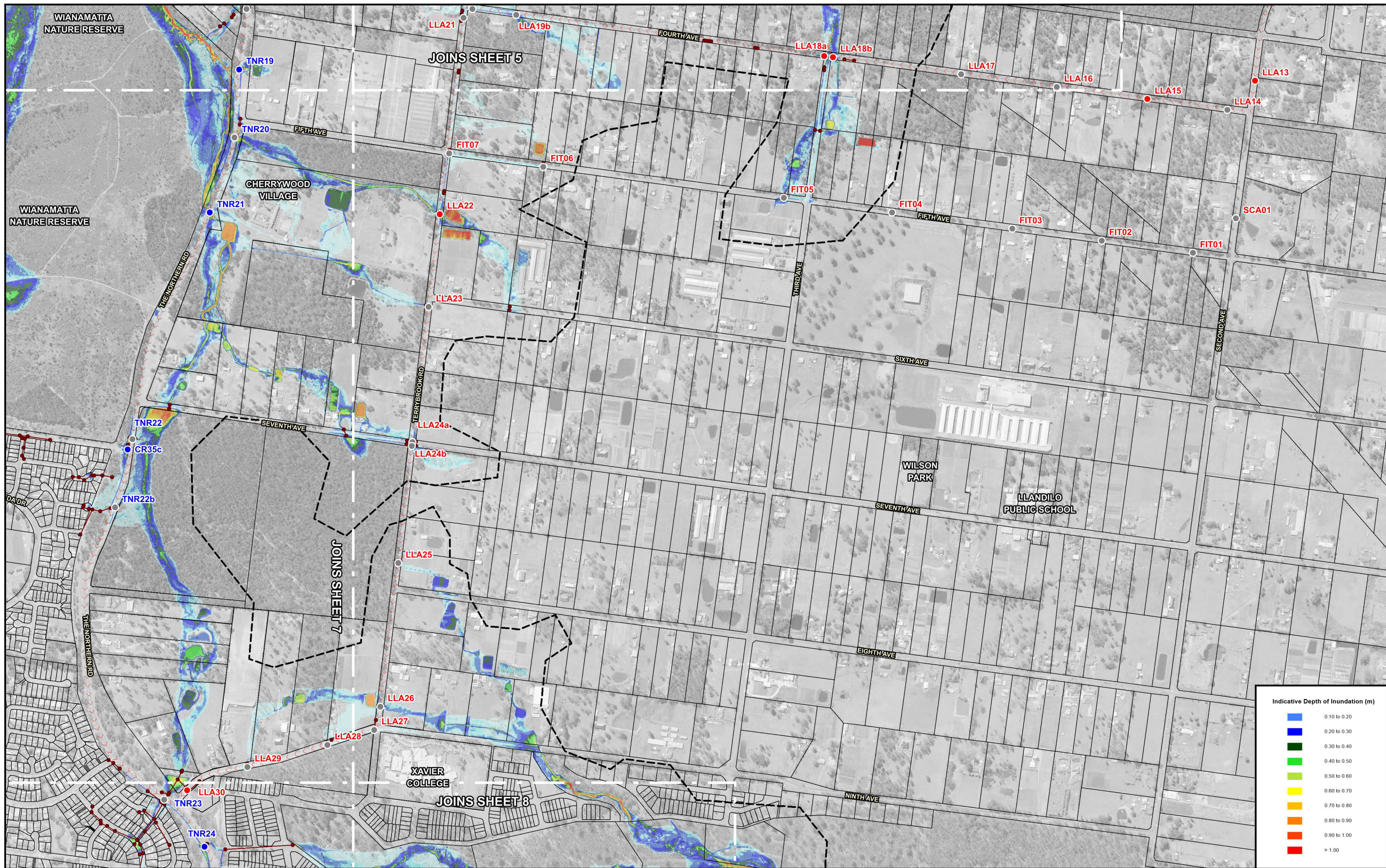
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 4 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP





Scale: 1:10,000

0 100 200 300 m

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TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

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- TUFLOW Model Boundary
- >>>> Regional Flood Evacuation Route
- Existing Piped Stormwater Drainage System

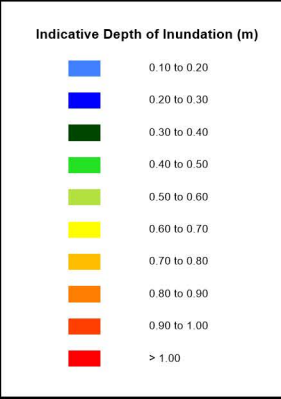
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 6 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW

PRE-PROPOSAL CONDITIONS - 20% AEP



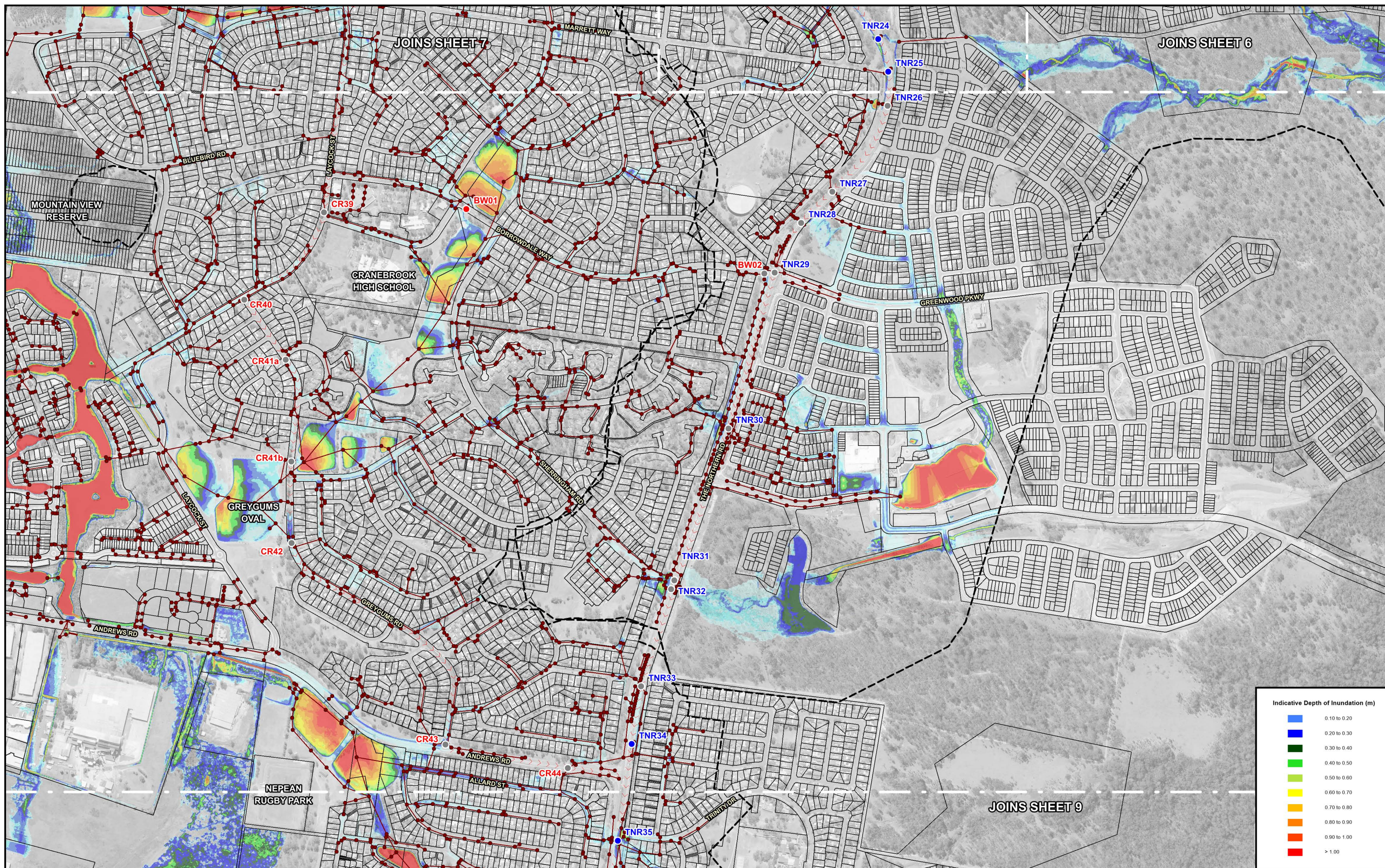
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-----	Regional Flood Evacuation Route
-----	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF
TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 7 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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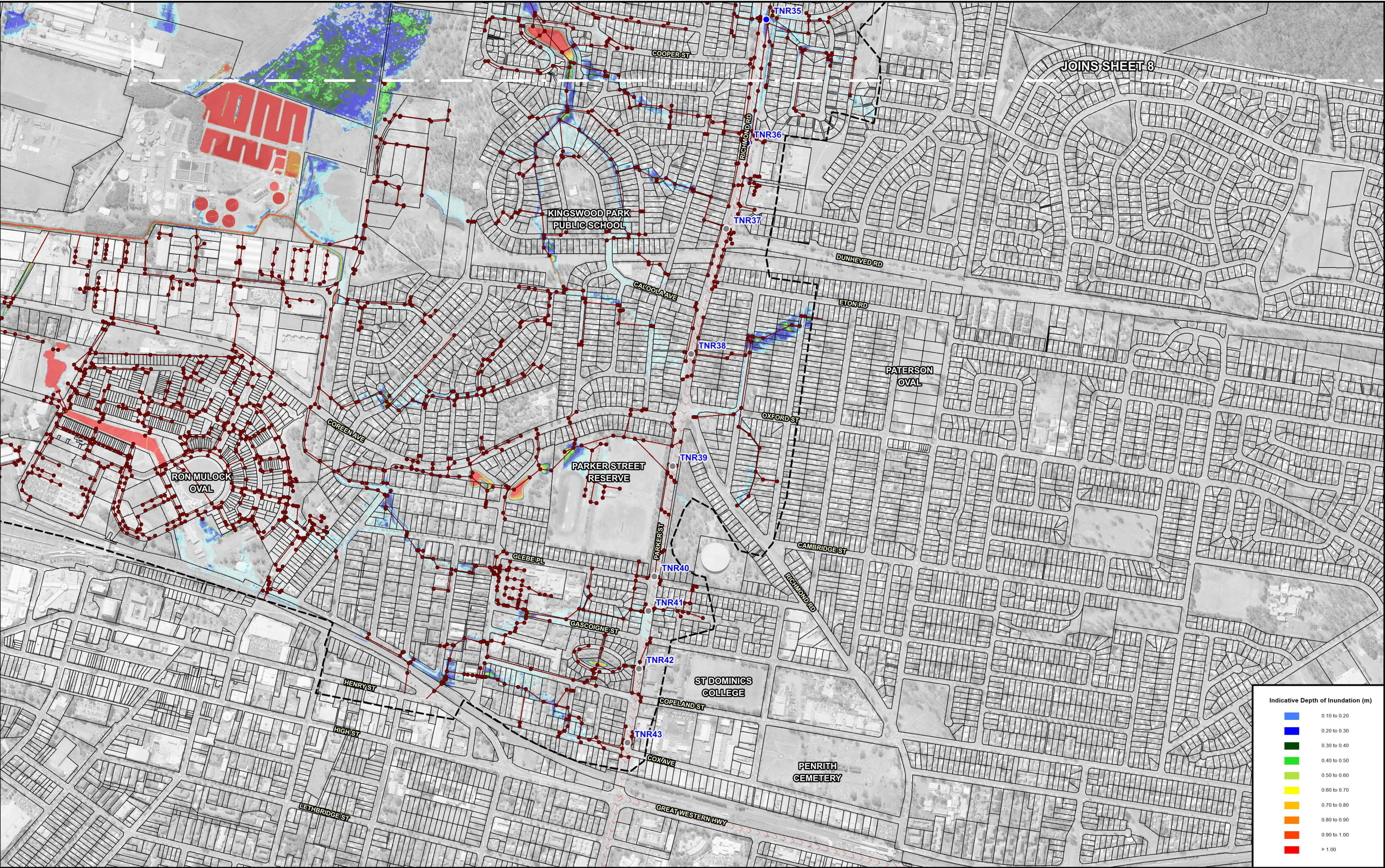
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- >>>> Regional Flood Evacuation Route
- Existing Piped Stormwater Drainage System

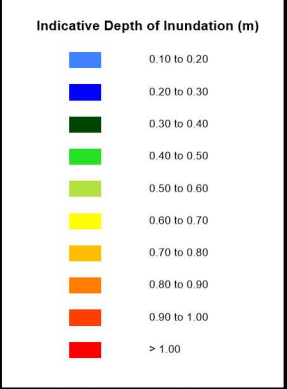
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TECHNICAL PAPER: FLOODING

Figure D.01
(Sheet 8 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP





N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

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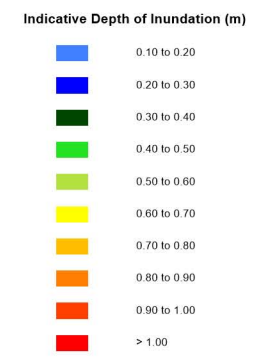
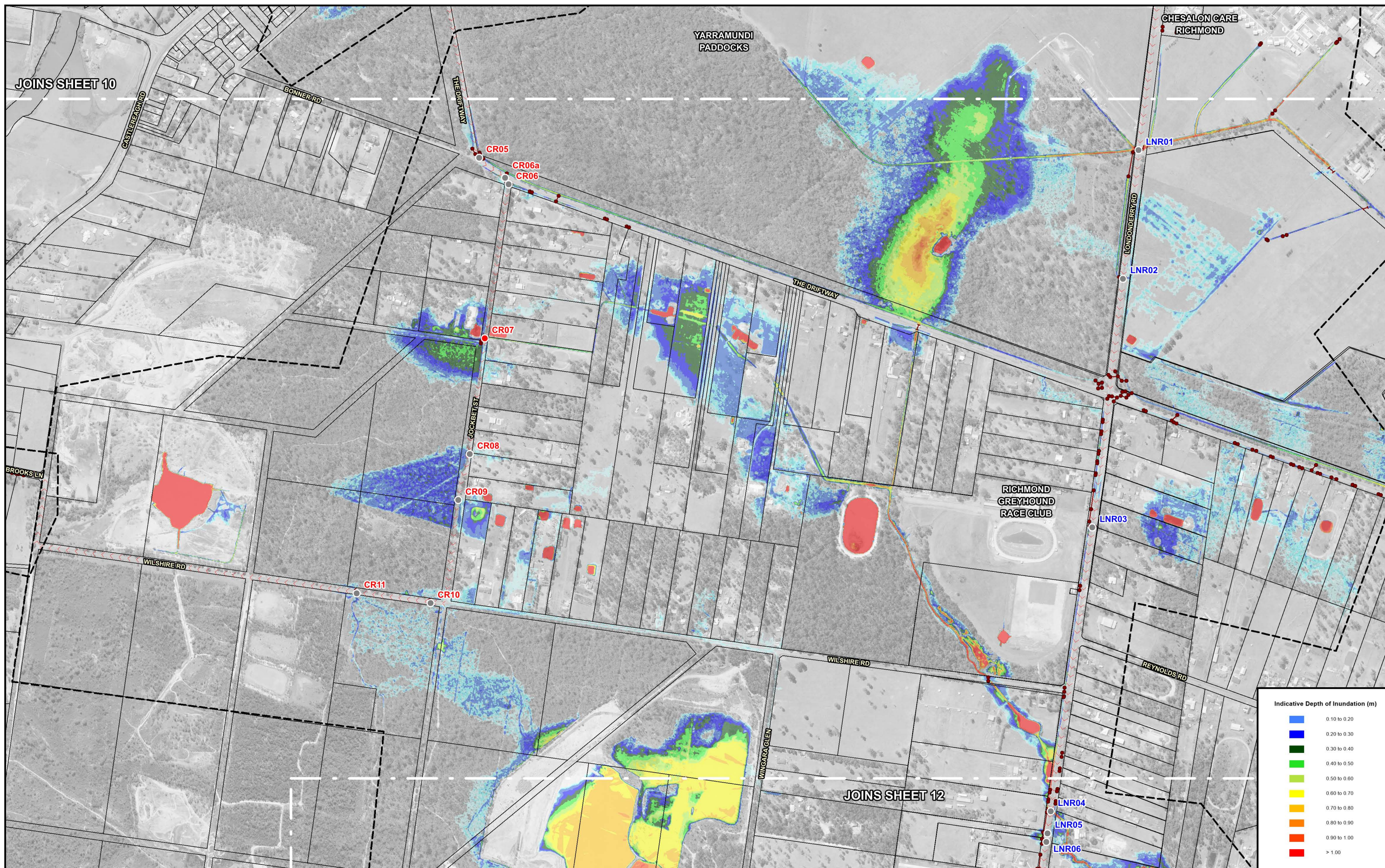
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—●—	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

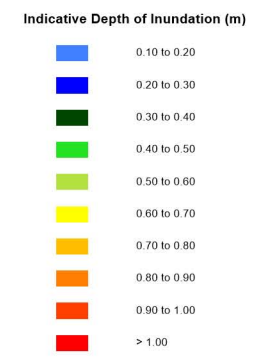
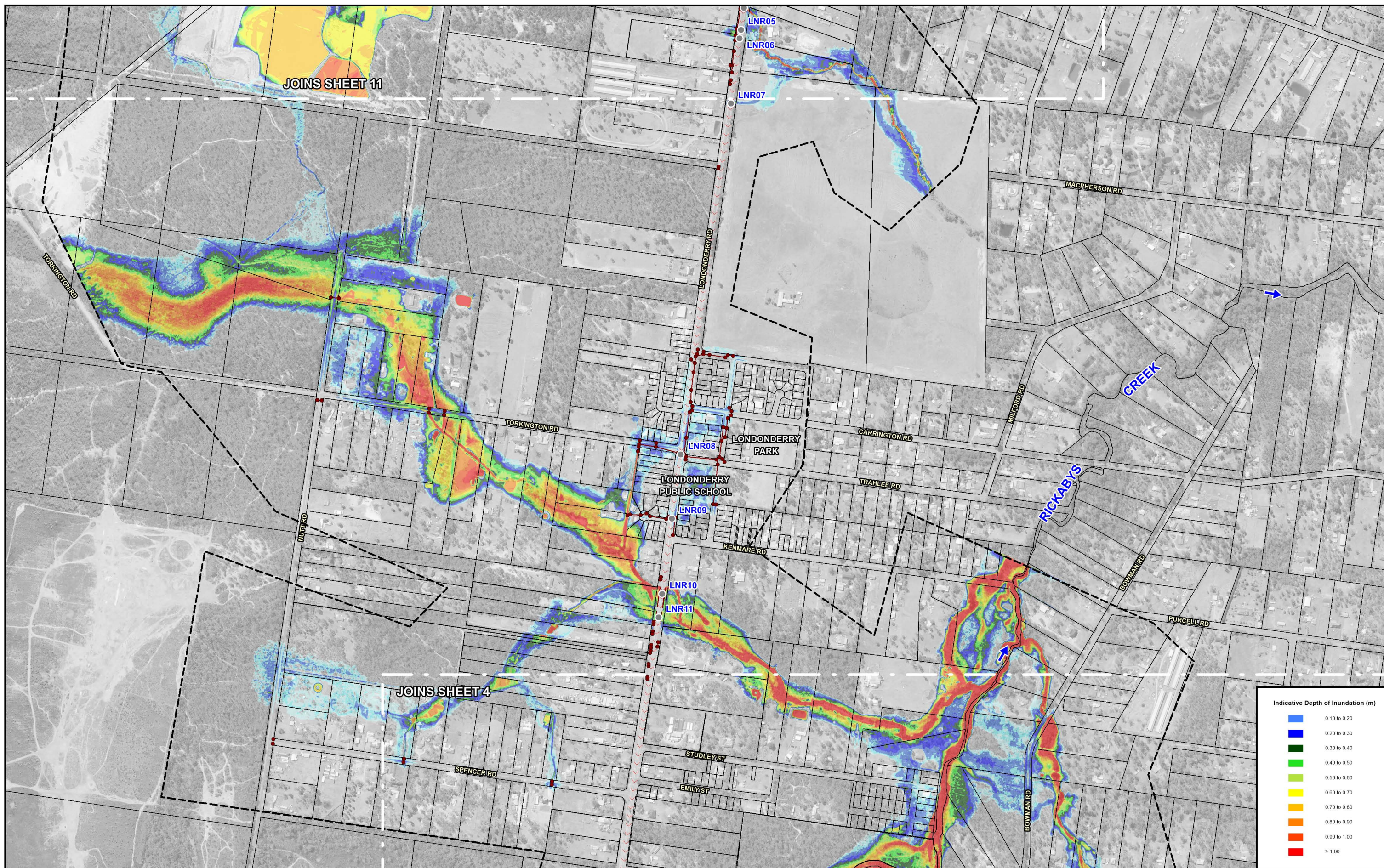
TECHNICAL PAPER: FLOODING

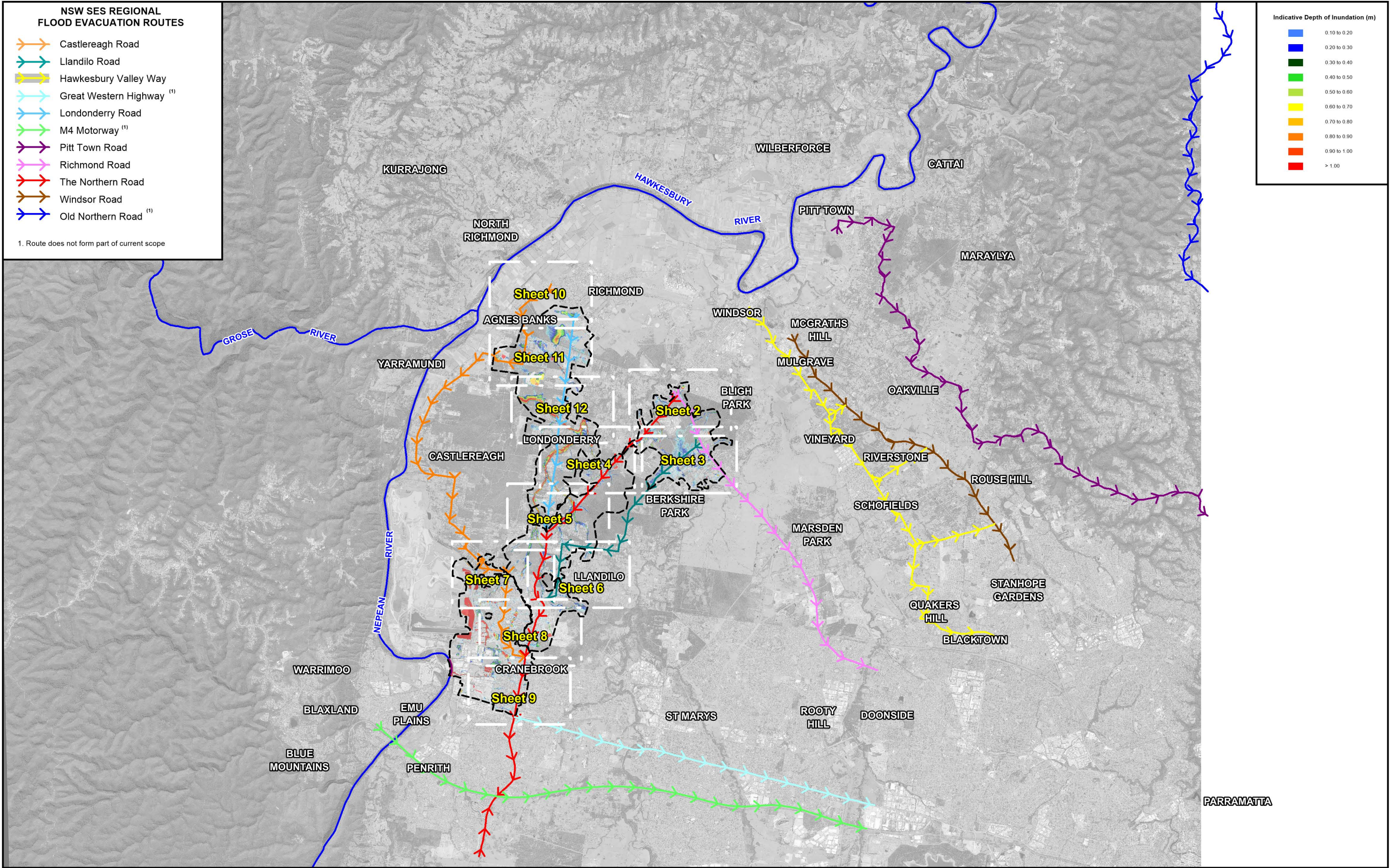
Figure D.01
(Sheet 10 of 12)

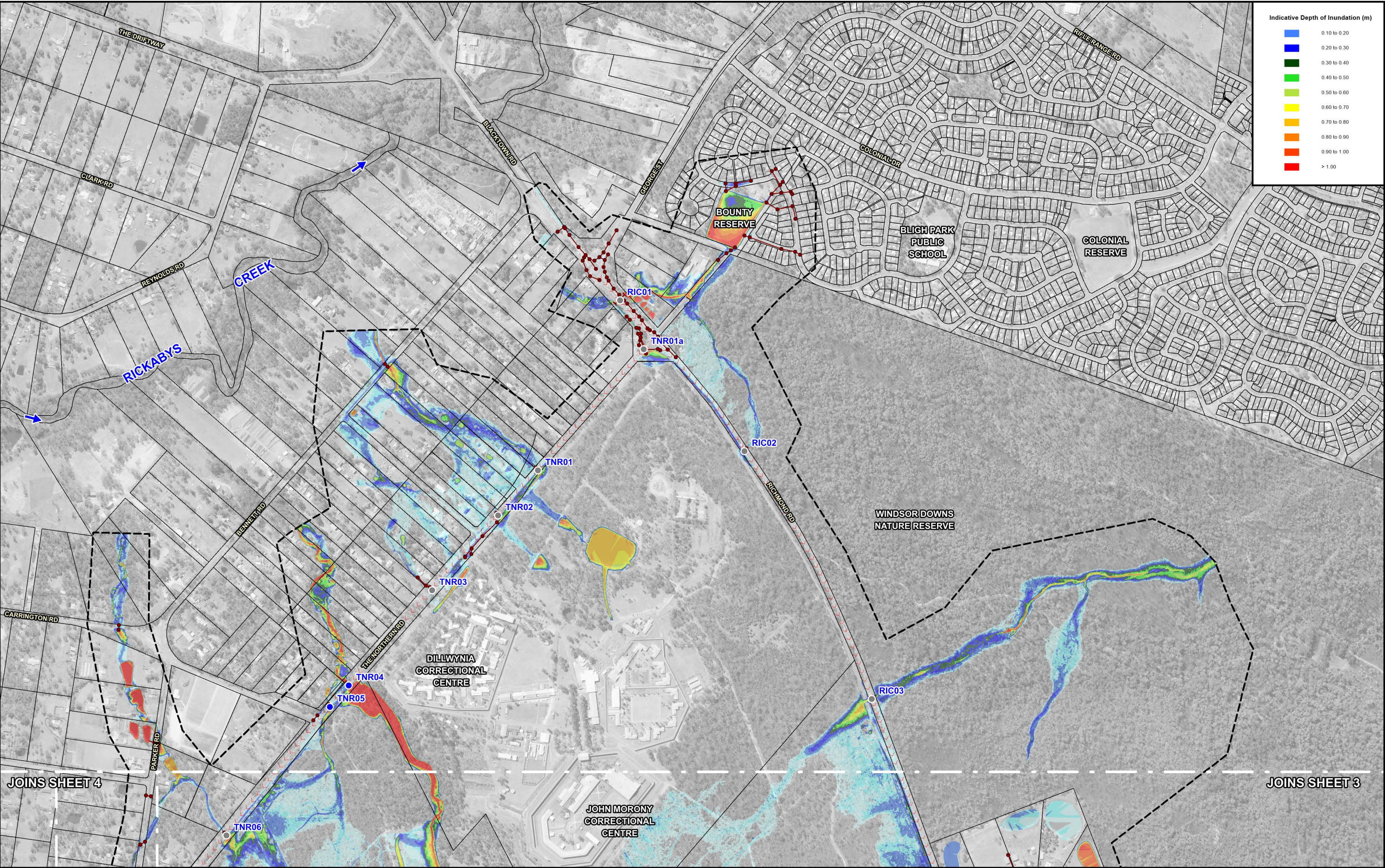
PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 20% AEP

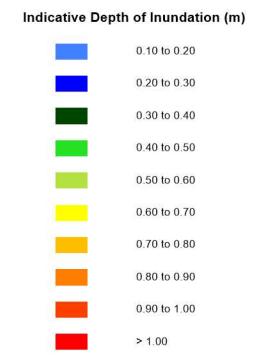
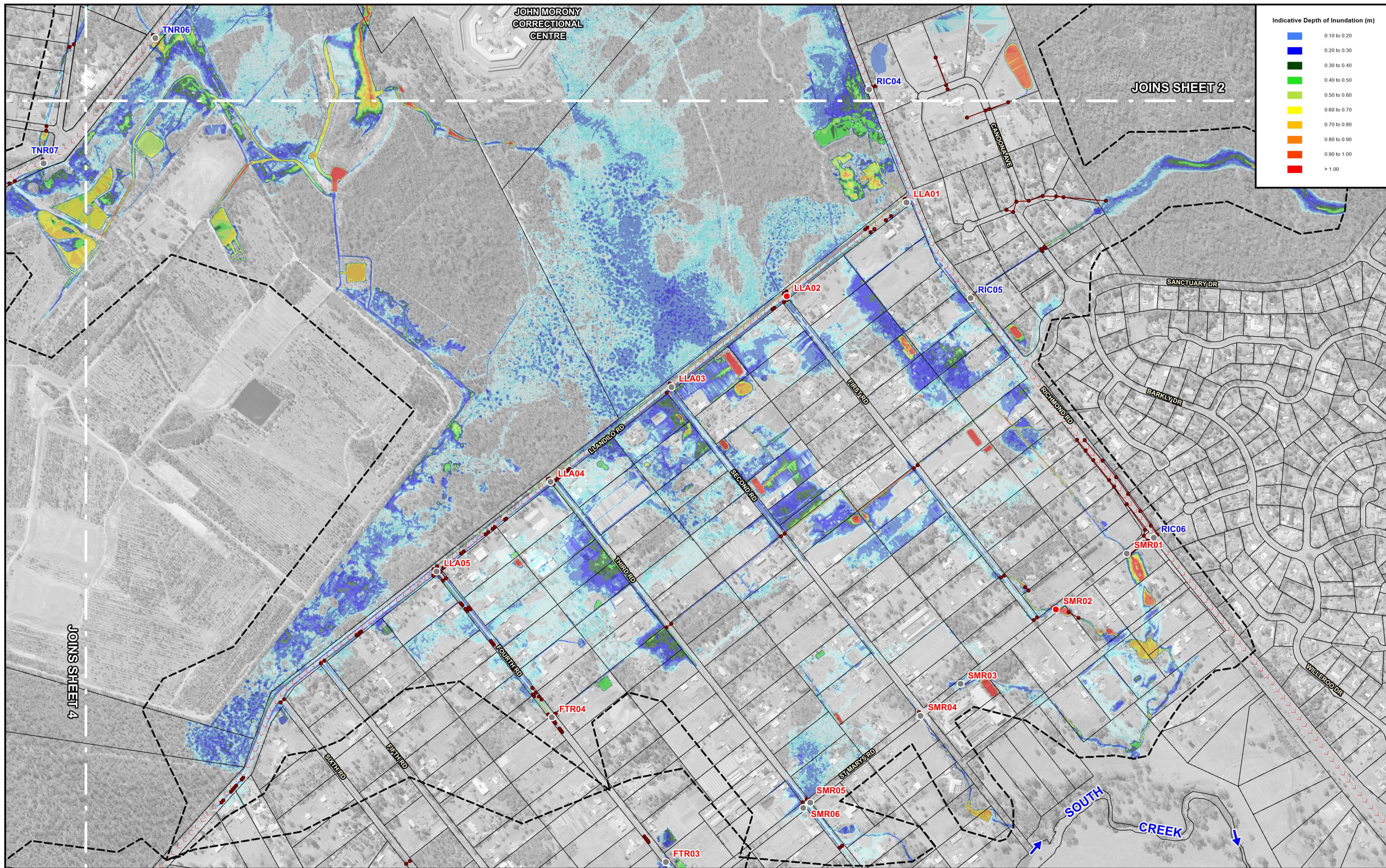


TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER		LEGEND	
● TNR22	State Project - Drainage Improvements Not Required	-----	TUFLOW Model Boundary
● TNR24	State Project - Drainage Improvements Required	>>>>	Regional Flood Evacuation Route
● CR32	Regional/Local Project - Drainage Improvements Not Required	—●—	Existing Piped Stormwater Drainage System
● CR36	Regional/Local Project - Drainage Improvements Required		









N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER	
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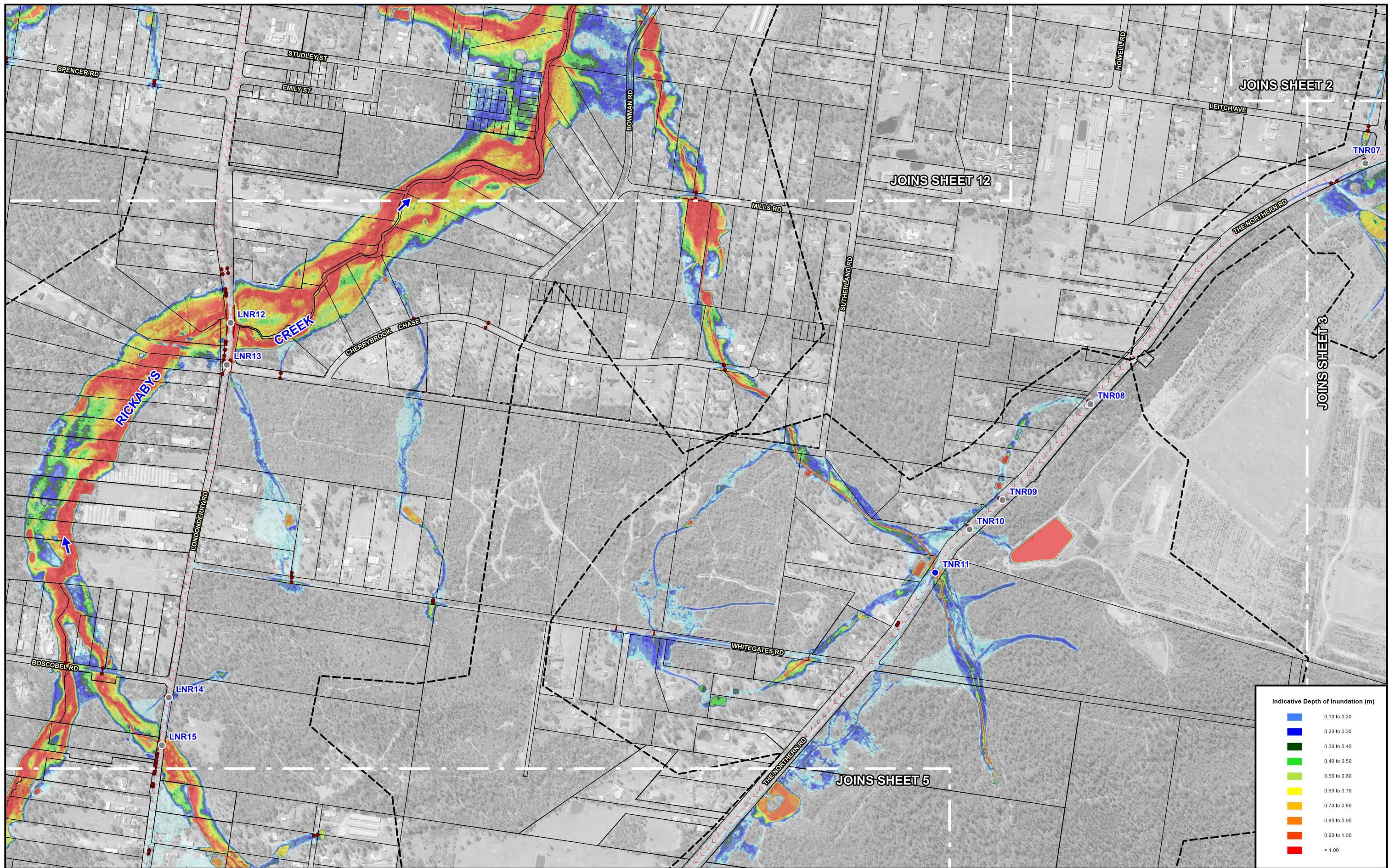
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>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

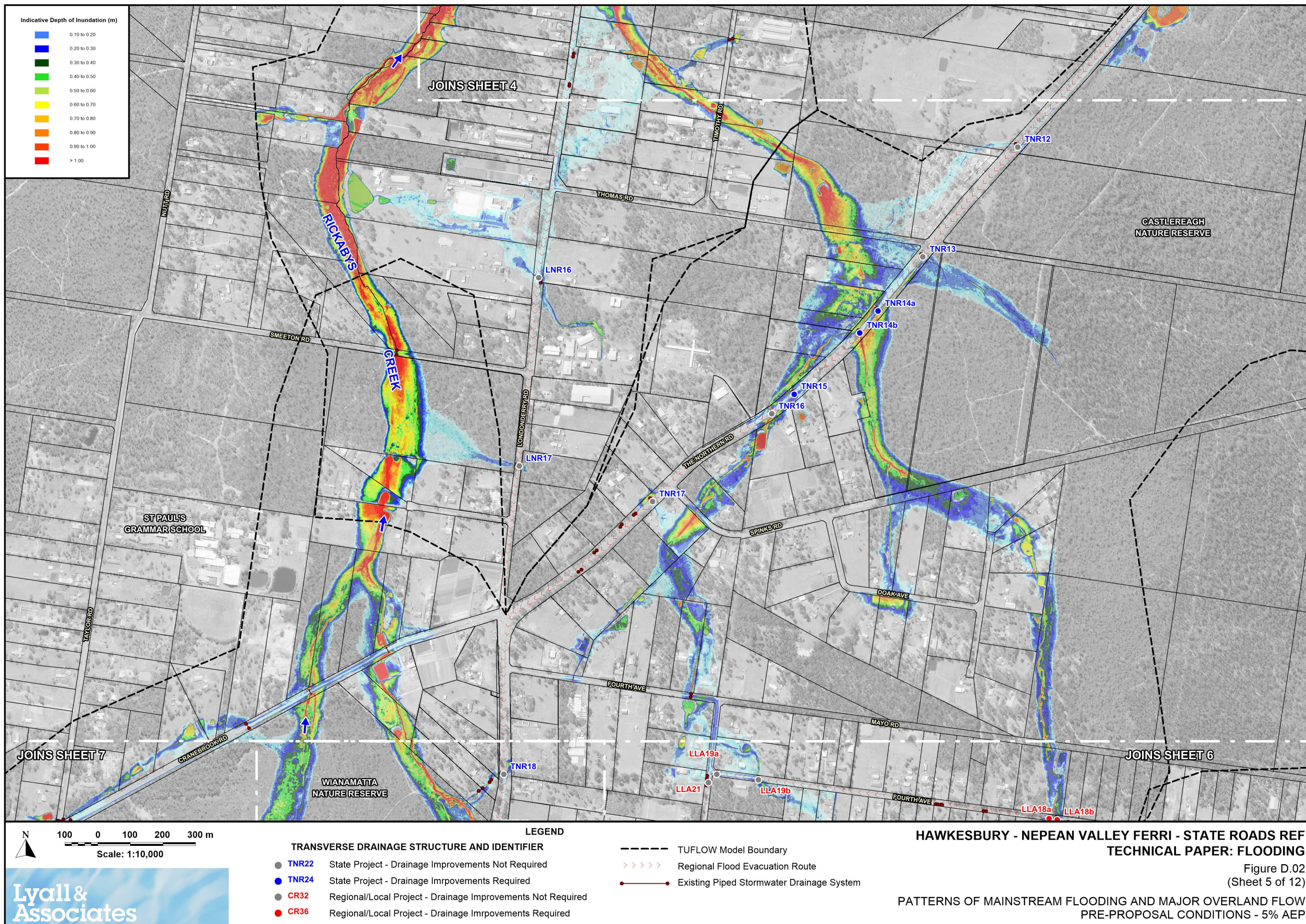
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

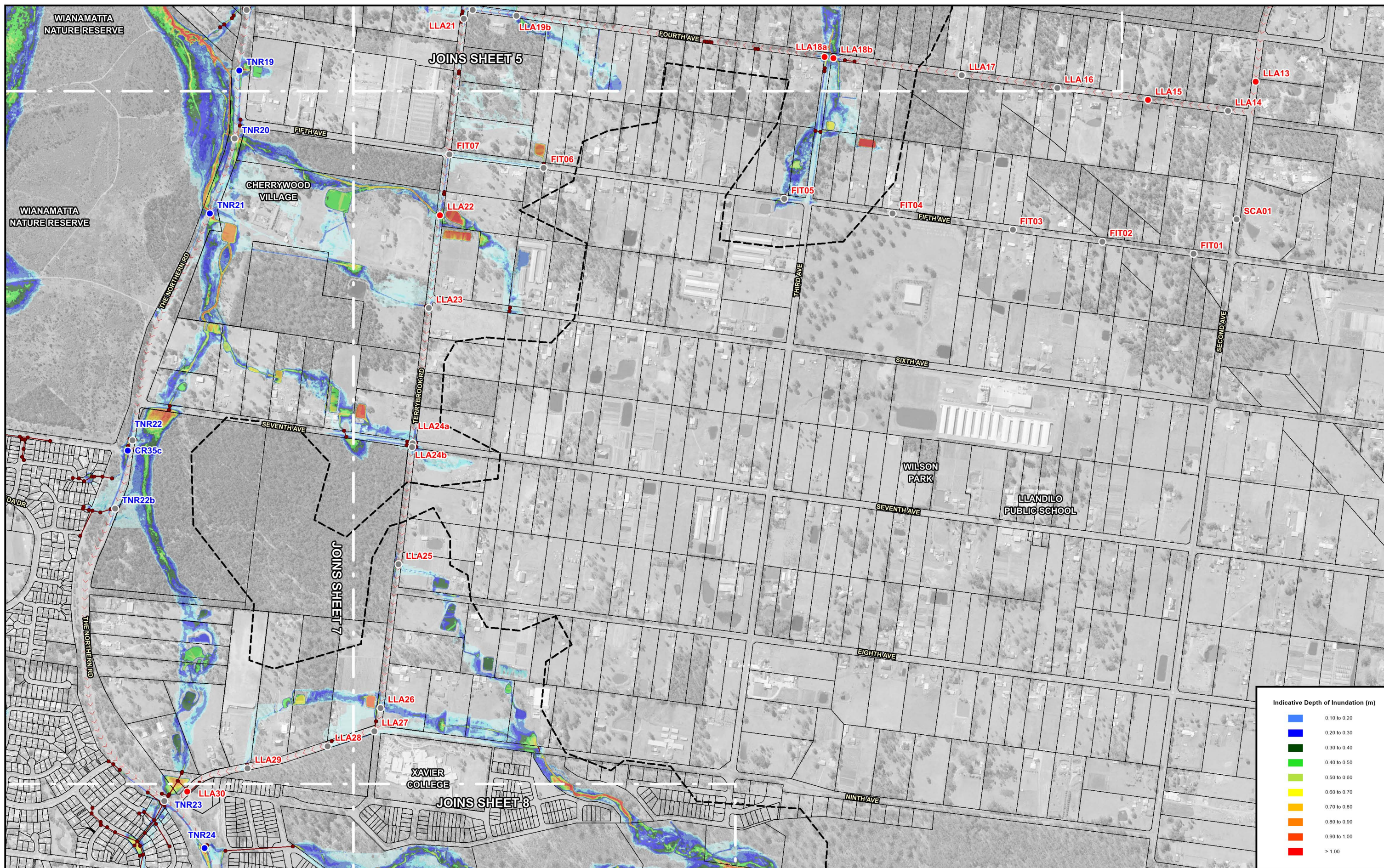
TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 3 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 5% AEP







Scale: 1:10,000

0 100 200 300 m

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER	
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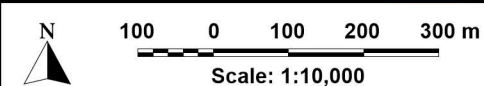
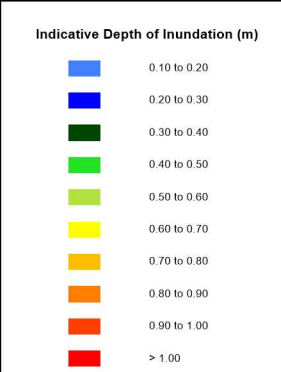
---	TUFLOW Model Boundary
>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 6 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 5% AEP



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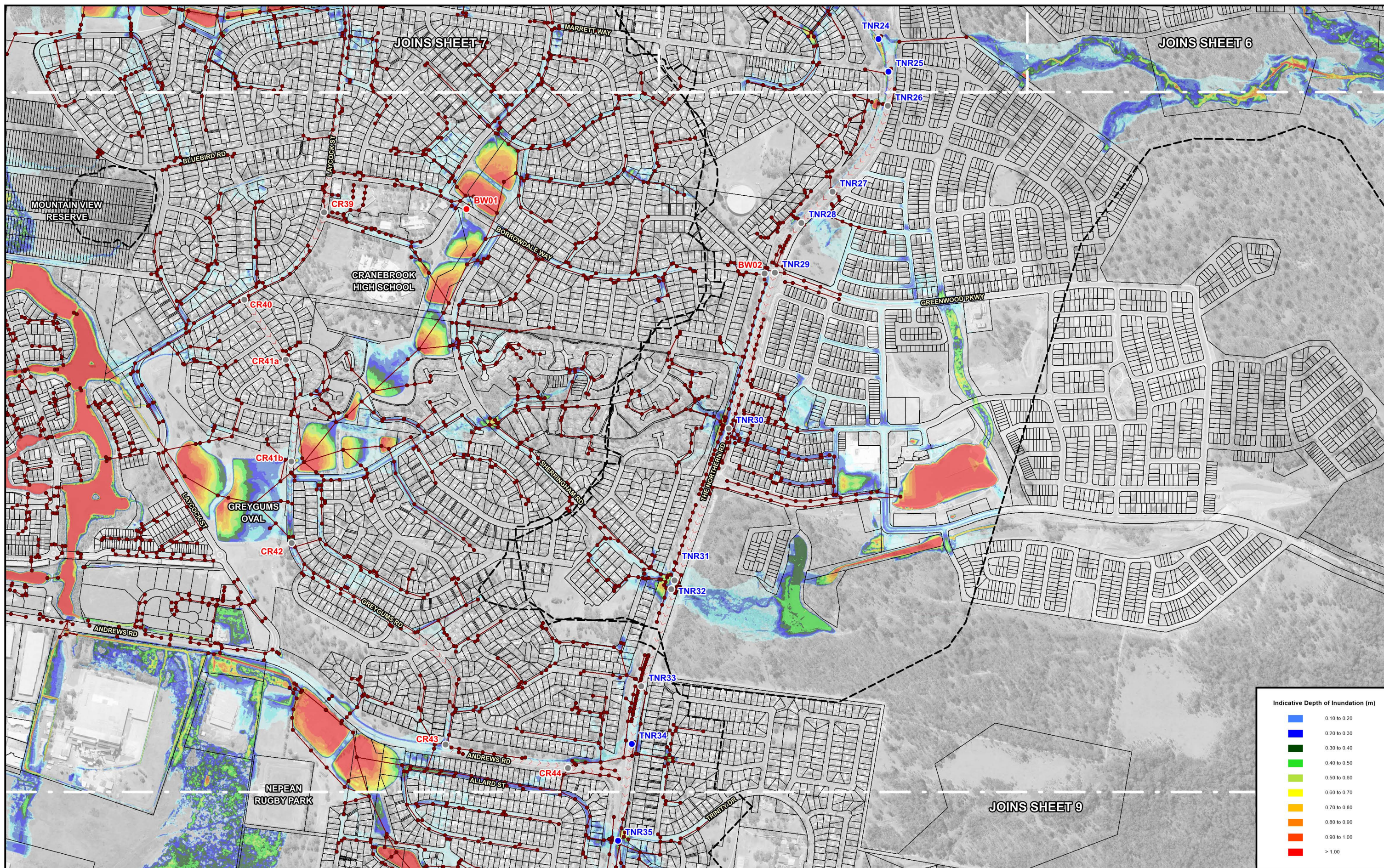
- LEGEND
- TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER
- TNR22 State Project - Drainage Improvements Not Required
 - TNR24 State Project - Drainage Improvements Required
 - CR32 Regional/Local Project - Drainage Improvements Not Required
 - CR36 Regional/Local Project - Drainage Improvements Required

- TUFLOW Model Boundary
- Regional Flood Evacuation Route
- Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF
TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 7 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 5% AEP



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LEGEND

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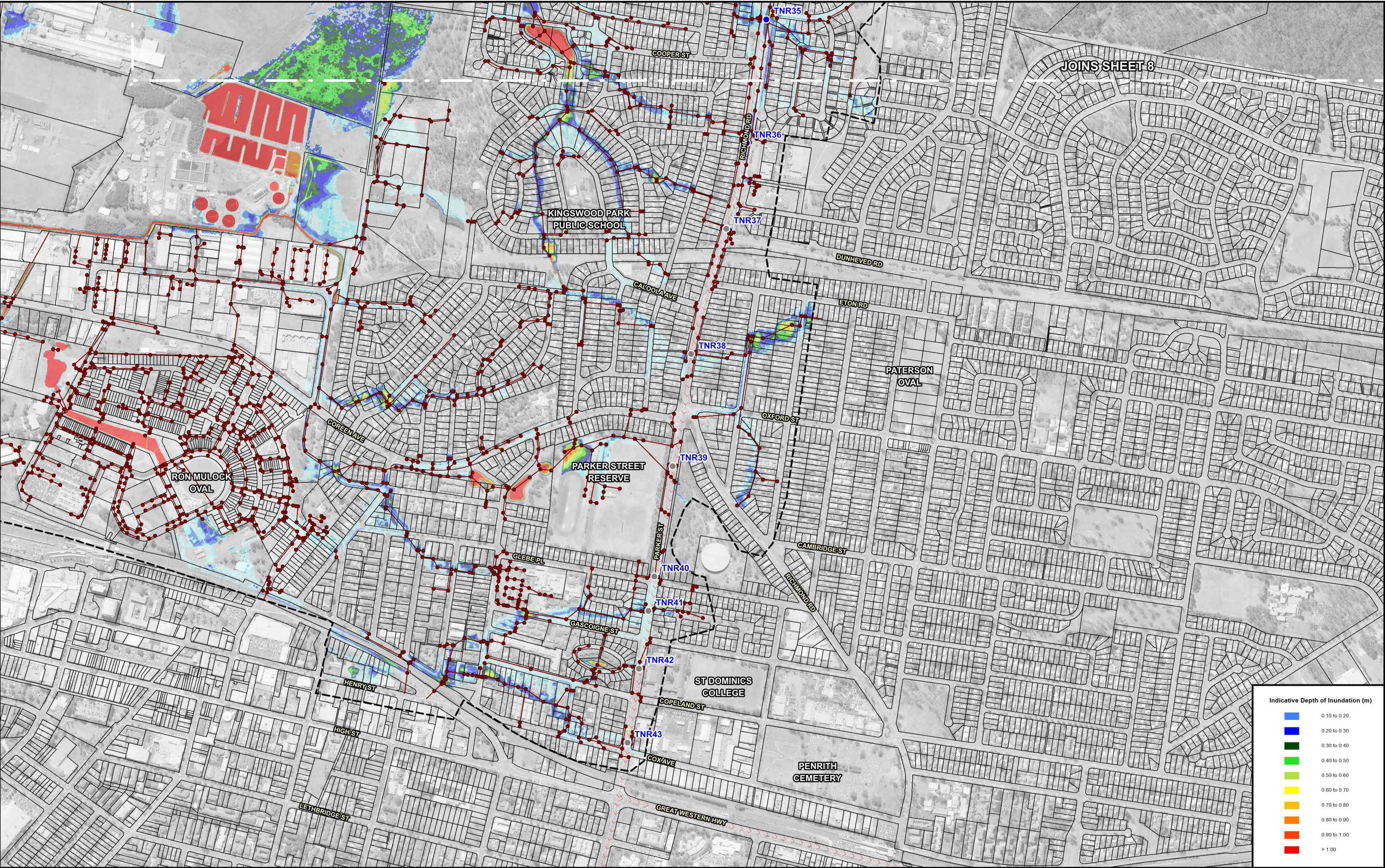
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>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

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TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 8 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 5% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

- TNR22 State Project - Drainage Improvements Not Required
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- CR36 Regional/Local Project - Drainage Improvements Required

- TUFLOW Model Boundary
- >>>> Regional Flood Evacuation Route
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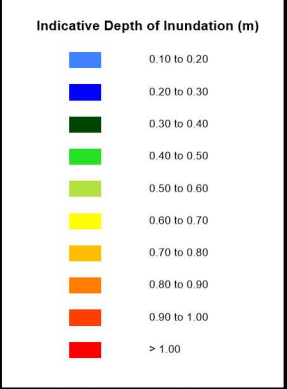
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TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 9 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW

PRE-PROPOSAL CONDITIONS - 5% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

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● TNR22	State Project - Drainage Improvements Not Required
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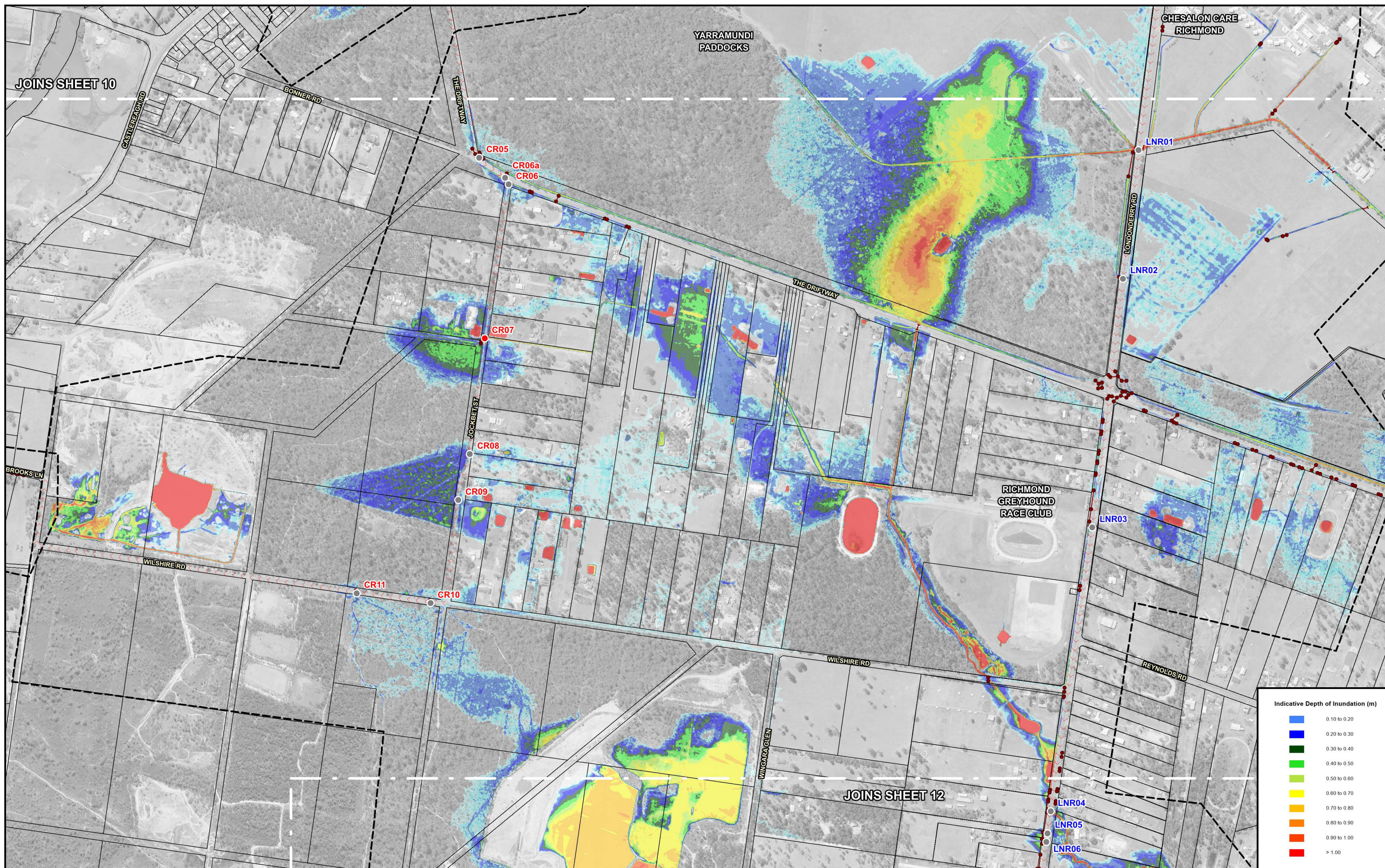
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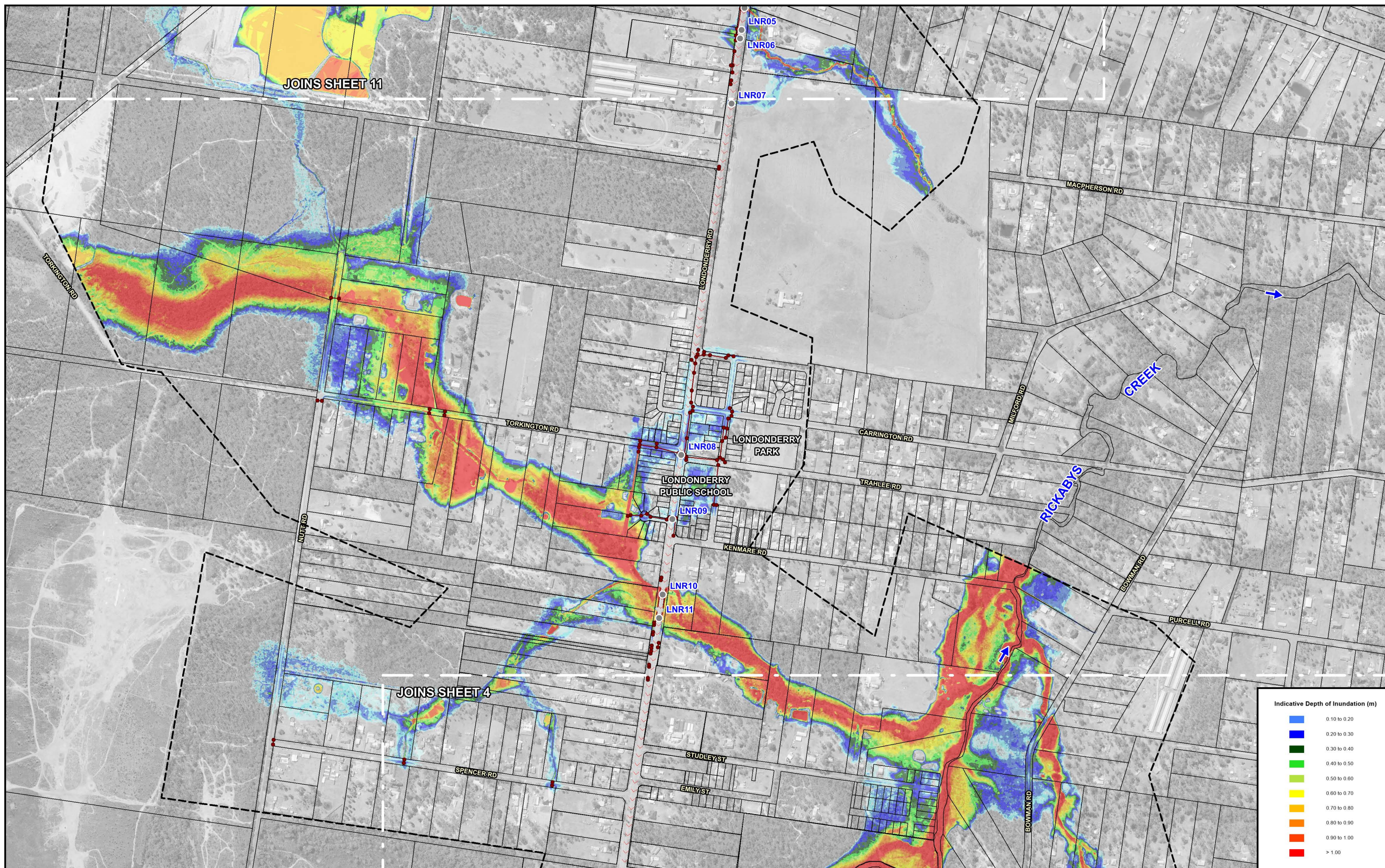
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.02
(Sheet 10 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 5% AEP





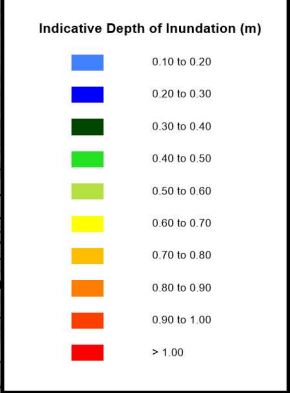
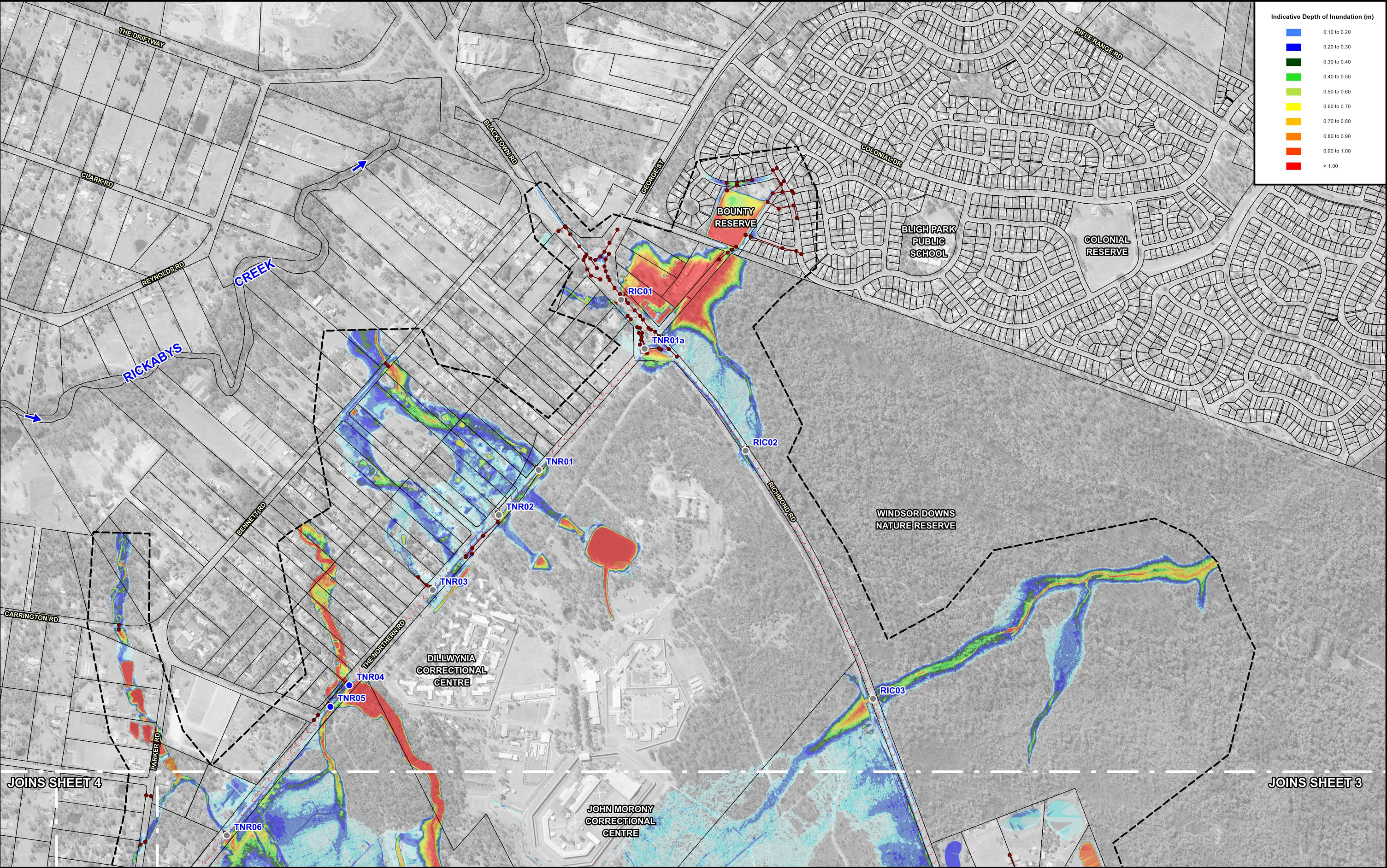
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Figure D.02
 (Sheet 12 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
 PRE-PROPOSAL CONDITIONS - 5% AEP

Scale: 1:10,000

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N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

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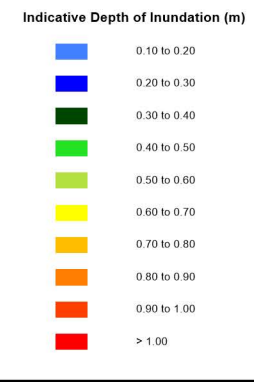
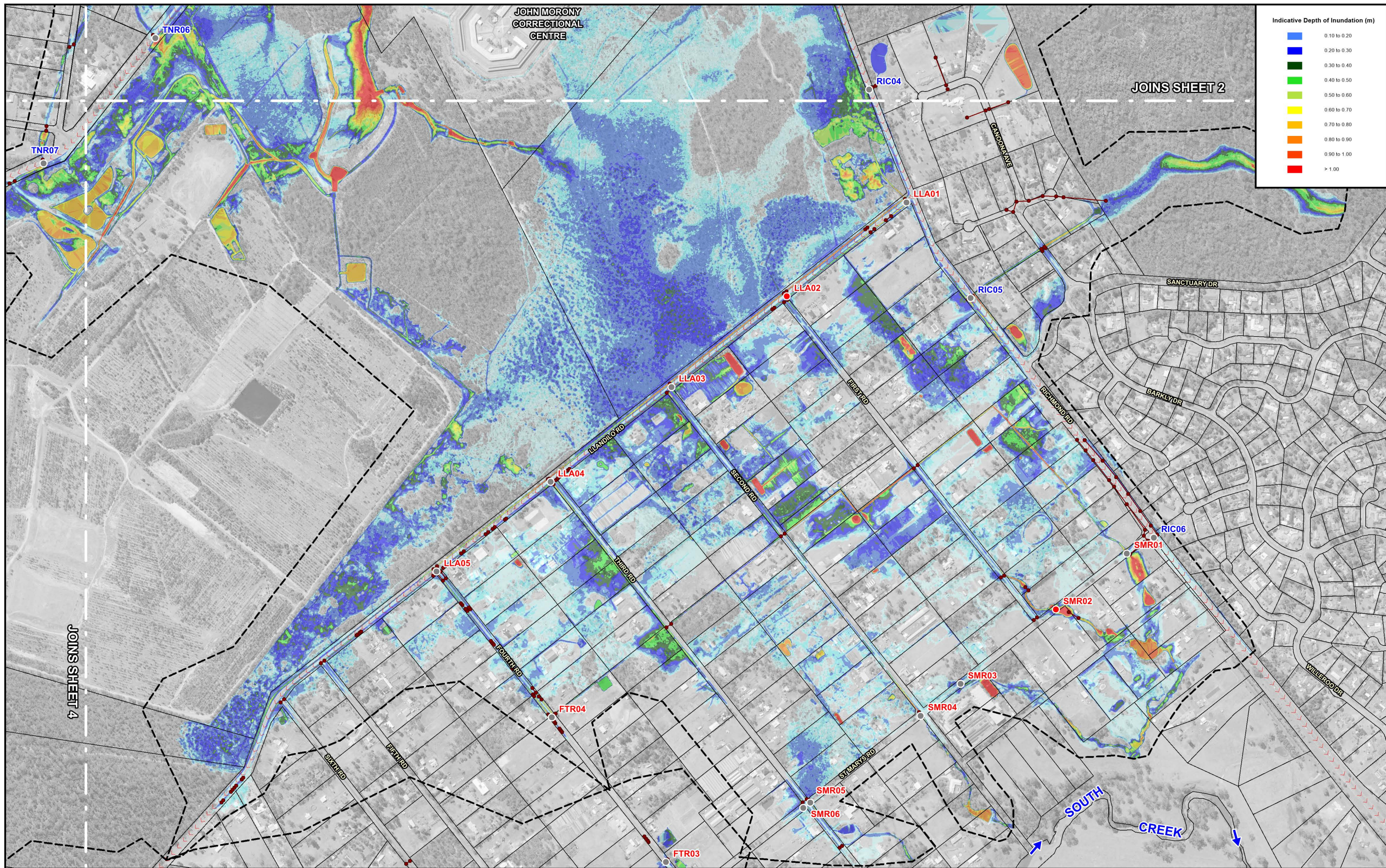
---	TUFLOW Model Boundary
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—●—	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 2 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

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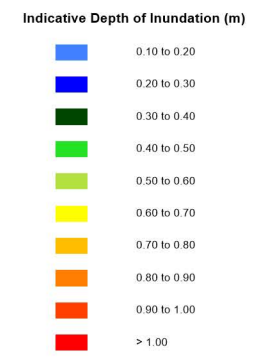
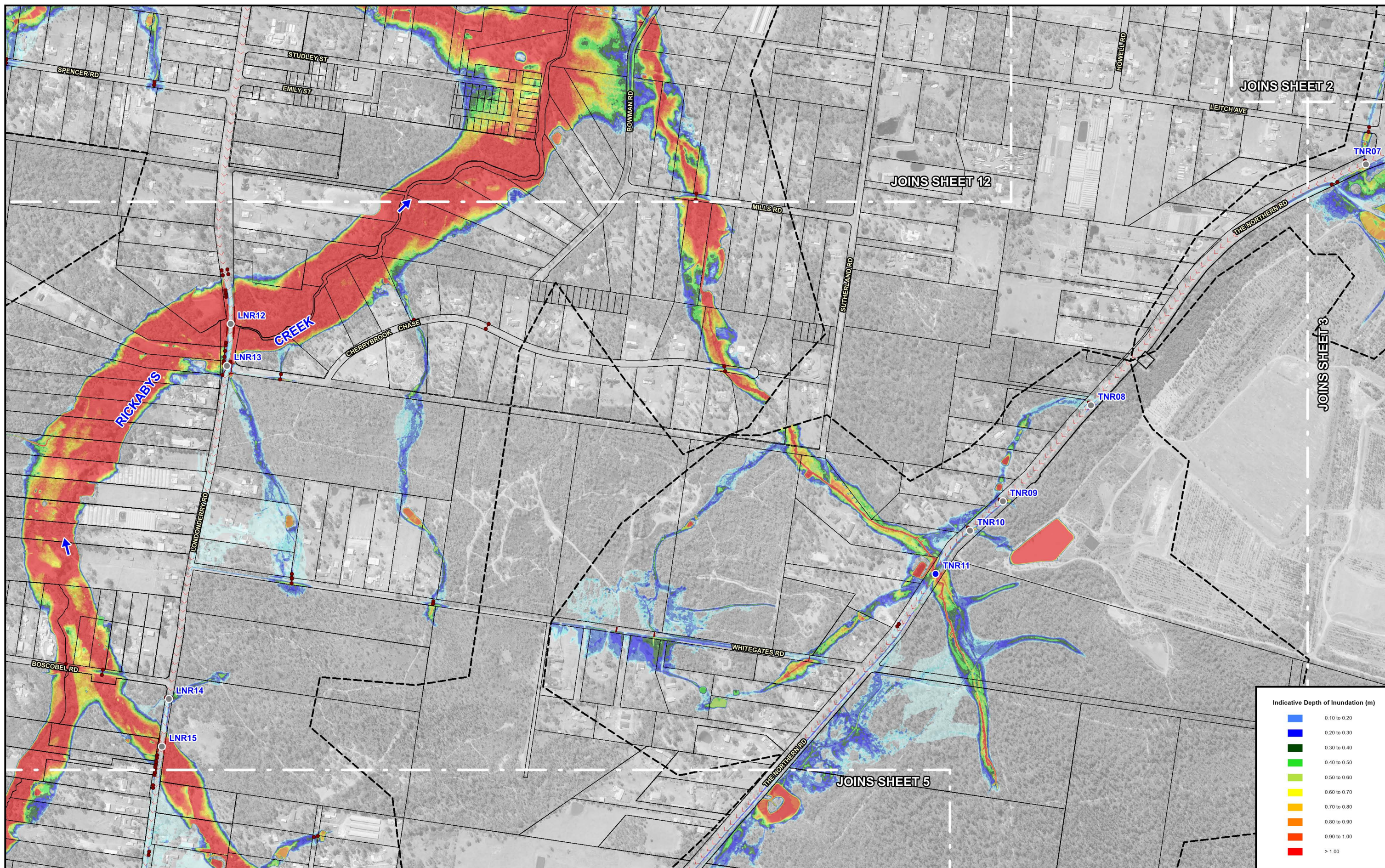
---	TUFLOW Model Boundary
>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

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TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 3 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

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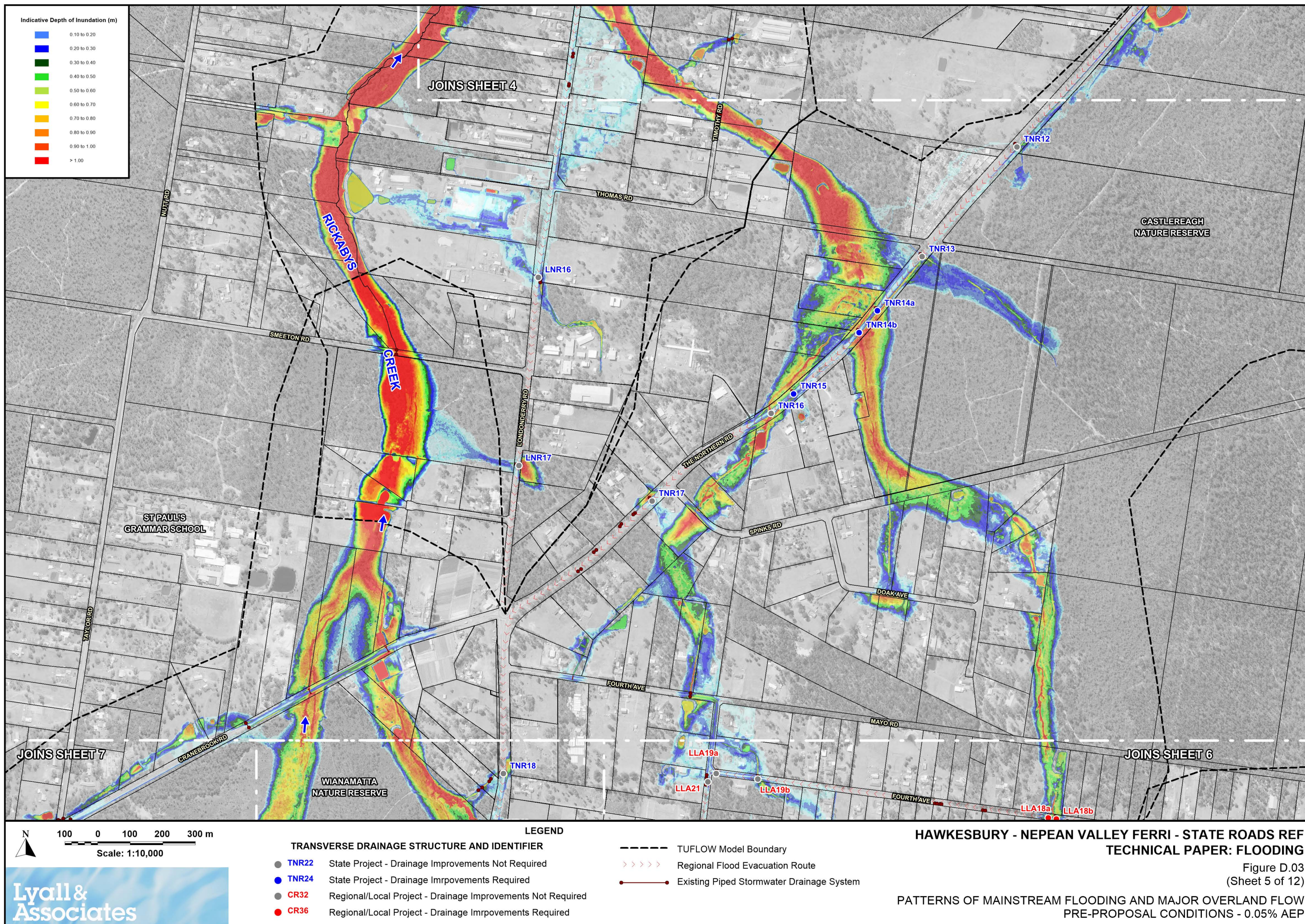
- TUFLOW Model Boundary
- >>>> Regional Flood Evacuation Route
- Existing Piped Stormwater Drainage System

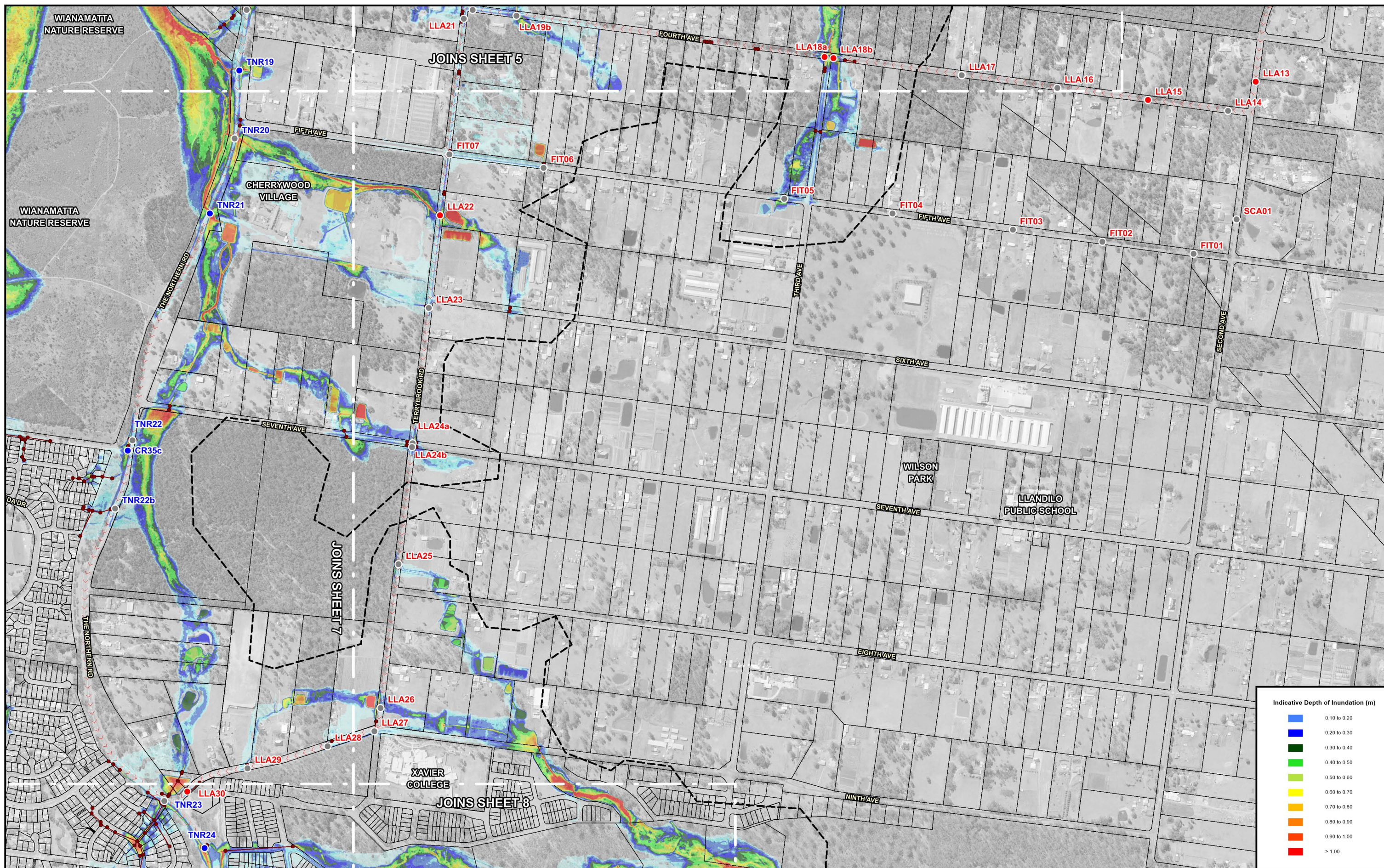
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

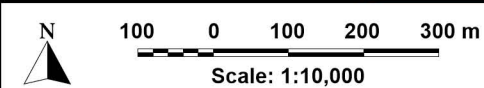
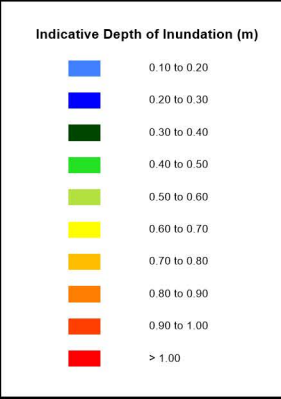
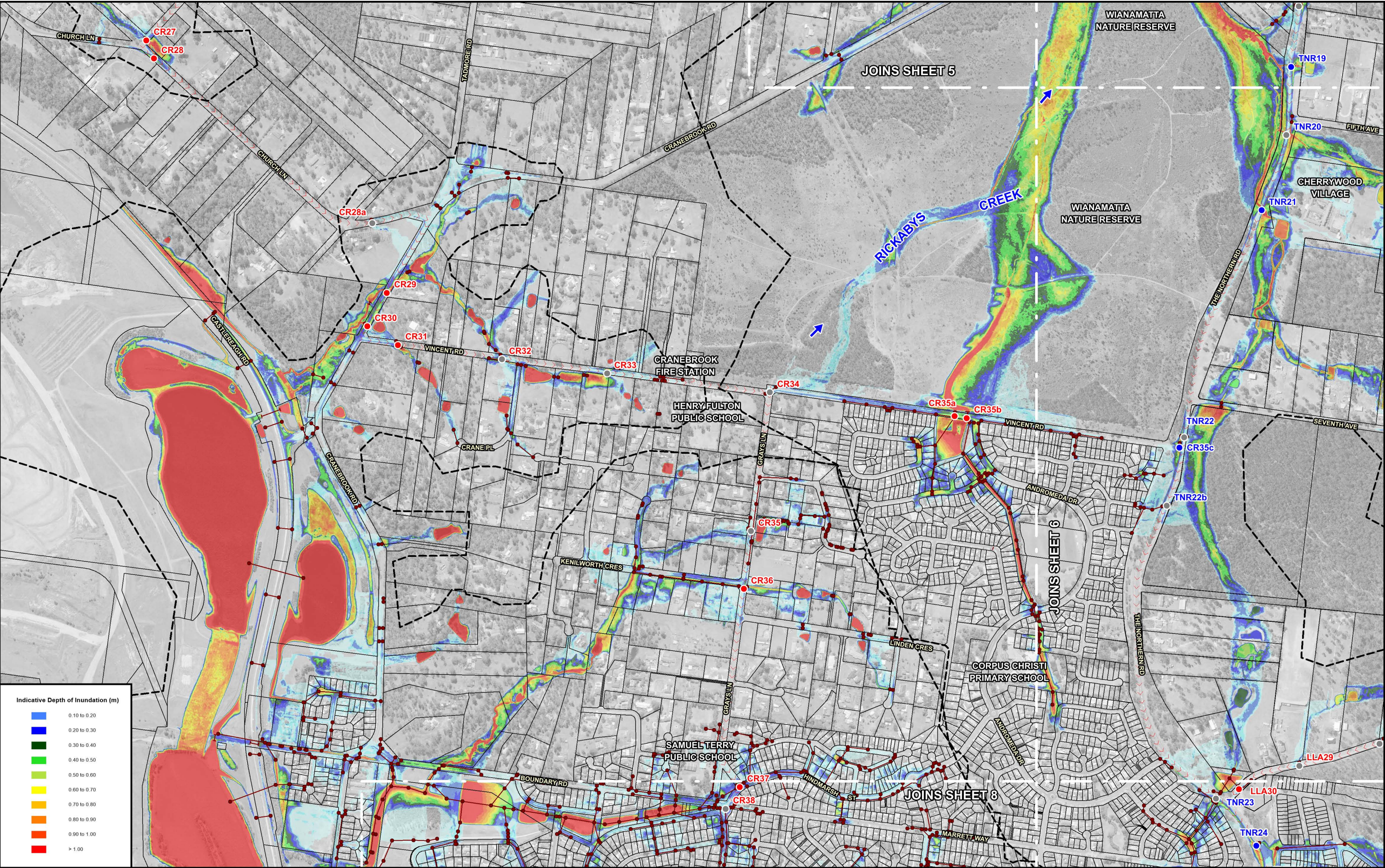
TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 4 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP







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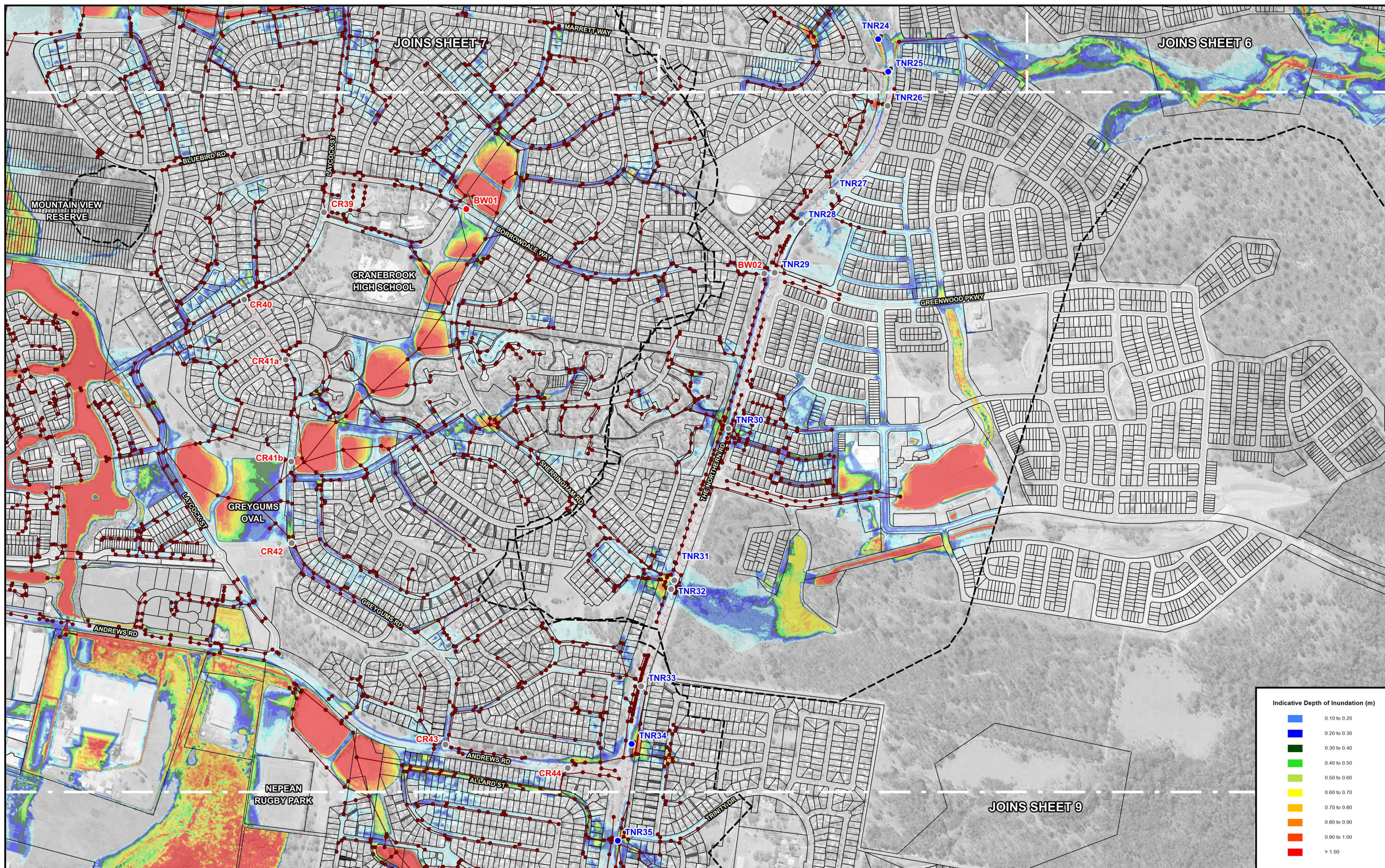
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-----	Regional Flood Evacuation Route
-----	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 7 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

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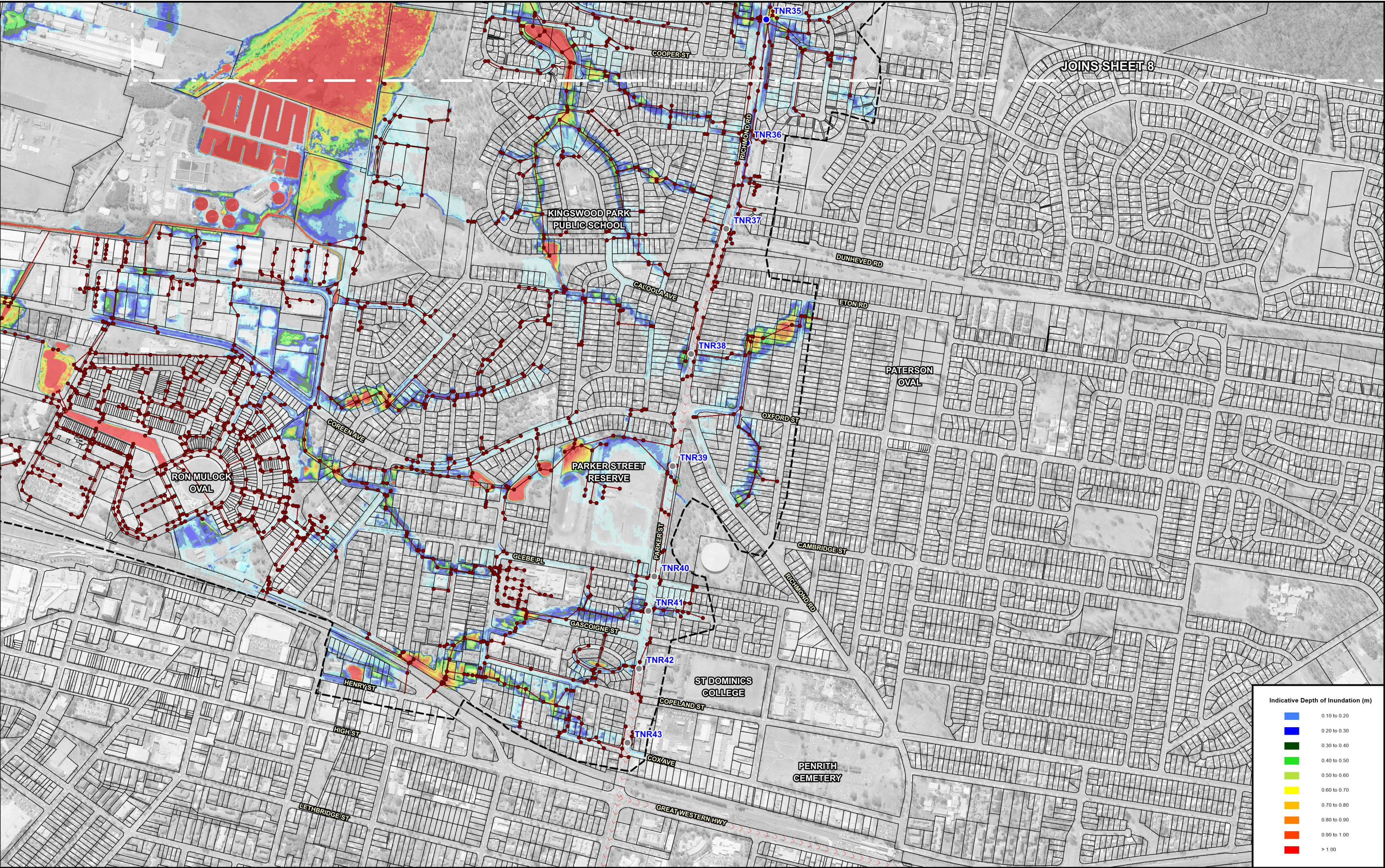
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HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 8 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

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LEGEND

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- CR36 Regional/Local Project - Drainage Improvements Required

--- TUFLOW Model Boundary

>>>> Regional Flood Evacuation Route

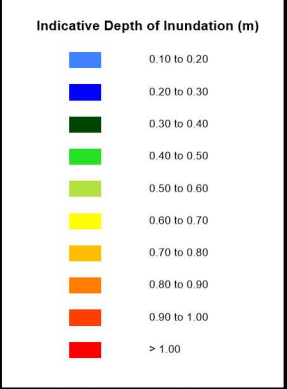
— Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 9 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP



N

100 0 100 200 300 m

Scale: 1:10,000

Lyall & Associates

LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER

● TNR22	State Project - Drainage Improvements Not Required
● TNR24	State Project - Drainage Improvements Required
● CR32	Regional/Local Project - Drainage Improvements Not Required
● CR36	Regional/Local Project - Drainage Improvements Required

-----	TUFLOW Model Boundary
>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

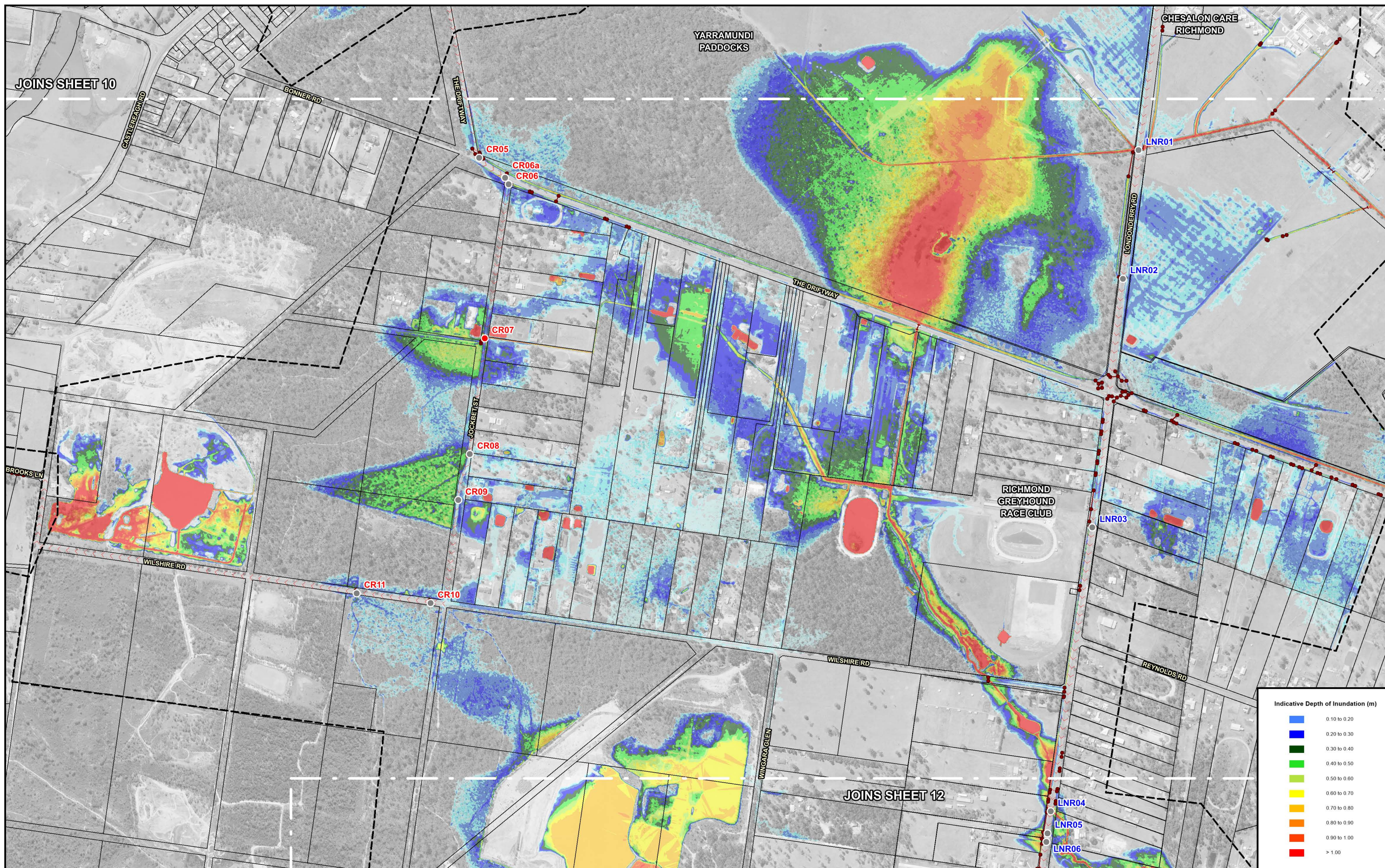
HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 10 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW

PRE-PROPOSAL CONDITIONS - 0.05% AEP



Scale: 1:10,000

100 0 100 200 300 m

Lyall & Associates

LEGEND

TRANSVERSE DRAINAGE STRUCTURE AND IDENTIFIER	
● TNR22	State Project - Drainage Improvements Not Required
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-----	TUFLOW Model Boundary
>>>>	Regional Flood Evacuation Route
—●—	Existing Piped Stormwater Drainage System

HAWKESBURY - NEPEAN VALLEY FERRI - STATE ROADS REF

TECHNICAL PAPER: FLOODING

Figure D.03
(Sheet 11 of 12)

PATTERNS OF MAINSTREAM FLOODING AND MAJOR OVERLAND FLOW
PRE-PROPOSAL CONDITIONS - 0.05% AEP

