

Waikanae Duplicate Rising Main

Construction Advancement

Current Situation

- Conveys all wastewater from Waikanae to the Paraparaumu treatment plant.
- Single 5km long rising main
- No redundancy for this critical main.
- Existing rising main nearing its rated design capacity.
- Further capacity needed to meet future grow.

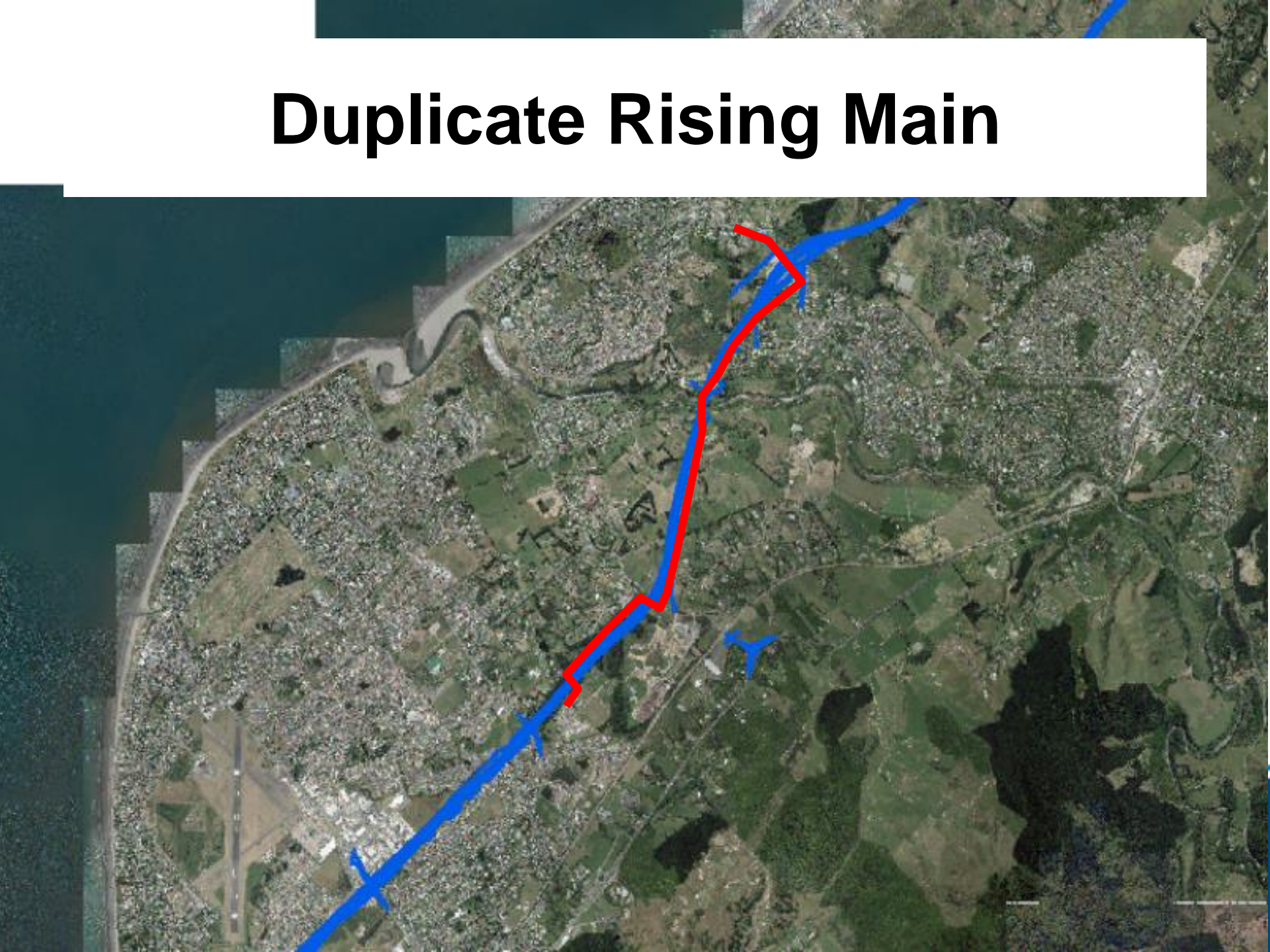
Current Rising Main



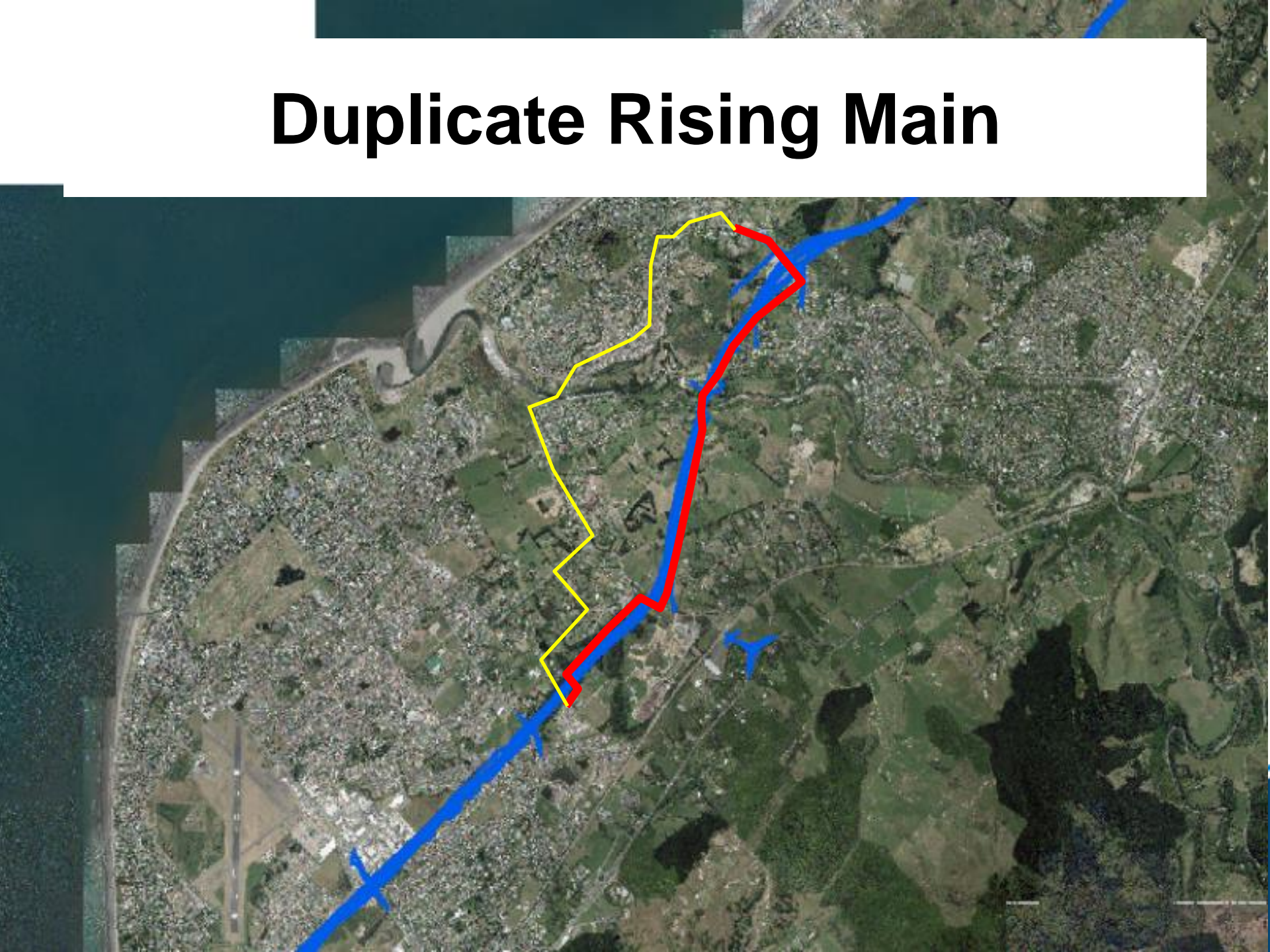
Duplicate Rising Main

- Provides capacity for future growth
- Utilises additional Rauparaha pumping station upgrade capacity
- Additional operational redundancy and flexibility.

Duplicate Rising Main



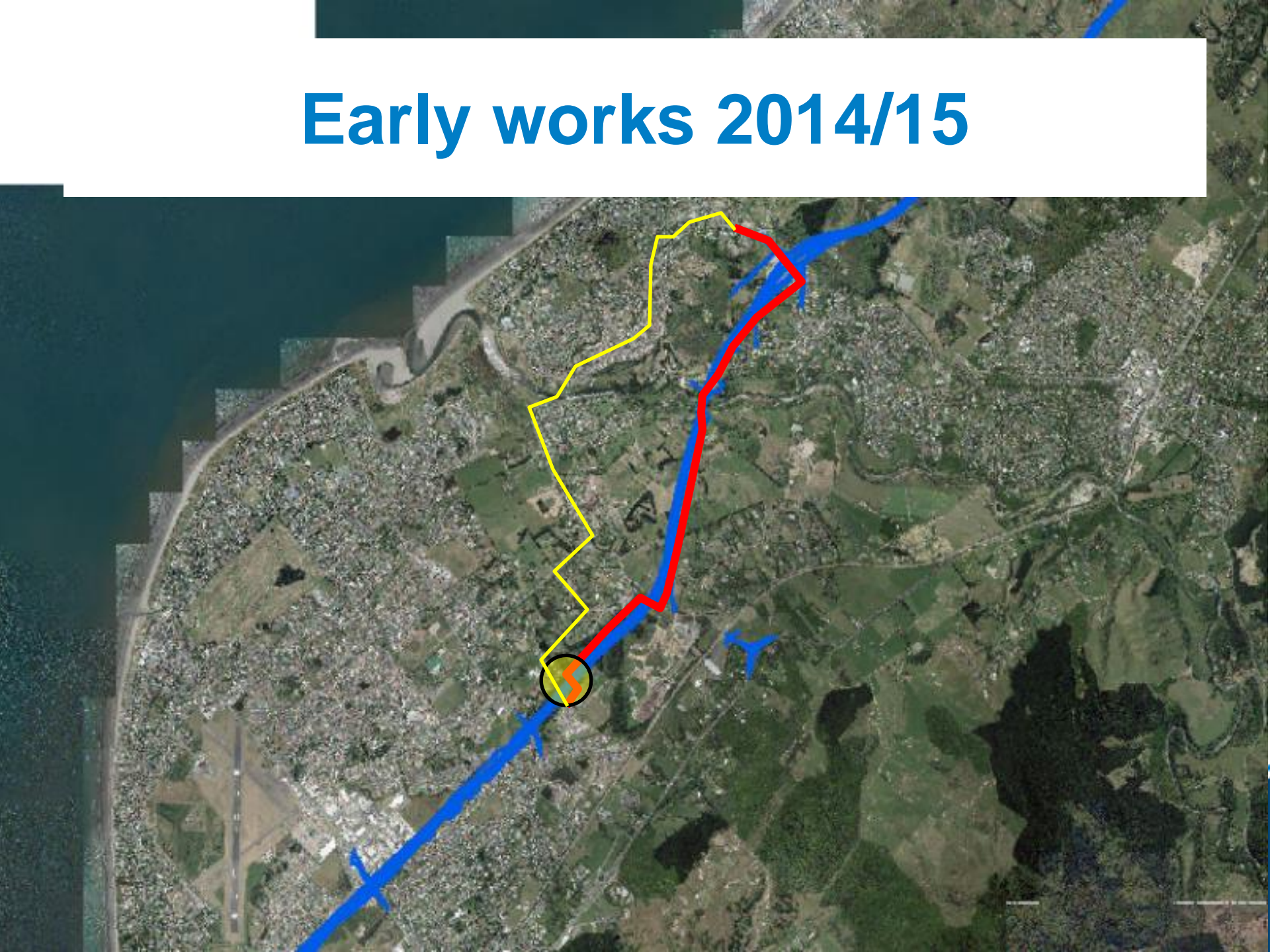
Duplicate Rising Main



Early works 2014/15

- The construction of a rising main duct completed during M2PP construction at the Expressway crossing at the WWTP
- Completed with surplus funds from Te Roto Wastewater Pumping Station upgrade Project

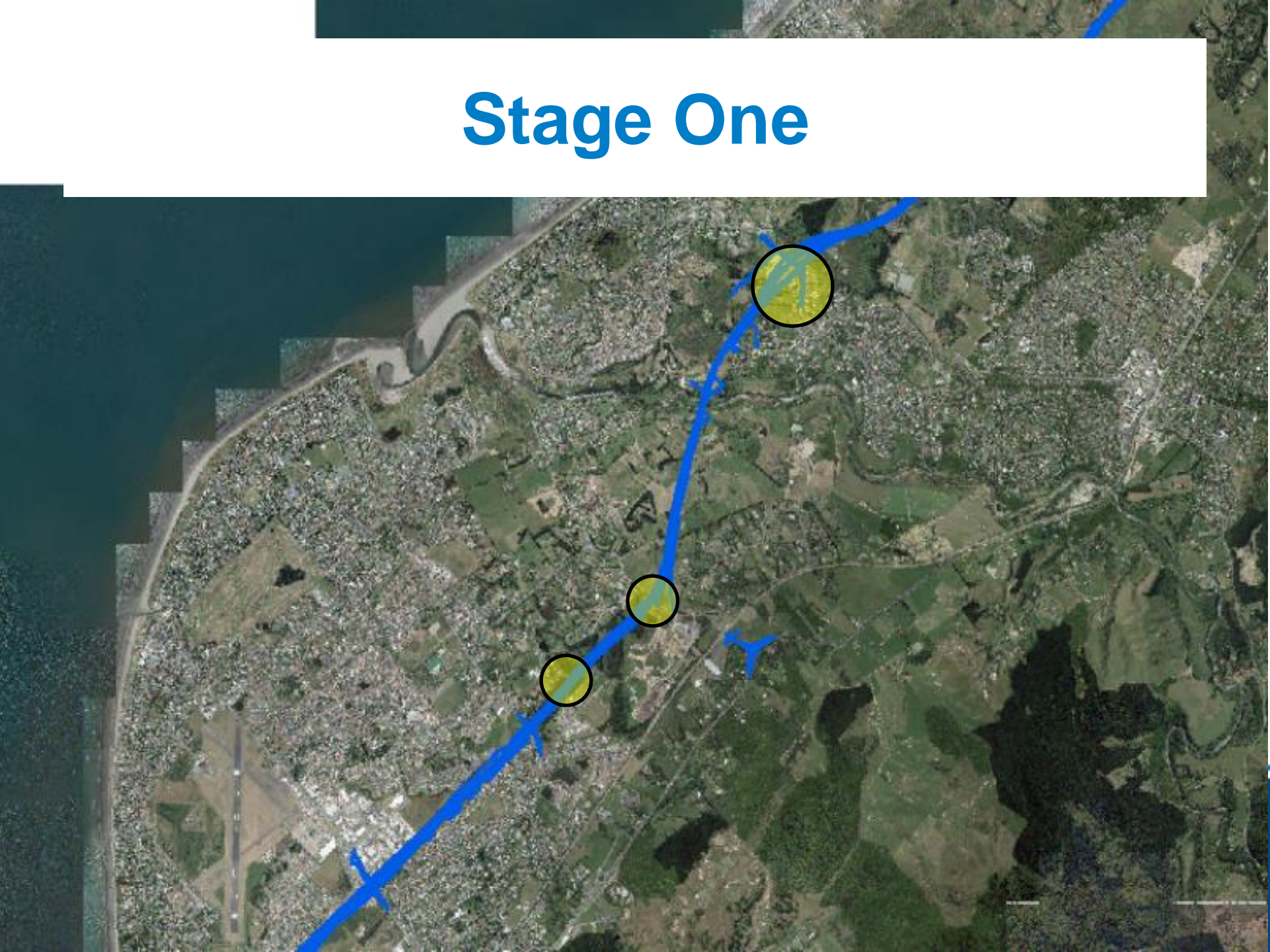
Early works 2014/15



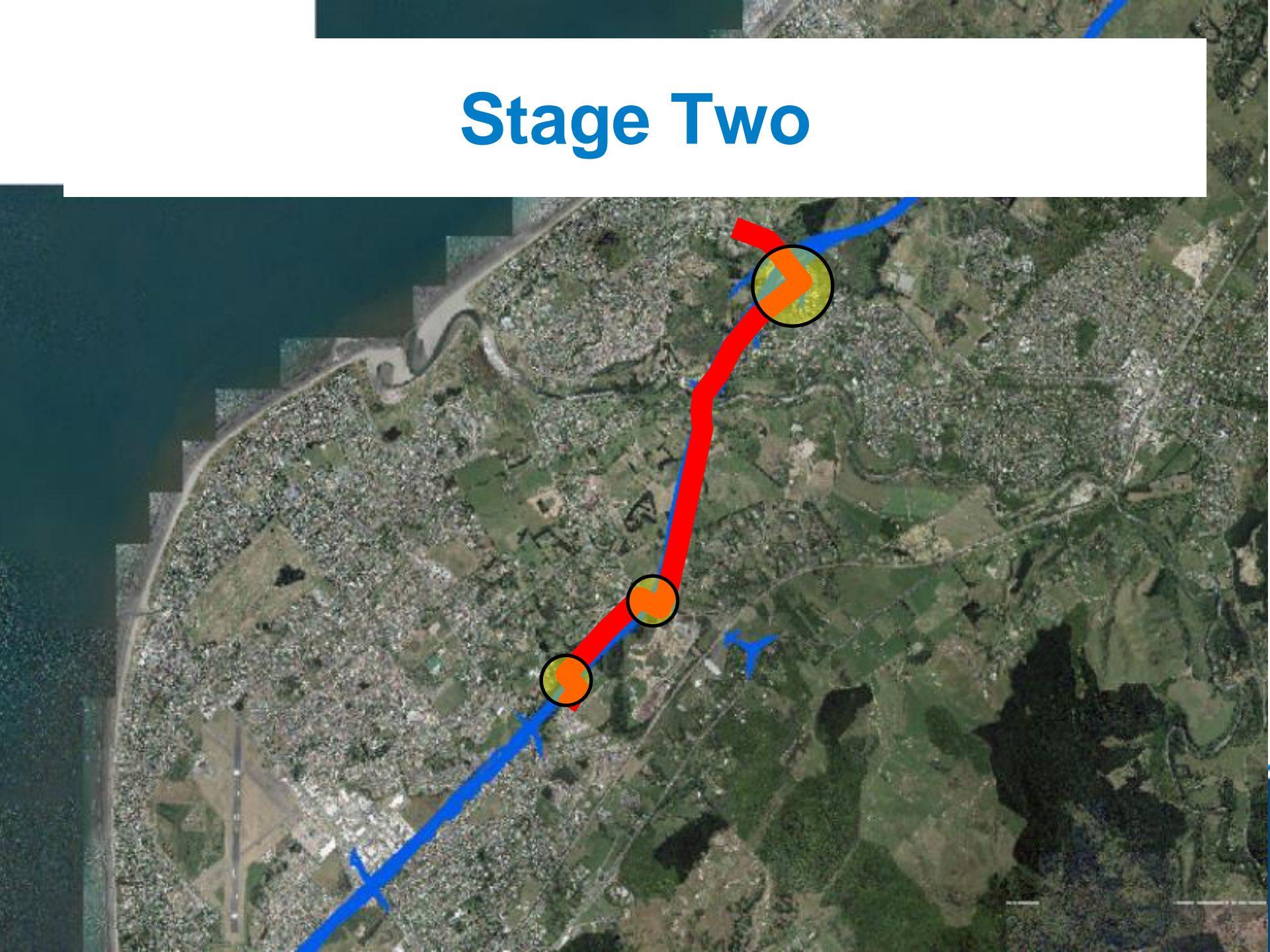
LTP Staging

- Current programme stages
- Stage one – advanced works
 - Limited advanced works to take advantage of any cost savings from construction in conjunction of the M2PP expressway.
 - Priority existing roads crossings at Otaihanga and Te Moana Interchange
 - Minimisation of future traffic disruption
 - Years 1 to 2 of LTP
- Stage two – Completion
 - Focused on completion of intermediate lengths along the services corridor and CWB adjacent to the expressway
 - Years 2-4 of LTP

Stage One



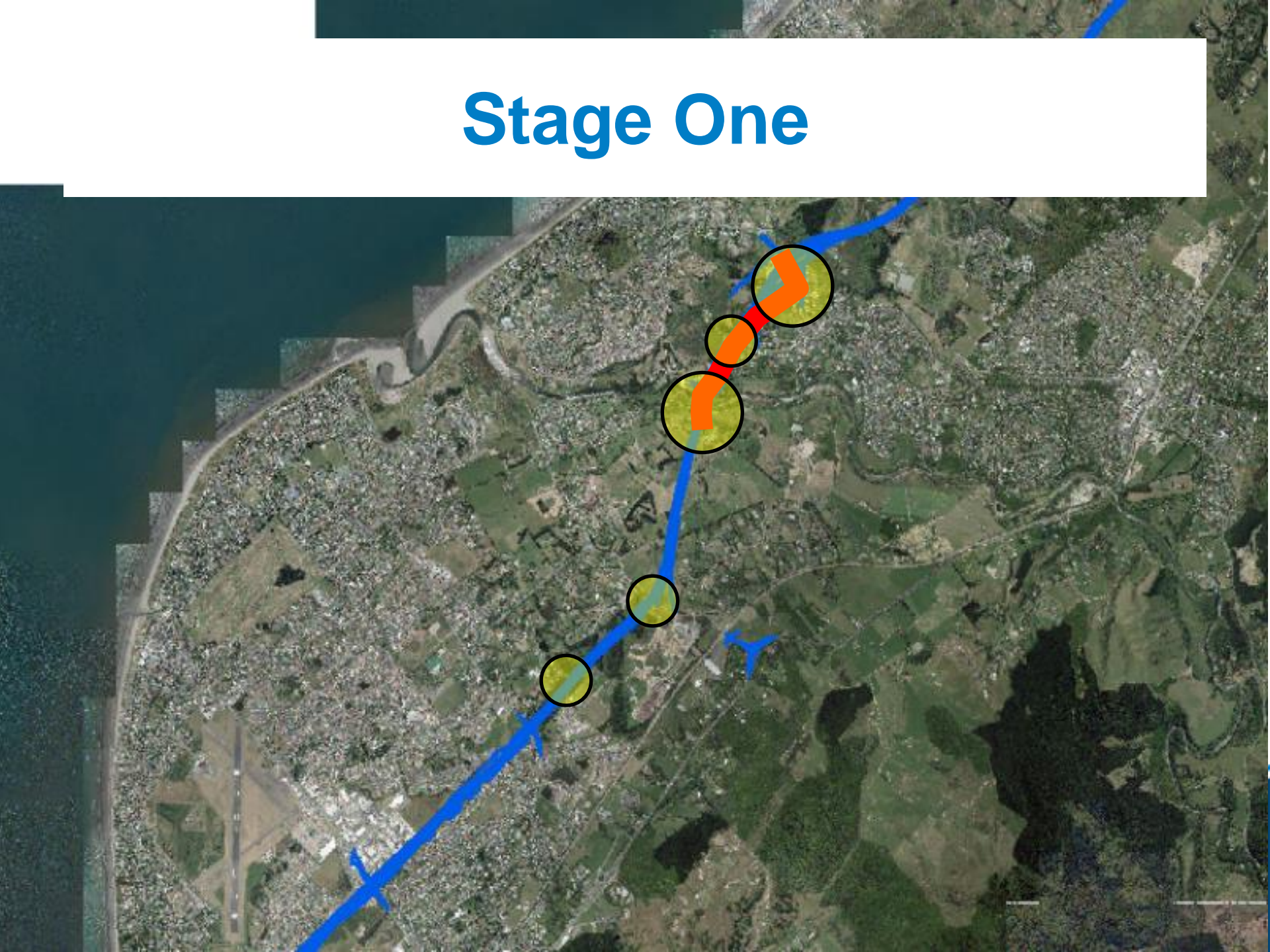
Stage Two



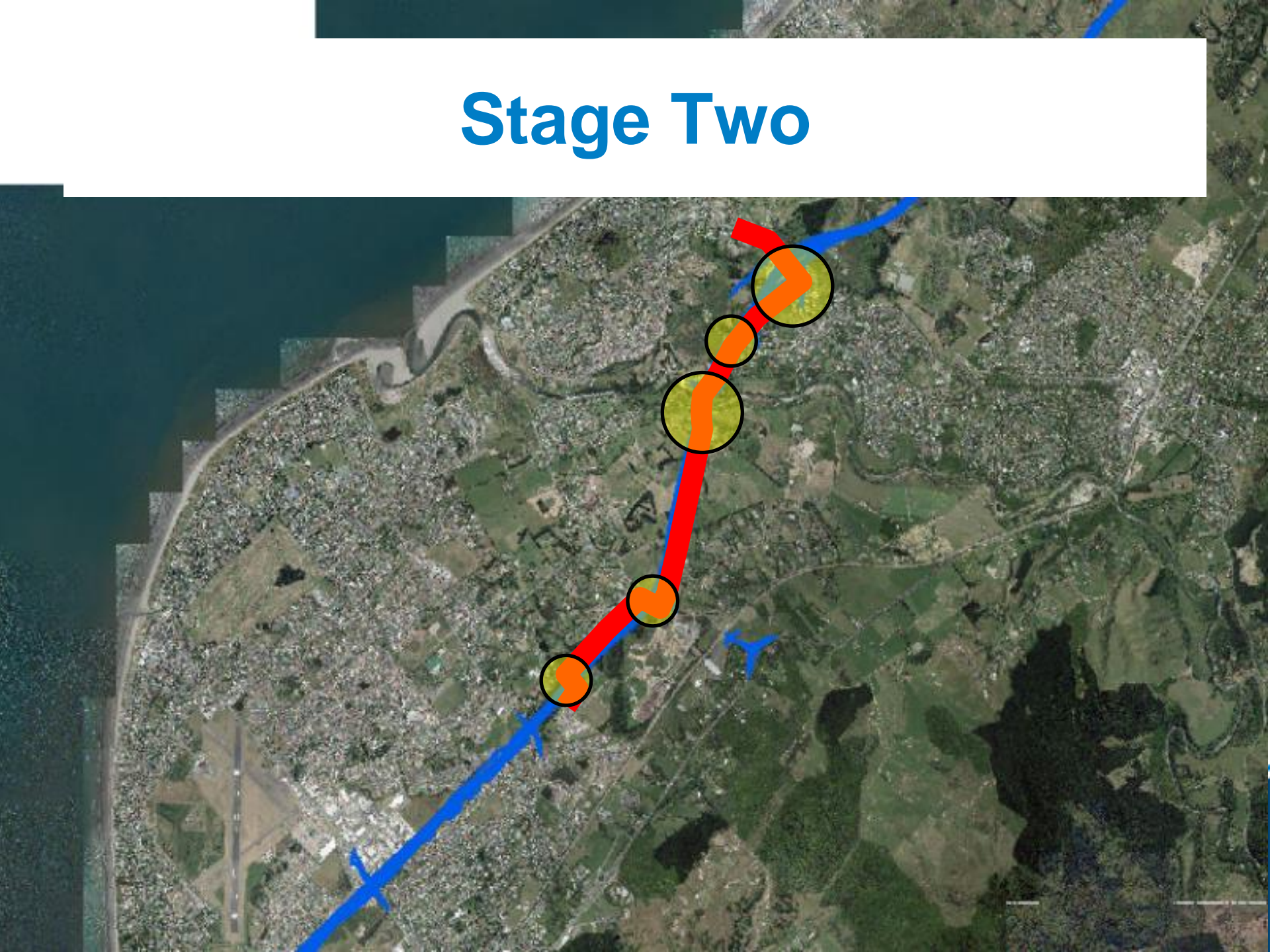
Advanced Construction

- Stage one
 - Extended advanced works
 - Focused on completion of the rising main across Waikanae Expressway Bridge, Patricia Grace Wall to and across Te Moana Road interchange.
 - Provide cost savings and minimisation of future disruption to traffic and CWB.
 - Completes critical links
- Stage two
 - Focused on completion of rising main from the Waikanae bridge south along the CWB services corridor.
 - Discussions underway with NZTA to complete with stage one

Stage One







Stage Two



LTP Funding

Project / programme	2015/16 \$000	2016/17 \$000	2017/18 \$000	2018/19 \$000	Total \$000	Priority
Dissolved Air flotation (DAF) renewal	700	-	-	-	700	Should / Must
Wastewater pipe renewals	500	513	526	541	2,079	Must
Paraparaumu Wastewater network reconfiguration	300	-	-	-	300	Must
Waikanae duplicate rising main	250	717	736	2,378	4,082	Must
Total	1,750	1,230	1,262	2,919	7,161	

Proposed Funding

Project / programme	2015/16 \$000	2016/17 \$000	2017/18 \$000	2018/19 \$000	Total \$000	Provisional priority
Dissolved Air flotation (DAF) renewal		 717			717	Defer to year 2
Wastewater pipe renewals		 1,262		818	2080	Defer to years 3-4
Paraparaumu Wastewater network reconfiguration		 313			313	Defer to year 2
Waikanae duplicate rising main	1750	200		2,101	4051	Advance years 2-3 to year 1
Total	1,750	1,230	1,262	2,919	7,161	Not net change to LTP

Risks

Issue	Primary Risk / Opportunity	Risk Level	Value \$000
Defer Dissolved Air flotation (DAF) renewal to year two	Exceed current capacity or failure	Low-Medium	700
Defer year 1 and 2 pipe renewals and spread over years 3 and 4	Delayed improvement in performance of wastewater network.	Medium-low	1,000
Defer Wastewater network reconfiguration to year two	Delayed operational performance improvements	Low	300