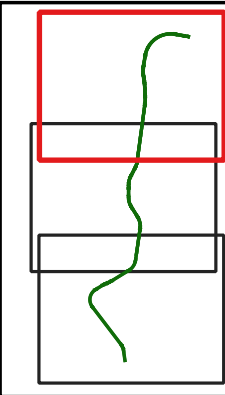
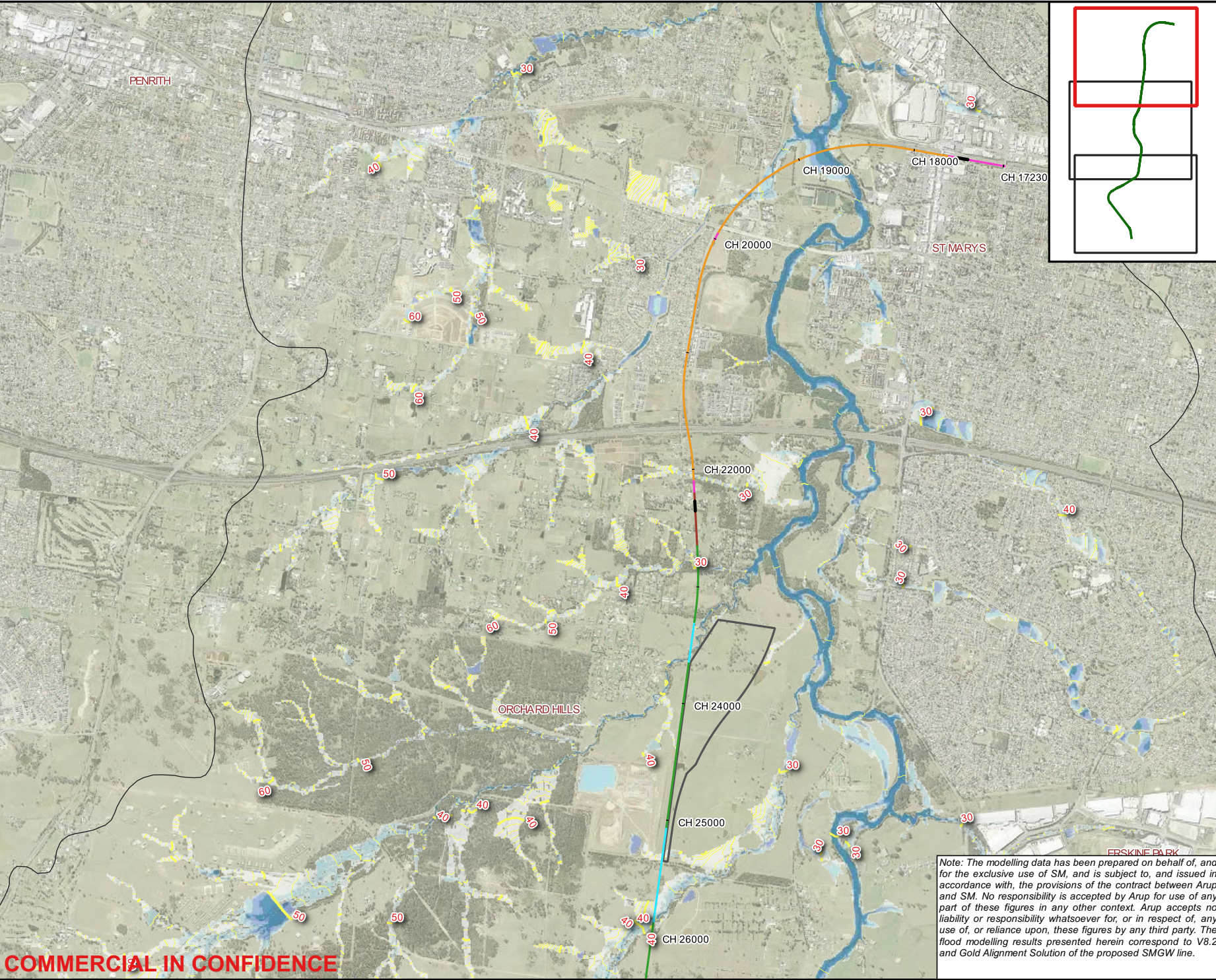


# **Appendix D**

## **With Project Flood Maps**





**Legend**

Peak flood levels (mAHD)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

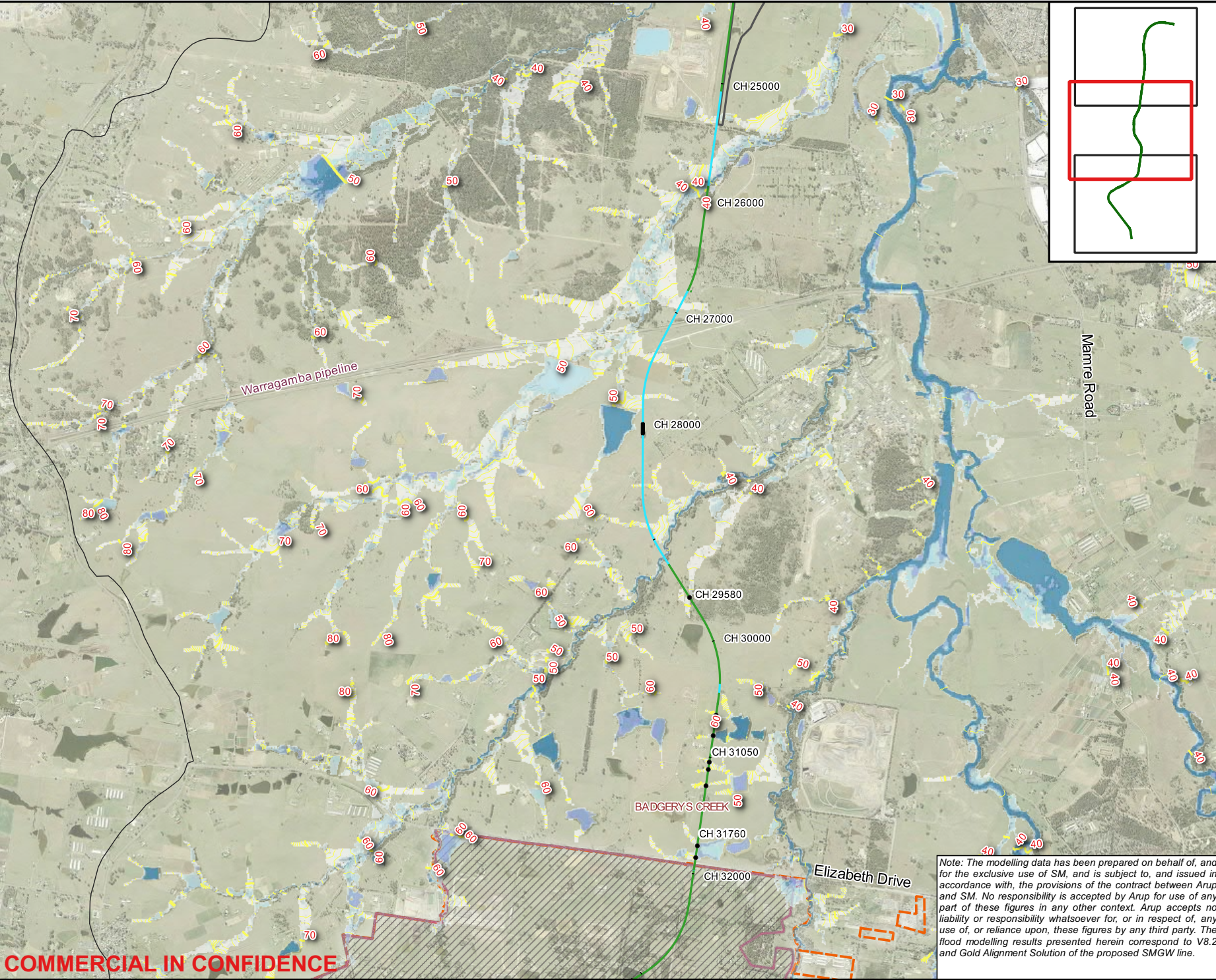
Job No  
**265549**

Figure No  
**D.1 (1 of 3)**

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**Legend**  
Peak flood levels (mAHD)  
Flood depth (m)  
0 - 0.1  
0.1 - 0.5  
0.5 - 1  
> 1.0  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

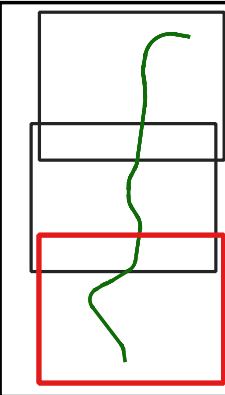
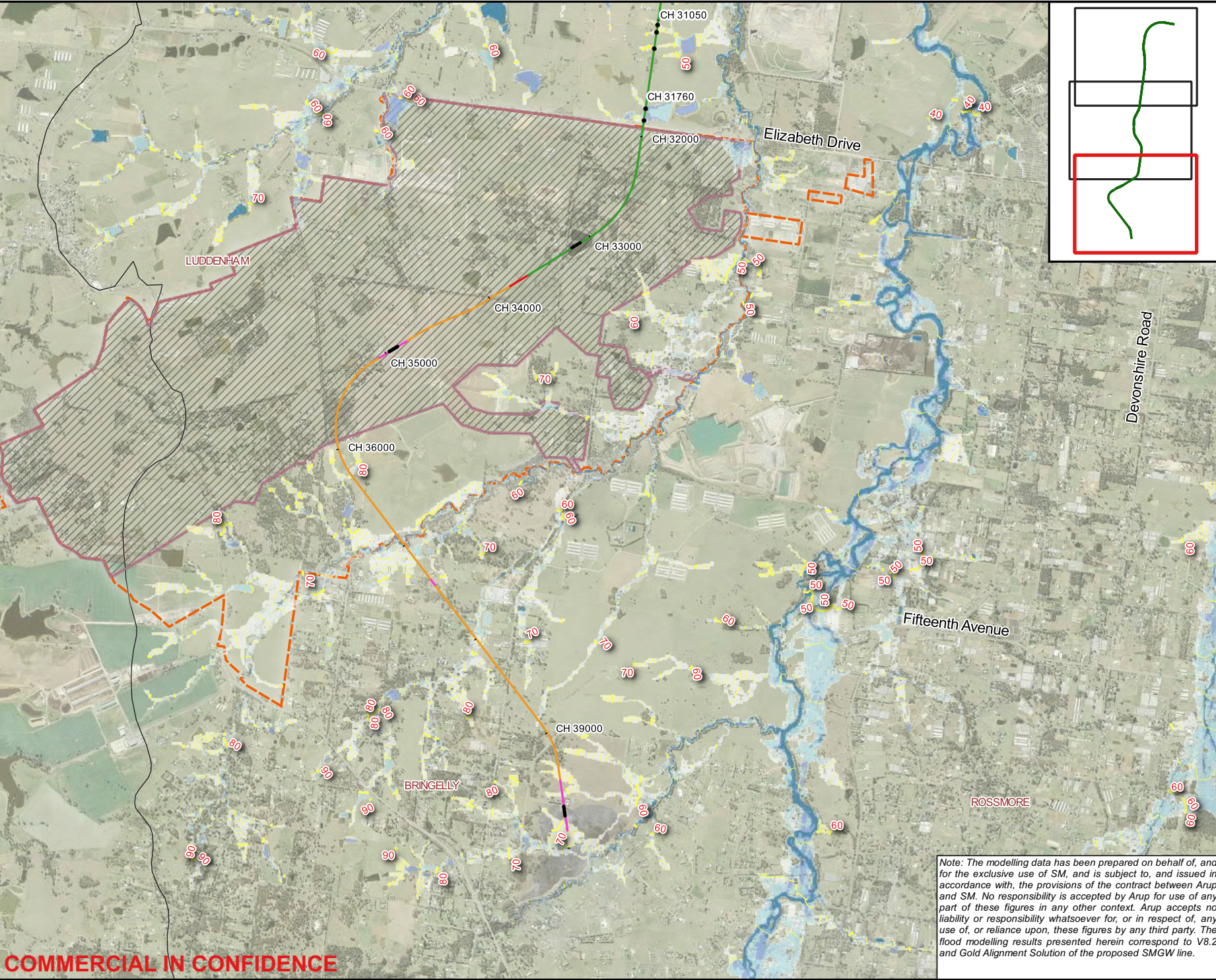
Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title  
**SMGW TA Services**  
Figure Title  
**Design Case - 0.5EY Design flood depth and levels**  
Scale at A3  
**1:30000**  
Figure Status  
**Issued for information**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure No  
**D.1 (2 of 3)**

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**Legend**

- Peak flood levels (mAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title

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Figure Title

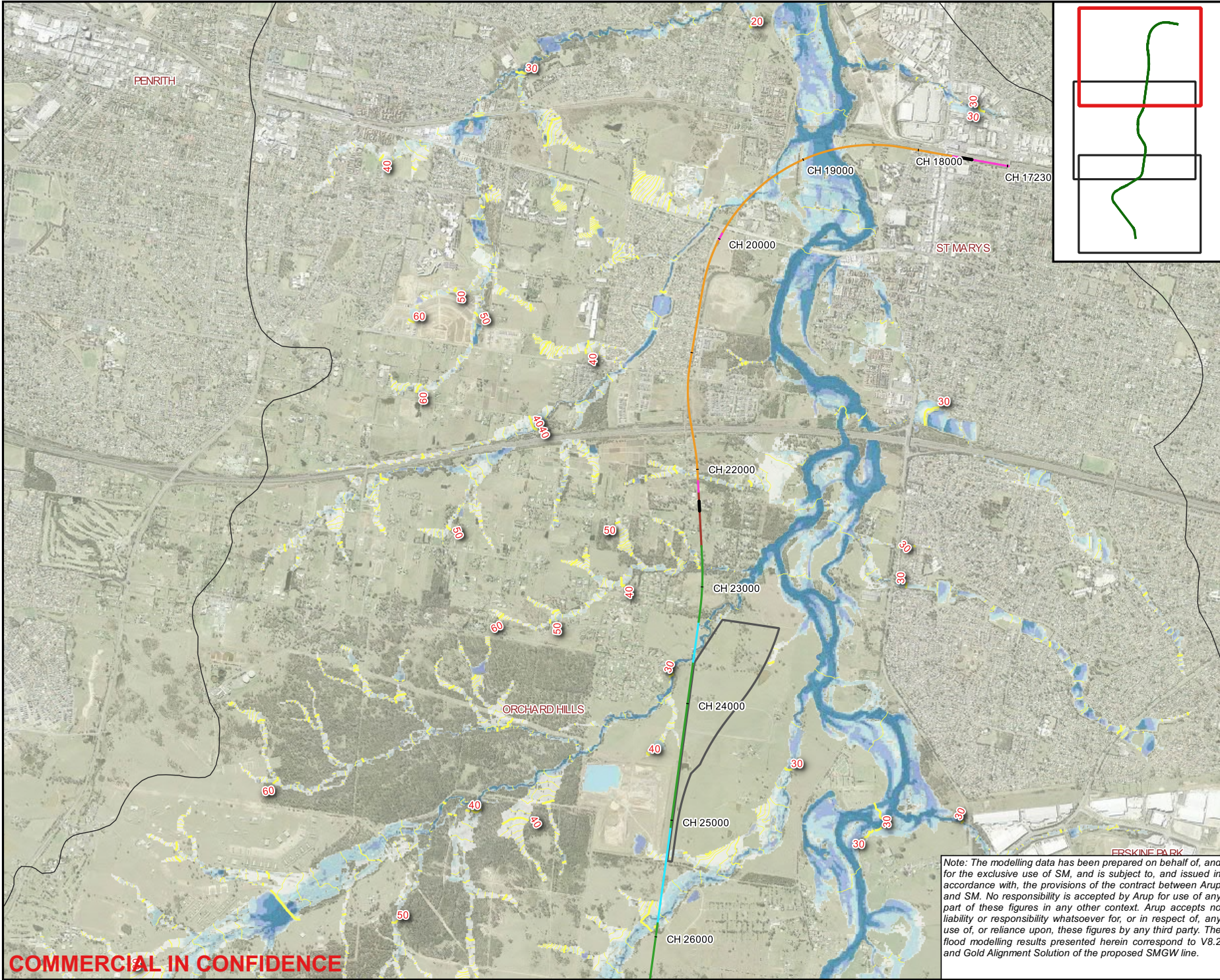
**Design Case - 0.5EY Design flood depth and levels**

Scale at A3 <b>1:30000</b>	Figure Status <b>Issued for information</b>
Coordinate System <b>GDA 1994 MGA Zone 56</b>	
Job No <b>265549</b>	Figure No <b>D.1 (3 of 3)</b>

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**Legend**  

Peak flood levels (mAHD)

Flood depth (m)  
0 - 0.1  
0.1 - 0.5  
0.5 - 1  
> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

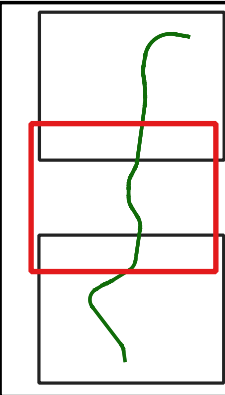
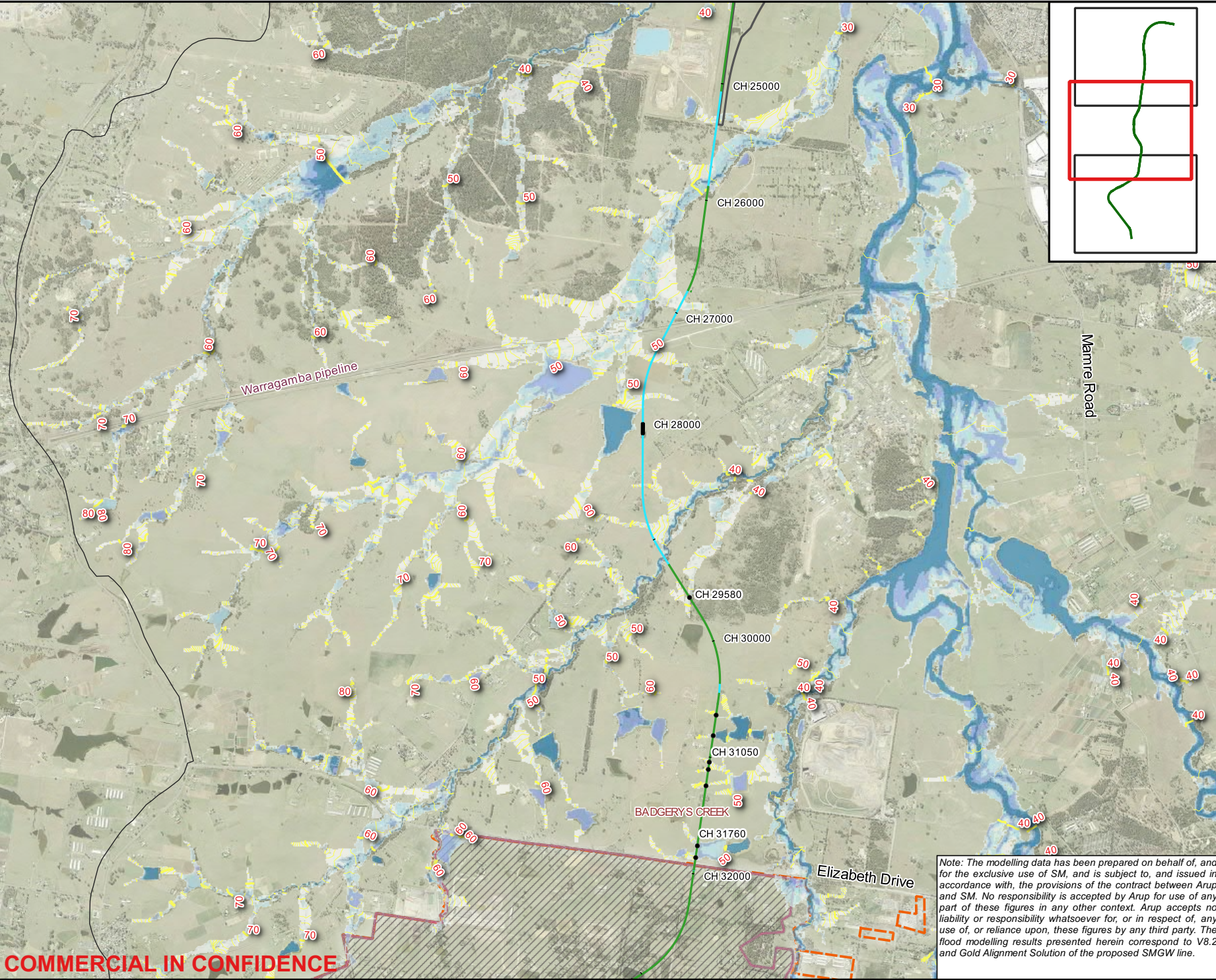
Coordinate System  
**GDA 1994 MGA Zone 56**

Job No  
**265549**

Figure No  
**D.2 (1 of 3)**

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**Legend**

Peak flood levels (mAHD)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Figure Title  
**Design Case - 0.2EY Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

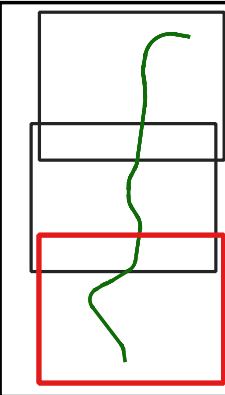
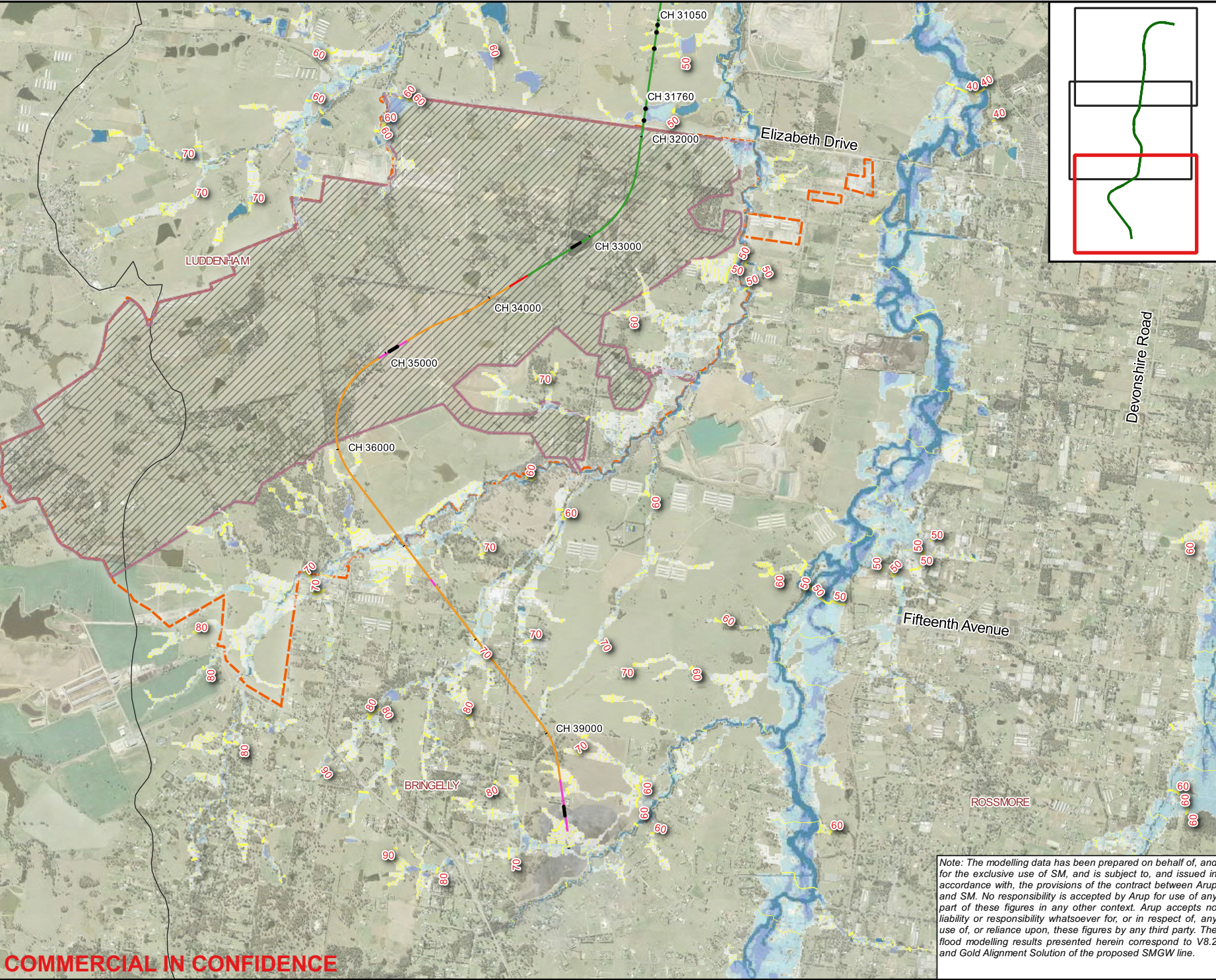
Job No  
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Figure No  
**D.2 (2 of 3)**

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**Legend**  
Peak flood levels (mAHD)  
Flood depth (m)  
0 - 0.1  
0.1 - 0.5  
0.5 - 1  
> 1.0  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0	500	1000	1500	m

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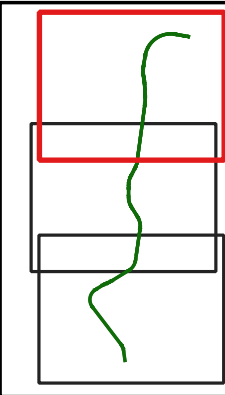
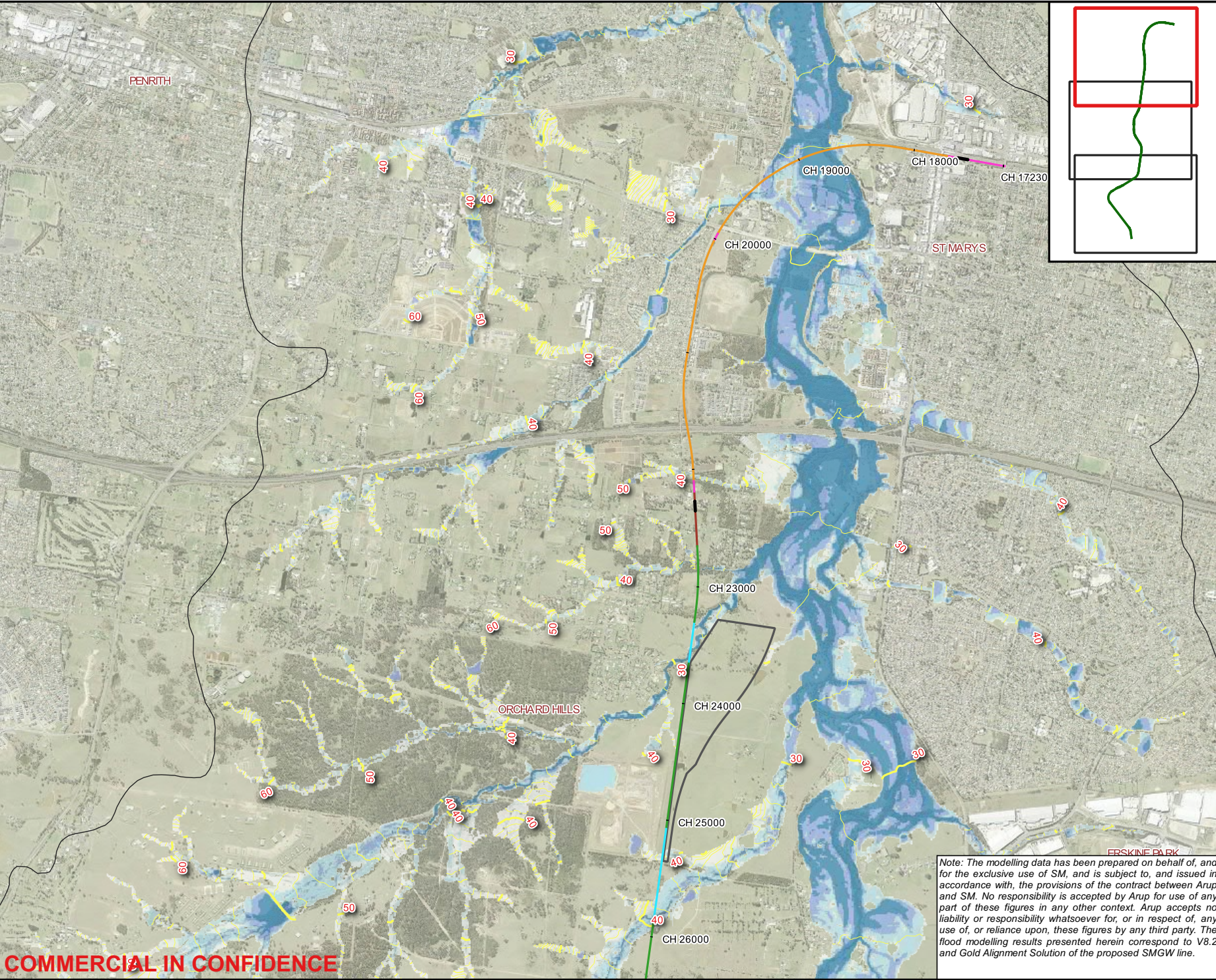
**Sydney Metro**  
Job Title  
**SMGW TA Services**

**Design Case - 0.2EY Design flood depth and levels**  
Scale at A3  
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Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure Status  
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Figure No  
**D.2 (3 of 3)**

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**Legend**

Peak flood levels (mAHD)

Flood depth (m)

- 0 - 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Figure Title  
**Design Case - 5% AEP Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

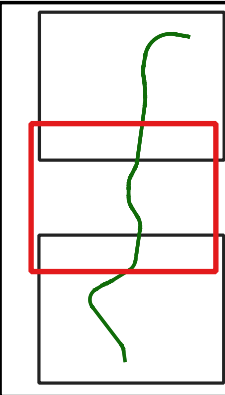
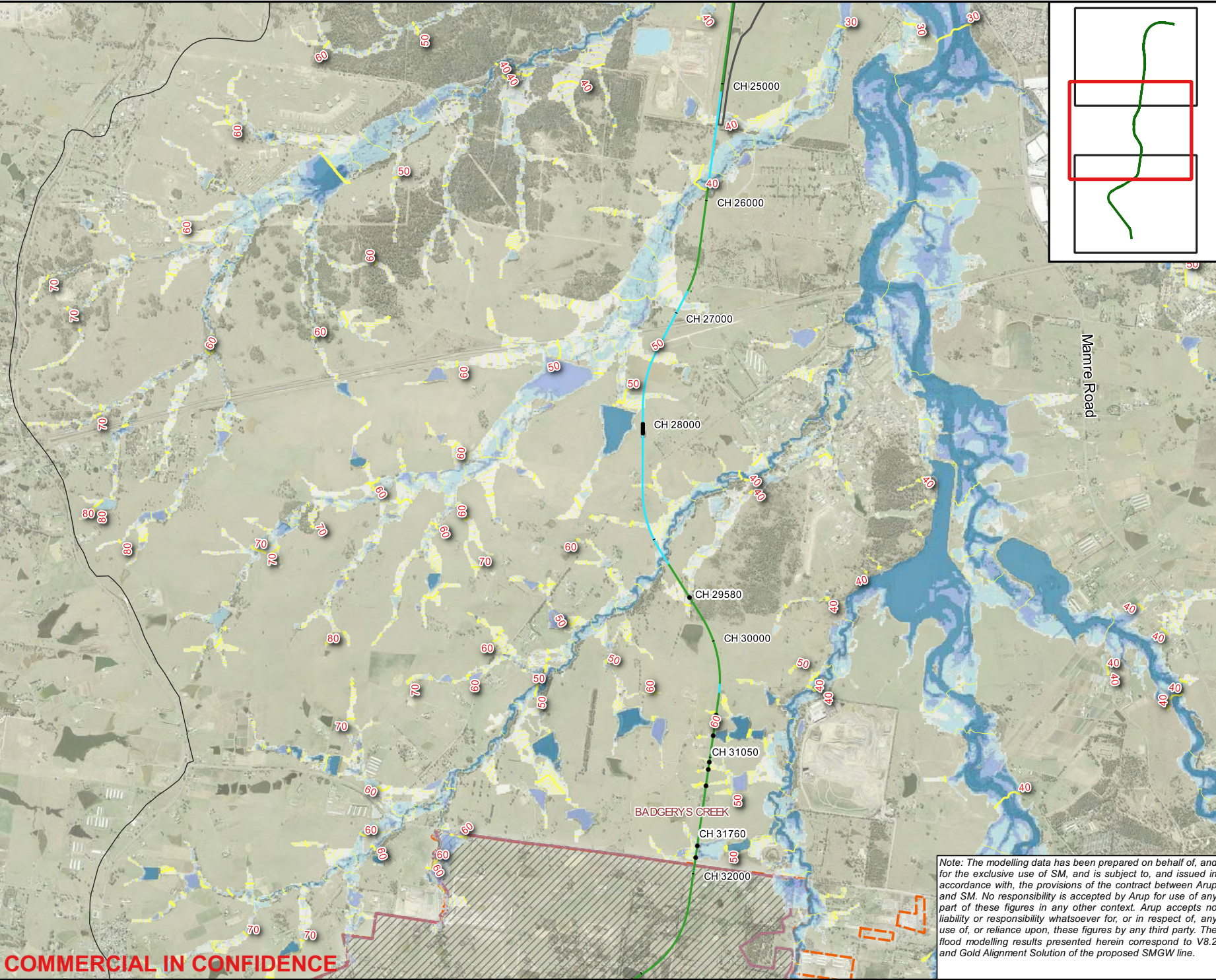
Job No  
**265549**

Figure No  
**D.3 (1 of 3)**

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**Legend**

Peak flood levels (mAH)

Flood depth (m)

- 0 - 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title:  
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Figure Title:  
**Design Case - 5% AEP Design flood depth and levels**

Scale at A3:  
**1:30000**

Figure Status:  
**Issued for information**

Coordinate System:  
**GDA 1994 MGA Zone 56**

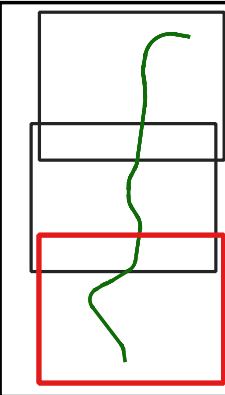
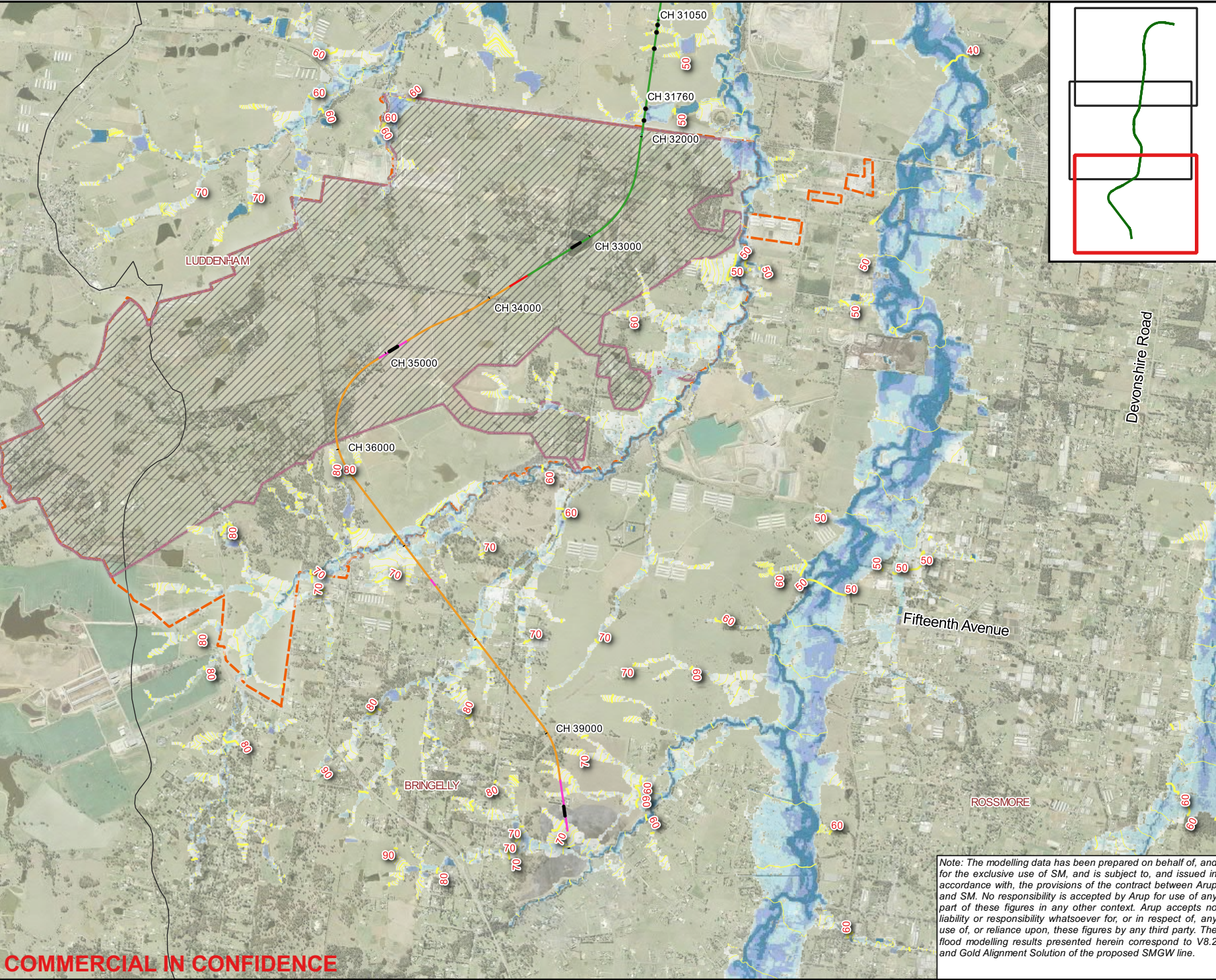
Job No:  
**265549**

Figure No:  
**D.3 (2 of 3)**

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**Legend**

Peak flood levels (mAHD)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

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Figure Title  
**Design Case - 5% AEP Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

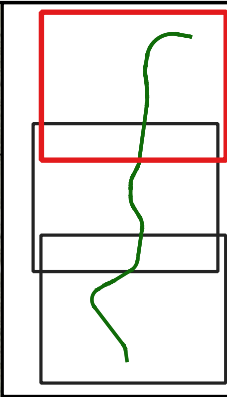
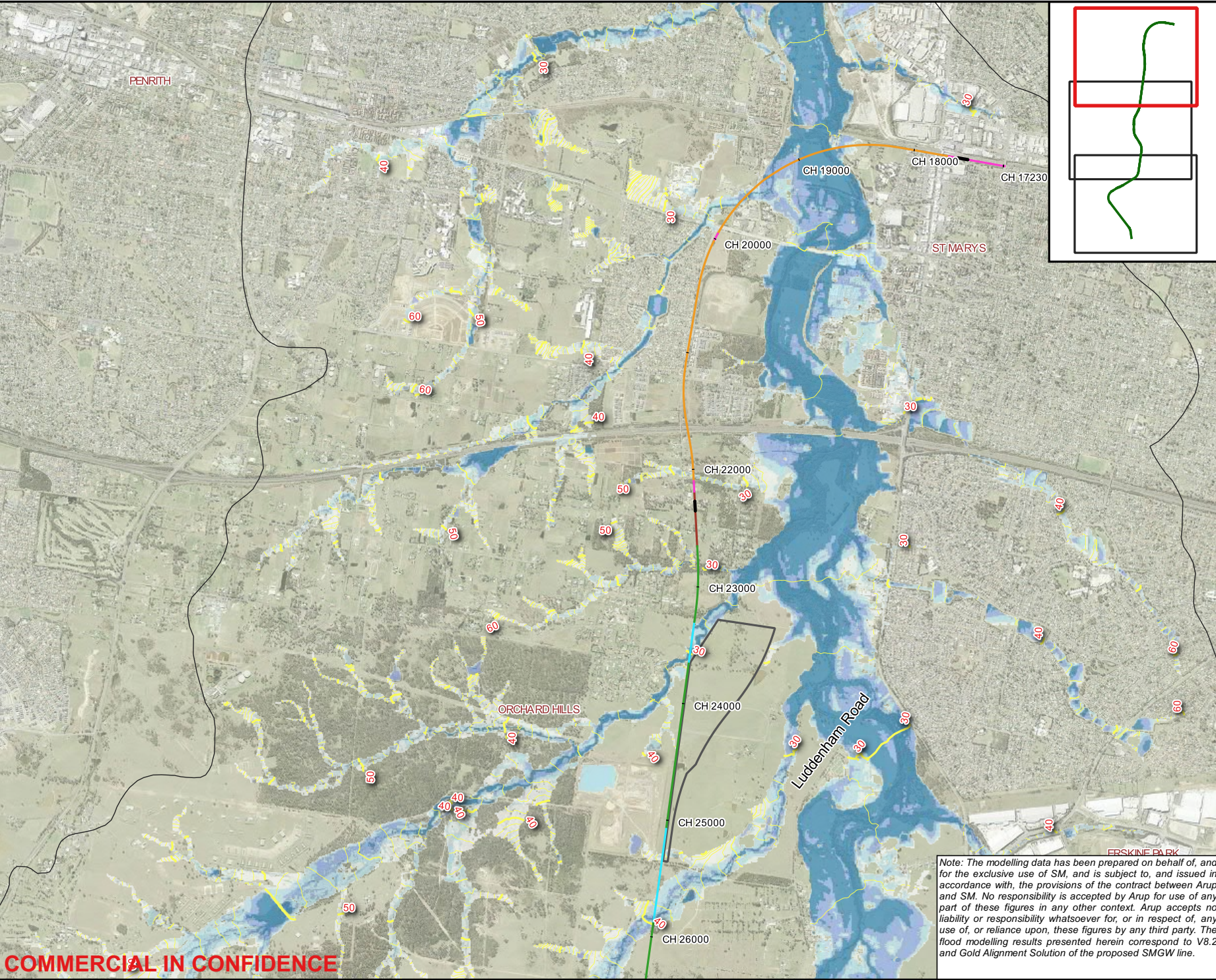
Job No  
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Figure No  
**D.3 (3 of 3)**

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**Legend**

Peak flood levels (mAHd)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Figure Title  
**Design Case - 1% AEP Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

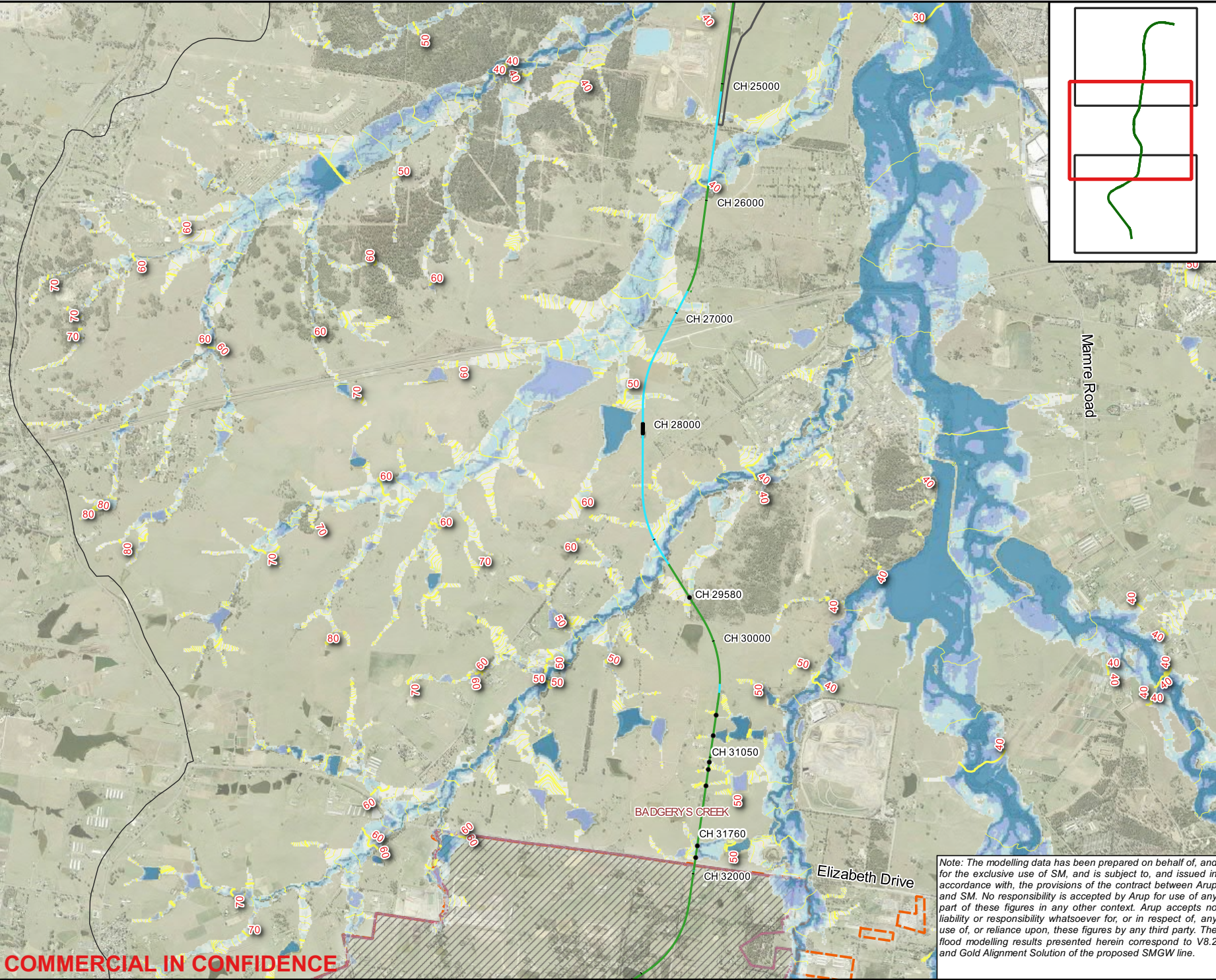
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Figure No  
**D.4 (1 of 3)**

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**Legend**

- Peak flood levels (MAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
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CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Client

Sydney Metro

Job Title

SMGW TA Services

Figure Title

Design Case - 1% AEP Design flood depth and levels

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

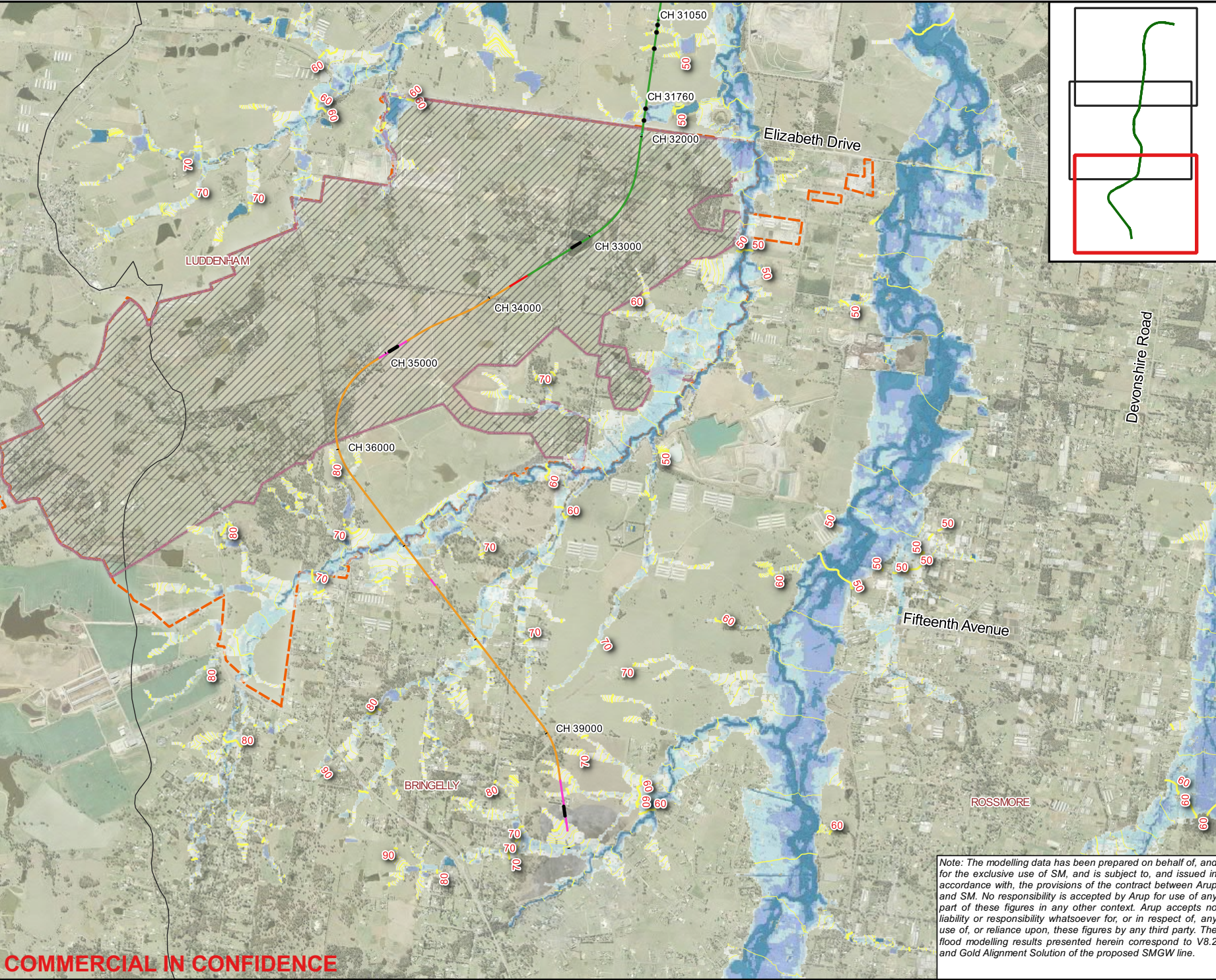
D.4 (2 of 3)

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**Legend**

Peak flood levels (mAHD)

**Flood depth (m)**

- 0 - 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

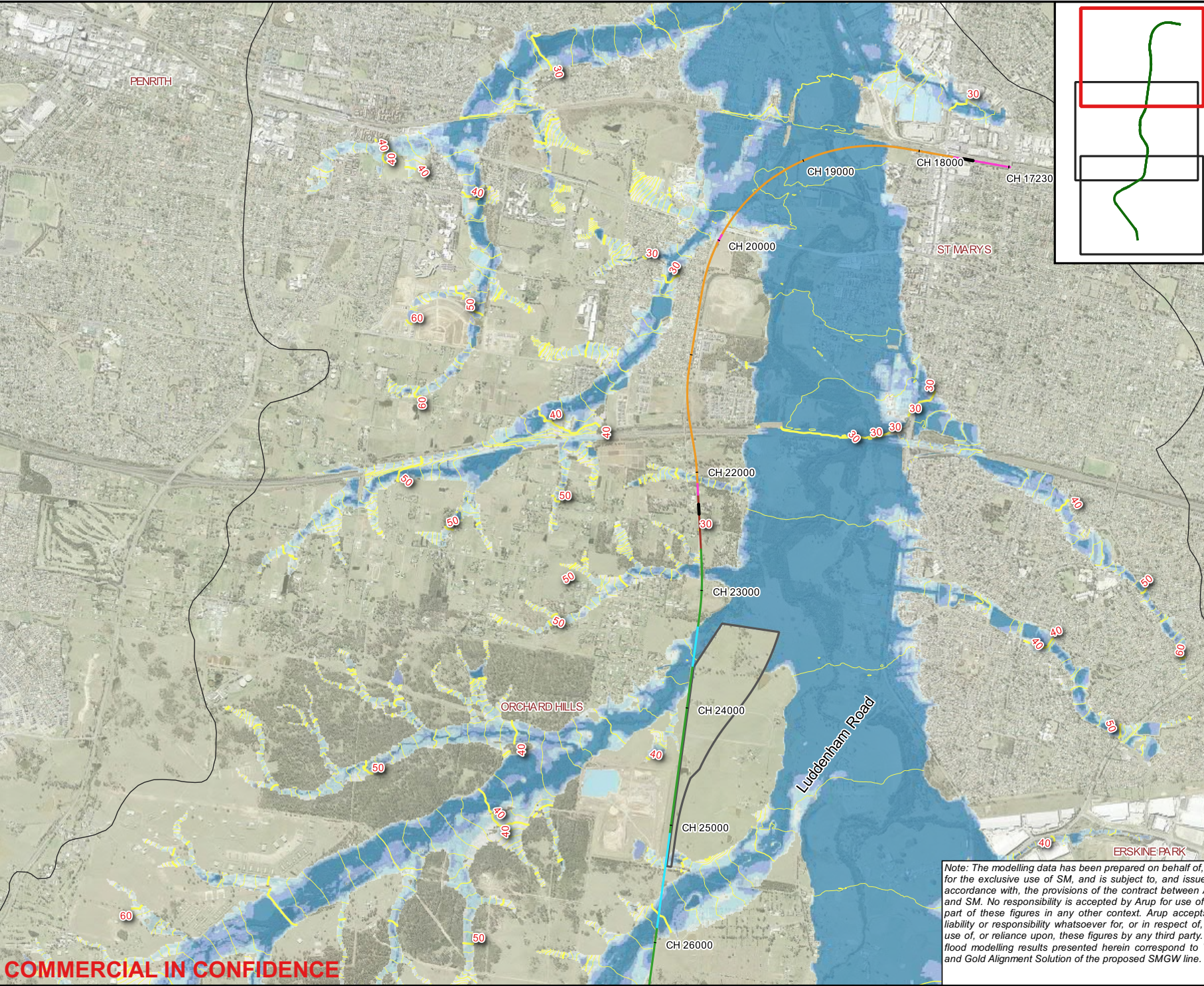
Job No  
**265549**

Figure No  
**D.4 (3 of 3)**

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Legend

- Peak flood levels (mAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Job Title

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Figure Title  
**Design Case - PMF Design flood depth and levels**

Scale at A3  
**1:30000**

Coordinate System  
**GDA 1994 MGA Zone 56**

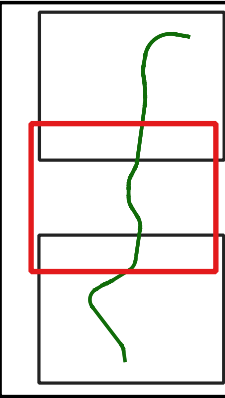
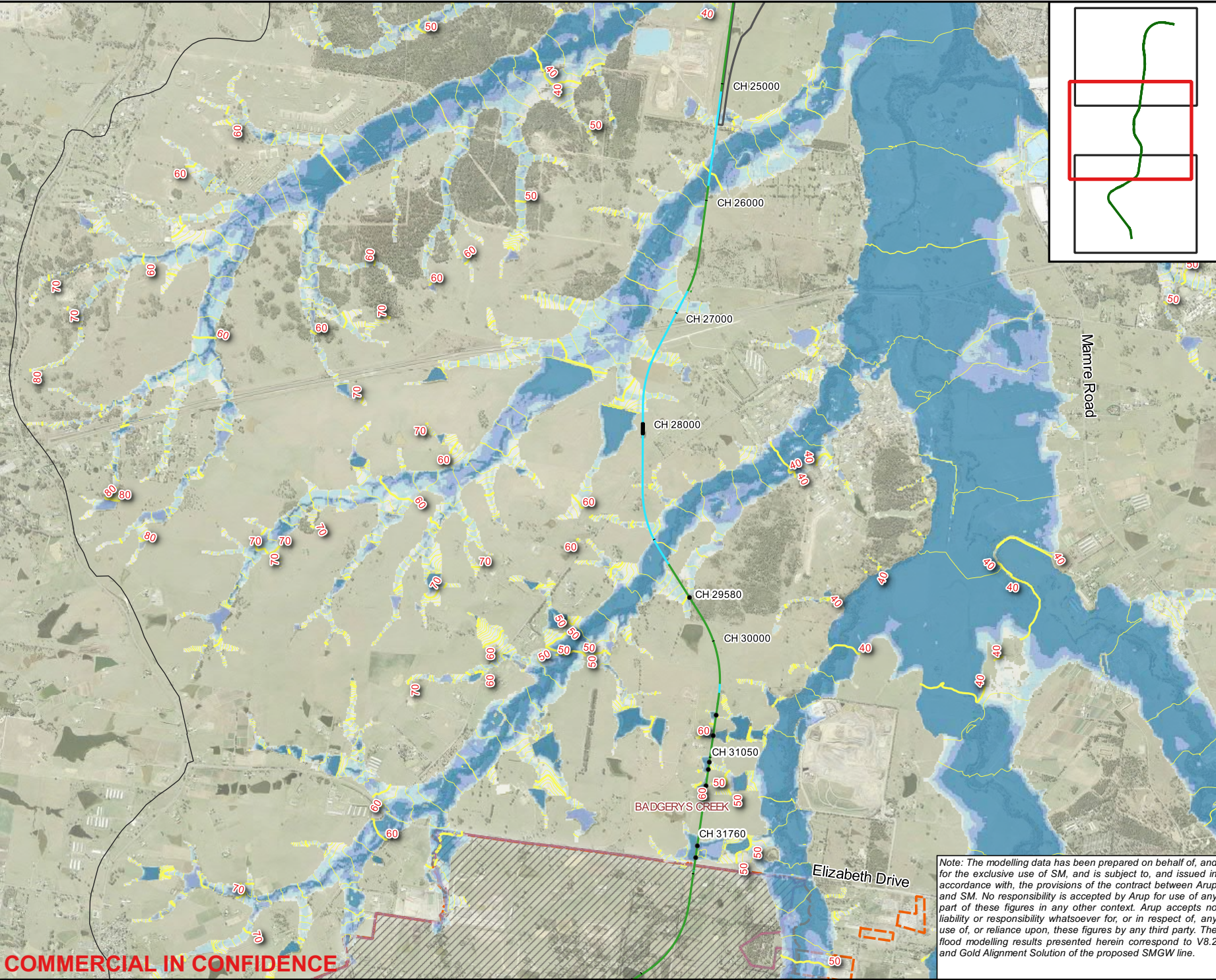
Job No  
**265549**

Figure No  
**D.5 (1 of 3)**

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**Legend**

Peak flood levels (mAHD)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - PMF Design flood depth and levels**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

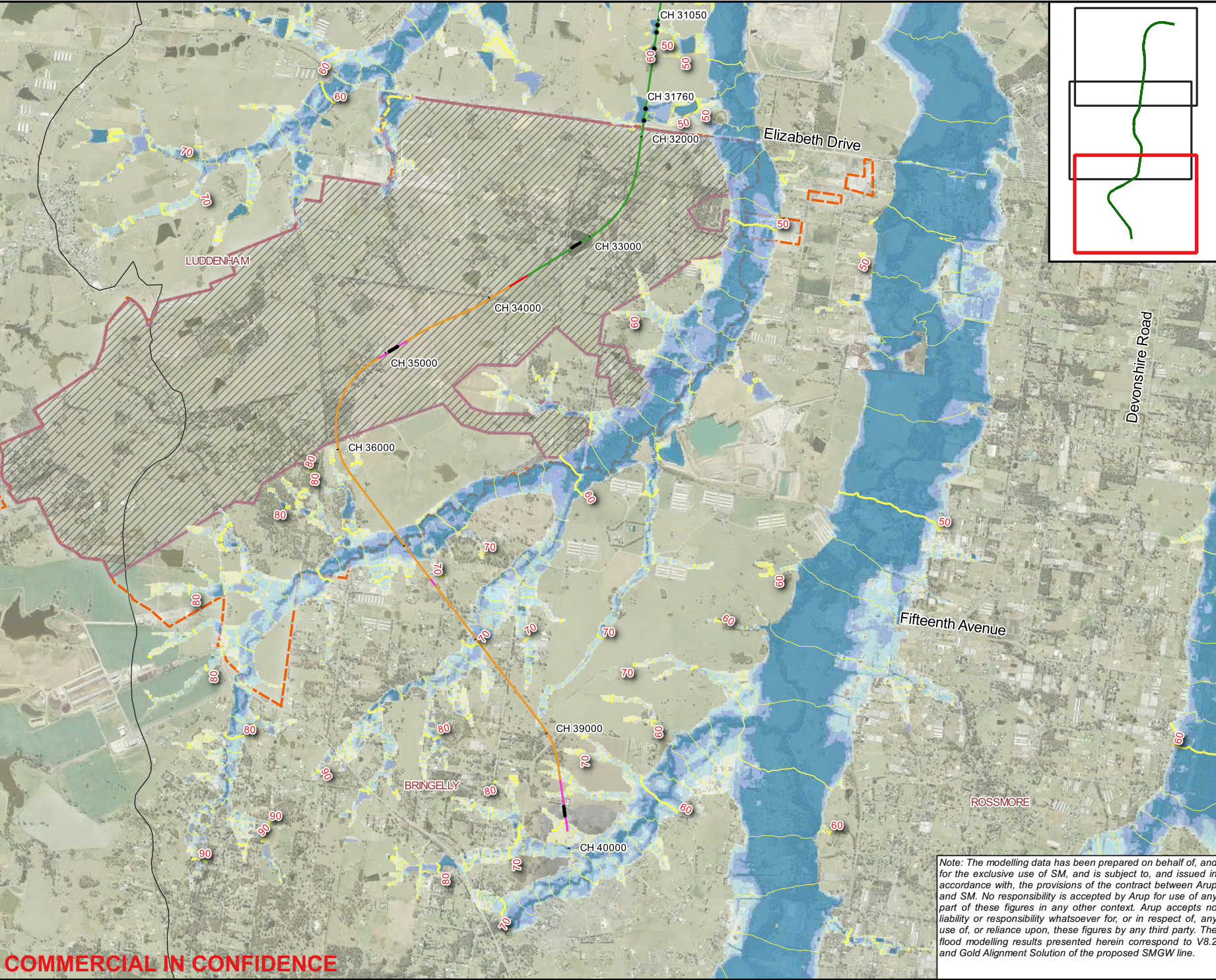
Job No  
**265549**

Figure No  
**D.5 (2 of 3)**

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**Legend**

- Peak flood levels (mAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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0	500	1000	1500	m

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**Design Case - PMF Design flood depth and levels**

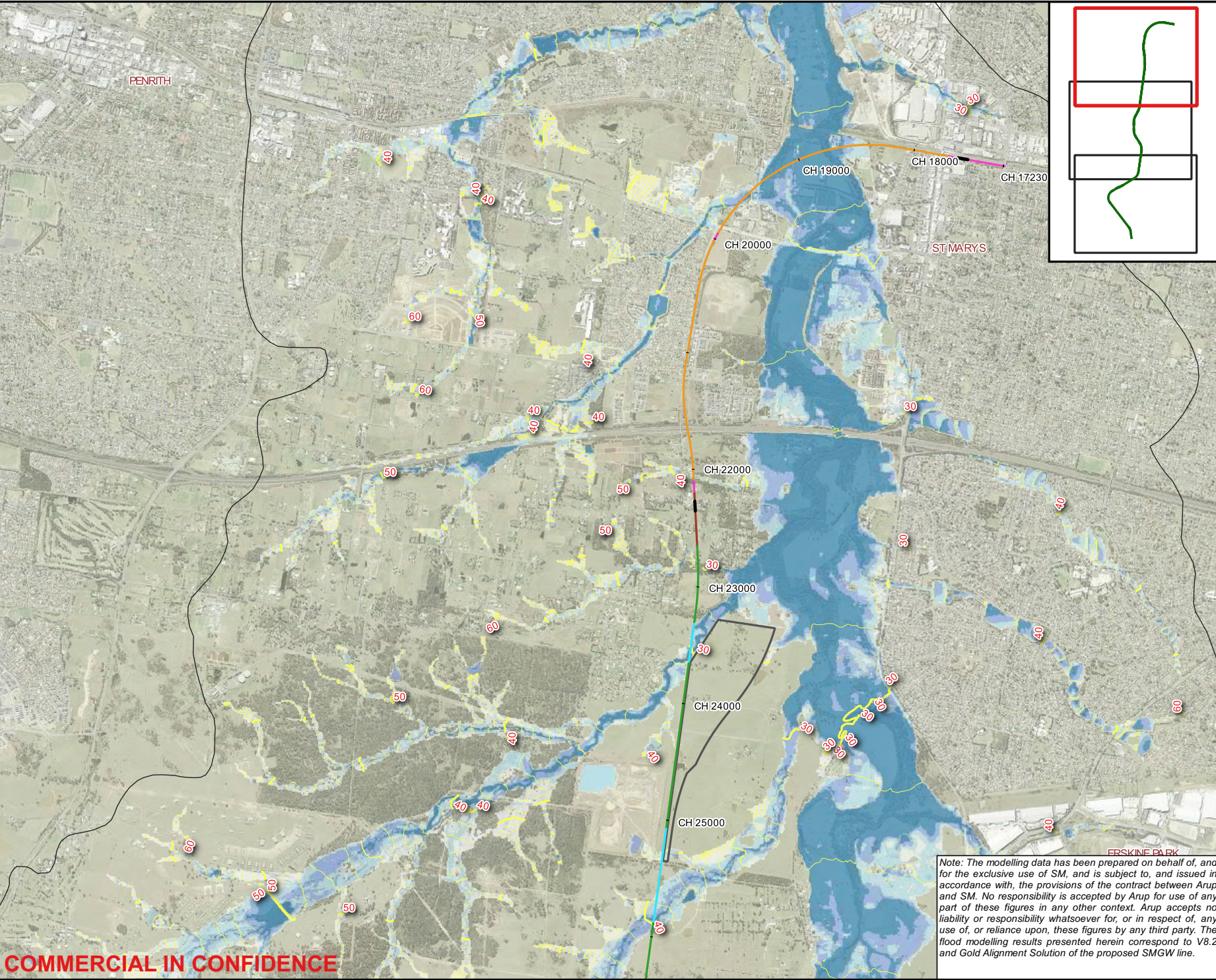
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Coordinate System <b>GDA 1994 MGA Zone 56</b>	Figure No <b>D.5 (3 of 3)</b>

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1:265000265549-01 SMWSA TA Work Internal Design GIS Data 02 Working Draft Mapping CGIS  
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**Legend**

- Peak flood levels (mAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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050010001500

m

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Client

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Job Title

SMGW TA Services

Figure Title

Design Case - 1% AEP with Climate Change flood depth and levels

Scale at A3

1:300000

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

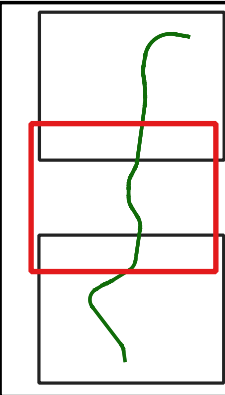
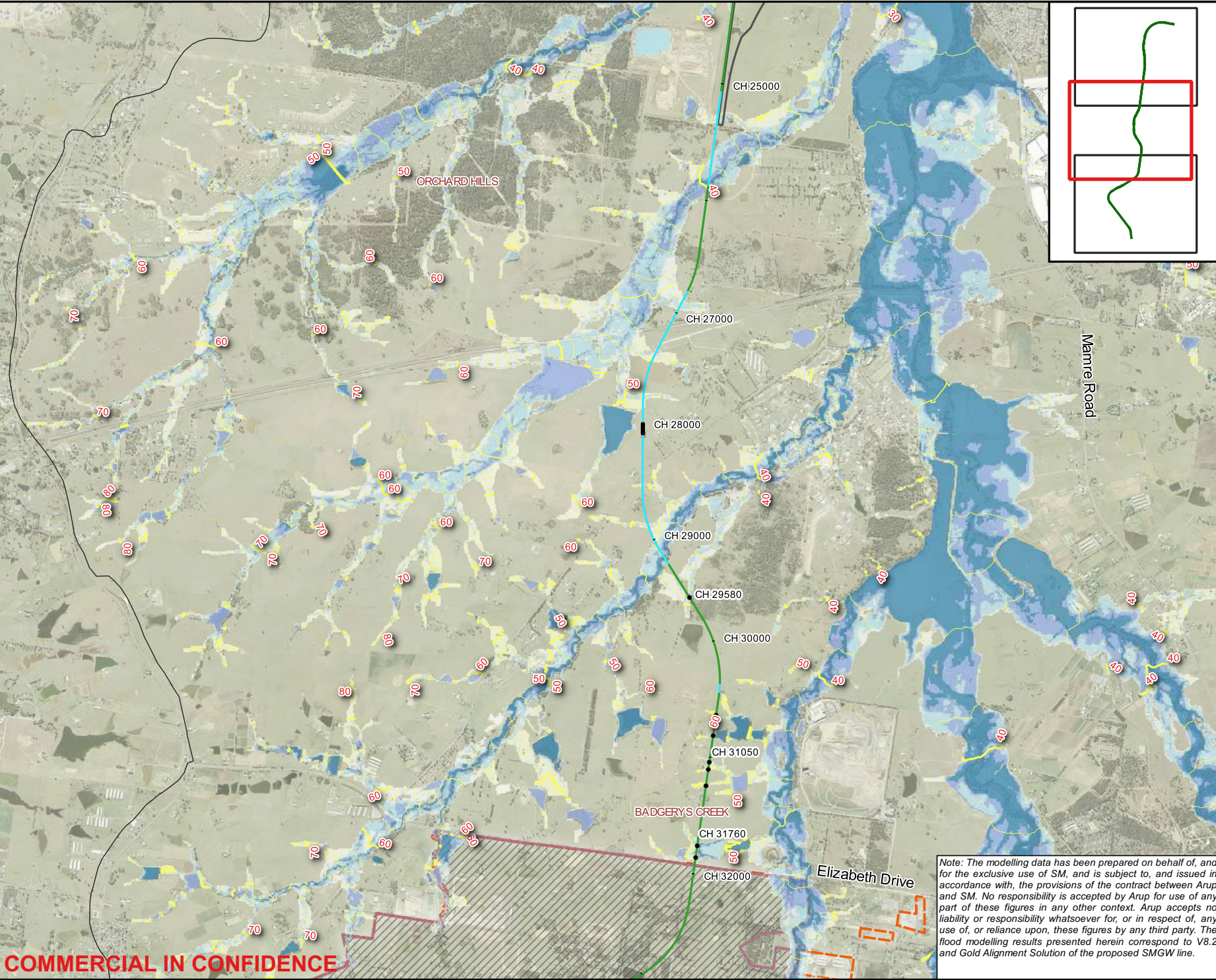
Figure No

D.6 (1 of 3)

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**Legend**

Peak flood levels (mAHD)

Flood depth (m)

0 - 0.1

0.1 - 0.5

0.5 - 1

> 1.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP with Climate Change flood depth and levels**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

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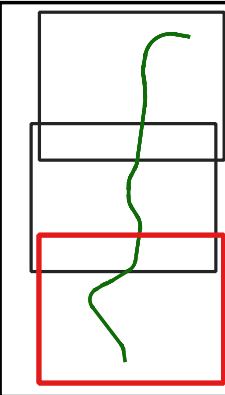
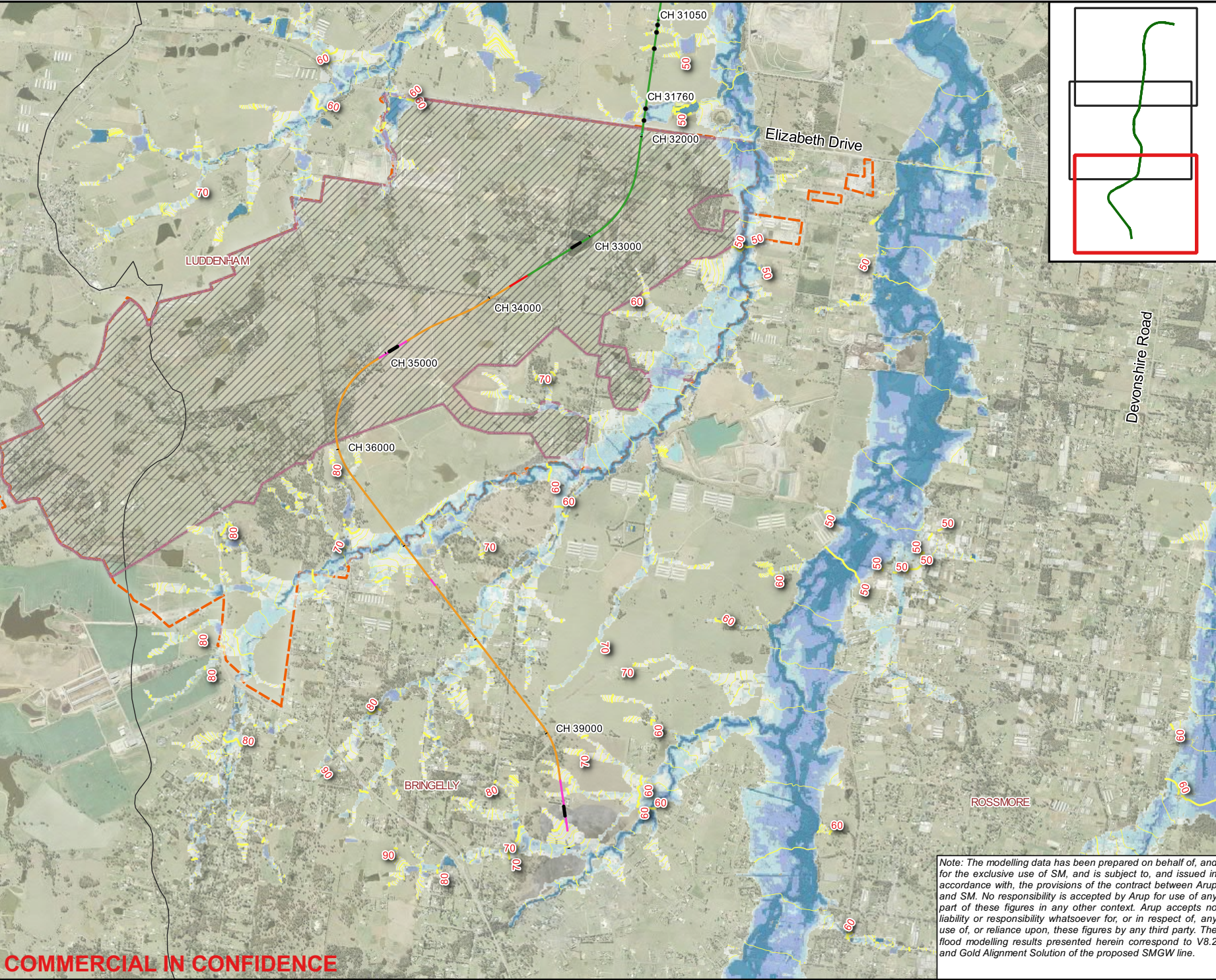
Figure No

**D.6 (2 of 3)**

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**Legend**

- Peak flood levels (mAHD)
- Flood depth (m)
  - 0 - 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1.0
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title  
**SMGW TA Services**

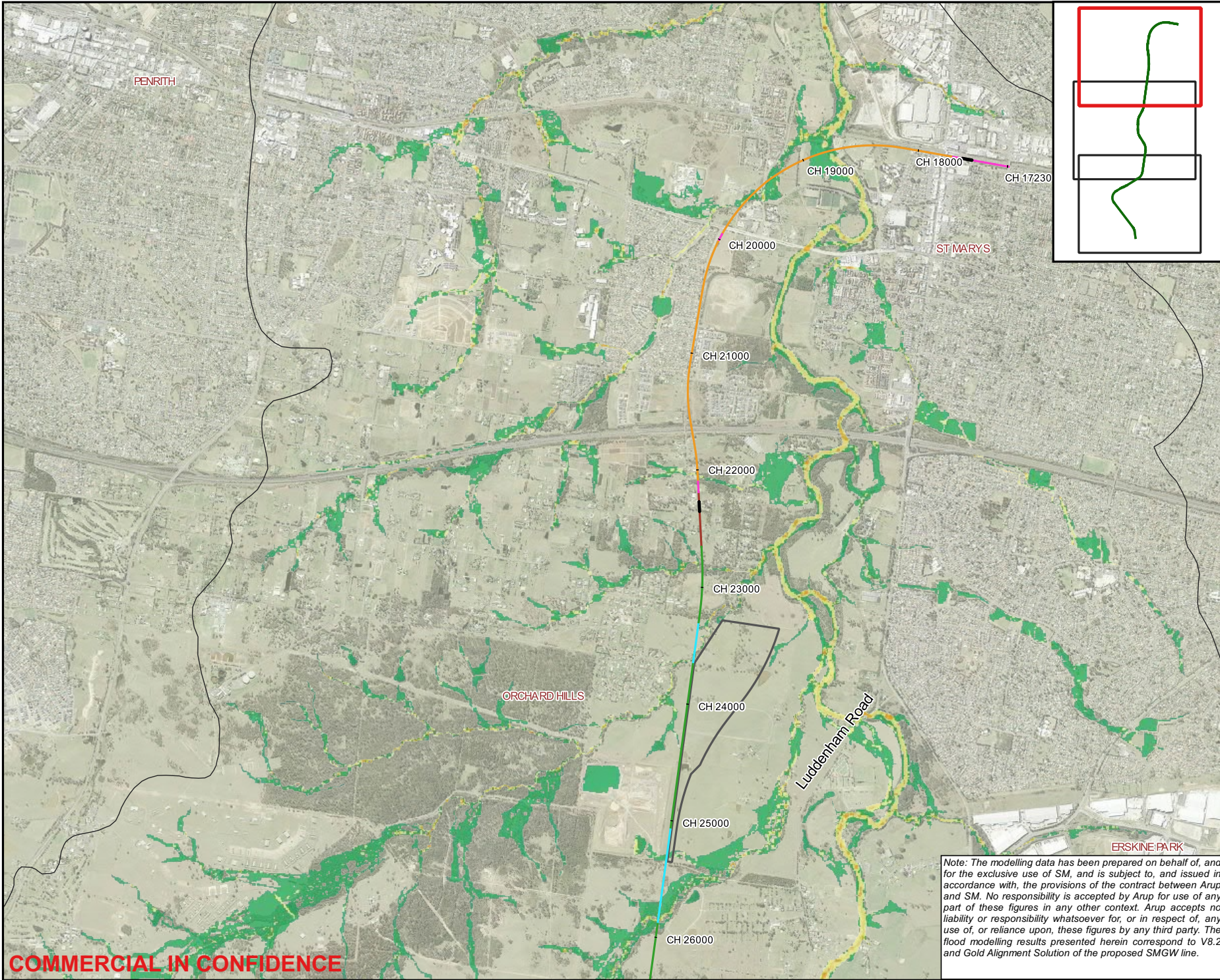
**Design Case - 1% AEP with Climate Change Design flood depth and levels**  
Scale at A3  
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Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure Status  
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Figure No  
**D.6 (3 of 3)**

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### Legend

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

**Other Symbols:**

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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0 500 1000 1500 m

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Client: **Sydney Metro**

Job Title: **SMGW TA Services**

Figure Title: **Design Case - 0.5EY Design flood velocity**

Scale at A3: **1:30000**

Coordinate System: **GDA 1994 MGA Zone 56**

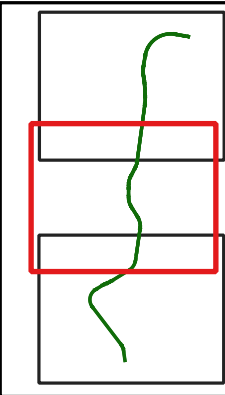
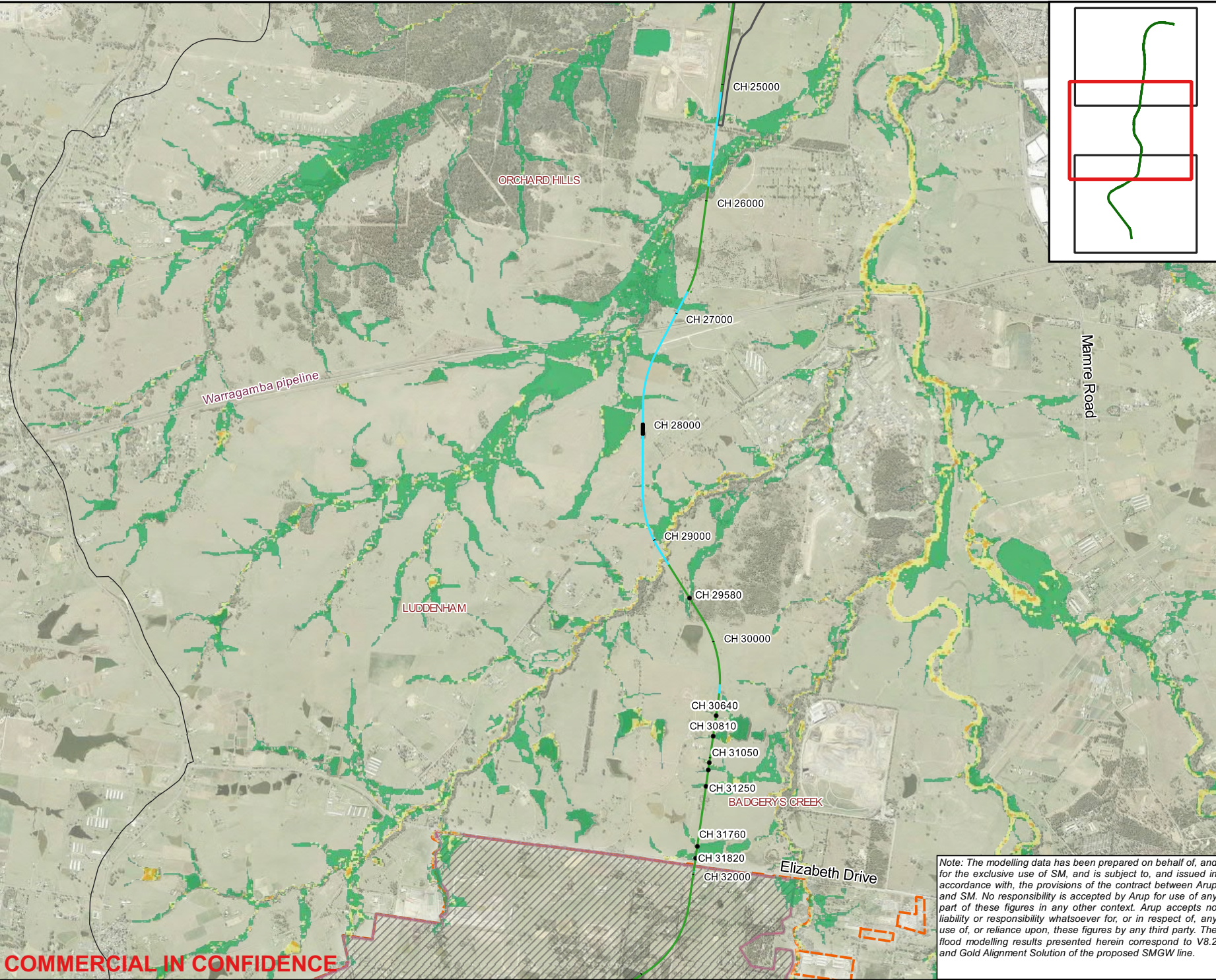
Job No: **265549**

Figure No: **D.7 (1 of 3)**

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**Legend**  
**Velocity (m/s)**  
0 - 0.5  
0.5 - 1.0  
1.0 - 2.0  
> 2.0  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

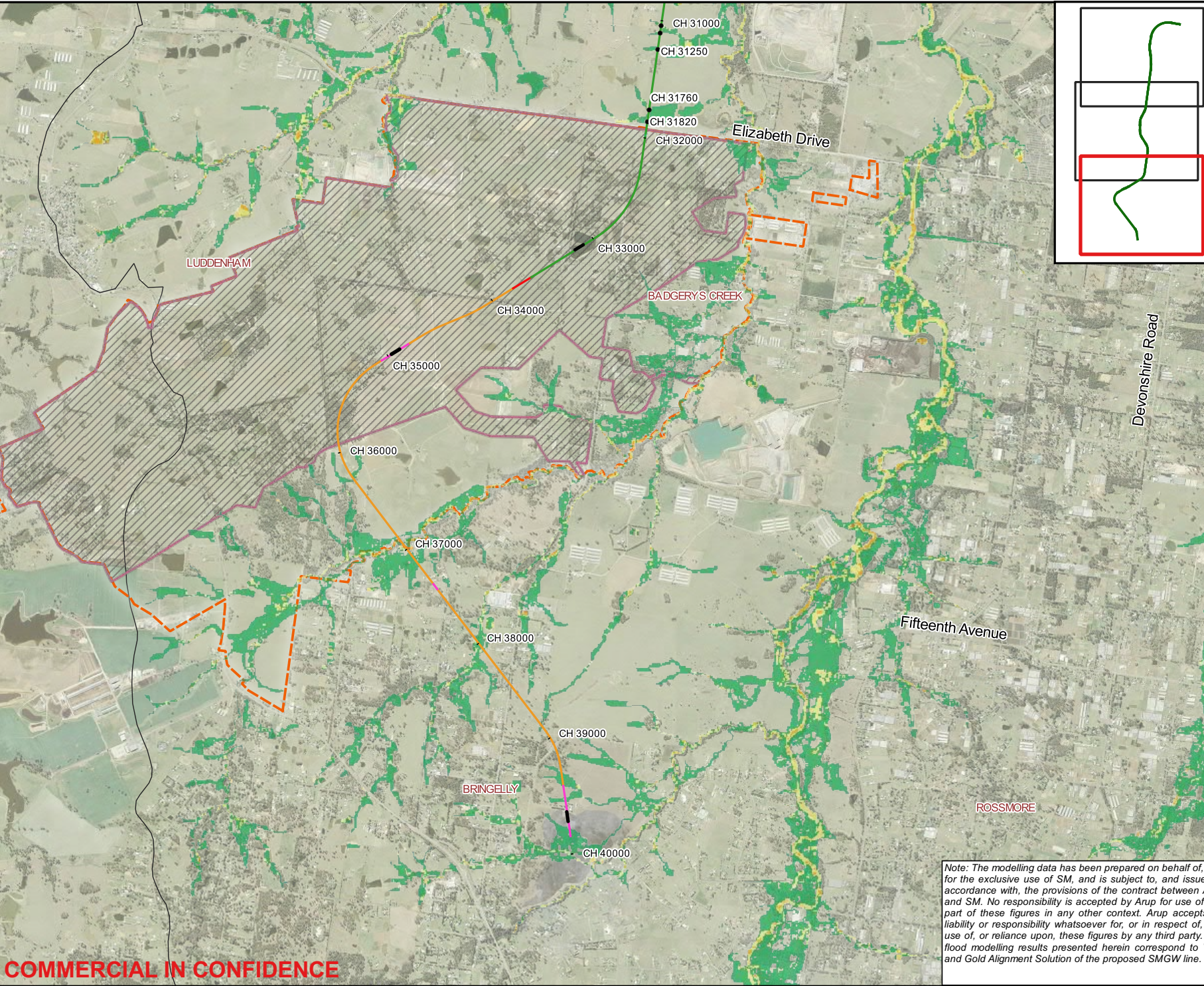
A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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**Sydney Metro**  
Job Title  
**SMGW TA Services**  
Figure Title  
**Design Case - 0.5EY Design flood velocity**  
Scale at A3  
**1:300000**  
Figure Status  
**Issued for information**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure No  
**D.7 (2 of 3)**

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Legend

Velocity (m/s)



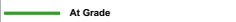
Culverts



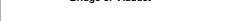
WSI Boundary



WSI Stage 1 Construction Boundary



South Creek Catchment Boundary



At Grade



Bridge or Viaduct



Cut and Cover



Dive Structure



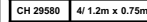
Driven Tunnel



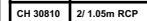
Trough or Cutting



Platform



Stabling Site



Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Issue	Date	By	Chkd	Appd



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Job Title

SMGW TA Services

Figure Title

Design Case - 0.5EY Design flood velocity

Scale at A3  
1:30000

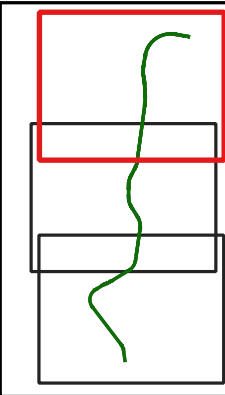
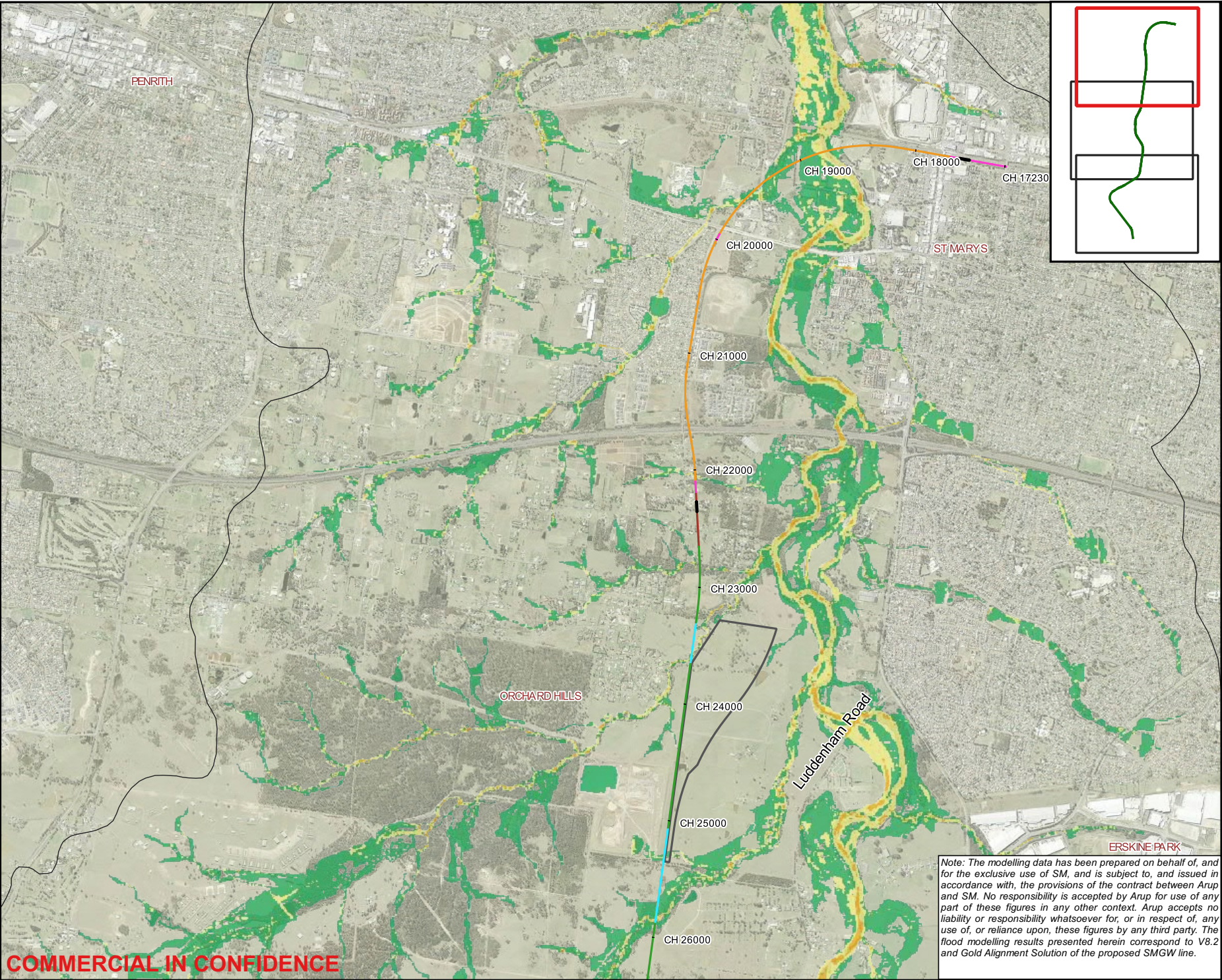
Coordinate System  
GDA 1994 MGA Zone 56

Job No  
265549

Figure No  
D.7 (3 of 3)

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

**Other Features:**

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Client  
**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

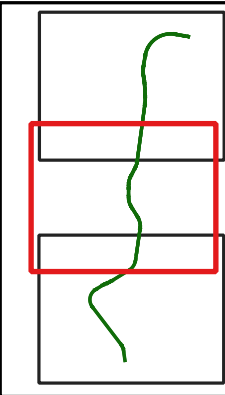
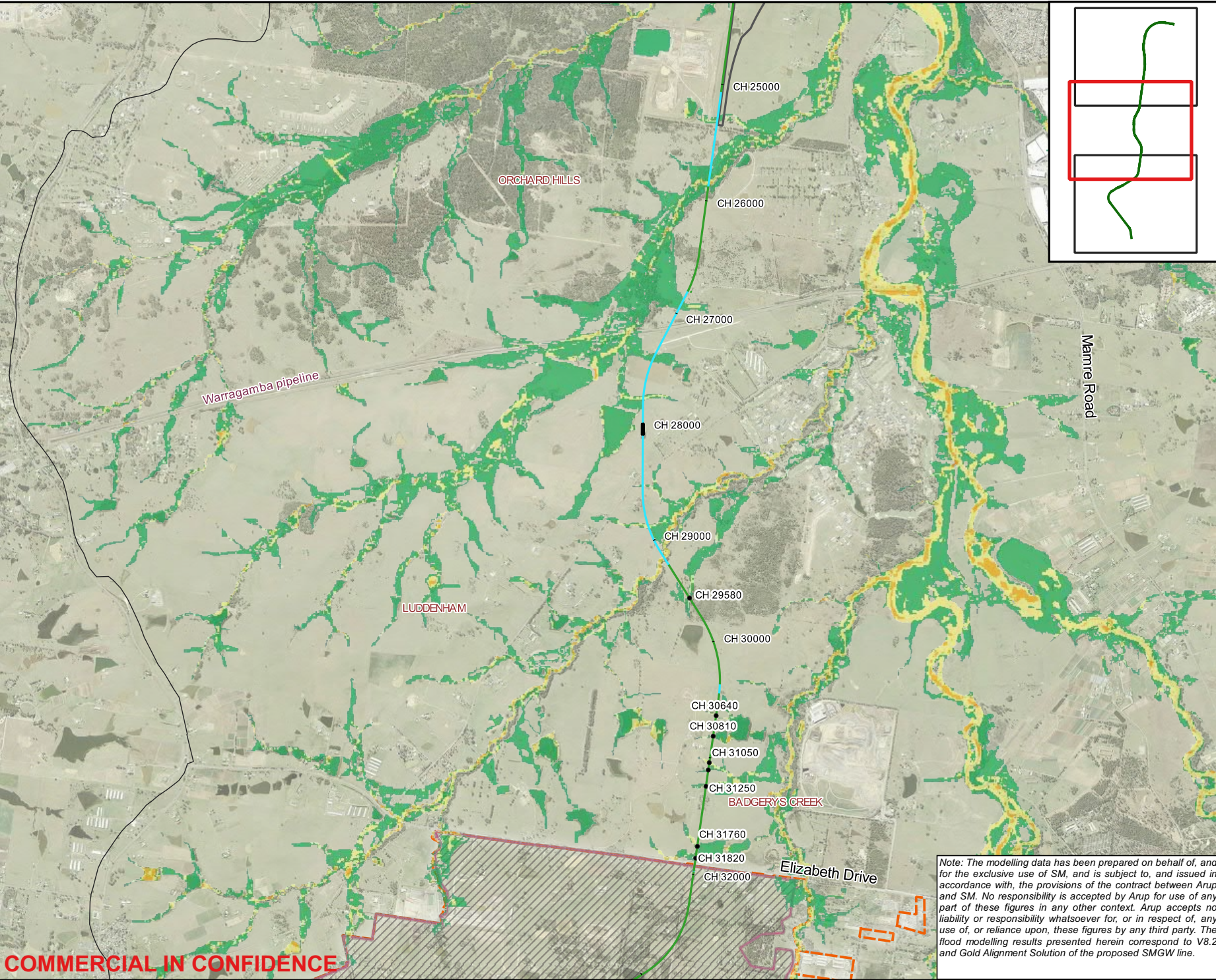
Job No  
**265549**

Figure No  
**D.8 (1 of 3)**

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

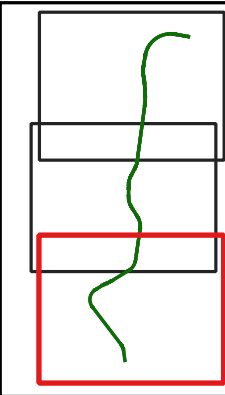
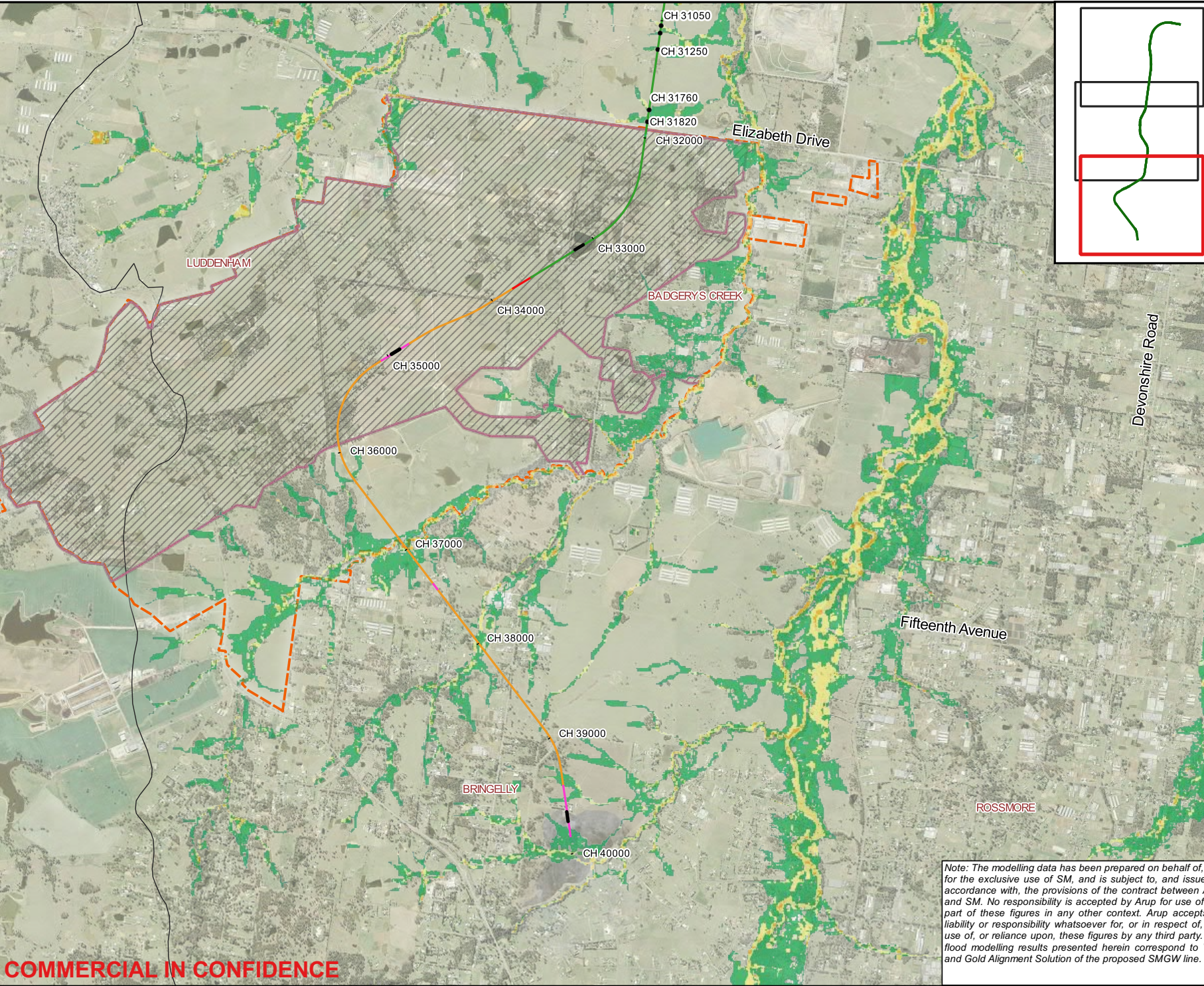
Job No  
**265549**

Figure No  
**D.8 (2 of 3)**

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**Legend**  
**Velocity (m/s)**  
0 - 0.5  
0.5 - 1.0  
1.0 - 2.0  
> 2.0  
● Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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0 500 1000 1500 m

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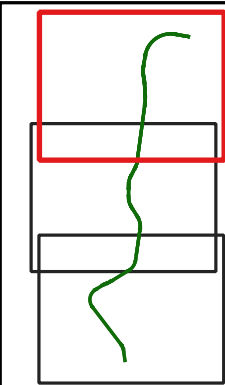
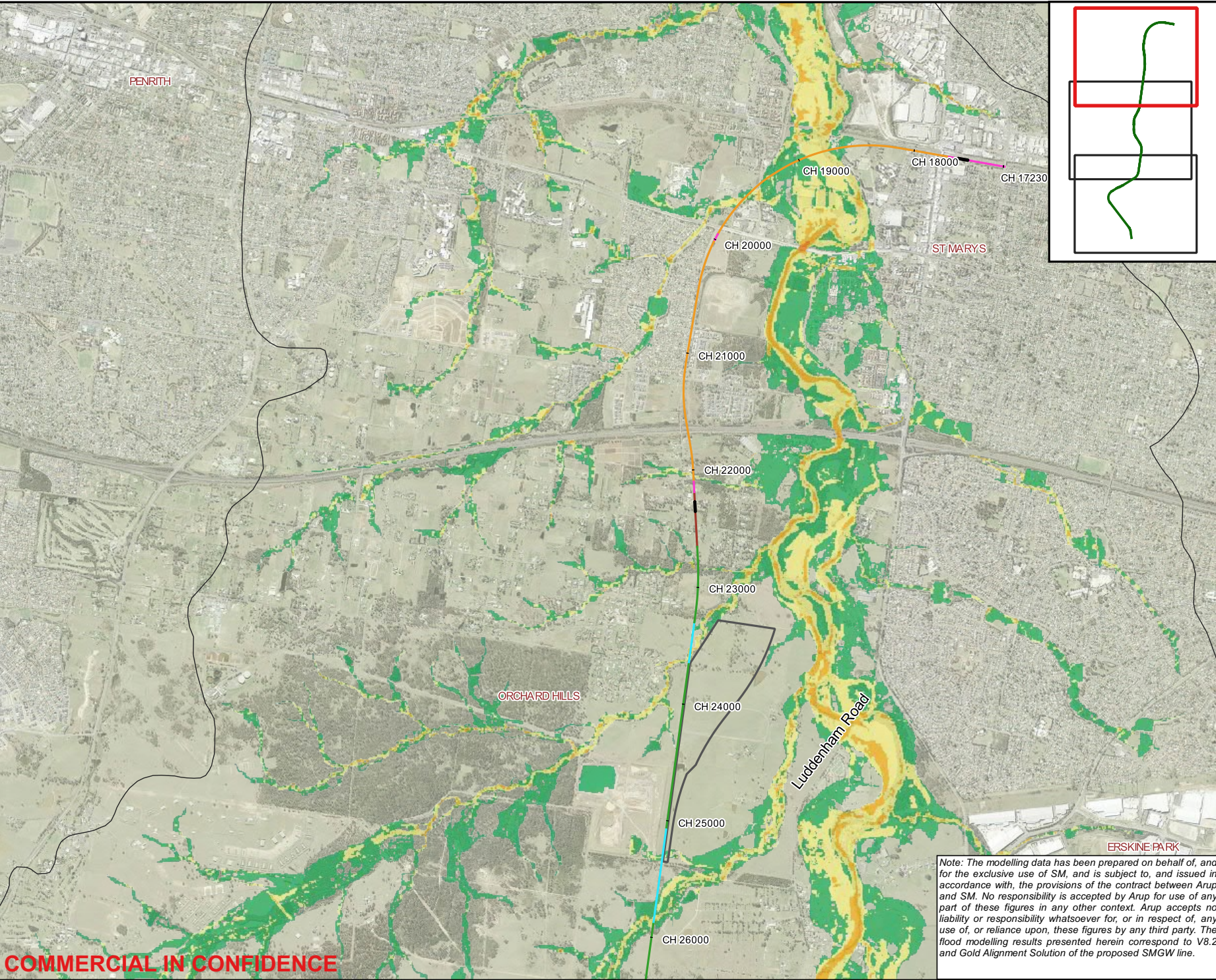
**Sydney Metro**  
Job Title  
**SMGW TA Services**

**Design Case - 0.2EY Design flood velocity**  
Scale at A3  
**1:30000**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure Status  
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Figure No  
**D.8 (3 of 3)**

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Design flood velocity**

Scale at A3  
**1:30000**

Coordinate System  
**GDA 1994 MGA Zone 56**

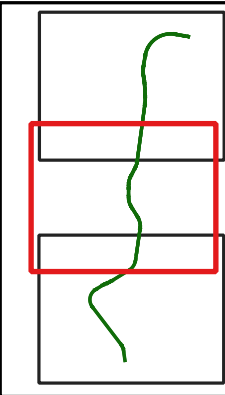
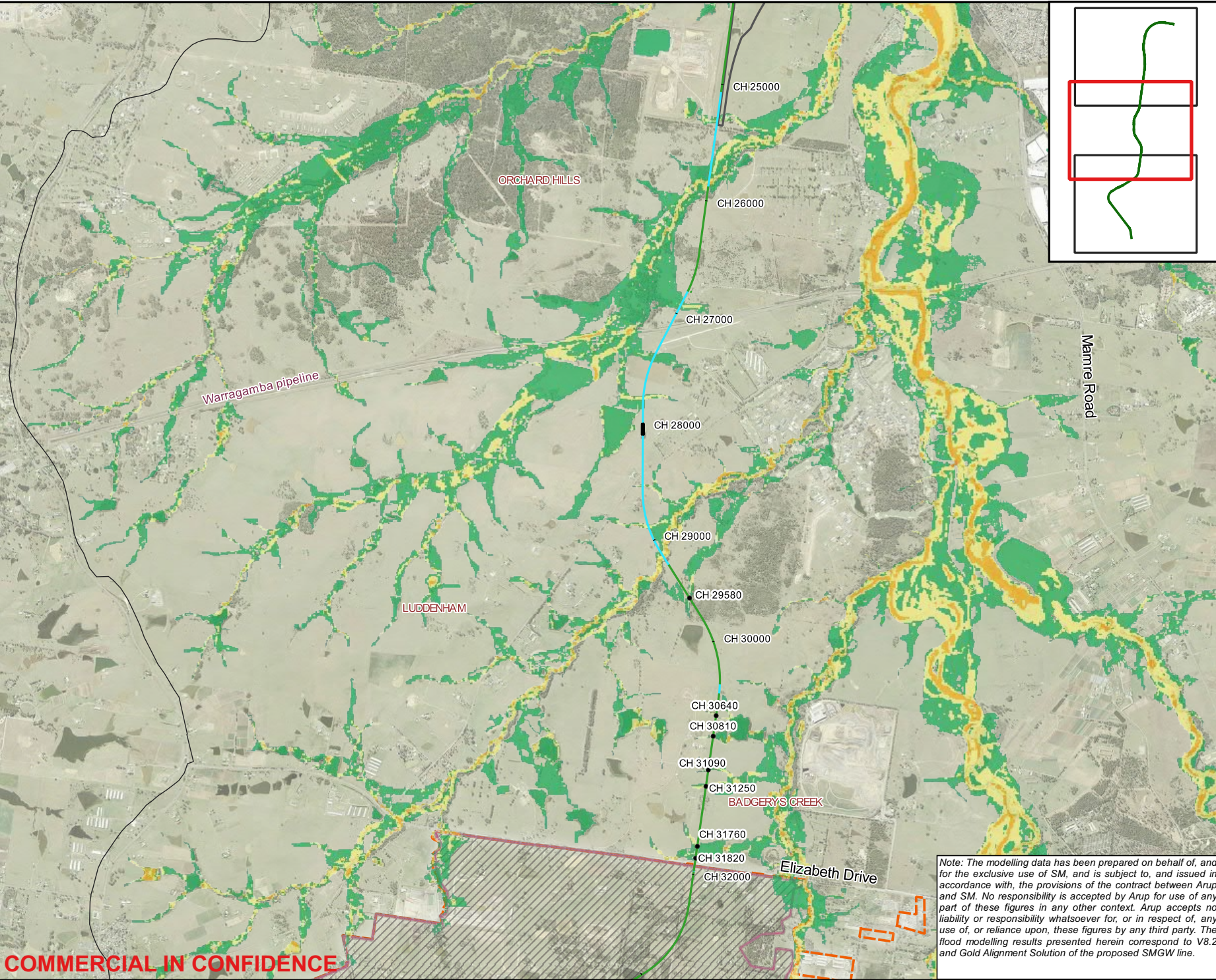
Job No  
**265549**

Figure No  
**D.9 (1 of 3)**

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**Legend**  
**Velocity (m/s)**  
0 - 0.5  
0.5 - 1.0  
1.0 - 2.0  
> 2.0  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 5% AEP Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

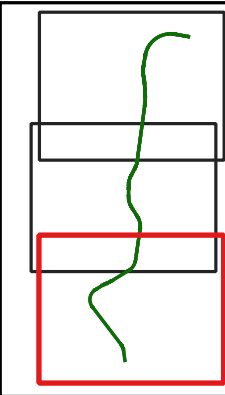
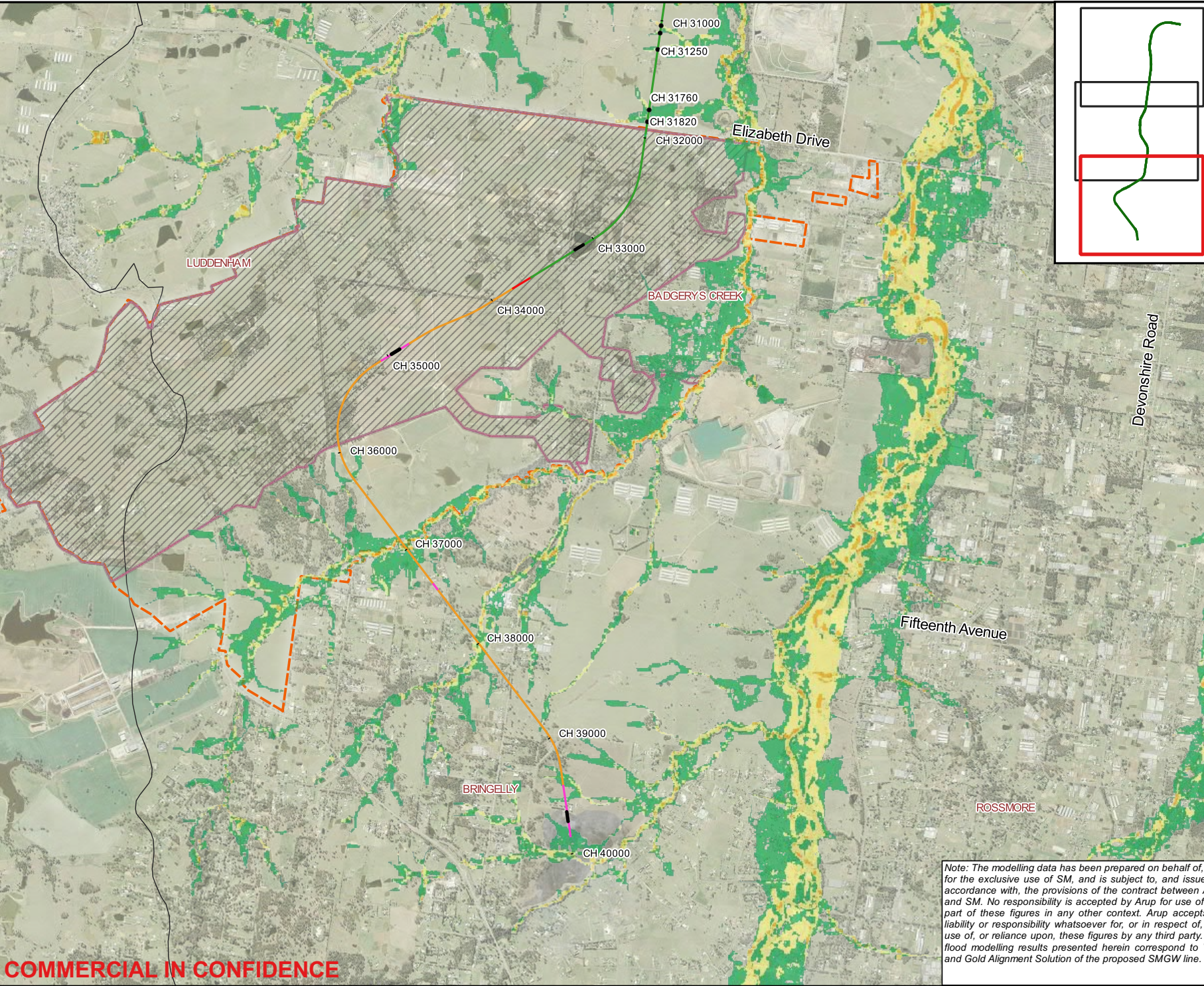
Job No  
**265549**

Figure No  
**D.9 (2 of 3)**

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**Legend**

**Velocity (m/s)**

0 - 0.5

0.5 - 1.0

1.0 - 2.0

> 2.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

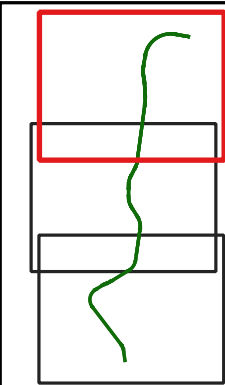
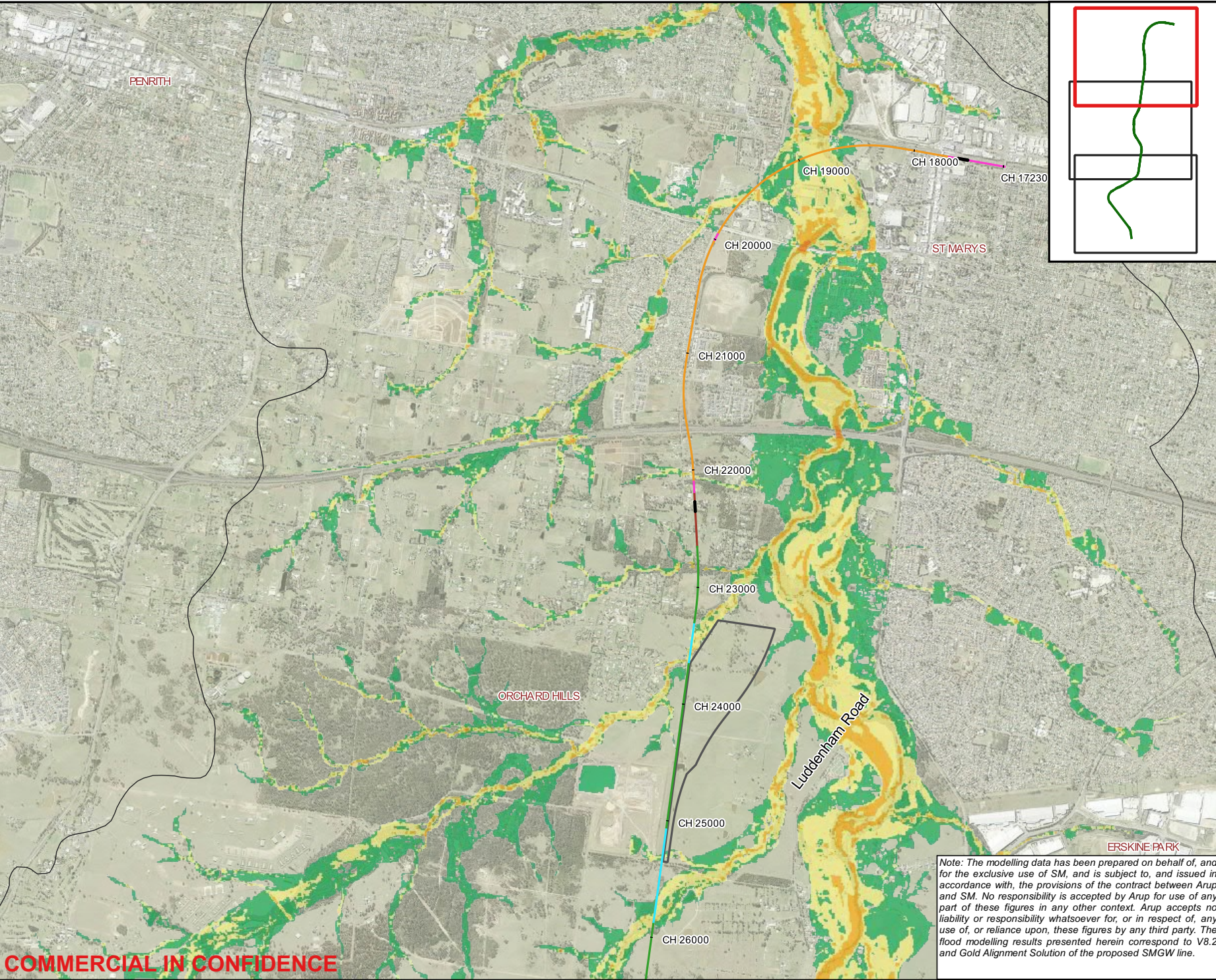
Job No  
**265549**

Figure No  
**D.9 (3 of 3)**

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

**Other Features:**

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title:  
**SMGW TA Services**

Figure Title:  
**Design Case - 1% AEP Design flood velocity**

Scale at A3:  
**1:30000**

Coordinate System:  
**GDA 1994 MGA Zone 56**

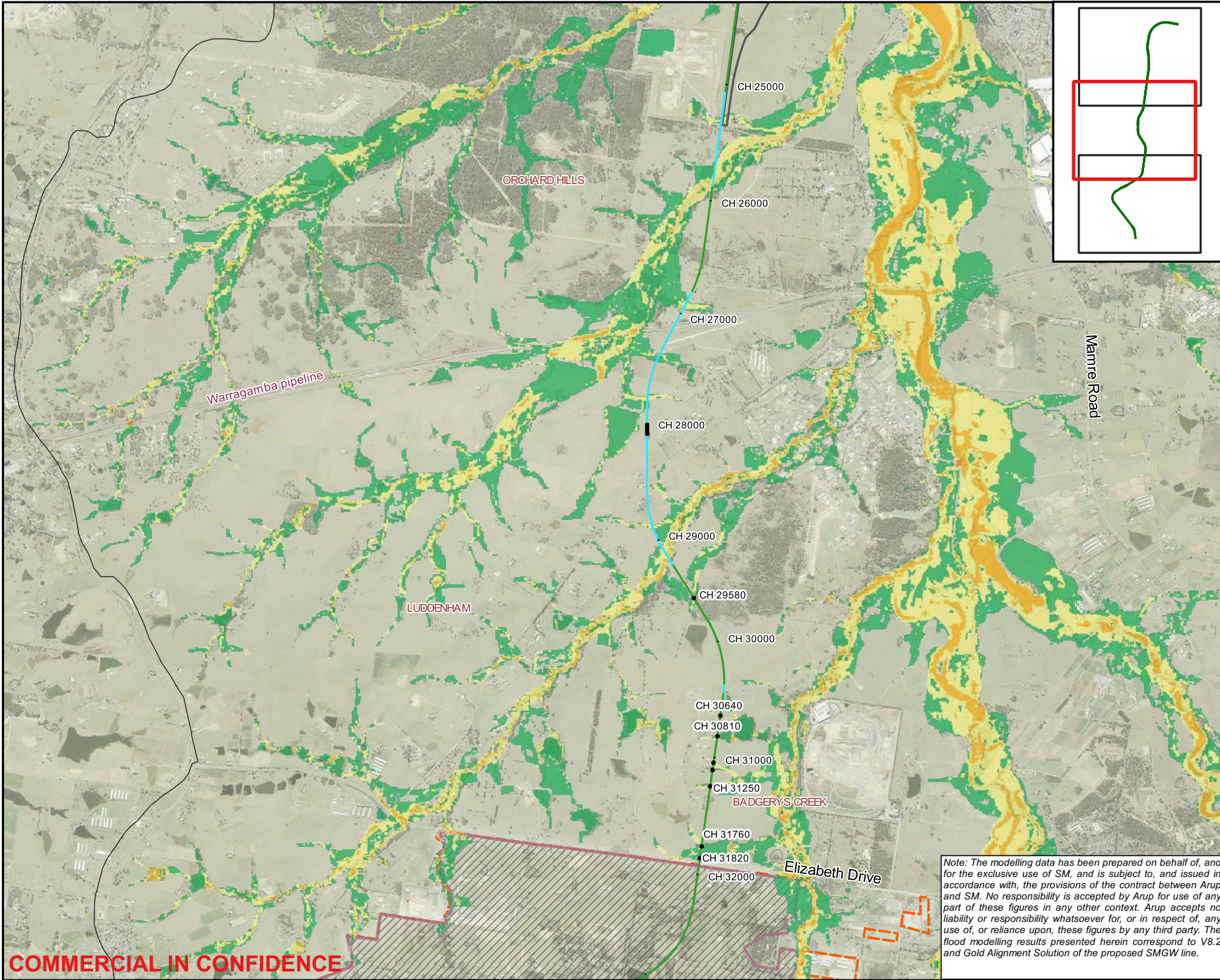
Job No:  
**265549**

Figure No:  
**D.10 (1 of 3)**

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### Legend

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

**Other Symbols:**

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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**NSW**  
Government

**sydney METRO**  
Western Sydney Airport

Client:

**Sydney Metro**

Job Title:

**SMGW TA Services**

Figure Title:

**Design Case - 1% AEP Design flood velocity**

Scale at A3:  
**1:300000**

Figure Status:  
**Issued for information**

Coordinate System:  
**GDA 1994 MGA Zone 56**

Job No:  
**265549**

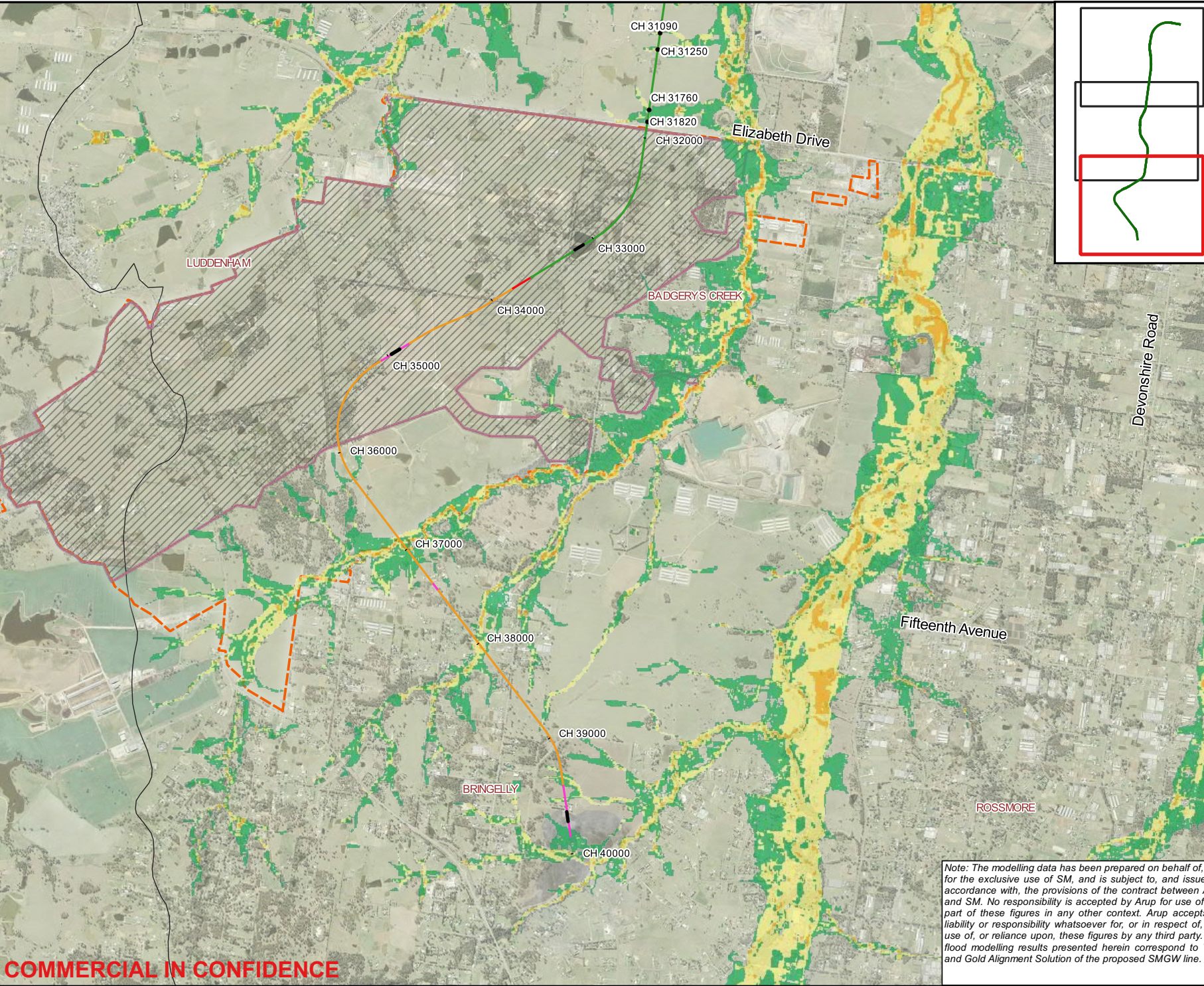
Figure No:  
**D.10 (2 of 3)**

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1:265000265549-01\_SMWSA-TAWorkInternalDesign-GISData02\_WorkingfloodModellingCGIS  
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**Legend**

Velocity (m/s)

0 - 0.5

0.5 - 1.0

1.0 - 2.0

> 2.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Design flood velocity**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

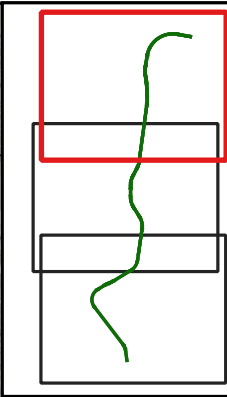
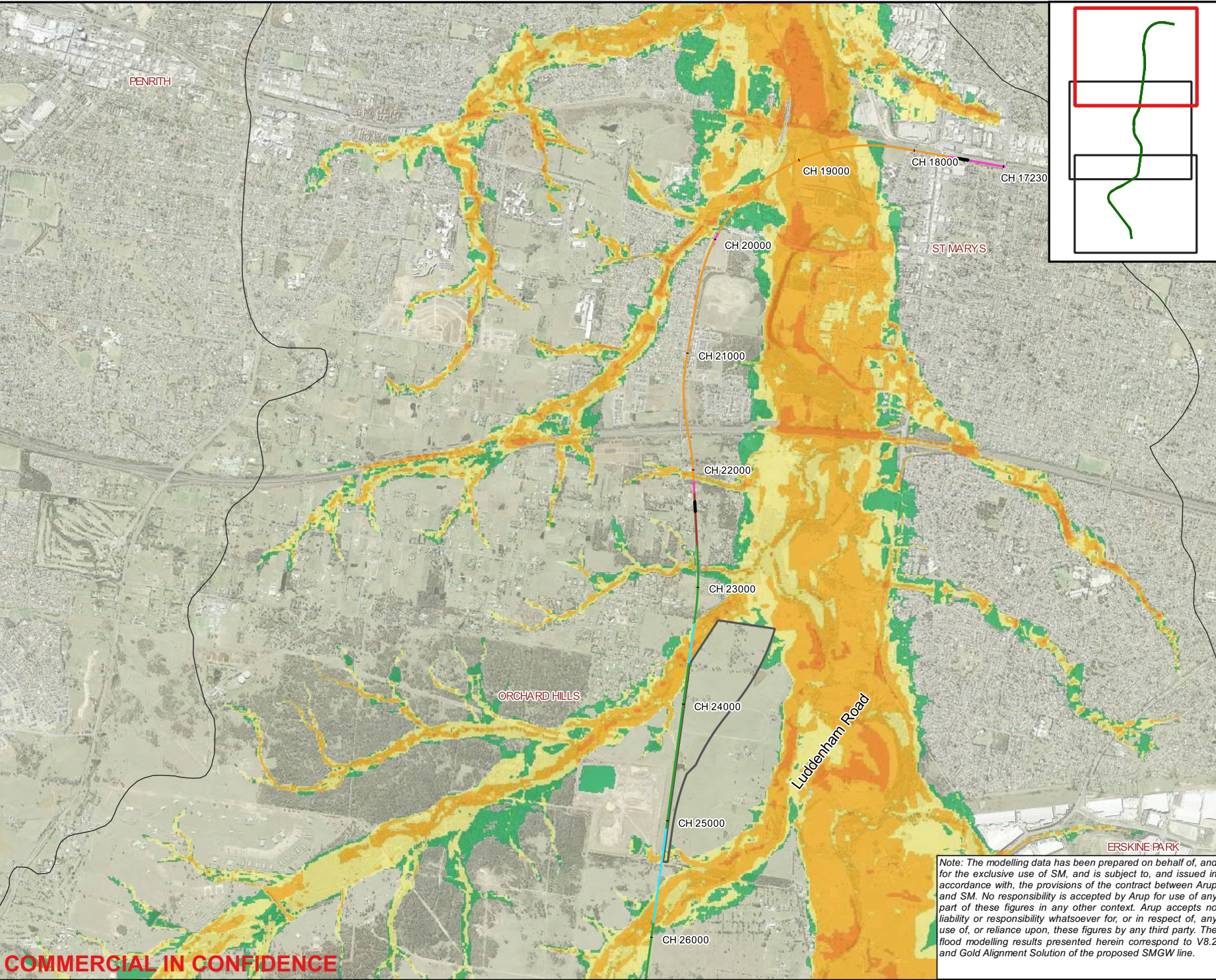
Figure No

**D.10 (3 of 3)**

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**Legend**

Velocity (m/s)

0 - 0.5

0.5 - 1.0

1.0 - 2.0

> 2.0

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

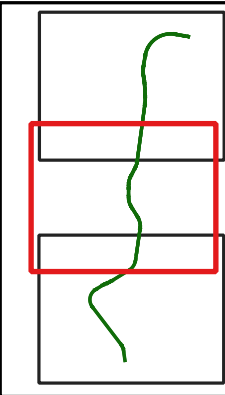
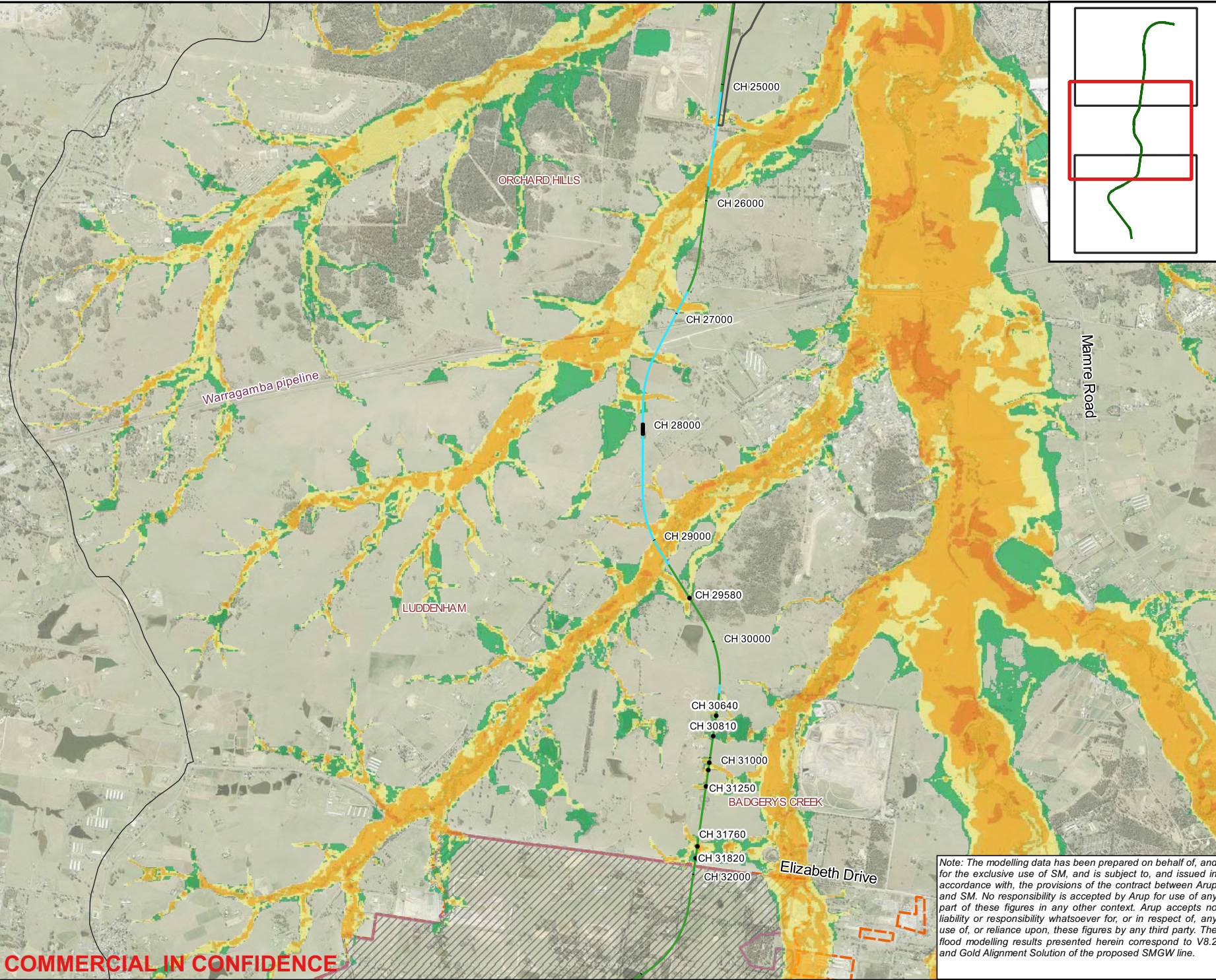
Job No  
**265549**

Figure No  
**D.11 (1 of 3)**

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Design flood velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate system  
**GDA 1994 MGA Zone 56**

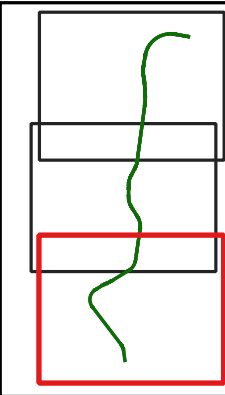
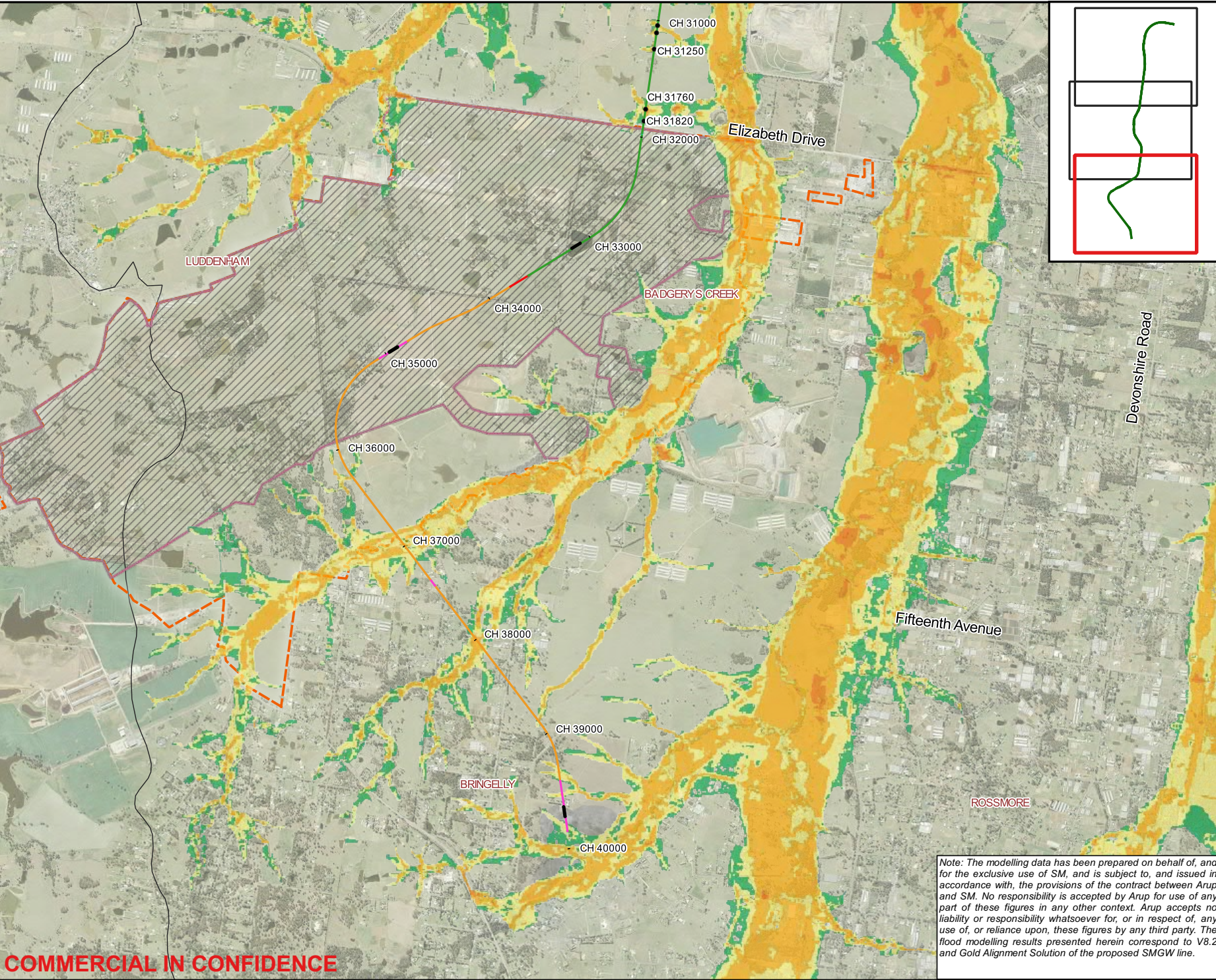
Job No  
**265549**

Figure No  
**D.11 (2 of 3)**

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**Legend**

**Velocity (m/s)**

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Client

**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Design flood velocity**

Scale at A3  
**1:30000**

Coordinate System  
**GDA 1994 MGA Zone 56**

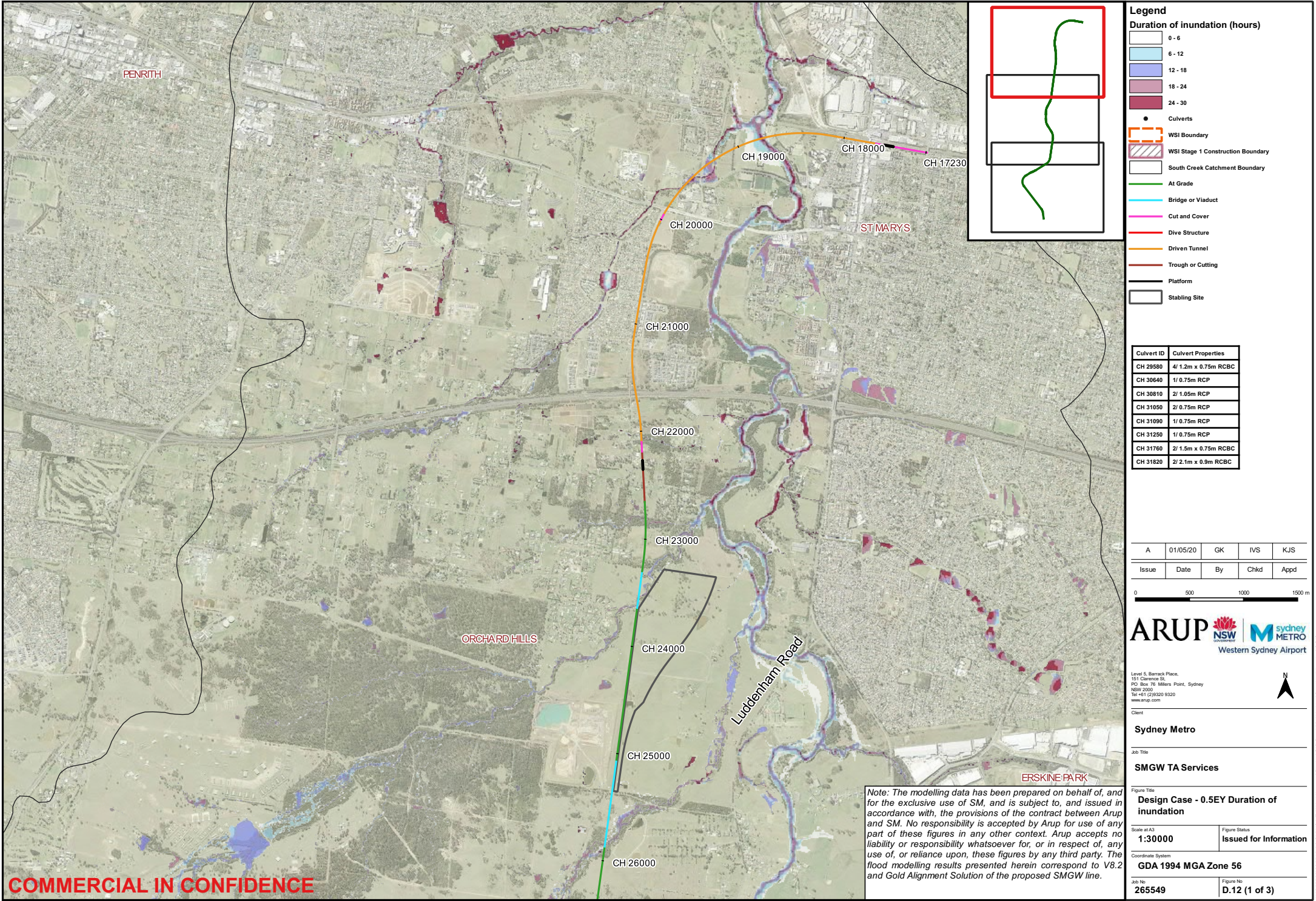
Job No  
**265549**

Figure No  
**D.11 (3 of 3)**

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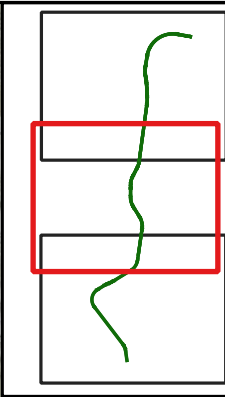
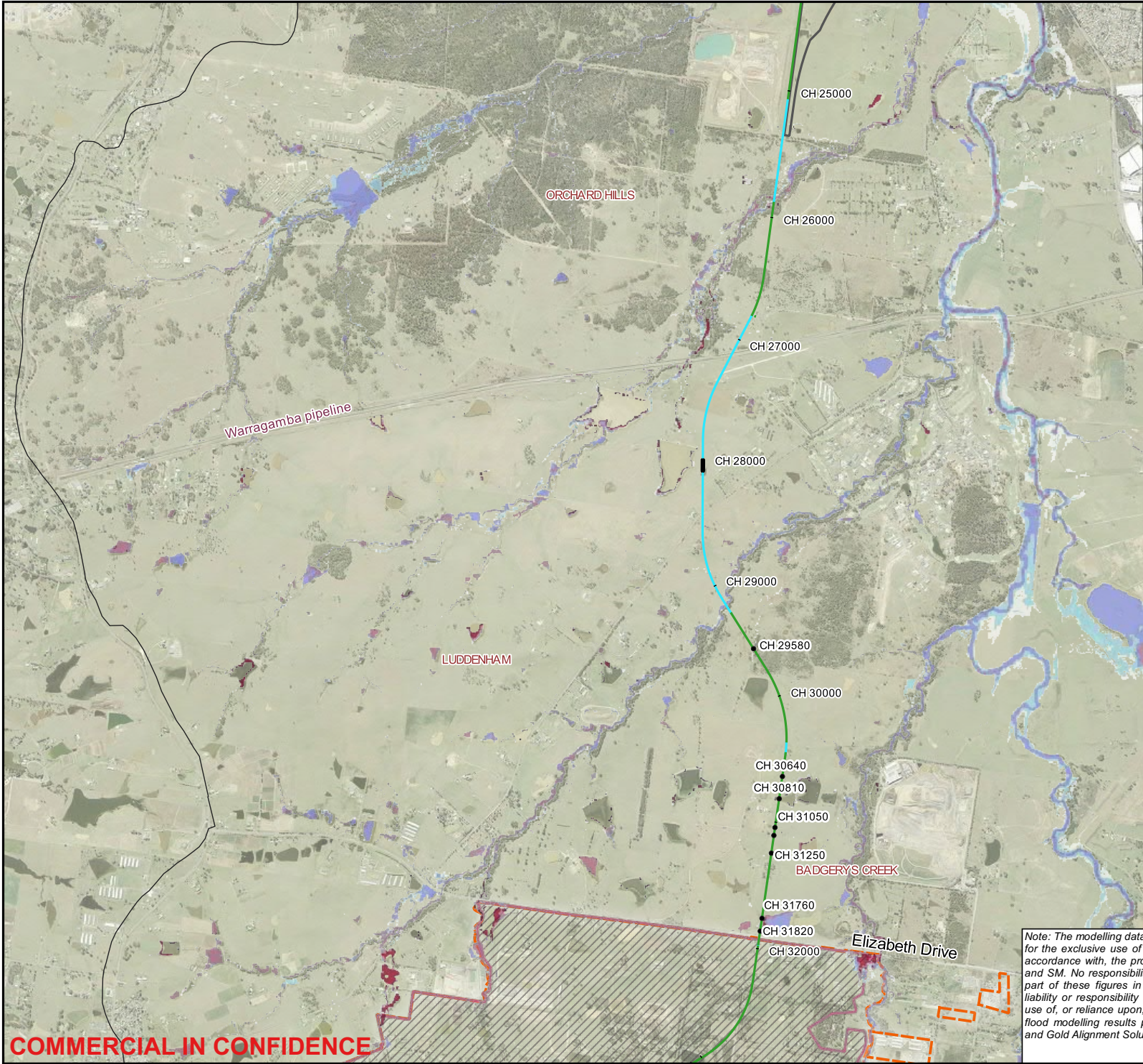
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COMMERCIAL IN CONFIDENCE





**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.5EY Duration of inundation**

Scale at A3

**1:300000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

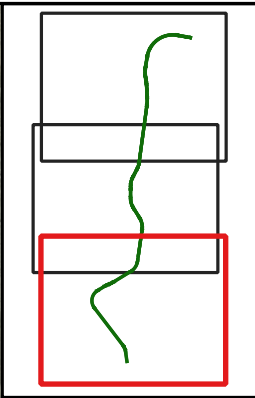
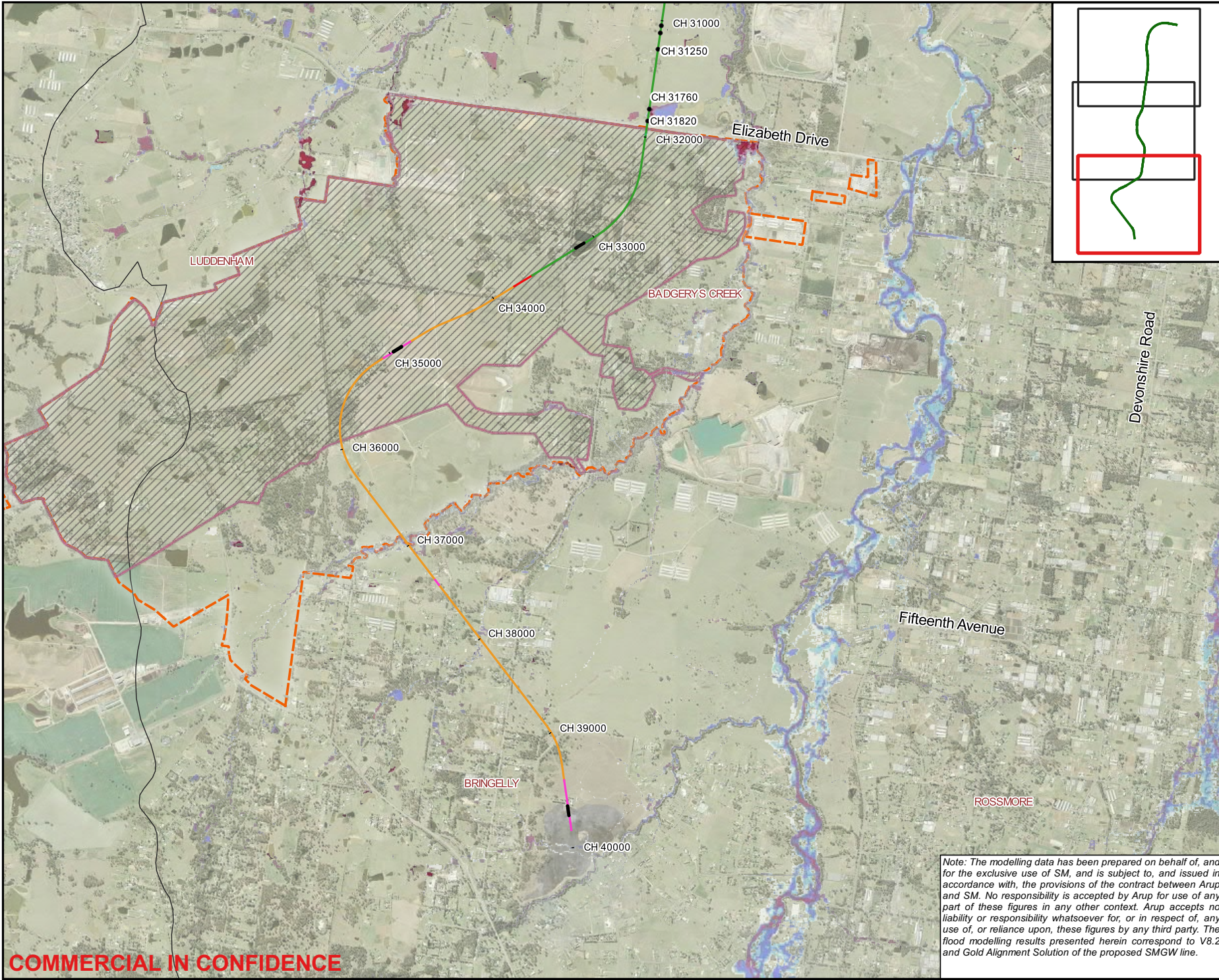
Figure No

**D.12 (2 of 3)**

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**Legend**  
**Duration of inundation (hours)**  
0 - 6  
6 - 12  
12 - 18  
18 - 24  
24 - 30  
● Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

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CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

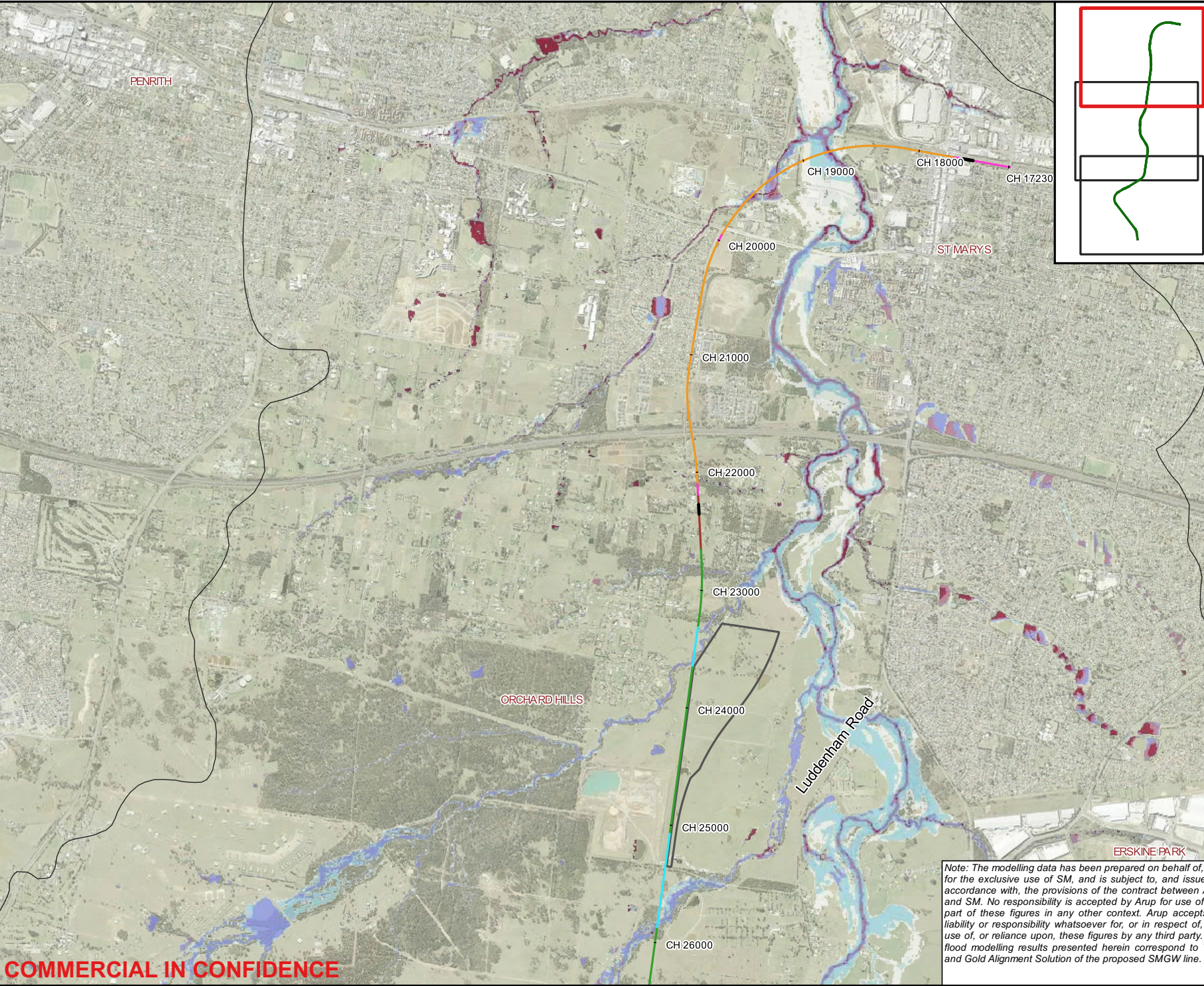
Job No  
**265549**

Figure No  
**D.12 (3 of 3)**

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**COMMERCIAL IN CONFIDENCE**





**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
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CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

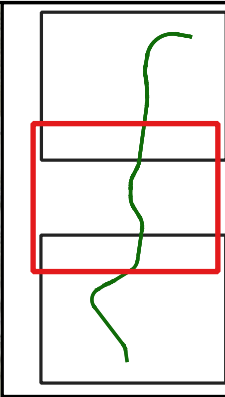
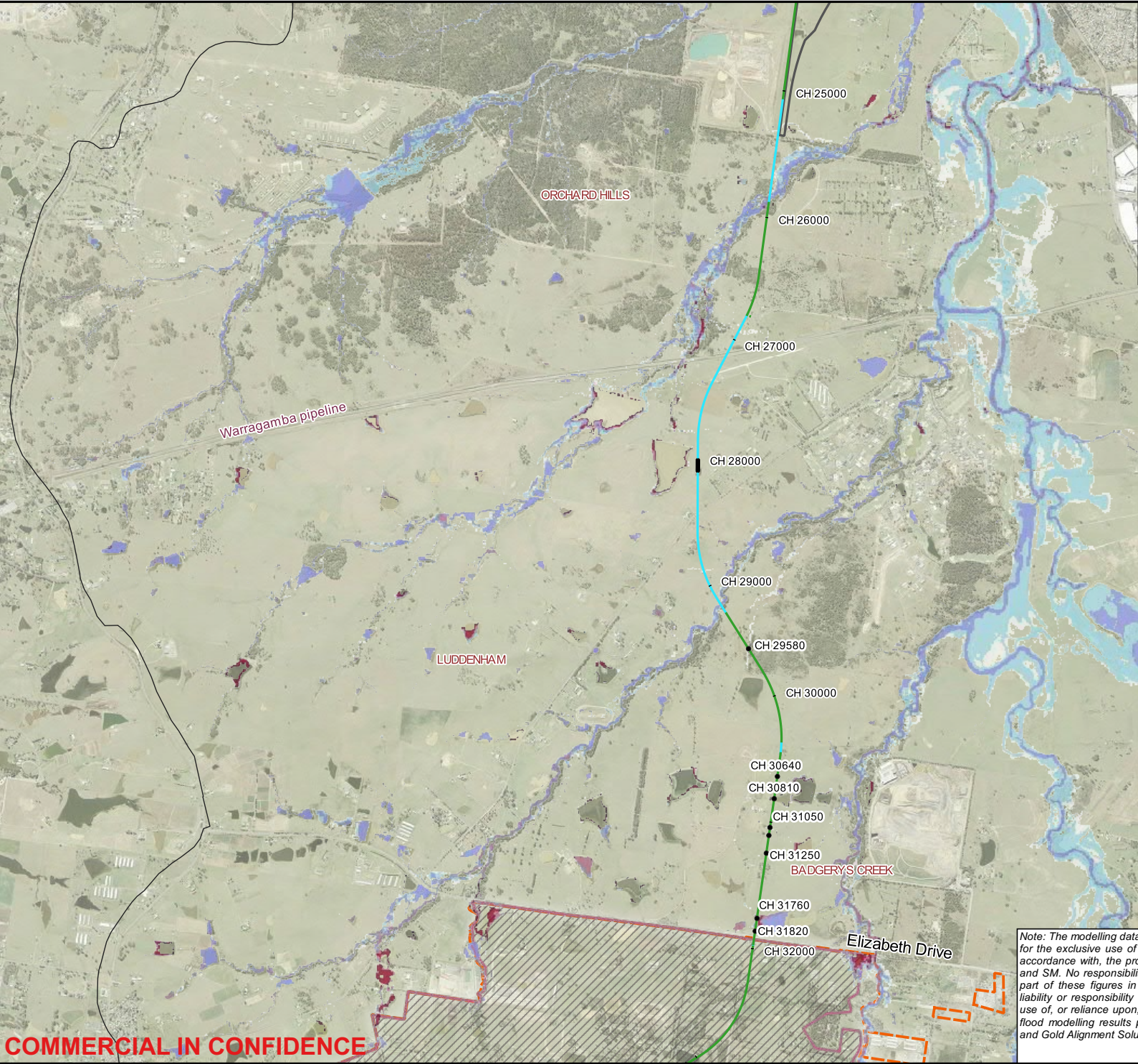
Job No  
**265549**

Figure No  
**D.13 (1 of 3)**

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**COMMERCIAL IN CONFIDENCE**





**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
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A	01/05/20	GK	IVS	KJS
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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Duration of inundation**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

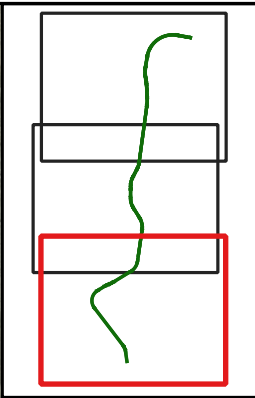
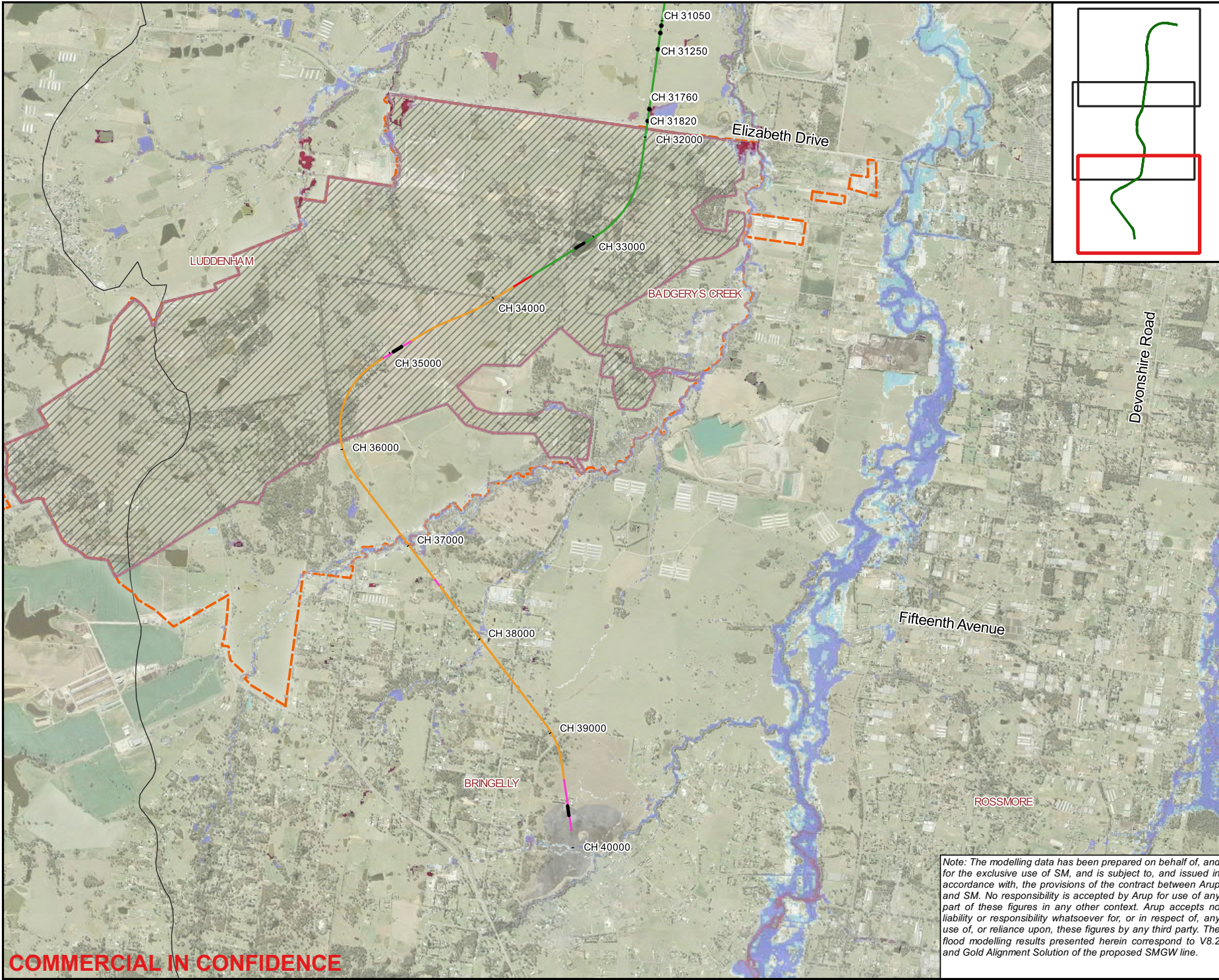
Figure No

**D.13 (2 of 3)**

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**COMMERCIAL IN CONFIDENCE**





**Legend**  
**Duration of inundation (hours)**  
0 - 6  
6 - 12  
12 - 18  
18 - 24  
24 - 30  
● Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
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CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title  
**SMGW TA Services**  
Figure Title  
**Design Case - 0.2EY Duration of inundation**  
Scale at A3  
**1:30000**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure No  
**D.13 (3 of 3)**

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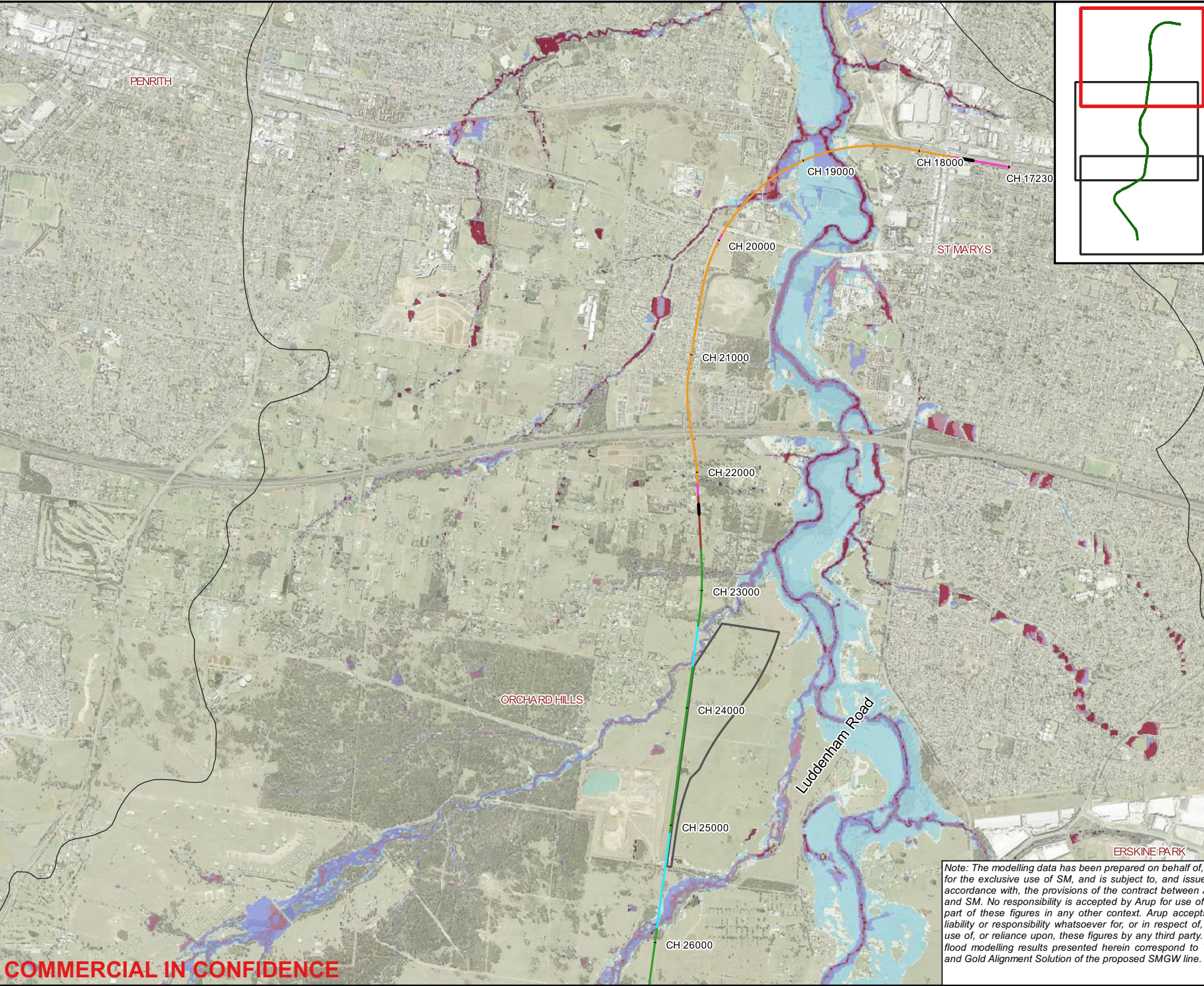
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1:265000265549-01\_SMGW TA Work Internal Design GIS Data 02\_Working flooding Mapping CGIS

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**Legend**

Duration of inundation (hours)

0 - 6

6 - 12

12 - 18

18 - 24

24 - 30

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

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Bridge or Viaduct

Cut and Cover

Dive Structure

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Trough or Cutting

Platform

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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

SMGW TA Services

Figure Title

Design Case - 5% AEP Duration of  
inundation

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

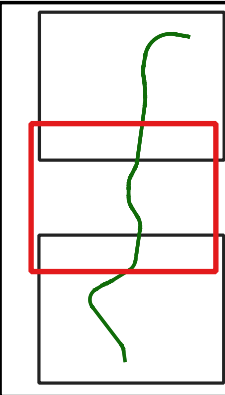
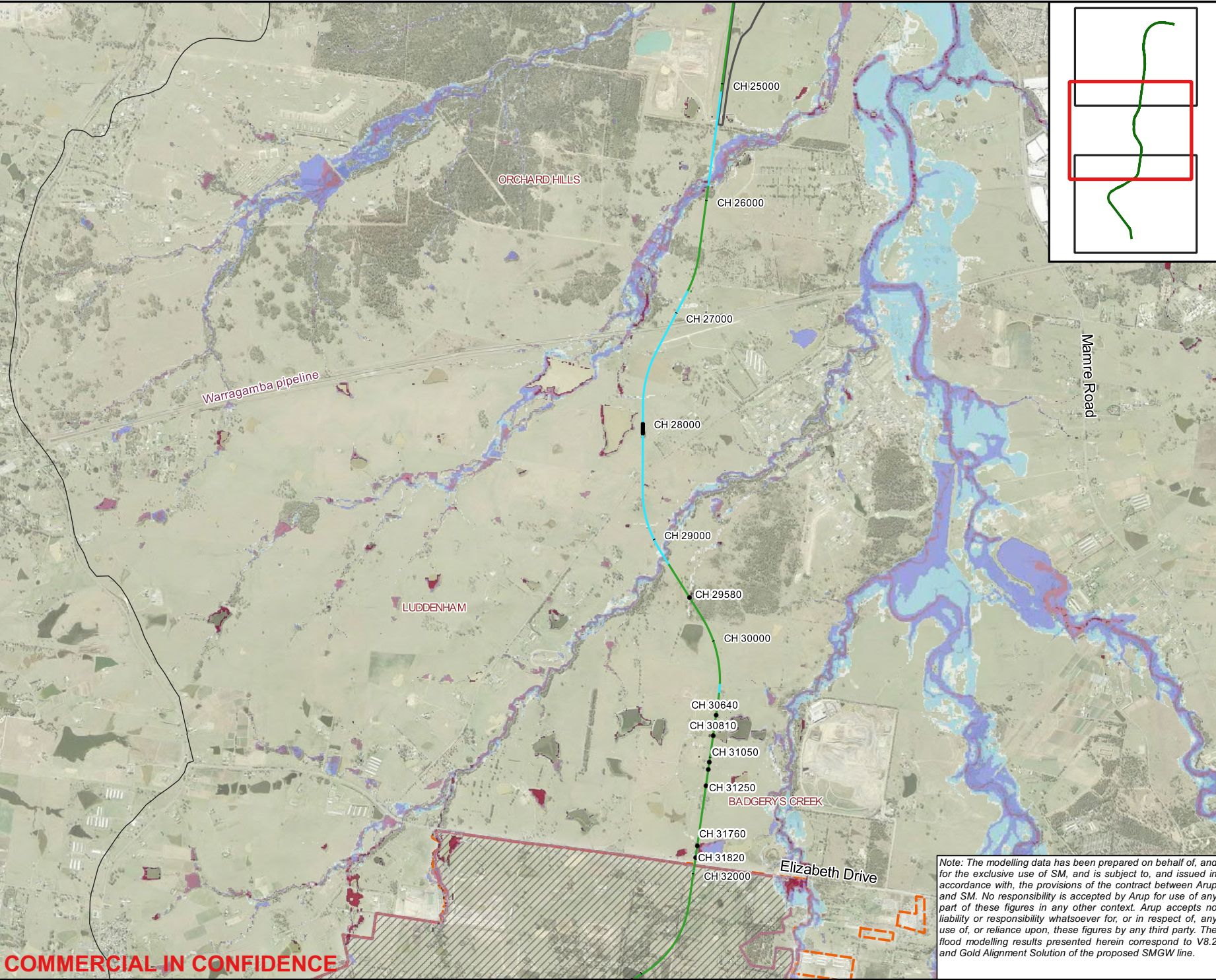
Figure No

D.14 (1 of 3)

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- Legend**
- Duration of inundation (hours)**
- 0 - 6
  - 6 - 12
  - 12 - 18
  - 18 - 24
  - 24 - 30
- Culverts
  - WSI Boundary
  - WSI Stage 1 Construction Boundary
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

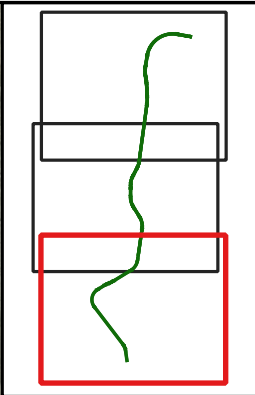
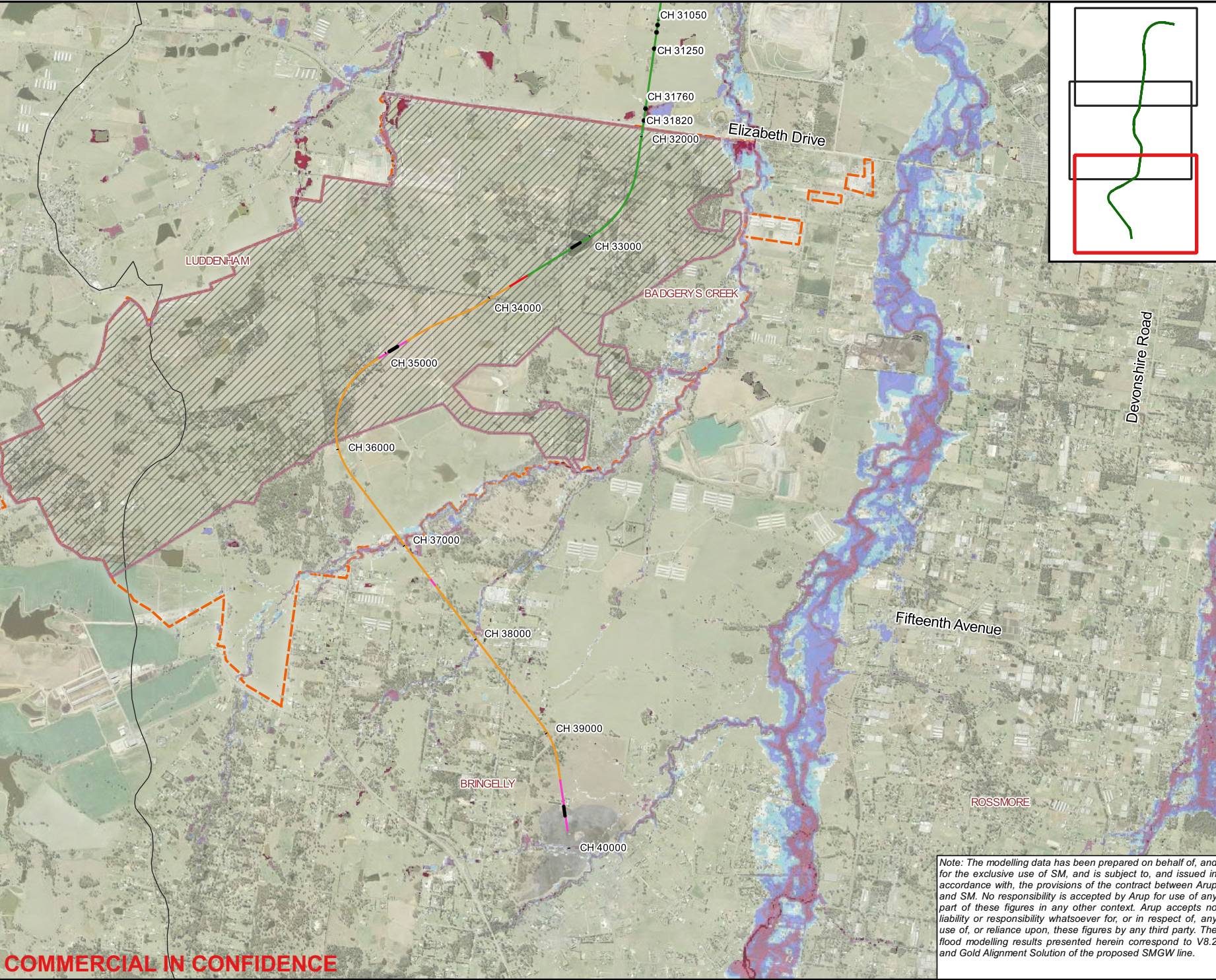
Job No  
**265549**

Figure No  
**D.14 (2 of 3)**

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**Legend**  
**Duration of inundation (hours)**  
0 - 6  
6 - 12  
12 - 18  
18 - 24  
24 - 30  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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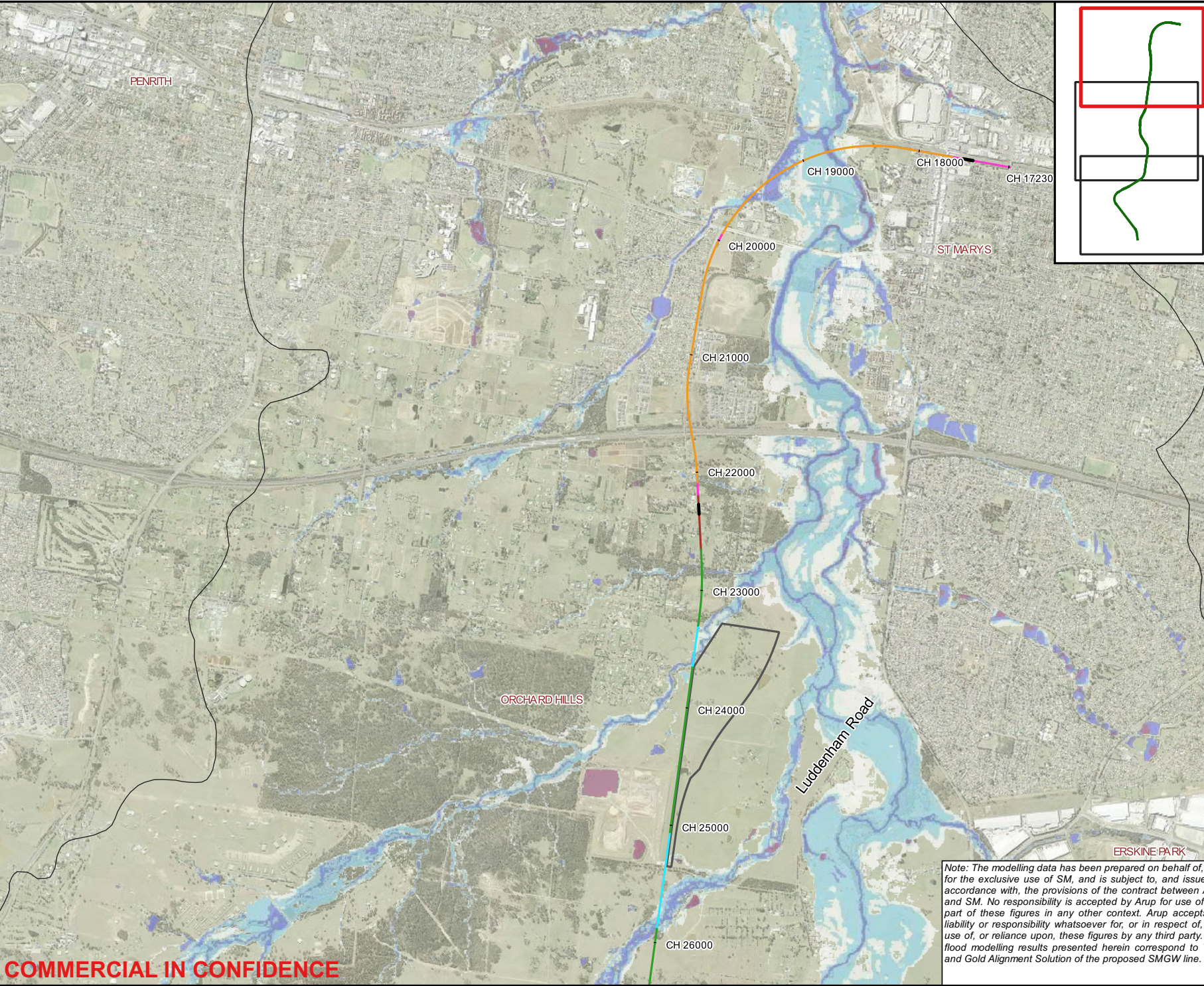
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**Sydney Metro**  
Job Title  
**SMGW TA Services**  
Figure Title  
**Design Case - 5% AEP Duration of inundation**  
Scale at A3  
**1:30000**  
Figure Status  
**Issued for information**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure No  
**D.14 (3 of 3)**

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**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Duration of inundation**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

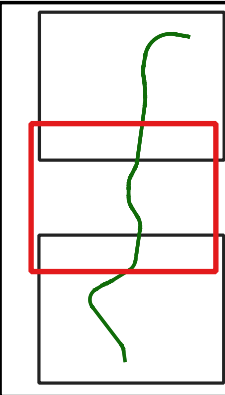
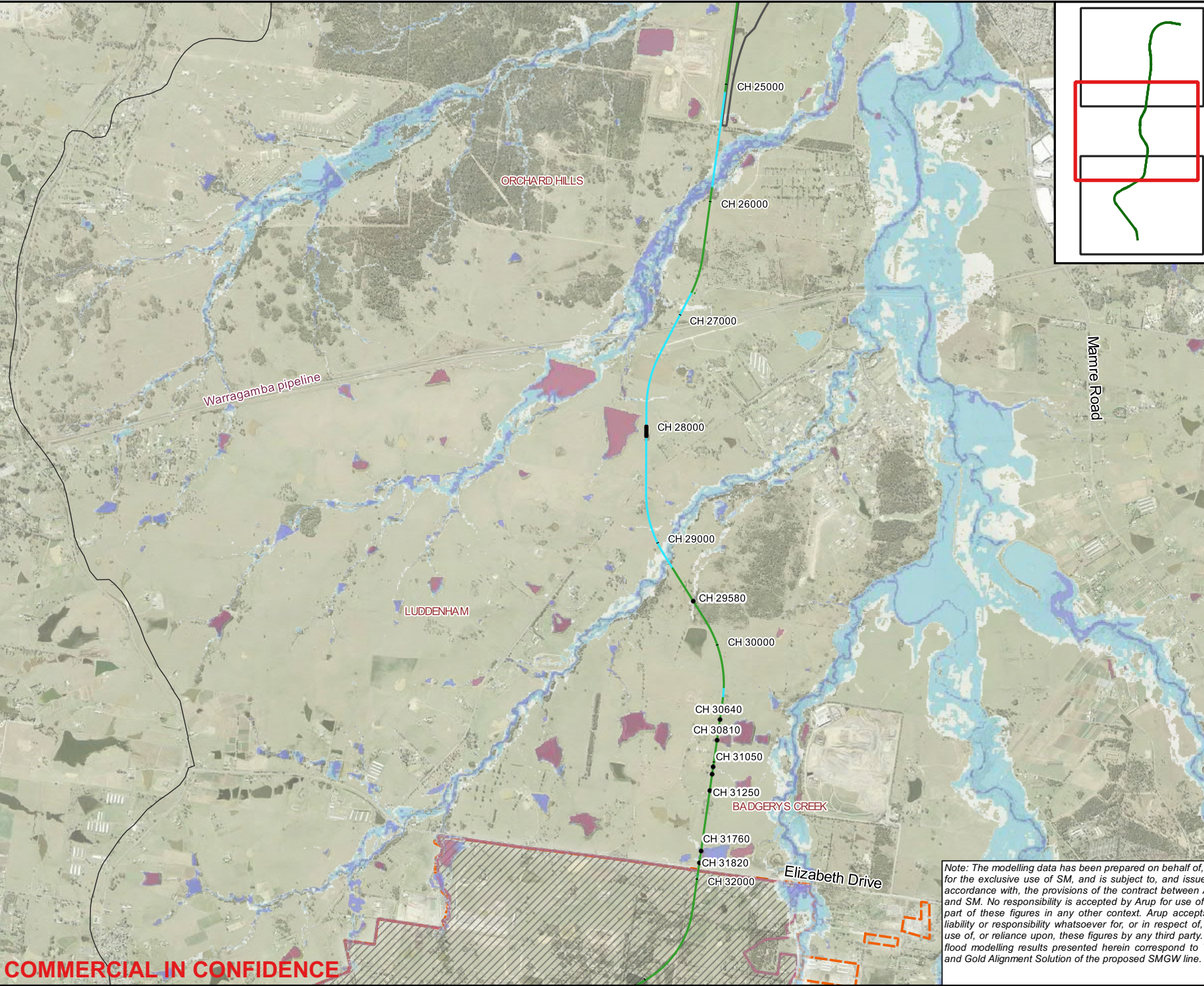
Figure No

**D.15 (1 of 3)**

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**COMMERCIAL IN CONFIDENCE**





**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP Duration of inundation**

Scale at A3  
**1:300000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

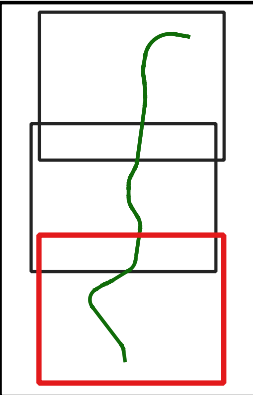
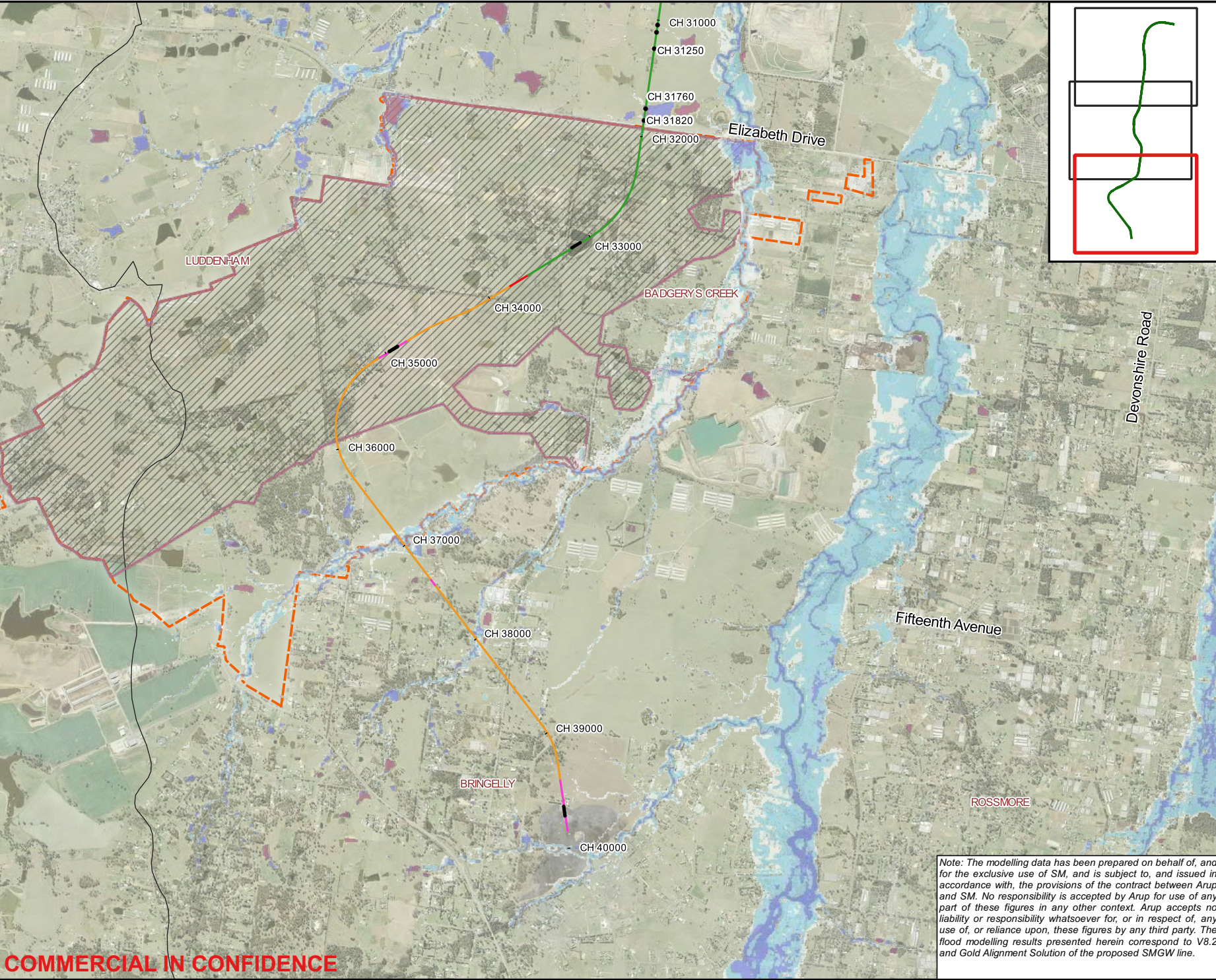
Job No  
**265549**

Figure No  
**D.15 (2 of 3)**

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**Legend**  
**Duration of inundation (hours)**  
0 - 6  
6 - 12  
12 - 18  
18 - 24  
24 - 30  
● Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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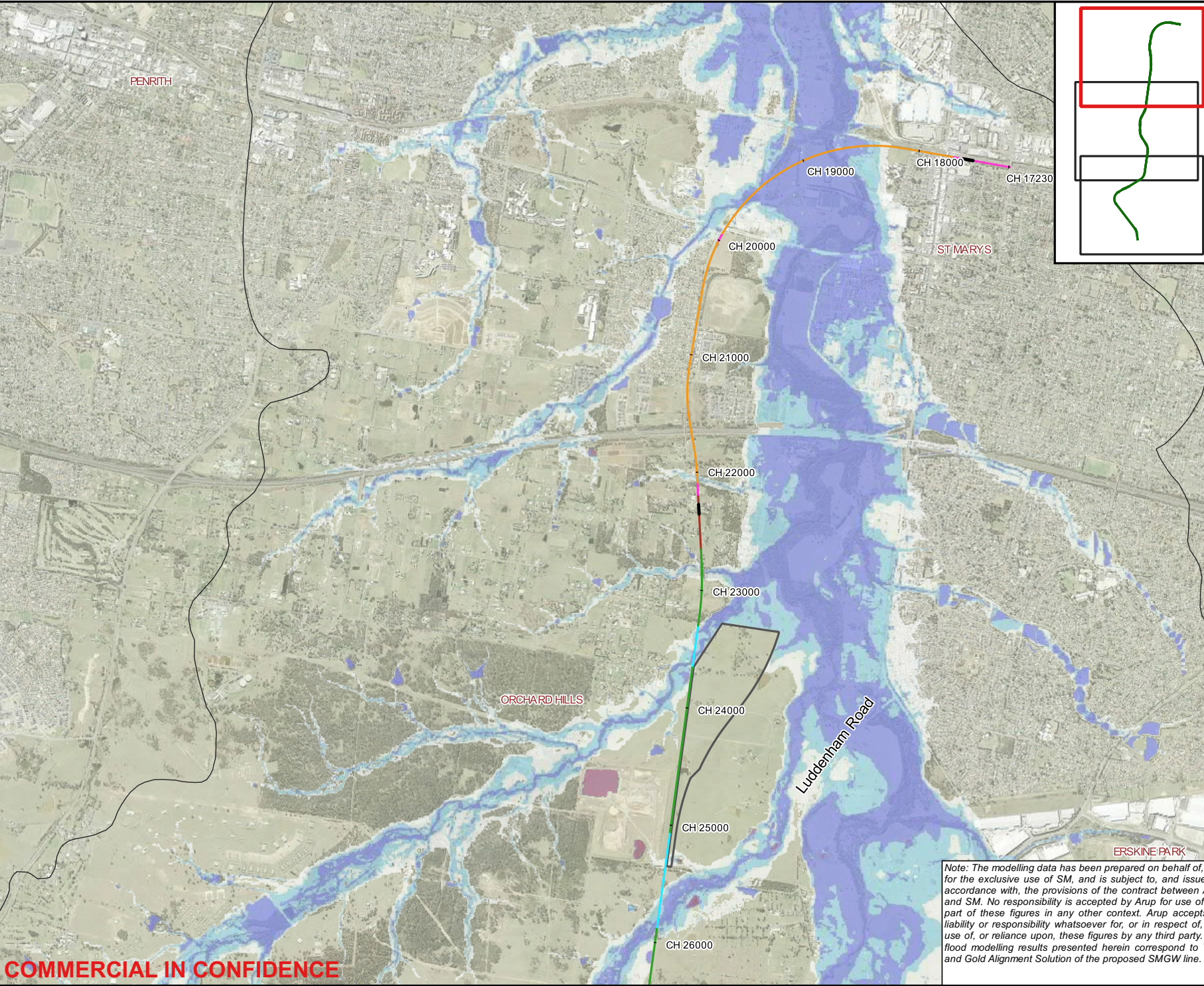
**Sydney Metro**  
**SMGW TA Services**

**Design Case - 1% AEP Duration of inundation**  
Scale at A3  
**1:30000**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure Status  
**Issued for information**  
Figure No  
**D.15 (3 of 3)**

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**Legend**

**Duration of inundation (hours)**

0 - 6

6 - 12

12 - 18

18 - 24

24 - 30

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Client  
**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - PMF Duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

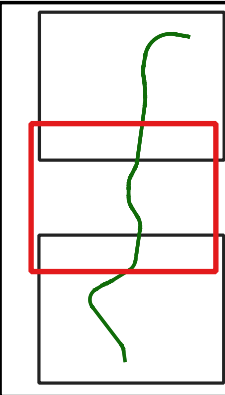
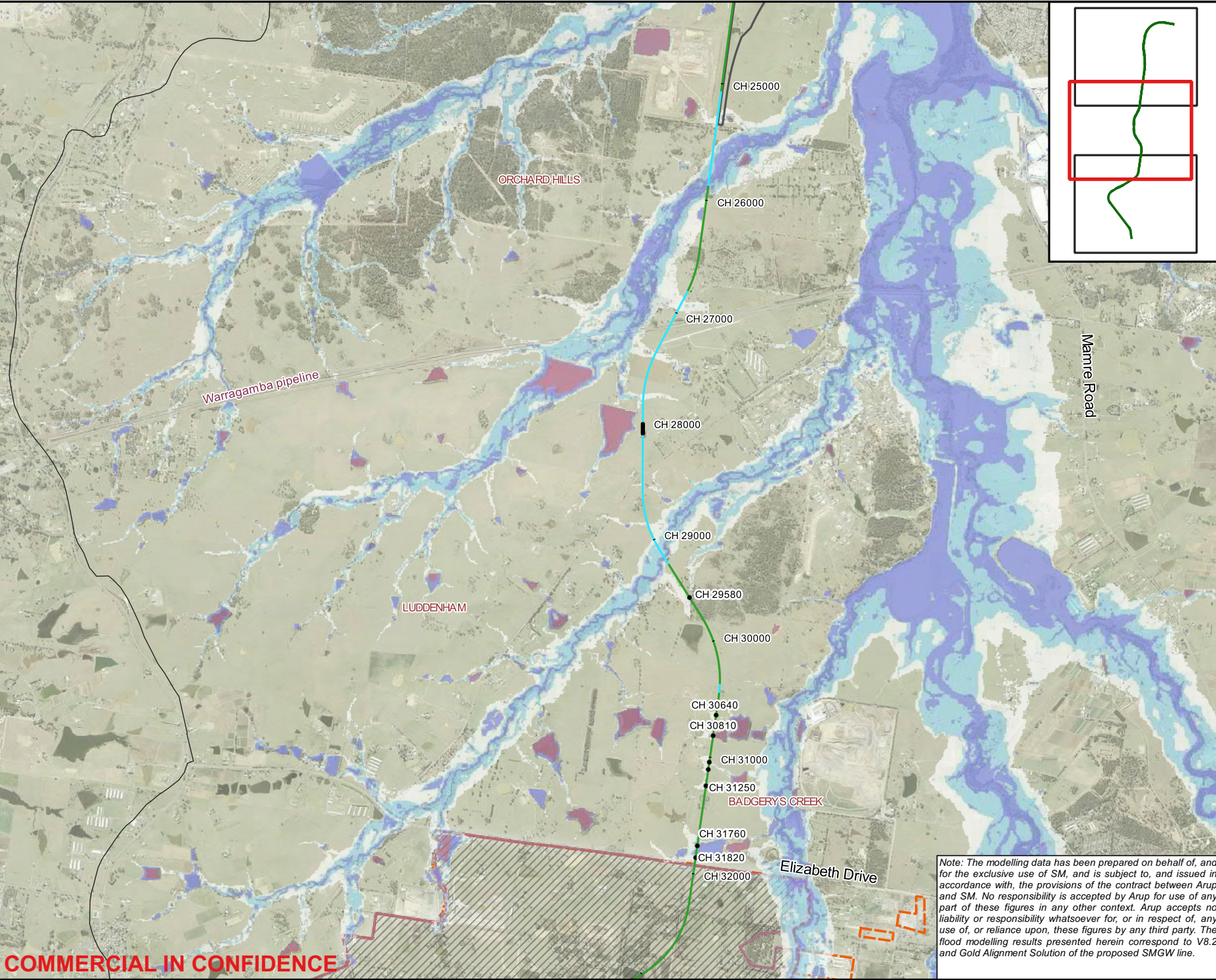
Job No  
**265549**

Figure No  
**D.16 (1 of 3)**

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**Legend**

**Duration of inundation (hours)**

- 0 - 6
- 6 - 12
- 12 - 18
- 18 - 24
- 24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Duration of inundation**

Scale at A3  
**1:30000**

Coordinate System  
**GDA 1994 MGA Zone 56**

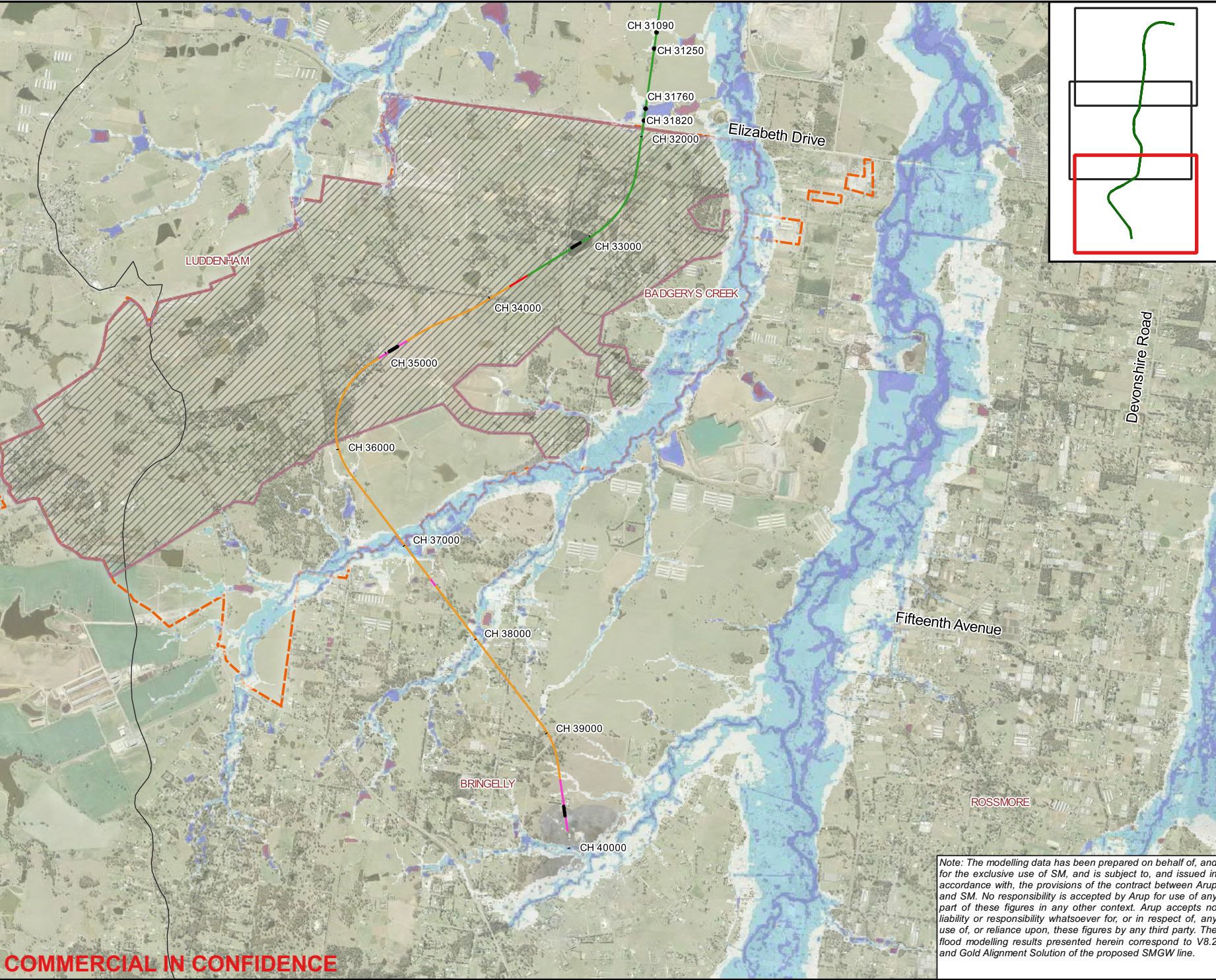
Job No  
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Figure No  
**D.16 (2 of 3)**

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### Legend

#### Duration of inundation (hours)

0 - 6
6 - 12
12 - 18
18 - 24
24 - 30

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

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Figure Title

Design Case - PMF Duration of inundation

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

D.16 (3 of 3)

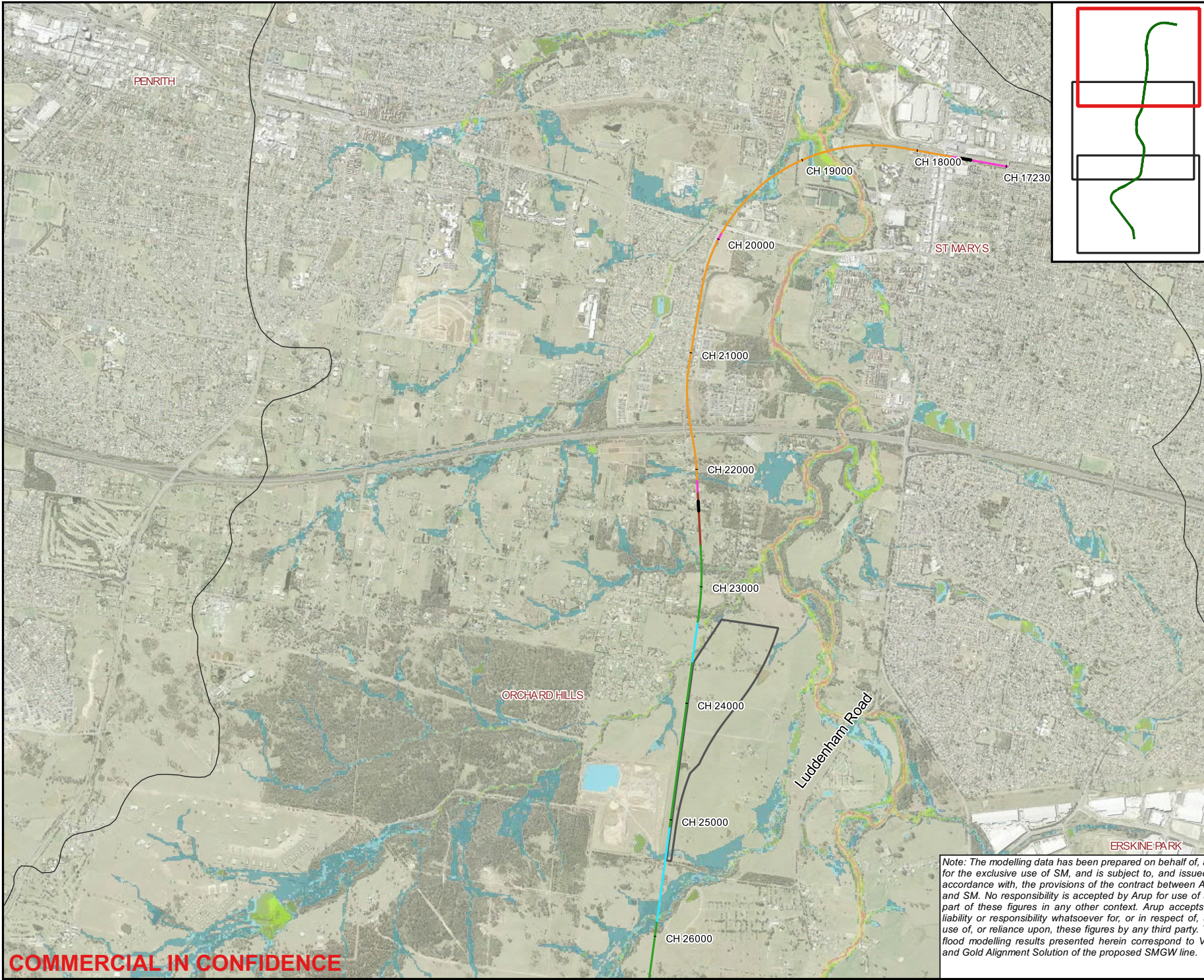
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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children and the elderly.

H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.5EY Provisional flood hazard**

Scale at A3

**1:30000**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

Figure No

**D.17 (1 of 3)**

North Arrow

North Arrow

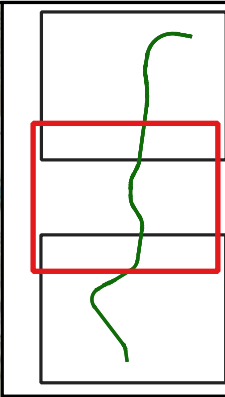
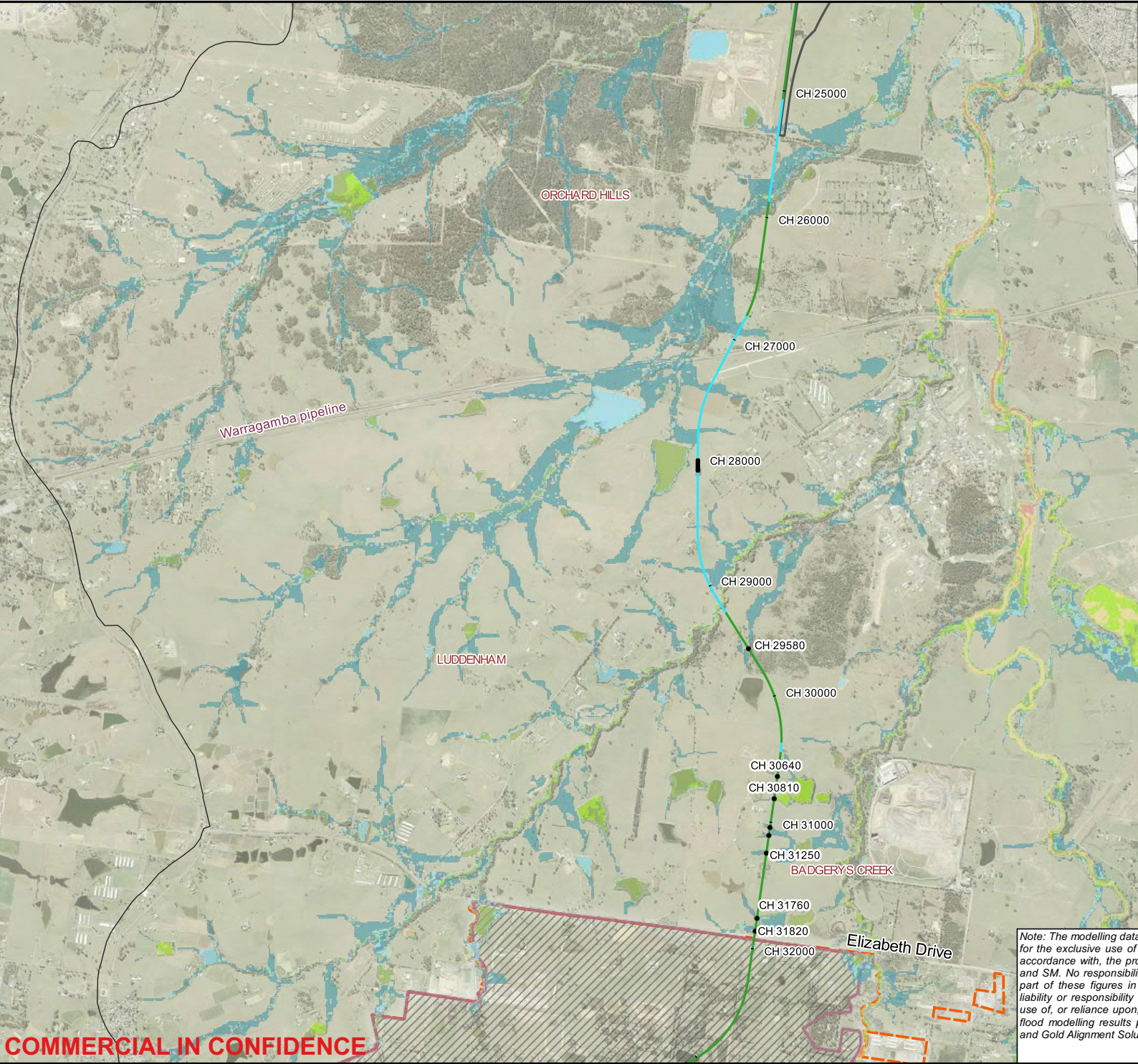
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### Legend

**Flood hazard**

- H1 - Generally safe for people, vehicles and buildings.
- H2 - Unsafe for small vehicles.
- H3 - Unsafe for vehicles, children and the elderly.
- H4 - Unsafe for people and vehicles.
- H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.
- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Figure Title

**Design Case - 0.5EY Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

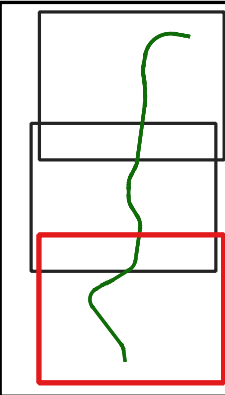
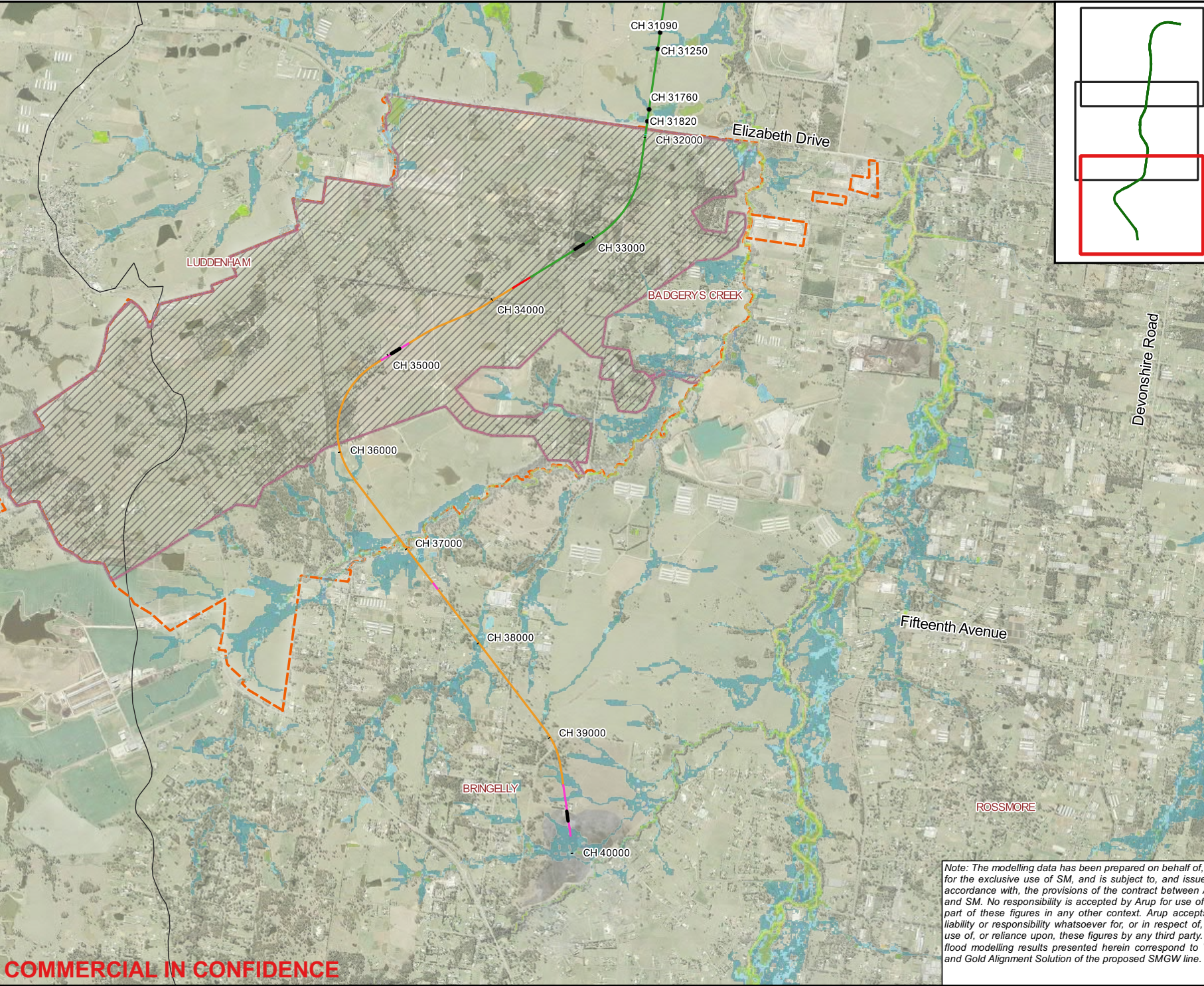
Job No  
**265549**

Figure No  
**D.17 (2 of 3)**

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**Legend**

**Flood hazard**

- H1 - Generally safe for people, vehicles and buildings.
- H2 - Unsafe for small vehicles.
- H3 - Unsafe for vehicles, children and the elderly.
- H4 - Unsafe for people and vehicles.
- H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.
- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

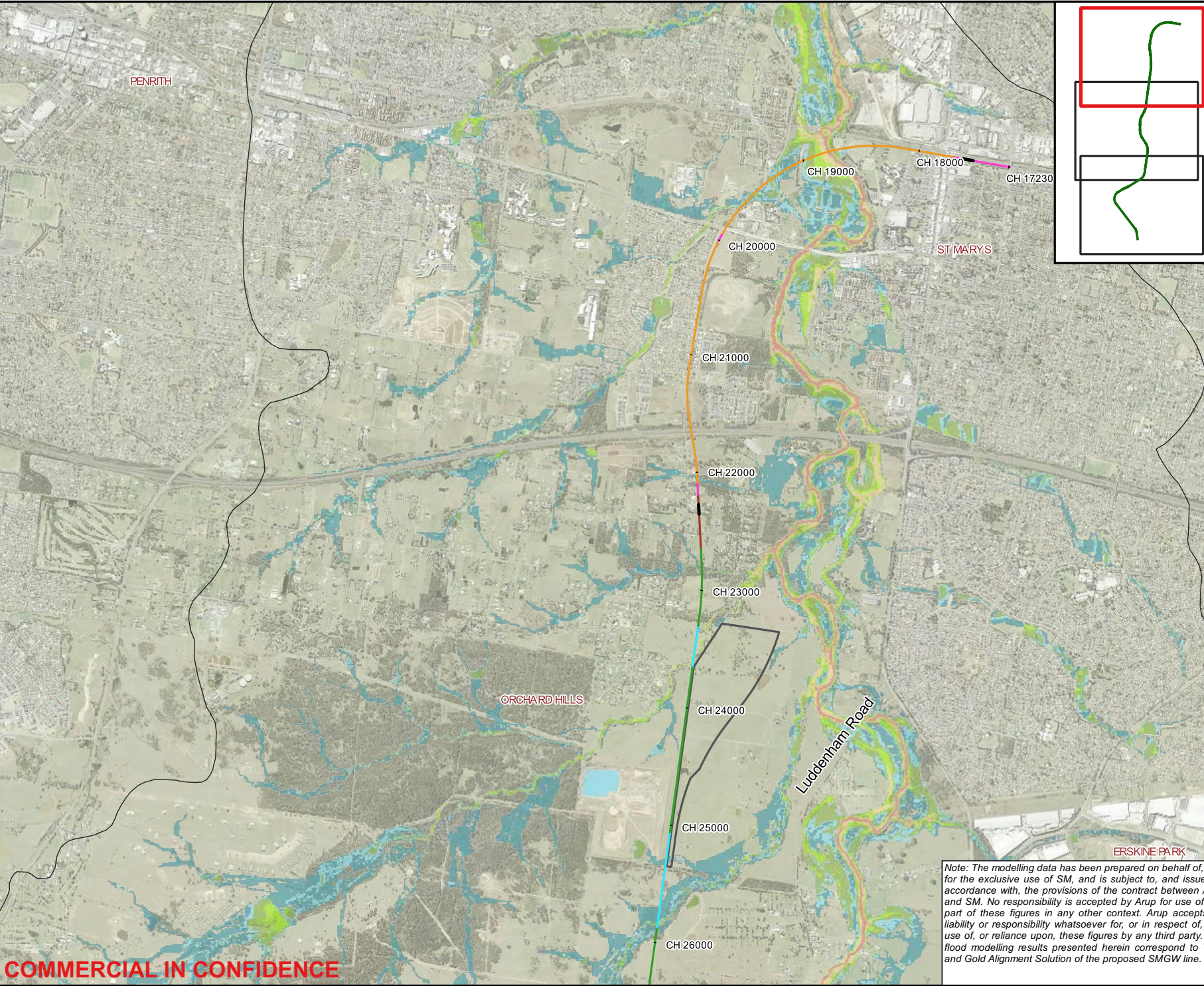
Job No  
**265549**

Figure No  
**D.17 (3 of 3)**

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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children and the elderly.

H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

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Figure Title

**Design Case - 0.2EY Provisional flood hazard**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

Figure No

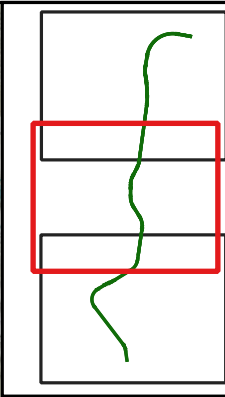
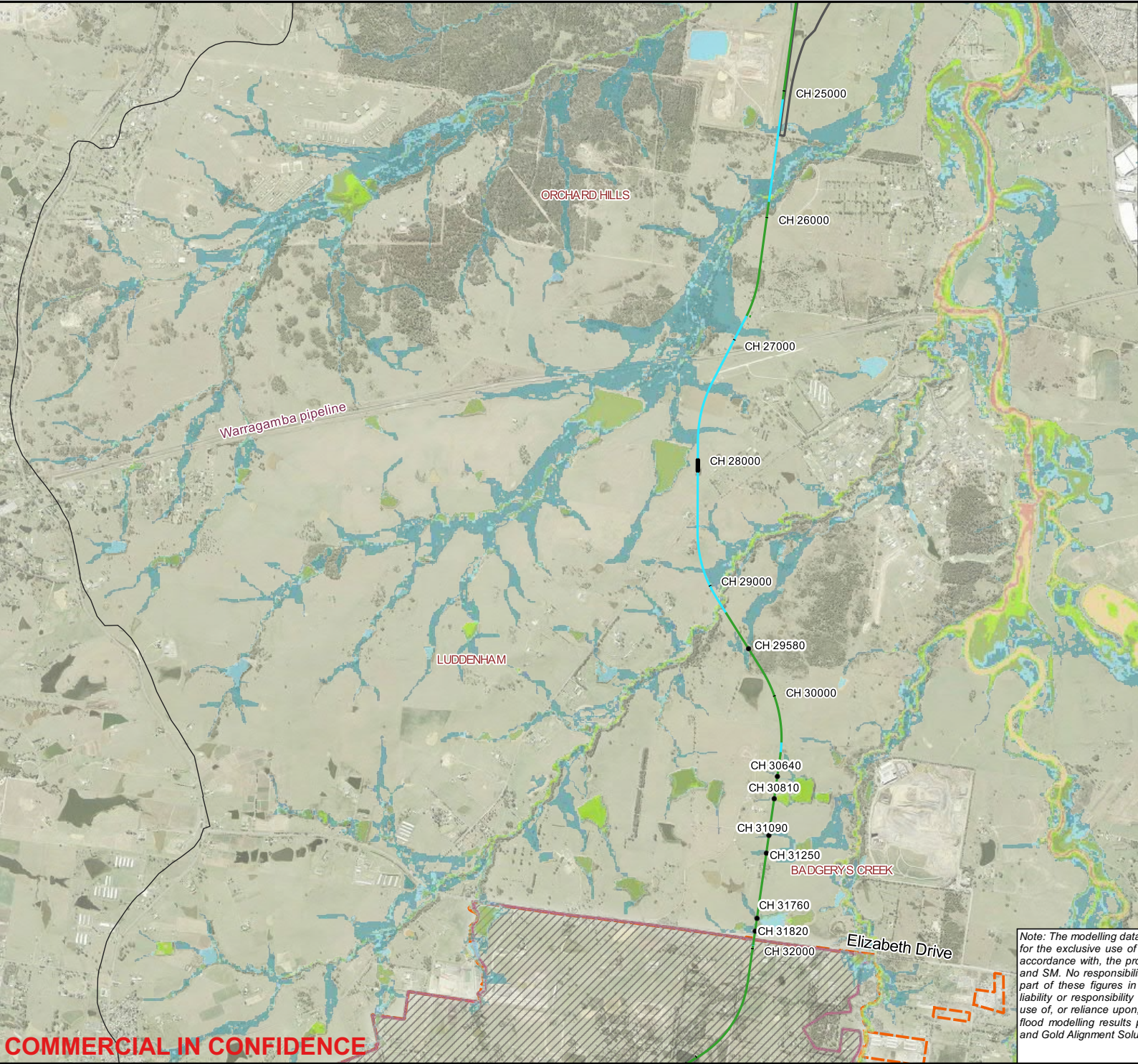
**D.18 (1 of 3)**

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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children and the elderly.

H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Provisional flood hazard**

Scale at A3

**1:300000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

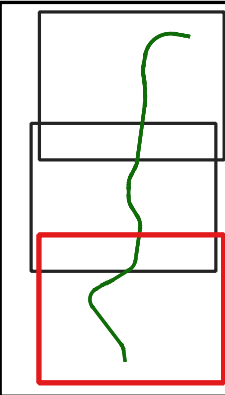
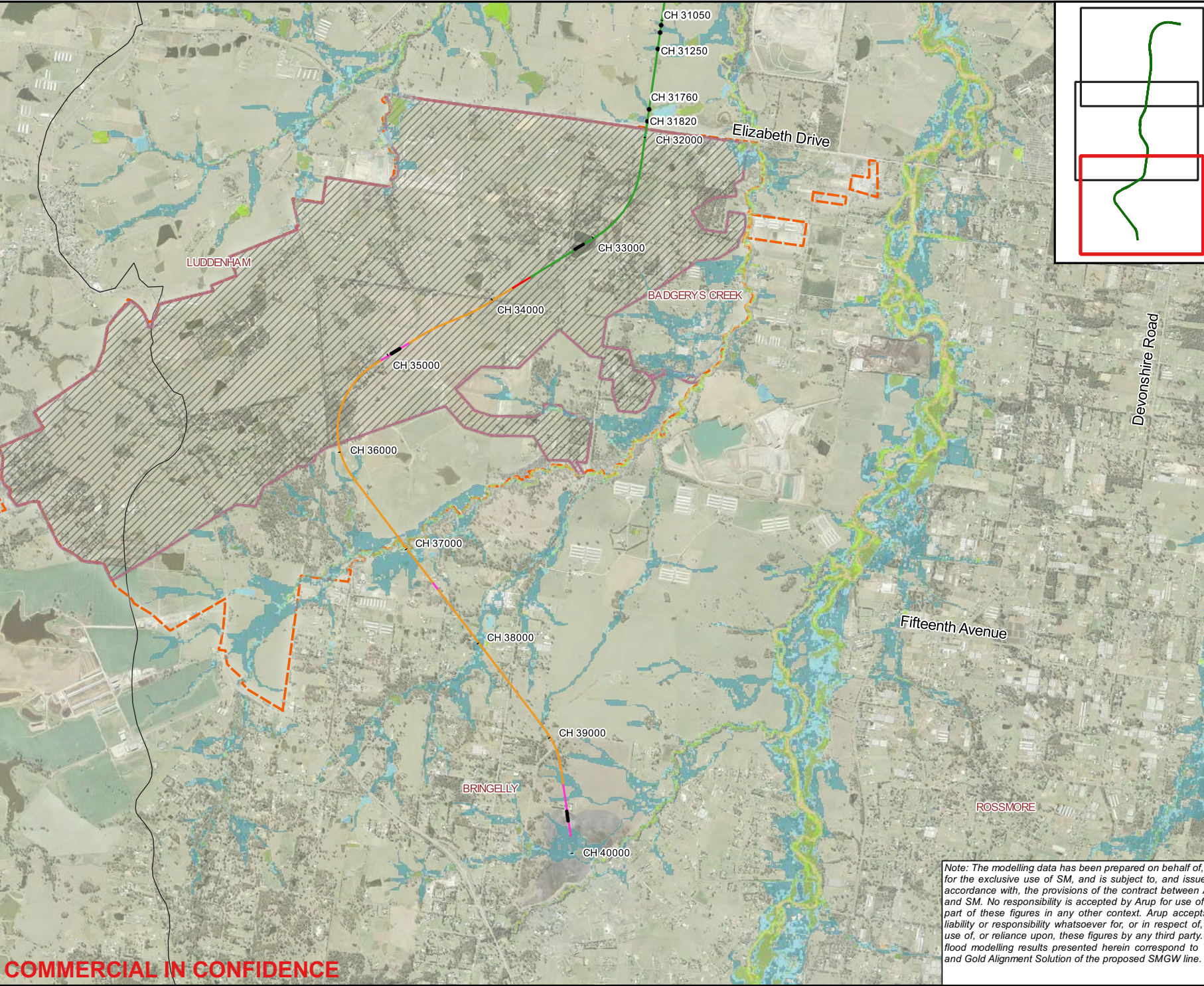
**265549**

Figure No

**D.18 (2 of 3)**

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**Legend**

**Flood hazard**

- H1 - Generally safe for people, vehicles and buildings.
- H2 - Unsafe for small vehicles.
- H3 - Unsafe for vehicles, children and the elderly.
- H4 - Unsafe for people and vehicles.
- H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.
- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

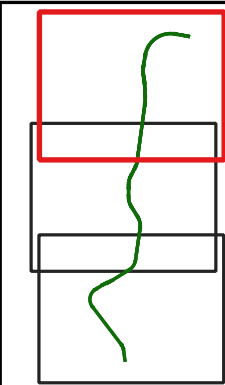
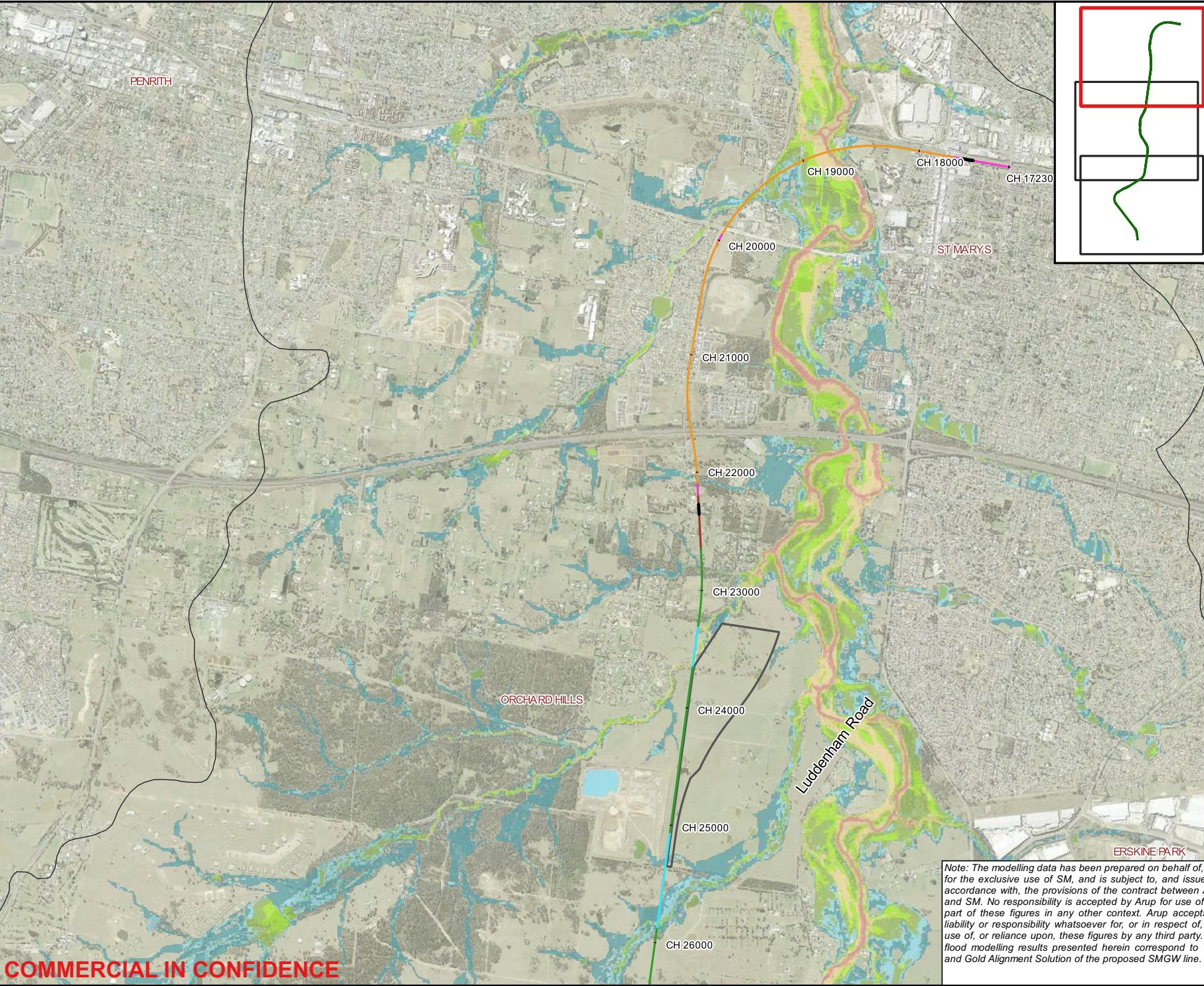
Job No  
**265549**

Figure No  
**D.18 (3 of 3)**

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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children and the elderly.

H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

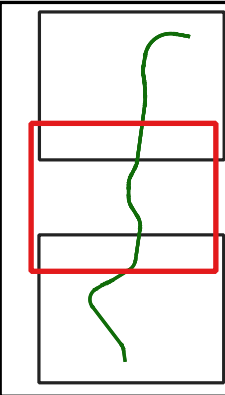
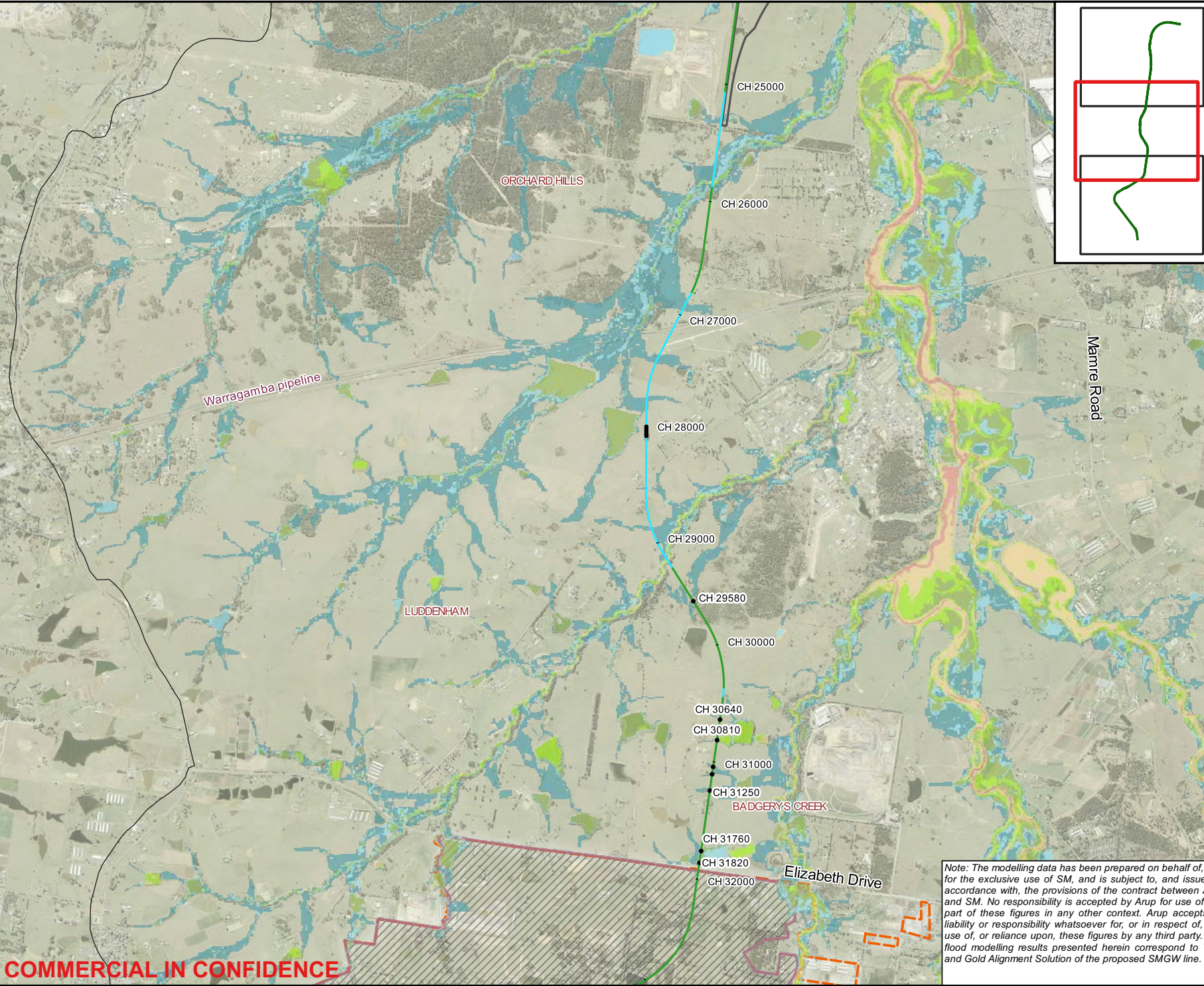
Job No  
**265549**

Figure No  
**D.19 (1 of 3)**

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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

H2 - Unsafe for small vehicles.

H3 - Unsafe for vehicles, children and the elderly.

H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

Job No  
**265549**

Figure No  
**D.19 (2 of 3)**

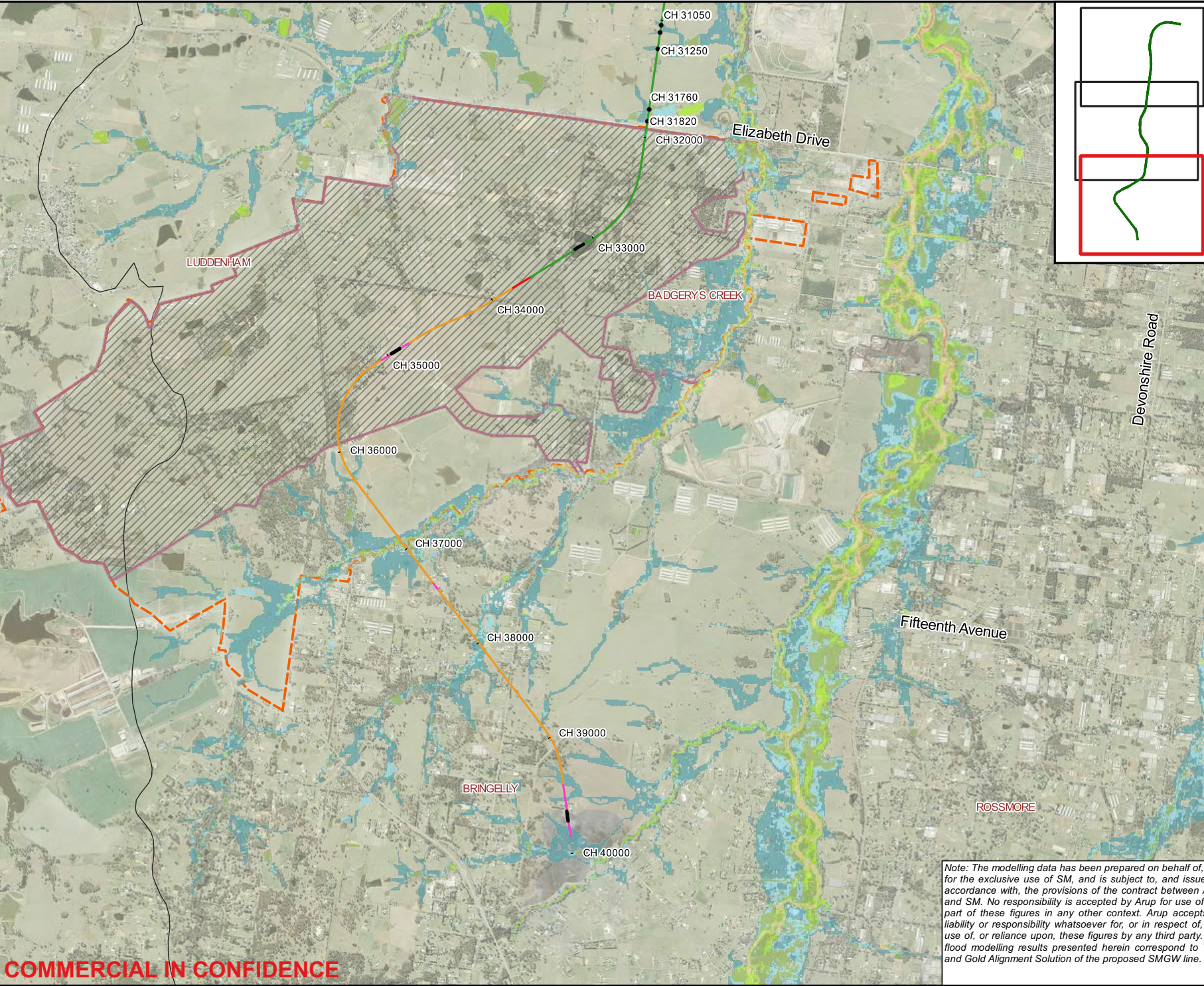
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### Legend

#### Flood hazard

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- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

SMGW TA Services

Figure Title

Design Case - 5% AEP Provisional flood hazard

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

D.19 (3 of 3)

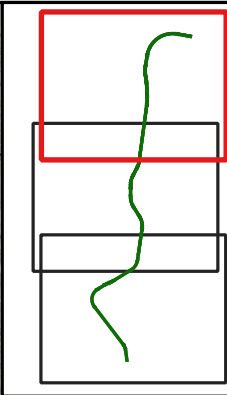
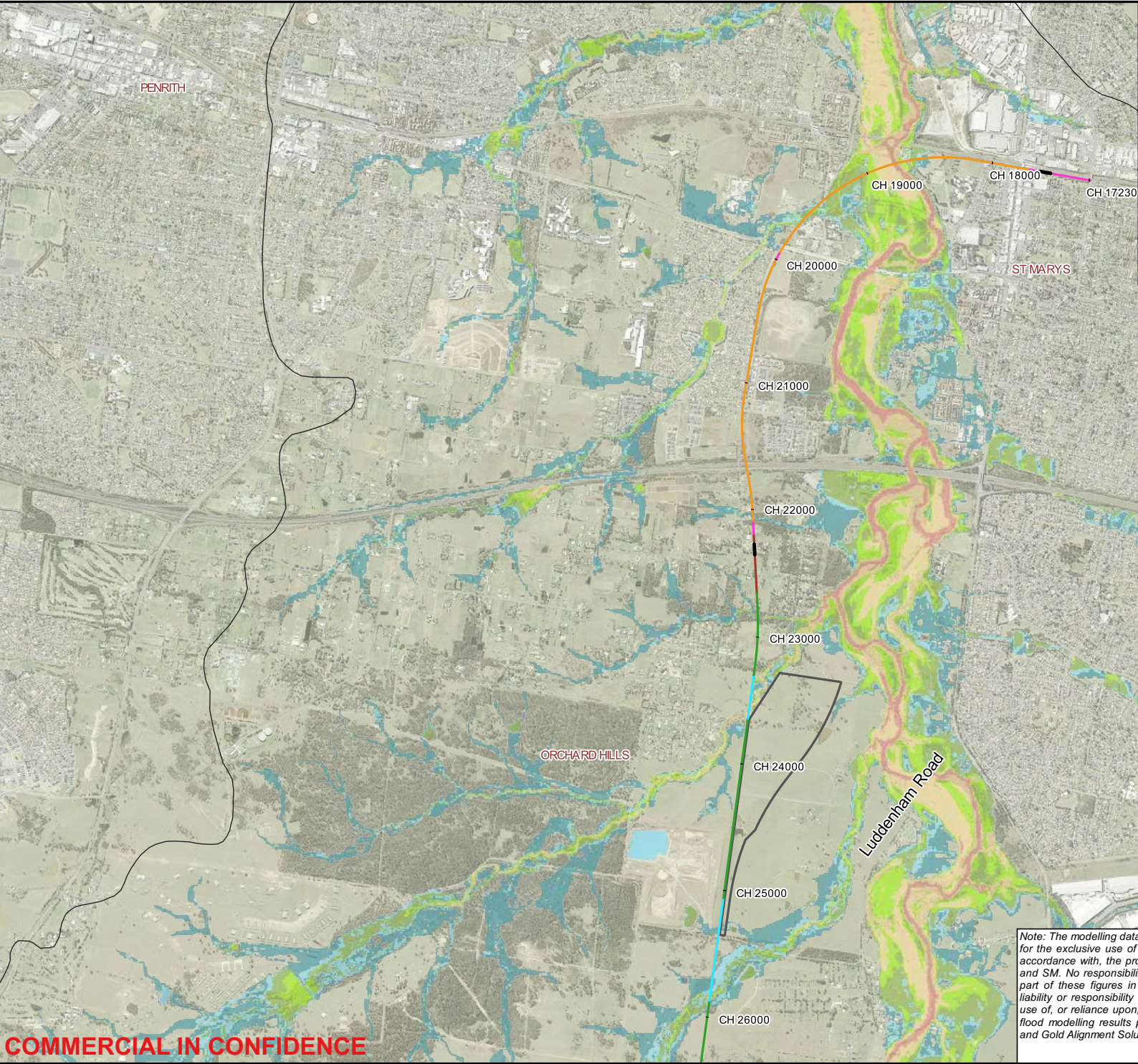
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**Legend**

**Flood hazard**

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- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

**Culverts**

- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

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CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

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Figure Title  
**Design Case - 1% AEP Provisional flood hazard**

Scale at A3 <b>1:30000</b>	Figure Status <b>Issued for information</b>
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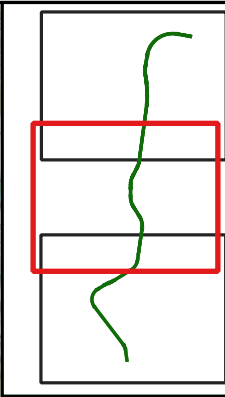
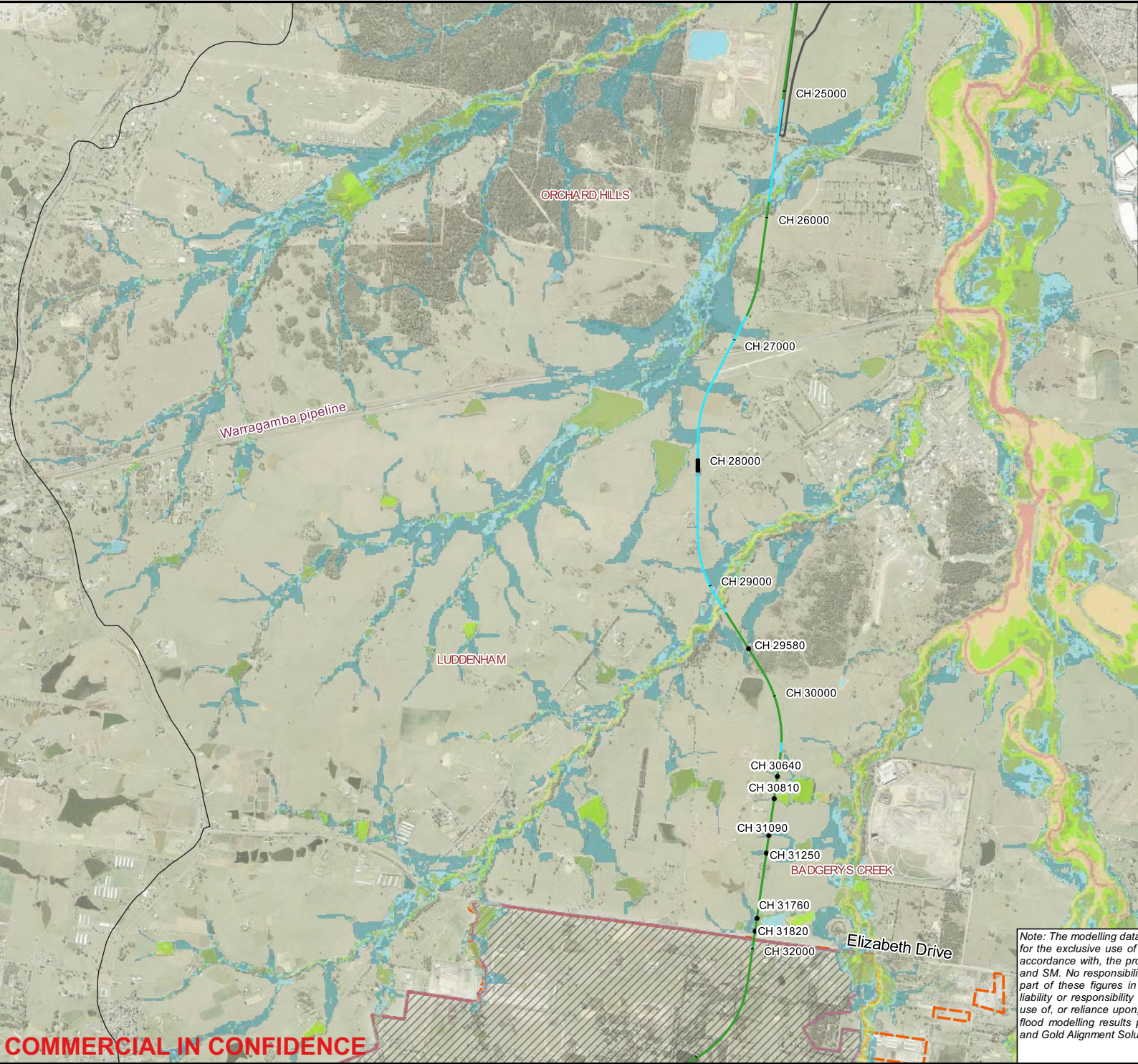
Coordinate System  
**GDA 1994 MGA Zone 56**

Job No <b>265549</b>	Figure No <b>D.20 (1 of 3)</b>
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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

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H4 - Unsafe for people and vehicles.

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H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP Provisional flood hazard**

Scale at A3  
**1:300000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

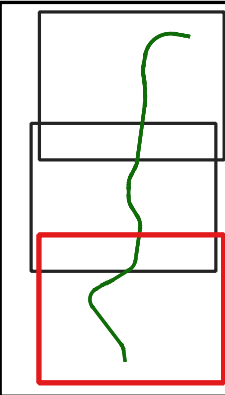
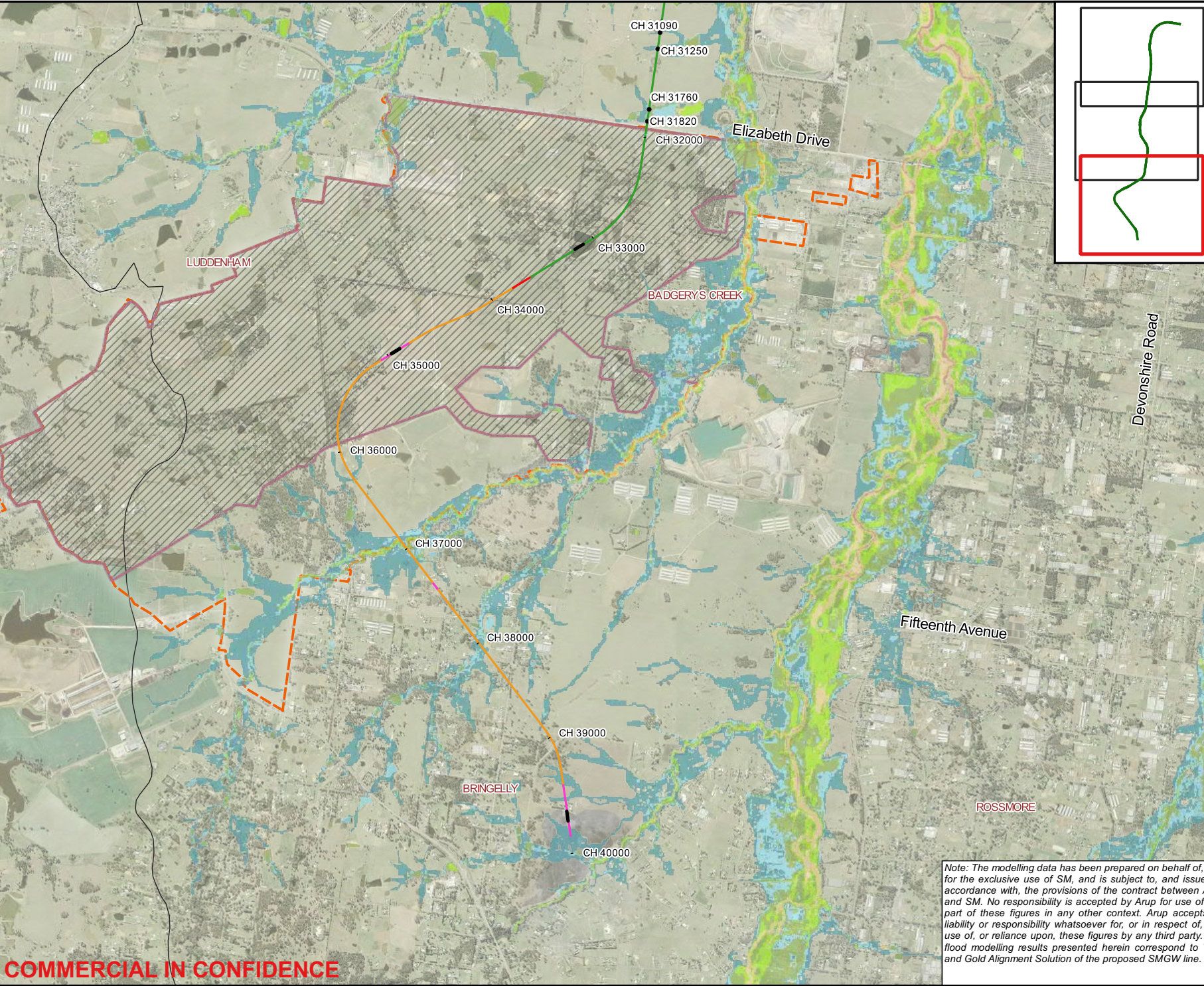
Job No  
**265549**

Figure No  
**D.20 (2 of 3)**

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**Legend**

**Flood hazard**

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- H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.
- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
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Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

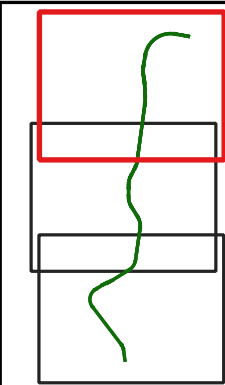
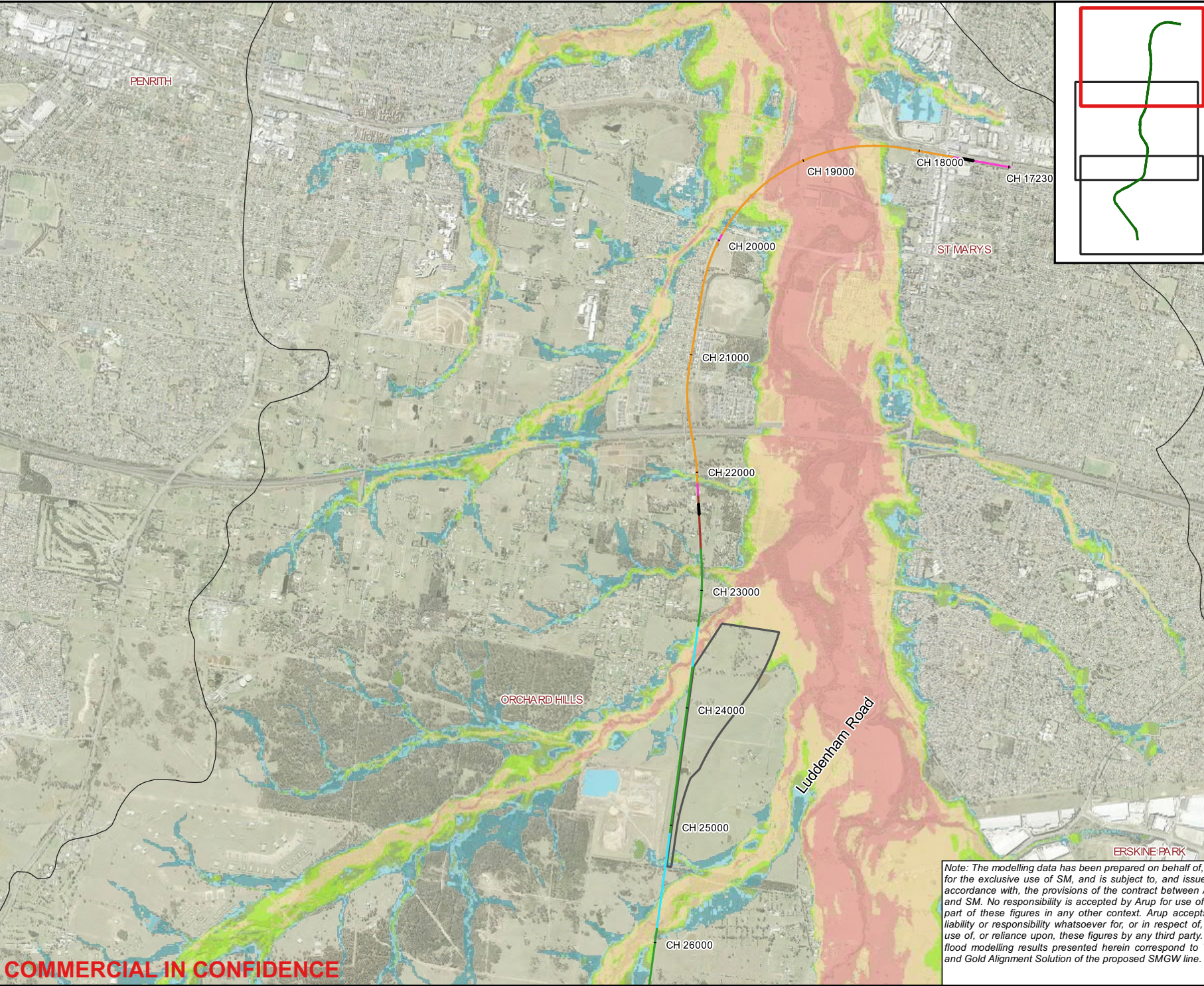
Job No  
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Figure No  
**D.20 (3 of 3)**

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**Legend**

**Flood hazard**

H1 - Generally safe for people, vehicles and buildings.

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H4 - Unsafe for people and vehicles.

H5 - Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.

H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - PMF Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

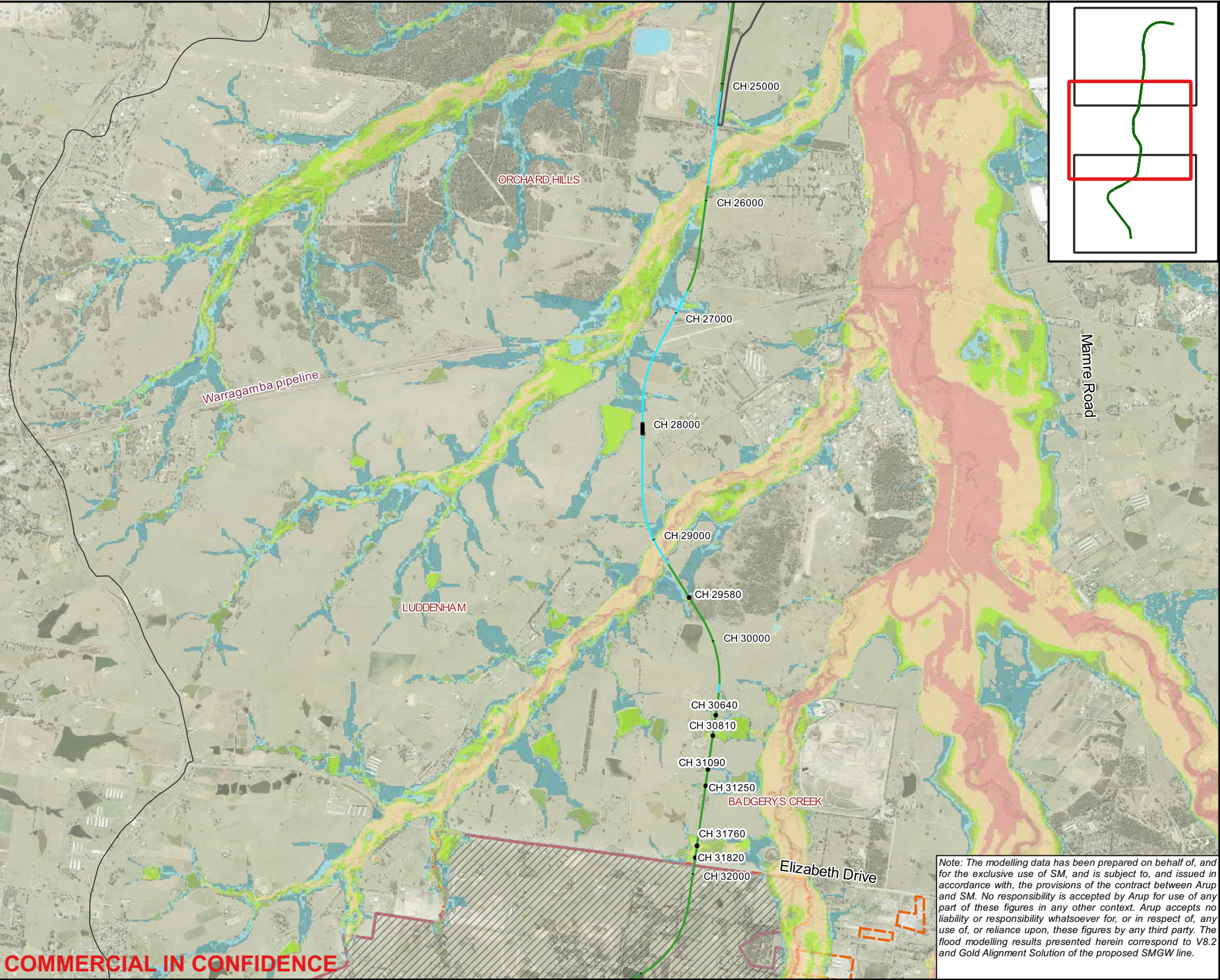
Job No  
**265549**

Figure No  
**D.21 (1 of 3)**

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### Legend

**Flood hazard**

- H1 - Generally safe for people, vehicles and buildings.
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- H4 - Unsafe for people and vehicles.
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- H6 - Unsafe for vehicles and people. All building types considered vulnerable to failure.

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
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- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
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- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - PMF Provisional flood hazard**

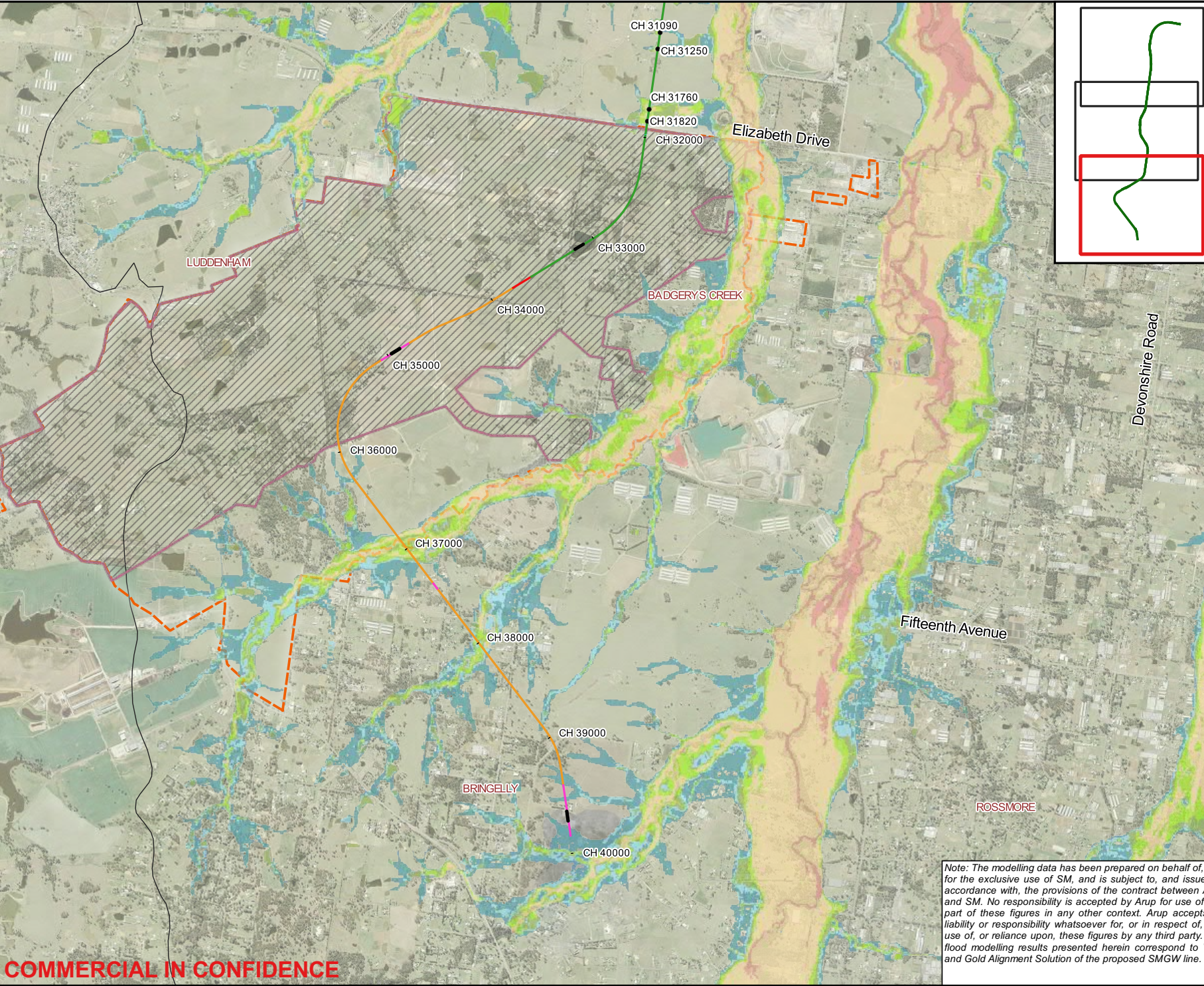
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Coordinate System	Figure No
<b>GDA 1994 MGA Zone 56</b>	<b>D.21 (2 of 3)</b>

Job No  
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**Legend**

**Flood hazard**

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Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

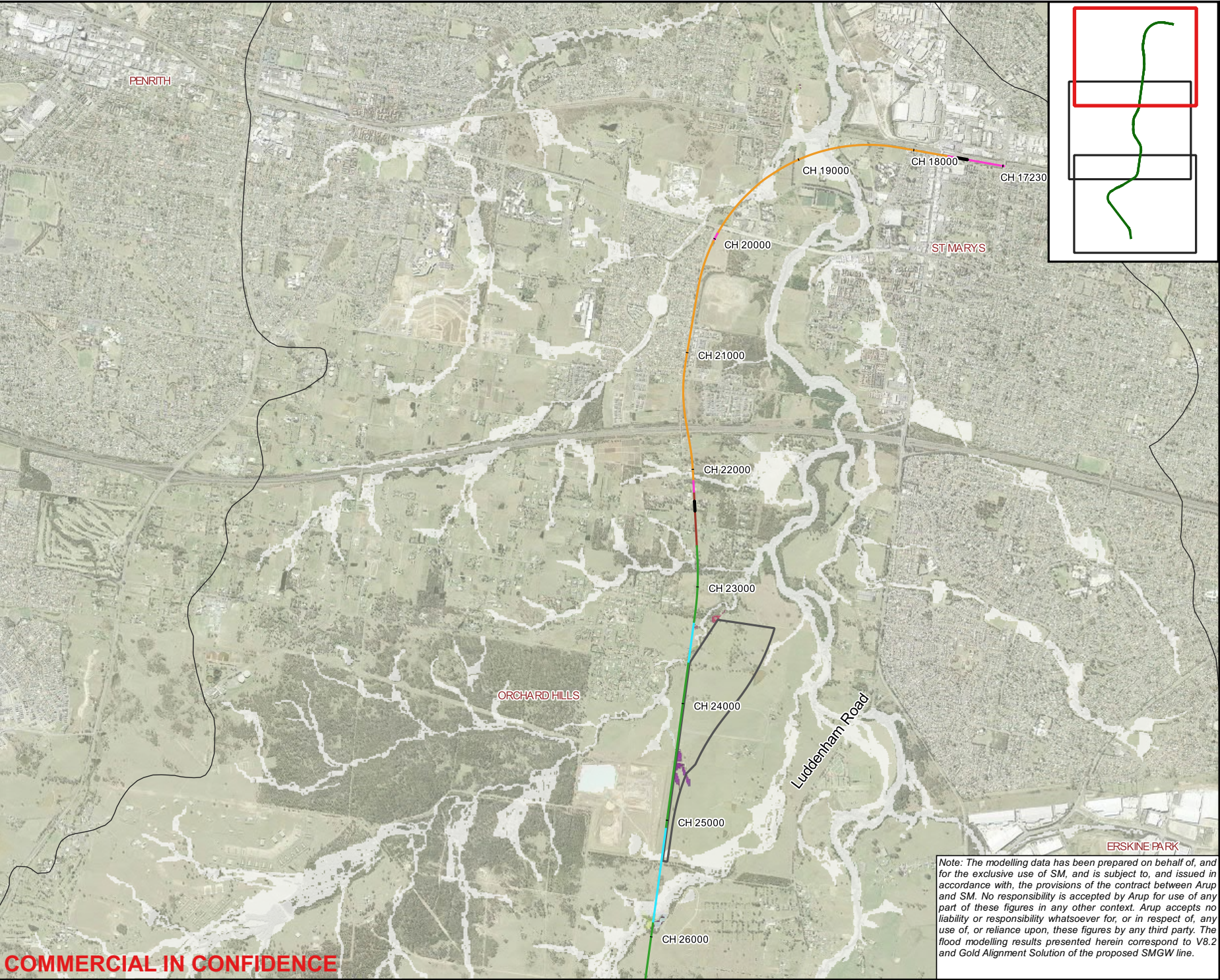
Job No  
**265549**

Figure No  
**D.21 (3 of 3)**

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### Legend

Peak flood level impact (m)

- <= -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly flooded
- No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
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CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

SMGW TA Services

Figure Title

Design Case - 0.5EY Afflux

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

D.22 (1 of 3)

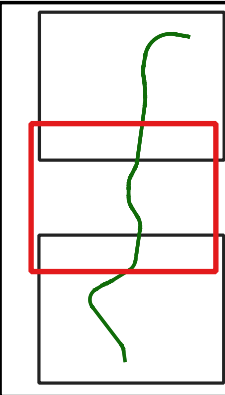
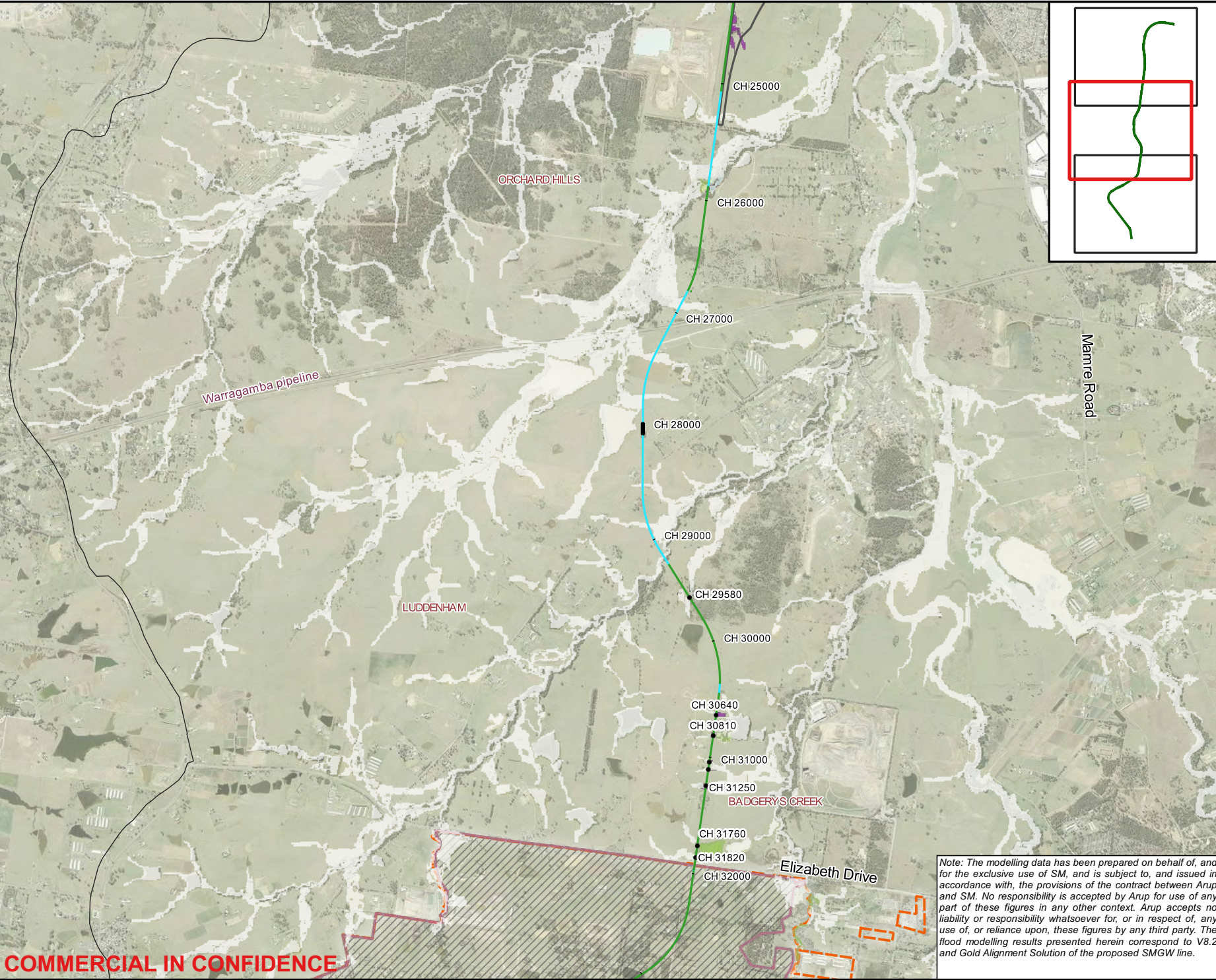
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**Legend**

**Peak flood level impact (m)**

- <= -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly flooded
- No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title:  
**SMGW TA Services**

Figure Title:  
**Design Case - 0.5EY Afflux**

Scale at A3:  
**1:30000**

Figure Status:  
**Issued for information**

Coordinate System:  
**GDA 1994 MGA Zone 56**

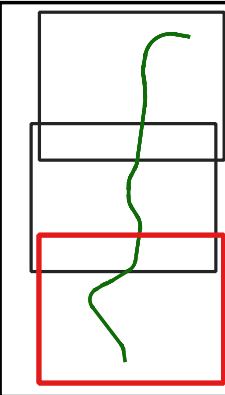
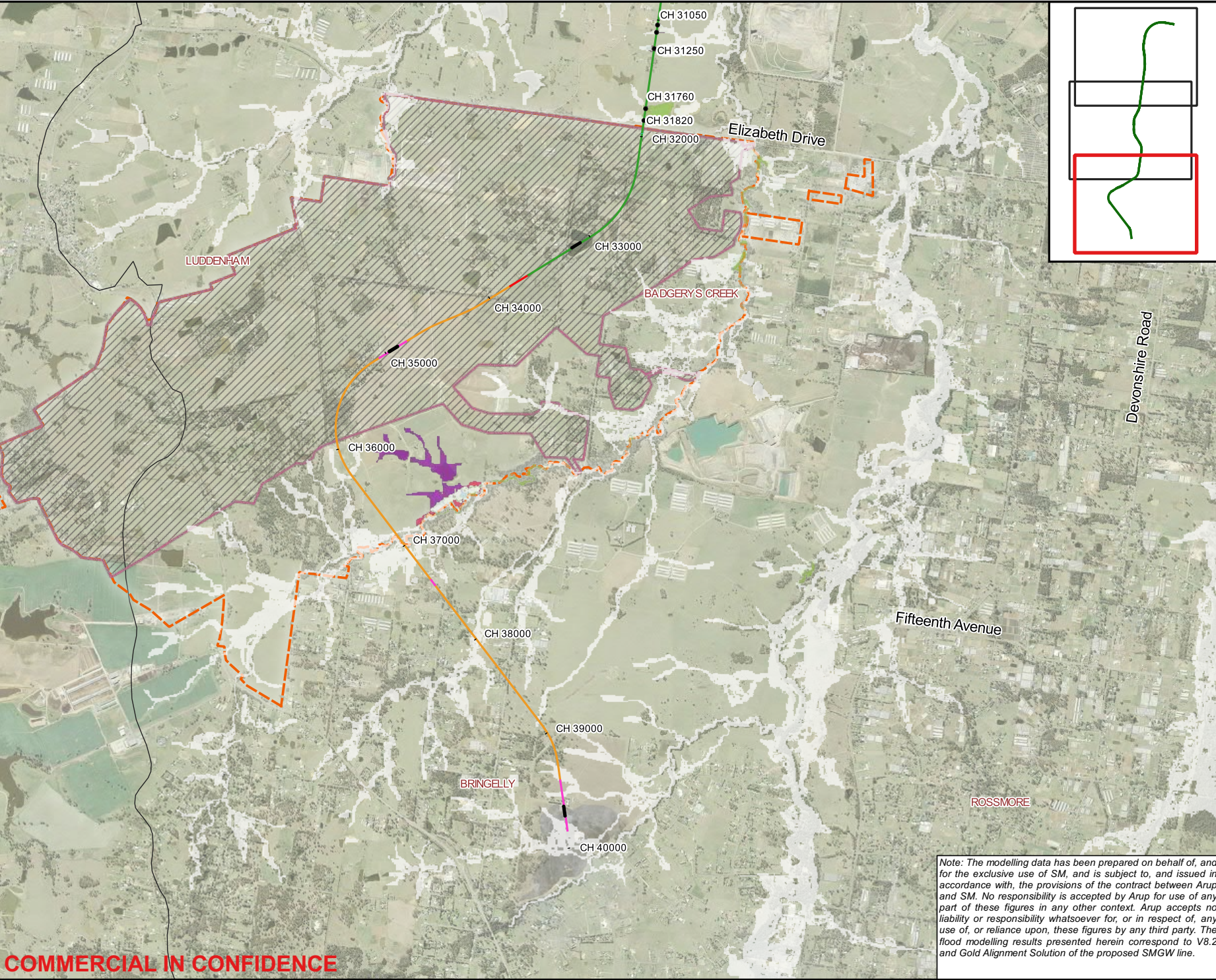
Job No:  
**265549**

Figure No:  
**D.22 (2 of 3)**

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**Legend**  
**Peak flood level impact (m)**  

≤ -0.01
-0.01 - 0.01
0.01 - 0.05
0.05 - 0.2
> 0.2
Newly flooded
No longer flooded

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CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Client

Sydney Metro

Job Title

SMGW TA Services

Figure Title

Design Case - 0.5EY Afflux

Scale at A3  
1:30000

Figure Status  
Issued for information

Coordinate System  
GDA 1994 MGA Zone 56

Job No  
265549

Figure No  
D.22 (3 of 3)

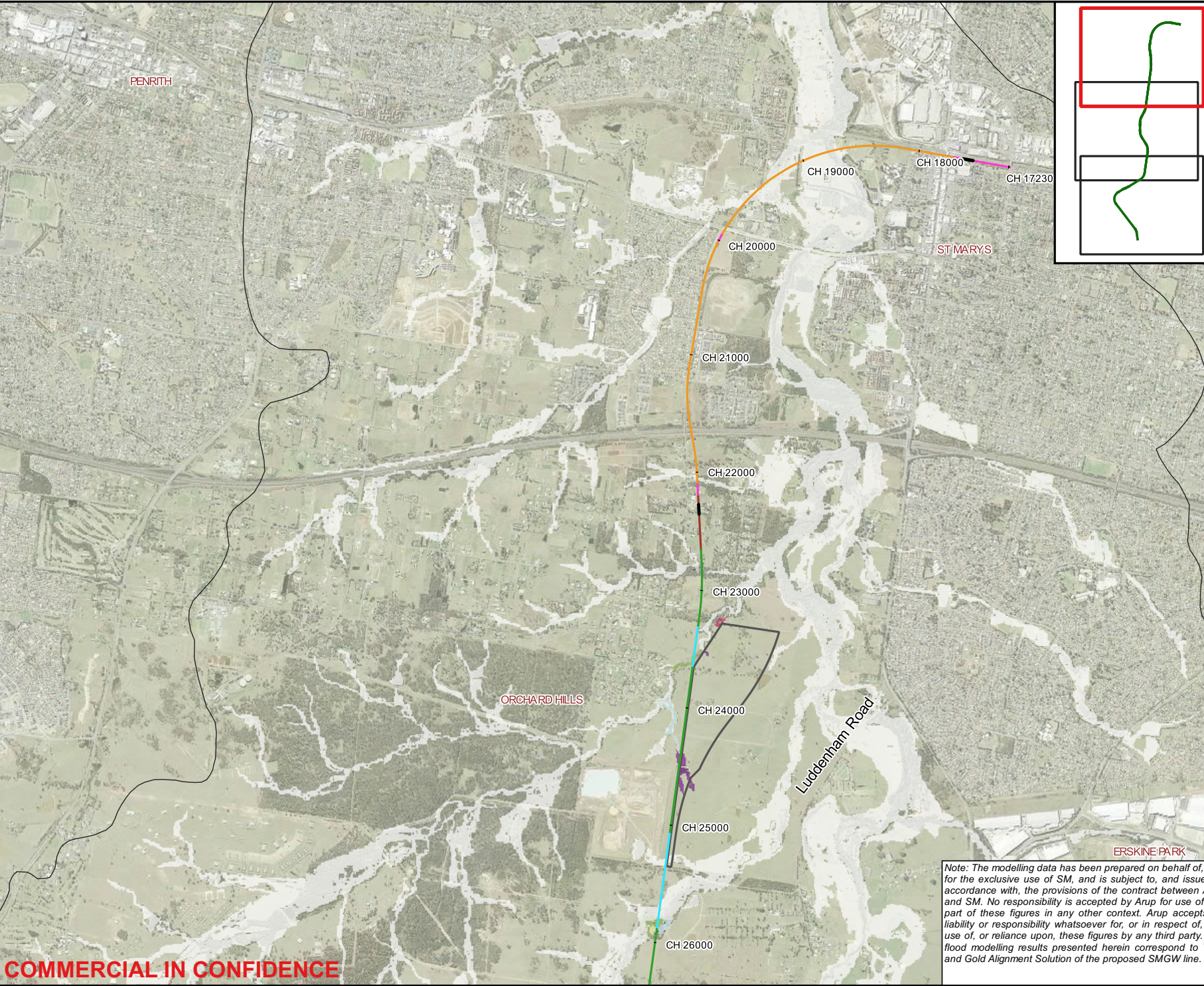
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**Legend**

Peak flood level impact (m)

- <= -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
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- Trough or Cutting
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CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Figure Title  
**Design Case - 0.2EY Afflux**

Scale at A3  
**1:30000**

Figure Status  
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Coordinate System  
**GDA 1994 MGA Zone 56**

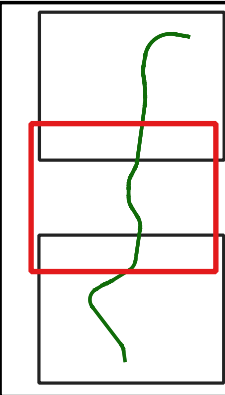
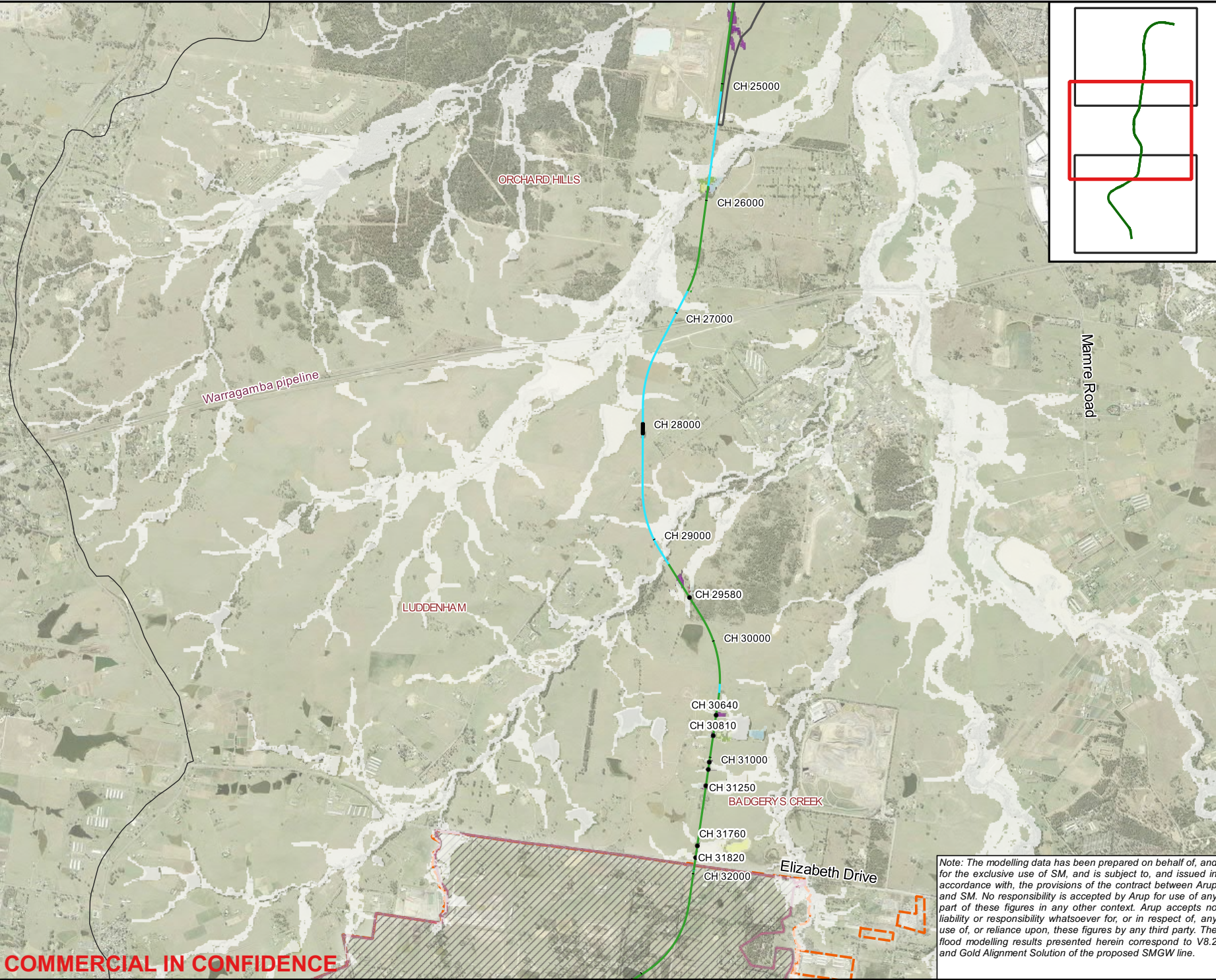
Job No  
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Figure No  
**D.23 (1 of 3)**

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**Legend**  
**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

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CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

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Figure Title

Design Case - 0.2EY Afflux

Scale at A3  
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Figure Status  
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GDA 1994 MGA Zone 56

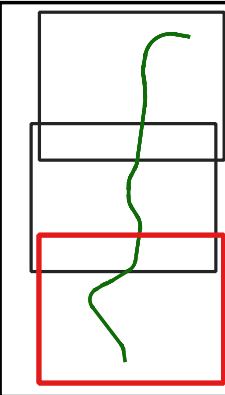
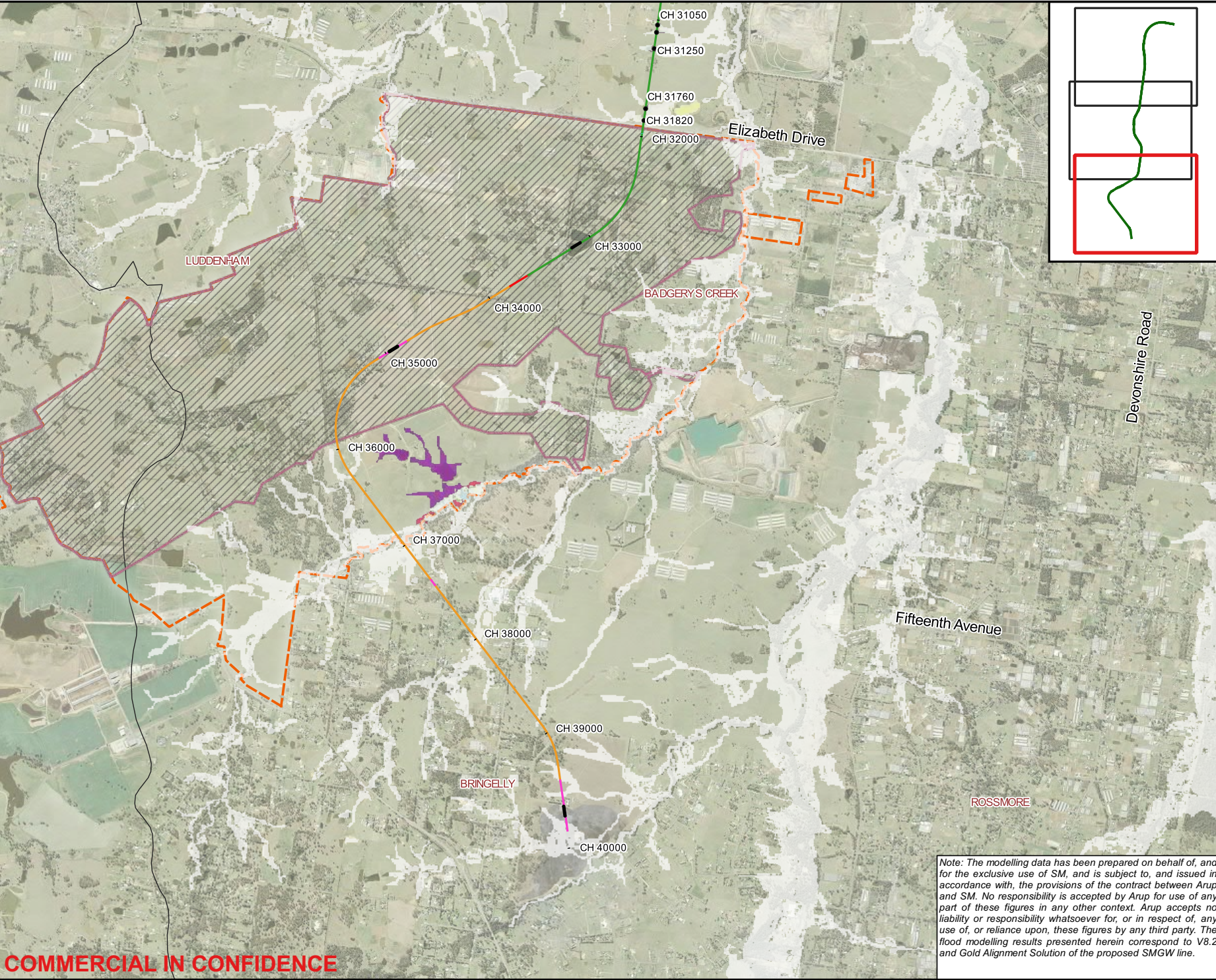
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D.23 (2 of 3)

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**Legend**  
**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
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At Grade  
Bridge or Viaduct  
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Dive Structure  
Driven Tunnel  
Trough or Cutting  
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Stabling Site

Culvert ID	Culvert Properties
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CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

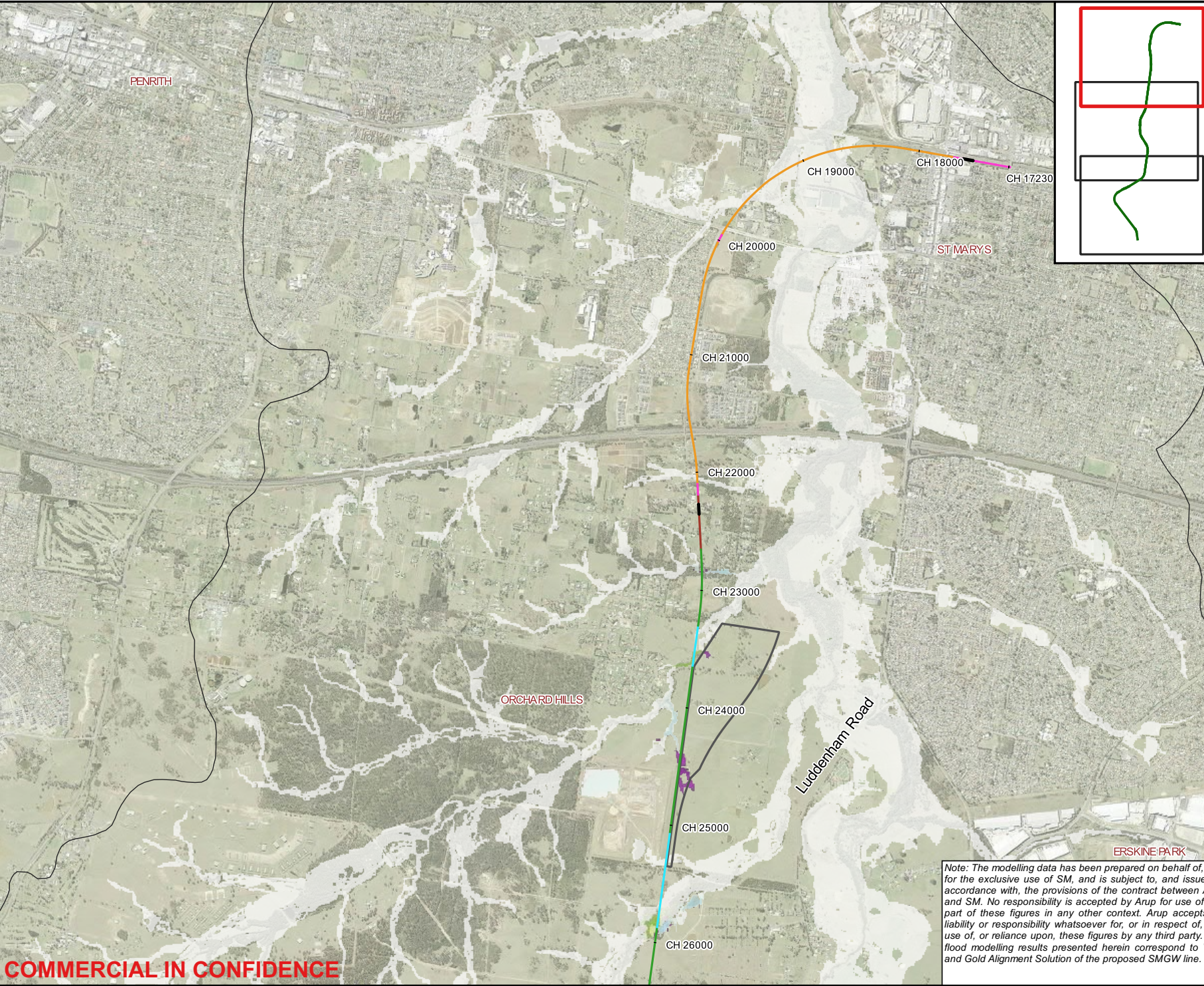
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Figure Title  
**Design Case - 0.2EY Afflux**  
Scale at A3  
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Figure Status  
**Issued for information**  
Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
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Figure No  
**D.23 (3 of 3)**

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**Legend**  
**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

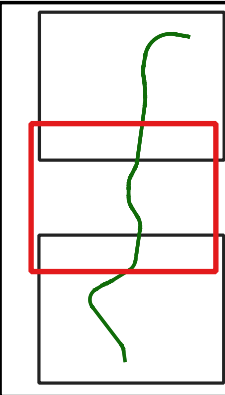
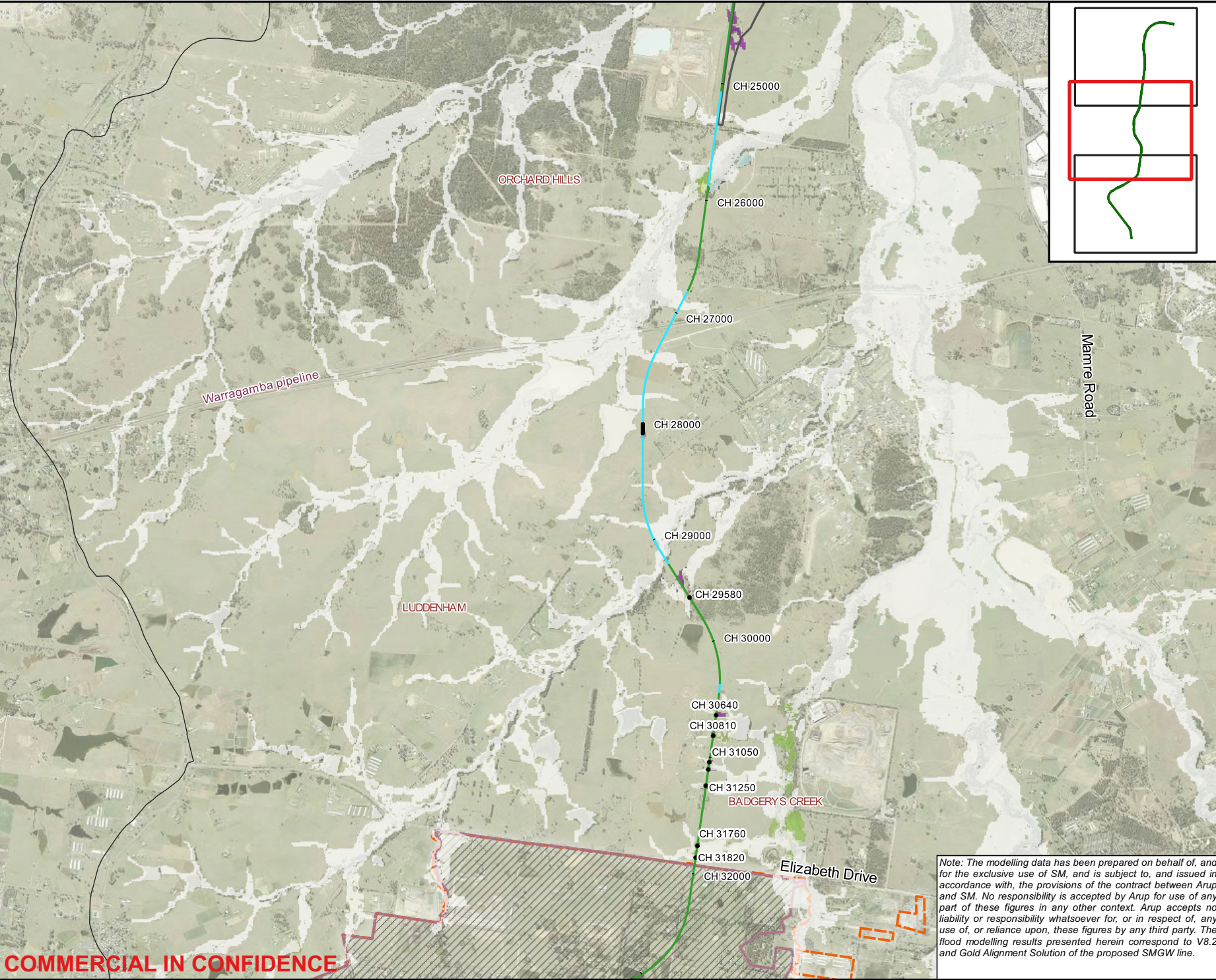
A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
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Job Title  
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Figure Title  
**Design Case - 5% AEP Afflux**  
Scale at A3  
**1:30000**  
Figure Status  
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Coordinate System  
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Job No  
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Figure No  
**D.24 (1 of 3)**

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**Legend**  
**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

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CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

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Client

**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 5% AEP Afflux**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

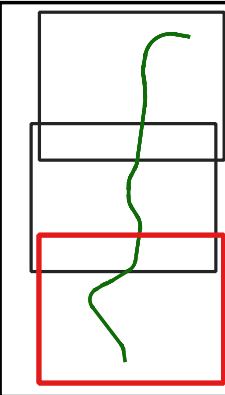
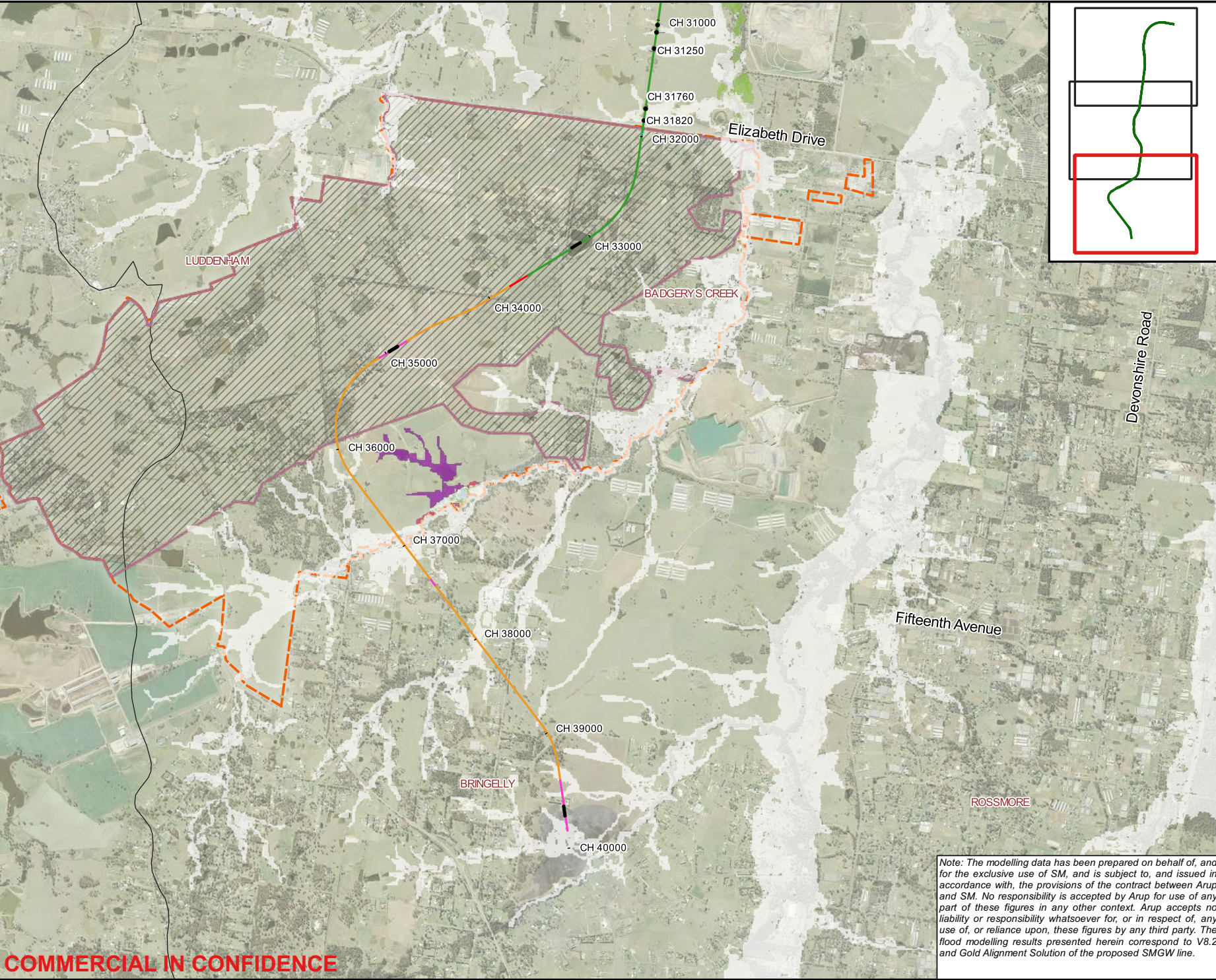
Figure No

**D.24 (2 of 3)**

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**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
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WSI Boundary  
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

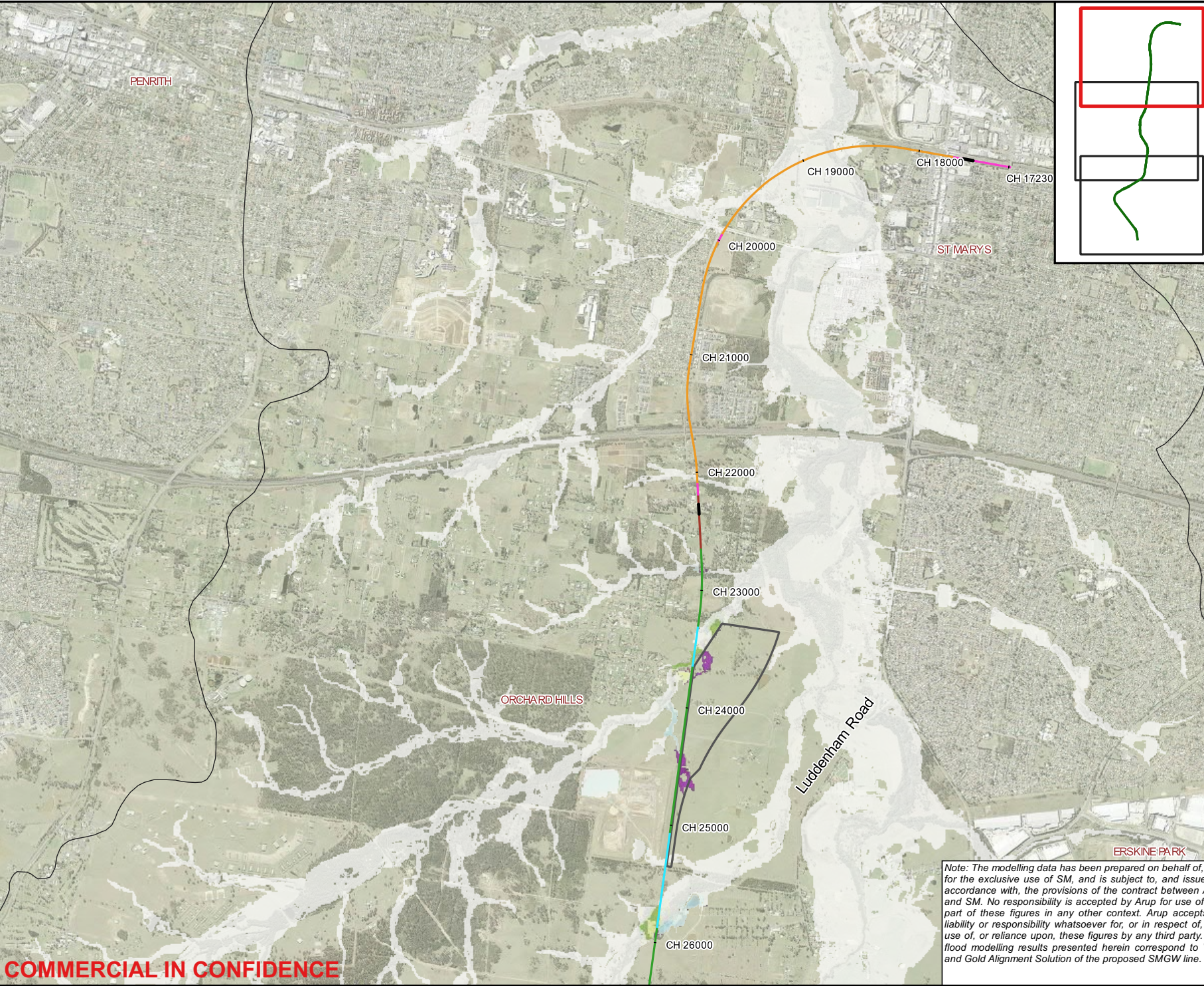
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Job Title  
**SMGW TA Services**  
Figure Title  
**Design Case - 5% AEP Afflux**  
Scale at A3  
**1:30000**  
Figure Status  
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Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
**265549**  
Figure No  
**D.24 (3 of 3)**

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Peak flood level impact (m)

<= -0.01

-0.01 - 0.01

0.01 - 0.05

0.05 - 0.2

> 0.2

Newly flooded

No longer flooded

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID

Culvert Properties

CH 29580

4/ 1.2m x 0.75m RCBC

CH 30640

1/ 0.75m RCP

CH 30810

2/ 1.05m RCP

CH 31050

2/ 0.75m RCP

CH 31090

1/ 0.75m RCP

CH 31250

1/ 0.75m RCP

CH 31760

2/ 1.5m x 0.75m RCBC

CH 31820

2/ 2.1m x 0.9m RCBC

A

01/05/20

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IVS

KJS

Issue

Date

By

Chkd

Appd

0

500

1000

1500 m

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Client

Sydney Metro

Job Title

SMGW TA Services

Figure Title

Design Case - 1% AEP Afflux

Scale at A3

1:30000

Figure Status

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Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

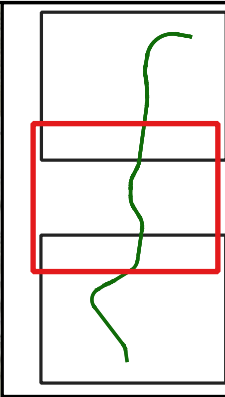
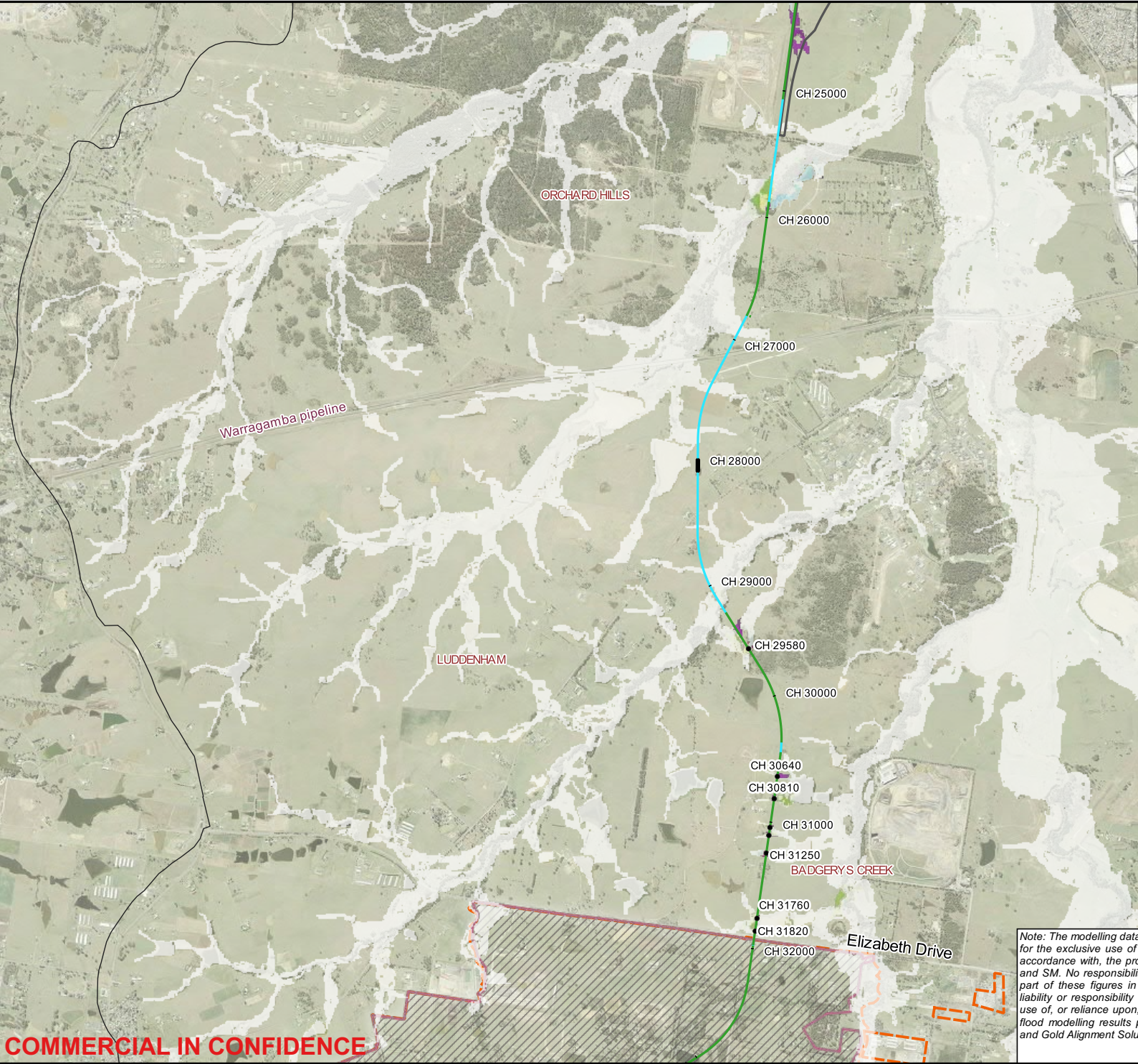
Figure No

D.25 (1 of 3)

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**Legend**

**Peak flood level impact (m)**

- <= -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly flooded
- No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
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A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title:  
**SMGW TA Services**

Figure Title:  
**Design Case - 1% AEP Afflux**

Scale at A3:  
**1:30000**

Figure Status:  
**Issued for information**

Coordinate System:  
**GDA 1994 MGA Zone 56**

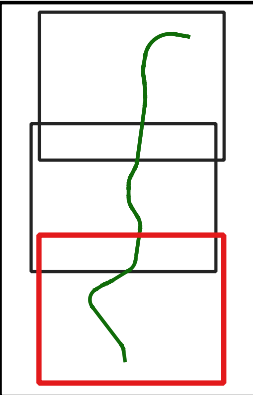
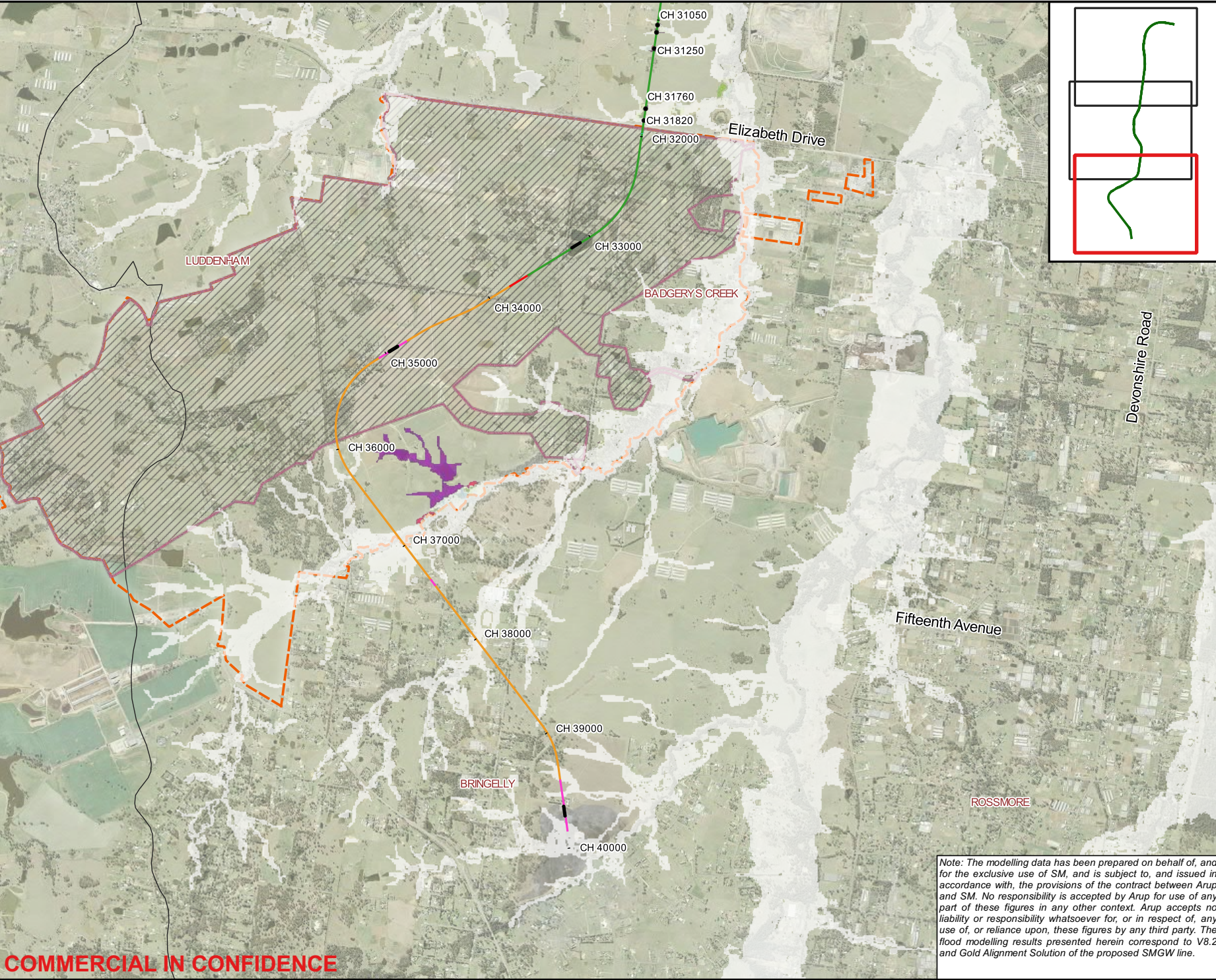
Job No:  
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Figure No:  
**D.25 (2 of 3)**

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**Legend**  
**Peak flood level impact (m)**  

Light Blue	<= -0.01
White	-0.01 - 0.01
Light Green	0.01 - 0.05
Yellow	0.05 - 0.2
Orange	> 0.2
Red	Newly flooded
Purple	No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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**Sydney Metro**  
**SMGW TA Services**

**Design Case - 1% AEP Afflux**  

Scale at A3 <b>1:30000</b>	Figure Status <b>Issued for information</b>
Coordinate System <b>GDA 1994 MGA Zone 56</b>	
Job No <b>265549</b>	Figure No <b>D.25 (3 of 3)</b>

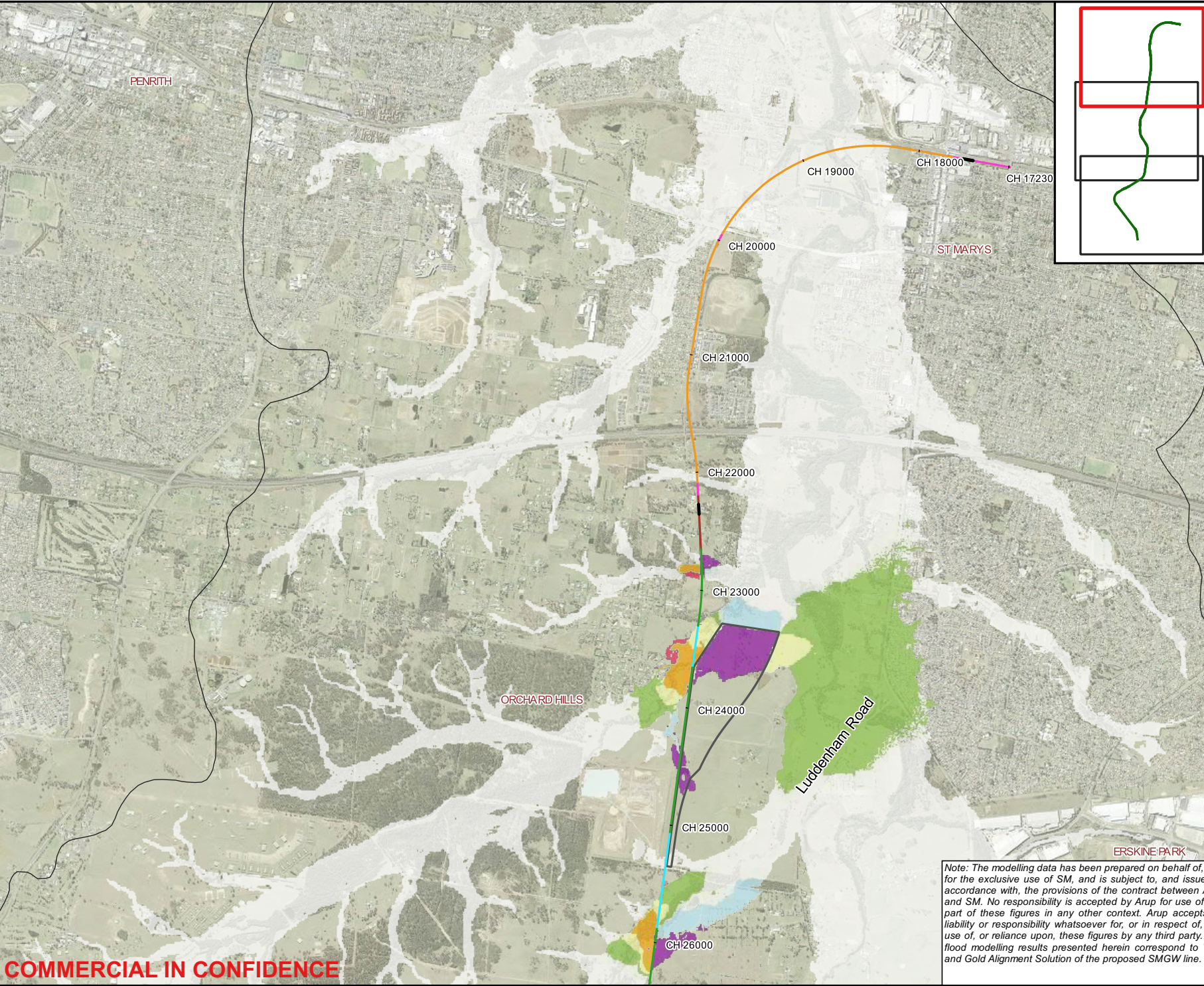
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**Legend**

**Peak flood level impact (m)**

<= -0.01

-0.01 - 0.01

0.01 - 0.05

0.05 - 0.2

> 0.2

Newly flooded

No longer flooded

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Government

**sydney**

METRO

Western Sydney Airport

Client

**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - PMF Afflux**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

Figure No

**D.26 (1 of 3)**

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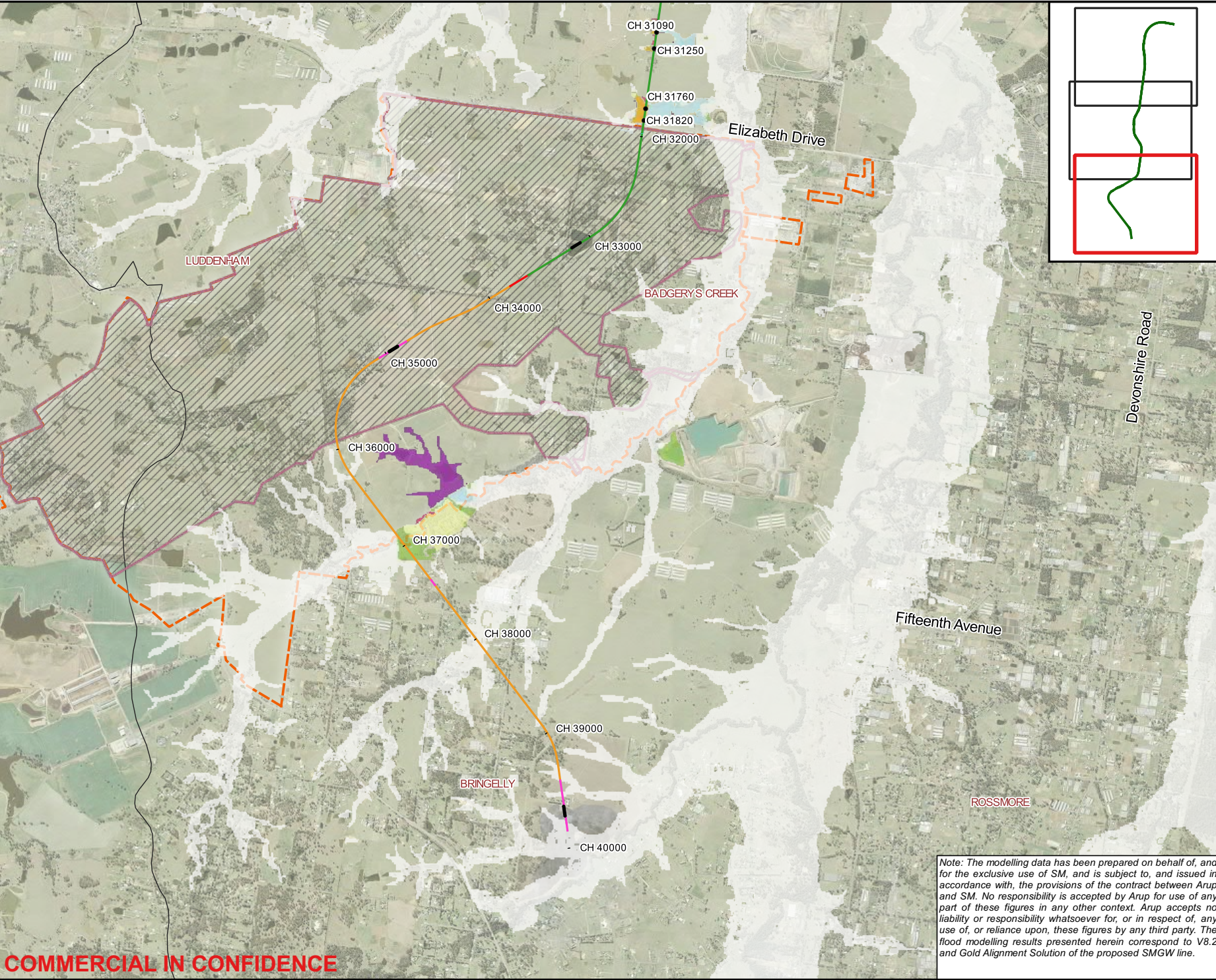
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### Legend




Peak flood level impact (m)

- <= -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly flooded
- No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - PMF Afflux**

Scale at A3	Figure Status
<b>1:30000</b>	<b>Issued for information</b>

Coordinate System

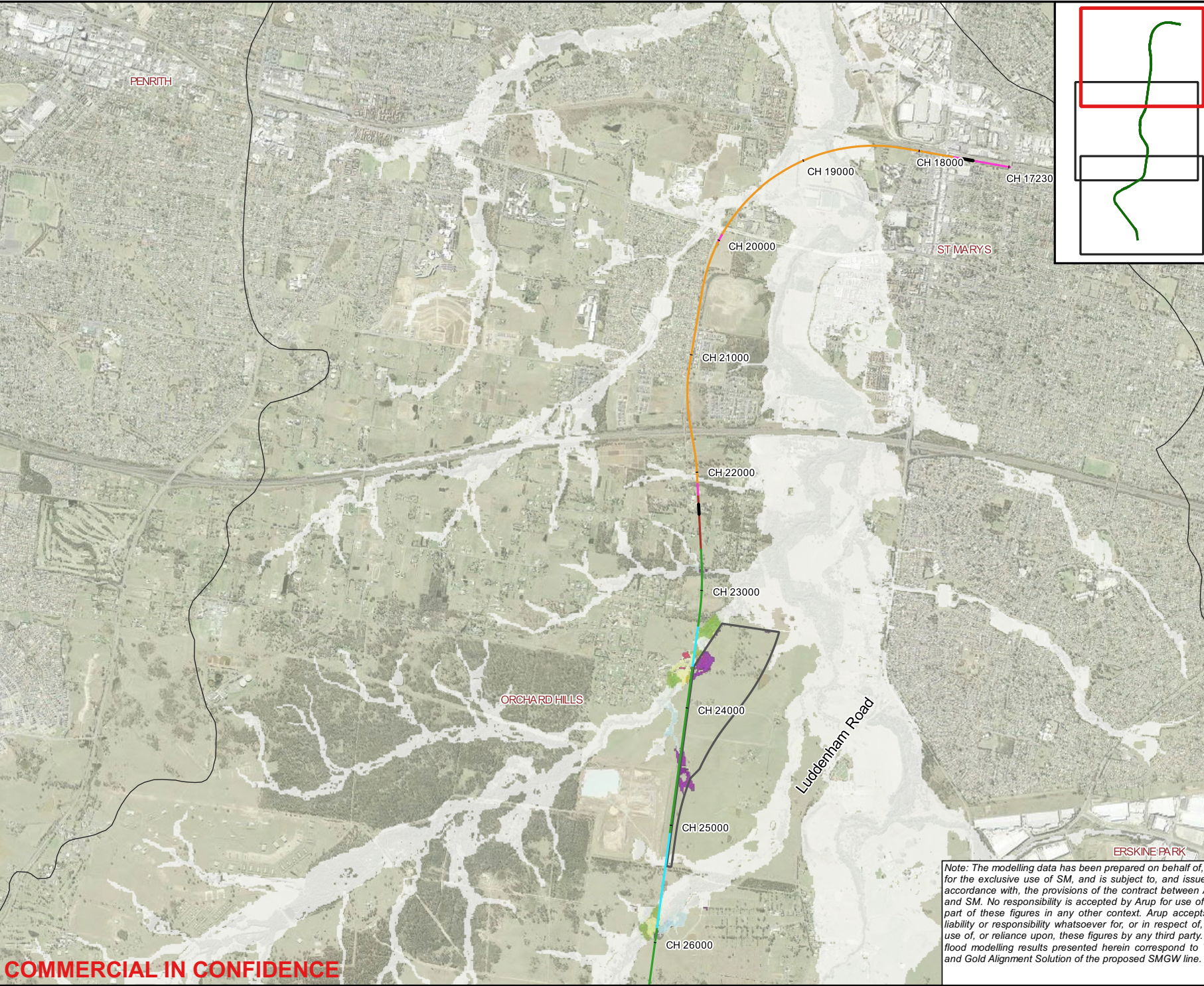
**GDA 1994 MGA Zone 56**

Job No	Figure No
<b>265549</b>	<b>D.26 (3 of 3)</b>

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**Legend**

**Peak flood level impact (m)**

<= -0.01

-0.01 - 0.01

0.01 - 0.05

0.05 - 0.2

> 0.2

Newly flooded

No longer flooded

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP with Climate Change Afflux**

Scale at A3  
**1:30000**

Figure Status  
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Coordinate System  
**GDA 1994 MGA Zone 56**

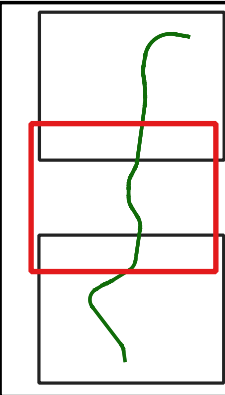
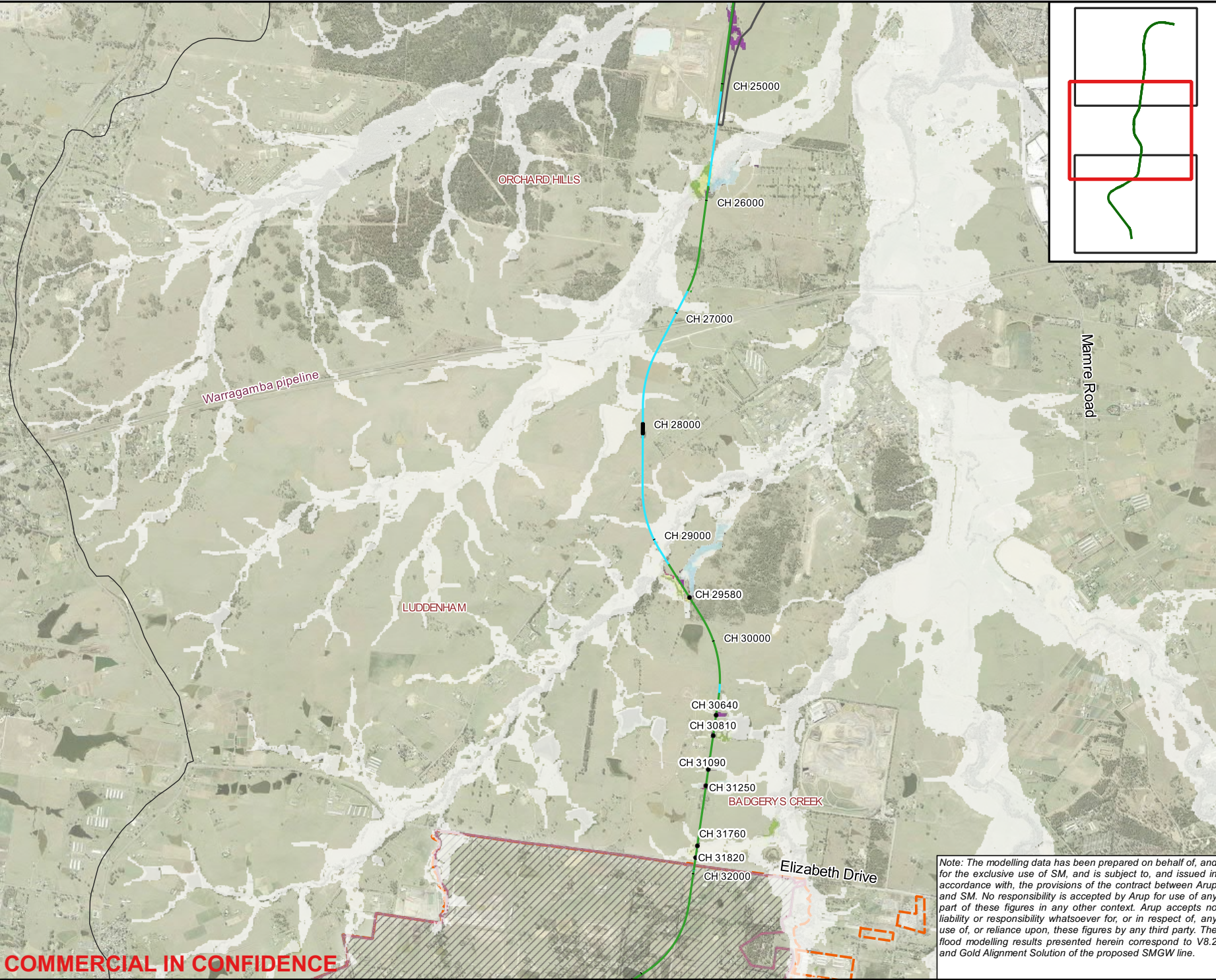
Job No  
**265549**

Figure No  
**D.27 (1 of 3)**

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**Legend**  
**Peak flood level impact (m)**  
≤ -0.01  
-0.01 - 0.01  
0.01 - 0.05  
0.05 - 0.2  
> 0.2  
Newly flooded  
No longer flooded  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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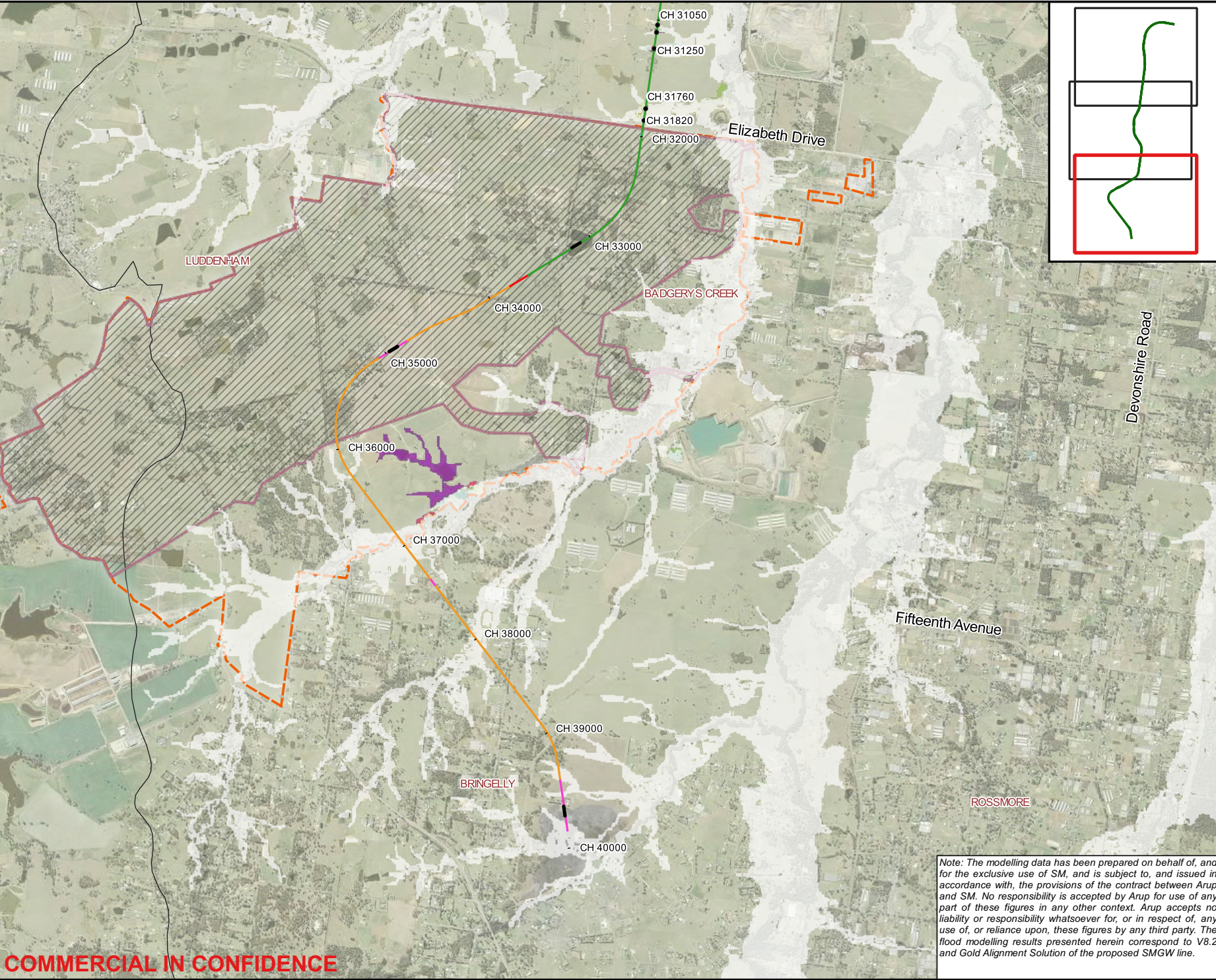
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Job Title  
**SMGW TA Services**

**Design Case - 1% AEP with Climate Change Afflux**  
Scale at A3  
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Coordinate System  
**GDA 1994 MGA Zone 56**  
Job No  
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Figure No  
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### Legend

Peak flood level impact (m)

- ≤ -0.01
- 0.01 - 0.01
- 0.01 - 0.05
- 0.05 - 0.2
- > 0.2
- Newly flooded
- No longer flooded

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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050010001500

m

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Sydney Metro

Job Title

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Figure Title

Design Case - 1% AEP with Climate Change Afflux

Scale at A3

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Figure No

D.27 (3 of 3)

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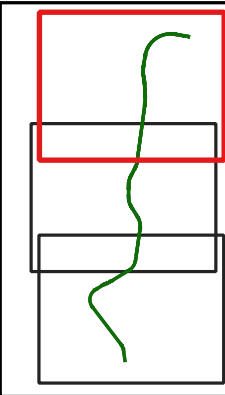
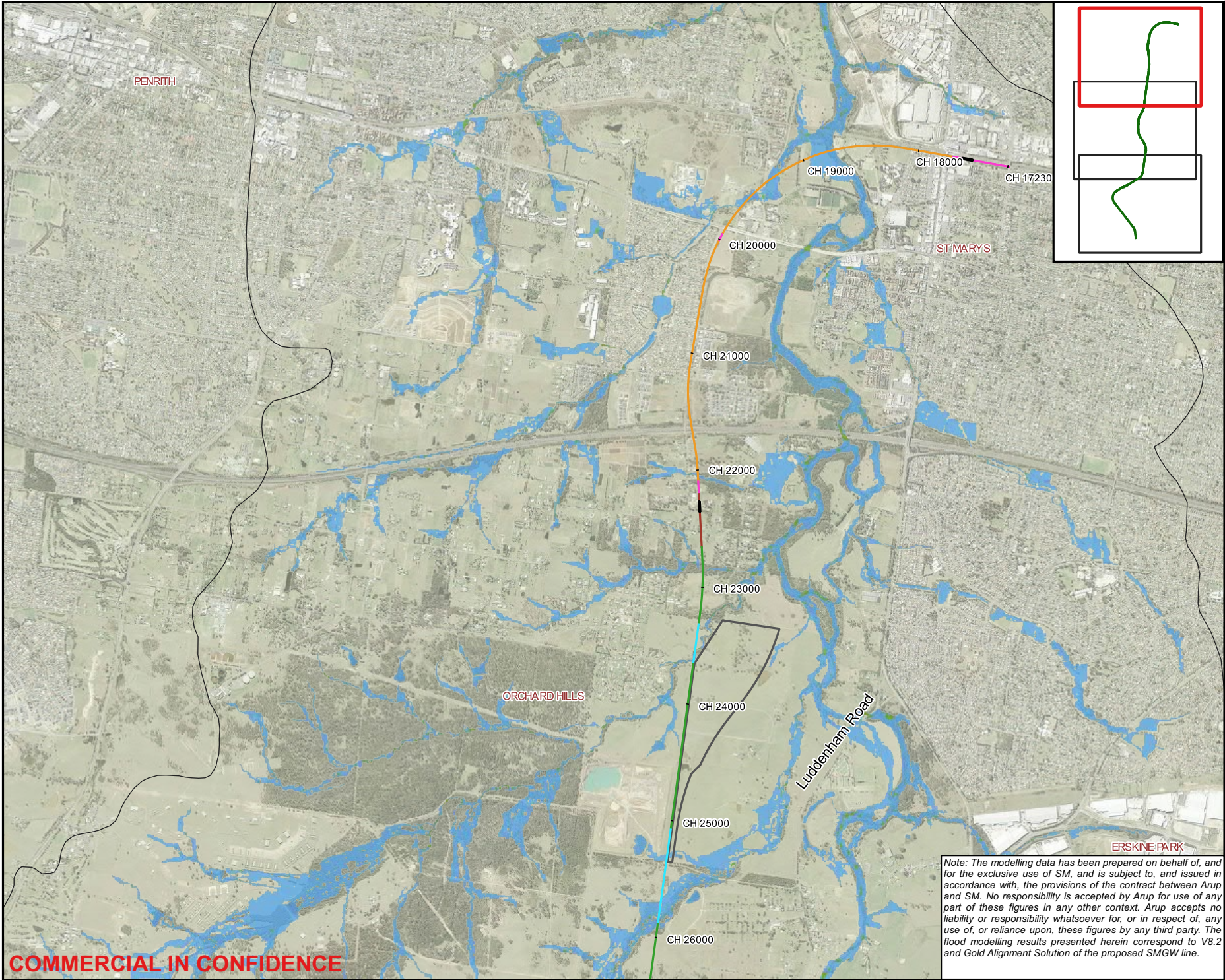
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\\265000\265549-01\_SMGW TA\Work\Internal Design\GIS\Bath02\_Working\Flooding\Map\figs\CGIS

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Issue	Date	By	Chkd	Appd



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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

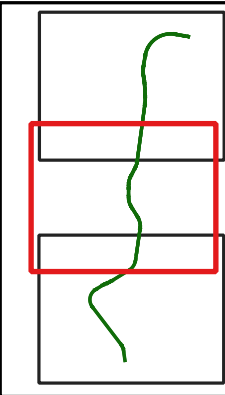
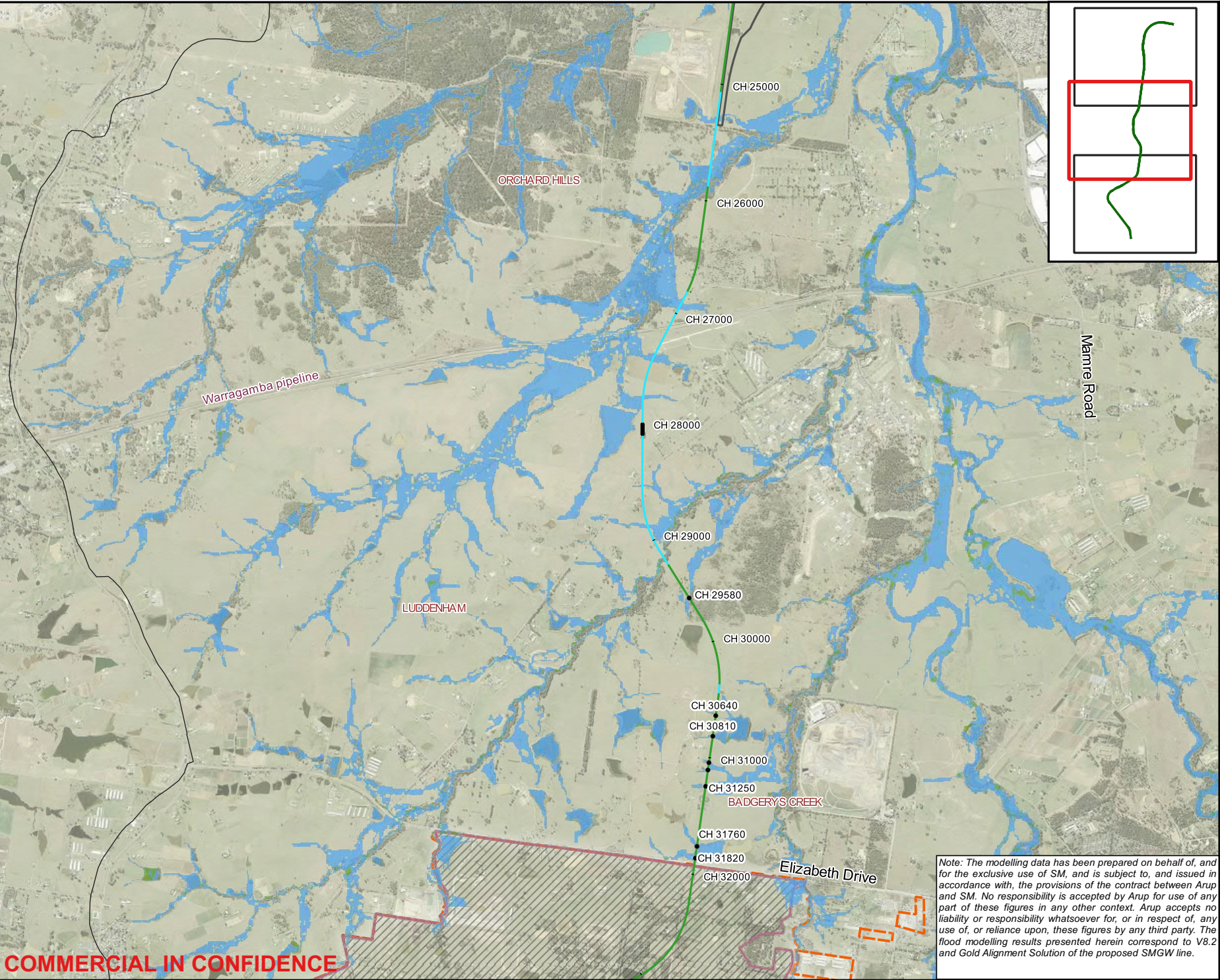
Job No  
**265549**

Figure No  
**D.28 (1 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.5EY Change in Velocity**

Scale at A3

**1:30000**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

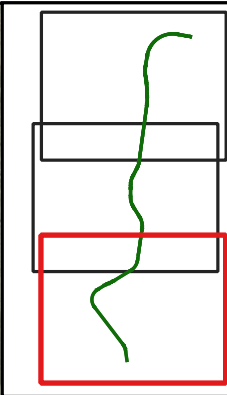
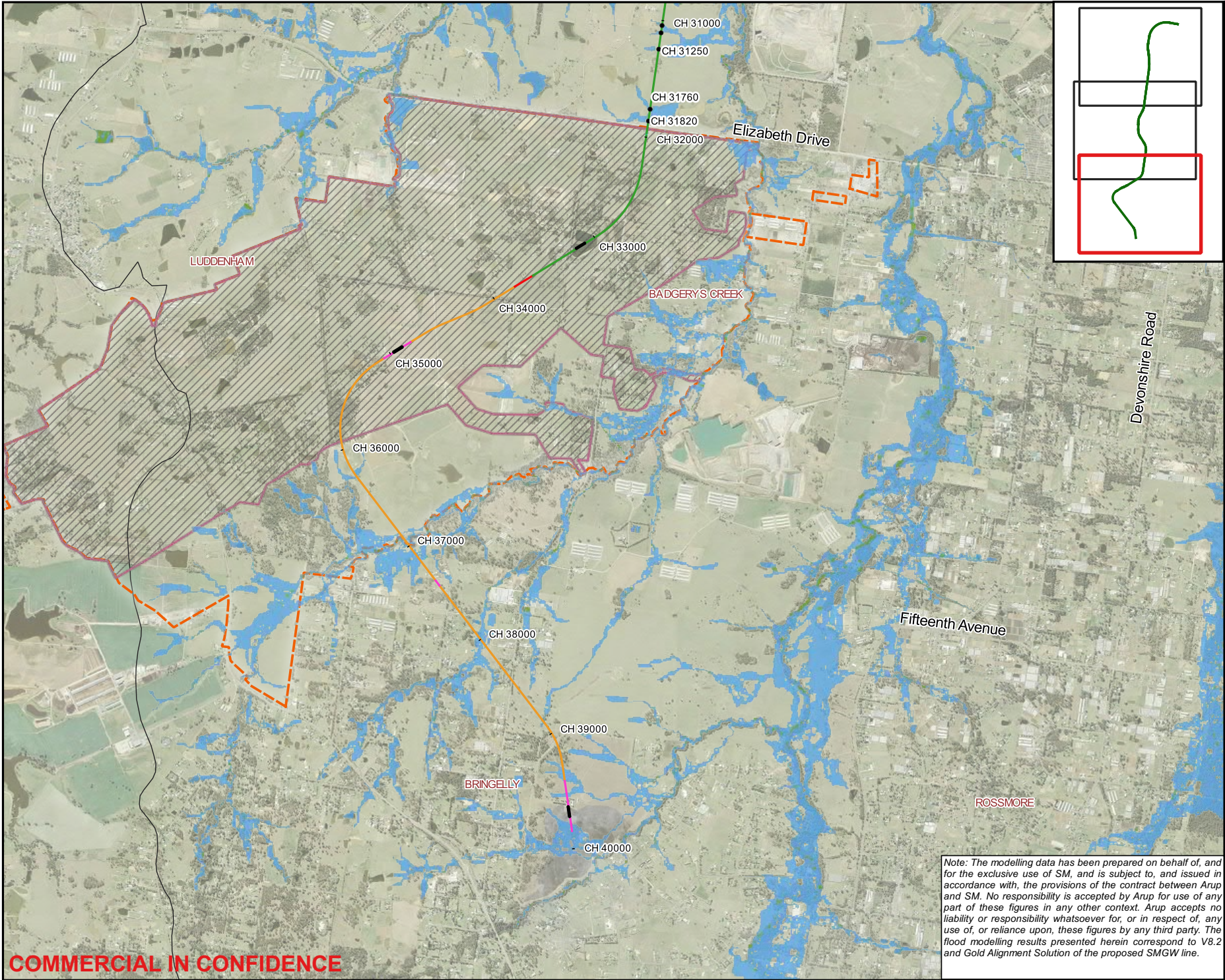
Figure No

**D.28 (2 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts

- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.5EY Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
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Coordinate System  
**GDA 1994 MGA Zone 56**

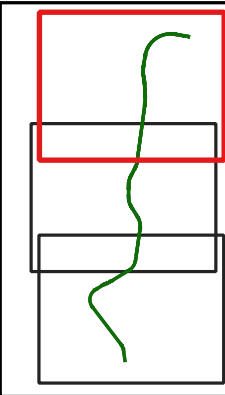
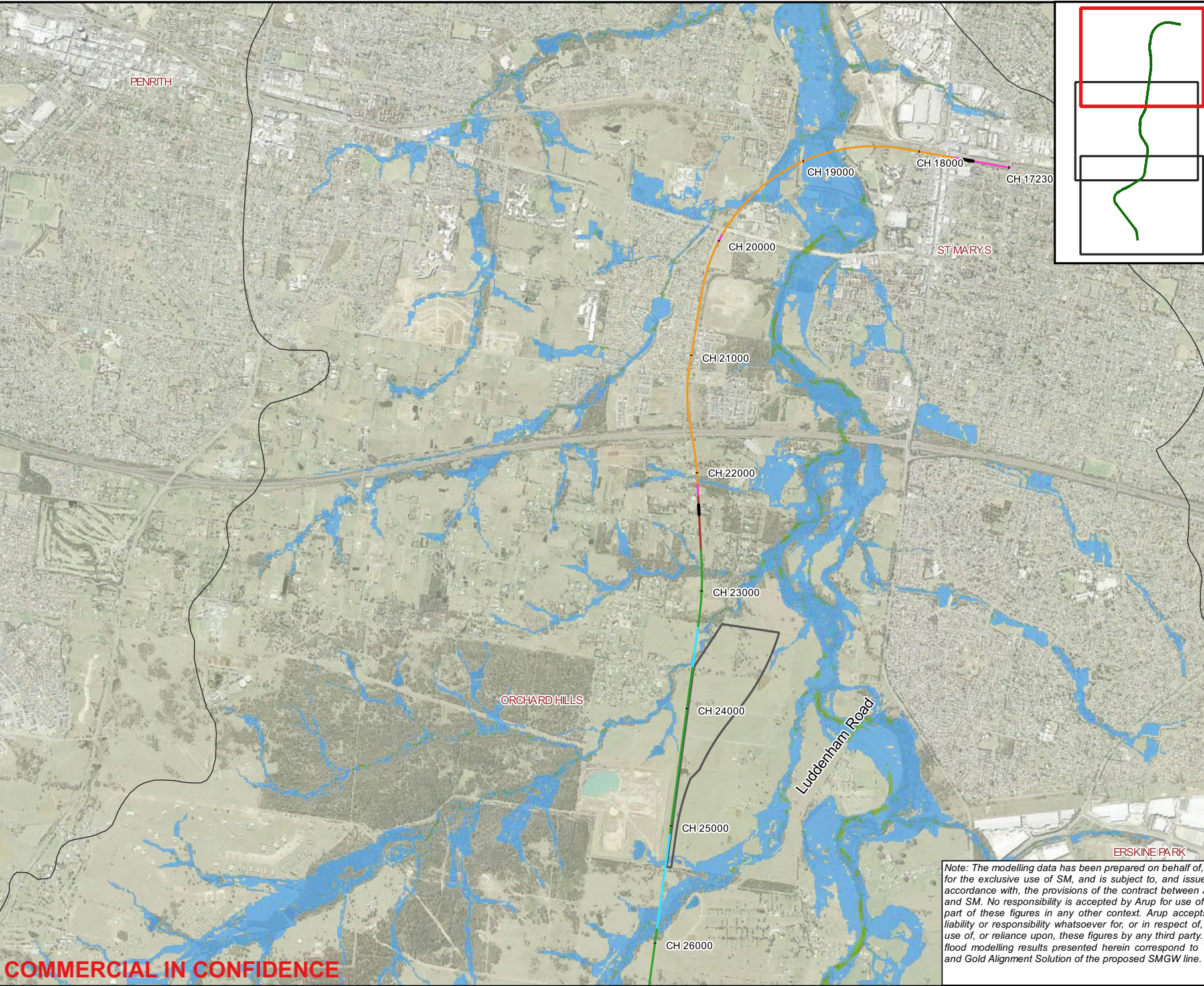
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**265549**

Figure No  
**D.28 (3 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Client  
**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

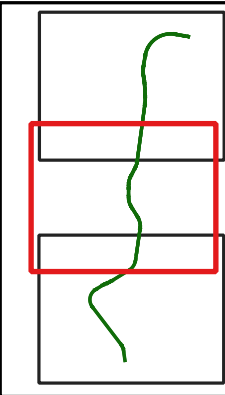
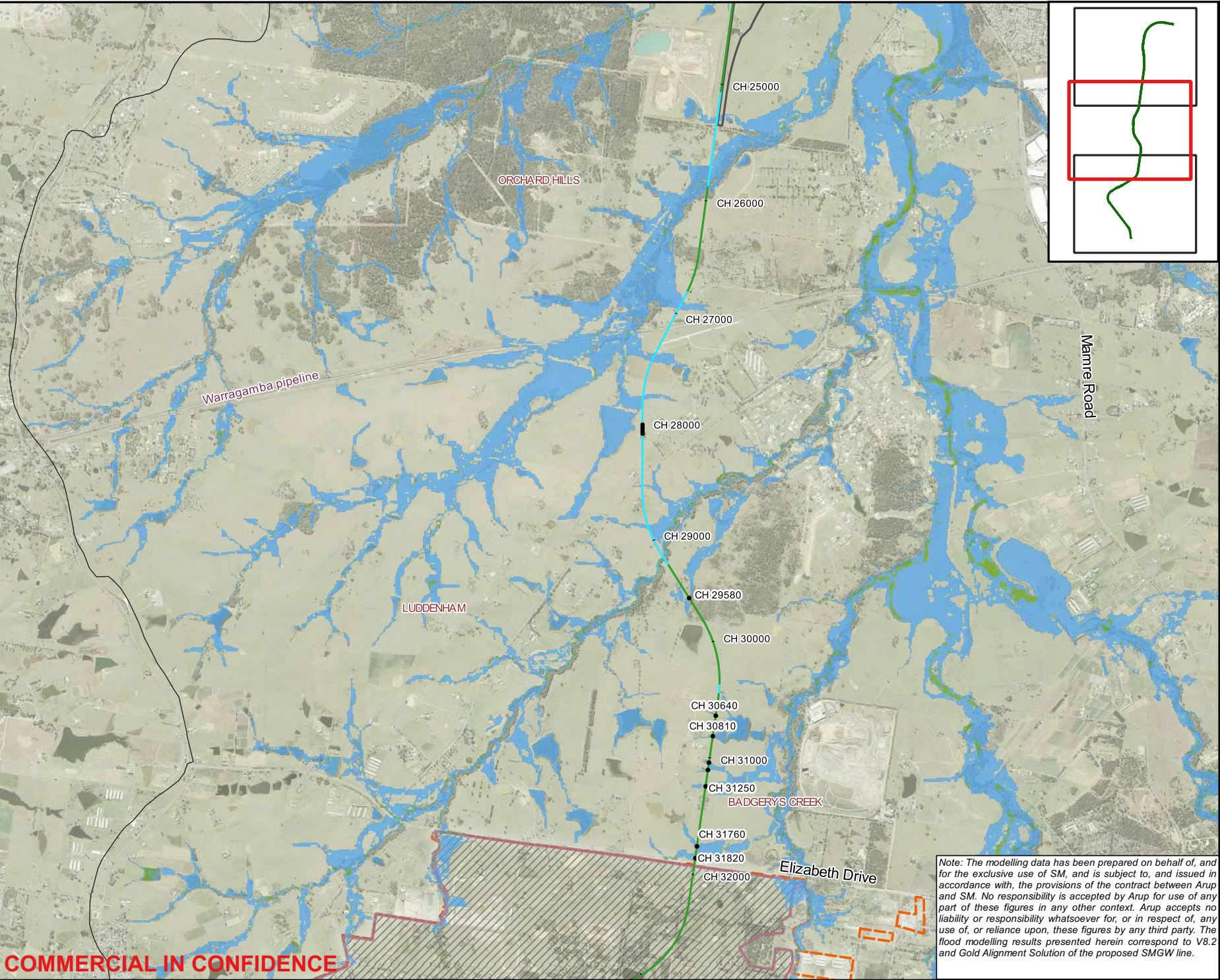
Job No  
**265549**

Figure No  
**D.29 (1 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Client

**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

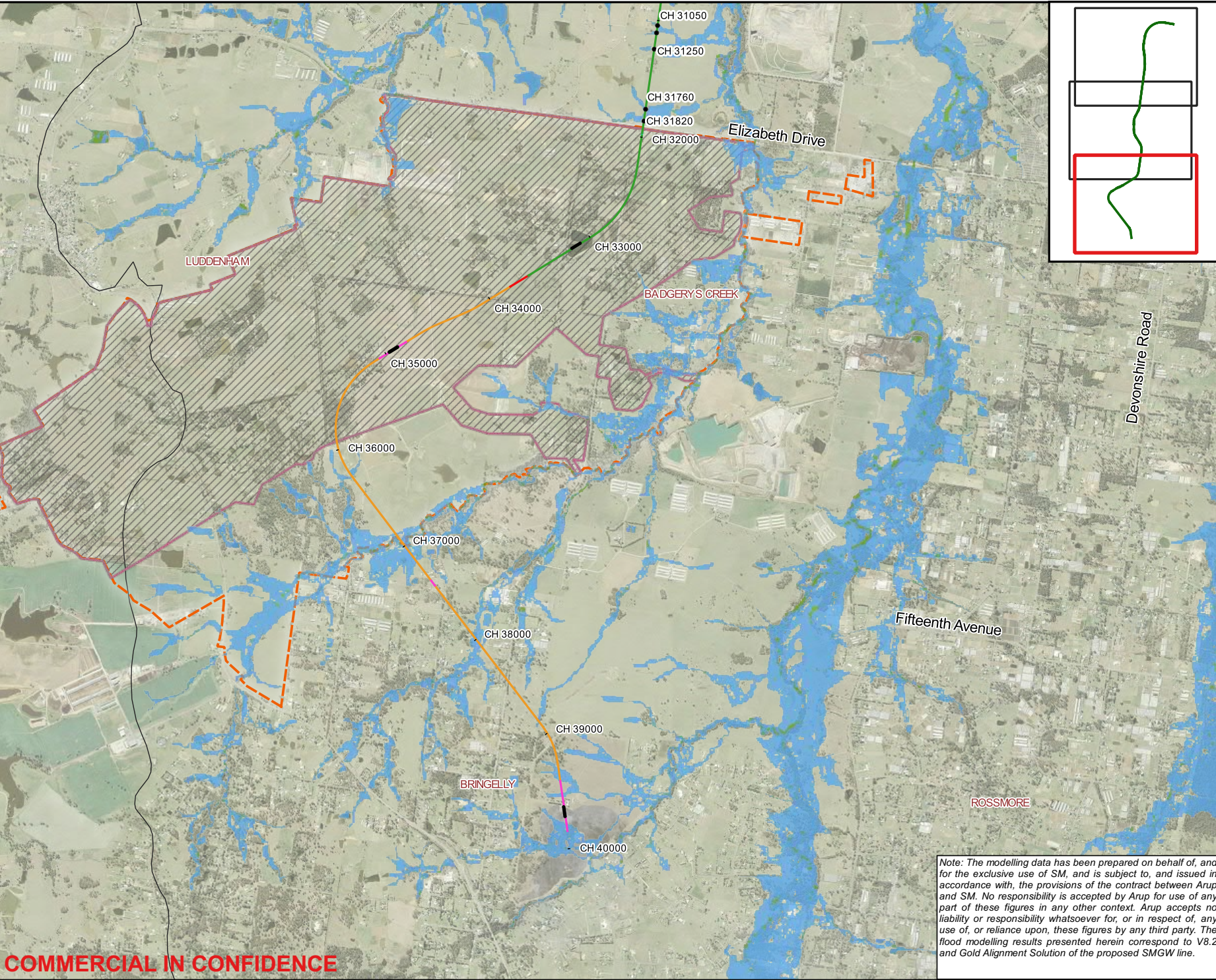
Job No  
**265549**

Figure No  
**D.29 (2 of 3)**

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### Legend

#### Change in velocity

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts

- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Client

Sydney Metro

Job Title

SMGW TA Services

Figure Title

Design Case - 0.2EY Change in Velocity

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

D.29 (3 of 3)

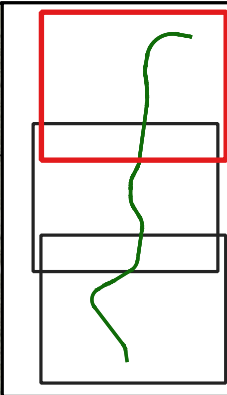
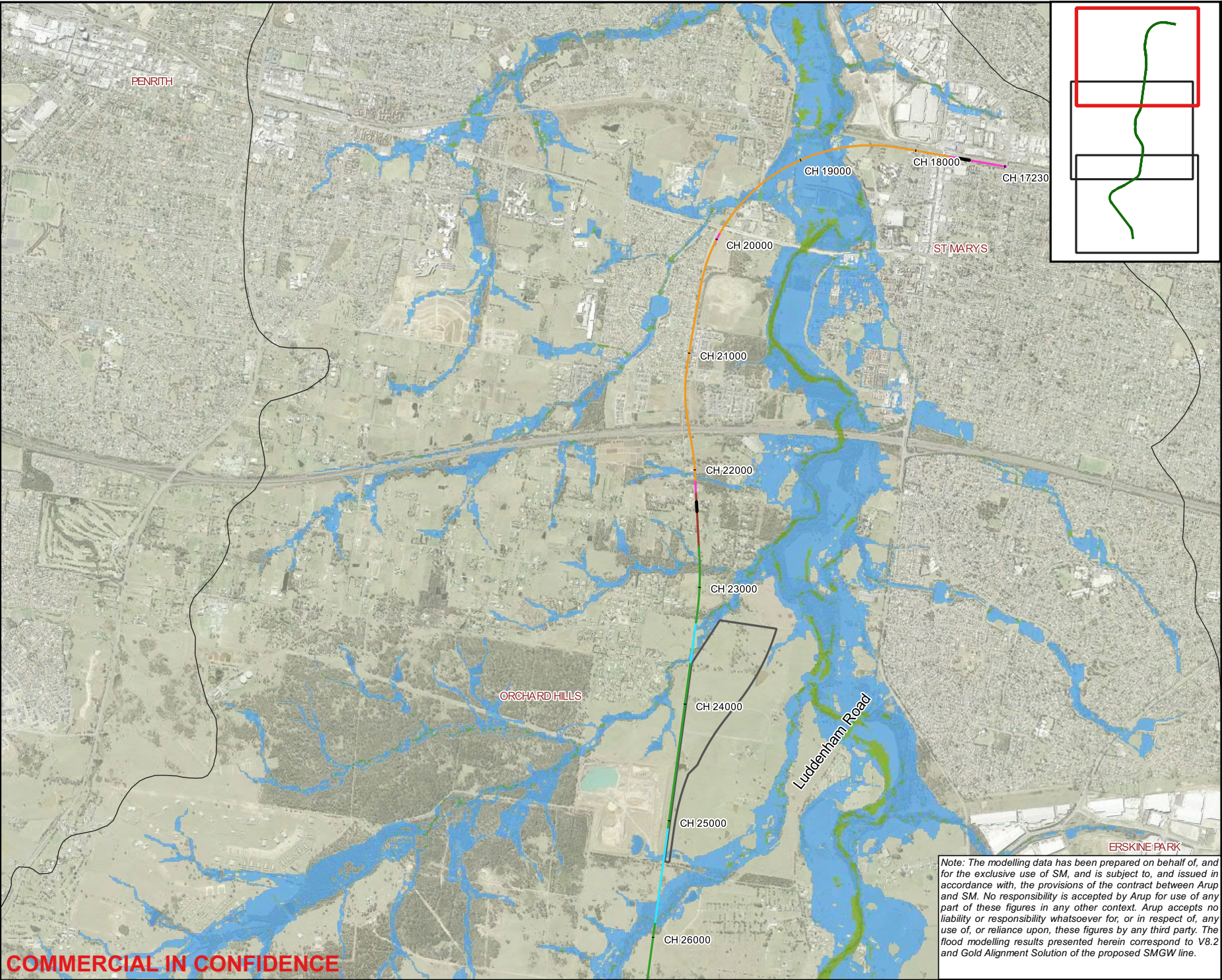
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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

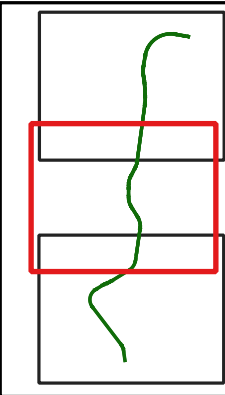
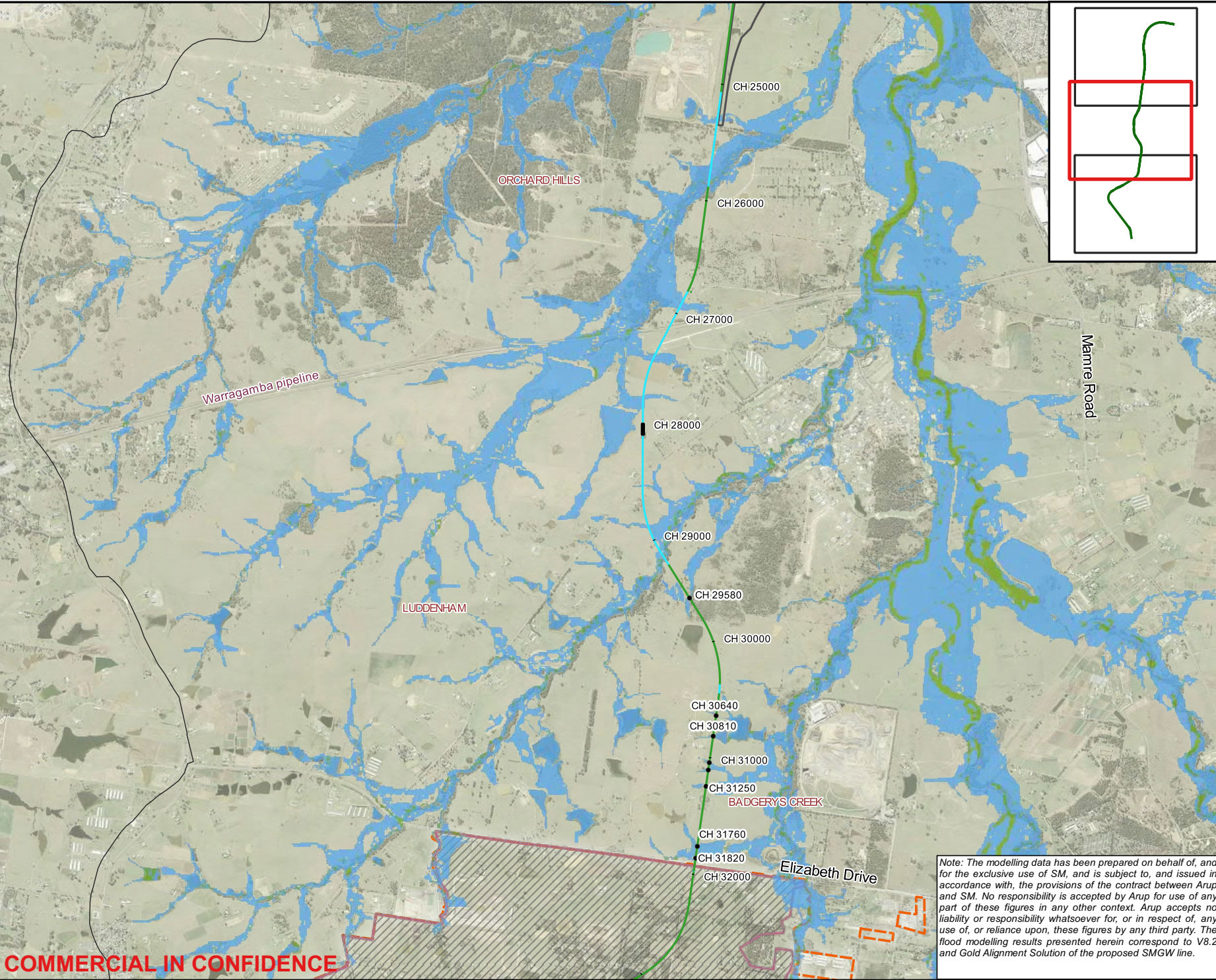
Job No  
**265549**

Figure No  
**D.30 (1 of 3)**

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### Legend

#### Change in velocity

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

SMGW TA Services

Figure Title

Design Case - 5% AEP Change in Velocity

Scale at A3

1:30000

Figure Status

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Coordinate System

GDA 1994 MGA Zone 56

Job No

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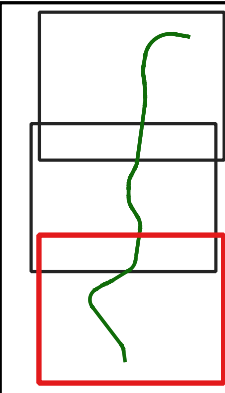
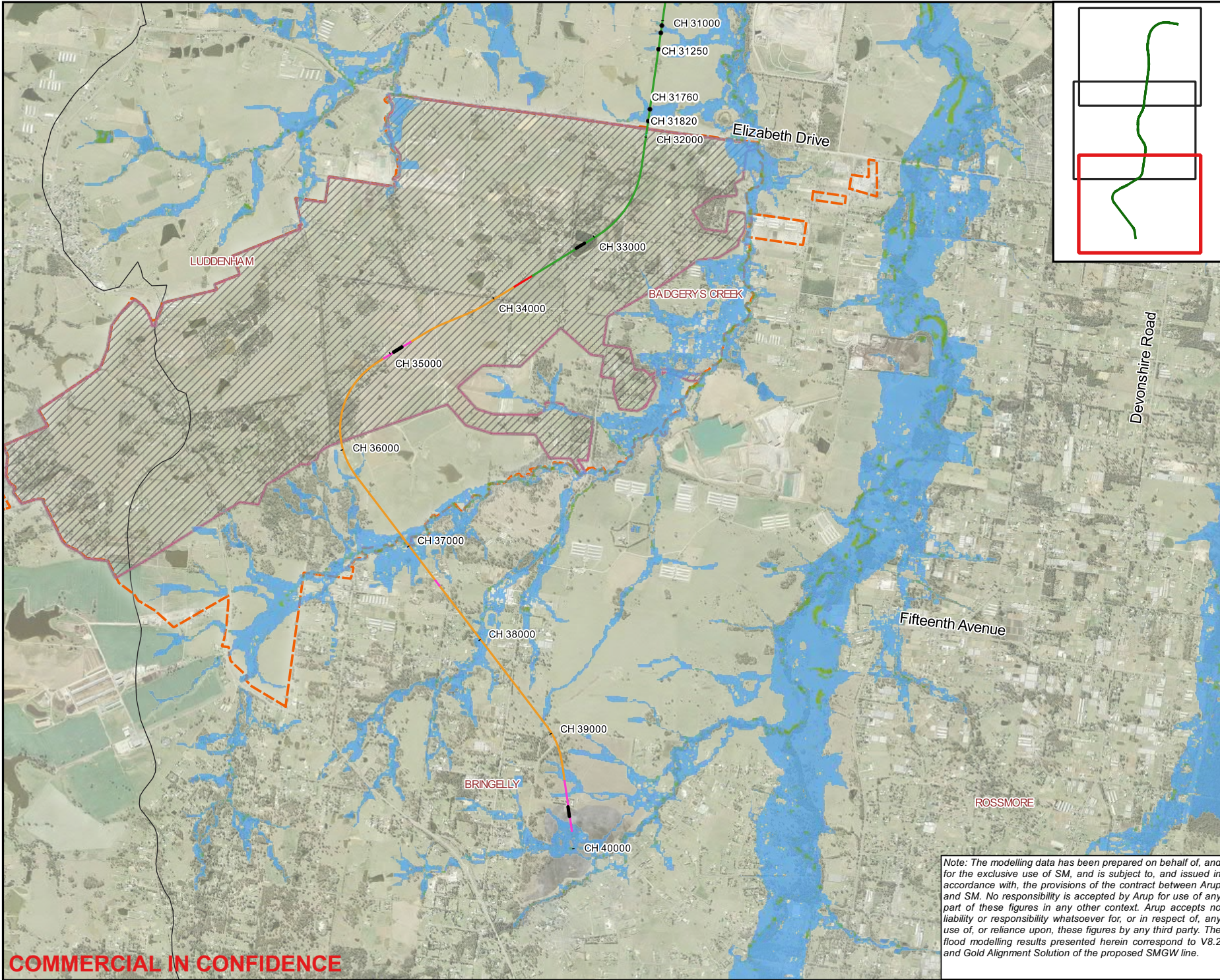
Figure No

D.30 (2 of 3)

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Figure Title  
**Design Case - 5% AEP Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
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**GDA 1994 MGA Zone 56**

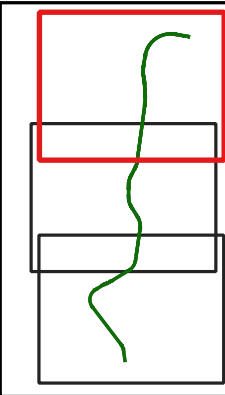
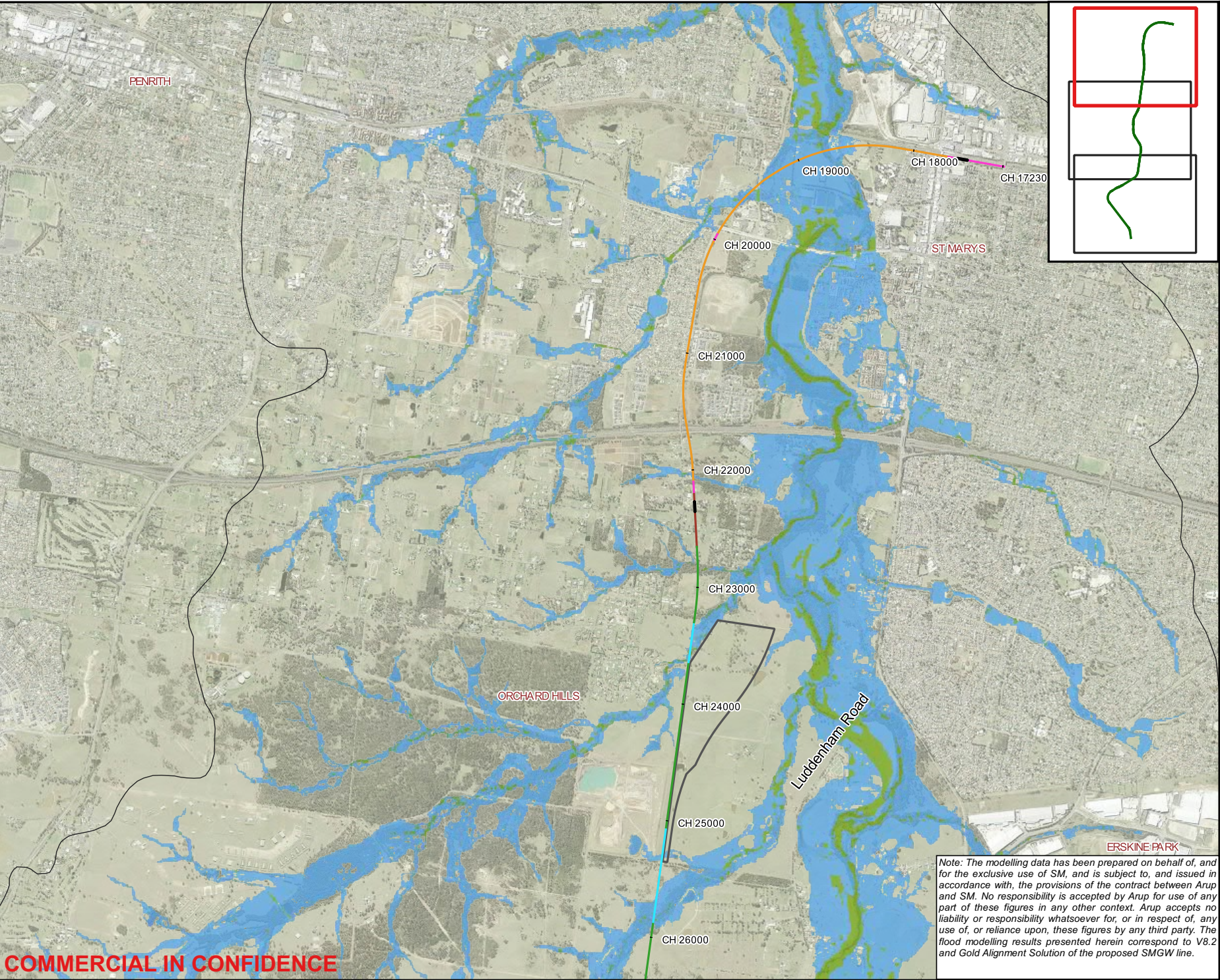
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Figure No  
**D.30 (3 of 3)**

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**Legend**  
**Change in velocity**  
Base & Definition Design: V < 1 m/s  
Base: V < 1m/s & Definition Design: V > 1 m/s  
Base: V > 1m/s & Definition Design: V < 20% increase  
Base: V > 1m/s & Definition Design: V > 20% increase  
Culverts  
WSI Boundary  
WSI Stage 1 Construction Boundary  
South Creek Catchment Boundary  
At Grade  
Bridge or Viaduct  
Cut and Cover  
Dive Structure  
Driven Tunnel  
Trough or Cutting  
Platform  
Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Figure Title  
**Design Case - 1% AEP Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
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Coordinate System  
**GDA 1994 MGA Zone 56**

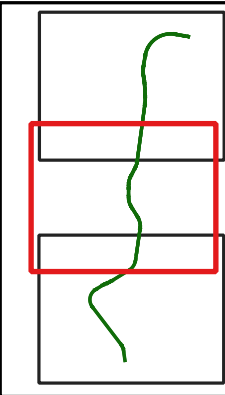
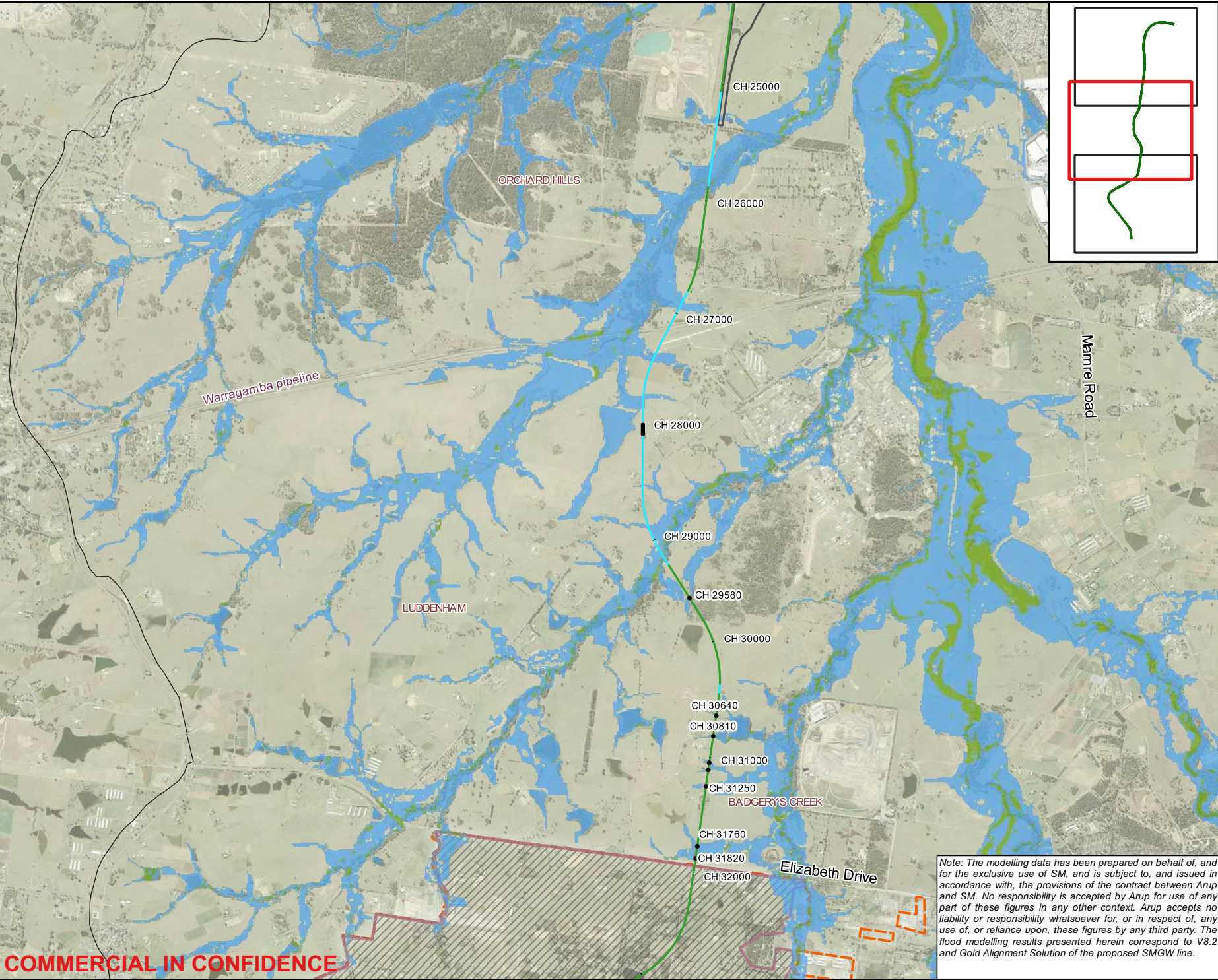
Job No  
**265549**

Figure No  
**D.31 (1 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

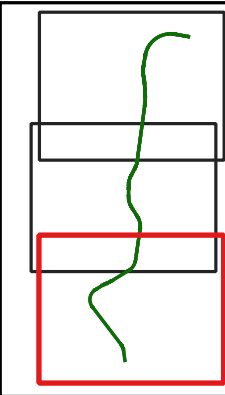
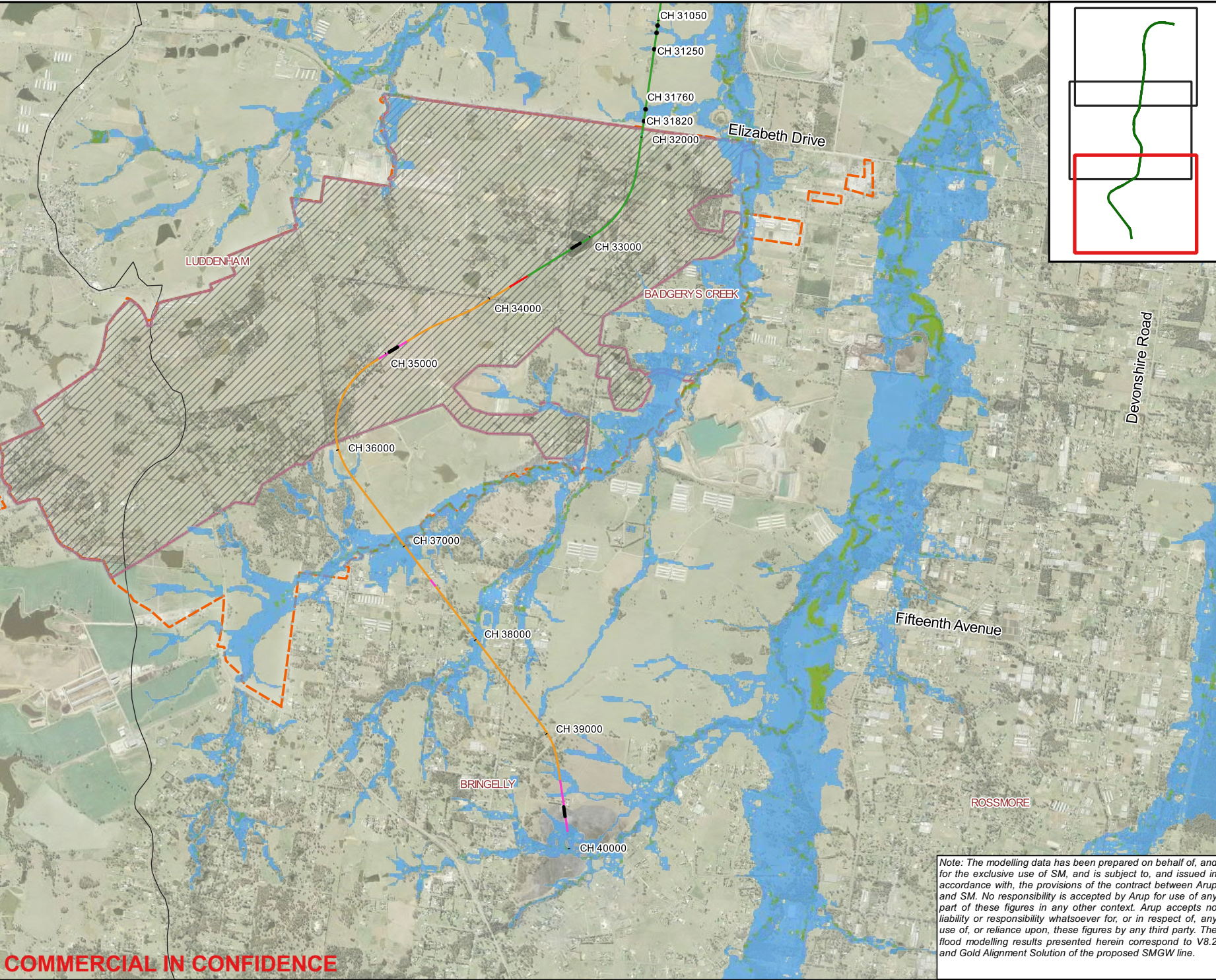
Job No  
**265549**

Figure No  
**D.31 (2 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts

- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.9m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Client

**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

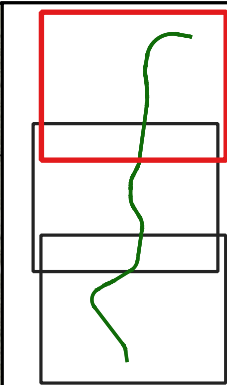
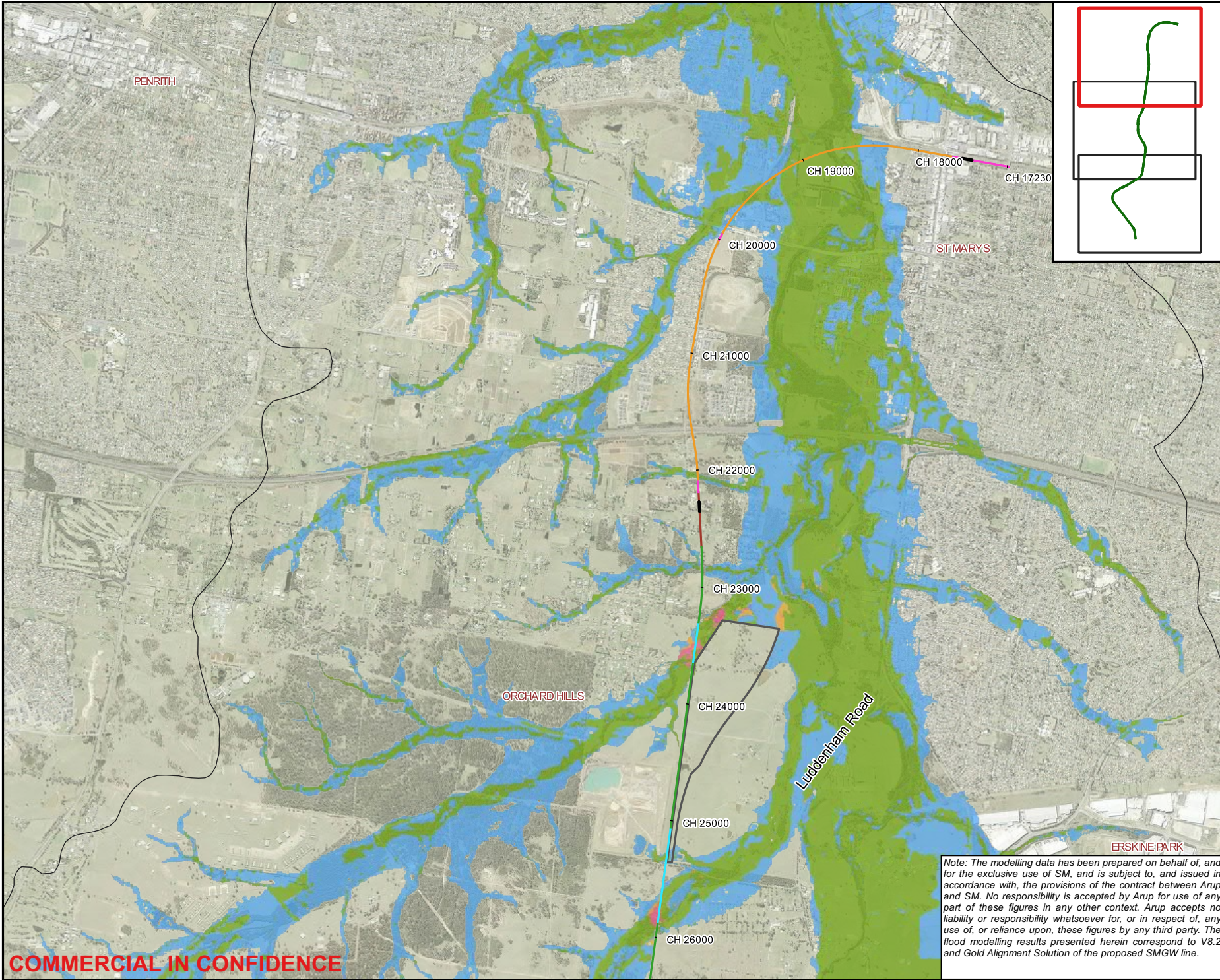
Job No  
**265549**

Figure No  
**D.31 (3 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - PMF Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

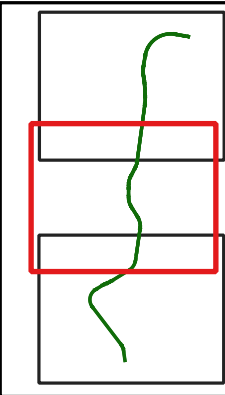
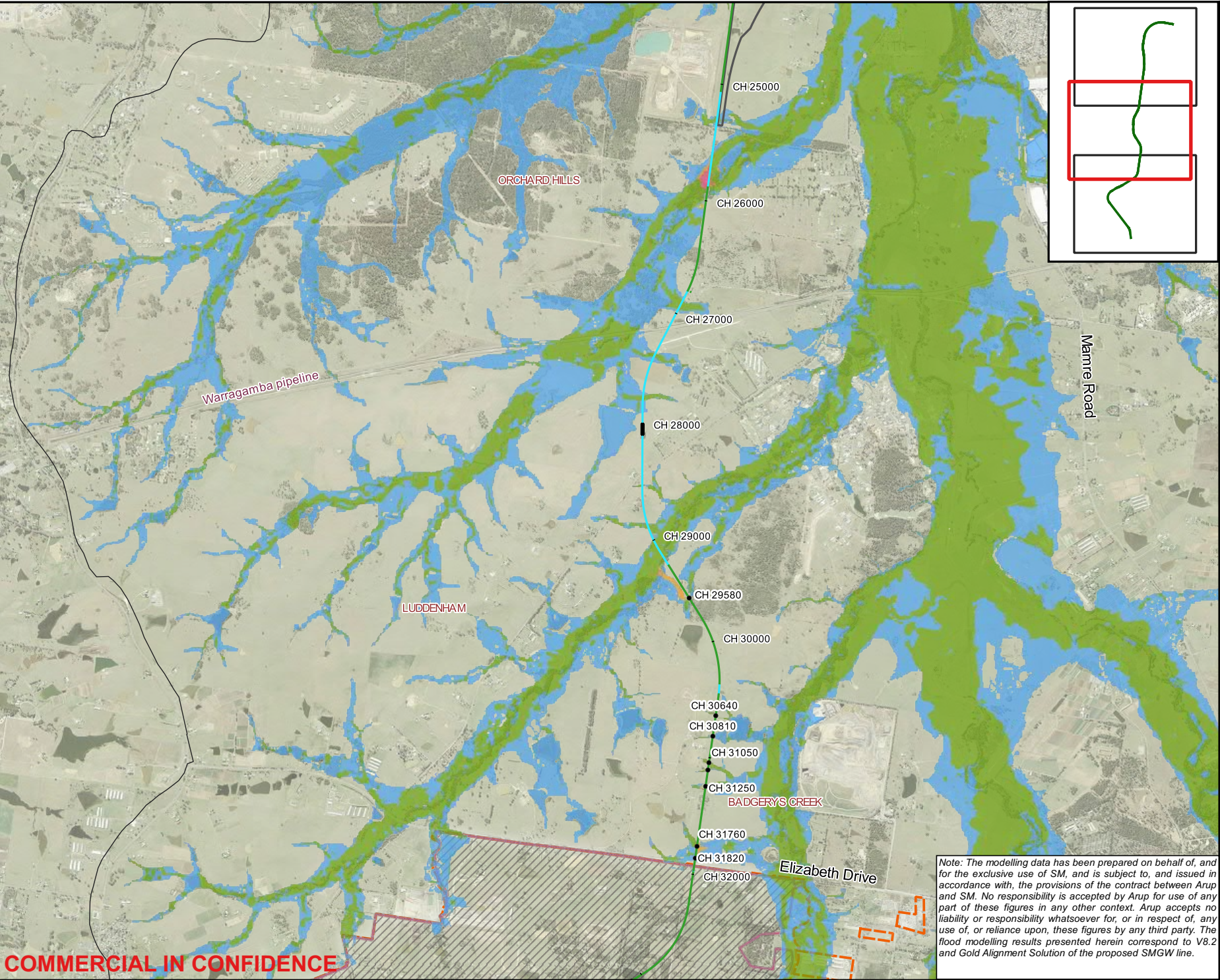
Job No  
**265549**

Figure No  
**D.32 (1 of 3)**

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**Legend**

**Change in velocity**

Base & Definition Design:  $V < 1$  m/s

Base:  $V < 1$  m/s & Definition Design:  $V > 1$  m/s

Base:  $V > 1$  m/s & Definition Design:  $V < 20\%$  increase

Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - PMF Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

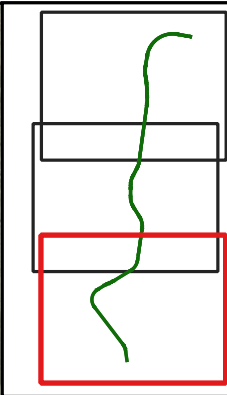
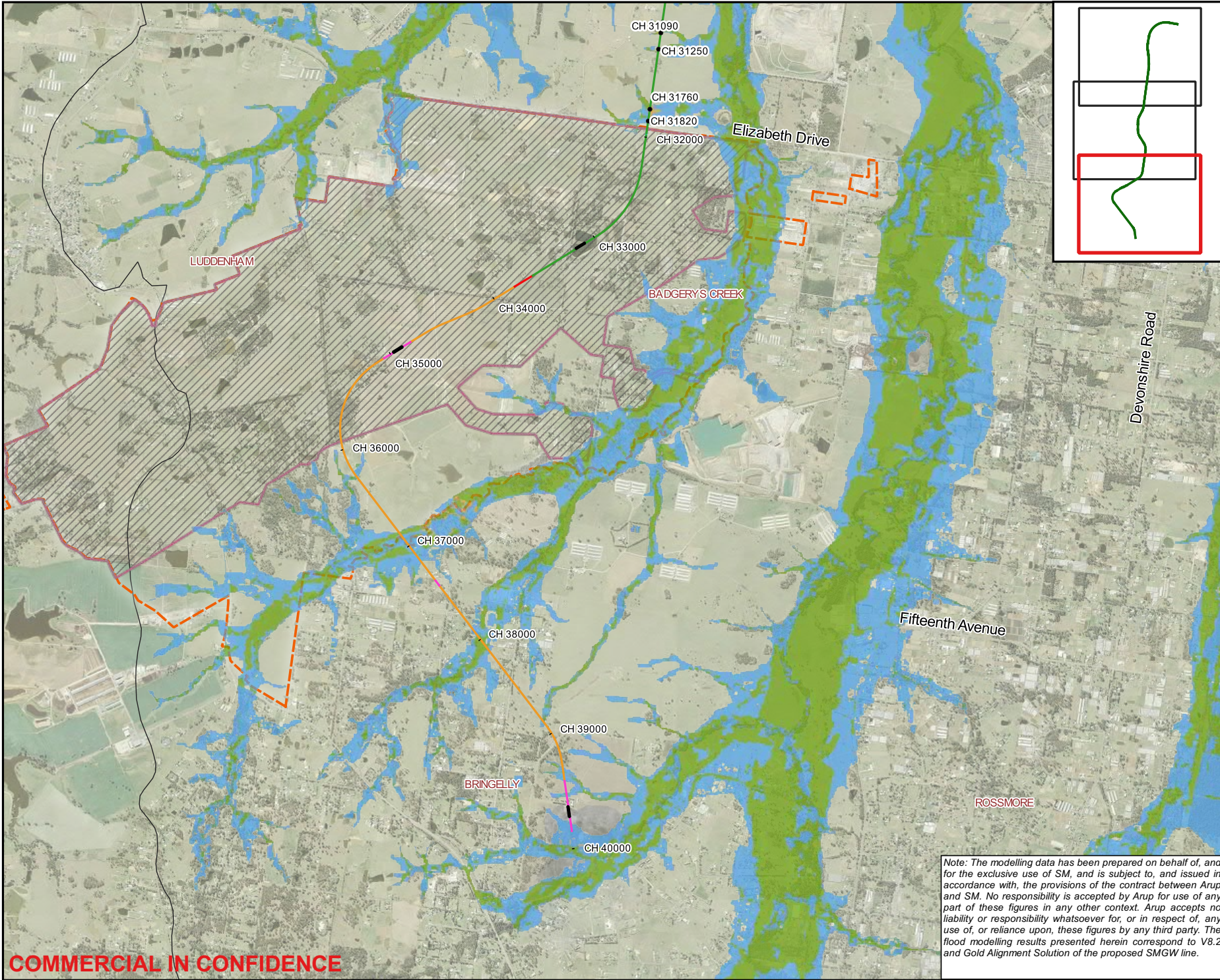
Job No  
**265549**

Figure No  
**D.32 (2 of 3)**

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**Legend**

**Change in velocity**

- Base & Definition Design:  $V < 1$  m/s
- Base:  $V > 1$  m/s & Definition Design:  $V > 1$  m/s
- Base:  $V < 20\%$  increase
- Base:  $V > 1$  m/s & Definition Design:  $V > 20\%$  increase
- Culverts

- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Client  
**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - PMF Change in Velocity**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

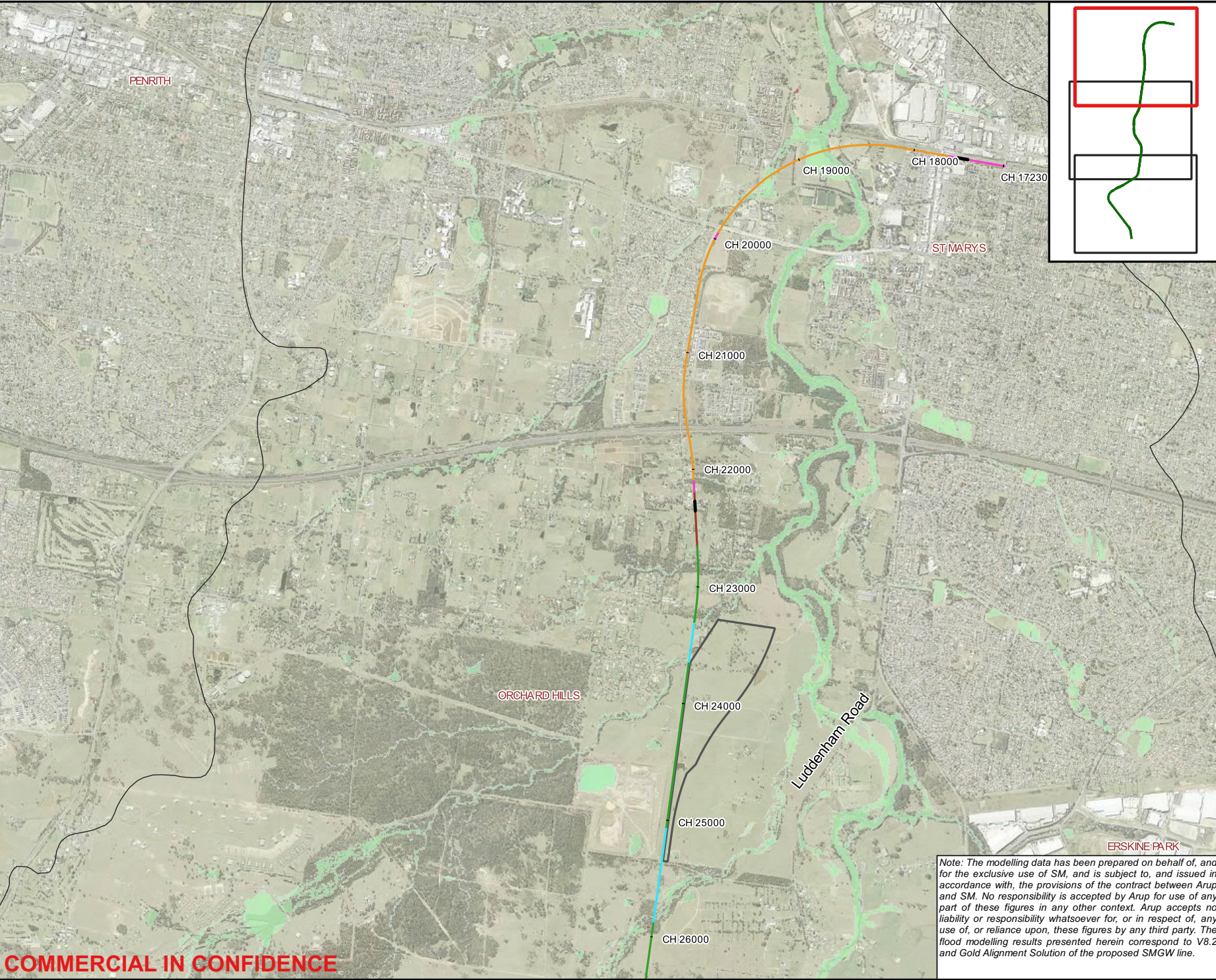
Job No  
**265549**

Figure No  
**D.32 (3 of 3)**

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### Legend

#### Change in duration of inundation

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Drive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabilizing Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500 m

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Job Title

SMGW TA Services

Figure Title

Design Case - 0.5EY Change in duration of inundation

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

Figure No

D.33 (1 of 3)

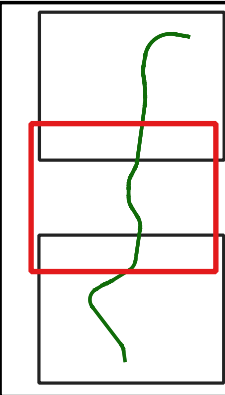
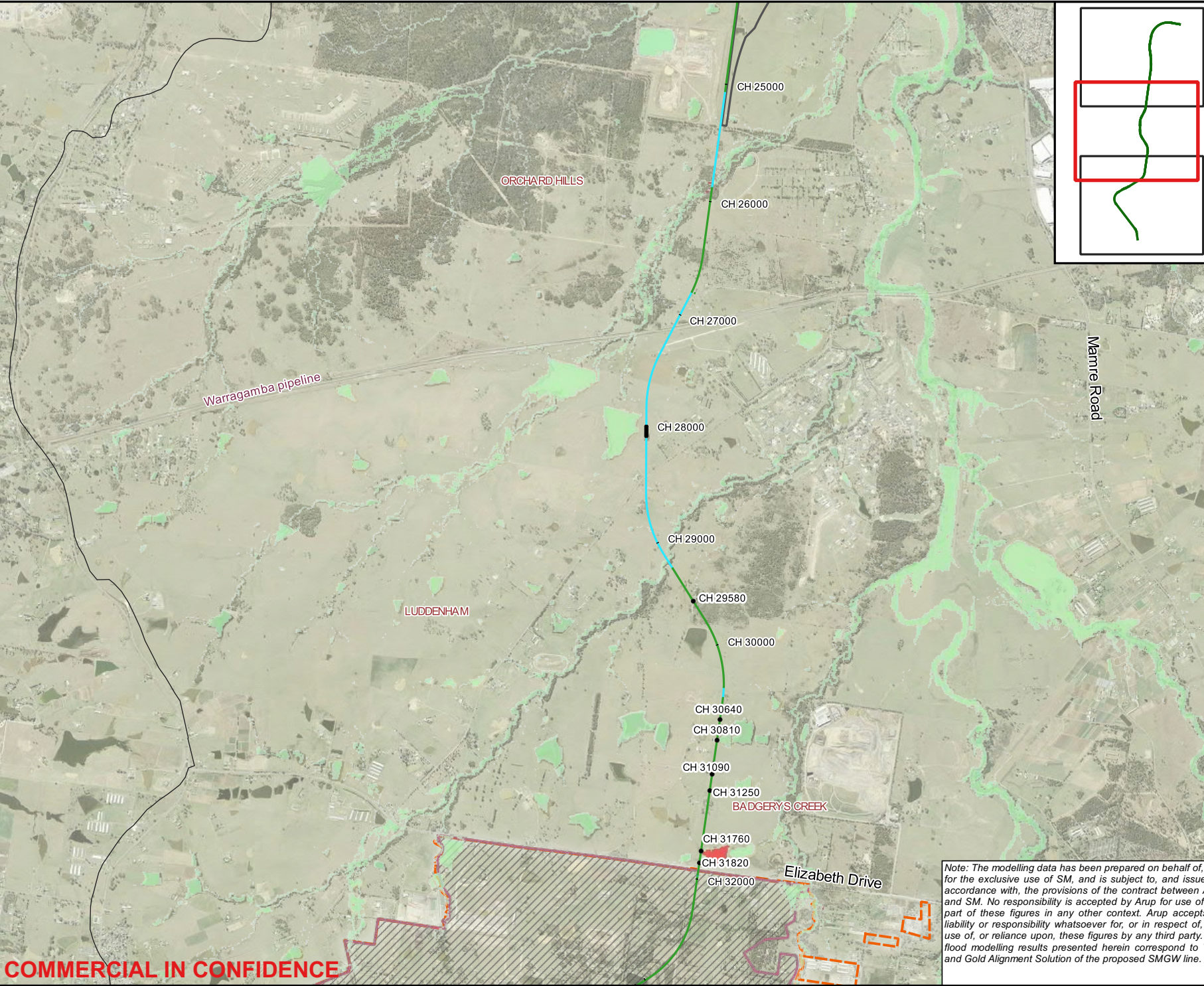
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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

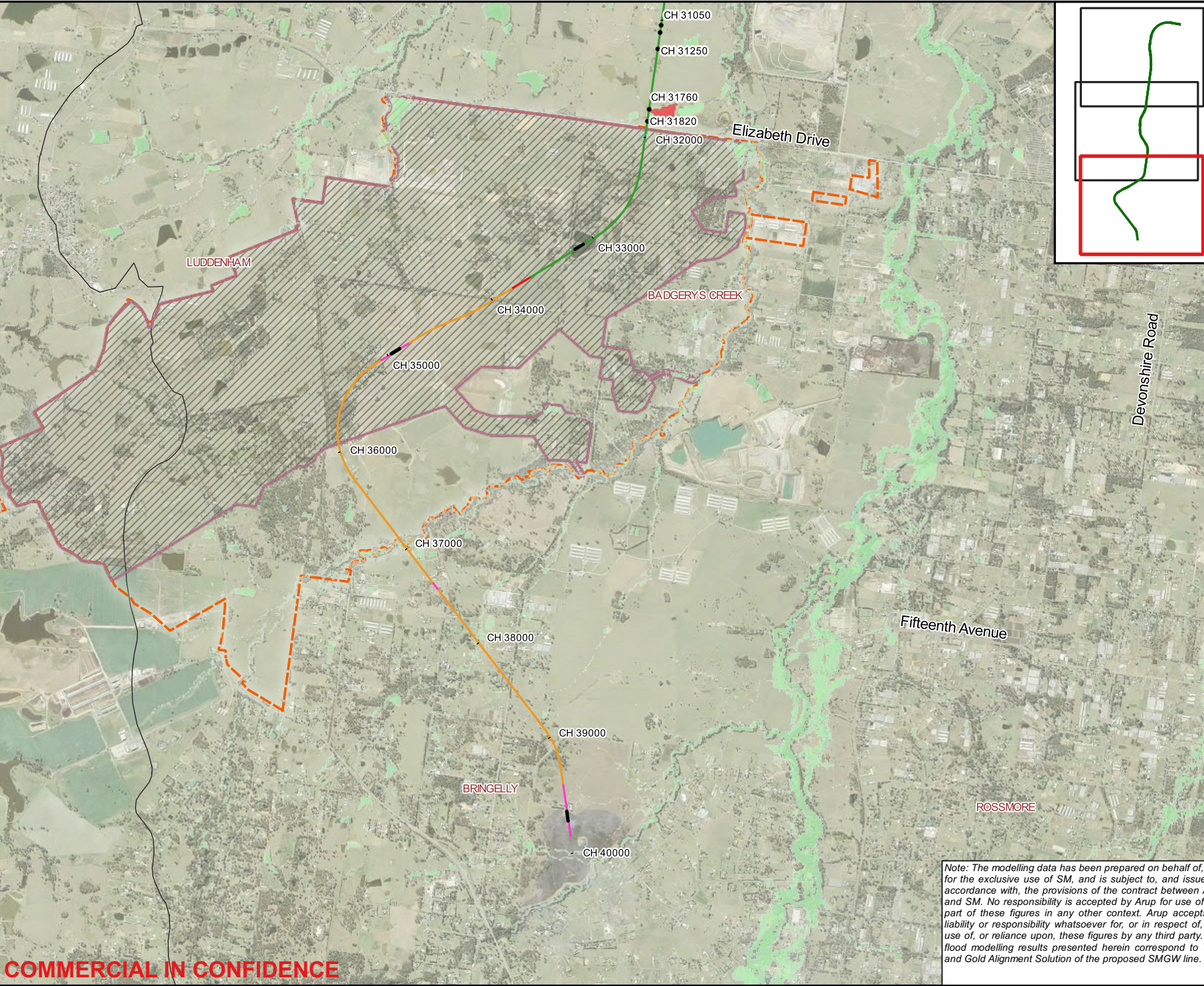
Job No  
**265549**

Figure No  
**D.33 (2 of 3)**

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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

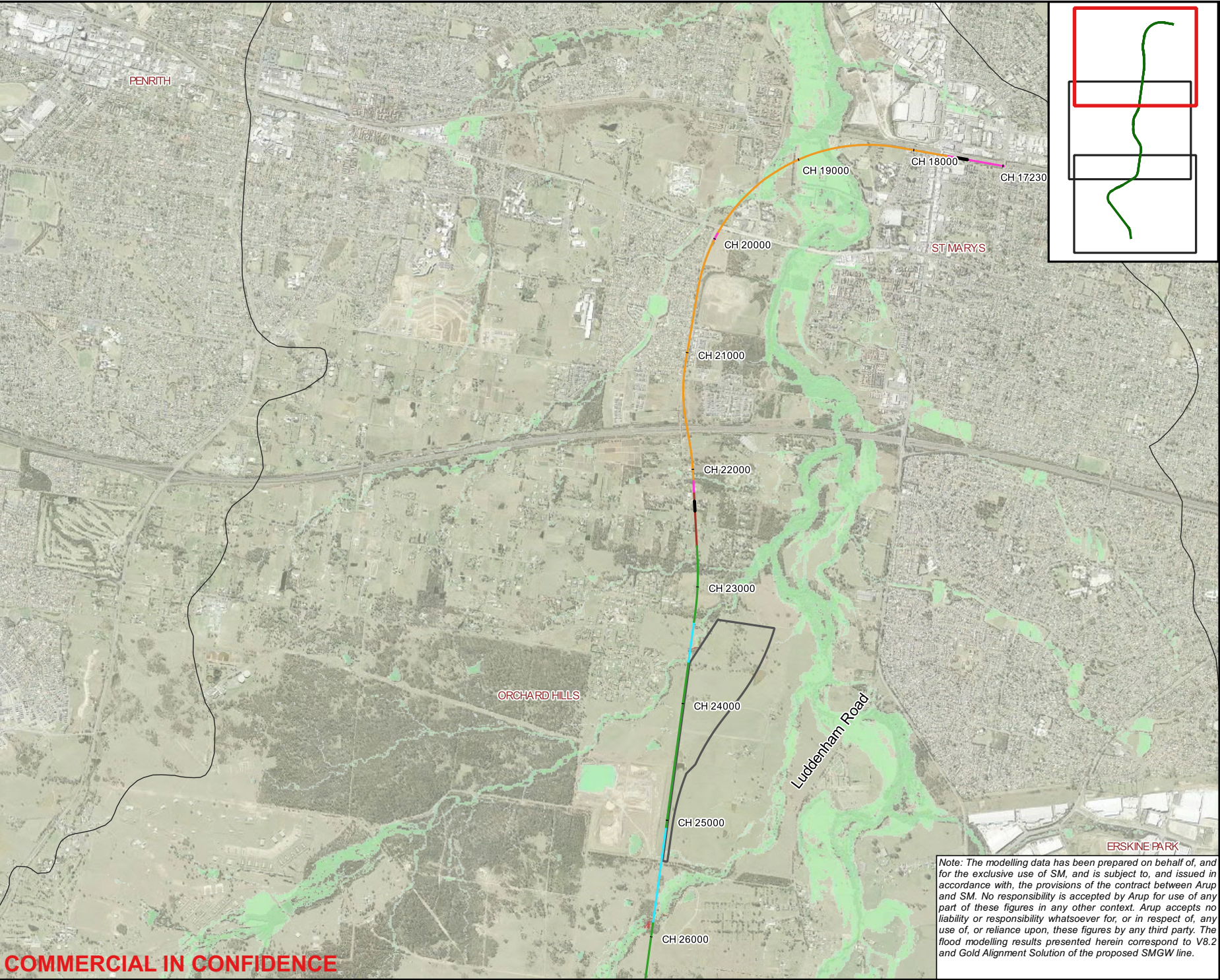
Job No  
**265549**

Figure No  
**D.33 (3 of 3)**

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### Legend

#### Change in duration of inundation

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

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Job Title

SMGW TA Services

Figure Title

Design Case - 0.2EY Change in duration of inundation

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

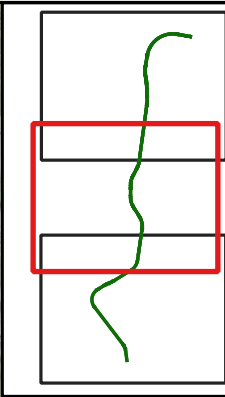
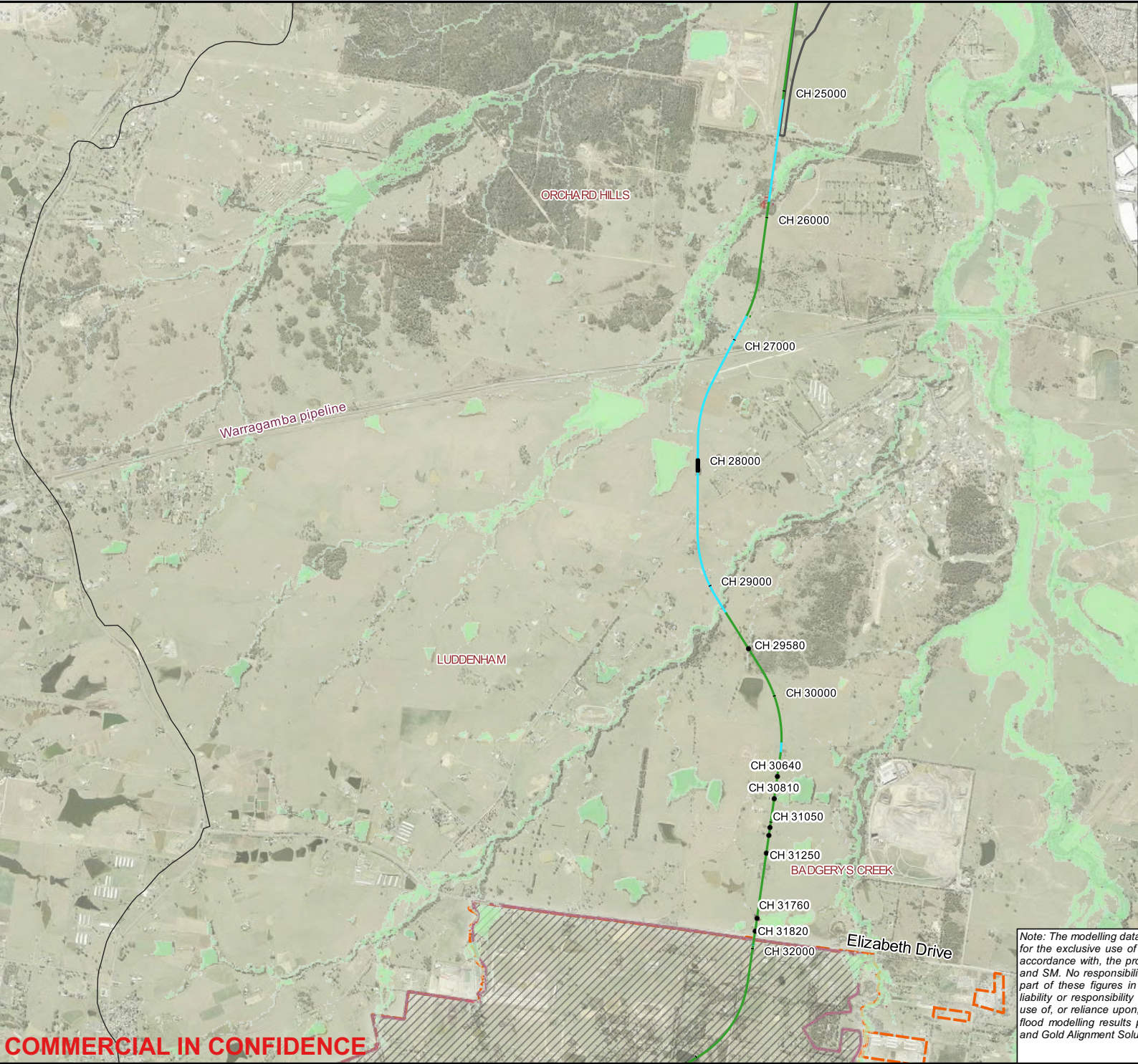
Figure No

D.34 (1 of 3)

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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

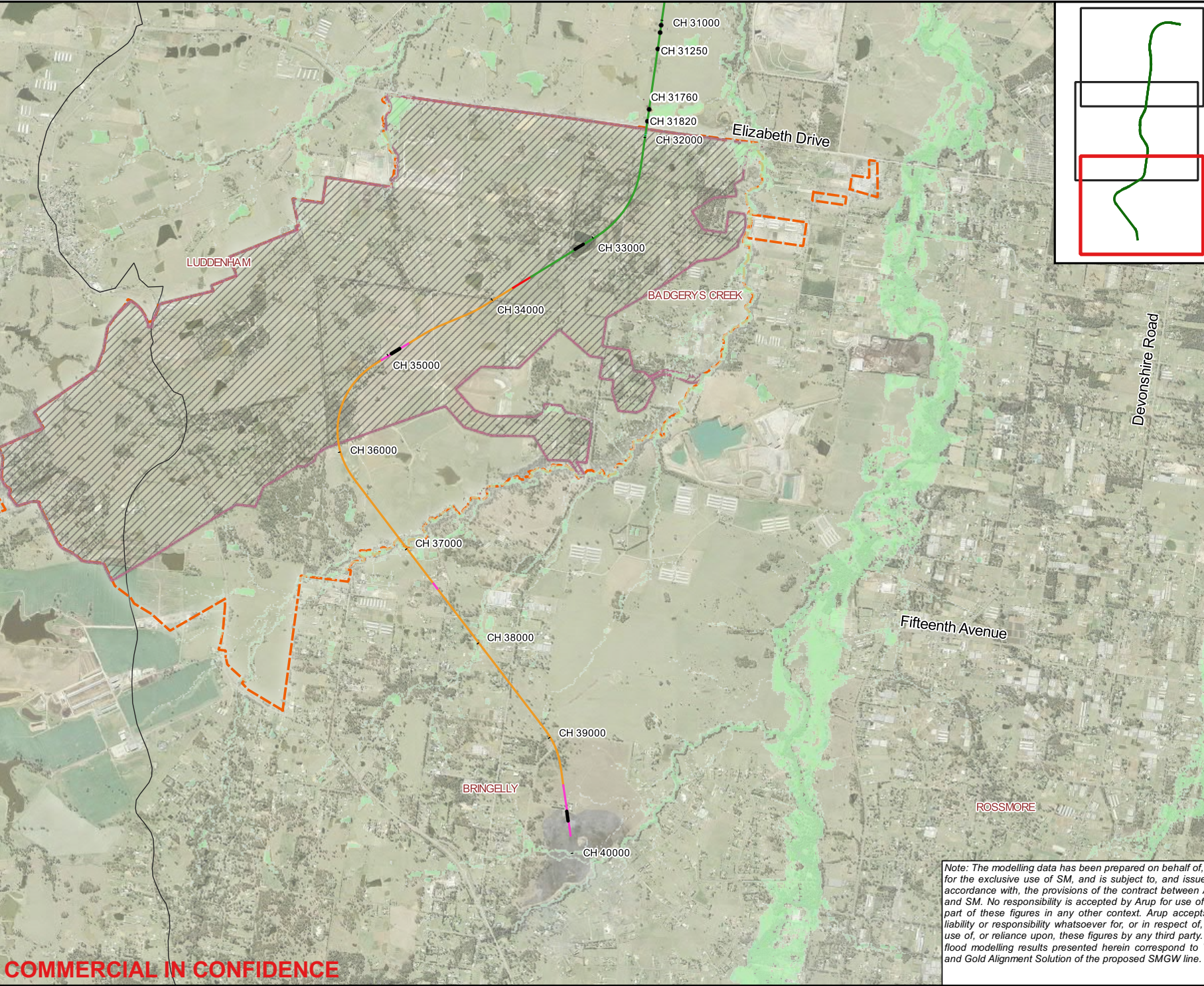
Coordinate System  
**GDA 1994 MGA Zone 56**

Job No  
**265549**

Figure No  
**D.34 (2 of 3)**

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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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**Sydney Metro**

Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Change in duration of inundation**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

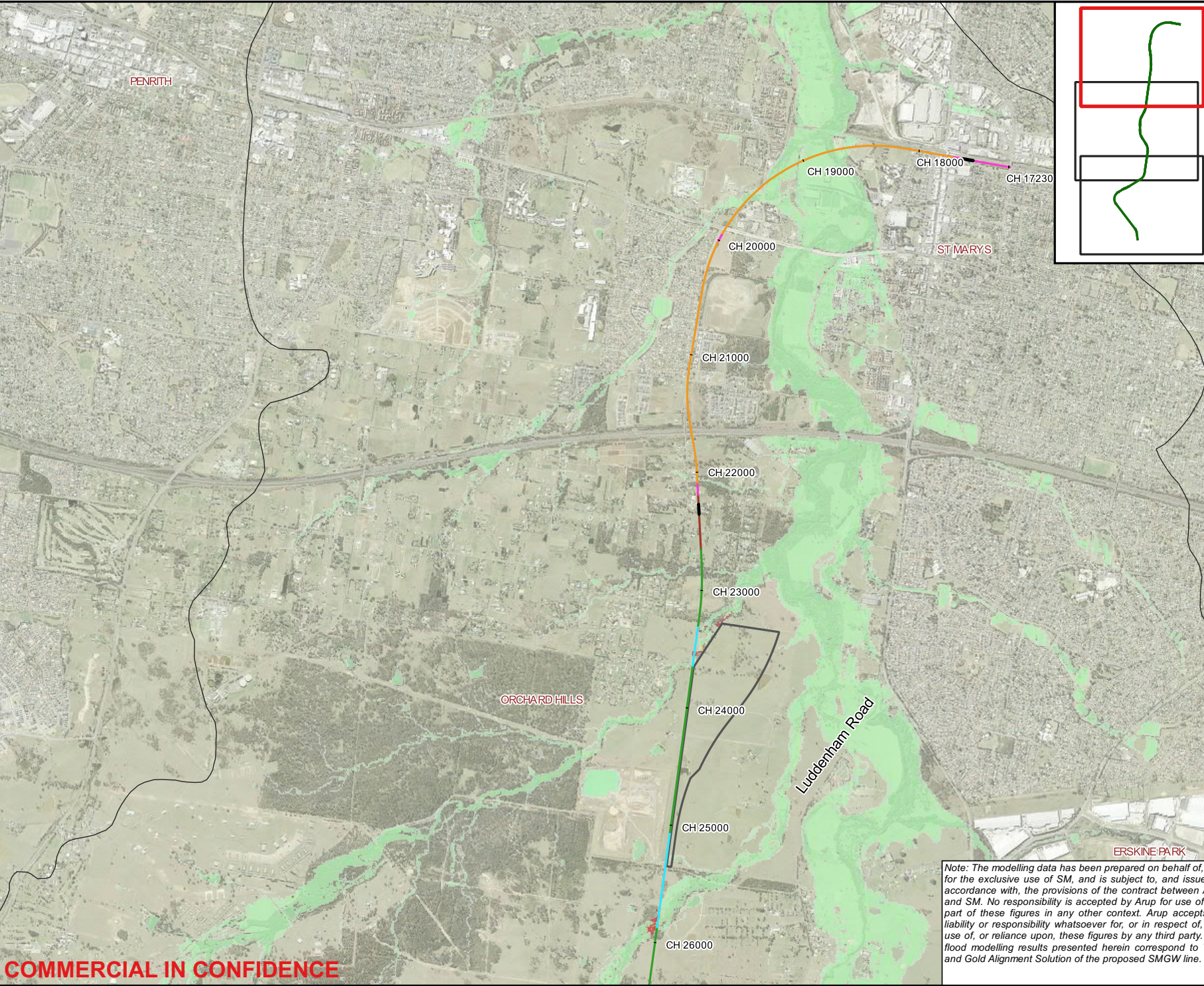
Figure No

**D.34 (3 of 3)**

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**Legend**  
**Change in duration of inundation**  

<= 10% increase in duration

> 10% increase in duration

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Change in duration of inundation**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

Figure No

**D.35 (1 of 3)**

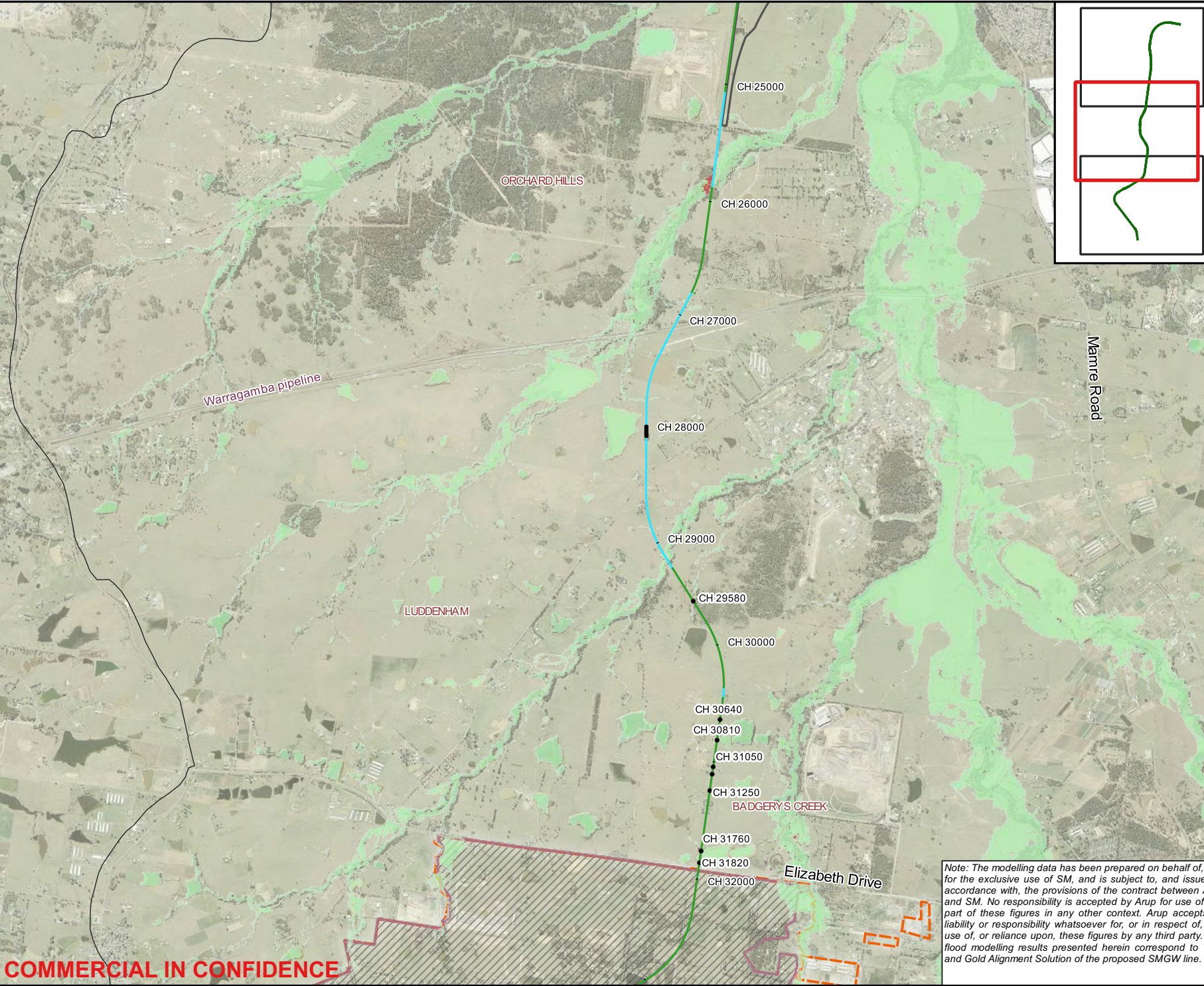
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**Legend**

**Change in duration of inundation**

<= 10% increase in duration

> 10% increase in duration

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

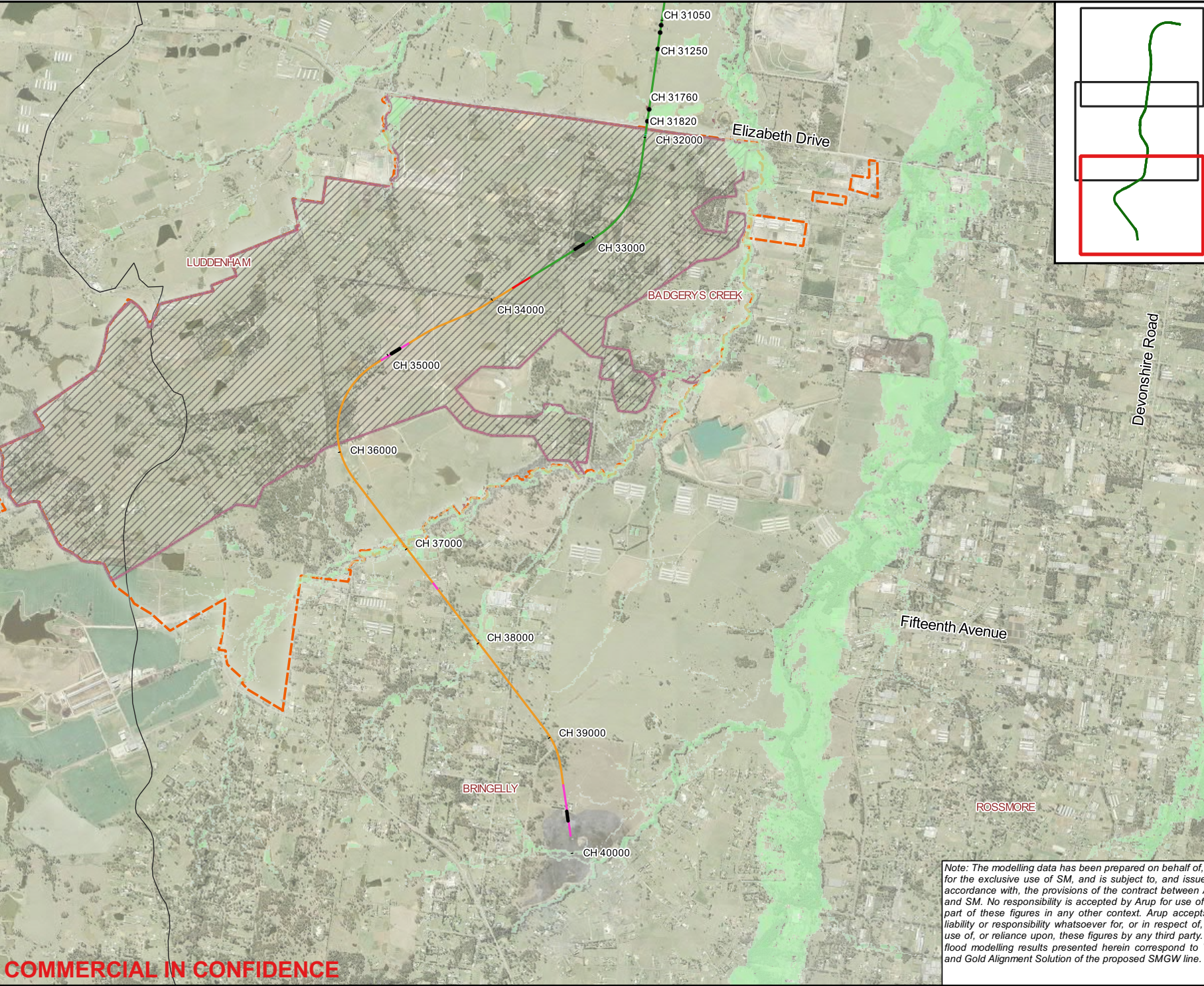
Job No  
**265549**

Figure No  
**D.35 (2 of 3)**

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Legend

Change in duration of inundation

<= 10% increase in duration

> 10% increase in duration

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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Job Title

SMGW TA Services

Figure Title

Design Case - 5% AEP Change in duration of inundation

Scale at A3

1:30000

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

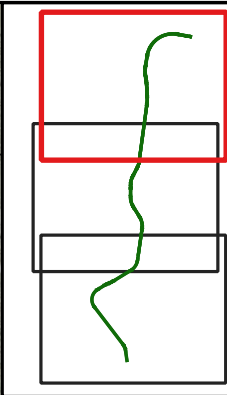
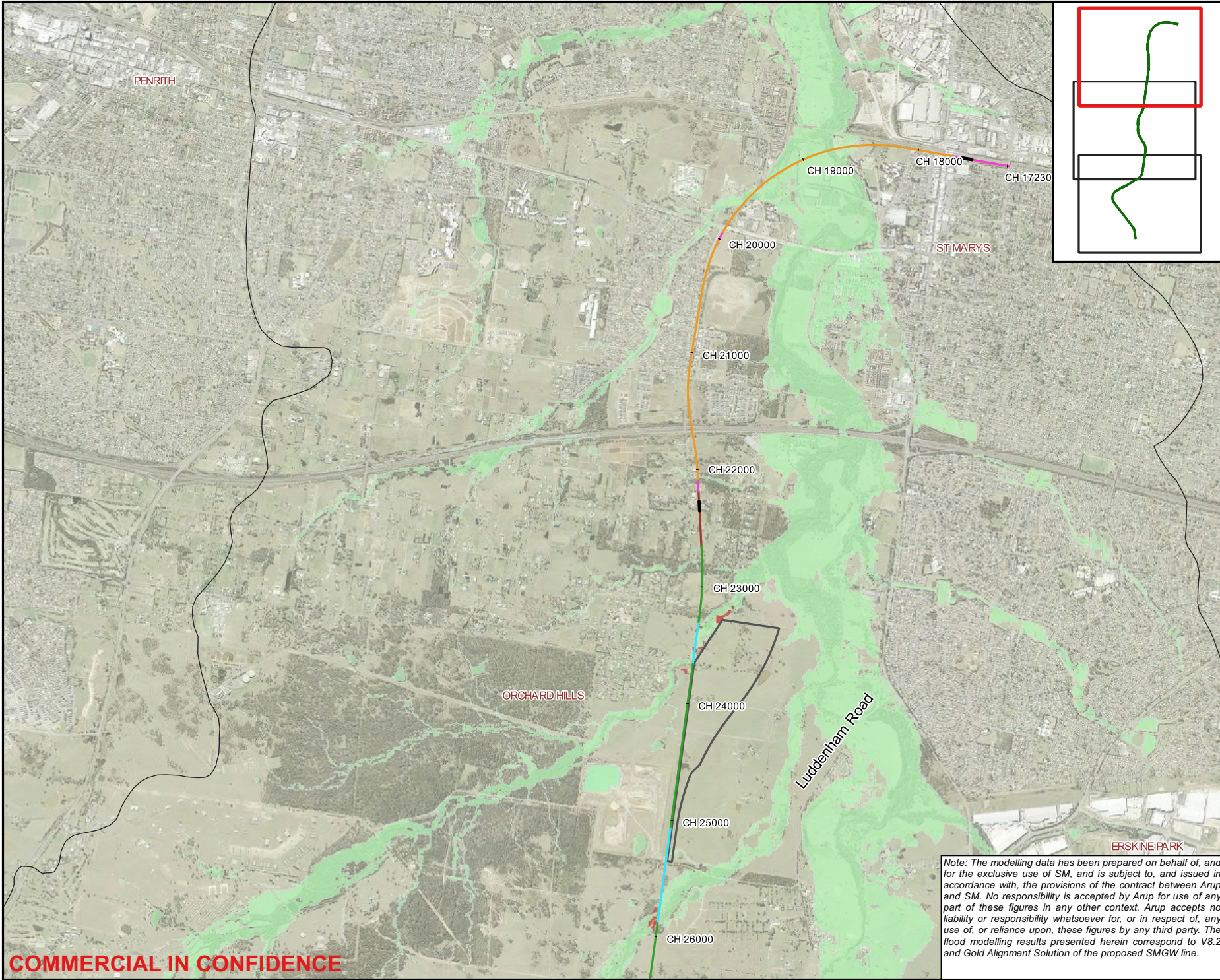
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### Legend

#### Change in duration of inundation

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

SMGW TA Services

Figure Title

Design Case - 1% AEP Change in duration of inundation

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

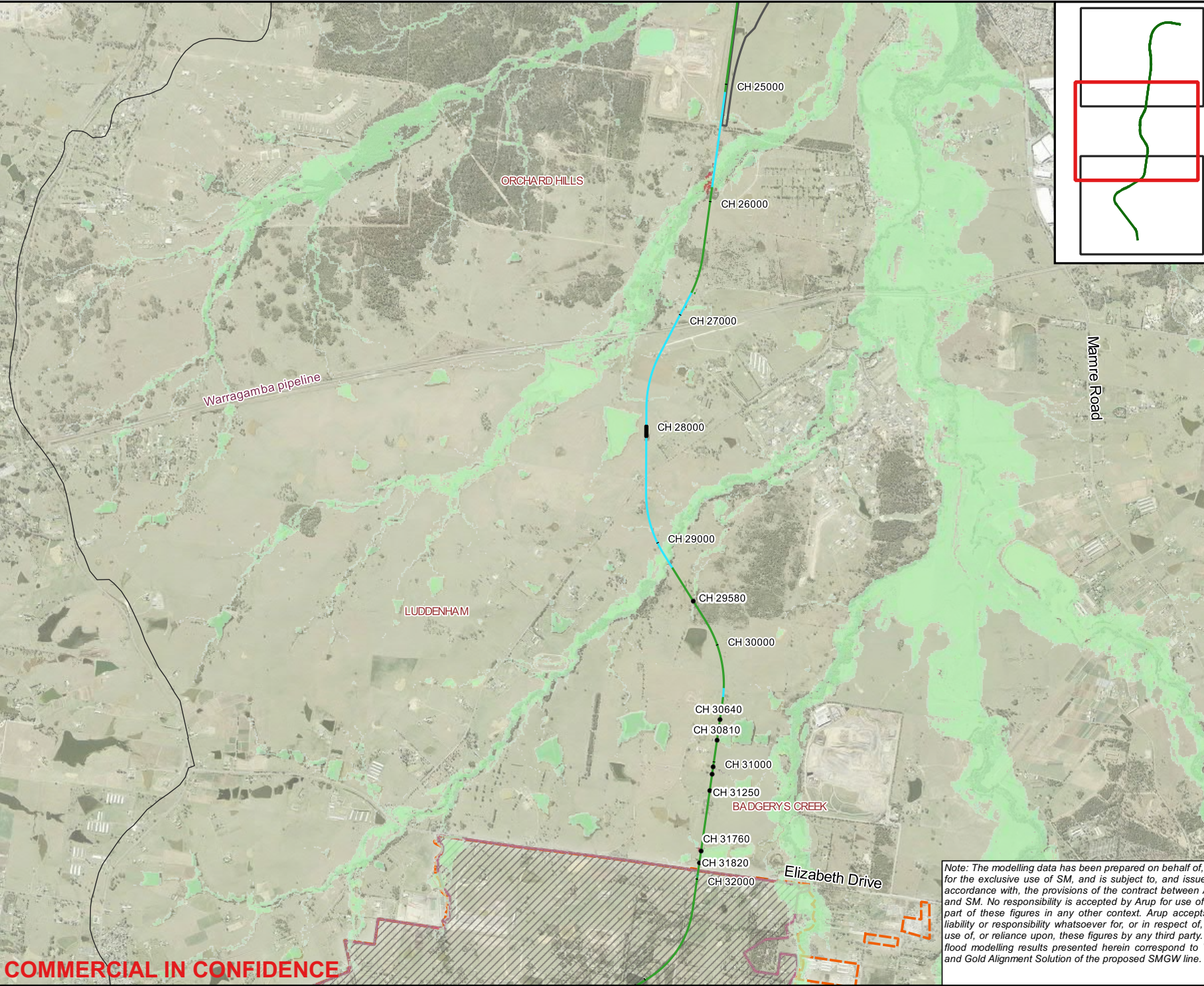
Figure No

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**Legend**

**Change in duration of inundation**

<= 10% increase in duration

> 10% increase in duration

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

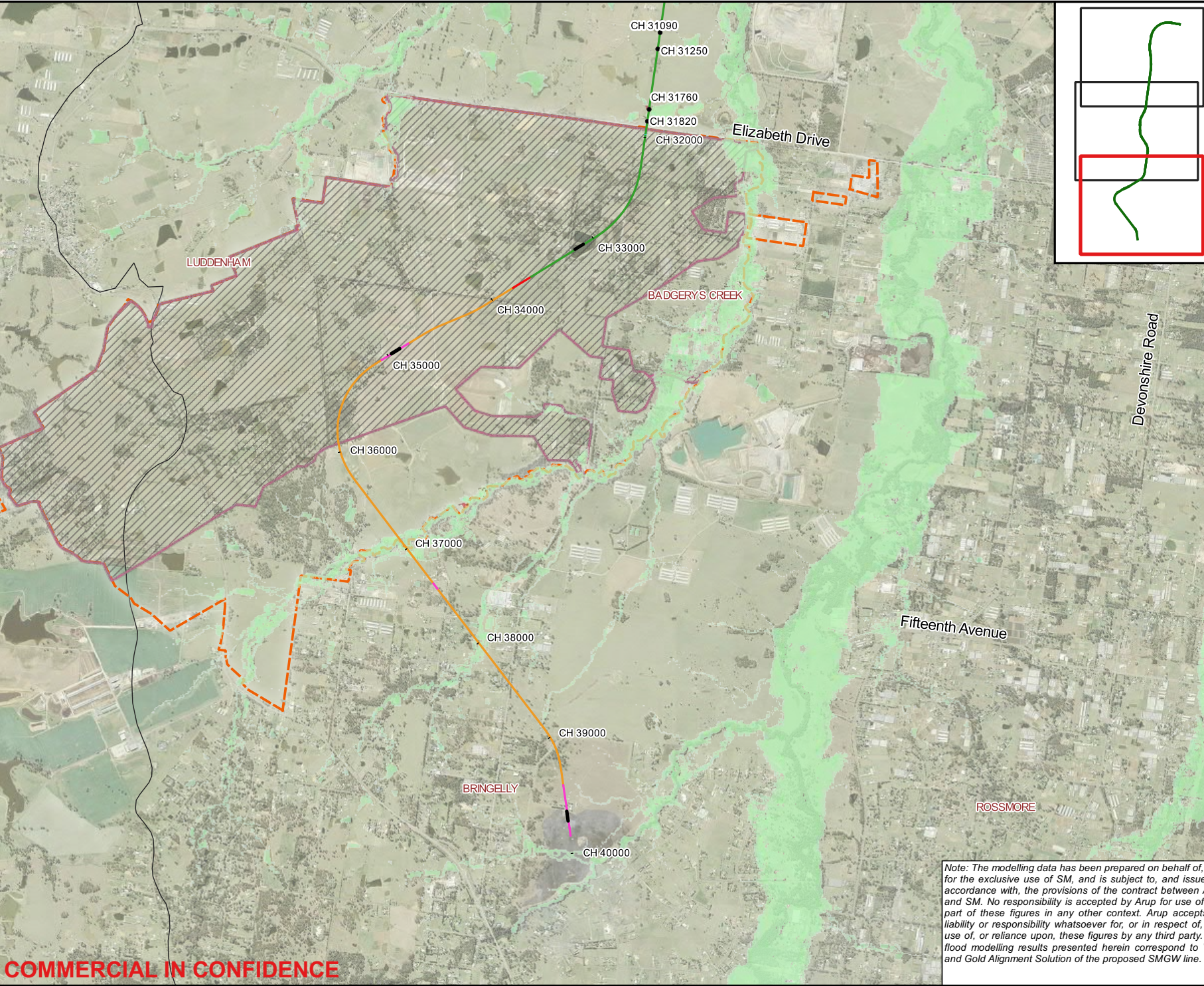
Job No  
**265549**

Figure No  
**D.36 (2 of 3)**

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**Legend**

**Change in duration of inundation**

<= 10% increase in duration

> 10% increase in duration

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - 1% AEP Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

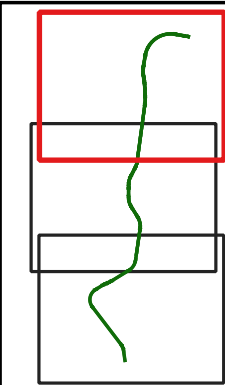
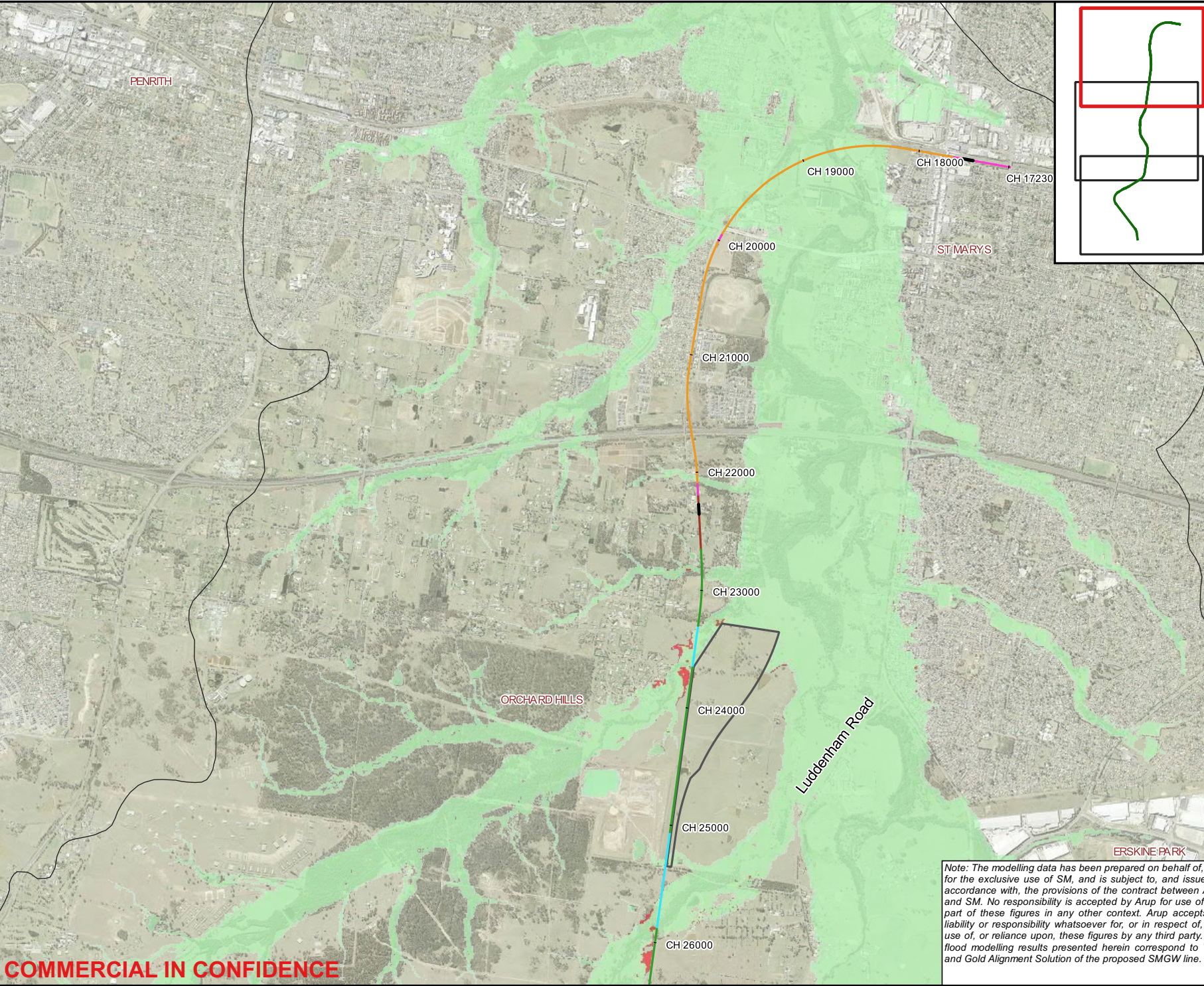
Job No  
**265549**

Figure No  
**D.36 (3 of 3)**

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**COMMERCIAL IN CONFIDENCE**





**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

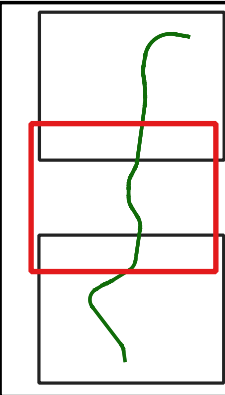
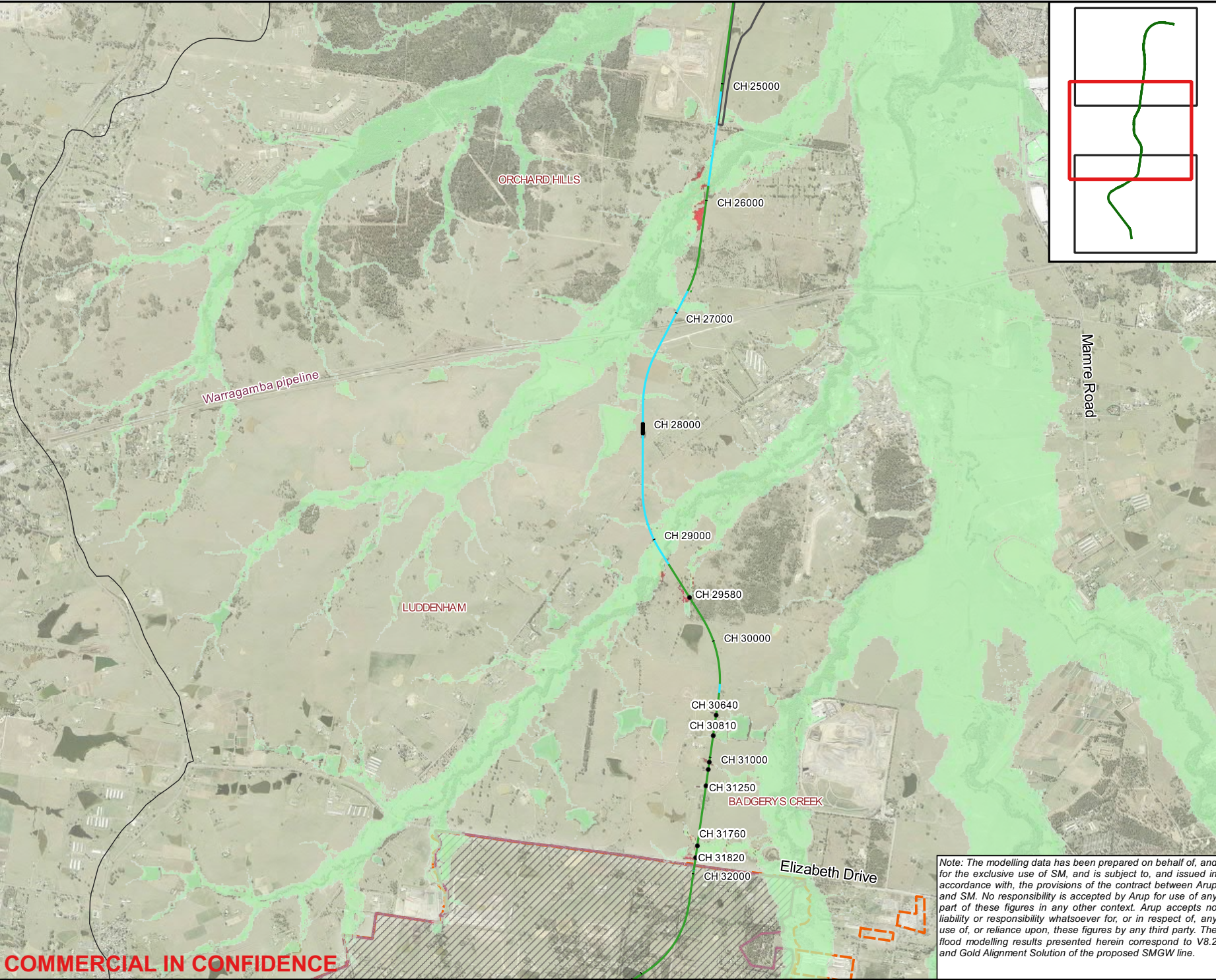
Job No  
**265549**

Figure No  
**D.37 (1 of 3)**

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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Job Title

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Figure Title  
**Design Case - PMF Change in duration of inundation**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

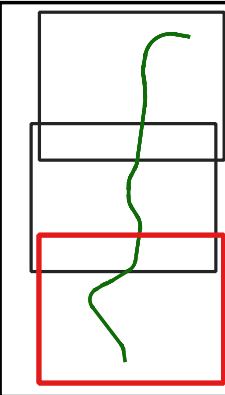
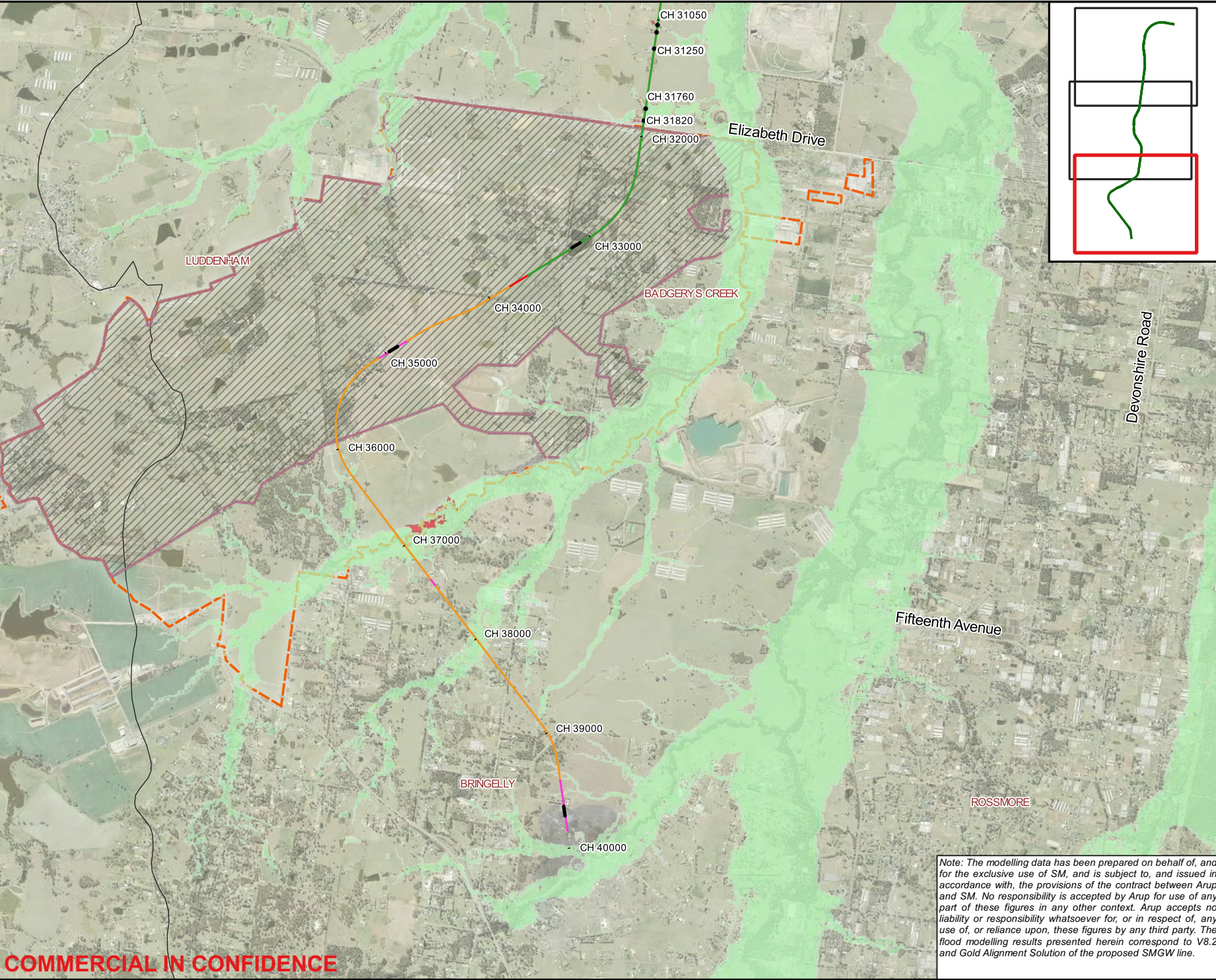
Job No  
**265549**

Figure No  
**D.37 (2 of 3)**

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**Legend**

**Change in duration of inundation**

- <= 10% increase in duration
- > 10% increase in duration

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title  
**Design Case - PMF Change in duration of inundation**

Scale at A3  
**1:30000**

Coordinate System  
**GDA 1994 MGA Zone 56**

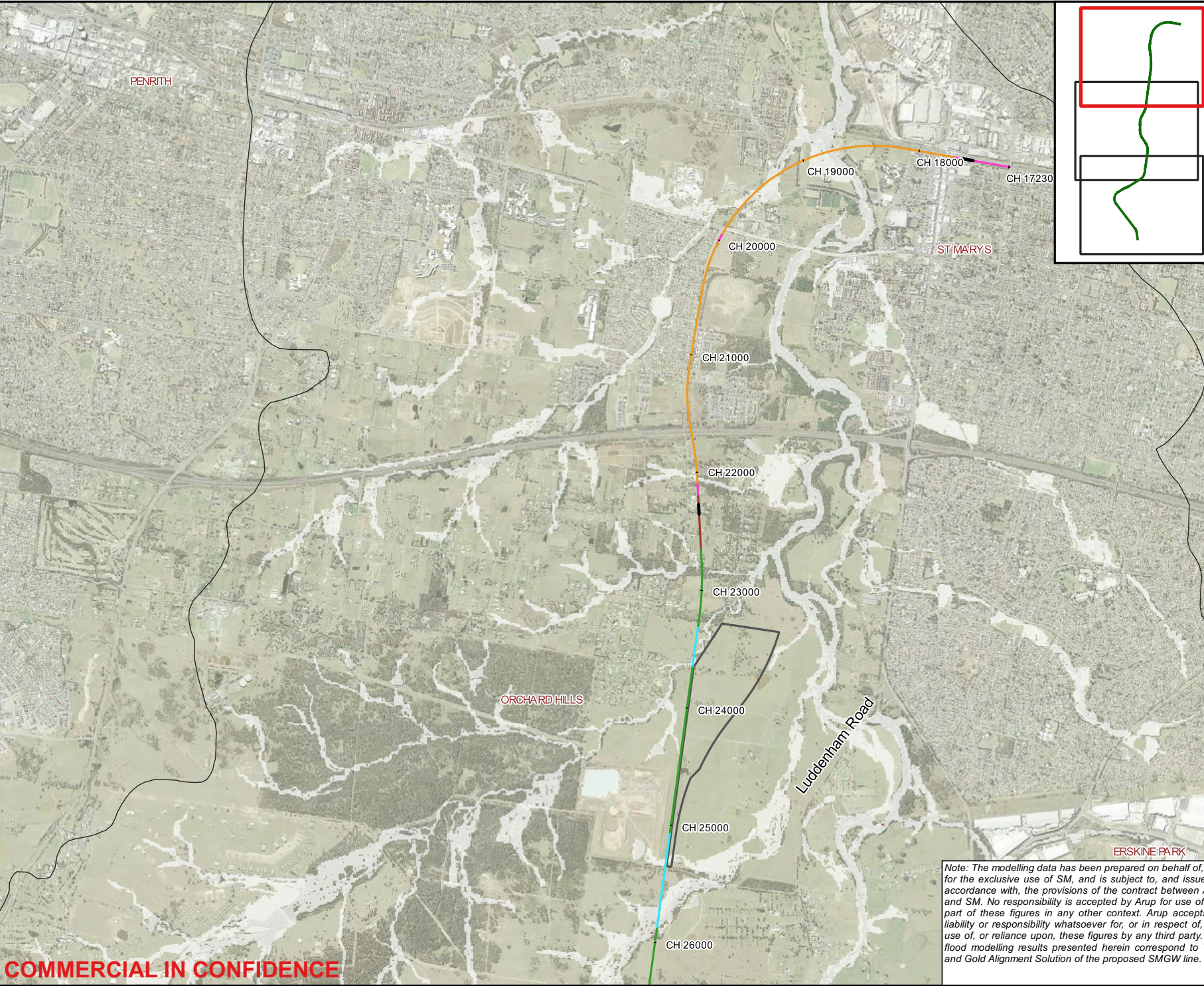
Job No  
**265549**

Figure No  
**D.37 (3 of 3)**

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**Legend**

Change in flood hazard category

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.5EY Change in Provisional flood hazard**

Scale at A3 <b>1:30000</b>	Figure Status <b>Issued for information</b>
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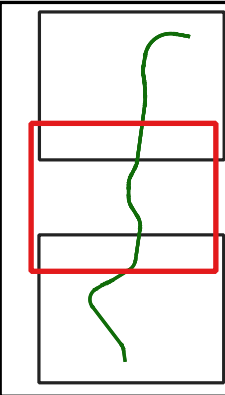
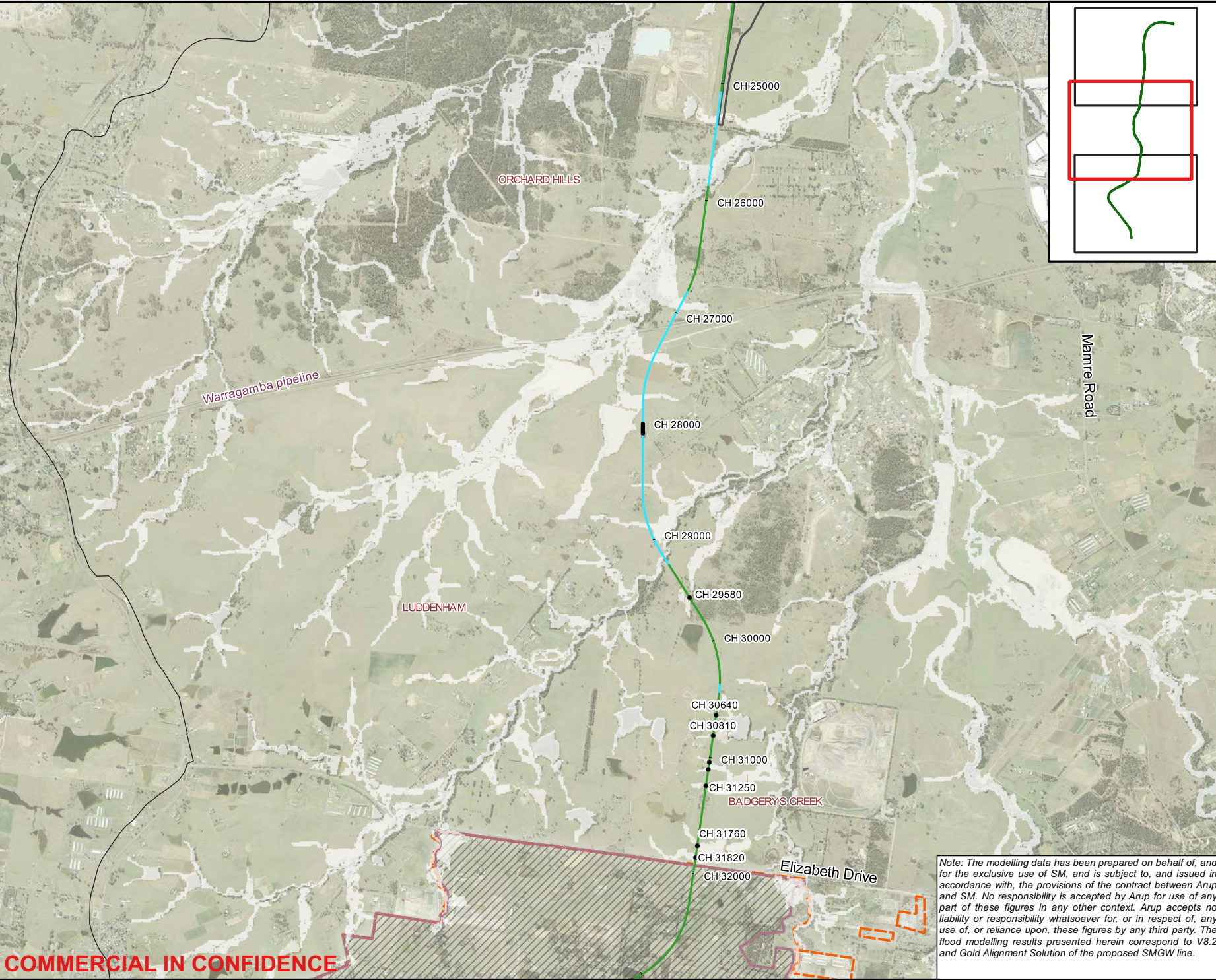
Coordinate System  
**GDA 1994 MGA Zone 56**

Job No <b>265549</b>	Figure No <b>D.38 (1 of 3)</b>
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### Legend

**Change in flood hazard category**

- Increase in flood hazard category
- No change in flood hazard category
- Decrease in flood hazard category

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

m

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Job Title

SMGW TA Services

Figure Title

Design Case - 0.5EY Change in Provisional flood hazard

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

265549

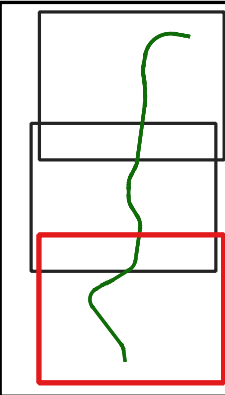
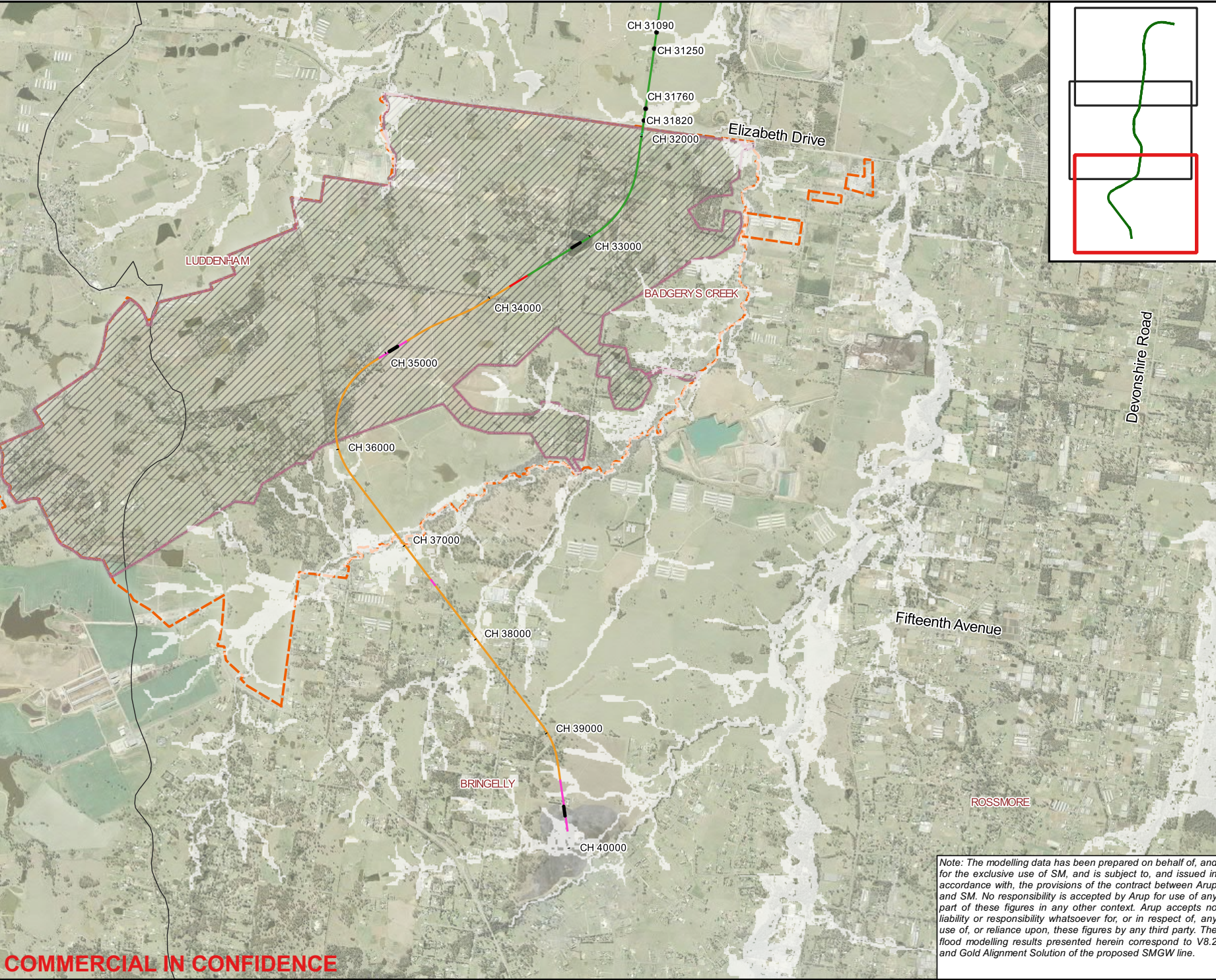
Figure No

D.38 (2 of 3)

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**Legend**  
**Change in flood hazard category**  

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.5EY Change in Provisional flood hazard**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

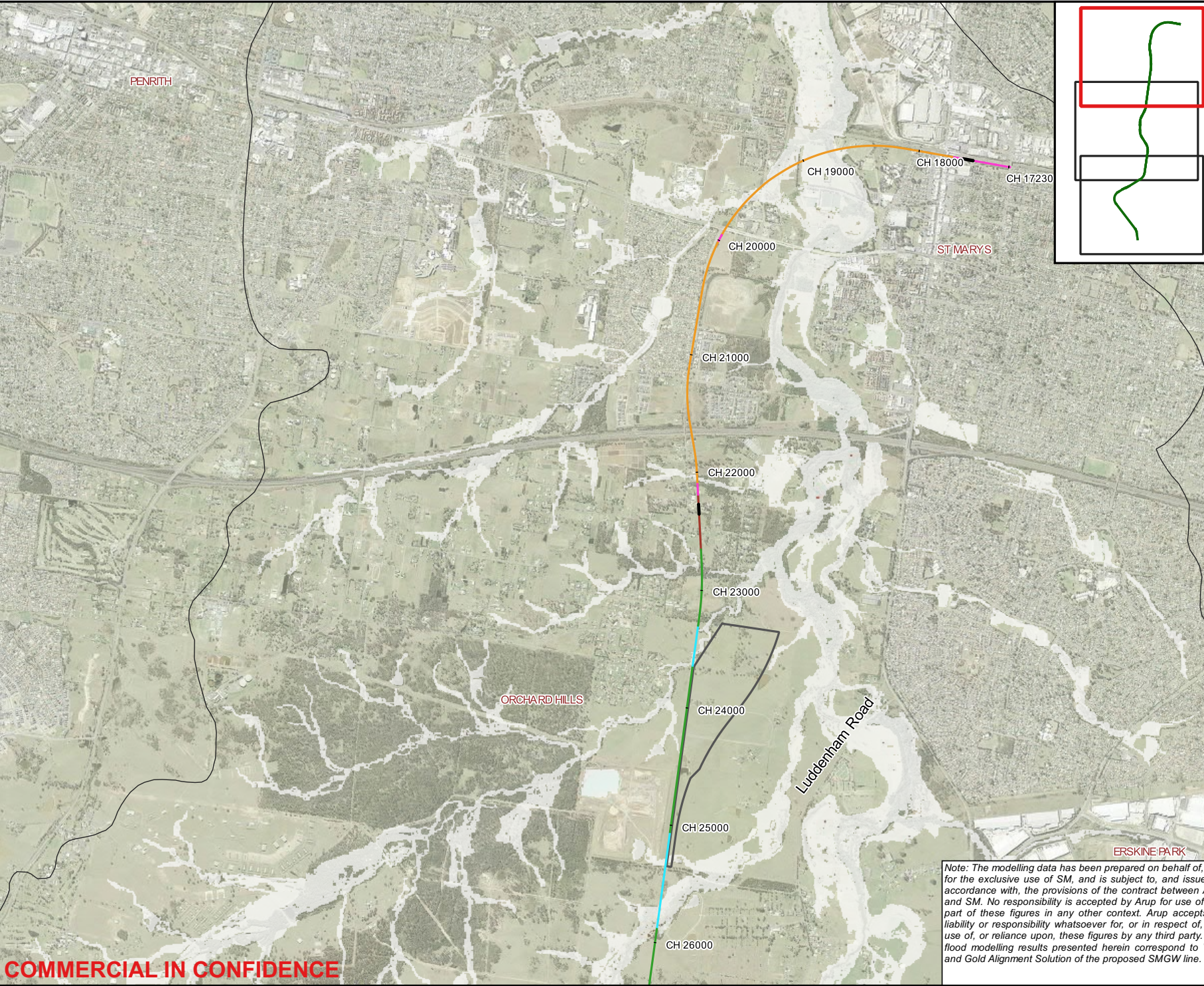
Figure No

**D.38 (3 of 3)**

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**Legend**

Change in flood hazard category

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 0.2EY Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

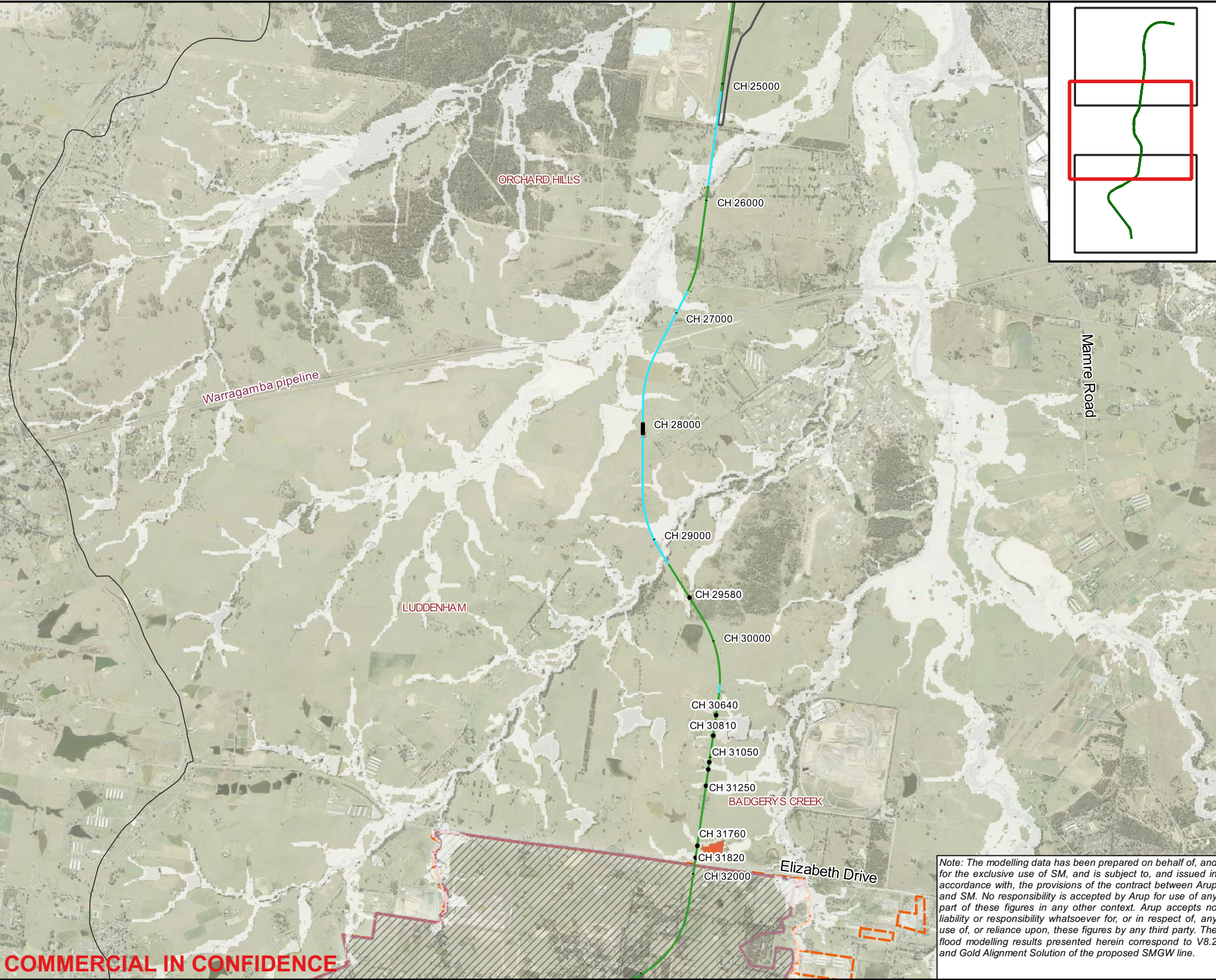
Job No  
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Figure No  
**D.39 (1 of 3)**

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### Legend

**Change in flood hazard category**

- Increase in flood hazard category
- No change in flood hazard category
- Decrease in flood hazard category

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

050010001500

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Job Title

SMGW TA Services

Figure Title

Design Case - 0.2EY Change in Provisional flood hazard

Scale at A3

1:30000

Figure Status

Issued for information

Coordinate System

GDA 1994 MGA Zone 56

Job No

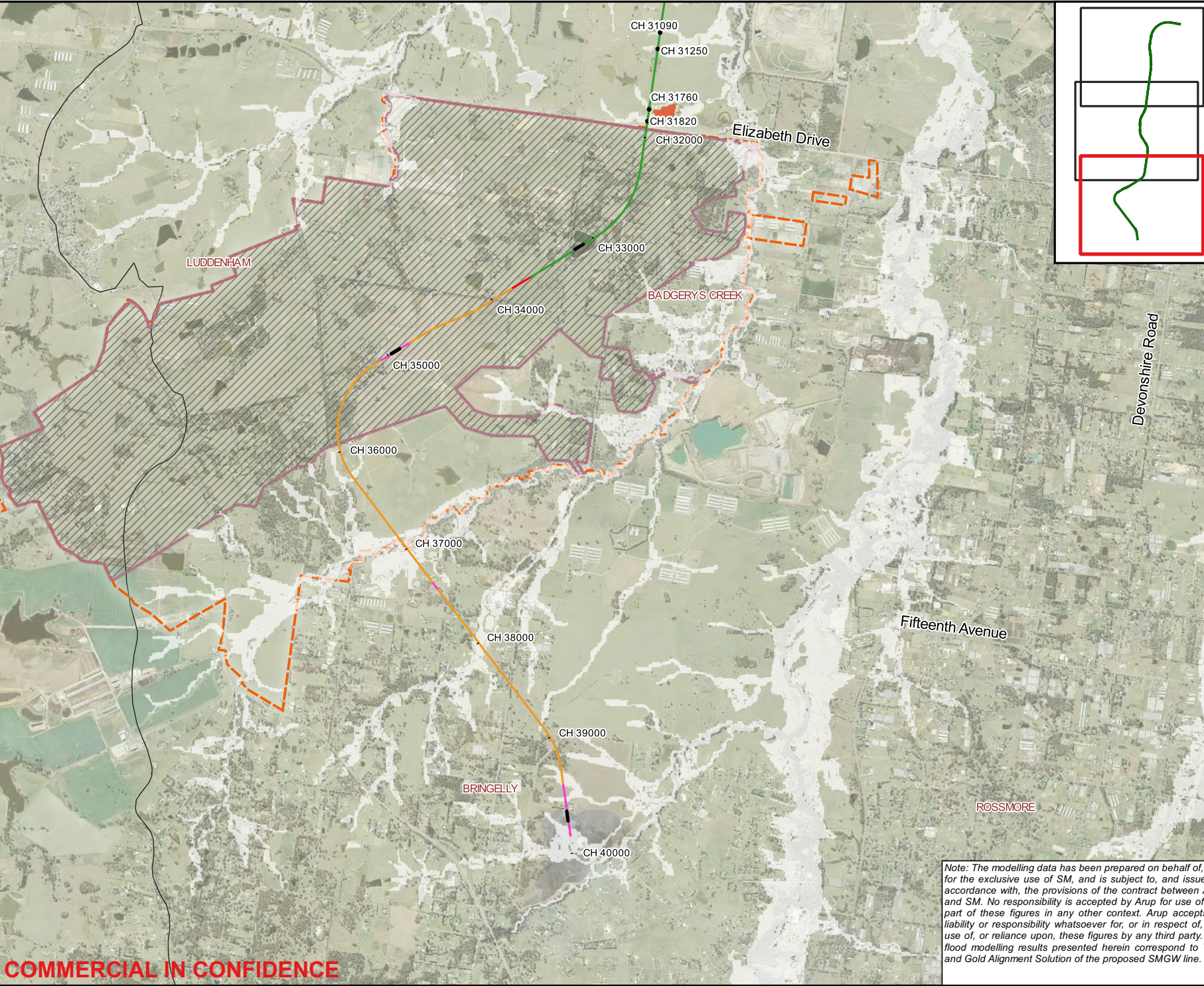
265549

Figure No

D.39 (2 of 3)

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**Legend**

Change in flood hazard category

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 0.2EY Change in Provisional flood hazard**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

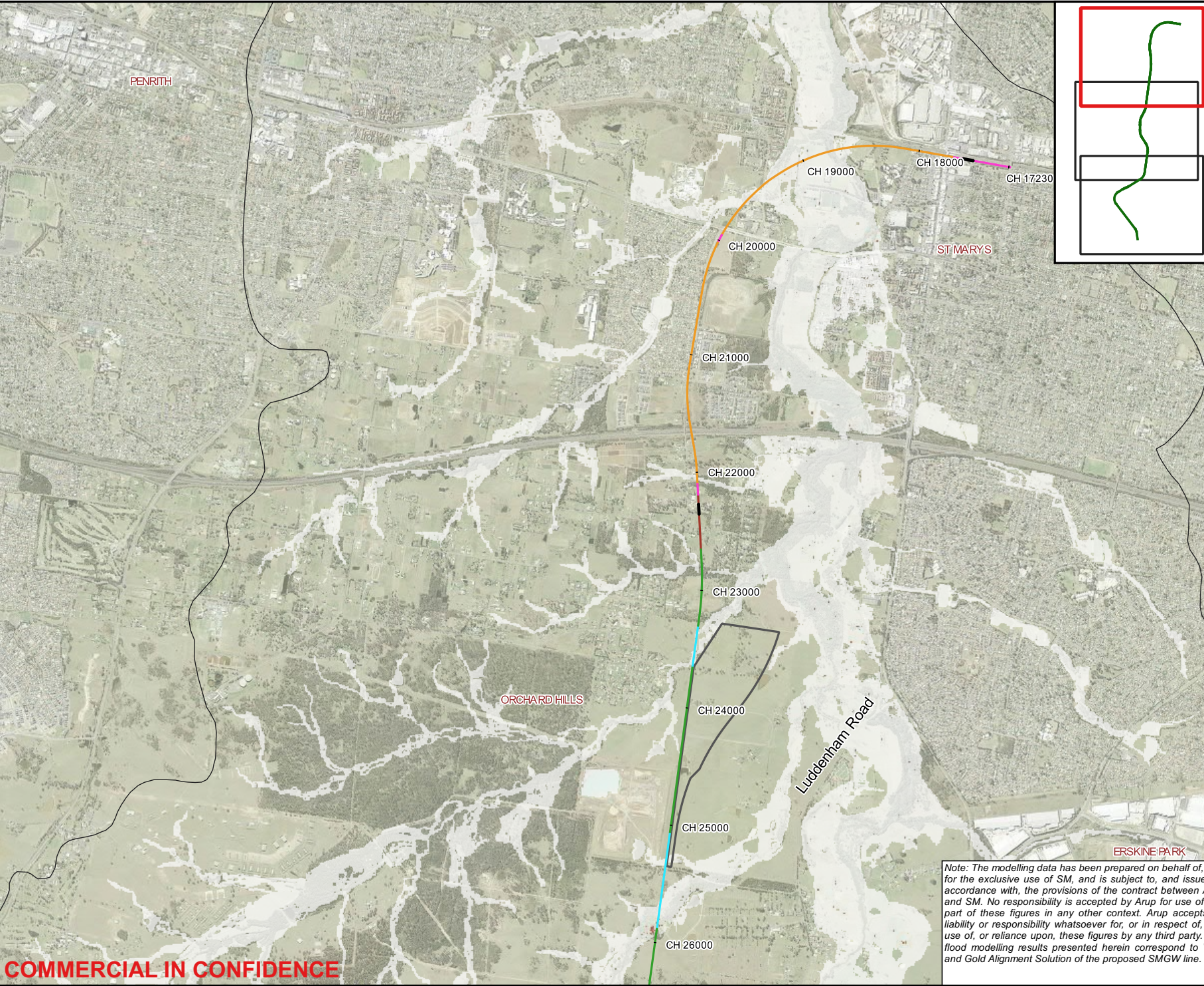
Figure No

**D.39 (3 of 3)**

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**Legend**

Change in flood hazard category

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0

500

1000

1500 m

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**Sydney Metro**

Job Title  
**SMGW TA Services**

Figure Title  
**Design Case - 5% AEP Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

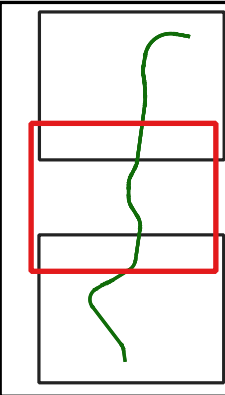
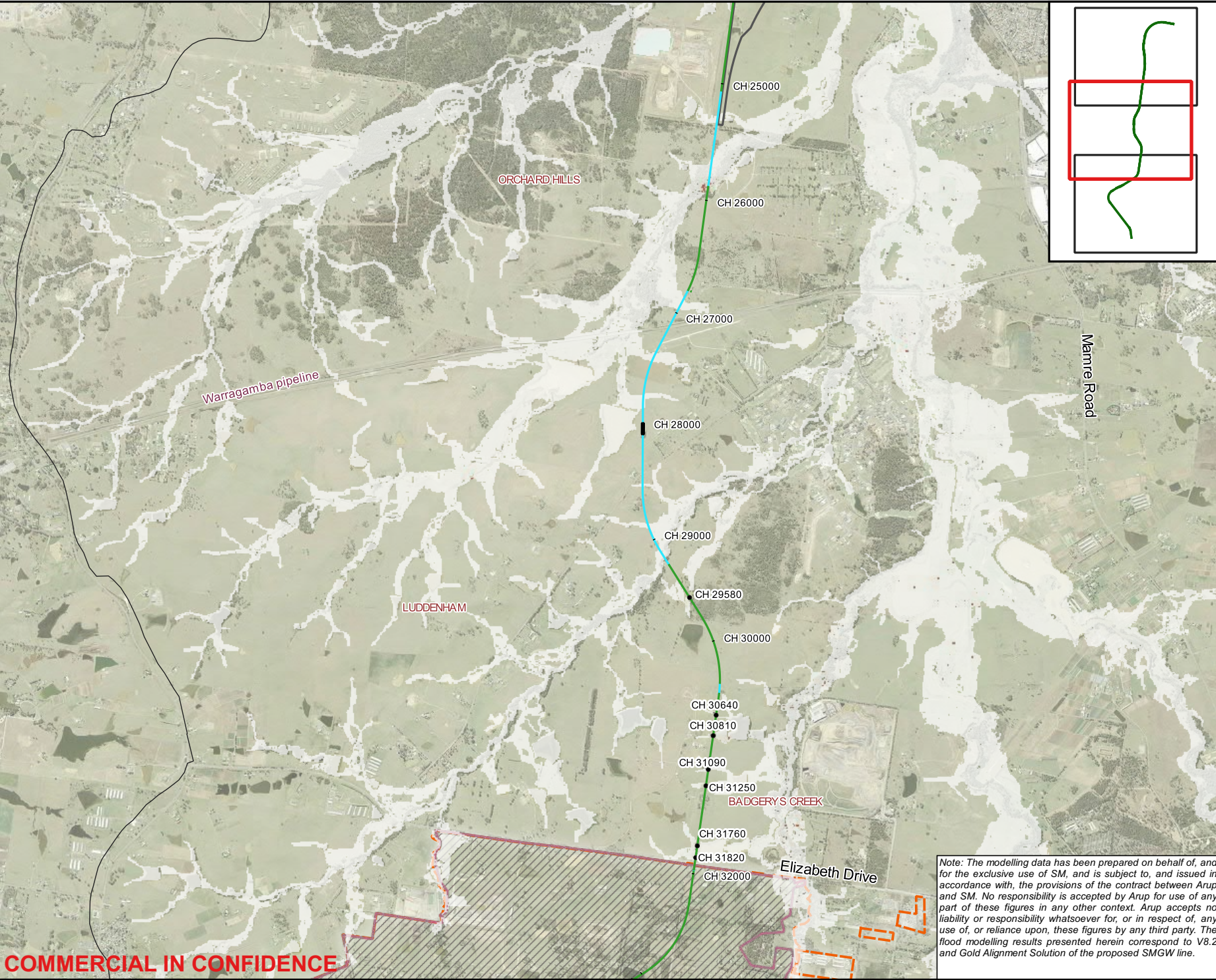
Job No  
**265549**

Figure No  
**D.40 (1 of 3)**

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**Legend**

**Change in flood hazard category**

- Increase in flood hazard category
- No change in flood hazard category
- Decrease in flood hazard category

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m

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Figure Title  
**Design Case - 5% AEP Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

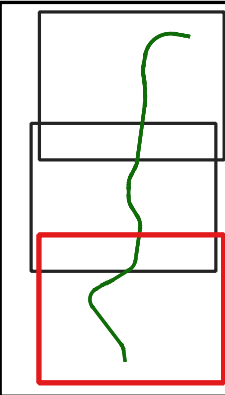
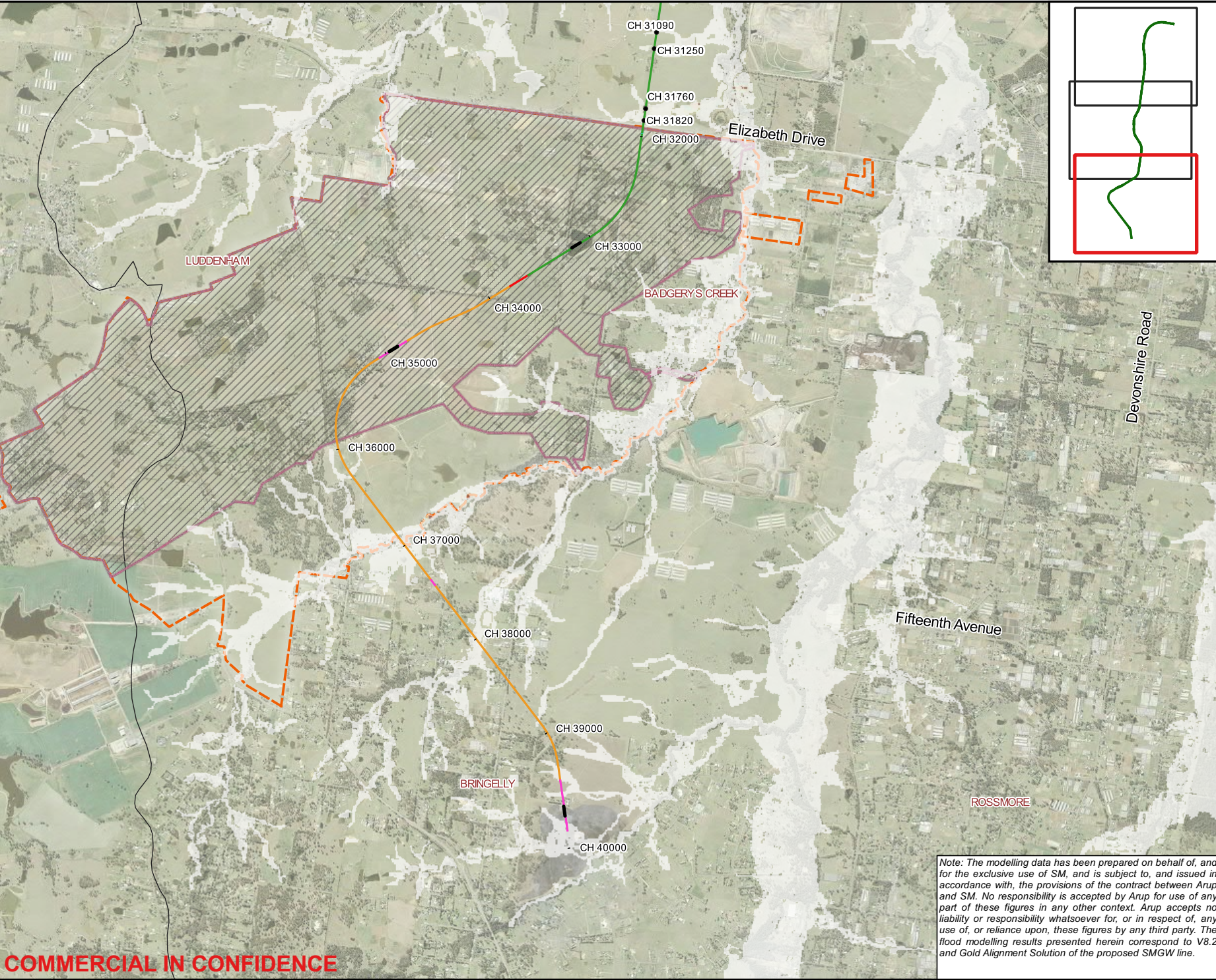
Job No  
**265549**

Figure No  
**D.40 (2 of 3)**

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- Legend**
- Change in flood hazard category**
- Increase in flood hazard category
  - No change in flood hazard category
  - Decrease in flood hazard category
- Culverts
  - WSI Boundary
  - WSI Stage 1 Construction Boundary
  - South Creek Catchment Boundary
  - At Grade
  - Bridge or Viaduct
  - Cut and Cover
  - Dive Structure
  - Driven Tunnel
  - Trough or Cutting
  - Platform
  - Stabling Site

Culvert ID	Culvert Properties
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CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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Figure Title  
**Design Case - 5% AEP Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

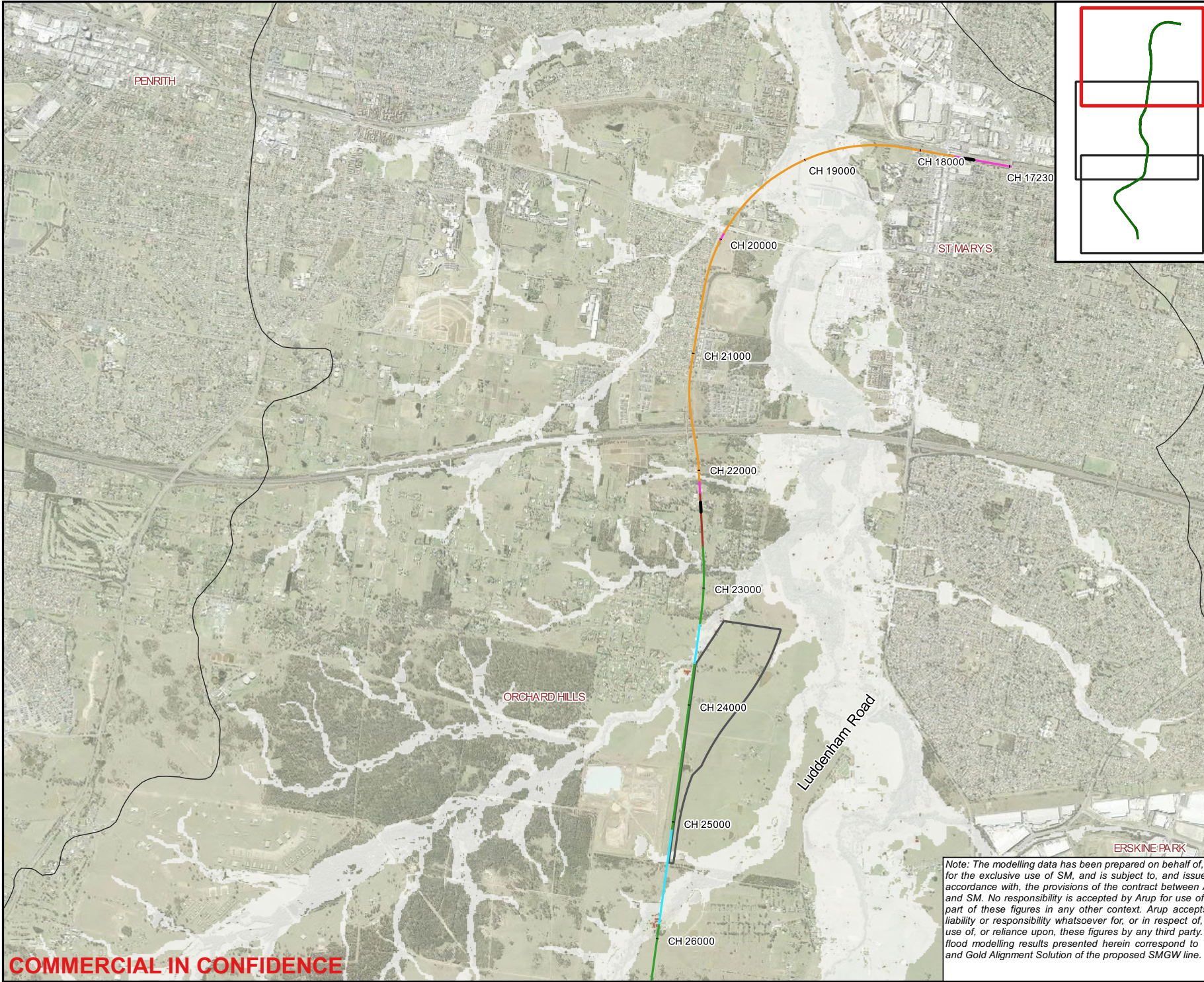
Job No  
**265549**

Figure No  
**D.40 (3 of 3)**

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**Legend**

- Change in flood hazard category**
- Increase in flood hazard category
  - No change in flood hazard category
  - Decrease in flood hazard category
- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd

0 500 1000 1500 m



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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

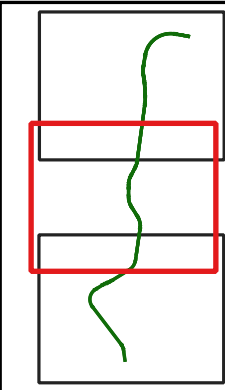
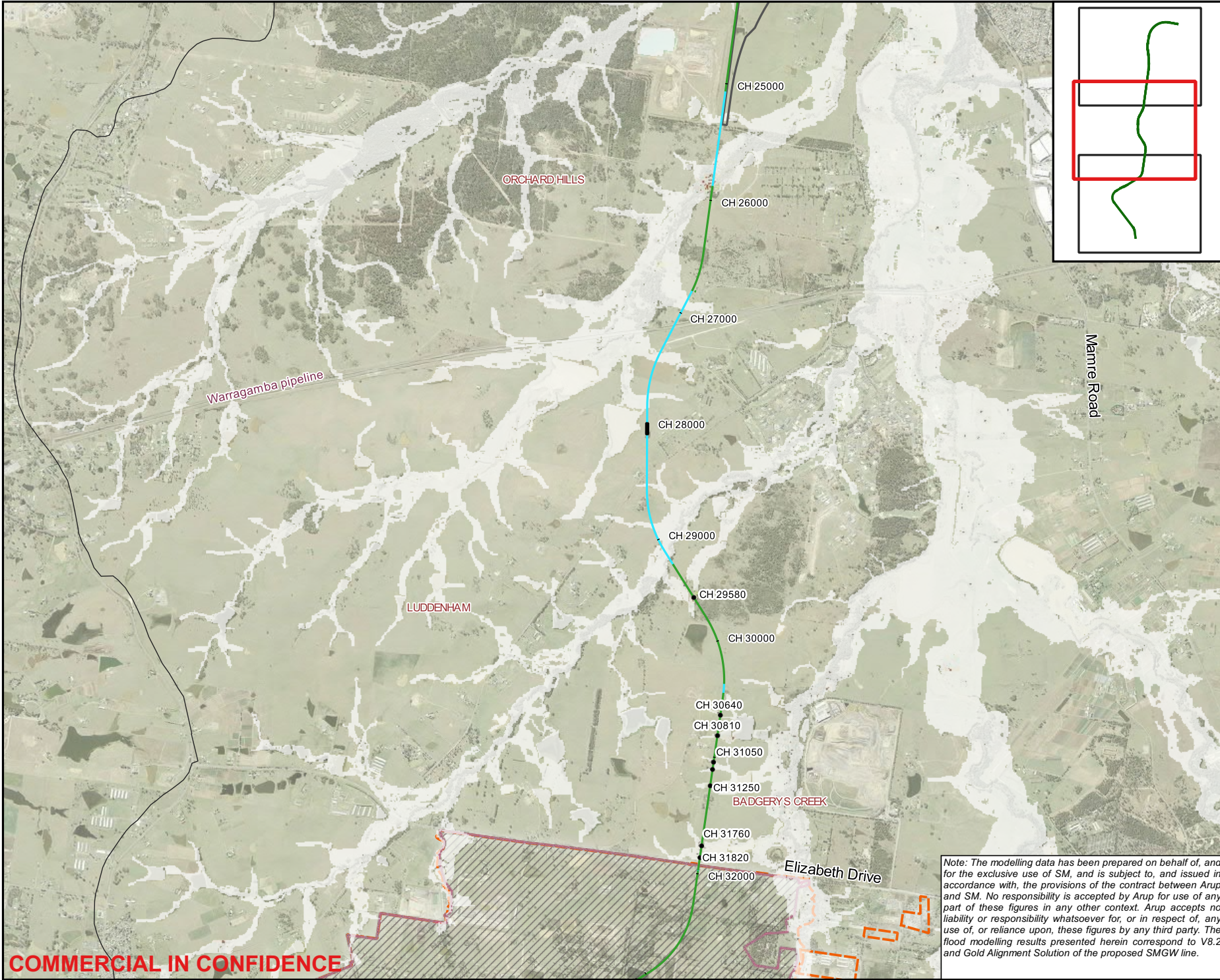
Job No  
**265549**

Figure No  
**D.41 (1 of 3)**

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**Legend**

**Change in flood hazard category**

- Increase in flood hazard category
- No change in flood hazard category
- Decrease in flood hazard category

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd



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Job Title:  
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Figure Title:  
**Design Case - 1% AEP Change in Provisional flood hazard**

Scale at A3:  
**1:300000**

Figure Status:  
**Issued for information**

Coordinate System:  
**GDA 1994 MGA Zone 56**

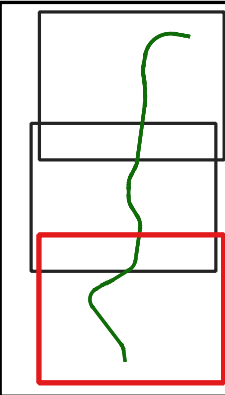
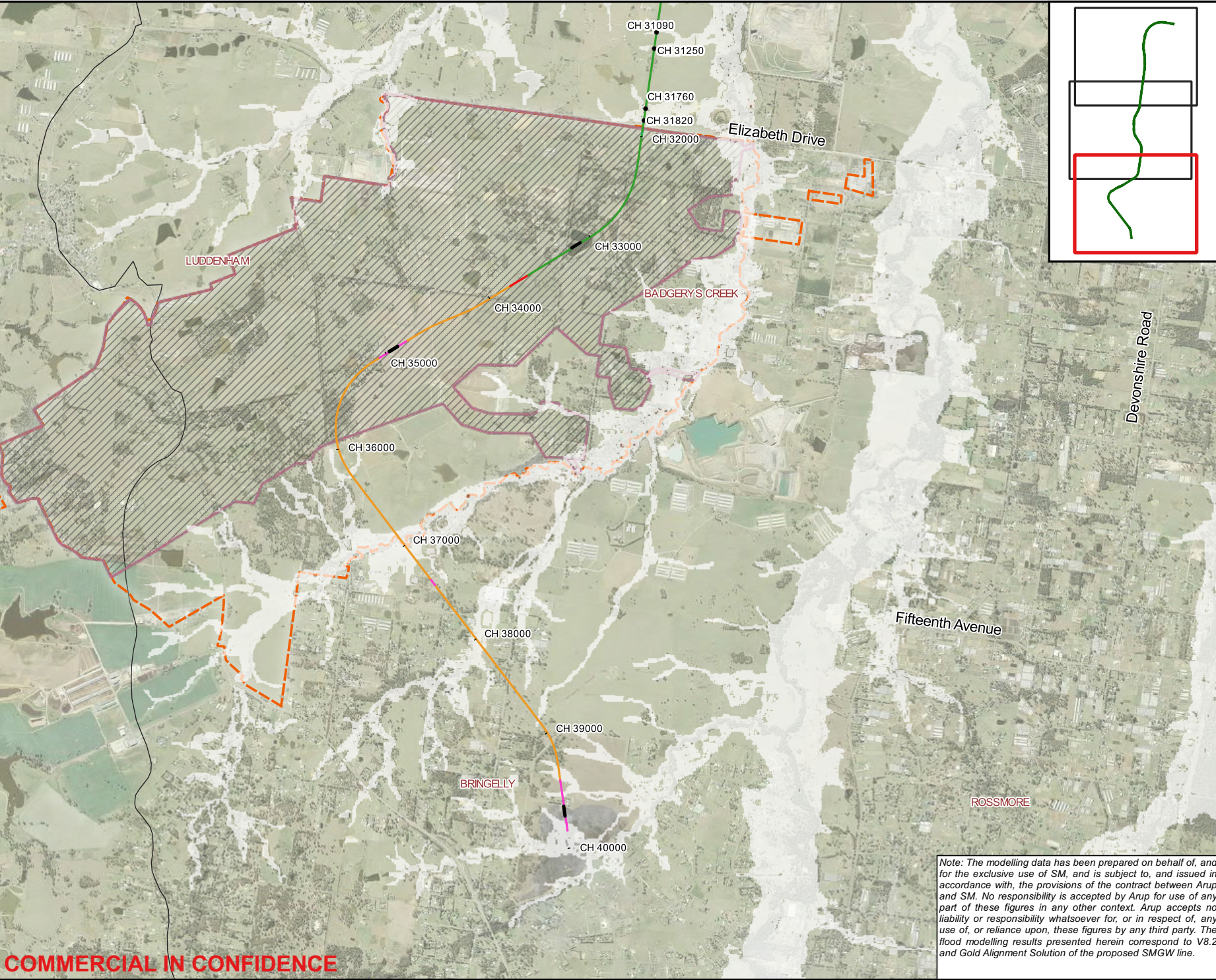
Job No:  
**265549**

Figure No:  
**D.41 (2 of 3)**

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**Legend**  
**Change in flood hazard category**  

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
Issue	Date	By	Chkd	Appd
0 500 1000 1500 m				

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Job Title

**SMGW TA Services**

Figure Title

**Design Case - 1% AEP Change in Provisional flood hazard**

Scale at A3

**1:30000**

Figure Status

**Issued for information**

Coordinate System

**GDA 1994 MGA Zone 56**

Job No

**265549**

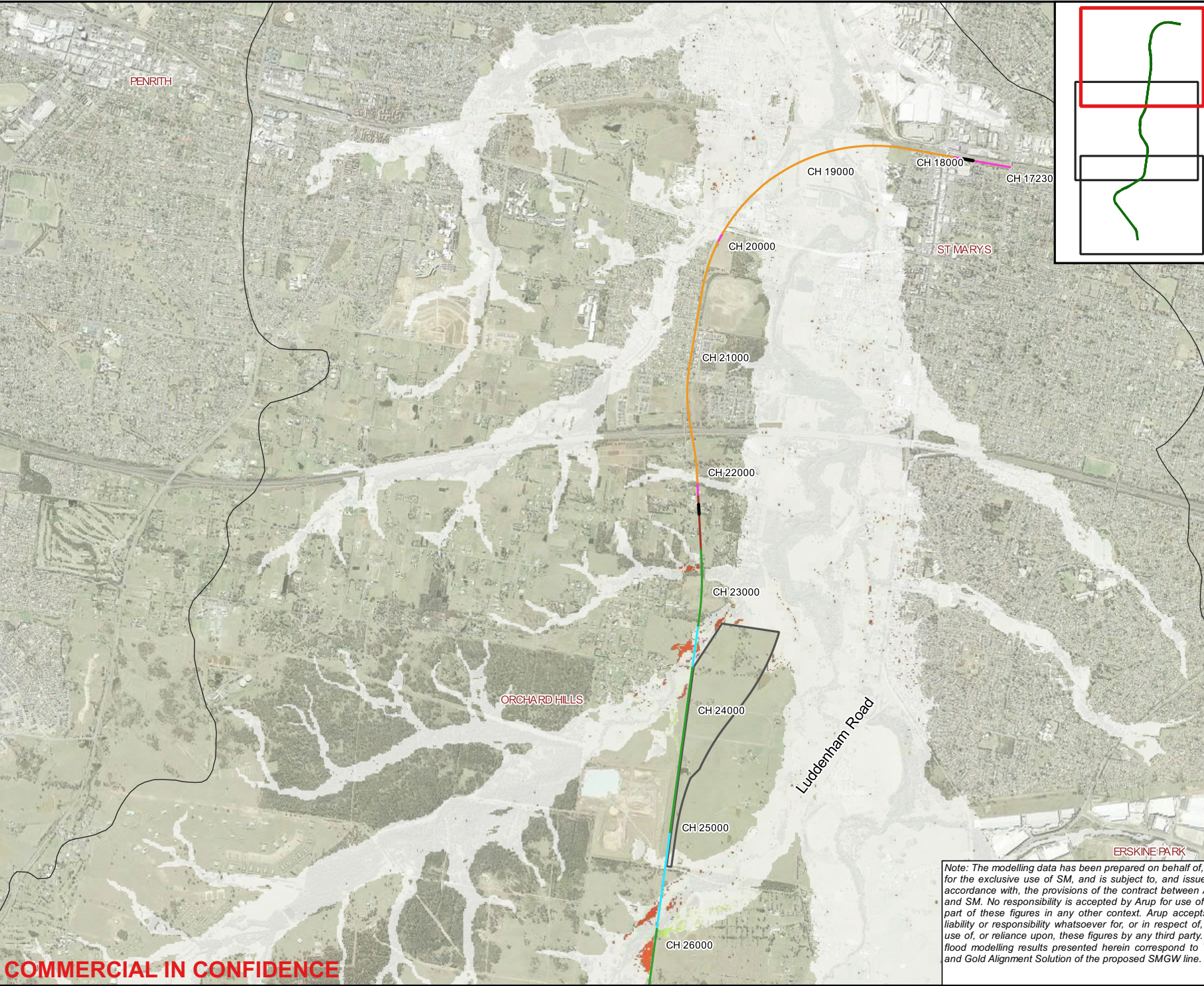
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**D.41 (3 of 3)**

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**Legend**

**Change in flood hazard category**

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

A	01/05/20	GK	IVS	KJS
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0

500

1000

1500 m

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Figure Title  
**Design Case - PMF Change in Provisional flood hazard**

Scale at A3  
**1:30000**

Figure Status  
**Issued for information**

Coordinate System  
**GDA 1994 MGA Zone 56**

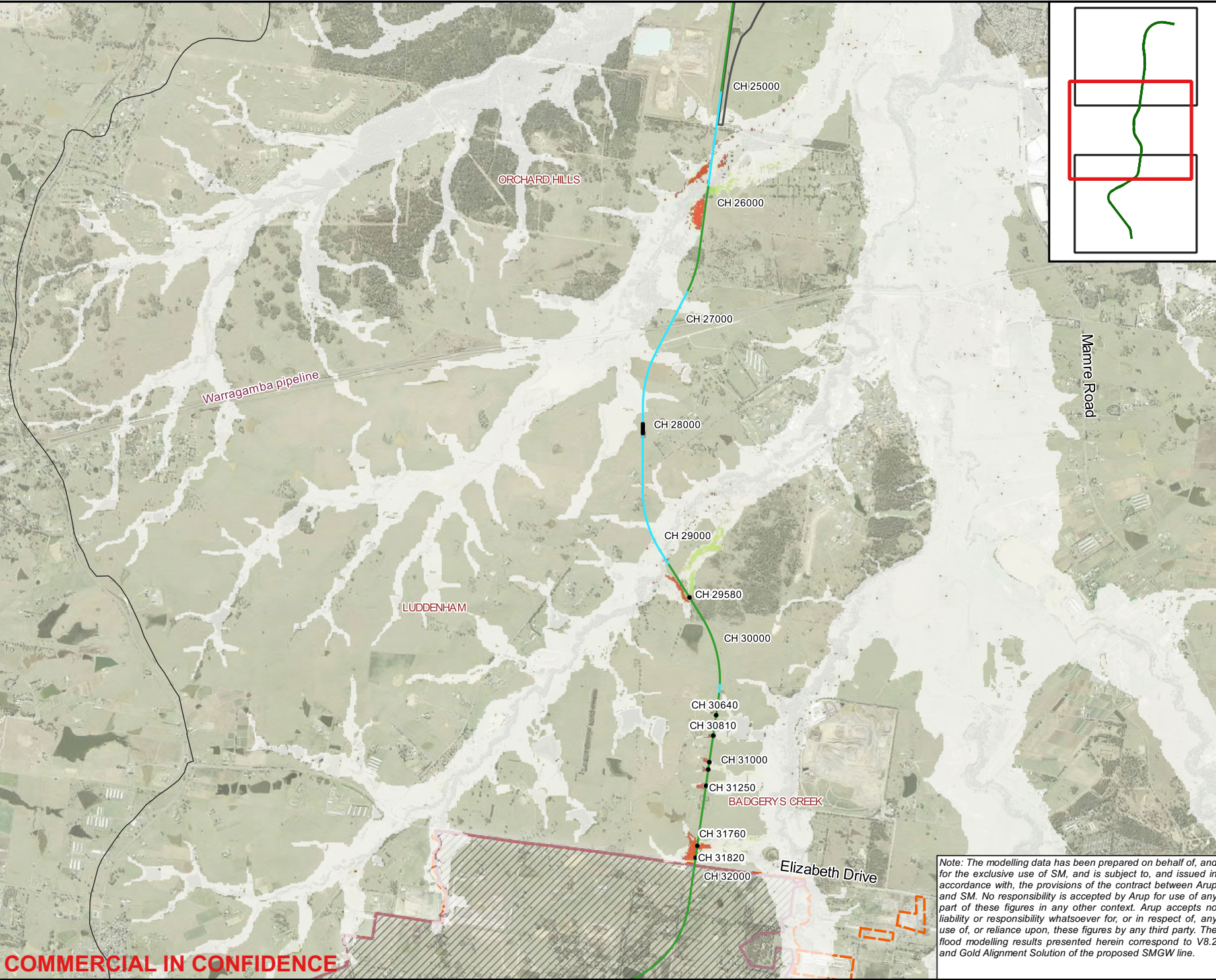
Job No  
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Figure No  
**D.42 (1 of 3)**

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### Legend

**Change in flood hazard category**

- Increase in flood hazard category
- No change in flood hazard category
- Decrease in flood hazard category

- Culverts
- WSI Boundary
- WSI Stage 1 Construction Boundary
- South Creek Catchment Boundary
- At Grade
- Bridge or Viaduct
- Cut and Cover
- Dive Structure
- Driven Tunnel
- Trough or Cutting
- Platform
- Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
CH 30640	1/ 0.75m RCP
CH 30810	2/ 1.05m RCP
CH 31050	2/ 0.75m RCP
CH 31090	1/ 0.75m RCP
CH 31250	1/ 0.75m RCP
CH 31760	2/ 1.5m x 0.75m RCBC
CH 31820	2/ 2.1m x 0.9m RCBC

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Issue	Date	By	Chkd	Appd

050010001500

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Job Title

SMGW TA Services

Figure Title

Design Case - PMF Change in  
Provisional flood hazard

Scale at A3  
1:30000

Figure Status  
Issued for information

Coordinate System  
GDA 1994 MGA Zone 56

Job No  
265549

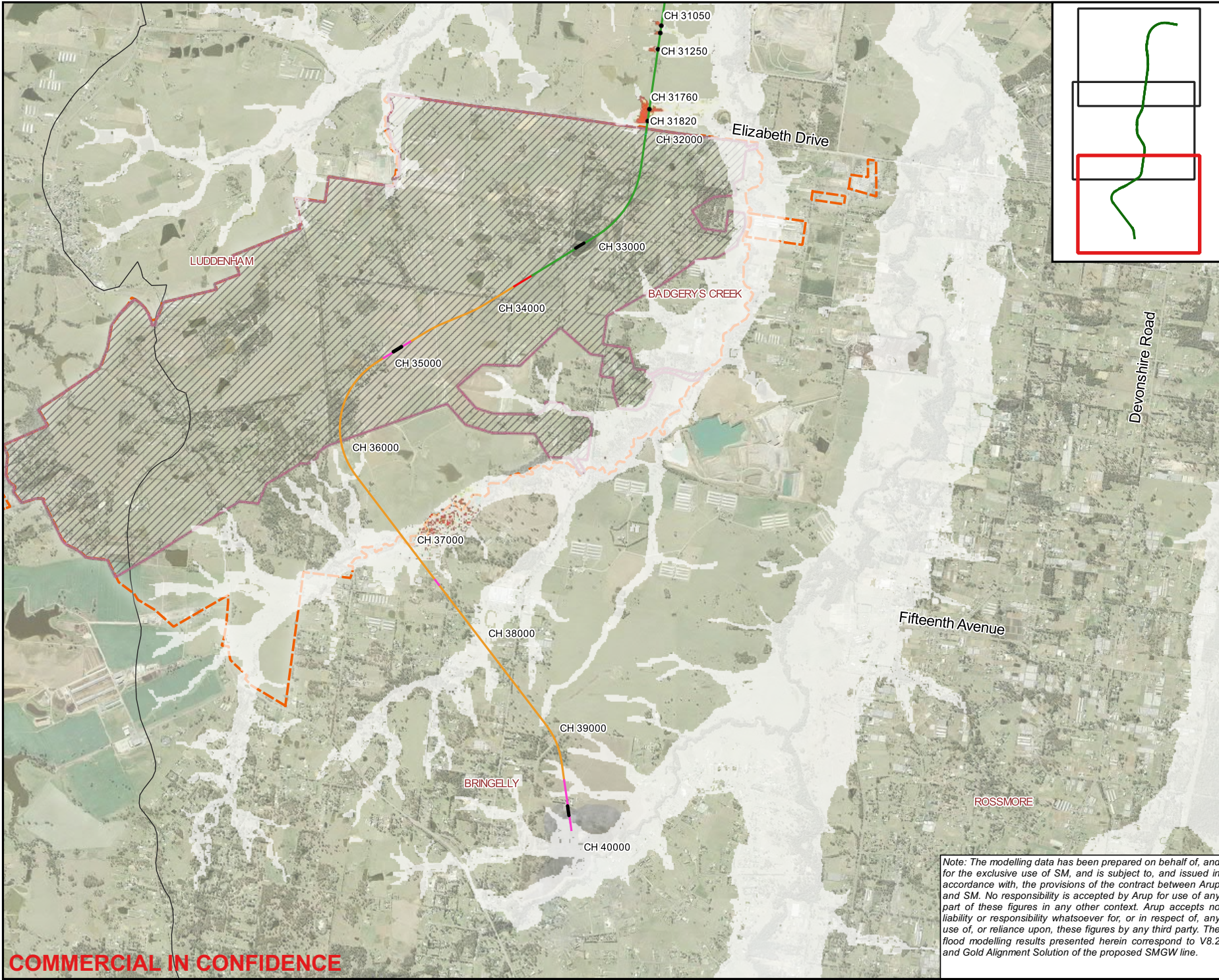
Figure No  
D.42 (2 of 3)

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1:265000265549-01\_SMGW TA Work Internal Design / GIS Data 02\_Working / flooding / Mapping / CDS  
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**Legend**  
**Change in flood hazard category**  

Increase in flood hazard category

No change in flood hazard category

Decrease in flood hazard category

Culverts

WSI Boundary

WSI Stage 1 Construction Boundary

South Creek Catchment Boundary

At Grade

Bridge or Viaduct

Cut and Cover

Dive Structure

Driven Tunnel

Trough or Cutting

Platform

Stabling Site

Culvert ID	Culvert Properties
CH 29580	4/ 1.2m x 0.75m RCBC
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Issue	Date	By	Chkd	Appd
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Scale at A3  
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