

Appendix 7

Structure Plans

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1. Waihi Beach Structure Plan

(a) Infrastructure Schedule

Project		Funding Source(%)			
		Developer	Council	Council	Other
			Financial Contributions	Rates	
Water Supply	Source	0%	0%	0%	0%
	Reservoirs	0%	100%	0%	0%
	Reticulation	37%	63%	0%	0%
Wastewater	Treatment	0%	0%	0%	0%
	Reticulation	12%	88%	0%	0%
Stormwater	Ponds	0%	100%	0%	0%
	Reticulation	0%	100%	0%	0%
Transport	Roads	0%	100%	0%	0%
	Intersections	0%	100%	0%	0%
	Walk/cycleways	0%	100%	0%	0%
	Park n Ride	0%	0%	0%	0%

Note: This schedule is a summary only. Refer to the Plan Change that proposed the structure plan for the original Schedule. In accordance with Rule 11.3.4 the Schedule is updated annually through the LTCCP/Annual Plan process to reflect changes in costs and timing.

Athenree Ecological Protection Requirements

To assist in protecting and maintaining the ecological values of Tauranga Harbour adjoining the Athenree foreshore, properties in the structure plan area and which adjoin the Tauranga Harbour or Esplanade Reserve are required to have a minimum area of 2000m².

An additional width Esplanade Reserve is to be set aside along the foreshore to the South of Athenree Road. The reserve is to generally follow the top of the escarpment. On the eastern most property (Lots 4 & 8, DP35041) the esplanade reserve is to be 20m from mean high water spring.

Provision shall be made by the Western Bay of Plenty District Council for a future walkway within the esplanade reserve and its specific location and design shall be supported by an ecological assessment carried out by a suitably qualified and experienced Ecologist. Suitable fencing (1.2 metres high) generally located along the harbours edge and planting of the embankment shall be implemented as part of any future subdivision development to assist in reducing the potential for people and domestic pets from venturing on to the harbour edge.

2. Katikati Structure Plan

26.33

(a) Infrastructure Schedule

Project		Funding Source(%)			
		Developer	Council	Council	Other
			Financial Contributions	Rates	
Water Supply	Source				
	Reticulation	20%	80%	0%	0%
Wastewater	Reticulation	20%	80%	0%	0%
Stormwater	Ponds	84%	16%	0%	0%
	Reticulation	28%	72%	0%	0%
Transport	Roads				
	Carisbrook Street	0%	100%	0%	0%
	Sheffield Street	0%	100%	0%	0%
	Marshall Road	0%	100%	0%	0%
	Tetley Road	0%	100%	0%	0%
	Wills Road	0%	100%	0%	0%
	Internal Residential	85%	15%	0%	0%
	Internal Industrial	88%	12%	0%	0%
Intersections	Wharawhara/ SH2 Roundabout and link to Bypass	0%	0%	0%	100%
	Marshall Road/SH2 Traffic Lights	0%	0%	0%	100%
	Walk/cycleways	0%	100%	0%	0%

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(b) Waterford Industrial Zone

A close-boarded wooden fence shall be constructed on the boundary of the zone with Flat 1 DPS 31079 and Lot 2 DPS 30458. The fence shall be 2.0m in height with a wooden cap.

The fence is to be constructed prior to Lot 2 DP 30458 being used for industrial purposes.

3. Omokoroa Structure Plan

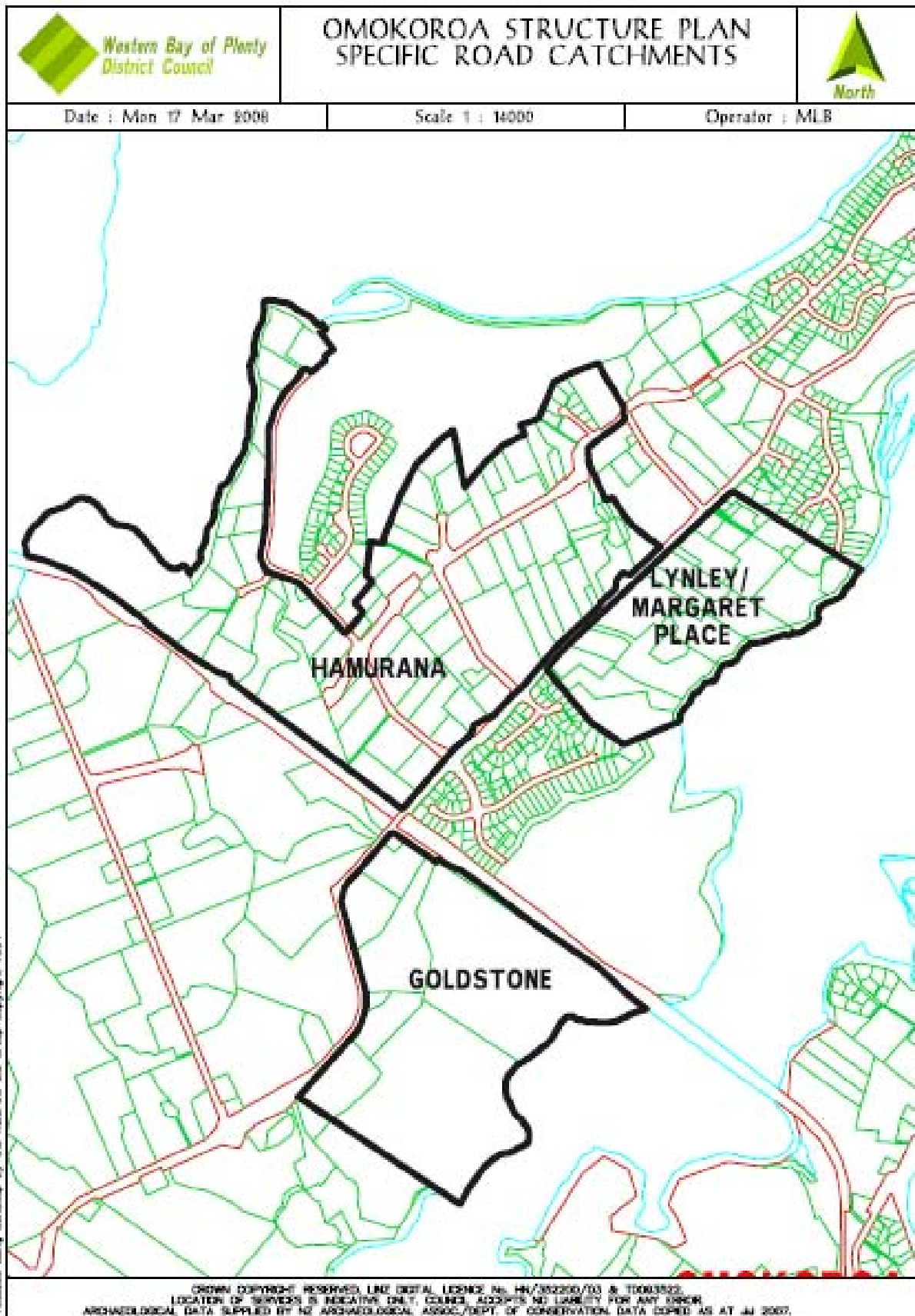
(a) Infrastructure Schedule

12.16

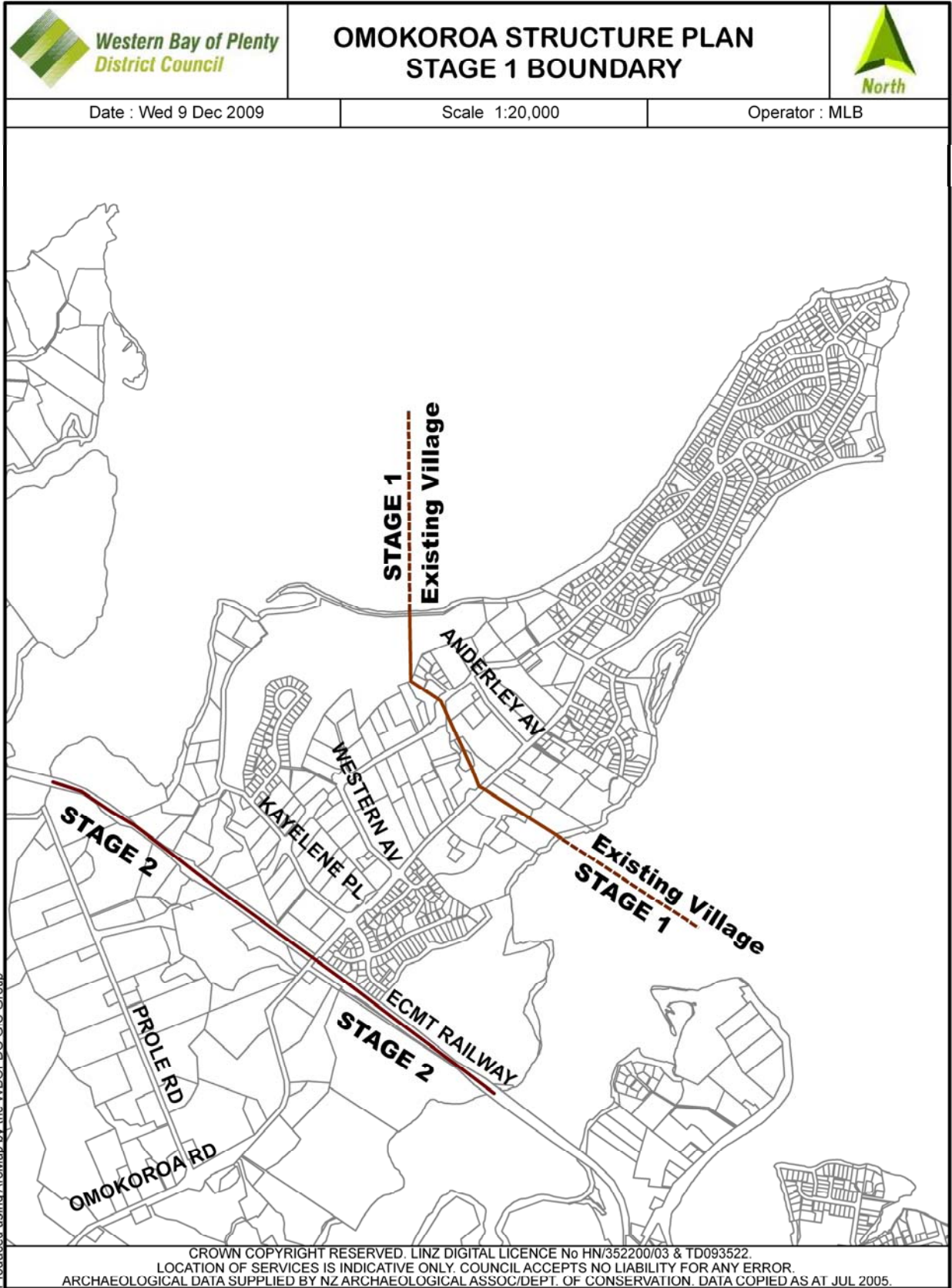
Project		Funding Source(%)			
		Developer	Council	Council	Other
			Financial Contributions	Rates	
Water Supply			72.6%	27.4%	
Wastewater	Reticulation		73.0%	11.0%	16.0%
Stormwater	Ponds		93.4%	6.6%	
	Reticulation	100.0%			
Transport	Roads	1.0%	96.0%	4.0%	
	Walk/cycleways	100.0%			
	Park n Ride	100.0%			

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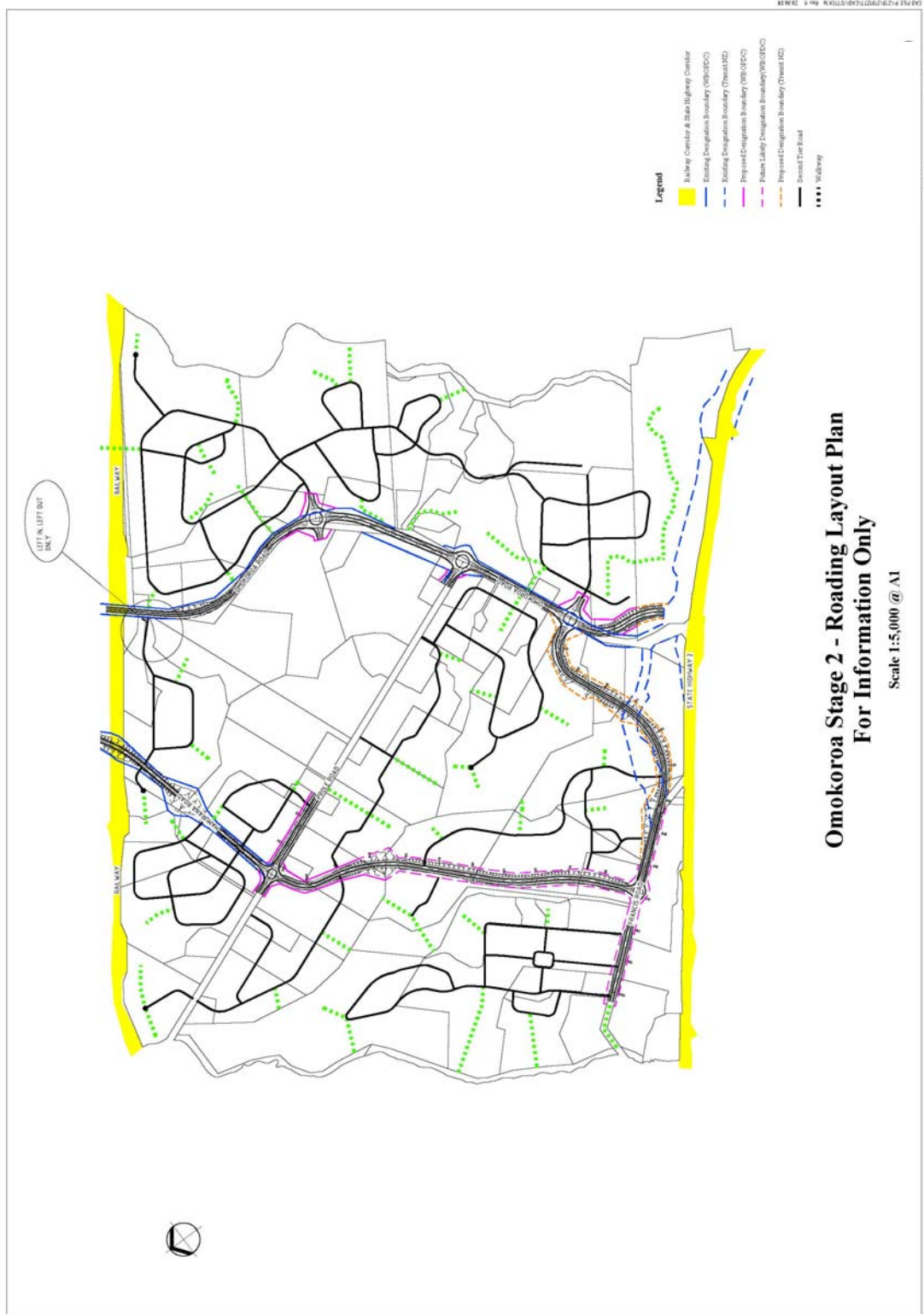
(b) **Structure Plan Specific Road Catchments**



(c) Structure Plan Boundaries



(d) Structure Plan Stage 2 Roding Map



(e) Earthworks Procedures

The following information is provided to give land developers information on good earthworks practice in the Omokoroa Stage 2 Structure plan area.

Generally

1. Contractors involved in earthmoving or who disturb earth as part of their development need to consult with Pirirakau so all parties are aware of protocols surrounding archaeological sites.

Consultation

2. Specifically, at least four weeks prior to significant earthworks on site Pirirakau is to be informed of the upcoming earthworks.

Earthworks

3. Prior to the works starting Pirirakau should be invited to carry out a blessing of the site.
4. All earthworks are to be monitored by a representative of Pirirakau and to this end an agreement between Pirirakau and the developer should be formed to enable site access for monitoring. It will be the developers responsibility to ensure all Occupational Safety and Health requirements and other legal obligations are able to be met by the Pirirakau representative.
5. On discovery of any unrecorded sites of archaeological importance work shall cease immediately until an assessment can be made by a hapu representative. Pirirakau will retain an archaeologist for further opinion or recommendation when or if one is required.

Archaeological

6. On discovering any archaeological find the following process will be instigated:

Koiwi (human remains)

- ▶ Site work will stop, and the designated Pirirakau representative will be notified and inspection/ assessment carried out.
- ▶ Rahui will be imposed on the site and immediate surrounds.
- ▶ Pirirakau and contractors to meet and assess implications and constraints.
- ▶ Pirirakau to notify relevant authorities.
- ▶ Koiwi site and location to be recorded and inspected by archaeologist.
- ▶ Site to be registered as Waahi tapu.
- ▶ Exhumation to be carried out according to tikanga and kawa.
- ▶ Construction Work may continue in another area until site has been made safe to continue.

12.17

Stone Artefacts

- ▶ Work in the immediate area will stop and Pirirakau representative to be notified.
- ▶ Rahui will be imposed for duration of assessment.
- ▶ Location to be recorded.
- ▶ Relevant authorities notified.

- ▶ Artefacts to be dated and removed from site by Pirirakau.
- ▶ Taonga to be vested under mana of Pirirakau.
- ▶ Investigation of immediate vicinity to be carried out.
- ▶ Work may continue in another area until site has been made safe to continue.

Wooden Artefacts

- ▶ Work in immediate area will stop and Pirirakau representative to be notified.
- ▶ Rahui will be imposed for duration of assessment.
- ▶ Location to be recorded.
- ▶ Relevant authorities notified.
- ▶ If dry, artefact will need to be protected vacuum-packed and protected from deterioration.
- ▶ If wet, artefact needs to be submerged at the site. Artefact cannot be removed until a safe curing process is confirmed.
- ▶ Investigation of immediate vicinity to be carried out.
- ▶ Work may continue in another area until site has been made safe to continue.

Habitation/Midden/Cooking Sites

- ▶ Work in immediate area to stop and Pirirakau representative to be notified.
- ▶ Rahui will be imposed for duration of assessment.
- ▶ Location to be recorded.
- ▶ Relevant authorities to be notified.
- ▶ Surface investigation/excavation to determine extent of the site.
- ▶ Archaeological investigation to be carried out because of number of artefact remains which may be found.
- ▶ If wet, artefact needs to be submerged at the site. Artefact cannot be removed until a safe curing process is confirmed.
- ▶ Any significant find to be stored and recorded.
- ▶ Work may continue in another area until site has been made safe to continue.

Naming Rights

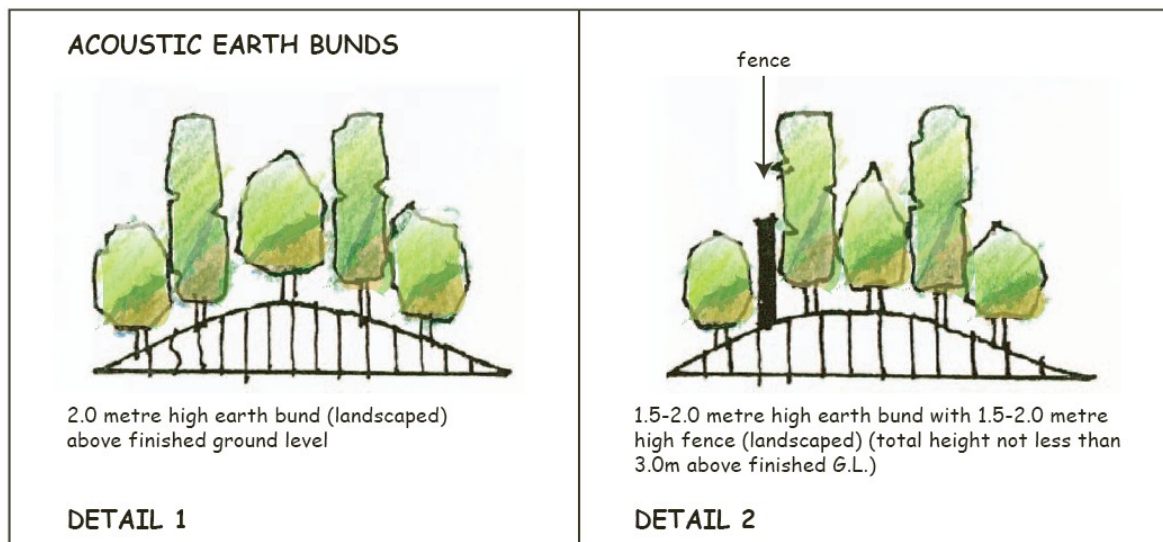
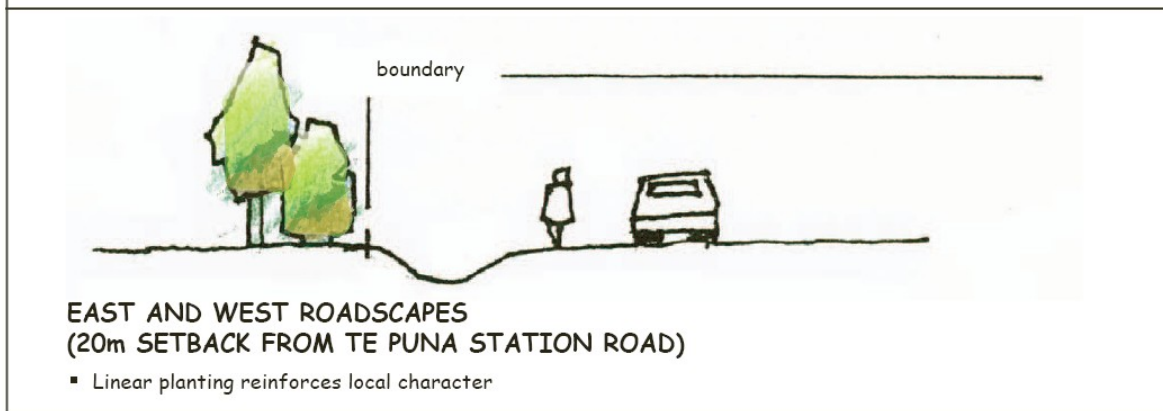
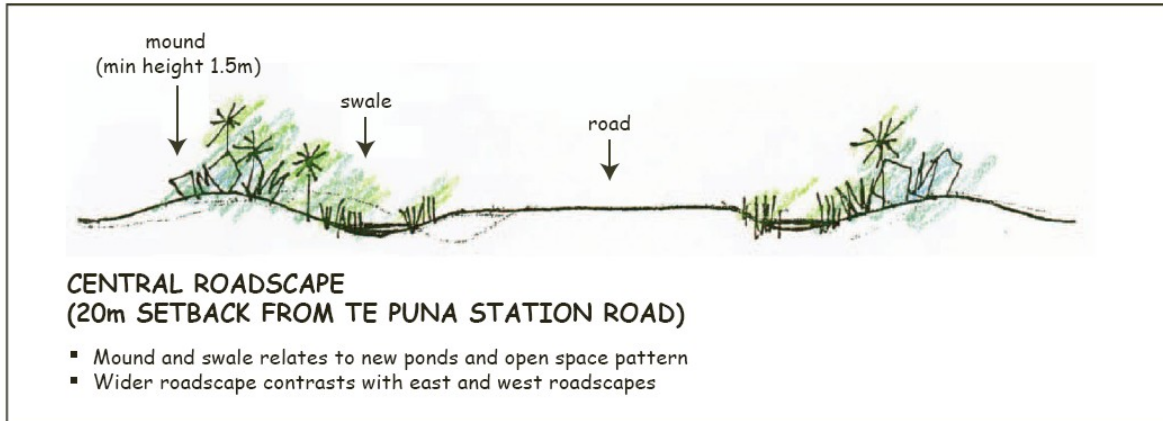
Pirirakau, as Tangata Whenua of the area, retains the right to suggest names to Council and reasons for such suggestions for any areas or roads resulting from earthworks and/or construction of roads.

4. Te Puna Business Park Structure Plan

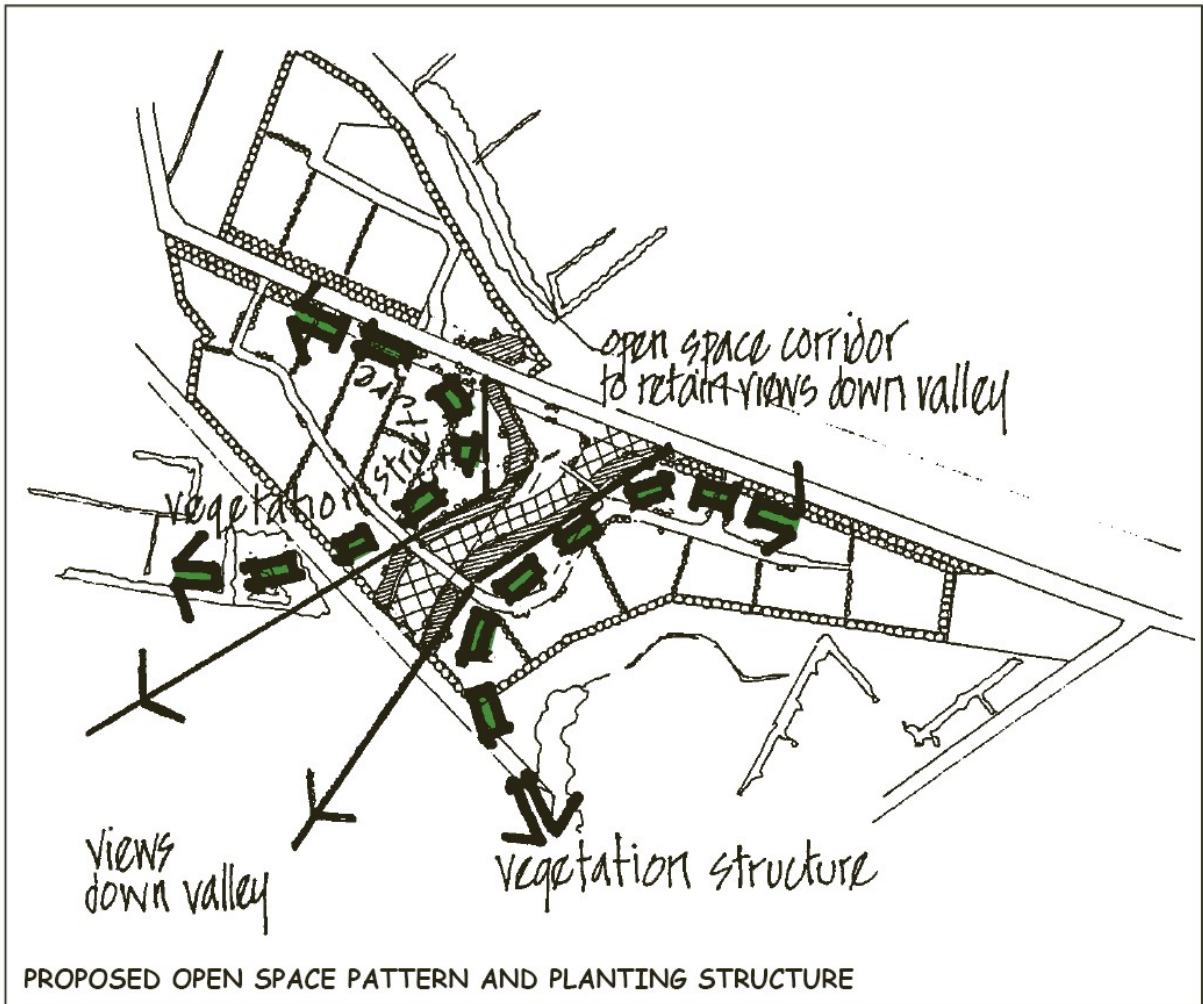
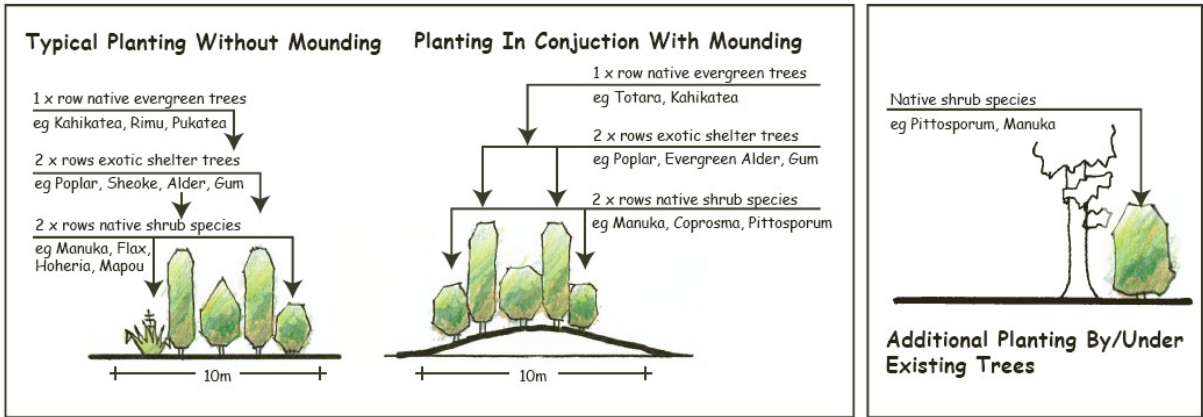


TE PUNA STATION ROAD PLANTING SECTIONS

(Planting to comply with sightline requirements at access points onto Te Puna Station Road)



PERIMETER PLANTING



TE PUNA RURAL BUSINESS PARK STRUCTURE PLAN

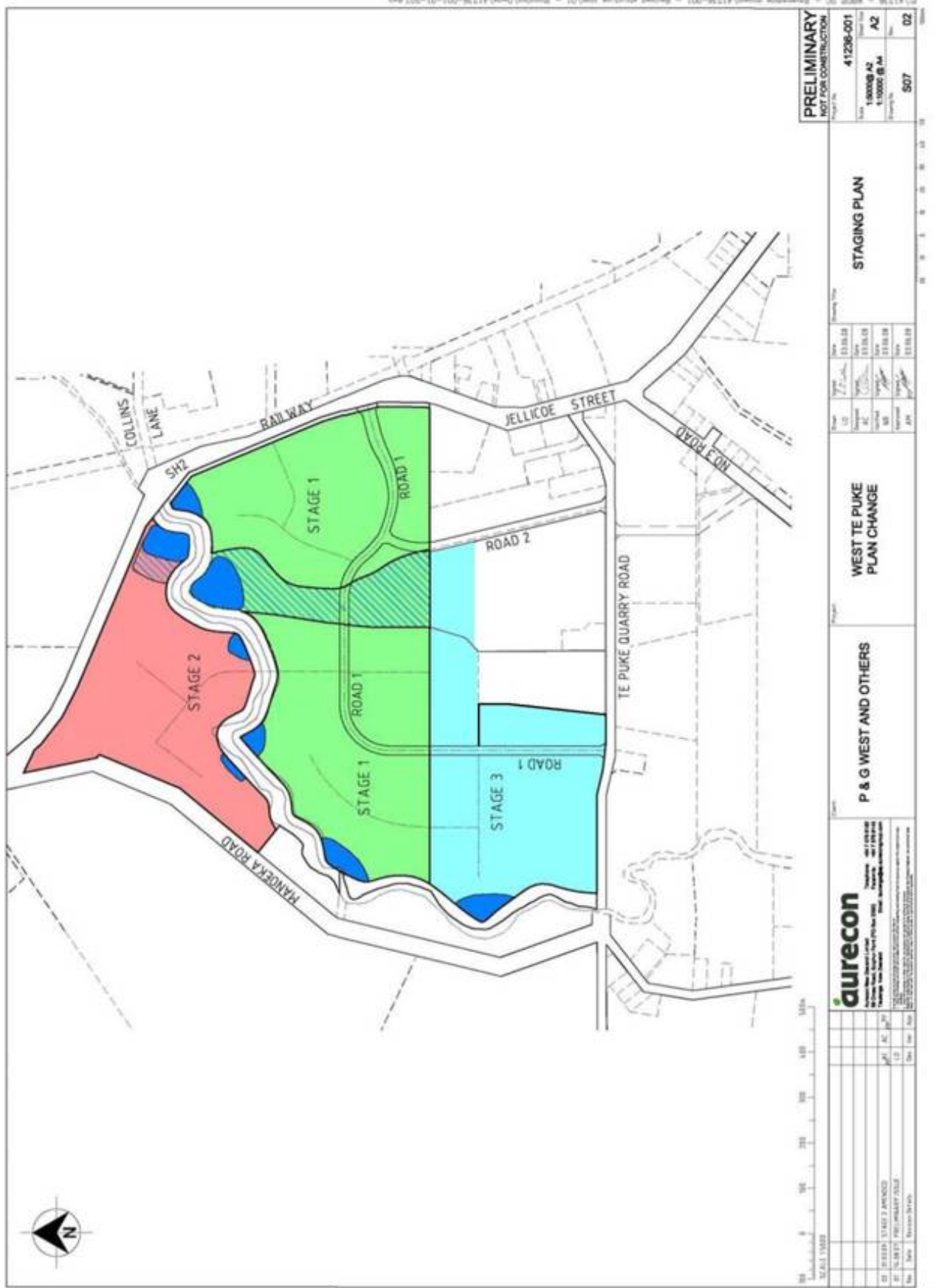
5. Te Puke Structure Plan

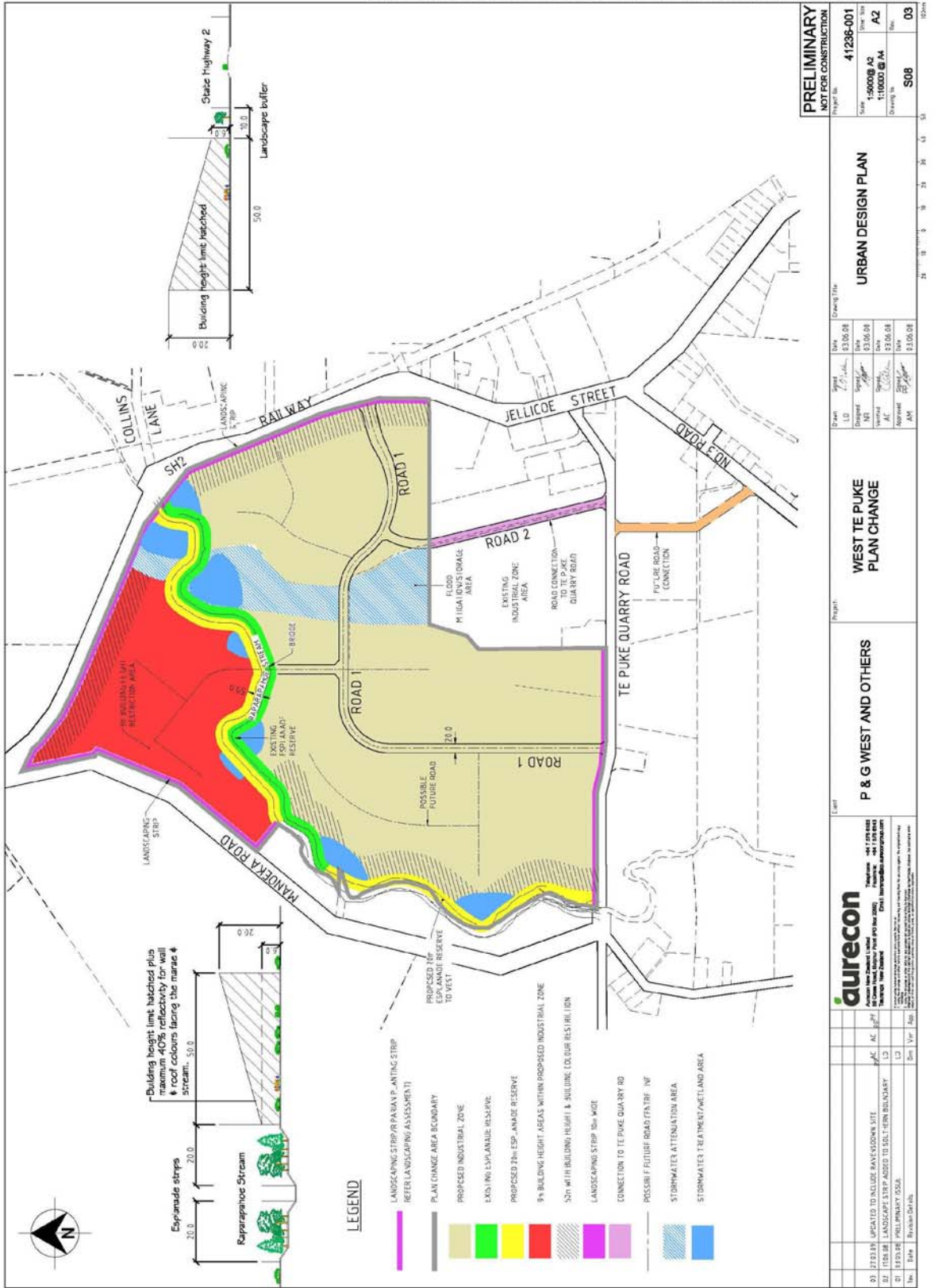
(a) Infrastructure Schedule

Project		Funding Source(%)			
		Developer	Council Financial Contributions	Council Rates	Other
Water Supply	Area 3, 4, 5 - Pongakawa Pipe Upgrade	0%	100%	0%	0%
	Area 3 Macloughlin Drive 150mm pipe	0%	100%	0%	0%
	Area 3 Dunlop Road 100mm pipe	0%	100%	0%	0%
	Area 4 new water pump	0%	100%	0%	0%
	Area 4 - Tynan Street - Dudley Vercoe 200mm pipe	52.50%	47.50%	0%	0%
	Area 5 - Cannell Farm Drive 100mm pipe	100%	0%	0%	0%
Wastewater	Area 3	0%	100%	0%	0%
	Area 4 and Area 5	100%	0%	0%	0%
Stormwater	Area 3	0%	100%	0%	0%
	Area 4 and Area 5	100%	0%	0%	0%
Transport	Roading Area 3 Phase 1, 3, Area 4 and Area 5	85%	15%	0%	0%
	Roading Area 3 Phase 2	75%	25%	0%	0%
	Area 3 No 3 Road Roundabout	0%	80%	20%	0%
	Area 3 No 3 Road link to Te Puke Quarry Road	0%	50%	30%	20%
	Area 3 State Highway Median	0%	0%	0%	100%
	Area 5 No 1 Road / Village Heights Link Road	0%	20%	80%	0%
	Walk/cycleways and Recreational Land				
	Area 3, 4, 5	0%	100%	0%	0%
	MacLoughlin Drive Reserve	0%	100%	0%	0%

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6. Te Puke West Industrial Structure Plan





Te Puke West Industrial Structure Plan

Stage as shown on Staging Plan

Stage 1A (defined as up to 20ha of stage 1 net developable area on the Puke West Staging Plan included in Appendix IX(f))

Prerequisite to subdivision 224 certificate being granted or to any land use or building consent activity being established

Roading and Access

- Internal structure road linking Te Puke Quarry Road with SH2 (comprising part of Road 1 and all of Road 2) completed.
- A two-lane roundabout at the intersection of SH2 and internal structure Road 1 to the standards and approval of NZTA completed.
- A two-lane roundabout at the intersection of SH2 and No.3 Road to the standards and approval of NZTA completed.
- Solid median between the foregoing two roundabouts to the standards and the satisfaction of NZTA completed.
- Stopping of Te Puke Quarry Road no further than 100m west of SH2 completed.

Stormwater

- Raparapahoe Stream flood width channel widening completed.
- Internal flood mitigation / storage area provided.
- Internal stormwater treatment areas completed.
- Open drain along Road 2 alignment completed.

Water

- 300 mm dia bulk supply watermain from Road 1 to existing 375mm dia in No. 3 Road (at Whitehead Ave) completed.
- 300 mm dia internal watermain within Road 1 corridor completed.

Sewerage

- Upgrade of gravity reticulation from existing MH 0129 to Centennial Park pumpstation to 375mm diameter completed.
- Upgrade / Replacement Centennial Park pumpstation completed.
- 225mm diameter sewer rising main replacement from Centennial Park pumpstation to MH 0988 completed.
- Upgrade of gravity reticulation from existing MH 0988 to existing MH 1119 to 450mm diameter completed.
- Internal sewage pumpstation and 200mm diameter rising main to existing MH 0129 completed including storage.

Landscaping

- Extension of esplanade reserve along Raparapahoe Stream established.
- 10m Planted Buffer Strip at SH2 established.

Compliance with all prerequisites for Stage 1A above.

Stage 1B (defined as the balance area of stage 1 on the Puke West Staging Plan included in Appendix IX(f))
Stage 2

Roading and Access

- Link road between No. 3 Road and Te Puke Quarry Road completed
- or
- Tauranga Eastern Motorway (TEM) operational or alternative State Highway improvement works being undertaken to create State Highway 2 capacity, as agreed with NZTA at that time.

Roading and Access

- Link road between No. 3 Road and Te Puke Quarry Road completed
- or
- Structure Road formed and vested in Council for Stage 1.
- TEM operational or alternative State Highway improvement works being undertaken to create State Highway 2 capacity, as agreed with NZTA at that time.
- Raparapahoe Stream bridge completed.

Stormwater

- Internal stormwater treatment areas completed.

Water supply

- 300 mm dia internal watermain extended from Stage 1 and connected to existing Manoeka Road watermain.
- Additional water supply bore No. 5 completed.

Sewerage

- Internal sewage pumpstation and 150mm diameter rising main to existing Stage 1 completed including storage.

Stage 3

Landscaping

- 10m landscape strip at SH2, Manoeka Road and adjacent Rural land to be established.
- Esplanade reserve along Raparapahoe Stream established.

Roading and Access

- Link road between No. 3 Road and Te Puke Quarry Road completed
- Structure road for Stage 2 formed and vested in Council.
- TEM operational or alternative State Highway improvement works being undertaken to create State Highway 2 capacity, as agreed with NZTA at that time.

Stormwater

- Internal stormwater treatment areas completed.
- Open drain from Te Puke Quarry Road piped or relocated prior to bulk earth filling.

Water supply

- 300 mm dia internal watermain extended from Stage 2 and connected to existing Te Puke Quarry Road watermain.
- Additional water supply bore No. 5 to be completed.

Landscaping

- Esplanade reserve along Raparapahoe Stream established.

Te Puke West Industrial Area Financial Contributions
Schedule of Capital works

		TOTAL	Industrial
		PROJECT	Land Costs
PROJECT		COSTS	
STORMWATER			
	Roading Runoff	313,246	313,246
	Stormwater mitigation area	128,380	128,380
	Stormwater treatment areas (for roads)	59,467	59,467
	Upstream catchment pipes	1,272,010	1,272,010
	Raparapahoe widening	1,017,870	1,017,870
	Raparapahoe landscaping	176,850	176,850
	Land Purchase	1,820,340	1,820,340
	Total	4,788,163	4,788,163
	Financial Contributions per m2	\$	10.64
ROADING			
	Roundabout at SH2 / Entrance Road	2,607,891	2,607,891
	Entrance Road to Link to Te Puke Quarry Road	130,067	130,067
	Link to Te Puke Quarry Road	693,690	693,690
	Roundabout at SH2 / No. 3 Road	2,668,882	0
	Median Island on SH2 between Roundabouts	196,996	0
	Internal Roding	2,445,256	2,445,256
	Bridge over Raparapahoe Stream	1,698,000	1,698,000
	Land Purchase (excl SH2 roading)	1,349,600	1,349,600
	Road stopping Te Puke Quarry Road	30,000	0
	New Link Road between Te Puke Quarry Road and No3 Road	1,000,000	200,000
	Total	12,820,381	9,124,503
	Financial Contributions per m2	\$	20.28
WATER			
	No. 3 Road Upgrade to 300 dia	850,773	850,773
	Internal trunk main 300 dia	536,655	536,655
	Total	1,387,428	1,387,428
	Financial Contributions per m2	\$	3.08
SEWERAGE			
	Centennial P/S replacement	1,059,500	1,059,500
	Rising Main Upgrade P/S to Aturoa	93,665	93,665
	Gravity Upgrade - Aturoa to Treatment Plant	137,709	137,709
	Gravity Upgrade - MH 0129 to Centennial P/S	268,450	268,450
	Internal Pumpstation in stage 1 for full development incl rising main	705,062	705,062
	Internal Pumpstation in stage 2 incl rising main	301,574	301,574
	Total	2,565,960	2,565,960
	Financial Contributions per m2	\$	5.70
TOTAL FINANCIAL CONTRIBUTIONS PER SQUARE METRE		\$	39.70

For the purpose of calculating financial contributions the area to be calculated shall be the net area and shall exclude non developable areas being roads 1 and 2 on the Te Puke West Structure Plan reserves to be vested, and stormwater pond.

7. Rangioru Business Park

Metroplex Rangioru Financial Contribution Schedule

November 2005

Rates include allowance for land purchase, contingencies plus design and supervision

Based on June 2005 costs

26.33

Item	Description	Unit	Quantity	Rate	Amount Total Construction	Percentage of Public/ Network Benefit	Rangioru Contribution
1.00	ROADING INFRASTRUCTURE						
1.01	Eastern Arterial Interchange	LS	1	9,788,000	9,788,000	0%	9,788,000
1.02	SH2/Pah Road Intersection Upgrade	LS	1	2,217,000	2,217,000	0%	2,217,000
1.03	Young Road/Pah Road Roundabout	LS	1	364,000	364,000	0%	364,000
1.04	Young Road Upgrade Within Site	m	1850	2,350	4,347,500	0%	4,347,500
1.05	Young Road Upgrade Outside Site	m	850	700	595,000	0%	595,000
1.06	Pah Road Upgrade	m	1250	800	1,000,000	0%	1,000,000
1.07	Entrance Road	m	520	1,450	754,000	0%	754,000
1.08	Collector roads	m	2420	1,000	2,420,000	0%	2,420,000
1.09	Roundabouts	ea	3	600,000	1,800,000	0%	1,800,000
	Young Road Bylaw		1	10,000	10,000		10,000
					<u>23,295,500</u>		<u>23,295,500</u>
2.00	STORMWATER						
2.01	Stormwater Pond 1 (Carrs)	LS	1	4,996,000	4,996,000	0%	4,996,000
2.02	Stormwater Pond 2 (Diagonal)	LS	1	361,000	361,000	0%	361,000
2.03	Walkways/Boardwalks	m	1500	65	97,500	0%	97,500
2.04	Stormwater Reticulation						
	(a) 900 dia	m	330	460	151,800	0%	151,800
	(b) 1050 dia	m	305	545	166,225	0%	166,225
	(c) 1350 dia	m	170	670	113,900	0%	113,900
	(d) 1500 dia	m	397	750	297,750	0%	297,750
	(e) 1650 dia	m	662	830	549,460	0%	549,460
	(f) 1800 dia	m	165	950	156,750	0%	156,750
2.05	Roading related Stormwater						
	Type 3 < 500m	m	2850	330	940,500	0%	940,500
2.06	Open Channel Drainage						
2.06.1	Type A (4m base width)	m	470	1,040	488,800	0%	488,800
2.06.2	Type B1 (9m base width, south of TEA)	m	940	1,240	1,165,600	0%	1,165,600
2.06.3	Type B2 (9m base width north of TEA)	m	180	320	57,600	0%	57,600
2.06.4	Type C (13m base width)	m	250	1,530	382,500	0%	382,500
2.06.5	Type D (35m base width, north of TEA)	m	440	740	325,600	0%	325,600
2.07	Multiple Culverts under TEA						
	7 x 1.5m x 1.5m box culverts	m	595	1,000	595,000	0%	595,000
	2 x 1.2m x 1.2m box culverts	m	170	900	153,000	0%	153,000
2.08	Culverts under internal roads						
	2 x 2m dia	m	170	1,250	212,500	0%	212,500
2.09	Investigation and Preliminary design	LS	1	31,500	31,500	0%	31,500
					<u>11,242,985</u>		<u>11,242,985</u>

Metroplex Rangioru Financial Contribution Schedule (cont)

Item	Description	Unit	Quantity	Rate	Amount Total Construction	Percentage of Public/ Network Benefit	Rangioru Contribution
3.00	SANITARY SEWER						
3.01	Sanitary Sewer Pumping Stations	ea	3	250,000	750,000	0%	750,000
3.02	Major Pump Station	ea	1	800,000	800,000	0%	800,000
3.03	Emergency Generator	ea	1	190,000	190,000	0%	190,000
3.04	Emergency Storage, major pumpstation	ea	1	280,000	280,000	0%	280,000
3.05	Emergency Storage, minor pumpstation	ea	3	75,000	225,000	0%	225,000
3.06	Sanitary Sewer Rising Main (400 dia)	m	5800	400	2,320,000	0%	2,320,000
3.07	Kaituna River Thrust	LS	1	380,000	380,000	0%	380,000
3.08	Waiari River Thrust	LS	1	170,000	170,000	0%	170,000
3.09	Internal Trunk Main (225dia)	m	350	145	50,750	0%	50,750
3.10	Internal Trunk Main (300dia)	m	760	160	121,600	0%	121,600
3.11	Internal rising mains (150 dia)	m	910	95	86,450	0%	86,450
3.12	Internal rising mains (200 dia)	m	430	140	60,200	0%	60,200
3.13	Fencing along rising main route	m	900	16	14,400	0%	14,400
3.14	Replace trench spoil with on-site sand	LS	1	38,500	38,500	0%	38,500
3.15	Metal Race on Vercoe property	LM	930	36	33,480	0%	33,480
3.16	Te Puke STP capacity upgrade	LS	1	8,500,000	8,500,000	0%	8,500,000
3.17	Investigation and Preliminary design	LS	1	37,400	37,400	0%	37,400
					14,057,780		14,057,780
4.00	WATER RETICULATION						
4.01	Supply and lay 450mm DI/CLMS Gravity Trunk	m	7850	400	3,140,000	0%	3,140,000
4.02	Supply and lay 225mm uPVC pumped main	m	9000	175	1,575,000	0%	1,575,000
4.03	Primary Water Supply Bores adjacent to site	ea	1	1,400,000	1,400,000	0%	1,400,000
4.04	Secondary Water Supply Bores adjacent to site	ea	0	1,000,000	0	0%	-
4.05	Temporary Pump Stage 1	ea	1	300,000	300,000	0%	300,000
4.06	Primary Water Supply Bores adjacent to Rangioru Road	ea	1	1,400,000	1,400,000	0%	1,400,000
4.07	Secondary Water Supply Bores adjacent to Rangioru	ea	1	1,000,000	1,000,000	0%	1,000,000
4.08	Treatment Plant adjacent to Rangioru Road	ea	1	1,500,000	1,500,000	0%	1,500,000
4.09	Reservoir Rangioru Road 5500m ³	ea	1	2,000,000	2,000,000	30%	1,400,000
4.10	Supply and lay 375mm uPVC	m	5250	350.00	1,837,500	0%	1,837,500
4.11	Supply and lay 300mm uPVC	m	3000	235.00	705,000	0%	705,000
4.12	Investigation and Preliminary design	LS	1	47,200.00	47,200	0%	47,200
4.13	Proof testing of supply bore	LS	1	250,000.00	250,000	0%	250,000
					15,154,700		14,554,700
5.00	RESERVES						
	LP Reserves and Cycleways						
5.01	Landscaping	ha	3.96	80,000	316,800	0%	316,800
5.02	Walkways/Cycleways	m	820	65	53,300	0%	53,300
5.03	Fencing (Timber board and batten)	m	420	65	27,300	0%	27,300
5.04	Fencing (Post and Wire)	m	6900	15	103,500	0%	103,500
5.05	Land Purchase	ha	4.04	300,000	1,212,000	0%	1,212,000
					1,712,900		1,712,900
TOTAL					65,463,865		64,863,865
	Development Area (ha)		148.60				

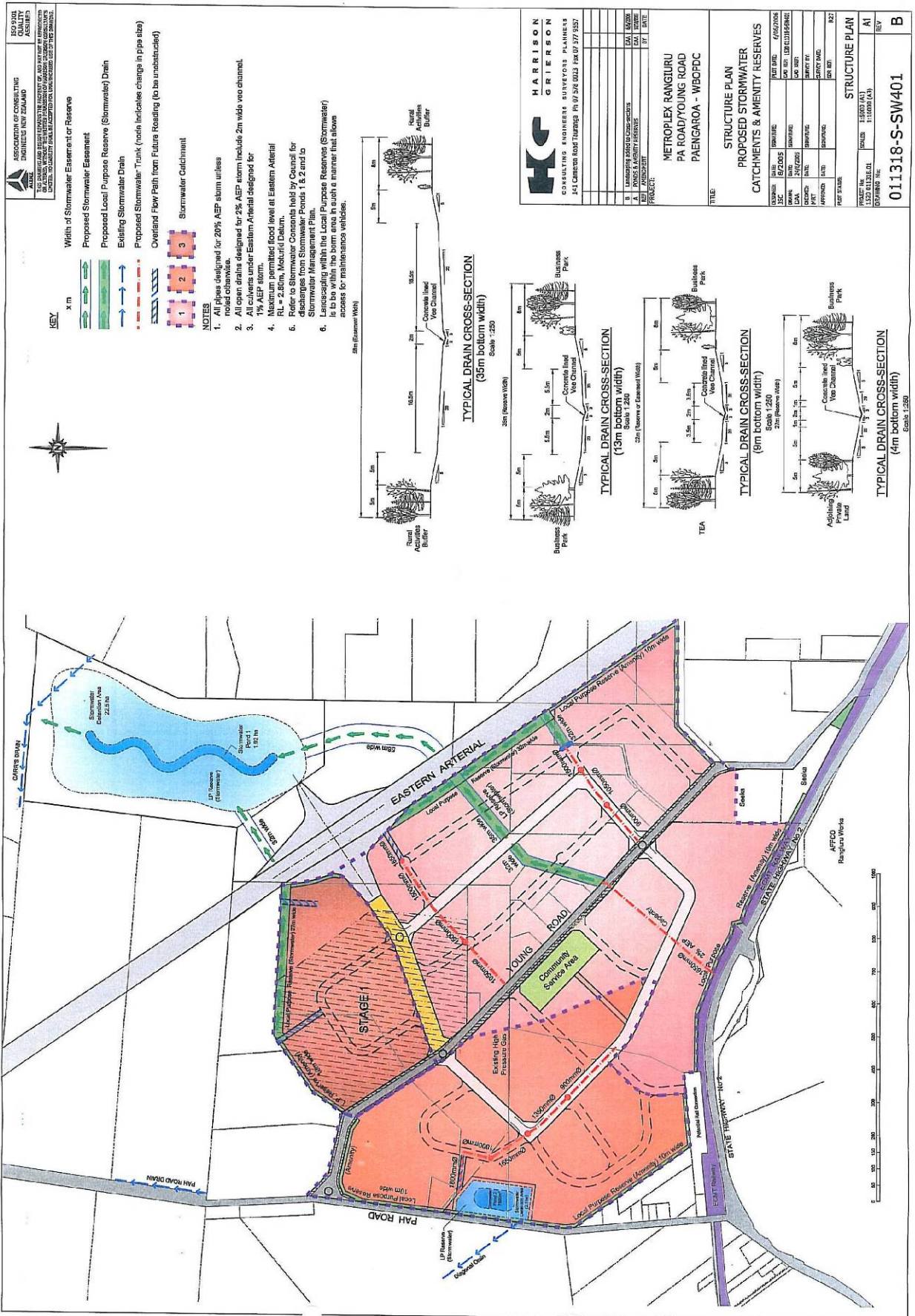
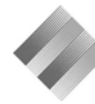
Advice Note

The cost per square meter is based on June 2005 cost

The contributions listed are as at June 2005

For current values refer to Councils current Annual Plan

This table will be updated annually through the LTCCP and Annual Plan Process





ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND
THE ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND IS AN INCORPORATED SOCIETY. SO QUALITY STANDARDS FOR THE ENGINEERING INDUSTRY ARE MAINTAINED.

NOTE

1. Following preliminary design and stormwater modeling the (shaded) contours shown on this structure plan (V4 - 4/20/20) are those that represent the proposed stormwater concept for the entire business park.
2. Datum = MSL+0.0.

SITE	CUT (m³)	REQUIRED FILL (m³)	SURPLUS (m³)	DEFICIT (m³)
A	62282	45318		26967
B	20393	90111		69718
C	70974	32188		48786
D	31258	74404		43146
E	115728	0	115728	
F	1052	0	1052	
G	107460	11	107449	
H	10298	3	10295	
I	23684	0	23684	
J	20109	0	20109	
K	21708	0	21708	
L	36568	1457	35111	
M	867	0	867	
N	11472	2987	8485	
O	43521	4571	38950	
P	79272	572981	17142	
Q	2081930	2031684		
TOTALS				

HARRISON GRIFFIN
 CONSULTING ENGINEERS SURVEYORS PLANNERS
 141 Cammell Road Tauranga, Ph: 07 578 0023 Fax: 07 577 5527

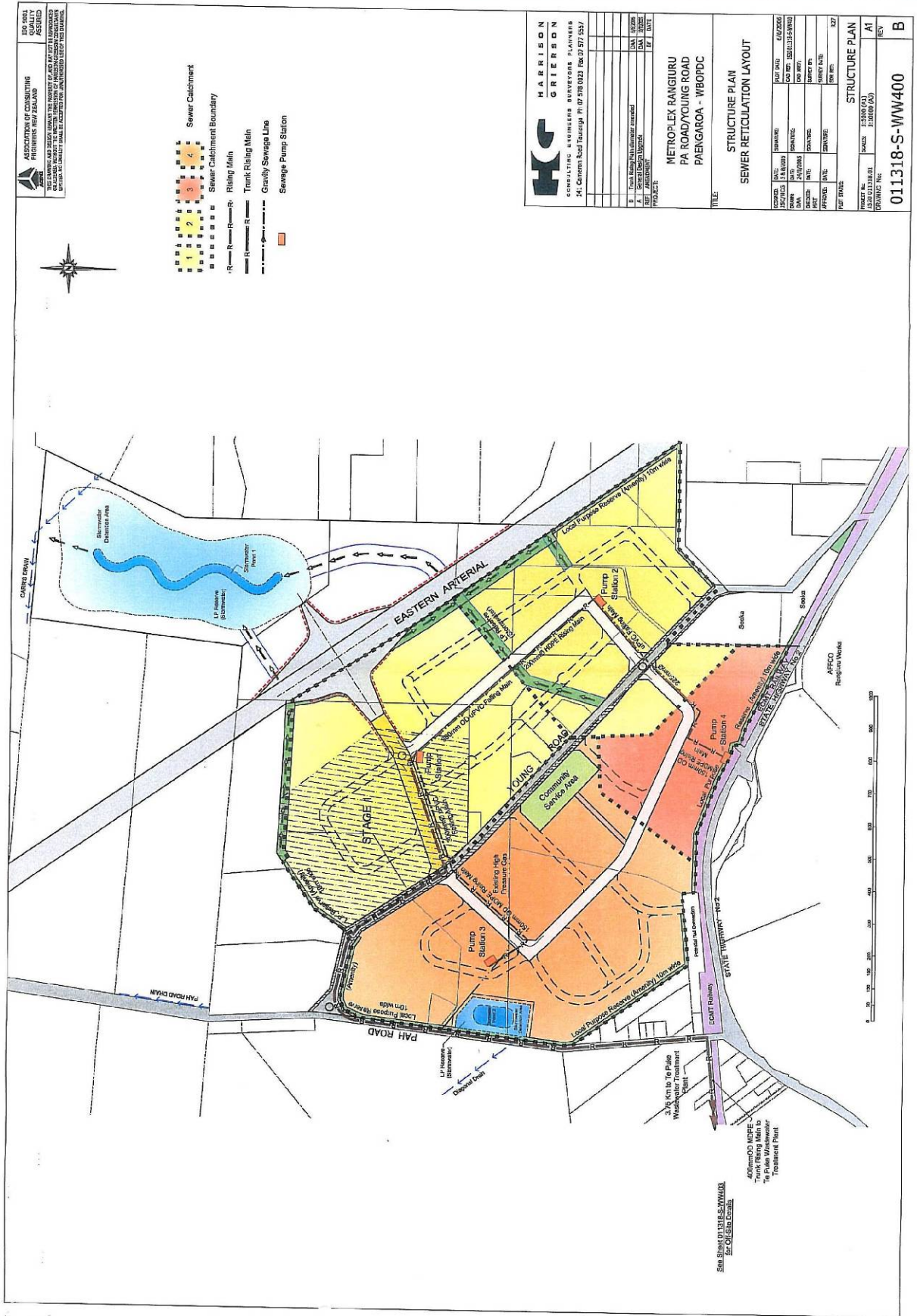
PROJECT: METROPLEX RANGIRU
 PA ROAD/YOUNG ROAD
 PAENGAROA - WBOPDC

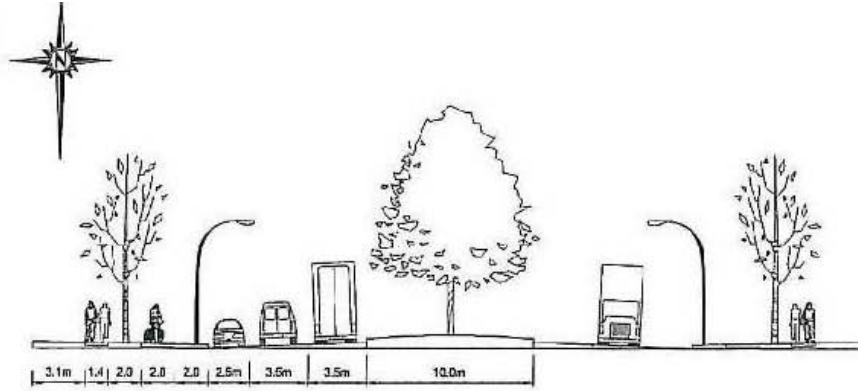
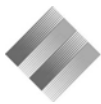
TITLE: STRUCTURE PLAN
 PROPOSED CONTOURS
 WITH PROPOSED LAYOUT DETAILS

DATE: 04/20/20
 DRAWN: 12/26/2008
 CHECKED: 01/13/2009
 APPROVED: 01/13/2009

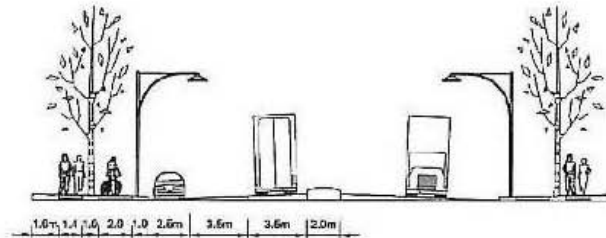
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 1:10000 (A2)
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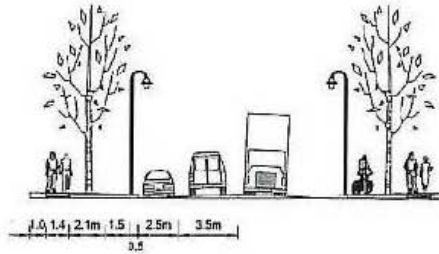




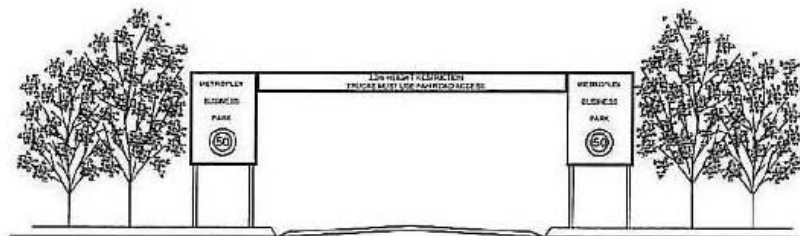
TYPE A
Entrance Road (50m wide)



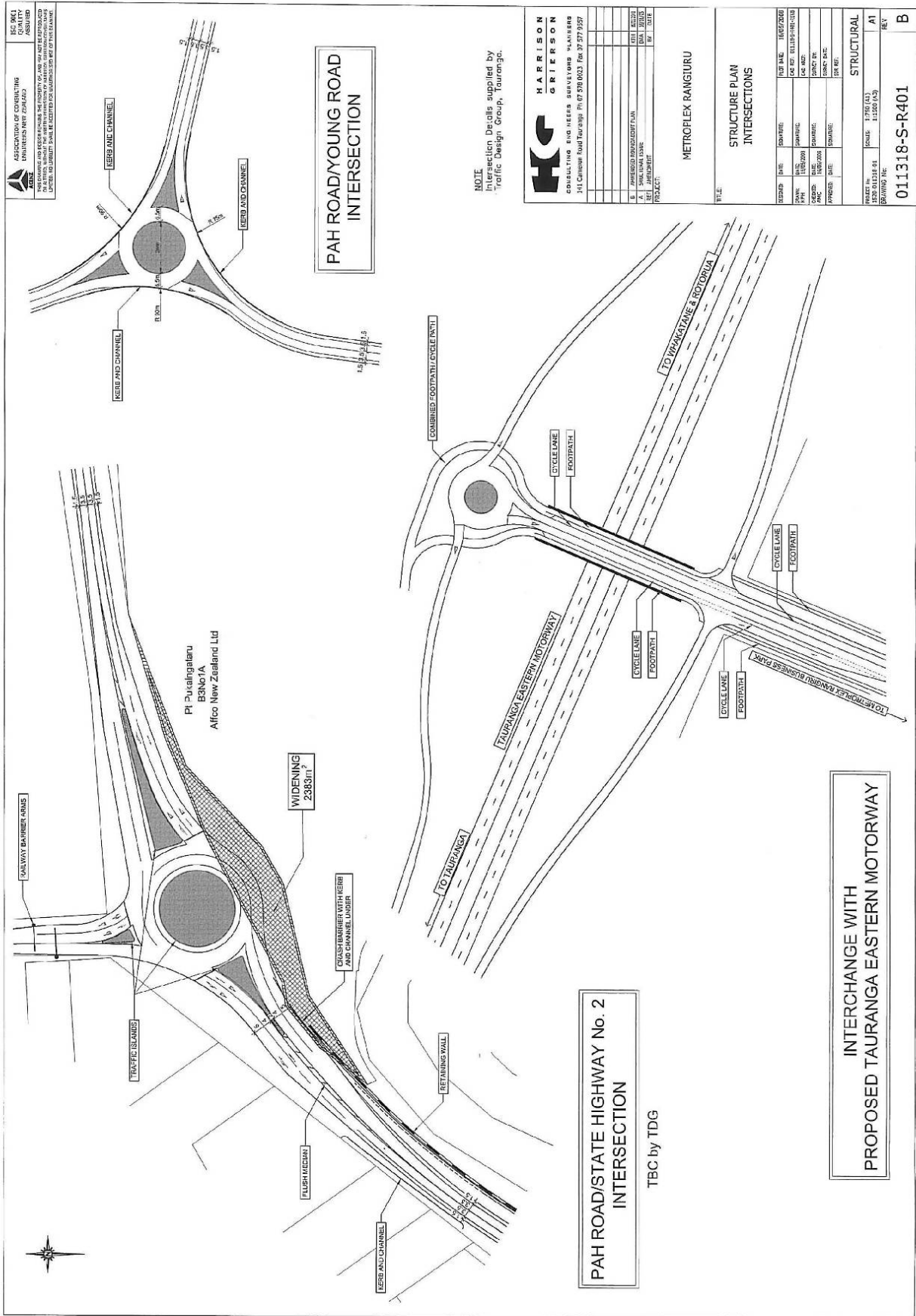
TYPE B
Collector Road (35m wide)



TYPE C
Local Road (25m wide)



TEMPORARY
'STAGE 1' THRESHOLD FEATURE



ASSOCIATION OF CONSTRUCTIVE ENGINEERS NEW ZEALAND
REGISTERED AND QUALIFIED ENGINEERS
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PAH ROAD/YOUNG ROAD INTERSECTION

NOTE
Intersection Details supplied by Traffic Design Group, Tauranga.

HARRISON GRIERSON
CONSULTING CIVIL ENGINEERS SURVEYORS PLANNERS
111 Crows Nest Tauranga Ph: 07 550 0033 Fax: 07 577 3557

NO.	PROJECT	DATE	BY
1	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
2	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
3	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
4	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
5	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
6	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
7	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
8	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
9	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
10	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
11	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
12	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
13	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
14	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
15	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
16	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
17	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
18	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
19	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.
20	PAH ROAD/YOUNG ROAD INTERSECTION	18/03/2010	H.G.

METROFLEX RANGIURU

STRUCTURE PLAN INTERSECTIONS

NO.	DATE	BY	REV.
1	18/03/2010	H.G.	
2	18/03/2010	H.G.	
3	18/03/2010	H.G.	
4	18/03/2010	H.G.	
5	18/03/2010	H.G.	
6	18/03/2010	H.G.	
7	18/03/2010	H.G.	
8	18/03/2010	H.G.	
9	18/03/2010	H.G.	
10	18/03/2010	H.G.	
11	18/03/2010	H.G.	
12	18/03/2010	H.G.	
13	18/03/2010	H.G.	
14	18/03/2010	H.G.	
15	18/03/2010	H.G.	
16	18/03/2010	H.G.	
17	18/03/2010	H.G.	
18	18/03/2010	H.G.	
19	18/03/2010	H.G.	
20	18/03/2010	H.G.	

STRUCTURAL

NO.	DATE	BY	REV.
1	18/03/2010	H.G.	
2	18/03/2010	H.G.	
3	18/03/2010	H.G.	
4	18/03/2010	H.G.	
5	18/03/2010	H.G.	
6	18/03/2010	H.G.	
7	18/03/2010	H.G.	
8	18/03/2010	H.G.	
9	18/03/2010	H.G.	
10	18/03/2010	H.G.	
11	18/03/2010	H.G.	
12	18/03/2010	H.G.	
13	18/03/2010	H.G.	
14	18/03/2010	H.G.	
15	18/03/2010	H.G.	
16	18/03/2010	H.G.	
17	18/03/2010	H.G.	
18	18/03/2010	H.G.	
19	18/03/2010	H.G.	
20	18/03/2010	H.G.	

PAH ROAD/STATE HIGHWAY No. 2 INTERSECTION

TBC by TDG

INTERCHANGE WITH PROPOSED TAURANGA EASTERN MOTORWAY

ASSOCIATION OF CONSULTING ENGINEERS NEW ZEALAND
NEW ZEALAND QUALITY ASSURANCE BOARD

NOTES

Entrance Road - Type A (50m wide)
 Similar to Collector Road but with extra width for wider central median & barriers for agricultural landscape treatment.
 Possible lengths: 2 Burnes @ 14.5m = 27m

Collector Road - Type B (35m wide)
 4 Lanes @ 3.5m = 14m
 2 Cycle Lanes @ 2.5m = 5m
 Central Median @ 2m = 2m
 2 Burnes @ 5m = 10m
 25m wide

Local Road - Type C (25m wide)
 2 Lanes @ 3.5m = 7m
 2 Parking Lanes @ 2.5m = 5m
 2 Cycle Lanes @ 1.5m = 3m
 2 Burnes @ 5m = 10m
 25m wide

Local Purpose Reserve (Amenity)
 Reserves to be fenced both sides.
 Type - Post & Wire

Access Restriction
 Pedestrian/Cycle Access
 Possible Local Road

Road Reserve (where required)
 Rural Activities
 Stormwater Drain
 Noise Control boundary
 Single Barrier (eg. cattle) within Local Purpose Reserve (Amenity)

HARRISON GRIERSON
 CONSULTING ENGINEERS SURVEYORS PLANNERS
 141 Cameron Road Tauranga Ph 07 350 0823 Fax 07 377 9327

DESIGNED BY	DATE	PROJECT NO.	REV
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY

METROPLEX RANGIRU

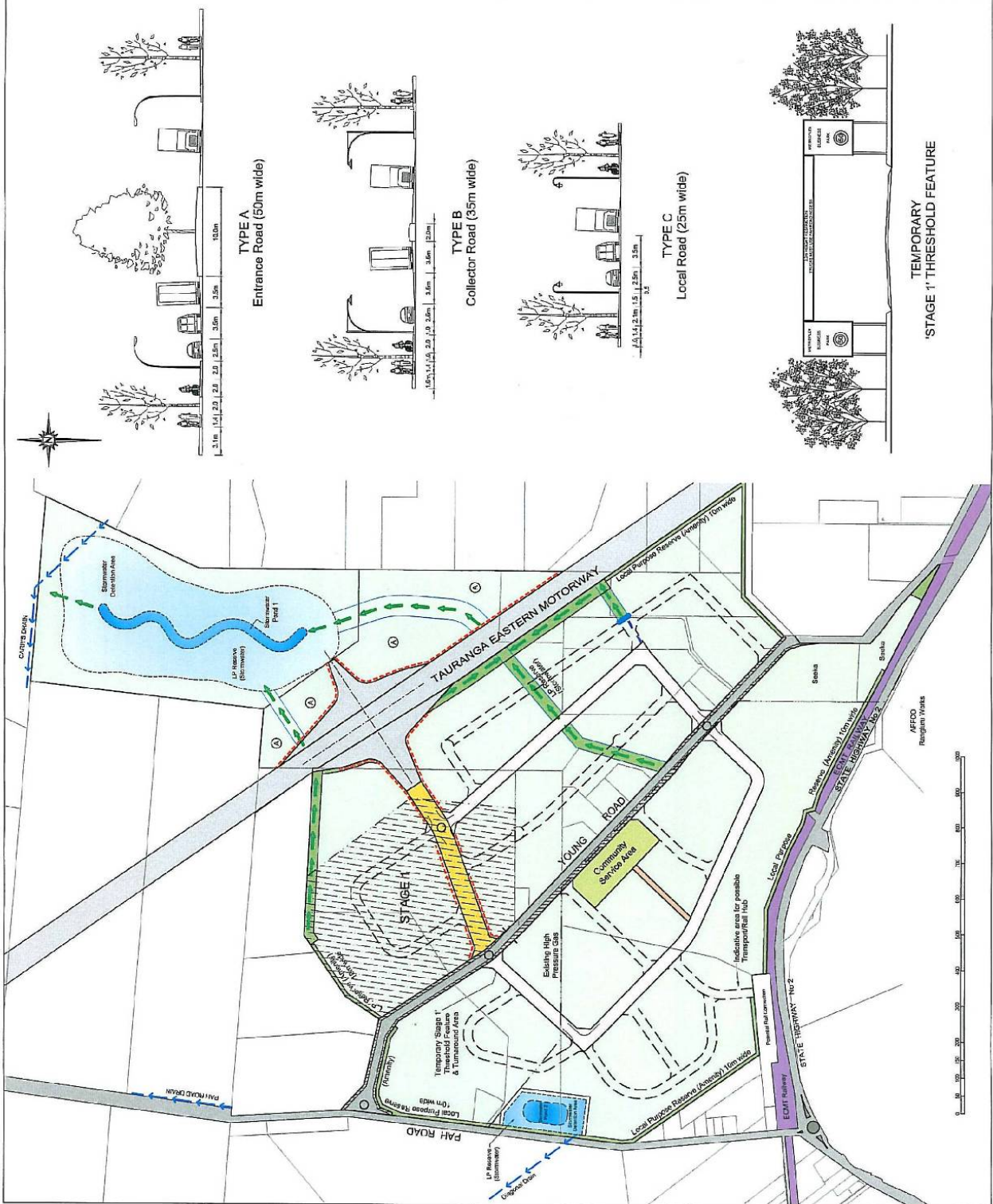
**STRUCTURE PLAN
 ROADING LAYOUT &
 LAND USE**

ISSUED	DATE	BY
DATE	BY	DATE
DATE	BY	DATE
DATE	BY	DATE
DATE	BY	DATE

STRUCTURE PLAN

PROJECT NO.	SCALE	DATE	REV
1520 011318-S-R400	1:5000 (A3)	11/08/2023	A1
DRAWING NO.			C

011318-S-R400



8. Te Puke Lifestyle Zone

26.10

Project		Funding Source(%)			Value
		Developer	Council	Council	
			Financial Contributions	Rates	\$
Water Supply	Reticulation: extension of water main to maximum of 90m a.s.l.		100%	0%	300,000
Transport	Roads				
	Minor Safety works - Te Puke Quarry Rd (TPQ)	0%	100%	0%	150,000
	TPQ – Manoeka Rd to Alley Rd	0%	100%	0%	200,000
	TPQ- Alley Rd to Bakers Entrance	0%	100%	0%	500,000
	TPQ – Bakers Ent to approx 800m west	0%	100%	0%	300,000
	Alley Road	0%	100%	0%	280,000