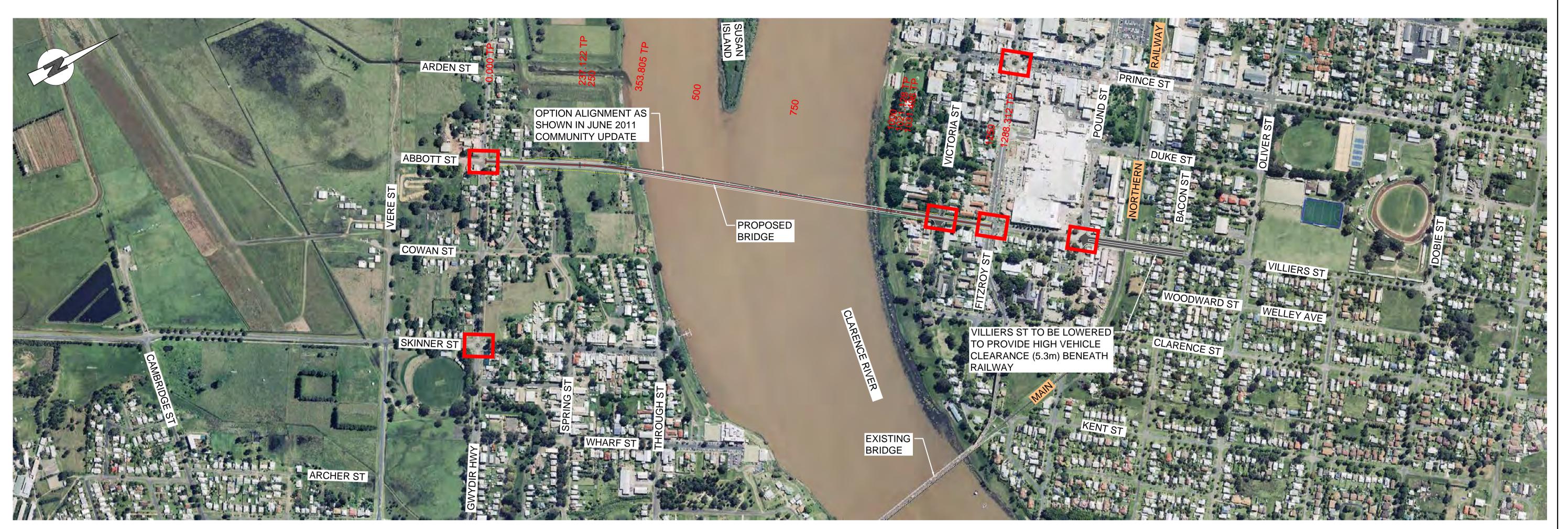
Appendix 4 – Preliminary route options drawings

This appendix presents basic plan and longitudinal section drawings for each of the 25 preliminary route options. The design criteria used for the development of these drawings is presented in Appendix 2.



LEGEND - PLAN:

INTERSECTION UPGRADE -TREATMENT TO BE DETERMINED PRELIMINARY ROUTE OPTION

OPTION ALIGNMENT AS SHOWN IN

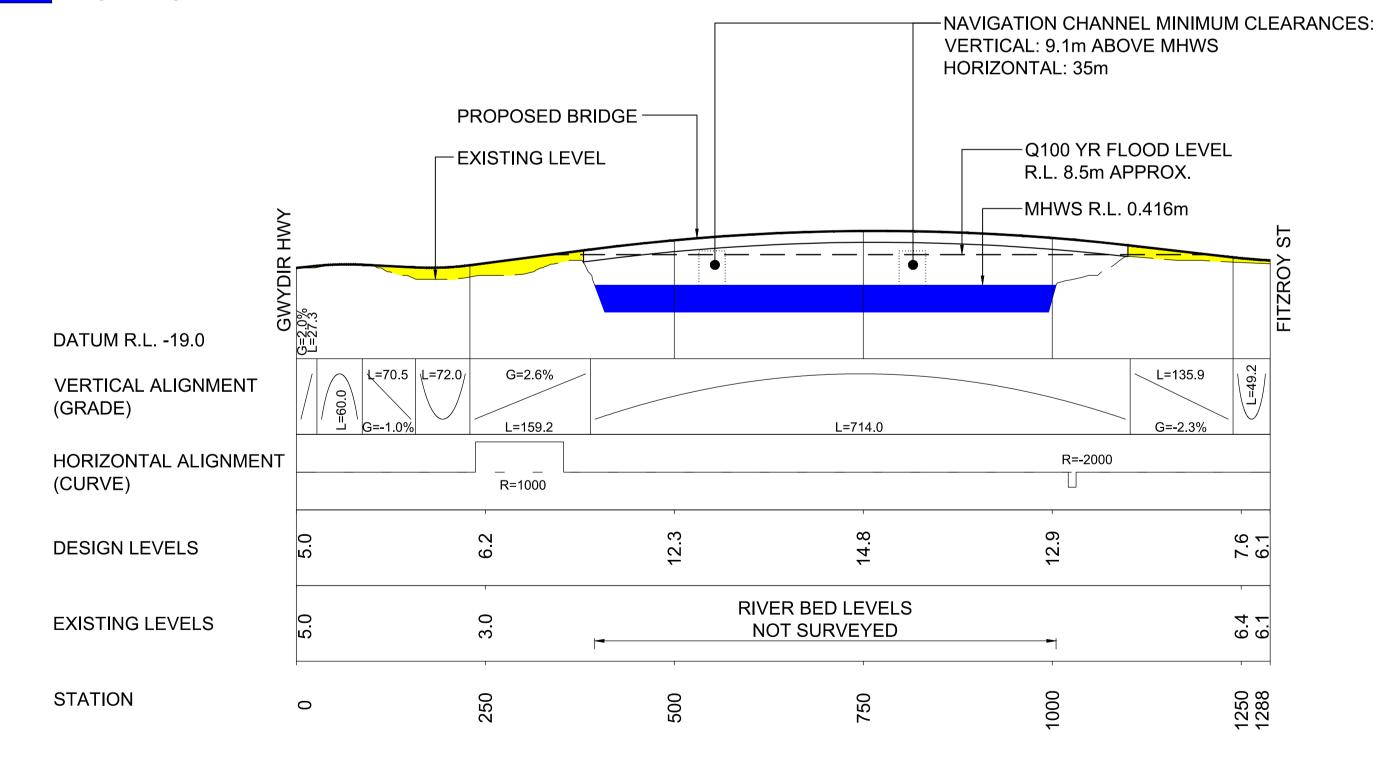
JUNE 2011 COMMUNITY UPDATE

NOTES

- Q100 YEAR FLOOD LEVELS BASED ON LOWER CLARENCE RIVER FLOOD STUDY REVIEW (WBM 2004).
- 2. IN ADDITION TO THE INTERSECTION UPGRADES SHOWN ON THE PLAN, THE OPTION WOULD INCLUDE AN UPGRADE OF THE FOLLOWING INTERSECTIONS:
 - GWYDIR HWY / BENT ST
- 3. INTERSECTIONS REQUIRING AN UPGRADE INCLUDE: WHERE THE ESTIMATED NUMBER OF VEHICLES APPROACHING THE INTERSECTIONS IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS.
- THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES

LEGEND - LONGITUDINAL SECTION:

EMBANKMENT CLARENCE RIVER PLAN



LONGITUDINAL SECTION

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С	PROR - PARTS 1 & 2 - DRAFT 3	REB	6/10/2011	0 20 40 60 80 100	Arup Pty Ltd ABN 18 000 966 165		
В	PROR - PARTS 1 & 2 - DRAFT 2	REB	26/09/2011	VERTICAL SCALE 1:1000m	ABN 18 000 966 165	MAIN ROAD 83 - SUMMERLAND WAY ADDITIONAL CROSSING OF THE CLARENCE RIVER	
Α	PROR - PART 2 - DRAFT 1	REB	30/08/2011	0 100 200 300 400 500 	DESIGNED		
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IME SERVICES LEY COUNCIL

MMERLAND WAY LARENCE RIVER AT GRAFTON ARY ROUTE OPTION F

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INTERSECTION UPGRADE -TREATMENT TO BE DETERMINED

PRELIMINARY ROUTE OPTION

— OPTION ALIGNMENT AS SHOWN IN JUNE 2011 COMMUNITY UPDATE

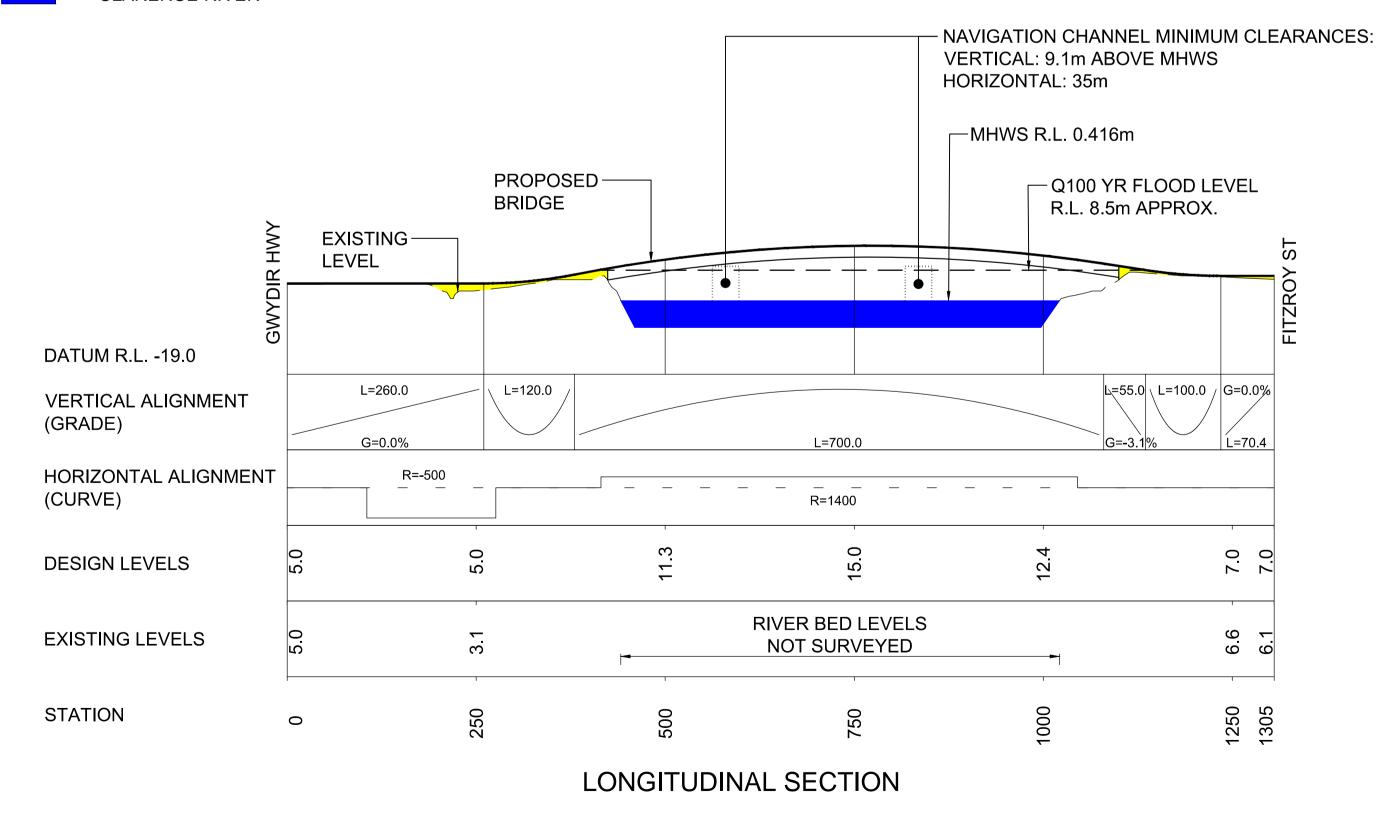
ROAD CLOSURE

NOTES

- Q100 YEAR FLOOD LEVELS BASED ON LOWER CLARENCE RIVER FLOOD STUDY REVIEW (WBM 2004).
- 2. INTERSECTIONS REQUIRING AN UPGRADE INCLUDE:
- WHERE THE ESTIMATED NUMBER OF VEHICLES APPROACHING THE INTERSECTIONS IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS.
- THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES.

LEGEND - LONGITUDINAL SECTION:

EMBANKMENT CLARENCE RIVER PLAN



Ε	PROF	R - FINAL - RMS NAME UPDATED	REB	6/12/2011	SCALES
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С	PROR - PARTS 1 & 2 - DRAFT 3		REB	6/10/2011	0 20 40 60 80 100
В	PROR - PARTS 1 & 2 - DRAFT 2		REB	26/09/2011	VERTICAL SCALE 1:1000m
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Arup Pty Ltd ABN 18 000 966 165	CLARENCE VALLEY COUNCIL MAIN ROAD 83 - SUMMERLAND WAY	
DESIGNED	ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRA	

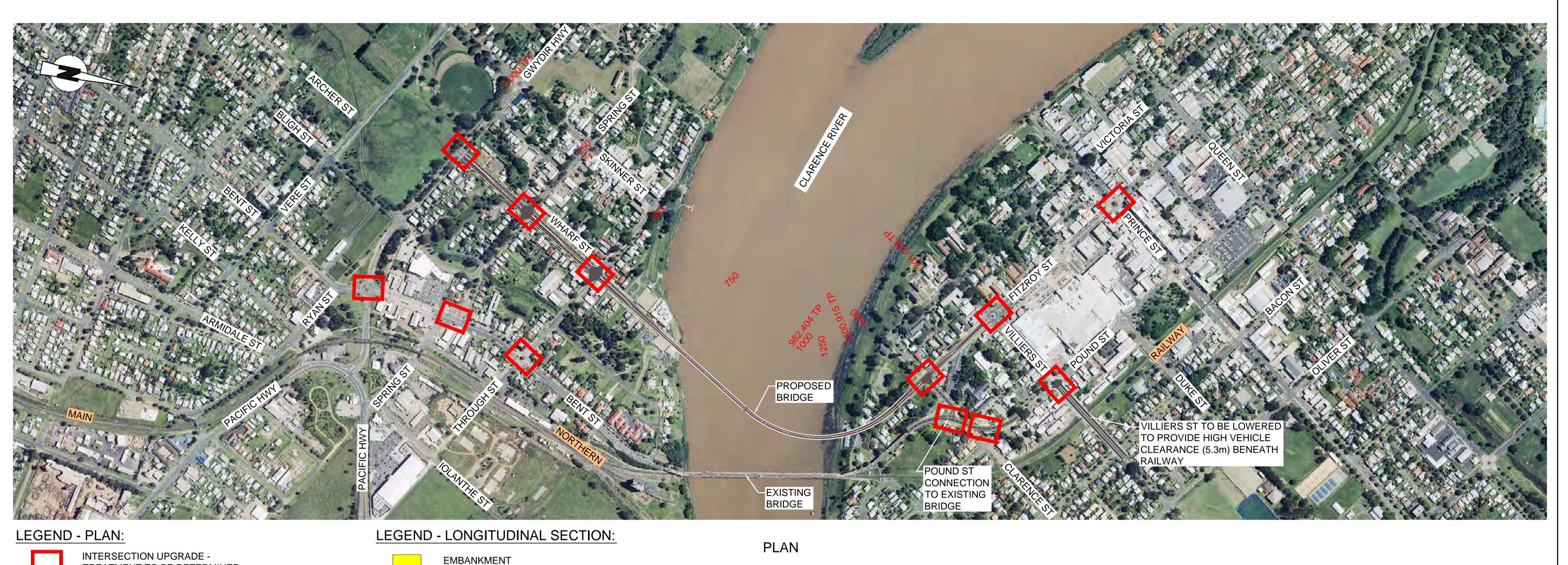
'ALLEY COUNCIL SUMMERLAND WAY E CLARENCE RIVER AT GRAFTON **CORRIDOR 1 - PRELIMINARY ROUTE OPTION E** PLAN AND LONGITUDINAL SECTION

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REGISTRATION NUMBER

0083.086.BA.2016

7



PRELIMINARY ROUTE OPTION

TREATMENT TO BE DETERMINED



ROAD CLOSURE

NOTES

- 1. Q100 YEAR FLOOD LEVELS BASED ON LOWER CLARENCE RIVER FLOOD STUDY REVIEW (WBM 2004).
- 2. INTERSECTIONS REQUIRING AN UPGRADE INCLUDE:
- WHERE THE ESTIMATED NUMBER OF VEHICLES APPROACHING THE INTERSECTIONS IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS.
- THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES.

DATUM R.L. -20.0

DESIGN LEVELS

EXISTING LEVELS

(GRADE)

(CURVE)

STATION

CLARENCE RIVER

HORIZONTAL: 35m — MHWS R.L. 0.416m —Q100 YR FLOOD LEVEL R.L. 8.3m APPROX. — VIADUCT EXISTING -_PROPOSED LEVEL BRIDGE G=5.5% L=125.0 L=50.0 G=0.5% L=541.0 L=52.7 ∖ L=210.7 VERTICAL ALIGNMENT L=79.5 / L=87.5 G=-0.5% L=385.2 G=-0.1% L=80.0 G=-3.4% Ĺ=62.9 R=-280 ____ HORIZONTAL ALIGNMENT 12.3 12.1 RIVER BED LEVELS

NOT SURVEYED

LONGITUDINAL SECTION

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E D	PROR - FINAL - RMS NAME UPDATED PROR - PARTS 1 & 2 - ISSUE	REB REB	6/12/2011 24/10/2011	SCALES 0 20 40 60	80 100	ARUP Arup Pty Ltd
B A	PROR - PARTS 1 & 2 - DRAFT 3 PROR - PARTS 1 & 2 - DRAFT 2 PROR - PART 2 - DRAFT 1	REB REB REB	6/10/2011 26/09/2011 30/08/2011	VERTICAL SCALE 1:1000m 0 100 200 300	400 500	ABN 18 000 966 165
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ROADS AND MARITIME SERVICES
CLARENCE VALLEY COUNCIL

MAVIGATION CHANNEL MINIMUM CLEARANCES:

VERTICAL: 9.1m ABOVE MHWS

MAIN ROAD 83 - SUMMERLAND WAY ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON **CORRIDOR 2 - PRELIMINARY ROUTE OPTION 5**

PLAN AND LONGITUDINAL SECTION

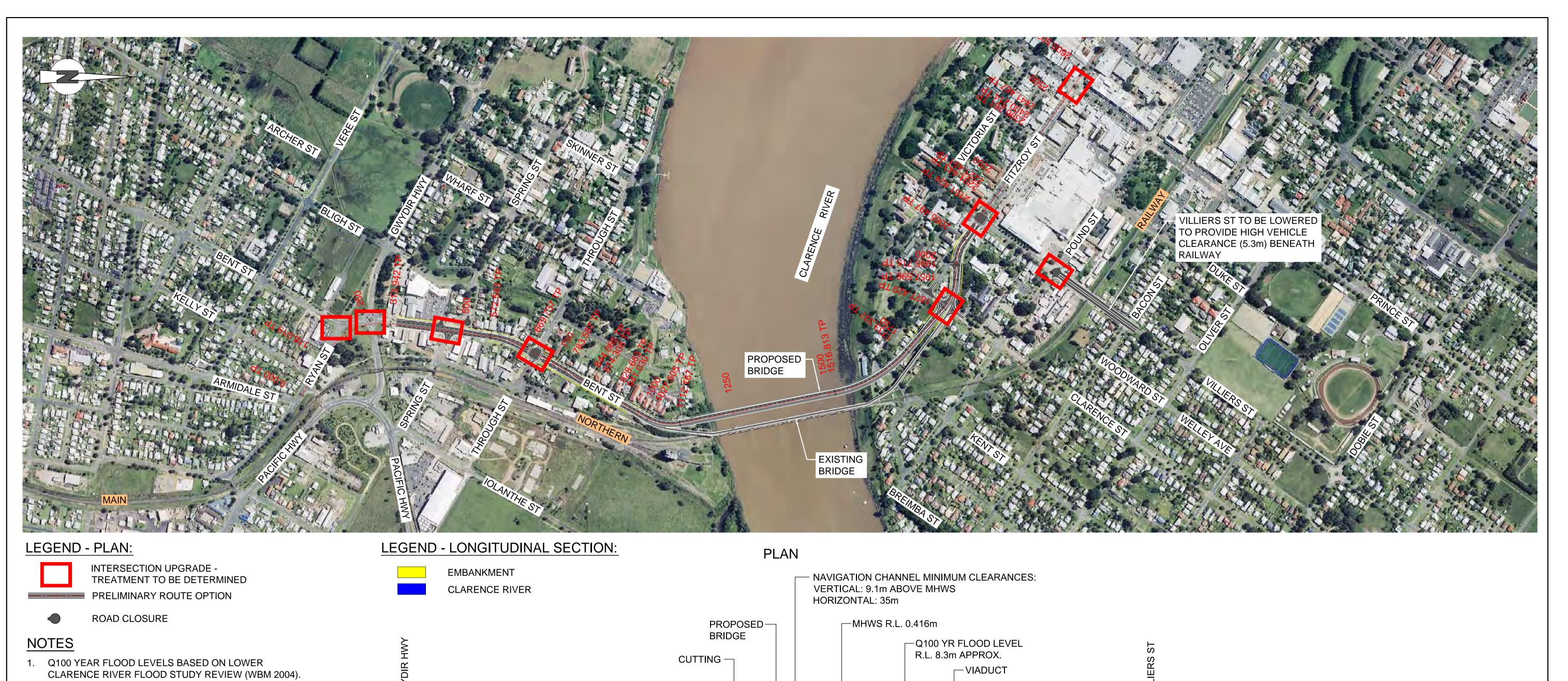
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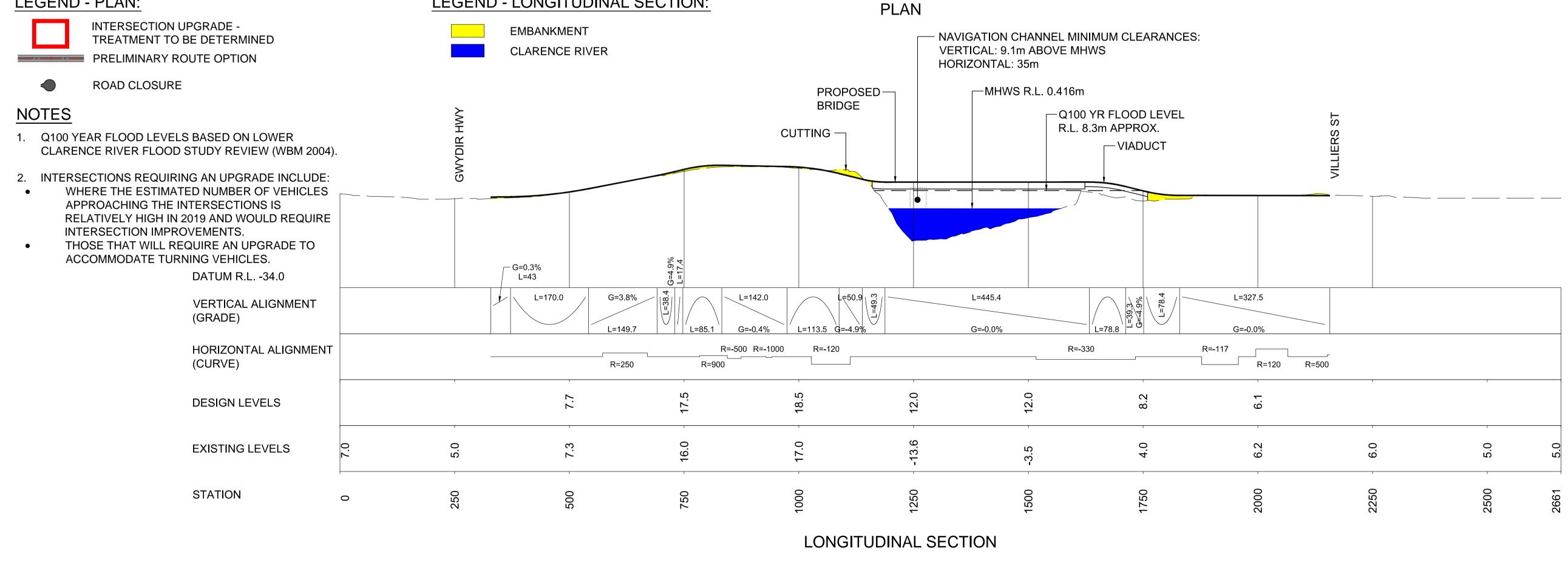
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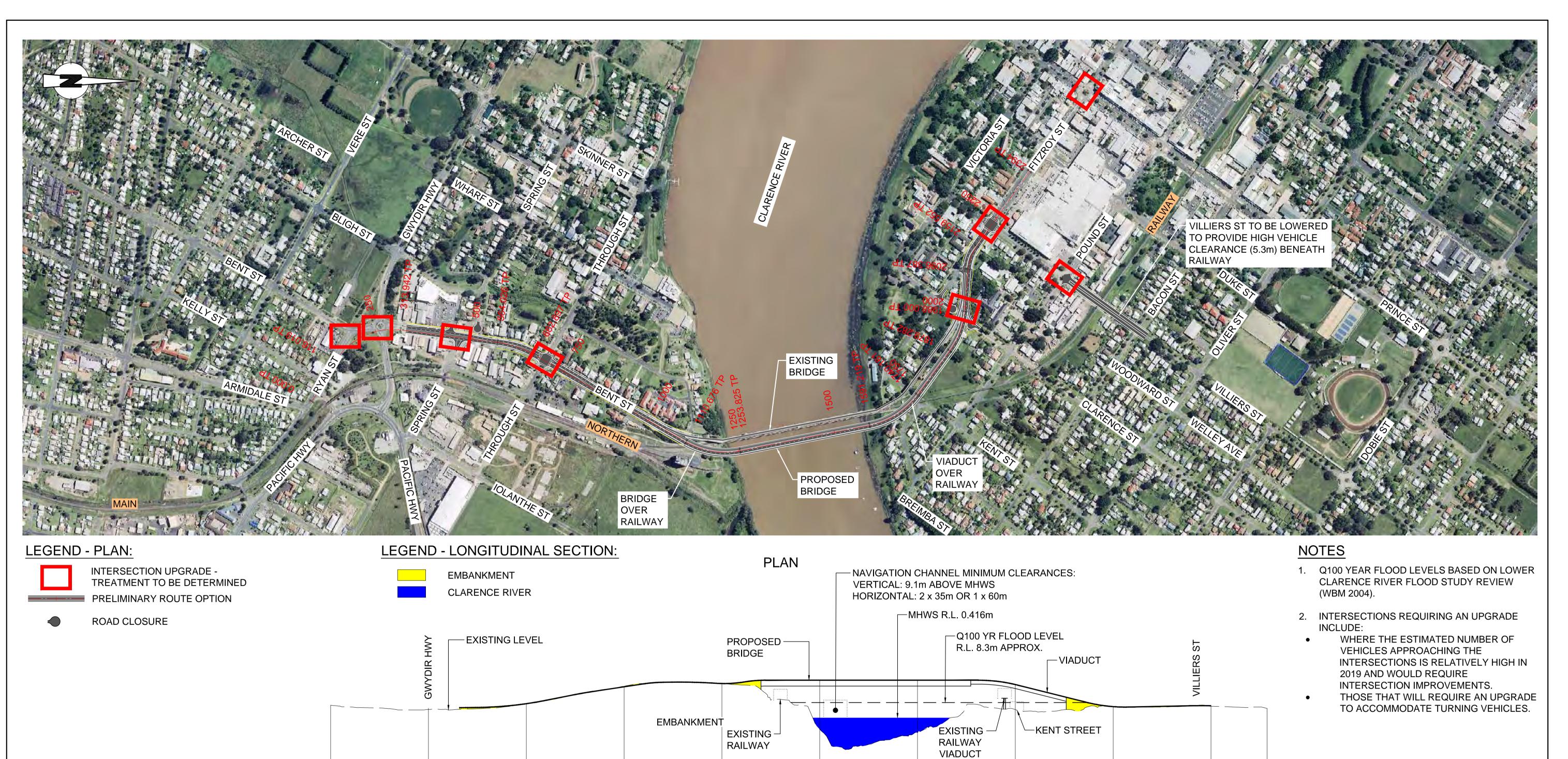
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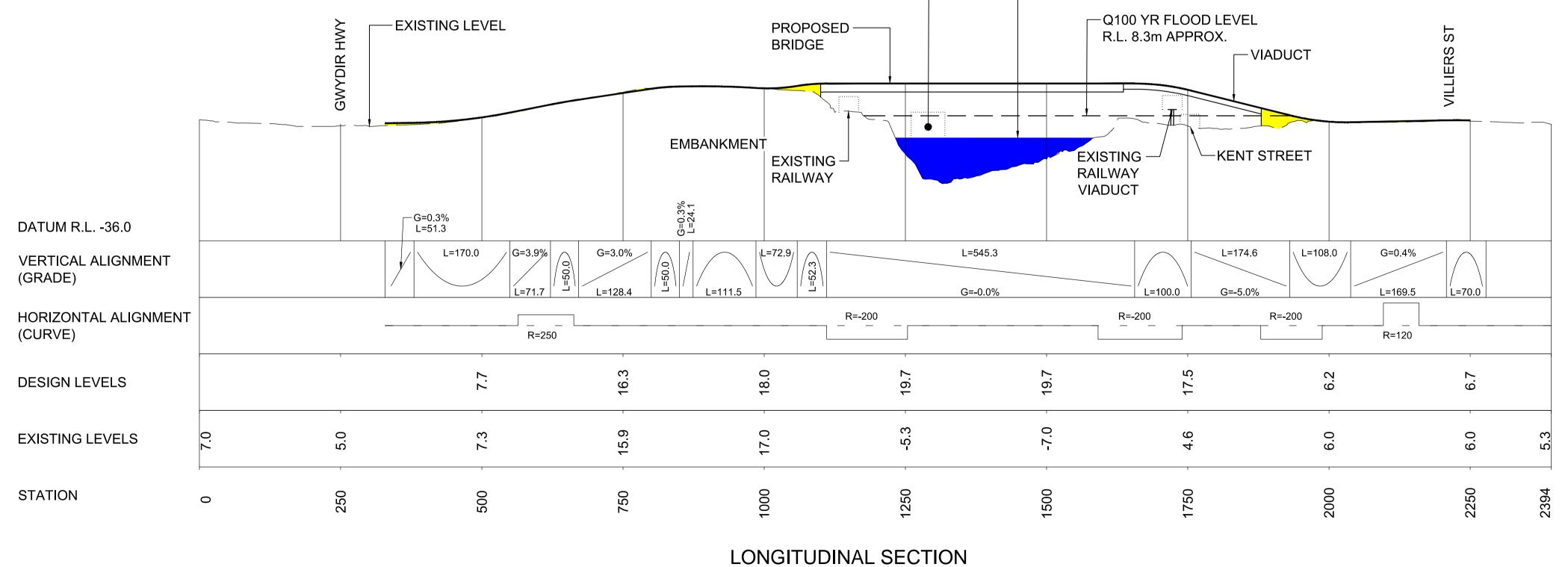
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A PROR - PART 2 - DRAFT 1	REB	30/08/2011	0 100 200 300 400	0 500	DESIGNED	ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON		REGISTRATION NUMBER	₹	4
No. Amendment Description	Initials	Date	HORIZONTAL SCALE 1:5000m		DESIGNED	CORRIDOR 2 - PRELIMINARY ROUTE OPTION A		3.086.BA	2016	•
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В	PROR - PARTS 1 & 2 - DRAFT 2	REB	26/09/2011	VERTICAL SCALE 1:1000m 0 100 200 300	400 500	ABN 18 000 966 165	MAIN ROAD 83 - SUMMERLAND WAY
Α	PROR - PART 2 - DRAFT 1	REB	30/08/2011	HORIZONTAL SCALE 1:5000m	1 1	DESIGNED	ADDITIONAL CROSSING OF THE CLARENCE RIVER A
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FILE	ROADS AND MARITIME SERVICES
] -	CLARENCE VALLEY COUNCIL
	MAIN ROAD 83 - SUMMERLAND WAY
	DDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON
	CORRIDOR 2 - PRELIMINARY ROUTE OPTION B

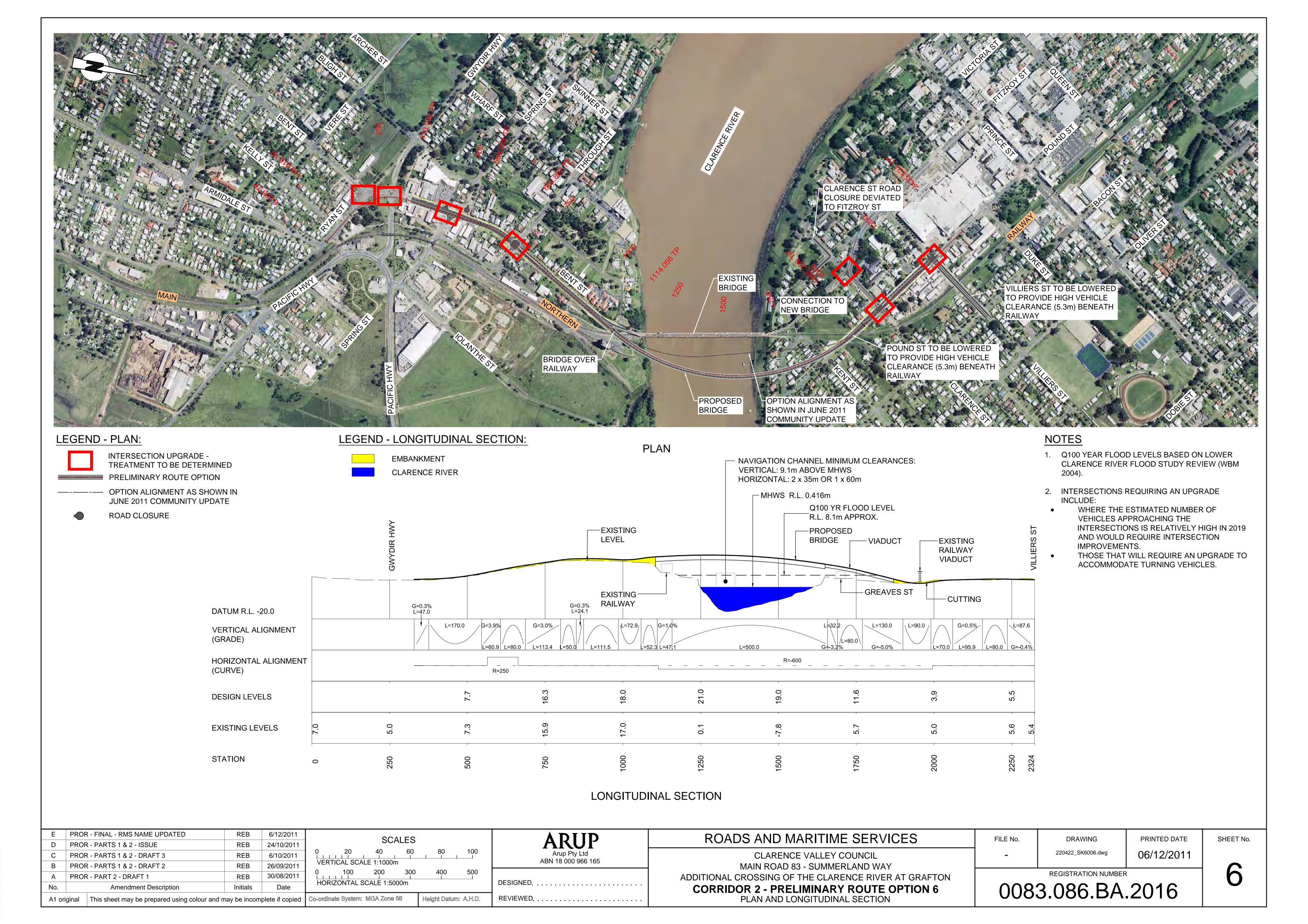
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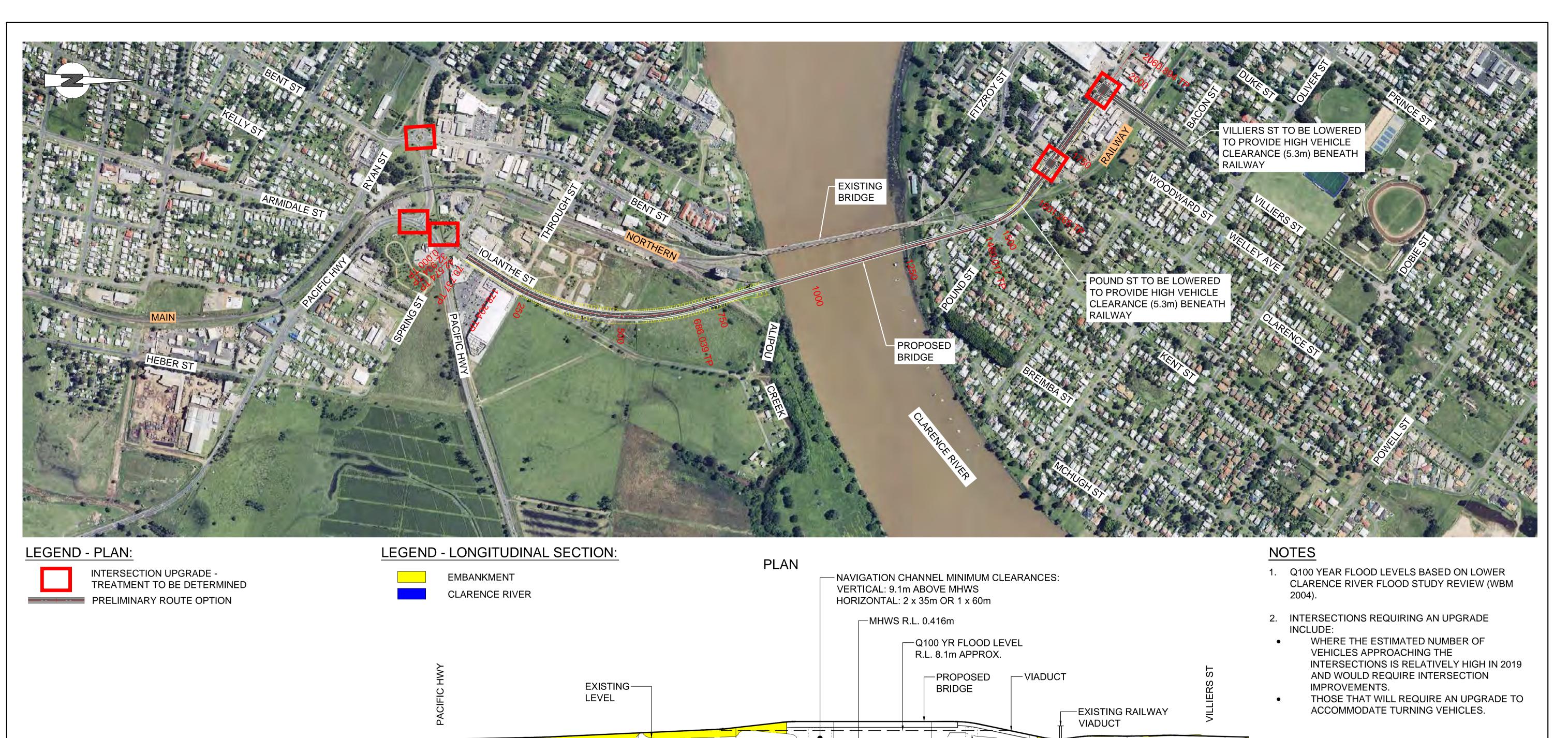
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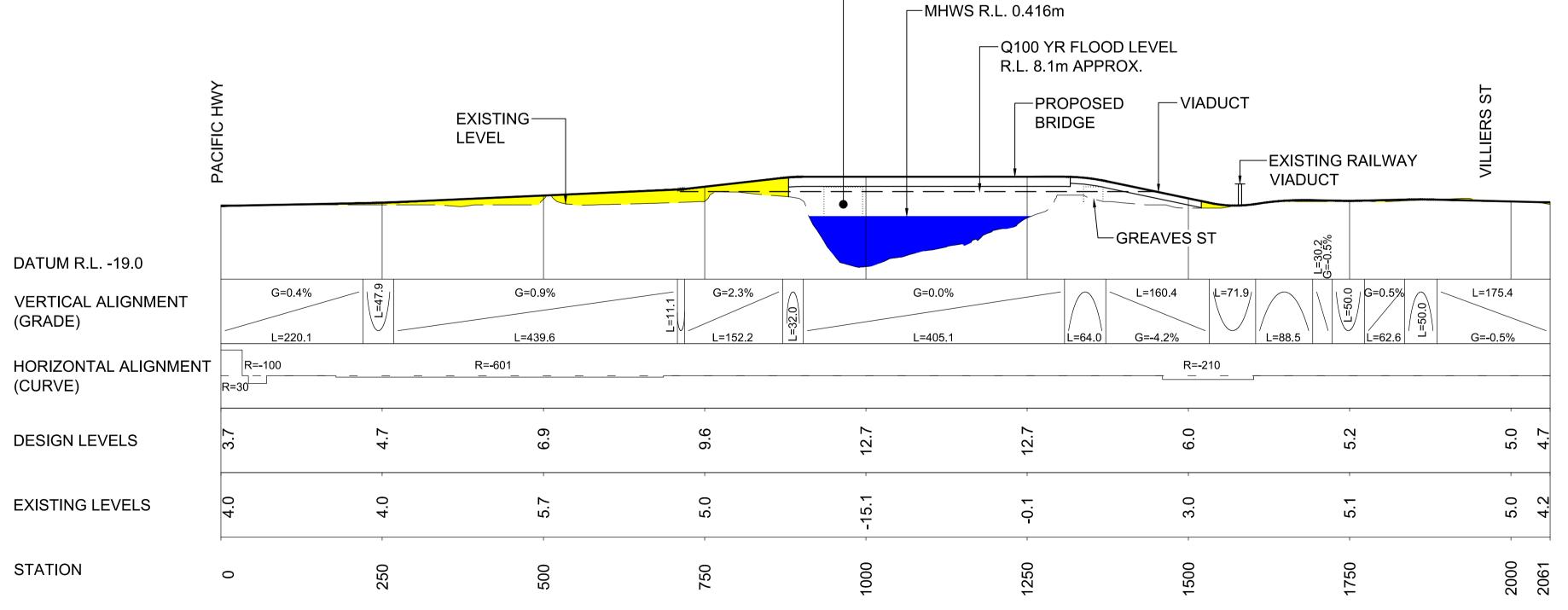
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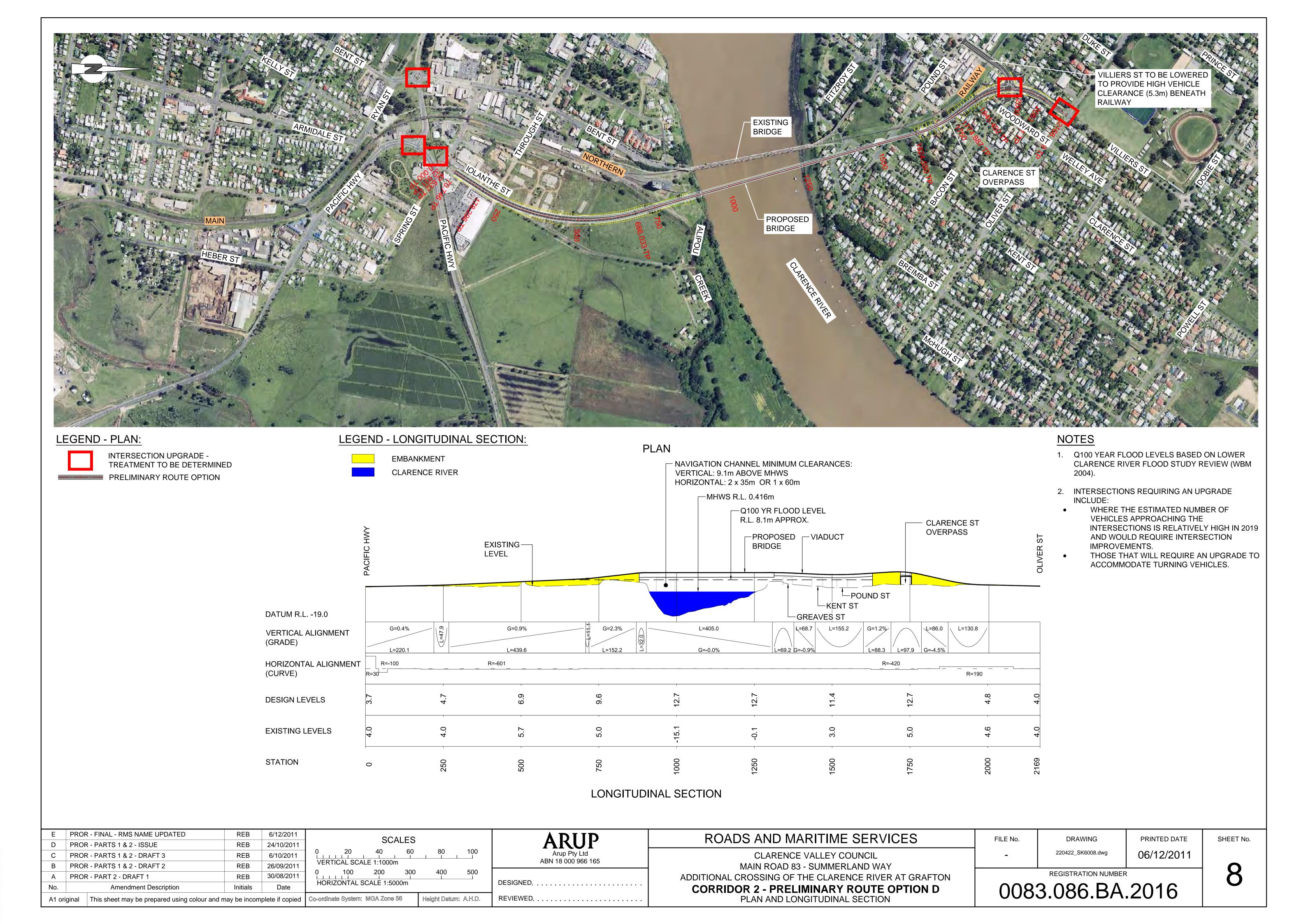


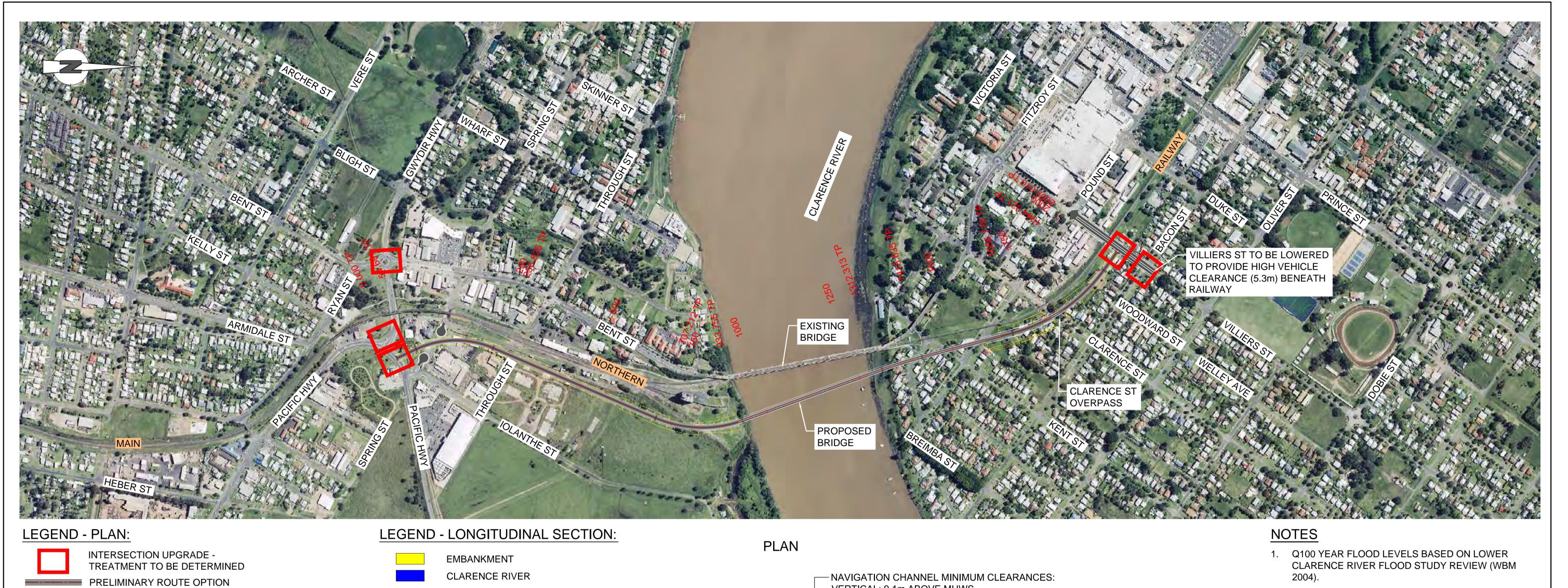


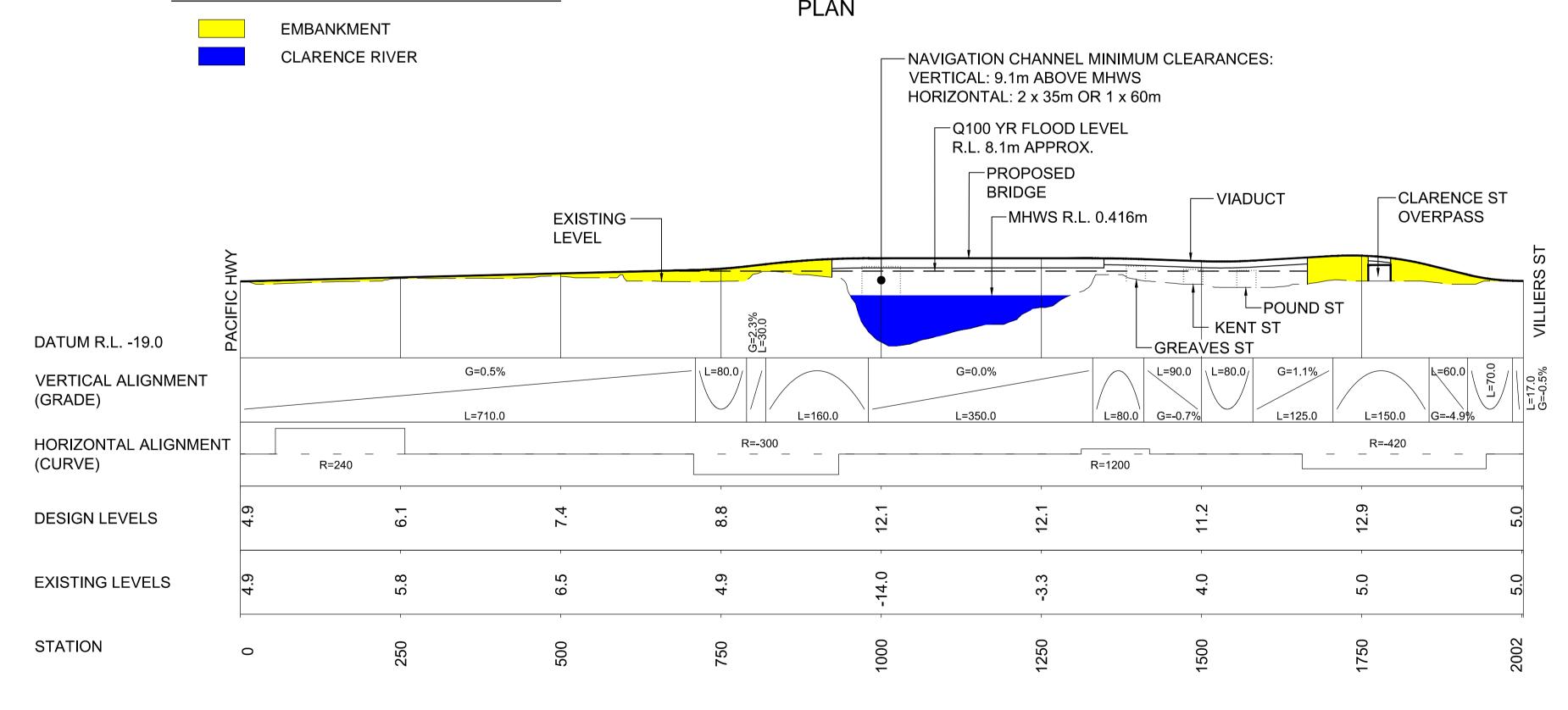


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В	PROR - PARTS 1 & 2 - DRAFT 2	REB	26/09/2011	VERTICAL SCALE 1:1000m	ABN 18 000 966 165	MAIN ROAD 83 - SUMMERLAND WAY				7
А	PROR - PART 2 - DRAFT 1	REB	30/08/2011	0 100 200 300 400 500	DEGIGNED	ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON		REGISTRATION NUMBE	R	
No	. Amendment Description	Initials	Date	HORIZONTAL SCALE 1:5000m	DESIGNED	CORRIDOR 2 - PRELIMINARY ROUTE OPTION C	\perp $\cap \cap \aleph$	3.086.BA	.2016	•
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- 2. INTERSECTIONS REQUIRING AN UPGRADE INCLUDE:
- WHERE THE ESTIMATED NUMBER OF VEHICLES APPROACHING THE INTERSECTIONS IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS.
- THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES.

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E	E PROR - FINAL - RMS NAME UPDATED		REB	6/12/2011	SCALES		
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B PROR - PARTS 1 & 2 - DRAFT 2		REB	26/09/2011	VERTICAL SCALE 1:1000m			
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ROAD CLOSURE

ARUP Arup Pty Ltd ABN 18 000 966 165
DESIGNED

ROADS AND MARITIME SERVICES	
CLARENCE VALLEY COUNCIL	
MAIN ROAD 83 - SUMMERLAND WAY	

PLAN AND LONGITUDINAL SECTION

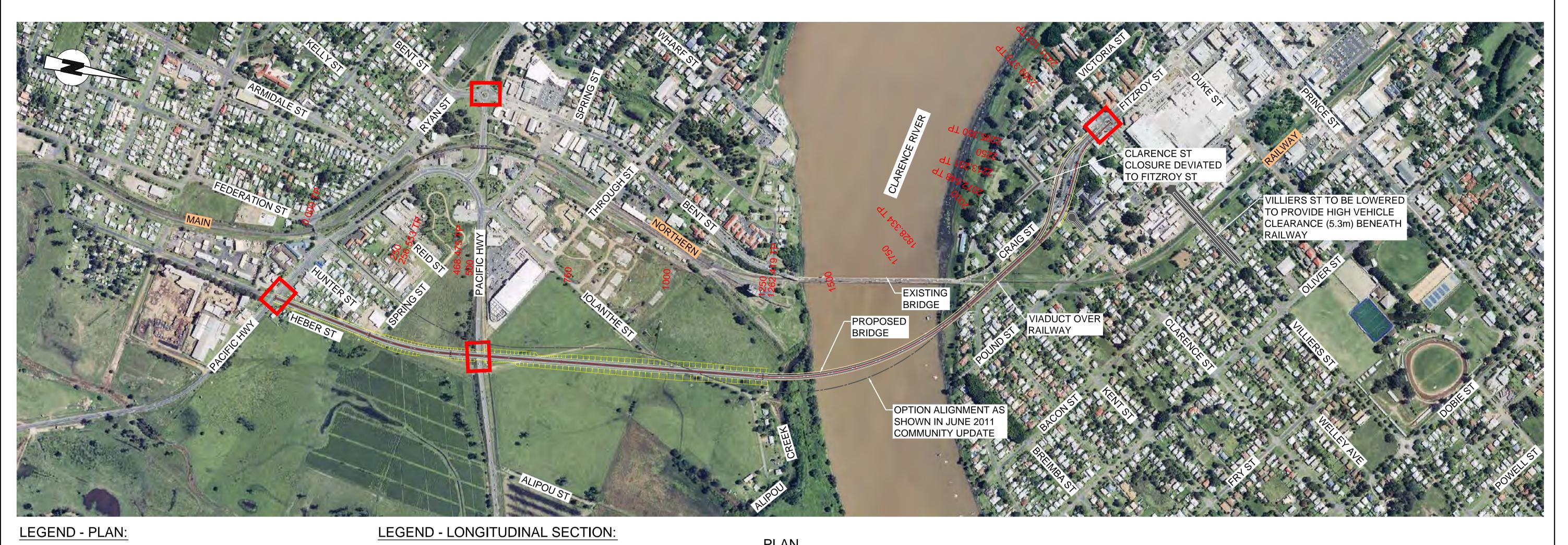
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ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON	
MAIN ROAD 83 - SUMMERLAND WAY	

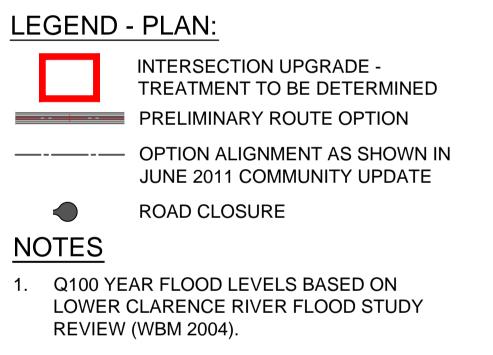
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PRINTED DATE 06/12/2011

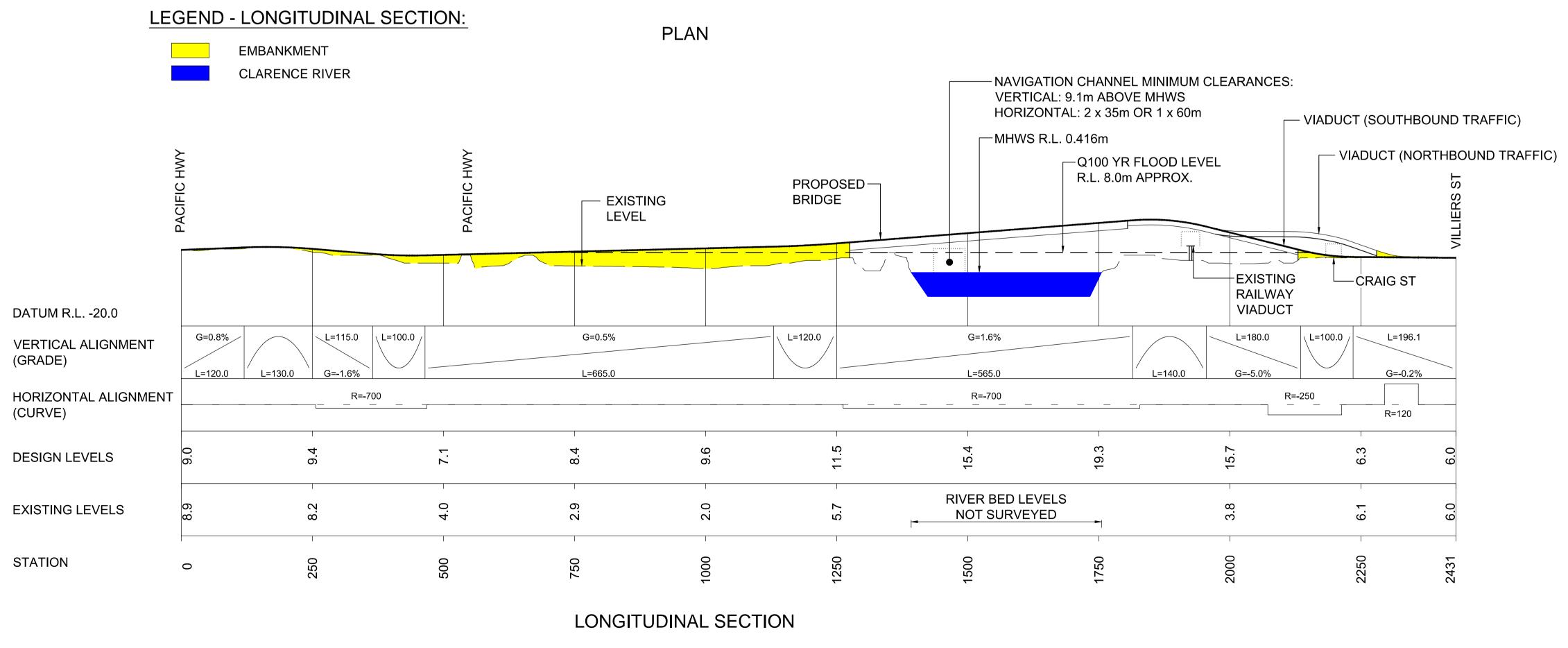




2. IN ADDITION TO THE INTERSECTION UPGRADES SHOWN ON THE PLAN, THE OPTION WOULD INCLUDE AN UPGRADE OF THE FOLLOWING INTERSECTIONS:

- FITZROY ST / PRINCE ST

- 3. INTERSECTIONS REQUIRING AN **UPGRADE INCLUDE:**
- WHERE THE ESTIMATED NUMBER OF VEHICLES APPROACHING THE INTERSECTIONS IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS.
- THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES.



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Arup Pty Ltd ABN 18 000 966 165

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	CLARENCE VALLEY COUNCIL
	MAIN ROAD 83 - SUMMERLAND WAY
ADDITIONAL	. CROSSING OF THE CLARENCE RIVER AT GRA
CORRIE	OOR 2 - PRELIMINARY ROUTE OPTION

CLARENCE VALLEY COUNCIL	-		06/12/201
MAIN ROAD 83 - SUMMERLAND WAY			
AL CROSSING OF THE CLARENCE RIVER AT GRAFTON		REGISTRATION NUMBER	₹
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NOTES

1. Q100 YEAR FLOOD LEVELS BASED ON WBM LOWER CLARENCE RIVER FLOOD STUDY 2004.

INTERSECTION UPGRADE -

PRELIMINARY ROUTE OPTION

TREATMENT TO BE DETERMINED

OPTION ALIGNMENT AS SHOWN IN

JUNE 2011 COMMUNITY UPDATE

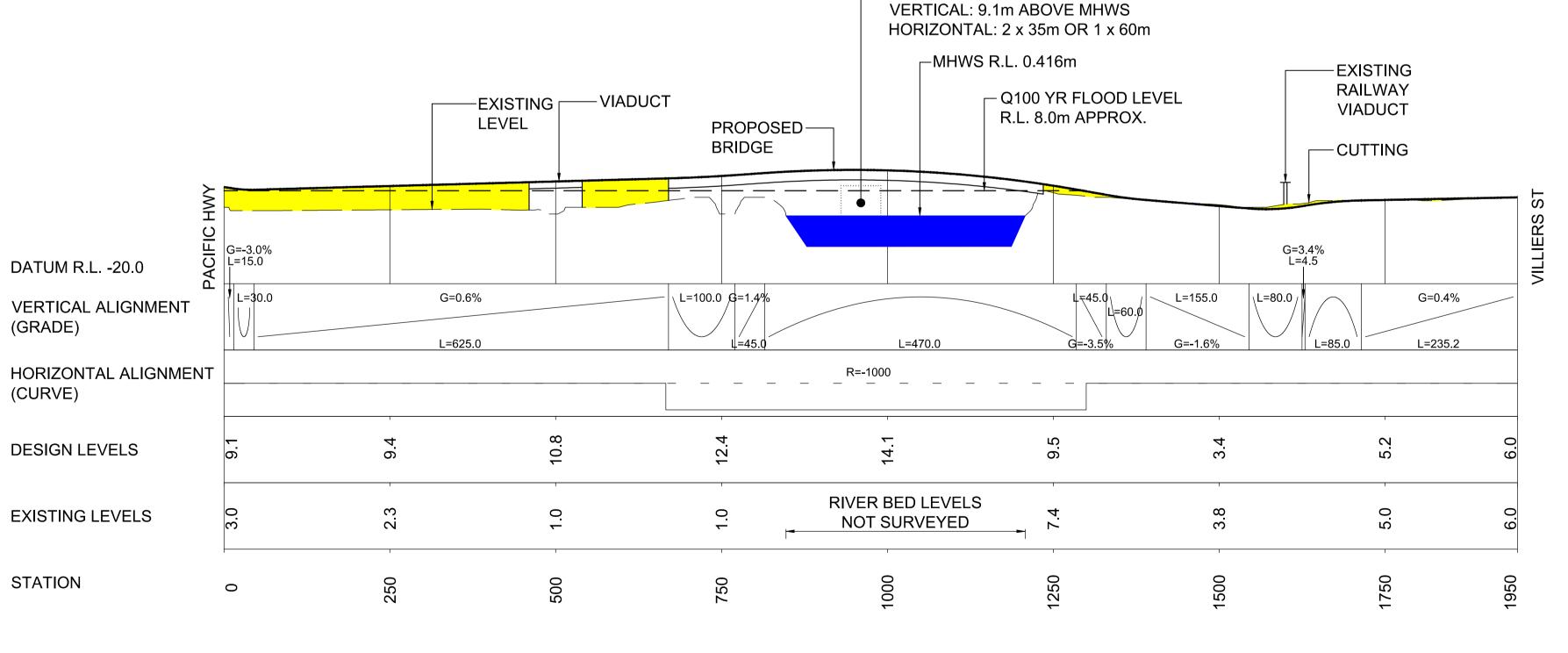
- 2. IN ADDITION TO THE INTERSECTION UPGRADES SHOWN ON THE PLAN, THE OPTION WOULD INCLUDE AN UPGRADE OF THE FOLLOWING INTERSECTIONS:
 - PACIFIC HWY / GWYDIR HWY
 - GWYDIR HWY / BENT ST
- 3. INTERSECTIONS REQUIRING AN UPGRADE INCLUDE:
- IS RELATIVELY HIGH IN 2019 AND WOULD REQUIRE INTERSECTION IMPROVEMENTS. THOSE THAT WILL REQUIRE AN UPGRADE TO ACCOMMODATE TURNING VEHICLES.

WHERE THE ESTIMATED NUMBER OF

VEHICLES APPROACHING THE INTERSECTIONS

LEGEND - LONGITUDINAL SECTION:

EMBANKMENT CLARENCE RIVER PLAN



LONGITUDINAL SECTION

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В	PROR - PARTS 1 & 2 - DRAFT 2	REB	26/09/2011	VERTICAL SCALE 1:1000m
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(GRADE)

(CURVE)

STATION

ARUP Arup Pty Ltd ABN 18 000 966 165
DESIGNED

CORRIDOR 2 - PRELIMINARY ROUTE OPTION 9

PLAN AND LONGITUDINAL SECTION

- NAVIGATION CHANNEL MINIMUM CLEARANCES:

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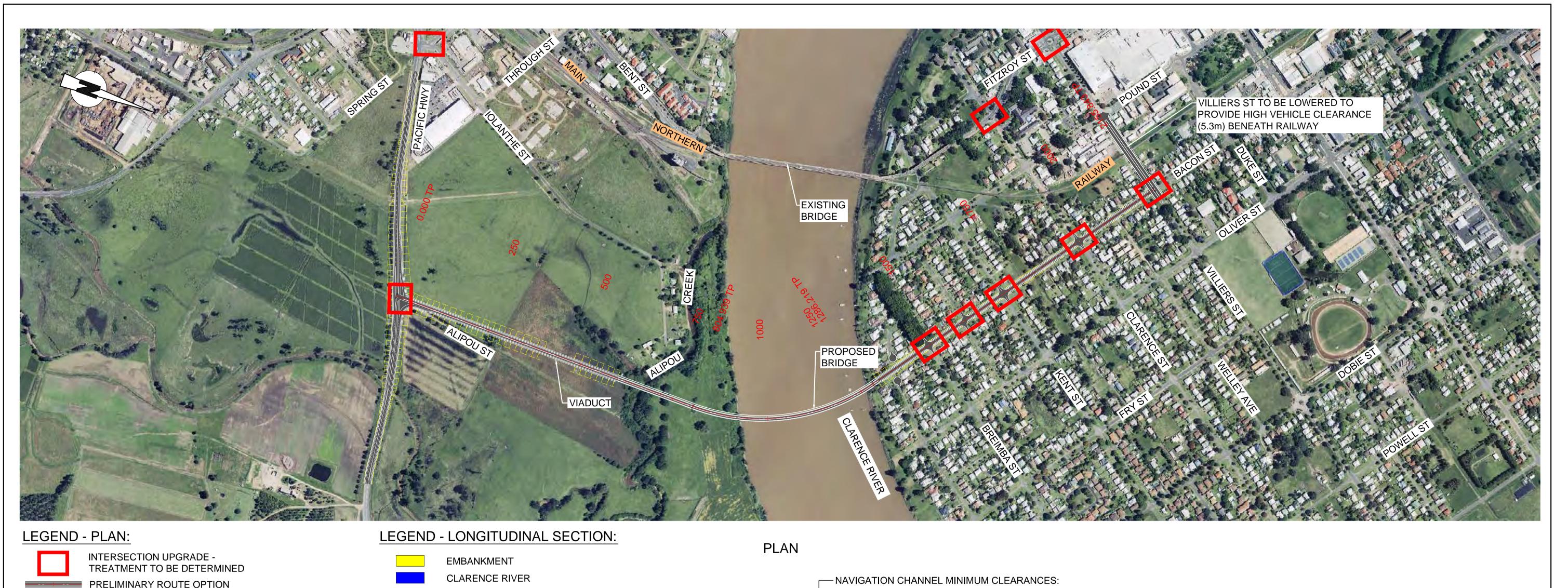
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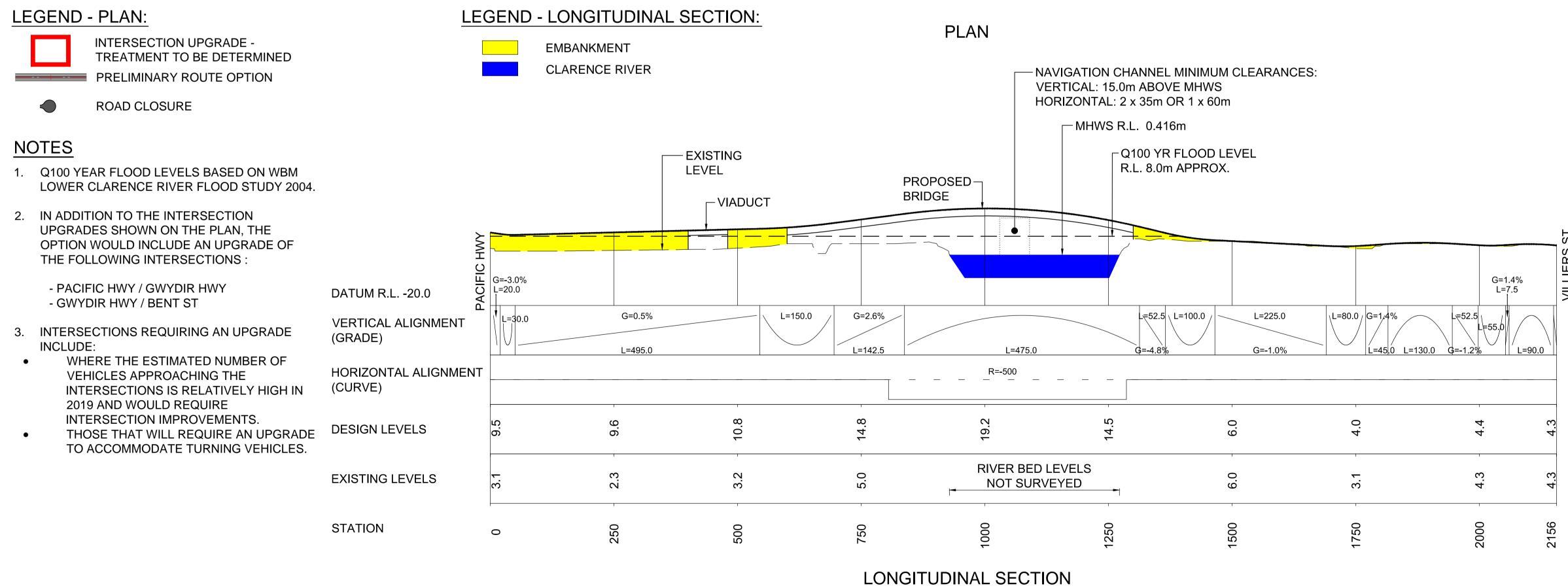
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С	PROF	R - PARTS 1 & 2 - DRAFT 3	REB	6/10/2011	0 20 40 60 80 100
В	PROF	R - PARTS 1 & 2 - DRAFT 2	REB	26/09/2011	VERTICAL SCALE 1:1000m
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No.	Amendment Description		Initials	Date	HORIZONTAL SCALE 1:5000m
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ARUP Arup Pty Ltd ABN 18 000 966 165					
DESIGNED					
REVIEWED					

ROADS AND MARITIME SERVICES	FILE No.
CLARENCE VALLEY COUNCIL MAIN ROAD 83 - SUMMERLAND WAY	-
ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON	
CORRIDOR 2 - PRELIMINARY ROUTE OPTION 10 PLAN AND LONGITUDINAL SECTION	00

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