

# 2015 | Fraser Coast Sewerage Strategy

September 2015

Appendices Volume 1

**APPENDIX 1 – CAPITAL EXPENDITURE PROGRAMME**

APPENDIX 1 – CAPITAL EXPENDITURE PROGRAMME

Year Required	Program	Strategy ID	Map ID	Coordinates	Description	H/W	Driver	Type	Diameter	Length	Cost (\$000's)
2016	CAPEX	S46	HB1	D3	Pulgul WWTP Upgrade Capacity Additional 0.9ML/Day (2,000ED)	T	Growth	Sewage Treatment Plant	n/a	n/a	6,000
2016	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2016	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2016	CAPEX	S6	HB1	C1	Gravity Sewer Augmentation Ann St from SRM025 to SRM204 DN225 195m	T	Growth	Sewer Gravity Main	225	193	107
2016	CAPEX	S1	HB2	E3	Gravity Sewer Augmentation Hythe St - Newhaven St to Esplanade (PS04) DN225 140m	T	Growth	Sewer Gravity Main	150	135	76
2016	CAPEX	S171	HB2	E3	SPS EPS04 Upgrade 241.6L/S@36.5m	T	Growth	Sewer Pump Station	n/a	n/a	181
2016	CAPEX	S14	HB2	D2	SPS EPS30 Upgrade Nikenbah 65L/S@44.5m	T	Growth	Sewer Pump Station	n/a	n/a	175
2016	CAPEX	S16	HB1	A1	SPS EPS05 Upgrade Hillyard Ln, Scarness 200L/S@11.2m	T	Growth	Sewer Pump Station	n/a	na	95
2016	CAPEX	S168	HB5	C1	SPS BHPS53 Upgrade 141 Burrum St, Burrum Heads 28.7L/S@67.4m	T	Growth	Sewer Pump Station	n/a	n/a	95
2016	CAPEX	S187	MB3	C1	SPS APS10 Upgrade 54 Banana St, Granville 45.2L/S@23.9m	T	Growth	Sewer Pump Station	n/a	n/a	75
2016	CAPEX	S15	HB2	C3	SPS EPS73 Upgrade Mariners Cove SPS 18.1L/S@13.9m	T	Growth	Sewer Pump Station	n/a	n/a	45
2016	CAPEX	S169	HB5	D3	SPS BHPS50 Upgrade 66 Orchid Dr, Burrum Heads 15L/S@23.6	T	Growth	Sewer Pump Station	n/a	n/a	45
2016	CAPEX	S174	HB2	C3	SPS EPS66 Upgrade 2 Piaiba Downs Dr, Eli Waters 15.3L/s@18.2m	T	Growth	Sewer Pump Station	n/a	n/a	45
2016	CAPEX	S170	HB4	C2	SPS TGMPS17 Upgrade Toogoom 8.8L/s@15.5m	T	Growth	Sewer Pump Station	n/a	n/a	32
2016	CAPEX	S173	HB2	D3	SPS EPS46 Upgrade Endeavour Way, Eli Waters 7.9L/S@22m	T	Growth	Sewer Pump Station	n/a	n/a	32
2016	CAPEX	S178	HB1	D1	SPS PPS70 Upgrade Lot 55 Alexandria St, Urangan 2.7L/S@31m	T	Growth	Sewer Pump Station	n/a	n/a	21
2016	CAPEX	S172	HB2	D1	SPS EPS13 Upgrade 118 Esplanade, Pt Vernon 7.7L/S@6.7m	T	Growth	Sewer Pump Station	n/a	n/a	19
2016	CAPEX	S185	HB1	B3	SPS APS09 Upgrade Neptune St, (Golf Club) Maryborough 7.1L/S@9.3m	T	Growth	Sewer Pump Station	n/a	n/a	19
2016	CAPEX	S26	HB5	B1	Sewer Rising Main From BHPS55, Upgrade DN150395m	T	Growth	Sewer Rising Main	150	394	86
<b>2016 Total</b>											<b>7,747</b>
2017	CAPEX	S43	HB2	D4	SPS EPS83 Upgrade 312L/S@61m	T	Growth	Sewer Pump Station	n/a	n/a	259
2017	CAPEX	S163	HB3	A3	Effluent Reuse - Pipeline Nikenbah WWTP to Cassava DN500 (17.1km) Part 1	T	Growth	Effluent Reuse Rising Main	500	17,100	7,885
2017	CAPEX	S190	HB5	C3	Mobile Dewatering Trailer for use at Howard, Tobanlea, Toogoom and Burrum Heads	T	Growth	Sewage Treatment Plant	n/a	n/a	100
2017	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2017	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2017	CAPEX	S35	HB1	A3	Gravity Sewer New Samarai Dr - Doolong Flats Kawungan DN225 440m	T	Growth	Sewer Gravity Main	225	436	221
2017	CAPEX	S205	MB1	A4	Gravity Sewer Augmentation Neptune St - Edward St Part Way to Carlise St DN 300 140m	T	Growth	Sewer Gravity Main	300	139	94
2017	CAPEX	S33	HB1	A3	Gravity Sewer New Doolong Flats Trunk Sewer Kawungan DN300 135m	T	Growth	Sewer Gravity Main	300	134	72
2017	CAPEX	S32	MB3	B1	Redirection And Upgrade APS02 Rising Main DN450 530m	T	Growth	Sewer Rising Main	450	529	548
<b>2017 Total</b>											<b>9,779</b>
2018	CAPEX	S194	HB3	B2	Nikenbah Effluent Pump Station New for Transfer to Cassava 227L/S@91m	T	Growth	Effluent Reuse Land Purchase	n/a	n/a	988
2018	CAPEX	S191	HB7	C3	320Ha Plantation Development at Cassava	T	Growth	Effluent Reuse Plantation	320 Ha	320	4,160
2018	CAPEX	S193	HB7	D4	Cassava Plantation Irrigation Pump Station 227L/S@91m	T	Growth	Effluent Reuse Pump Station	n/a	n/a	988
2018	CAPEX	S163	HB3	A3	Effluent Reuse - Pipeline Nikenbah WWTP to Cassava DN500 (17.1km) Part 2	T	Growth	Effluent Reuse Rising Main	500	17,100	6,000
2018	CAPEX	S192	HB7	C4	Cassava Dam No 2 Improvements	T	Growth	Effluent Reuse Storage Lagoon	n/a	n/a	200
2018	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2018	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2018	CAPEX	S13	HB3	E1	Gravity Sewer Augmentation Urraween Dist. to Main St. Stage 1 DN225 230m	T	Growth	Sewer Gravity Main	225	230	124
2018	CAPEX	S177	HB1	A3	Redirection PPS84 From Nikenbah To Pulgul Catchment	T	Growth	Sewer Pump Station	n/a	n/a	45
2018	CAPEX	S24	MB3	A1	Sewer Rising Main Augmentation Fort Street - Queen St To Ann St DN300 305m	T	Growth	Sewer Rising Main	300	303	133
<b>2018 Total</b>											<b>13,238</b>
2019	CAPEX	S65	HB1	D3	Pulgul WWTP Upgrade Capacity Additional 4.5ML (10,000ED) Part 1	T	Growth	Sewage Treatment Plant	n/a	n/a	10,000
2019	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2019	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300

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Year Required	Program	Strategy ID	Map ID	Coordinates	Description	H/W	Driver	Type	Diameter	Length	Cost (\$000's)
2019	CAPEX	S195	HB1	D3	Extend Pulgul Outfall 4.9km DN450 to Urangan Harbour	T	Growth	Sewer Outfall	450	4,900	8,100
2019	CAPEX	S196	HB1	D3	Pulgul Effluent Outfall Pump Station 232L/S@17m	T	Growth	Sewer Pump Station	n/a	n/a	457
<b>2019 Total</b>											<b>19,157</b>
2020	CAPEX	S65	HB1	D3	Pulgul WWTP Upgrade Capacity Additional 4.5ML (10,000ED) Part 2	T	Growth	Sewage Treatment Plant	n/a	n/a	15,000
2020	CAPEX	S9	HB1	D2	Gravity Sewer Augmentation Stage 1 - Pulgul Ck DN375 365m	T	Growth	Sewer Gravity Main	375	363	390
2020	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2020	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2020	CAPEX	S12	HB3	E1	Gravity Sewer New Doolong Rd to Urraween Dist. Stage 2 DN225 230m	T	Growth	Sewer Gravity Main	225	226	122
2020	CAPEX	S28	HB1	C1	Gravity Sewer Augmentation Truro St Trunk Sewer (MH10650) Torquay DN300 80m	T	Growth	Sewer Gravity Main	300	79	66
2020	CAPEX	S20	MB3	A2	SPS APS13 Upgrade Mcgregor St Tinana 66.7L/S@47.7m	T	Growth	Sewer Pump Station	n/a	na	118
<b>2020 Total</b>											<b>16,296</b>
2021	CAPEX	S197	HB6	D2	Purchase and Development of 230Ha Plantations at Takura	T	Growth	Effluent Reuse Land Purchase	230 Ha	230	5,290
2021	CAPEX	S65	HB1	D3	Pulgul WWTP Upgrade Capacity Additional 4.5ML (10,000ed) Part 3	T	Growth	Sewage Treatment Plant	n/a	n/a	5,000
2021	CAPEX	S34	HB1	A3	Gravity Sewer New Doolong Flats DN300 2.3km	T	Growth	Sewer Gravity Main	300	2,334	1,214
2021	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2021	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2021	CAPEX	S67	HB3	D1	Gravity Sewer New Nikenbah Structure Plan DN150 650m	F	Growth	Sewer Gravity Main	150	648	253
2021	CAPEX	S156	HB3	D2	Gravity Sewer New Nikenbah Structure Plan DN225 485m	T	Growth	Sewer Gravity Main	225	482	250
2021	CAPEX	S70	HB3	D1	Gravity Sewer New Nikenbah Structure Plan DN150 620m	F	Growth	Sewer Gravity Main	150	617	238
2021	CAPEX	S122	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN150 425m	F	Growth	Sewer Gravity Main	150	420	165
2021	CAPEX	S139	HB3	D1	Gravity Sewer New Nikenbah Structure Plan DN150 385m	F	Growth	Sewer Gravity Main	150	385	153
2021	CAPEX	S123	HB3	E1	Gravity Sewer New Nikenbah Structure Plan DN150 305m	F	Growth	Sewer Gravity Main	150	303	122
2021	CAPEX	S157	HB3	D2	Gravity Sewer New Nikenbah Structure Plan DN150 65m	F	Growth	Sewer Gravity Main	150	62	30
2021	CAPEX	S84	HB3	D2	SPS New Nikenbah Structure Plan 86L/S@22m	T	Growth	Sewer Pump Station	n/a	n/a	249
2021	CAPEX	S25	HB5	B1	SPS BHPS55 Upgrade, 5 Burrum St West 21.7L/S@40.1m	T	Growth	Sewer Pump Station	na	n/a	62
2021	CAPEX	S180	HB4	C2	SPS TGMPS44 Upgrade 230 O'Regan Creek Rd 20.8L/S@18.3m	T	Growth	Sewer Pump Station	n/a	n/a	45
2021	CAPEX	S149	HB3	C3	Sewer Rising Main New Nikenbah Structure Plan DN375 5km	T	Growth	Sewer Rising Main	375	5,010	2,000
2021	CAPEX	S2	HB2	D3	Sewer Rising Main EPS04 Augmentation DN525 1.7km	T	Growth	Sewer Rising Main	525	1,721	1,468
2021	CAPEX	S158	HB5	C2	Sewer Rising Main BHPS52 Augmentation DN225 2.2km	T	Growth	Sewer Rising Main	225	2,237	790
2021	CAPEX	S183	MB3	A2	Sewer Rising Main APS13 Augmentation DN300 1.1km	T	Growth	Sewer Rising Main	300	1,101	482
<b>2021 Total</b>											<b>18,410</b>
2022	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2022	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2022	CAPEX	S201	HB3	E1	SPS PPS23 Main St Divert To Pulgul Catchment	T	Growth	Sewer Pump Station	n/a	n/a	50
<b>2022 Total</b>											<b>650</b>
2023	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2023	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2023	CAPEX	S175	HB1	A3	Gravity Sewer New Doolong Flats DN225 450m	T	Growth	Sewer Gravity Main	225	447	226
2023	CAPEX	S176	HB1	A3	Redirection Sewer From EPS22 To Pulgul Catchment Delete EPS22	T	Growth	Sewer Pump Station	n/a	n/a	62
<b>2023 Total</b>											<b>888</b>
2024	CAPEX	S7	HB1	D3	Gravity Sewer Augmentation Pulgul Street DN450 330m	T	Growth	Sewer Gravity Main	450	331	326
2024	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2024	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2024	CAPEX	S8	HB1	D2	Gravity Sewer Augmentation Stage 2 - Pulgul Ck DN375 215m	T	Growth	Sewer Gravity Main	375	215	208

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Year Required	Program	Strategy ID	Map ID	Coordinates	Description	H/W	Driver	Type	Diameter	Length	Cost (\$000's)
2024	CAPEX	S21	MB3	C1	SPS APS12 Upgrade Banana St, Granville 17L/S@11m	T	Growth	Sewer Pump Station	n/a	n/a	200
<b>2024 Total</b>											<b>1,334</b>
2025	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2025	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2025	CAPEX	S63	MB2	E4	Gravity Sewer New To Allow Relocation Of APS28 DN 150 315m	F	Growth	Sewer Gravity Main	150	315	225
2025	CAPEX	S19	MB3	C1	Gravity Sewer Augmentation Banana St - From PS12 RM To Maryborough & Odessa St DN225 300m	T	Growth	Sewer Gravity Main	225	297	158
2025	CAPEX	S22	MB2	E4	PS28 Relocation And Upgrade Central Road, Tinana, 10L/S@9m	T	Growth	Sewer Pump Station	n/a	n/a	138
2025	CAPEX	S181	HB1	B2	SPS PPS06 Upgrade 125L/S @ 40.2m	T	Growth	Sewer Pump Station	n/a	n/a	137
<b>2025 Total</b>											<b>1,258</b>
2026	CAPEX	S64	HB4	C2	Toogoom WWTP Purchase Additional Land for Irrigation (15Ha)	T	Growth	Effluent Reuse Land Purchase	15 Ha	15	345
2026	CAPEX	S184	HB4	C2	Toogoom Effluent Reuse - Additional Effluent Storage (20ML)	T	Growth	Effluent Reuse Storage Lagoon	n/a	20	140
2026	CAPEX	S48	MB1	C4	Aubinville WWTP Upgrade Capacity Additional 2.5ML/Day (5,555ED) Part 1	T	Growth	Sewage Treatment Plant	n/a	5,555	6,667
2026	CAPEX	S57	MB1	B2	Gravity Sewer New St Helens Structure Plan DN300 1.2km	T	Growth	Sewer Gravity Main	300	1,156	702
2026	CAPEX	S30	HB1	B4	Gravity Sewer New Doolong Flats DN225 1.1km	T	Growth	Sewer Gravity Main	225	1,055	547
2026	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2026	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2026	CAPEX	S29	HB1	E1	Gravity Sewer New Swiss Ct Trunk Sewer Urangan DN225 210m	T	Growth	Sewer Gravity Main	225	209	113
2026	CAPEX	S62	MB1	B3	SPS New St Helens Structure Plan 105L/S@35m	T	Growth	Sewer Pump Station	n/a	n/a	340
2026	CAPEX	S44	HB1	B4	SPS PPS79 Upgrade 91.9L/S@79.3	T	Growth	Sewer Pump Station	n/a	n/a	168
2026	CAPEX	S51	MB2	E3	SPS New Eatonvale Road 20.4L/S@15m	T	Growth	Sewer Pump Station	n/a	n/a	154
2026	CAPEX	S53	MB2	E3	SPS New Mary River Heights Buchanan St 2.6L/S@10m	T	Growth	Sewer Pump Station	n/a	n/a	124
2026	CAPEX	S11	HB2	C4	Sewer Rising Main Duplication PS83 to Nikenbah WWTP DN450 6.9km	T	Growth	Sewer Rising Main	450	6,889	6,855
2026	CAPEX	S56	MB1	C3	Sewer Rising Main New St Helens Structure Plan DN300 3.6km	T	Growth	Sewer Rising Main	300	3,620	1,586
2026	CAPEX	S185	MB2	E3	Sewer Rising Main Augmentation PS79 DN300 2.2km	T	Growth	Sewer Rising Main	300	2,176	986
2026	CAPEX	S38	MB2	E3	Sewer Rising Main New Eatonvale Road DN150 890m	T	Growth	Sewer Rising Main	150	890	245
2026	CAPEX	S39	MB2	E3	Sewer Rising Main New Mary River Heights RM - Buchanan St Tinana DN150 395m	T	Growth	Sewer Rising Main	150	392	108
<b>2026 Total</b>											<b>19,679</b>
2027	CAPEX	S48	MB1	C4	Aubinville WWTP Upgrade Capacity Additional 2.5ML/Day (5,555ED) Part 2	T	Growth	Sewage Treatment Plant	n/a	5,555	10,000
2027	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2027	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2027	CAPEX	S54	MB1	A3	SPS New - Bryant St 8.7L/S@13m	T	Growth	Sewer Pump Station	n/a	n/a	138
<b>2027 Total</b>											<b>10,738</b>
2028	CAPEX	S200	MB1	C4	Aubinville WWTP Improve Effluent Quality 5.625ML/Day (12,500ED)	T	Growth	Sewage Treatment Plant	na	12,500	18,750
2028	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2028	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
<b>2028 Total</b>											<b>19,350</b>
2029	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2029	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
<b>2029 Total</b>											<b>600</b>
2030	CAPEX	S47	HB4	C2	Toogoom WWTP Upgrade Capacity To 625kl/Day	T	Growth	Sewage Treatment Plant	n/a	n/a	1,300
2030	CAPEX	S10	HB2	D4	Gravity Sewer New Part Chancellors Dr To Pembridge Ct Through Open Space DN 375 435m	T	Growth	Sewer Gravity Main	375	433	406
2030	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2030	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300

APPENDIX 1 – CAPITAL EXPENDITURE PROGRAMME

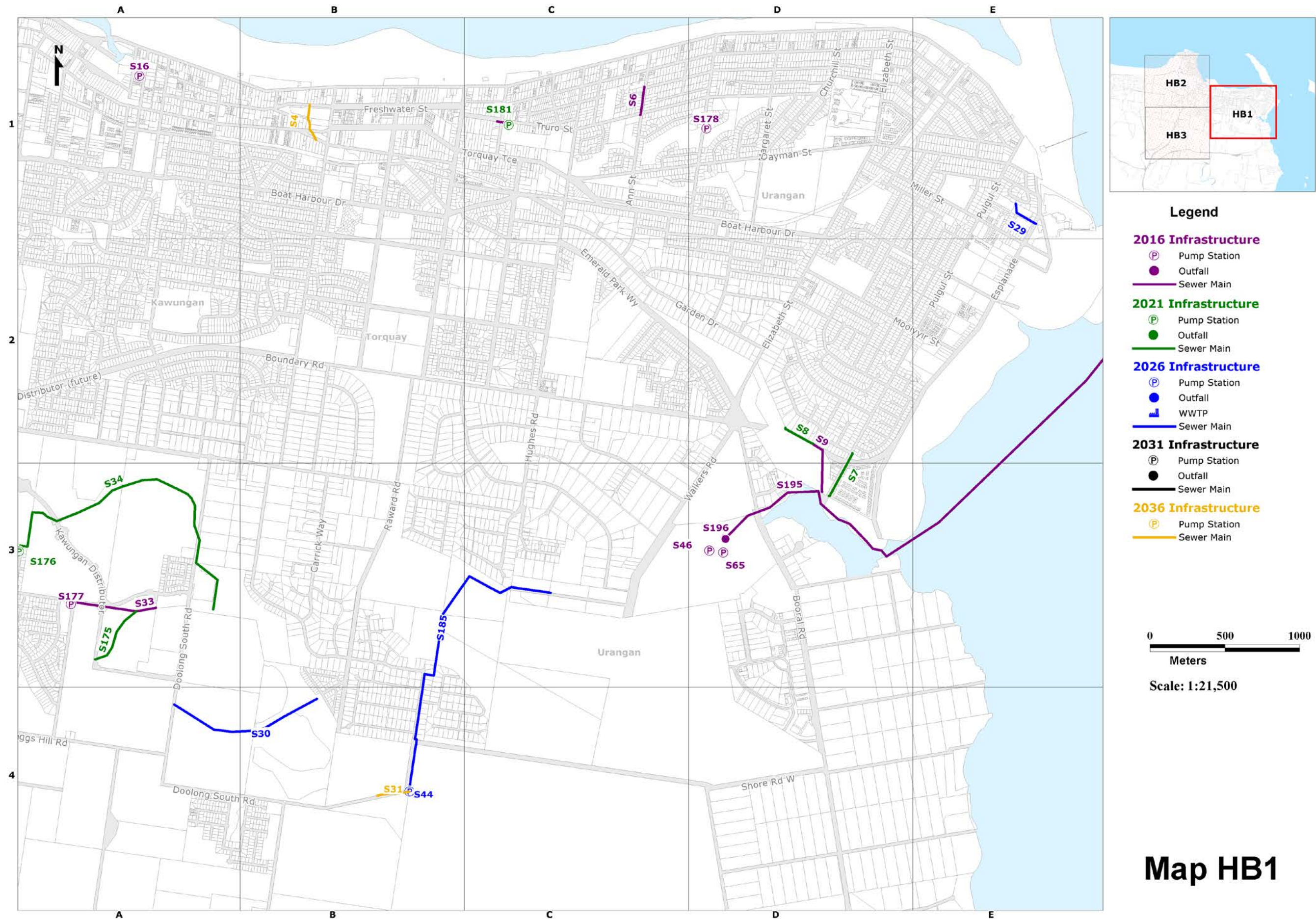
Year Required	Program	Strategy ID	Map ID	Coordinates	Description	H/W	Driver	Type	Diameter	Length	Cost (\$000's)
2030	CAPEX	S203	HB2	D4	SPS New 109 109 Nissen St	T	Growth	Sewer Pump Station	n/a	n/a	180
2030	CAPEX	S202	HB3	E1	SPS PPS23 Upgrade Main St	T	Growth	Sewer Pump Station	n/a	n/a	175
2030	CAPEX	S204	HB2	E4	Sewer Rising Main New 109 Nissen St to PPS23 DN225 1.8km	T	Growth	Sewer Rising Main	225	1,776	310
<b>2030 Total</b>											<b>2,971</b>
2031	CAPEX	S166	HB2	C3	Gravity Sewer New Eli Waters Structure Plan DN225 1.3km	T	Growth	Sewer Gravity Main	225	1,277	888
2031	CAPEX	S66	MB1	B1	Gravity Sewer New St Helens Structure Plan DN225 715m	T	Growth	Sewer Gravity Main	225	712	371
2031	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2031	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2031	CAPEX	S31	HB1	B4	Gravity Sewer New Doolong Flats DN450 220m	T	Growth	Sewer Gravity Main	450	218	204
2031	CAPEX	S3	HB2	E3	Gravity Sewer Augmentation Alice St/Torquay Rd to Main Street DN225 155m	T	Growth	Sewer Gravity Main	225	153	78
2031	CAPEX	S49	HB2	B3	SPS New Grinsteeds Rd 103L/S@37m	T	Growth	Sewer Pump Station	n/a	n/a	340
2031	CAPEX	S61	MB1	B1	SPS New St Helens Structure Plan 76L/S@12.5m	T	Growth	Sewer Pump Station	n/a	n/a	206
2031	CAPEX	S167	HB2	C3	SPS New Eli Structure Plan 6L/S@5m	T	Growth	Sewer Pump Station	n/a	n/a	124
2031	CAPEX	S36	HB2	B4	Sewer Rising Main New Grinstead Rd To Nikenbah WWTP DN450 5.3km	T	Growth	Sewer Rising Main	450	5,315	5,288
2031	CAPEX	S58	MB1	B2	Sewer Rising Main New St Helens Structure Plan DN 225 740m	T	Growth	Sewer Rising Main	225	737	249
2031	CAPEX	S41	MB1	A3	Sewer Rising Main New St Helens Structure Plan - Bryant St DN150 275m	T	Growth	Sewer Rising Main	150	275	76
<b>2031 Total</b>											<b>8,424</b>
2032	CAPEX	S198	HB6	D2	Purchase and Development of 430Ha Plantations Takura	T	Growth	Effluent Reuse Land Purchase	430 Ha	430	9,890
2032	CAPEX	S199	HB6	D2	Takura Construction of 500ML Effluent Storage	T	Growth	Effluent Reuse Storage Lagoon	500ML	500	3,500
2032	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2032	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
<b>2032 Total</b>											<b>13,990</b>
2033	CAPEX	S45	HB5	C3	Burrum Heads WWTP Upgrade Capacity By 200kl/Day	T	Growth	Sewage Treatment Plant	na	n/a	1,300
2033	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2033	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2033	CAPEX	S164	HB2	B3	Gravity Sewer New Eli Structure Plan DN300 1.1km	T	Growth	Sewer Gravity Main	300	1,096	300
2033	CAPEX	S162	HB2	A3	SPS New Eli Structure Plan 26L/S@16m	T	Growth	Sewer Pump Station	n/a	n/a	177
2033	CAPEX	S165	HB2	A3	Sewer Rising Main New Eli Structure Plan DN 150 1.2km	T	Growth	Sewer Rising Main	150	1,224	337
<b>2033 Total</b>											<b>2,713</b>
2034	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2034	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
<b>2034 Total</b>											<b>600</b>
2035	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2035	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
<b>2035 Total</b>											<b>600</b>
2036	CAPEX	S17	MB1	C4	Rising Main Redirect APS03 to DN900 Moreton St	T	Growth	Sewer Gravity Main	450	1,158	235
2036	CAPEX	S161	HB2	B3	Gravity Main New Eli Structure Plan Sewer DN375 825m	T	Growth	Sewer Gravity Main	375	826	706
2036	CAPEX	S69	HB3	D2	Gravity Sewer New Nikenbah Structure Plan DN300 725m	T	Growth	Sewer Gravity Main	300	724	485
2036	CAPEX	S71	HB3	D2	Gravity Sewer New Nikenbah Structure Plan DN300 360m	T	Growth	Sewer Gravity Main	300	359	315
2036	CAPEX	S206	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2036	CAPEX	S207	varies	n/a	Sewer Rehabilitation - Relining to Reduce I/I	F	I/I	Sewer Gravity Main	n/a	varies	300
2036	CAPEX	S18	MB3	A1	Gravity Sewer Augmentation Alice St to MH54775 DN375 275m	T	Growth	Sewer Gravity Main	375	276	266
2036	CAPEX	S121	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN225 390m	T	Growth	Sewer Gravity Main	225	388	204
2036	CAPEX	S127	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN225 365m	T	Growth	Sewer Gravity Main	225	361	193

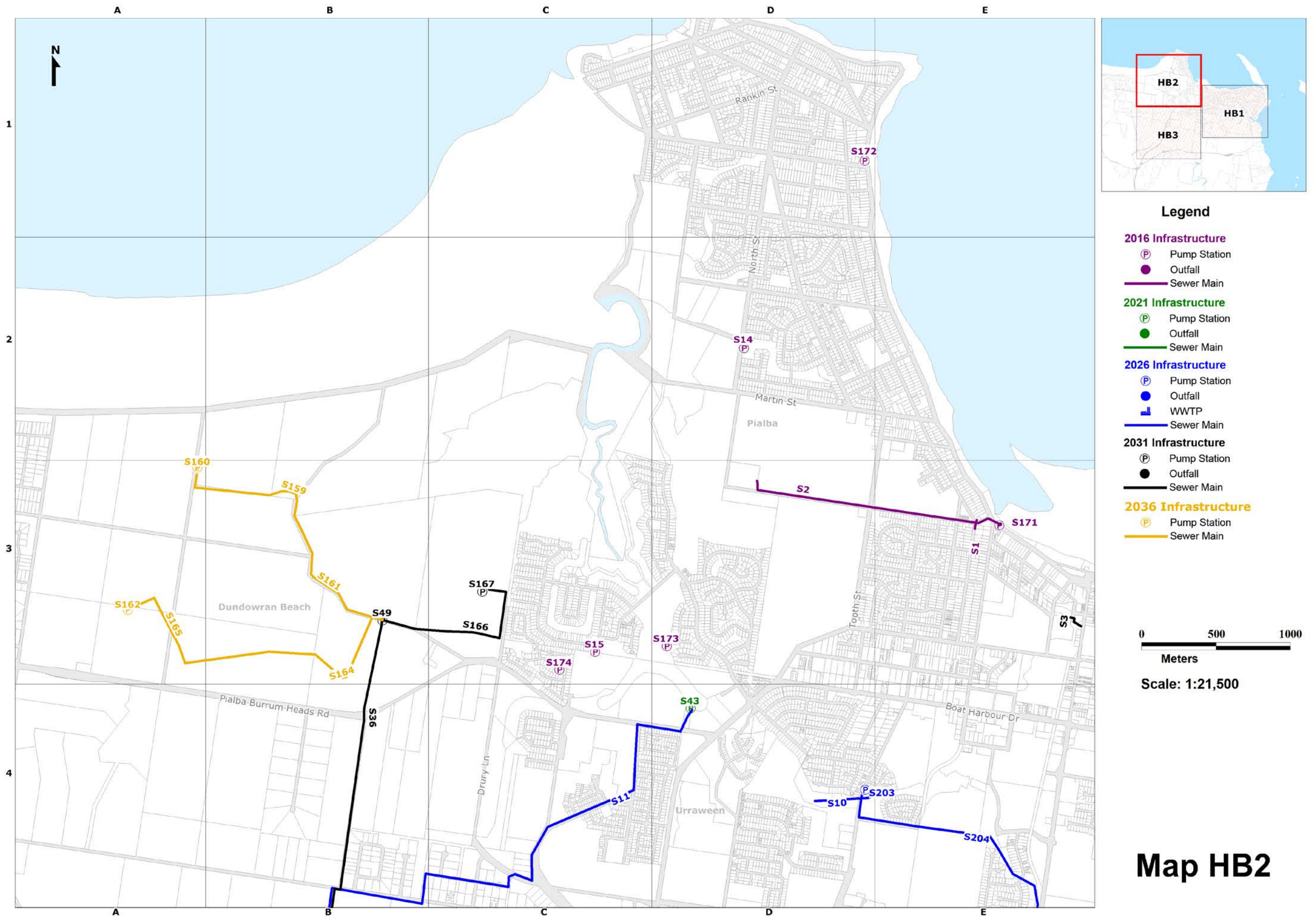
APPENDIX 1 – CAPITAL EXPENDITURE PROGRAMME

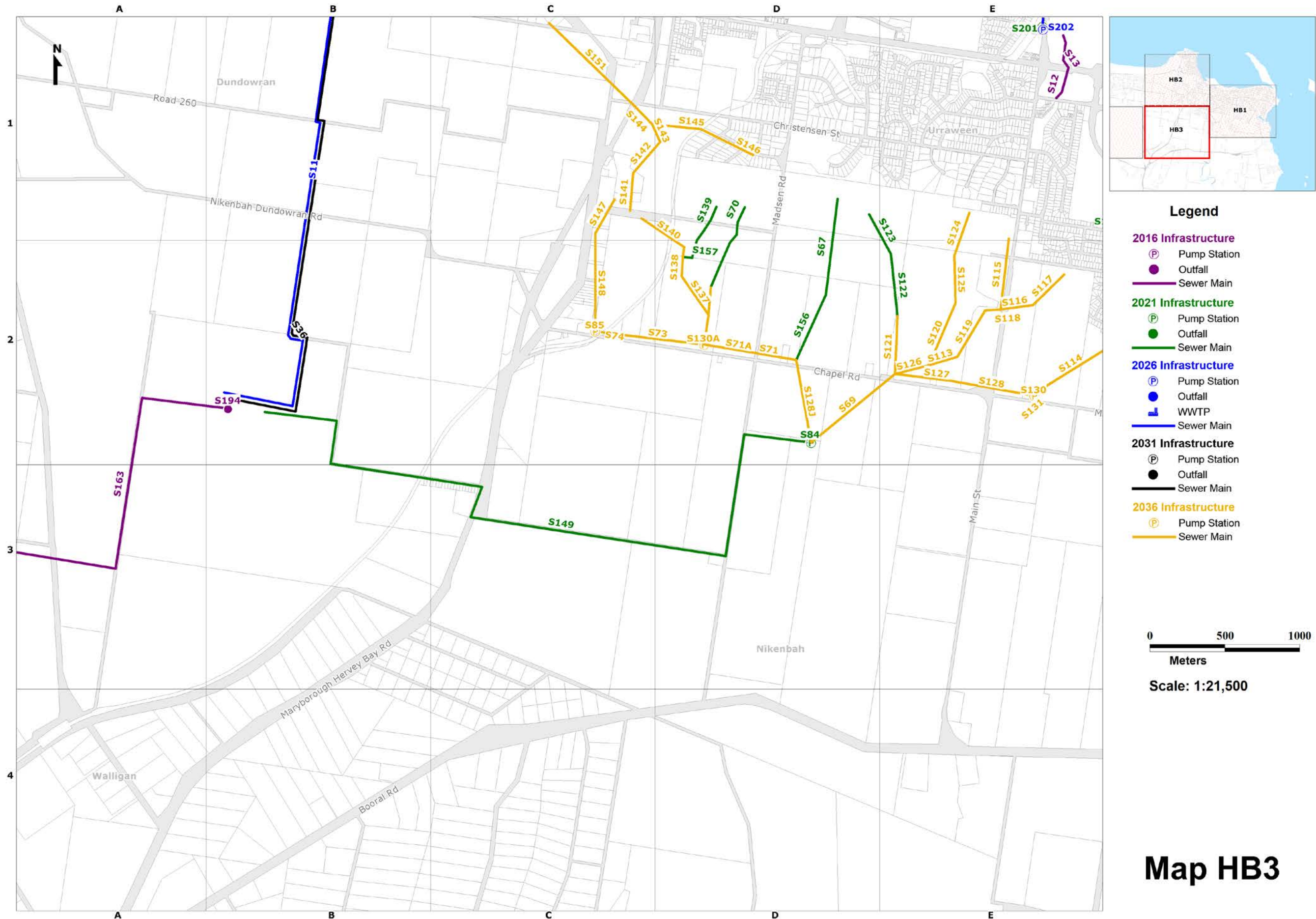
Year Required	Program	Strategy ID	Map ID	Coordinates	Description	H/W	Driver	Type	Diameter	Length	Cost (\$000's)
2036	CAPEX	S115	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN 150 480m	F	Growth	Sewer Gravity Main	150	478	190
2036	CAPEX	S114	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN150 465m	F	Growth	Sewer Gravity Main	150	464	186
2036	CAPEX	S120	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN150 455m	F	Growth	Sewer Gravity Main	150	454	182
2036	CAPEX	S4	HB1	B1	Gravity Sewer Augmentation Tottness St to Esplanade DN 300 260m	T	Growth	Sewer Gravity Main	300	257	175
2036	CAPEX	S125	HB3	E2	Gravity Main New Nikenbah Structure Plan Sewer DN 150 320m	F	Growth	Sewer Gravity Main	150	319	128
2036	CAPEX	S126	HB3	E2	Gravity Sewer New Nikenbah Structure Plan DN225 235m	T	Growth	Sewer Gravity Main	225	235	126
2036	CAPEX	S124	HB3	E1	Gravity Sewer New Nikenbah Structure DN150 305m	F	Growth	Sewer Gravity Main	150	304	123
2036	CAPEX	S117	HB3	E2	Gravity Sewer New Nikenbah Structure DN150 295m	F	Growth	Sewer Gravity Main	150	290	119
2036	CAPEX	S155	HB3	D2	Gravity Sewer New Nikenbah Structure DN225 205m	T	Growth	Sewer Gravity Main	225	202	111
2036	CAPEX	S116	HB3	E2	Gravity Sewer New Nikenbah Structure DN150 220m	F	Growth	Sewer Gravity Main	150	219	91
2036	CAPEX	S154	HB3	D2	Gravity Sewer New Nikenbah Structure DN150 190m	F	Growth	Sewer Gravity Main	150	185	80
2036	CAPEX	S131	HB3	E2	Gravity Sewer New Nikenbah Structure DN150 100m	F	Growth	Sewer Gravity Main	150	97	46
2036	CAPEX	S60	MB1	C1	SPS New St Helens 69L/S@13m	T	Growth	Sewer Pump Station	n/a	n/a	206
2036	CAPEX	S130a	HB3	D2	SPS New Nikenbah Structure Plan 36.9L/S@13m	T	Growth	Sewer Pump Station	n/a	n/a	177
2036	CAPEX	S160	HB2	A3	SPS New Eli Structure Plan 57L/S@7m	T	Growth	Sewer Pump Station	n/a	na	177
2036	CAPEX	S52	MB2	C1	SPS New Maryborough West	T	Growth	Sewer Pump Station	n/a	n/a	150
2036	CAPEX	S130	HB3	E2	SPS New Nikenbah Structure Plan 7.2L/S@14m	T	Growth	Sewer Pump Station	n/a	n/a	138
2036	CAPEX	S55	MB3	C1	SPS New Burns St 5.2L/S@10.5m	T	Growth	Sewer Pump Station	n/a	n/a	124
2036	CAPEX	S59	MB1	C1	Sewer Rising Main New St Helens Structure Plan DN225 1.6km	T	Growth	Sewer Rising Main	225	1,622	510
2036	CAPEX	S159	HB2	B3	Sewer Rising Main New Eli Structure Plan DN250 1.1km	T	Growth	Sewer Rising Main	250	1,082	413
2036	CAPEX	S40	MB2	D1	Sewer Rising Main New Maryborough West Oakhurst DN 150 1.4km	T	Growth	Sewer Rising Main	150	1,366	376
2036	CAPEX	S128j	HB3	D2	Sewer Rising Main New Nikenbah Structure Plan DN225 565m	T	Growth	Sewer Rising Main	225	562	195
2036	CAPEX	S42	MB3	C1	Sewer Rising Main New Burns St Granville DN150 710m	T	Growth	Sewer Rising Main	150	705	194
2036	CAPEX	S37	MB2	E4	Sewer Rising Main New Central Road Tinana DN150 625m	T	Growth	Sewer Rising Main	150	624	172
2036	CAPEX	S71A	HB3	D2	Sewer Rising Main New Nikenbah Structure Plan DN225 230m	T	Growth	Sewer Rising Main	225	258	161
2036	CAPEX	S128	HB3	E2	Sewer Rising Main New Nikenbah Structure Plan DN100 585m	T	Growth	Sewer Rising Main	100	583	120
2036	CAPEX	S206	HB5	C3	Burrum Heads Effluent Storage Lagoon 60ML	T	Growth	Effluent Reuse Storage Lagoon	60ML	60	420
<b>2036 Total</b>											<b>8,092</b>
<b>Grand Total CAPEX</b>											<b>176,514</b>
2016	OPEX	n/a	n/a	n/a	Investigate Options for Reducing Total Nitrogen and Total Phosphorus and Suspended Solids Aubinville WWTP	F	Quality	Sewage Treatment Plant	n/a	n/a	60
2016	OPEX	n/a	n/a	n/a	Investigate the Reduction in Total Phosphorus at Toogoom WWTP to Meet Licencing Requirements	F	Quality	Sewage Treatment Plant	n/a	n/a	30
2016	OPEX	n/a	n/a	n/a	Review SCADA system to determine user requirements and scope future works to augment SCADA system	F	I/I	Sewer Gravity Main	n/a	n/a	20
2016	OPEX	n/a	n/a	n/a	Creation of SCADA database for the storage of sewerage data for access by all users	F	I/I	Sewer Gravity Main	n/a	n/a	30
2016	OPEX	n/a	n/a	n/a	Investigate and produce a detailed planning report on the viability and timing of components in option H2(b)	F	Growth	Effluent Reuse	n/a	n/a	80
2016	OPEX	n/a	n/a	n/a	Investigate the economics of the Fraser Coast Reuse schemes in 2016 at a cost of \$20k	F	Growth	Effluent Reuse	n/a	n/a	20
<b>2016 Total</b>											<b>240</b>
2017	OPEX	n/a	n/a	n/a	Investigate Feasibility of New WWTP Located in Tinana	F	Growth	Sewage Treatment Plant	n/a	n/a	40
2017	OPEX	n/a	n/a	n/a	Investigate The Impact of Sewer Rehabilitation to Date on Infiltration	F	I/I	Sewer Gravity Main	n/a	n/a	30
<b>2017 Total</b>											<b>70</b>
<b>Grand Total OPEX</b>											<b>310</b>

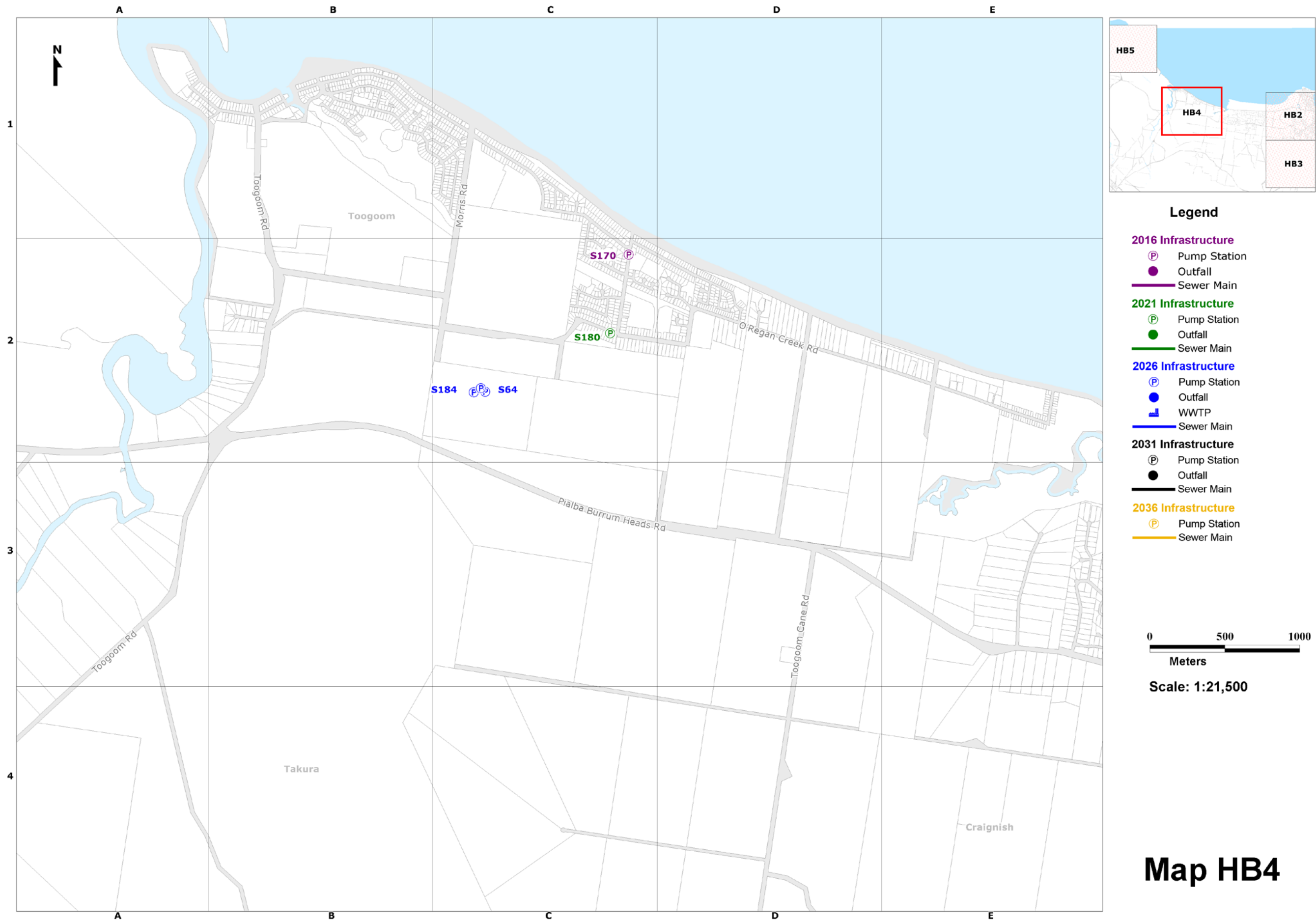
## APPENDIX 2 – INFRASTRUCTURE PLANS







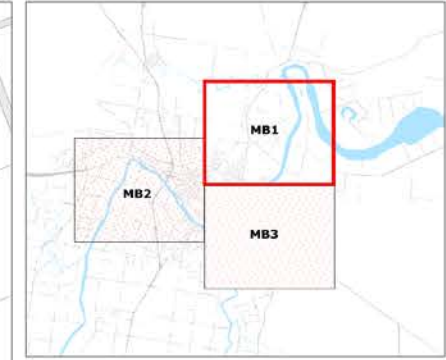
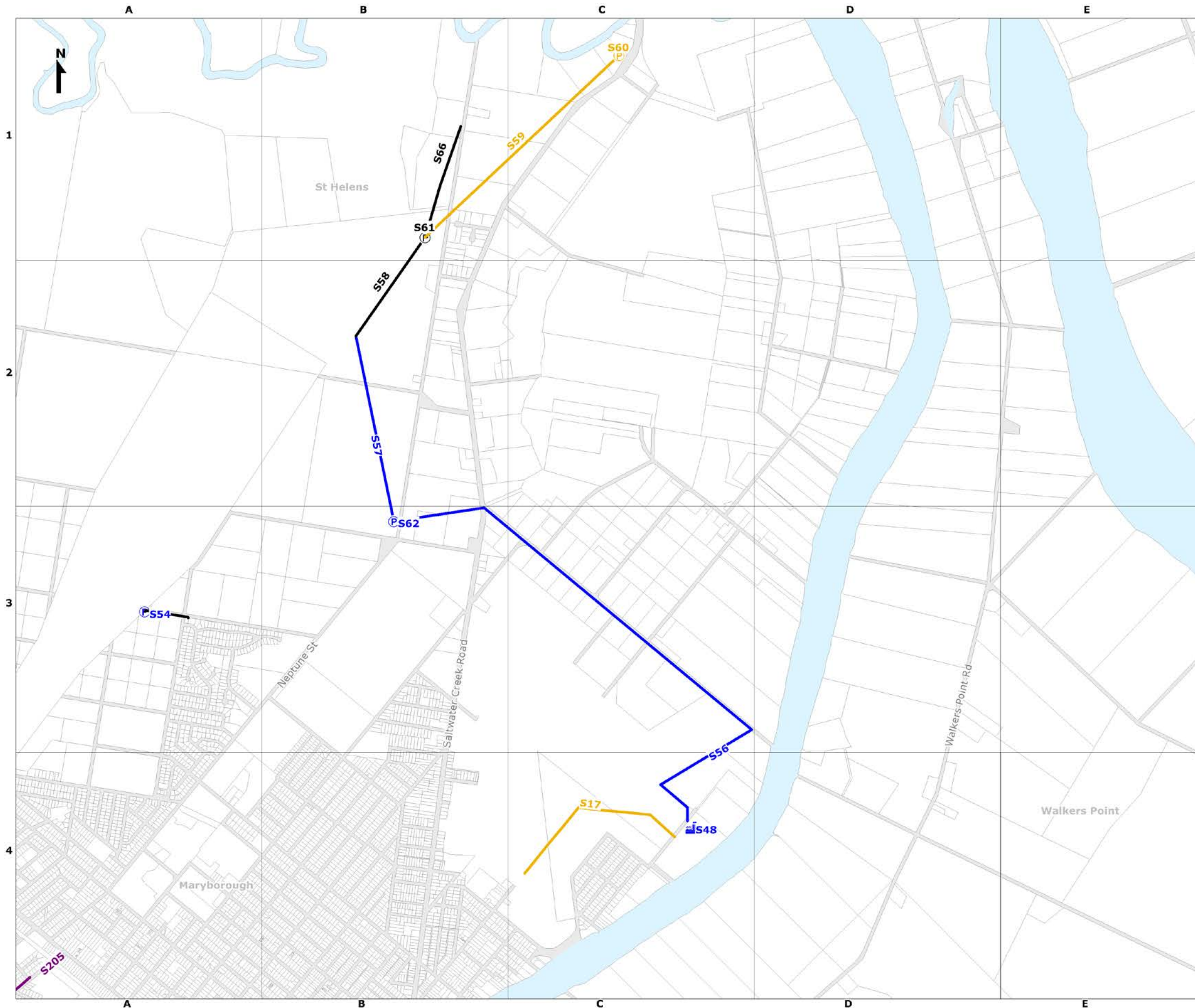






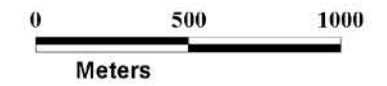






**Legend**

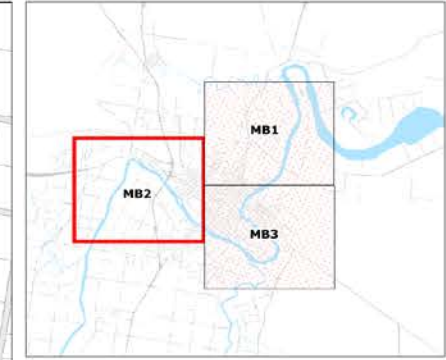
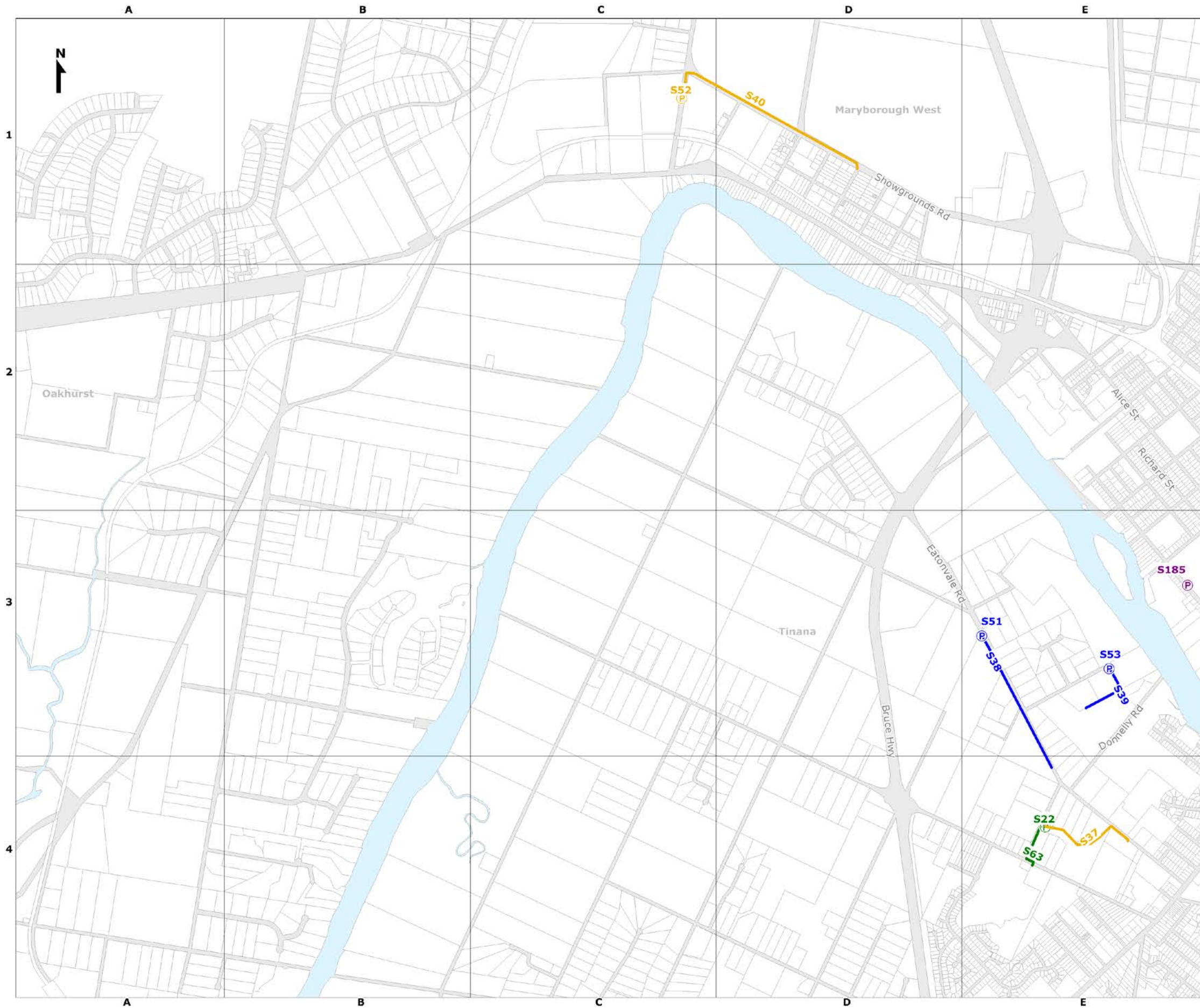
- 2016 Infrastructure**
  - Pump Station
  - Outfall
  - Sewer Main
- 2021 Infrastructure**
  - Pump Station
  - Outfall
  - Sewer Main
- 2026 Infrastructure**
  - Pump Station
  - Outfall
  - Sewer Main
  - WWTP
- 2031 Infrastructure**
  - Pump Station
  - Outfall
  - Sewer Main
- 2036 Infrastructure**
  - Pump Station
  - Sewer Main



Scale: 1:21,500

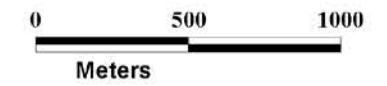
**Map MB1**





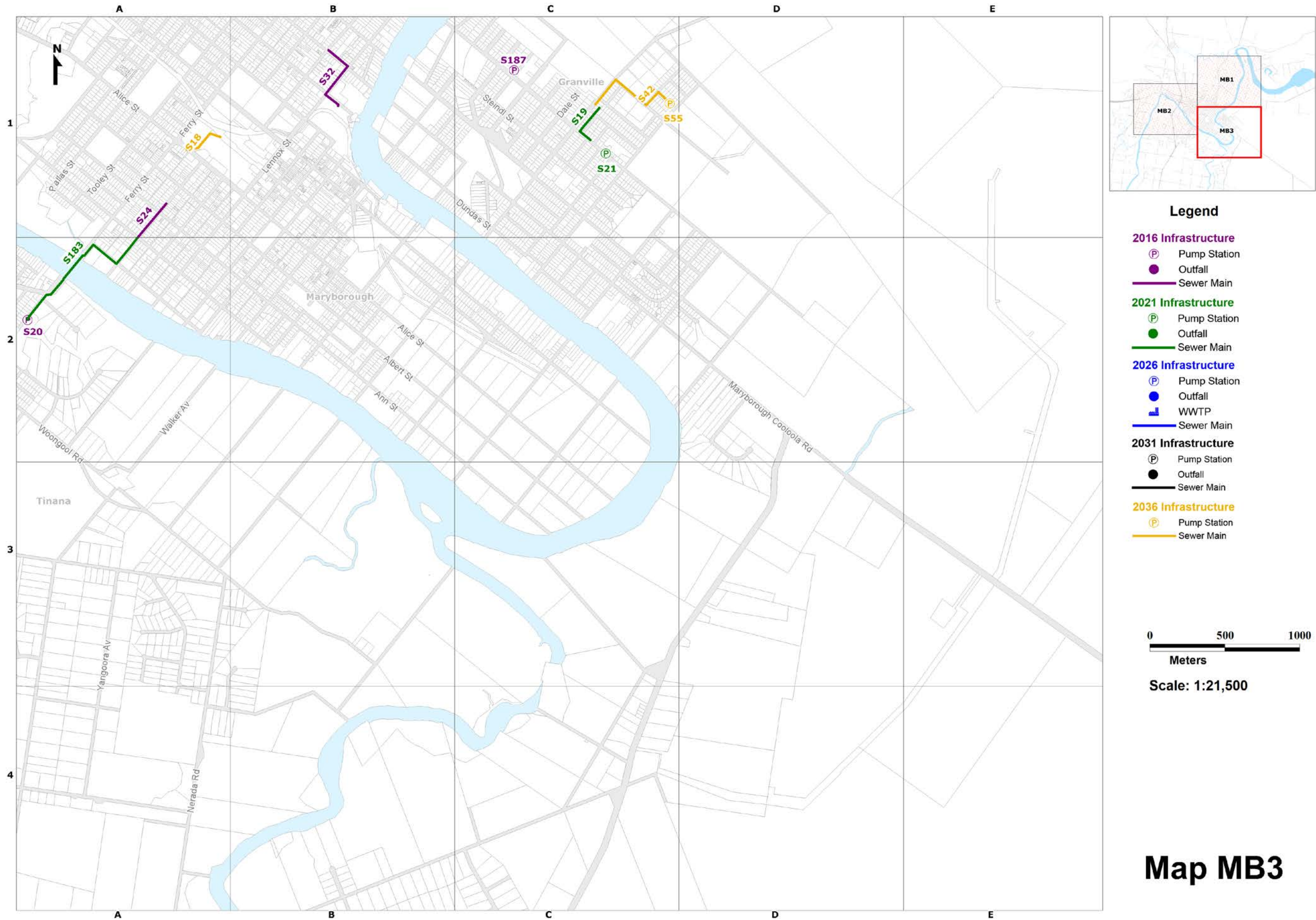
**Legend**

- 2016 Infrastructure**
  - Ⓟ Pump Station
  - Outfall
  - Sewer Main
- 2021 Infrastructure**
  - Ⓟ Pump Station
  - Outfall
  - Sewer Main
- 2026 Infrastructure**
  - Ⓟ Pump Station
  - Outfall
  - WWTP
  - Sewer Main
- 2031 Infrastructure**
  - Ⓟ Pump Station
  - Outfall
  - Sewer Main
- 2036 Infrastructure**
  - Ⓟ Pump Station
  - Sewer Main

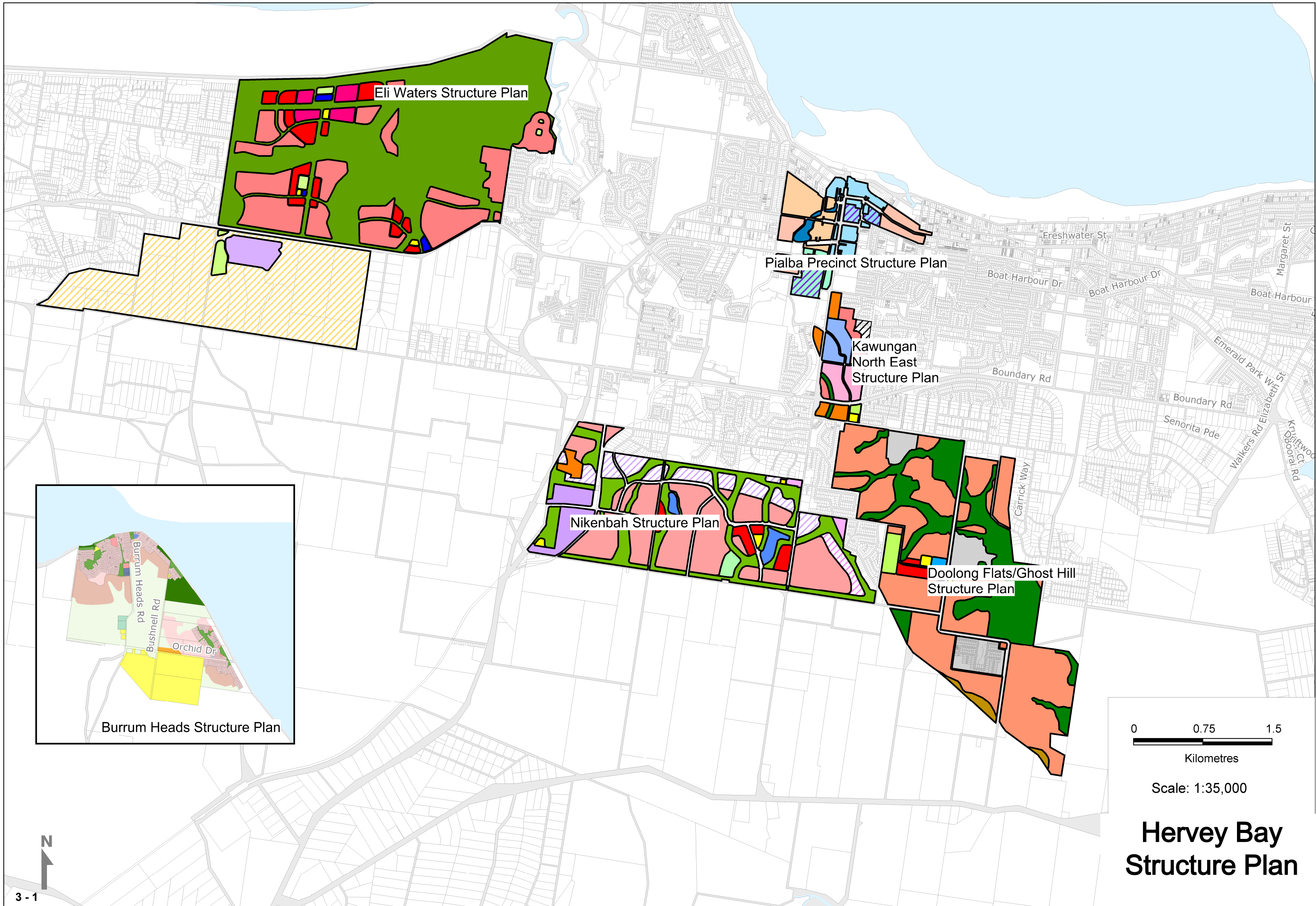


Scale: 1:21,500

**Map MB2**



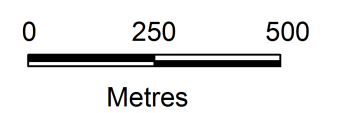
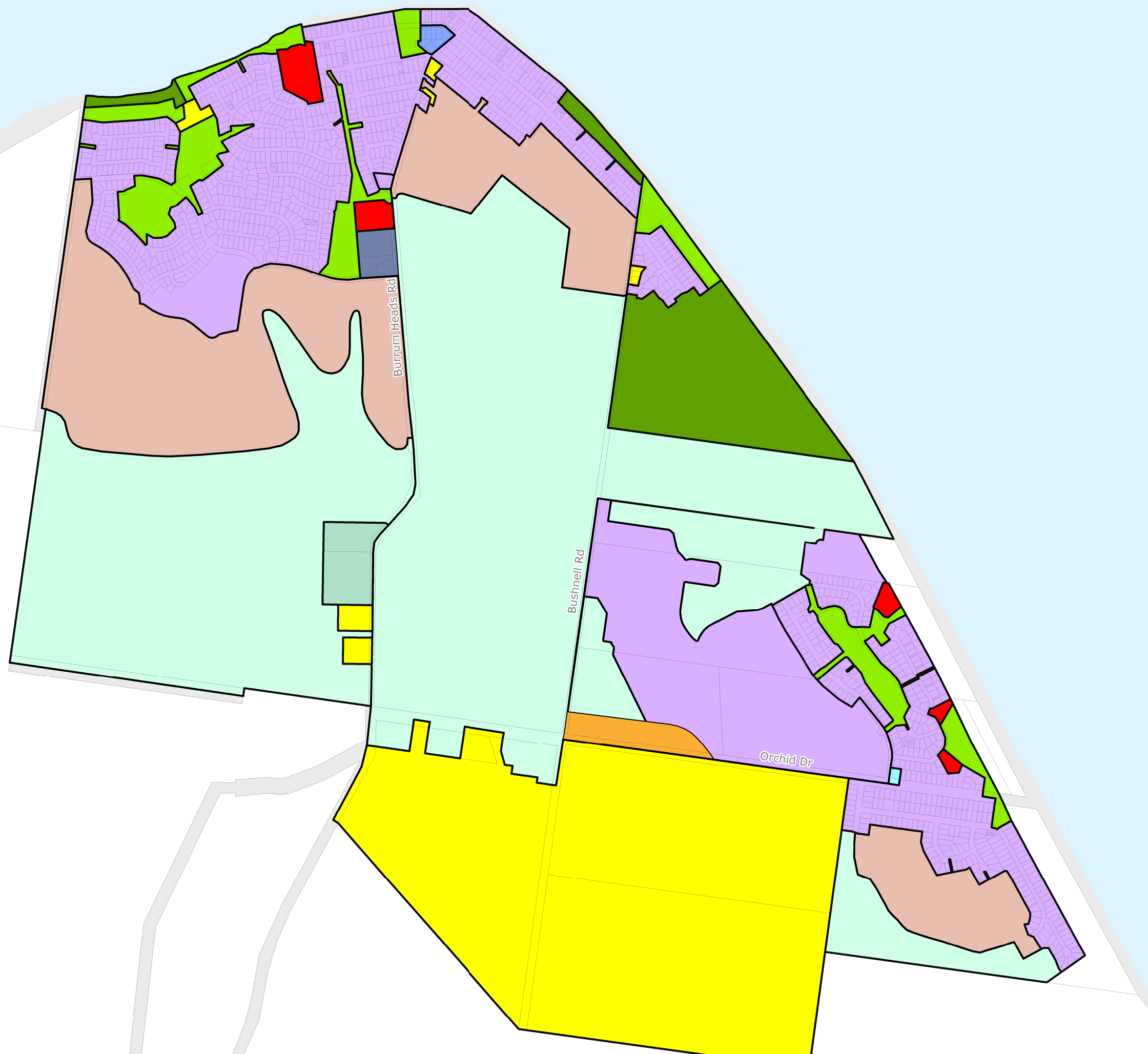
## APPENDIX 3 – STRUCTURE PLANS



# Hervey Bay Structure Plan

**Burrum Heads SP Legend**

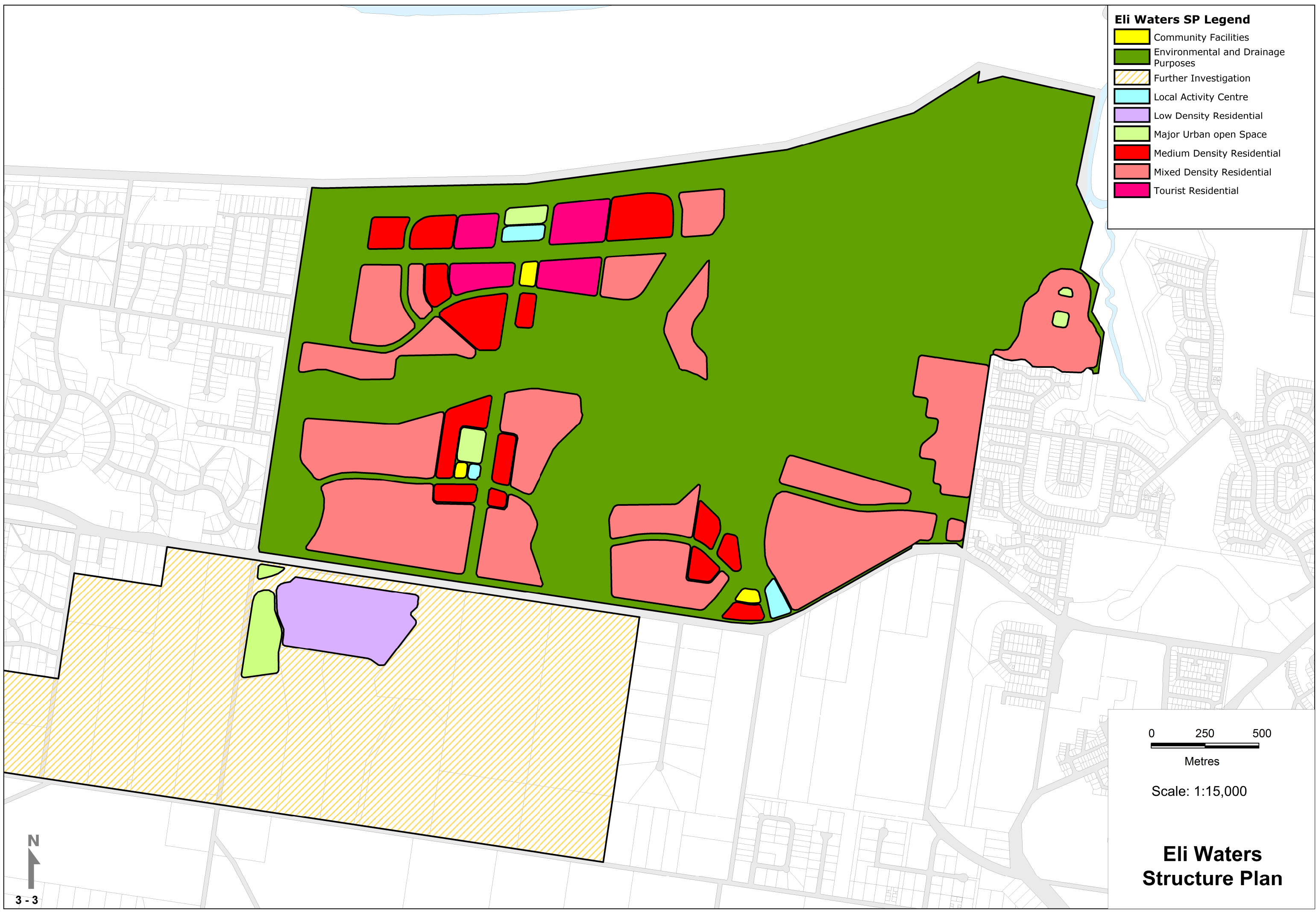
- Community Facilities 2
- Community Facilities 5
- District Centre
- Emerging Communities
- Environmental Management and Conservation
- Limited Development (Constrained Land)
- Local Centre
- Low Density Residential
- Medium Density Residential
- Neighbourhood Centre
- Open Space
- Rural
- Sport and Recreation



Scale: 1:15,000

**Burrum Heads  
Structure Plan**

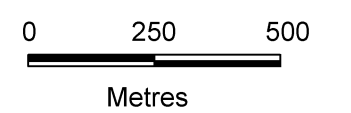
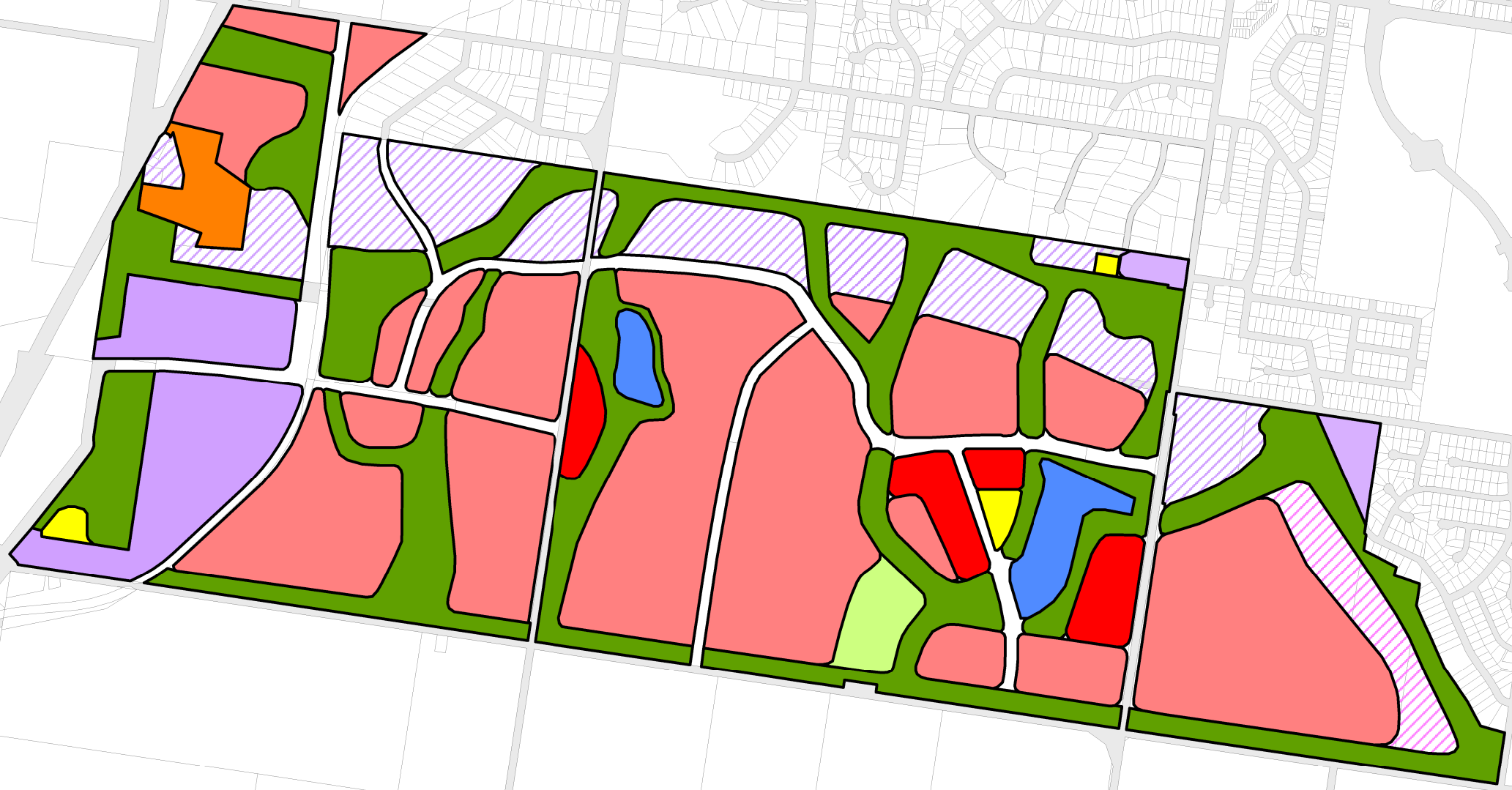
- Eli Waters SP Legend**
- Community Facilities
  - Environmental and Drainage Purposes
  - Further Investigation
  - Local Activity Centre
  - Low Density Residential
  - Major Urban open Space
  - Medium Density Residential
  - Mixed Density Residential
  - Tourist Residential



0      250      500  
 Metres  
 Scale: 1:15,000

**Eli Waters  
 Structure Plan**

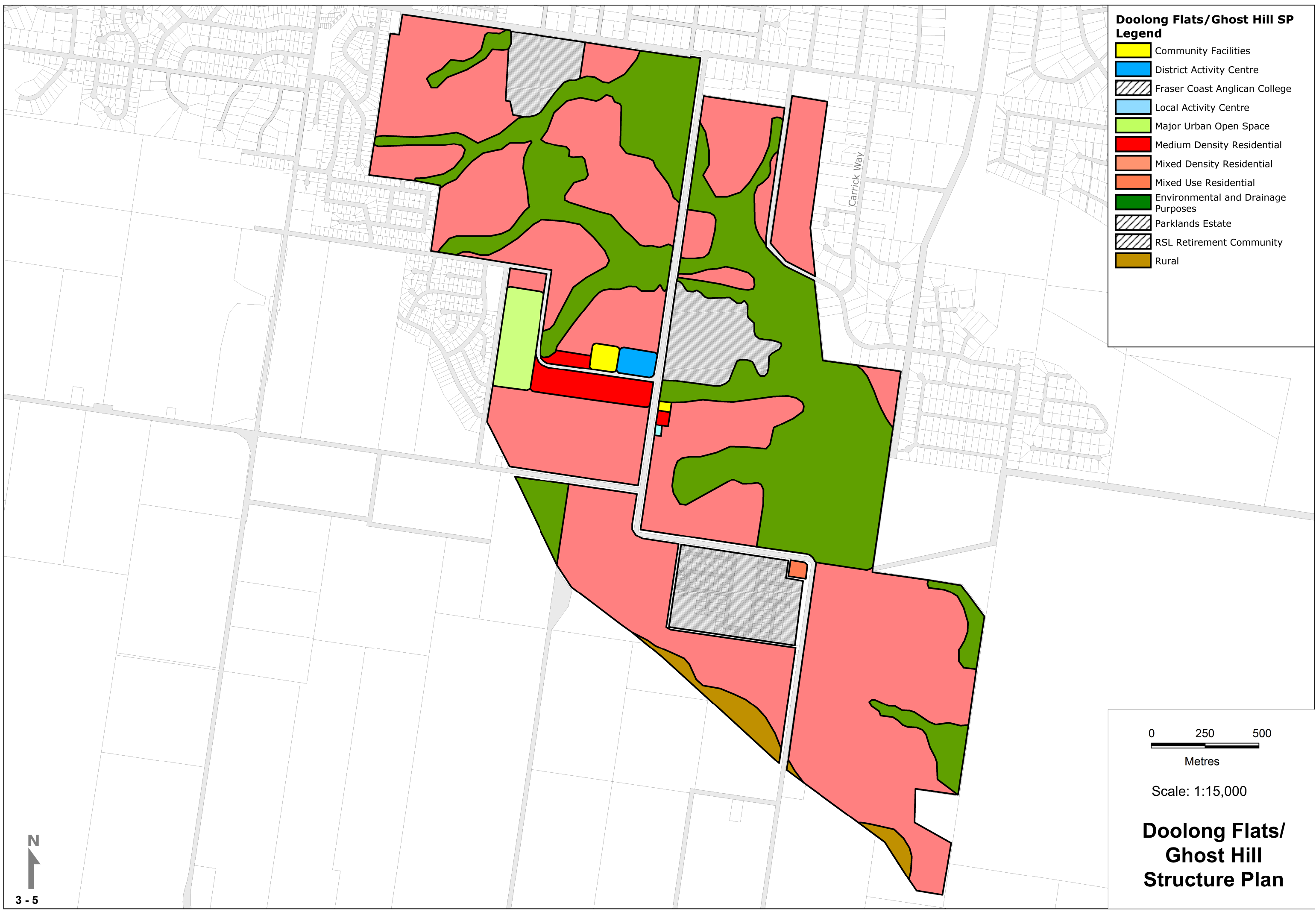
- Nikenbah SP Legend**
- Community Facilities
  - Environmental and Drainage Purposes
  - Hillslope Residential
  - Industry and Employment
  - Low Density Residential
  - Major Urban Open Space
  - Major Waterbody
  - Medium Density Residential
  - Mixed Density Residential
  - Mixed Use



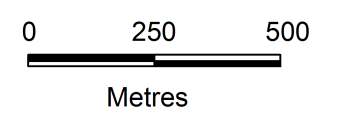
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**Nikenbah  
Structure Plan**





- Doolong Flats/Ghost Hill SP Legend**
- Community Facilities
  - District Activity Centre
  - Fraser Coast Anglican College
  - Local Activity Centre
  - Major Urban Open Space
  - Medium Density Residential
  - Mixed Density Residential
  - Mixed Use Residential
  - Environmental and Drainage Purposes
  - Parklands Estate
  - RSL Retirement Community
  - Rural











Scale: 1:15,000

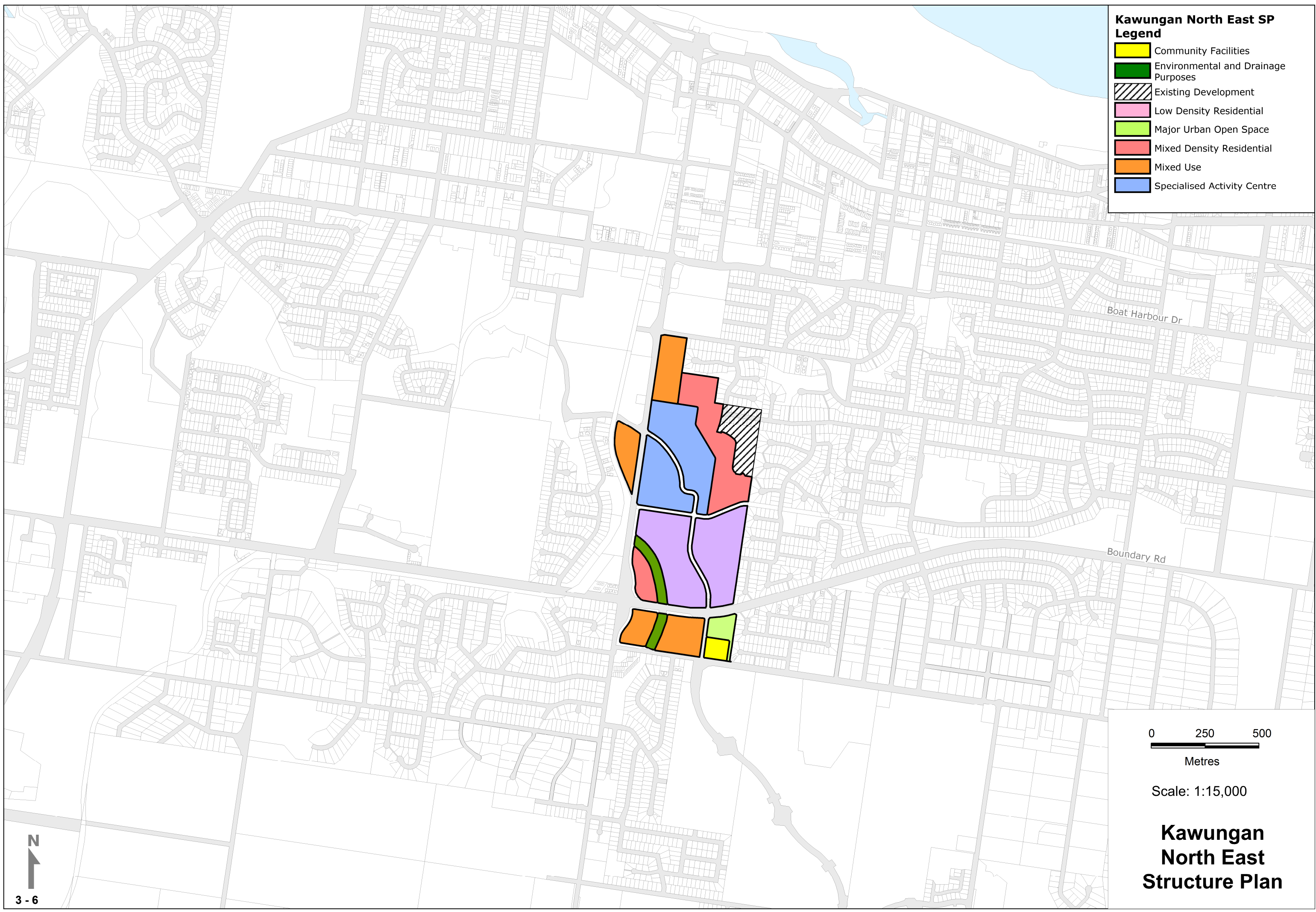
**Doolong Flats/  
Ghost Hill  
Structure Plan**





**Kawungan North East SP  
Legend**

-  Community Facilities
-  Environmental and Drainage Purposes
-  Existing Development
-  Low Density Residential
-  Major Urban Open Space
-  Mixed Density Residential
-  Mixed Use
-  Specialised Activity Centre



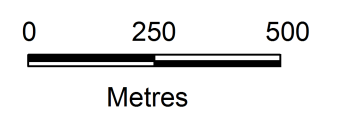
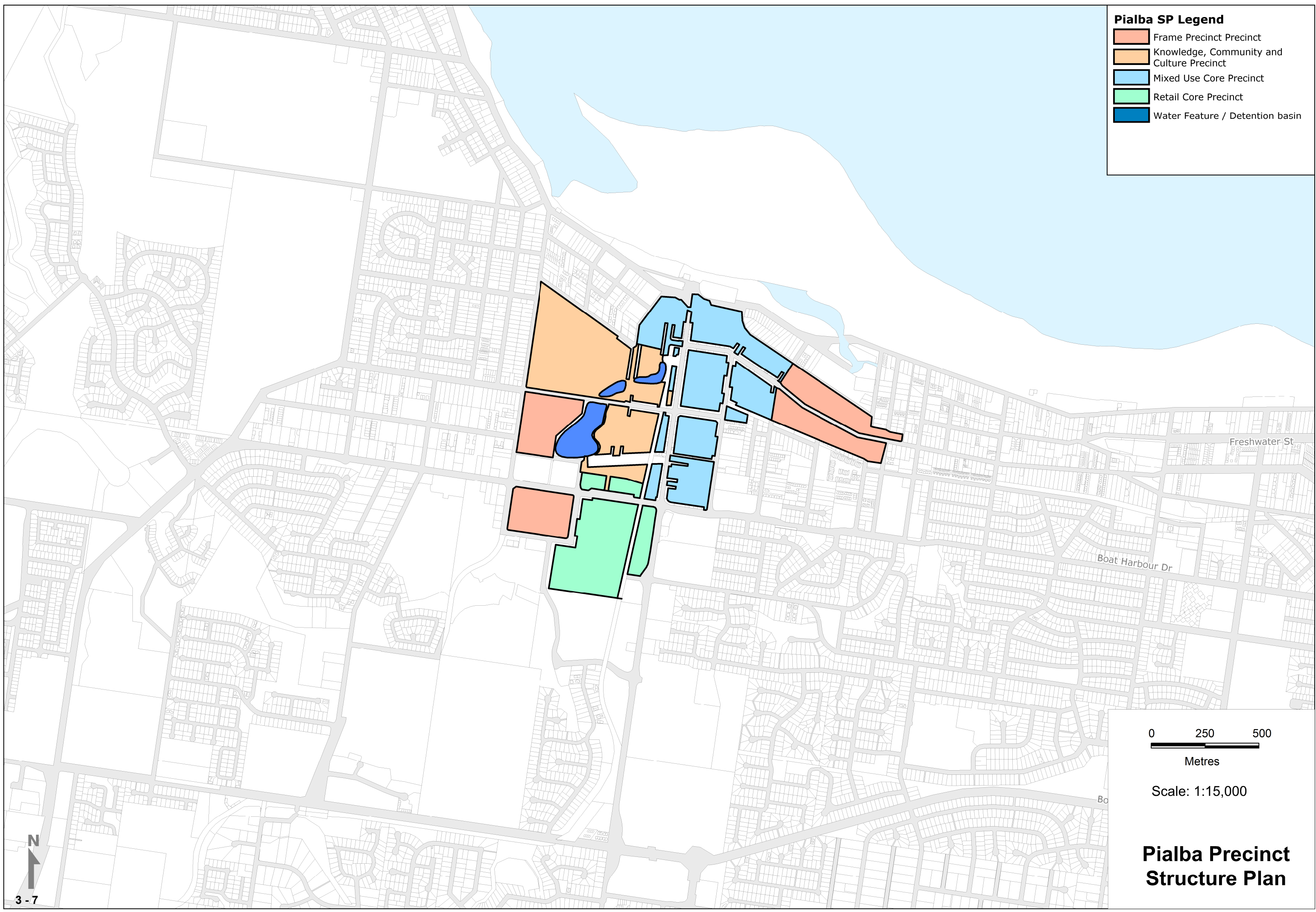
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**Kawungan  
North East  
Structure Plan**

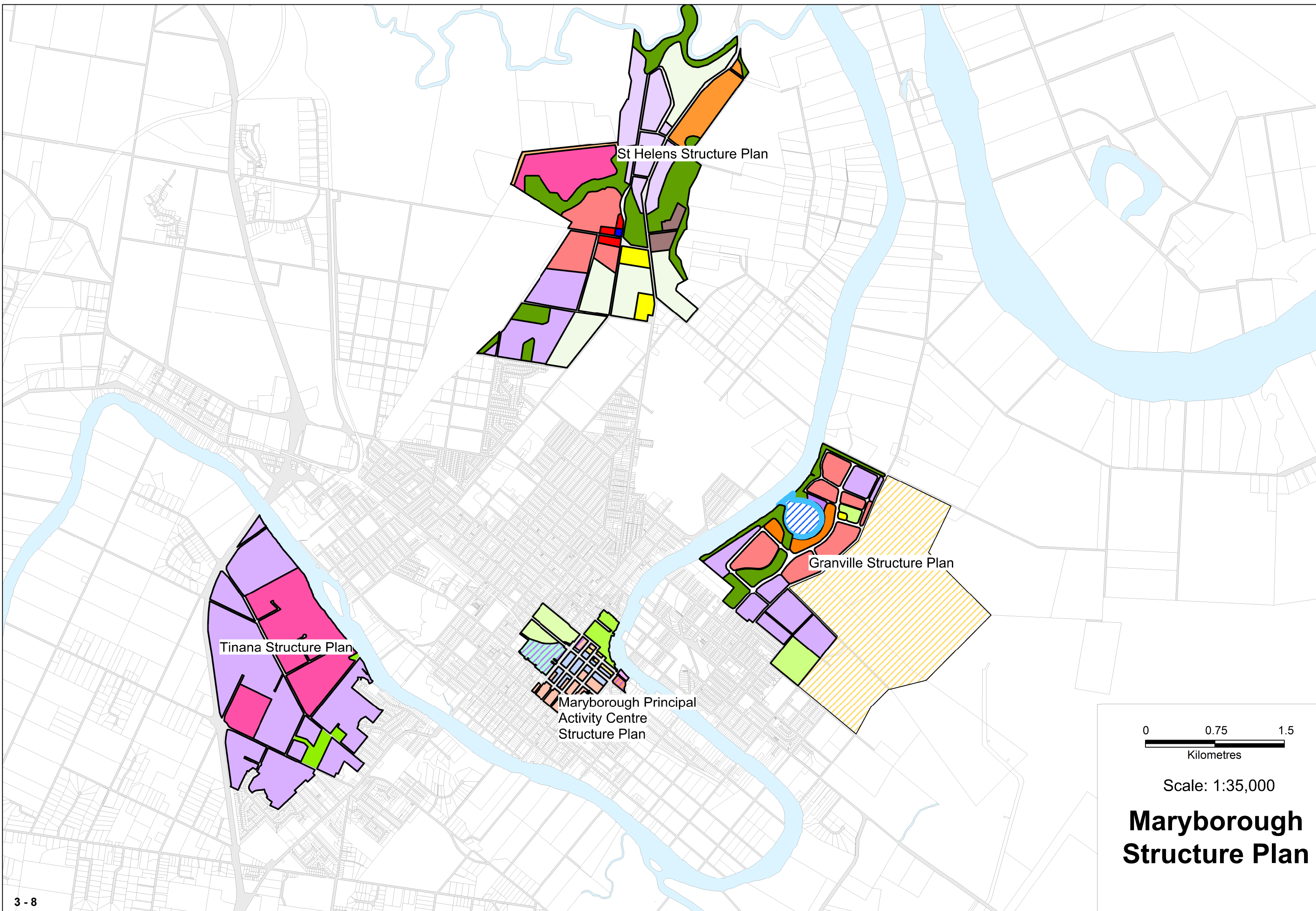
**Pialba SP Legend**

- Frame Precinct Precinct
- Knowledge, Community and Culture Precinct
- Mixed Use Core Precinct
- Retail Core Precinct
- Water Feature / Detention basin



Scale: 1:15,000

**Pialba Precinct Structure Plan**

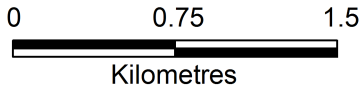


St Helens Structure Plan

Tinana Structure Plan

Maryborough Principal  
Activity Centre  
Structure Plan

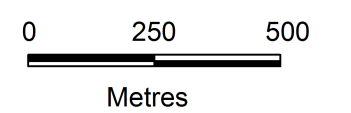
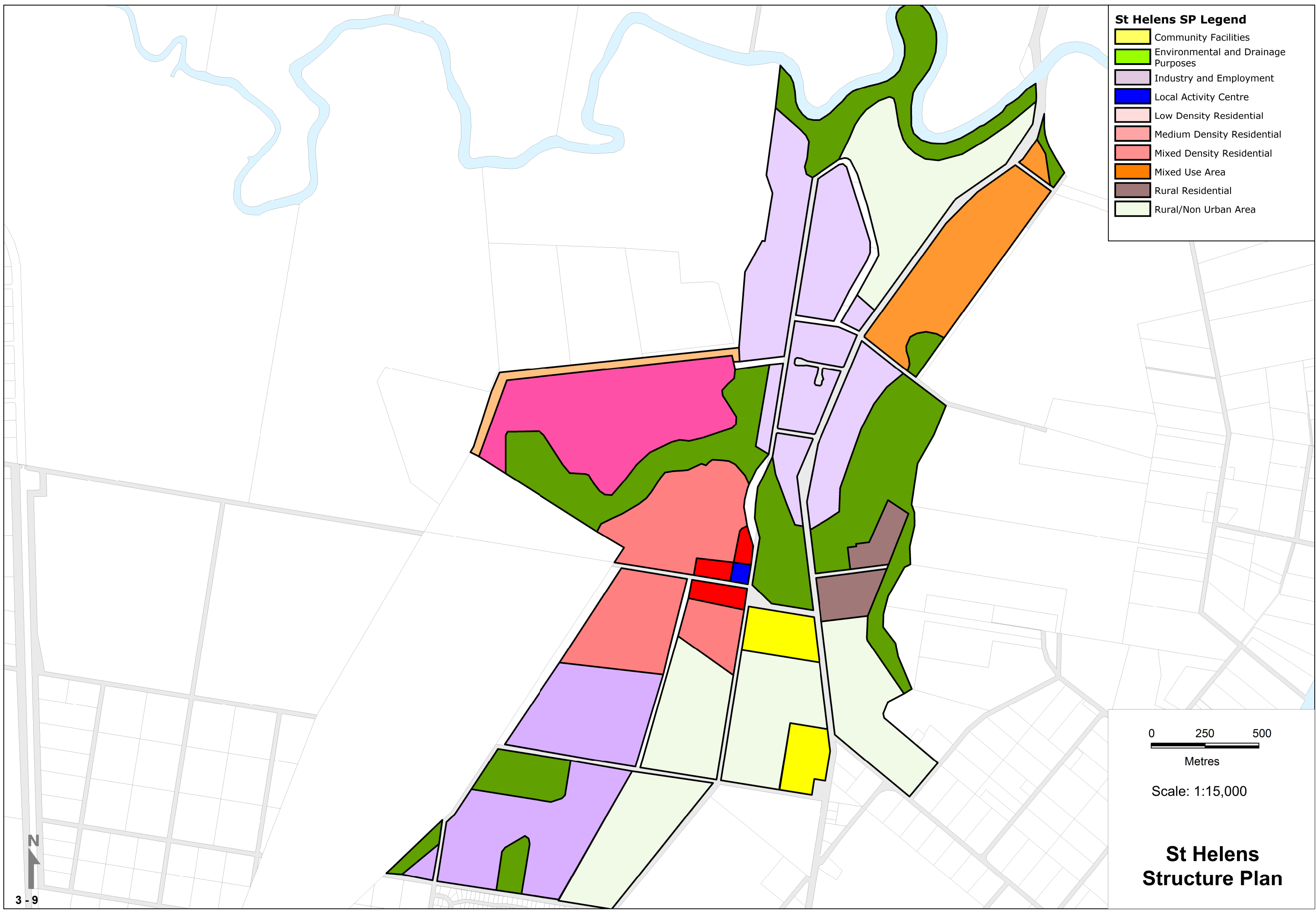
Granville Structure Plan



Scale: 1:35,000

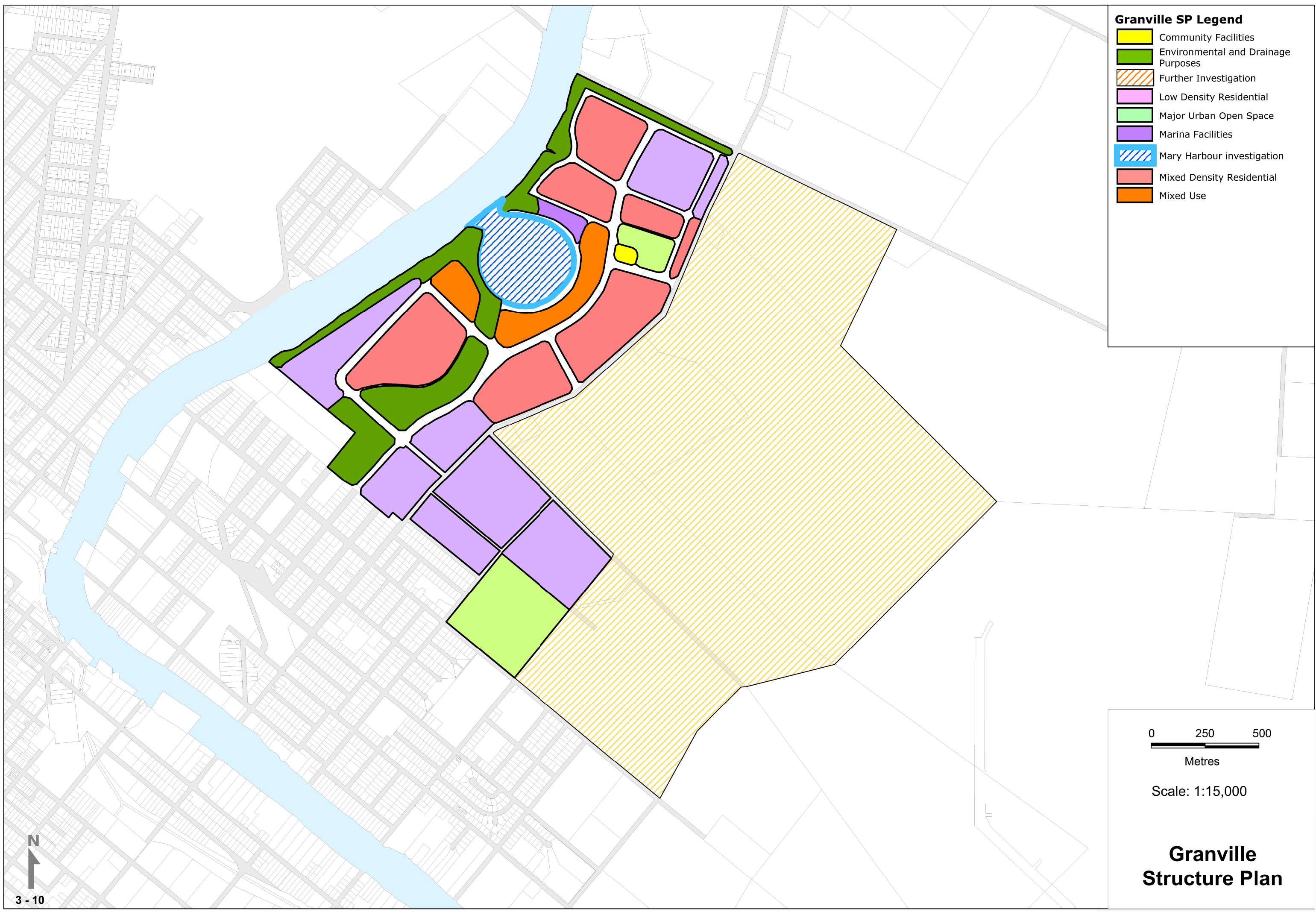
# Maryborough Structure Plan

- St Helens SP Legend**
- Community Facilities
  - Environmental and Drainage Purposes
  - Industry and Employment
  - Local Activity Centre
  - Low Density Residential
  - Medium Density Residential
  - Mixed Density Residential
  - Mixed Use Area
  - Rural Residential
  - Rural/Non Urban Area



Scale: 1:15,000

**St Helens  
Structure Plan**



- Granville SP Legend**
- Community Facilities
  - Environmental and Drainage Purposes
  - Further Investigation
  - Low Density Residential
  - Major Urban Open Space
  - Marina Facilities
  - Mary Harbour investigation
  - Mixed Density Residential
  - Mixed Use

0 250 500  
Metres

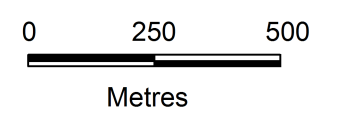
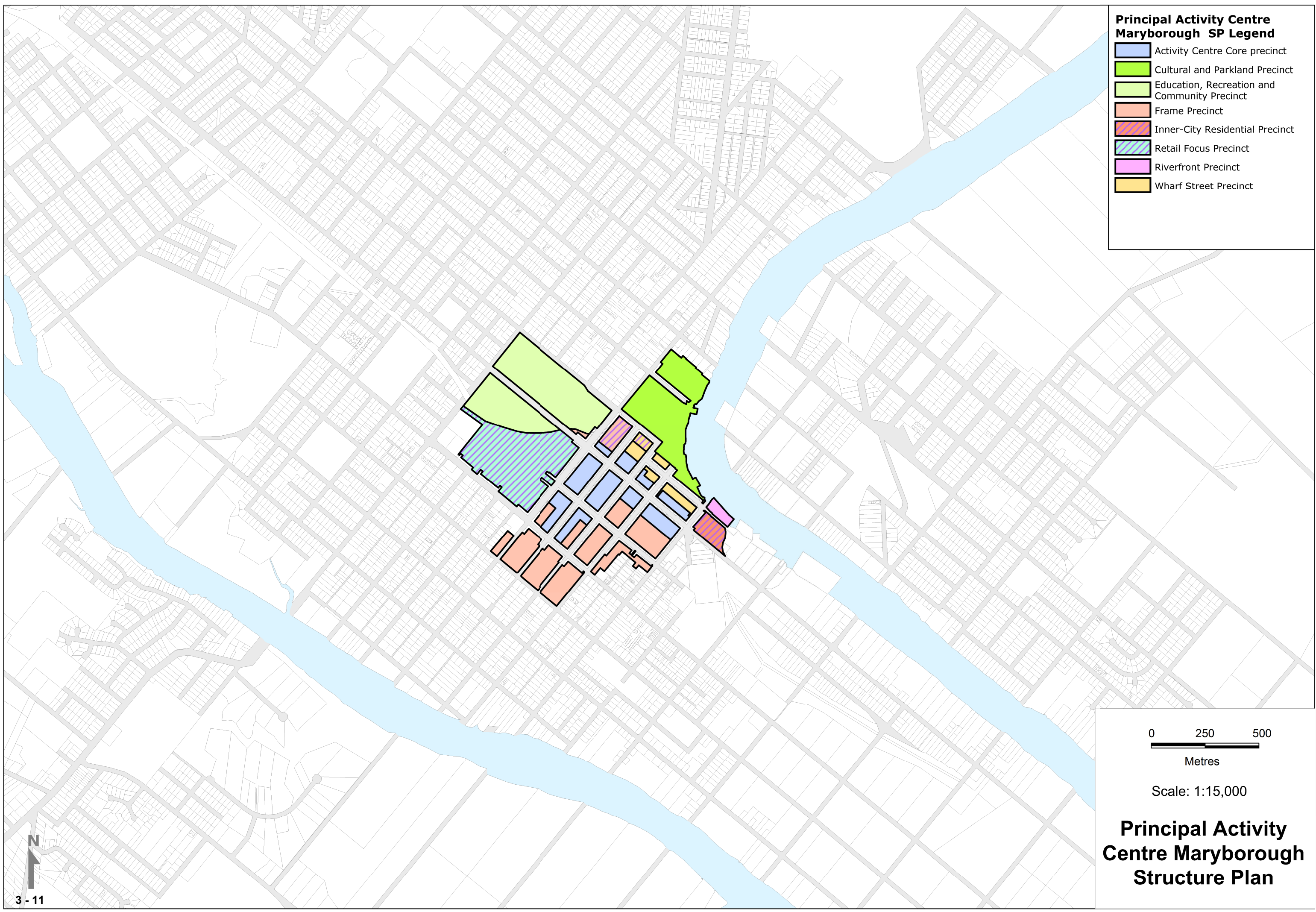
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**Granville  
Structure Plan**



**Principal Activity Centre  
Maryborough SP Legend**




- Activity Centre Core precinct
- Cultural and Parkland Precinct
- Education, Recreation and Community Precinct
- Frame Precinct
- Inner-City Residential Precinct
- Retail Focus Precinct
- Riverfront Precinct
- Wharf Street Precinct

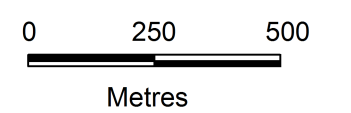
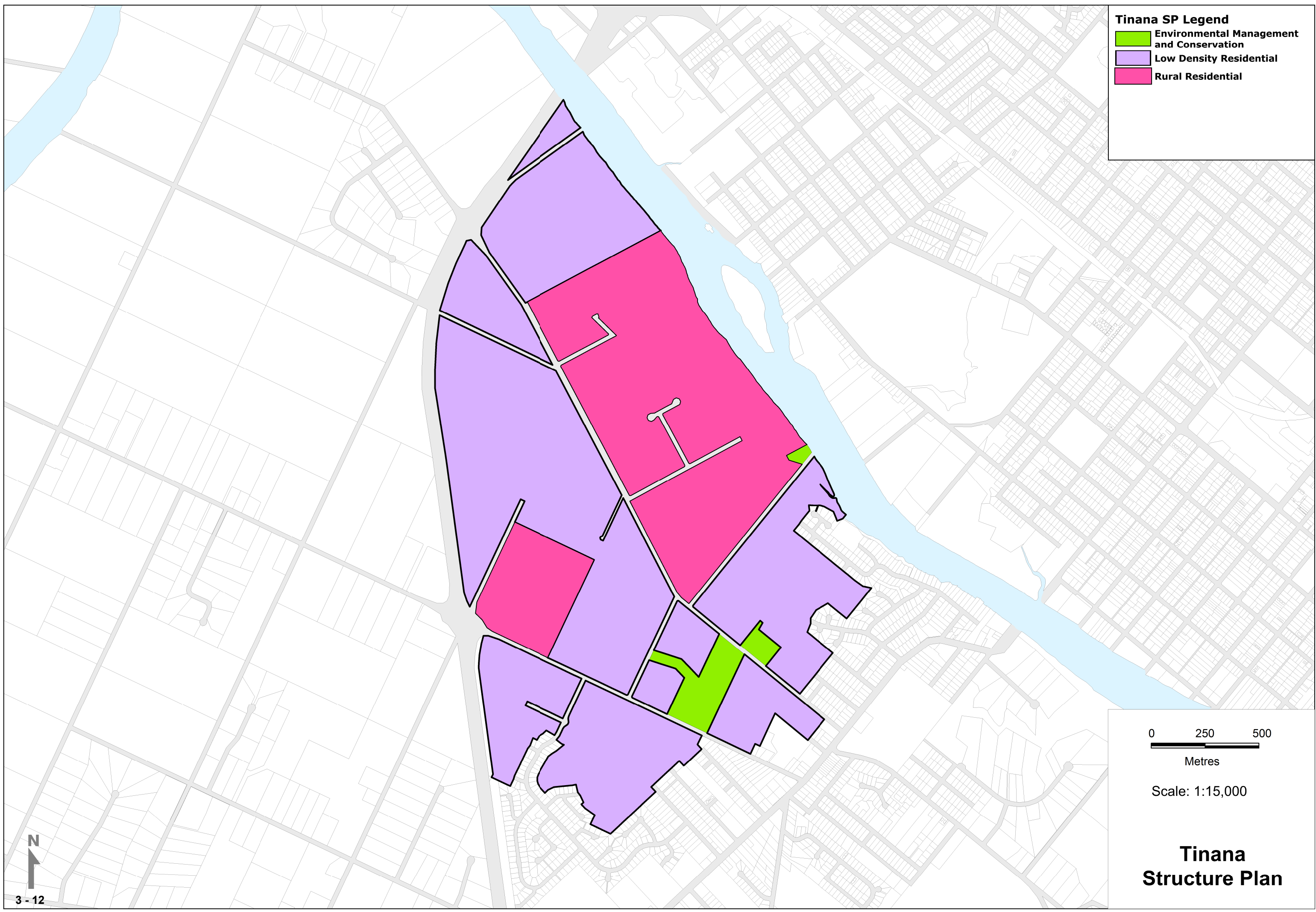


Scale: 1:15,000

**Principal Activity  
Centre Maryborough  
Structure Plan**

**Tinana SP Legend**

-  Environmental Management and Conservation
-  Low Density Residential
-  Rural Residential



Scale: 1:15,000

**Tinana  
Structure Plan**

