

Indicative Business Case (IBC) cost estimate sheets MRT/SHI engagement options

26-Nov-21

The following IBC cost estimate sheets are just one of the raw inputs (albeit a significant one) to a financial model Let's Get Wellington Moving uses to generate Whole of Life Costs (WoLC) over a 30-year period for the MRT/SHI engagement options. These following cost estimates exclude property costs and Indicative Business Case costs.

The WoLC values form the estimated costs for the engagement options.

Let's Get Wellington Moving applies a number of factors to calculate WoLC; inflation, sequencing (start dates and duration for projects), on-going maintenance and renewals, service provision costs, lost car parking revenue, financing costs and programme office costs.

More information about the WoLC for the engagement options is available in the document below:

[Programme Cost Summary Technical Note](#)

Key to estimate combinations

Option	tab name
Option (i)	
LRT South (K/C)	opt i, iii MRT - S
Bus East (Diagonal)	opt i, MRT - E
Tunnel (diagonal)	opt i,ii Tunnel - diagonal
Basin GS	opt i,ii,iii - basin GS
Option (ii)	
BRT South	opt ii - BRT - S
BRT East (Diagonal)	opt ii - BRT - E
Tunnel (diagonal)	opt i,ii Tunnel - diagonal
Basin GS	opt i,ii,iii - basin GS
Option (iii)	
LRT South (K/C)	opt i, iii MRT - S
Bus East (Hataitai)	opt iii,iv - Bus - E
Tunnel (active)	opt iii,iv - Tunnel
Basin GS	opt i,ii,iii - basin GS
Option (iv)	
LRT South (Taranaki)	opt iv - MRT - S (Taranaki)
Bus East (Hataitai)	opt iii,iv - Bus - E
Tunnel (active)	opt iii,iv - Tunnel
Basin	opt iv - Basin (at grade)

Project Estimate - Form B

LGWM - MRT - opt i, iii MRT - S

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 16,792,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 16,792,000	\$ -	\$ -
B	Total Project Development	\$ 33,584,000	\$ 5,544,762	\$ 10,472,162
	Pre-Implementation Phase		\$ -	\$ -
	- Consultancy Fees	\$ 27,706,800	\$ -	\$ -
	- NZTA Managed Costs	\$ 22,669,200	\$ -	\$ -
C	Total Pre-implementation	\$ 50,376,000	\$ 12,517,143	\$ 15,708,243
	Implementation Phase	\$ -	\$ -	\$ -
	Implementation Fees	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 41,835,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 27,240,000	\$ -	\$ -
	- Consent Monitoring Fees	\$ -	\$ -	\$ -
	Sub Total Base Implementation Fees	\$ 69,075,000	\$ 3,215,242	\$ 12,313,013
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 2,273,550	\$ 2,578,851	\$ 1,704,610
2	Earthworks	\$ 40,544,615	\$ 10,005,970	\$ 3,940,767
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 8,204,995	\$ 11,740,167	\$ 3,775,493
5	Pavement and Surfacing	\$ 57,515,678	\$ 23,717,016	\$ 5,863,632
6	Bridges	\$ -	\$ 700,000	\$ 872,883
7	Retaining Walls	\$ 3,124,030	\$ 3,193,734	\$ 1,697,657
8	Traffic Services	\$ 20,951,350	\$ 8,720,520	\$ 3,391,926
9	Service Relocations	\$ 85,350,120	\$ 58,510,512	\$ 9,949,346
10	Landscaping	\$ 55,534,460	\$ 21,172,417	\$ 11,650,506
11	Traffic Management and Temporary Works	\$ 29,350,000	\$ 6,633,333	\$ 2,861,878
	Tunnelling	\$ -	\$ -	\$ -
	Rail Infrastructure	\$ 24,460,850	\$ 3,215,362	\$ 4,616,916
	Buildings	\$ 75,296,950	\$ 15,325,982	\$ 4,449,750
12	Preliminary and General	\$ 153,140,000	\$ 7,949,264	\$ 10,021,955
13	Extraordinary Construction Costs	\$ 12,340,000	\$ 4,390,667	\$ 1,882,813
	Fleet	\$ 108,832,500	\$ 14,741,646	\$ 8,929,689
		\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 676,919,098	\$ 192,595,441	\$ 75,609,821
D	Total for Implementation Phase	\$ 745,994,098	\$ 195,810,683	\$ 87,922,834
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 829,954,098		
F	Contingency (Assessed/Analysed)	(A+B+C+D)	Excluded	
G	Project Expected Estimate	(E+F)	Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed)	(A+B+C+D)		Excluded
I	95th percentile Project Estimate	(G+H)		Excluded
	Nett Project Property Cost 95th percentile Estimate			Excluded
	Project Development Phase 95th percentile Estimate			Excluded
	Pre-implementation Phase 95th percentile Estimate			Excluded
	Implementation Phase 95th percentile Estimate			Excluded

Date of Estimate:	Cost Index (Qtr/Year)
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Estimate external peer review by	Signed
Estimate accepted by NZTA	Signed

Project Estimate - Form B

IBE

LGWM - MRT - opt i, MRT - E

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 3,384,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 3,384,000	\$ -	\$ -
B	Total Project Development	\$ 6,768,000	\$ 1,190,294	\$ 2,090,368
	Pre-Implementation Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 5,583,600	\$ -	\$ -
	- NZTA Managed Costs	\$ 4,568,400	\$ -	\$ -
C	Total Pre-implementation	\$ 10,152,000	\$ 1,785,440	\$ 3,135,552
	Implementation Phase	\$ -	\$ -	\$ -
	Implementation Fees	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 9,475,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 6,430,000	\$ -	\$ -
	- Consent Monitoring Fees	\$ -	\$ -	\$ -
	Sub Total Base Implementation Fees	\$ 15,905,000	\$ 731,367	\$ 2,783,372
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 986,760	\$ 756,533	\$ 500,981
2	Earthworks	\$ 9,942,575	\$ 2,324,061	\$ 1,002,604
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 901,480	\$ 2,576,716	\$ 1,221,505
5	Pavement and Surfacing	\$ 16,698,859	\$ 6,528,172	\$ 2,103,345
6	Bridges	\$ -	\$ -	\$ -
7	Retaining Walls	\$ 697,060	\$ 394,951	\$ 408,978
8	Traffic Services	\$ 11,401,625	\$ 2,451,235	\$ 1,126,596
9	Service Relocations	\$ 28,984,160	\$ 18,896,249	\$ 3,850,889
10	Landscaping	\$ 13,885,110	\$ 6,208,784	\$ 3,388,881
11	Traffic Management and Temporary Works	\$ 7,620,000	\$ 1,974,000	\$ 868,767
	Tunnelling	\$ -	\$ -	\$ -
	Rail Infrastructure	\$ -	\$ -	\$ -
	Buildings	\$ 7,044,600	\$ 3,174,487	\$ 1,133,115
12	Preliminary and General	\$ 37,170,000	\$ 1,899,972	\$ 2,814,442
13	Extraordinary Construction Costs	\$ -	\$ -	\$ -
	Fleet	\$ -	\$ -	\$ -
	SH1 Project Contribution	\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 135,332,229	\$ 47,185,160	\$ 18,420,103
D	Total for Implementation Phase	\$ 151,237,229	\$ 47,916,527	\$ 21,203,475
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 168,157,229		
F	Contingency (Assessed/Analysed)	(A+B+C+D)	Excluded	
G	Project Expected Estimate	(E+F)	Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed)	(A+B+C+D)		Excluded
I	95th percentile Project Estimate	(G+H)		Excluded
	Nett Project Property Cost 95th percentile Estimate			Excluded
	Project Development Phase 95th percentile Estimate			Excluded
	Pre-implementation Phase 95th percentile Estimate			Excluded
	Implementation Phase 95th percentile Estimate			Excluded
Date of Estimate:		Cost Index (Qtr/Year)		
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Project Estimate - Form B

IBE

LGWM - SHI- opt i,ii Tunnel - diagonal

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
B	Project Development Phase			
	- Consultancy Fees	\$ 9,537,319	\$ 2,861,196	\$ 1,859,777
	- NZTA Managed Costs	\$ 3,331,901	\$ 999,570	\$ 649,721
B	Total Project Development	\$ 12,869,220	\$ 3,860,766	\$ 2,509,498
C	Pre-Implementation Phase			
	- Consultancy Fees	\$ 44,936,293	\$ 13,480,888	\$ 8,762,577
	- NZTA Managed Costs	\$ 6,663,802	\$ 1,999,140	\$ 1,299,441
C	Total Pre-implementation	\$ 51,600,095	\$ 15,480,029	\$ 10,062,019
D	Implementation Phase			
	Implementation Fees			
	- Consultancy Fees	\$ 7,280,960	\$ 2,184,288	\$ 1,419,787
	- NZTA Managed Costs	\$ 6,364,193	\$ 1,909,258	\$ 1,241,018
	- Consent Monitoring Fees	\$ 19,982,759	\$ 5,994,828	\$ 3,896,638
	Sub Total Base Implementation Fees	\$ 33,627,912	\$ 10,088,374	\$ 6,557,443
	Physical Works	\$ -	\$ -	\$ -
	1 Environmental Compliance	\$ 14,109,561	\$ 4,232,868	\$ 2,751,364
	2 Earthworks	\$ 14,333,658	\$ 4,300,097	\$ 2,795,063
	3 Ground Improvements	\$ 15,157,175	\$ 4,547,153	\$ 2,955,649
	4 Drainage	\$ 6,543,424	\$ 1,963,027	\$ 1,275,968
	5 Pavement and Surfacing	\$ 12,195,083	\$ 3,658,525	\$ 2,378,041
	6 Tunnelling	\$ 387,007,297	\$ 116,102,189	\$ 75,466,423
	7 Retaining Walls	\$ -	\$ -	\$ -
8 Traffic Services	\$ 7,055,594	\$ 2,116,678	\$ 1,375,841	
9 Service Relocations	\$ 12,092,985	\$ 3,627,896	\$ 2,358,132	
10 Landscaping	\$ 5,390,898	\$ 1,617,269	\$ 1,051,225	
11 Traffic Management and Temporary Works	\$ 14,709,860	\$ 4,412,958	\$ 2,868,423	
12 Preliminary and General	\$ 101,550,952	\$ 30,465,286	\$ 19,802,436	
13 Extraordinary Construction Costs	\$ 434,478	\$ 130,343	\$ 84,723	
Sub Total Base Physical Works	\$ 590,580,965	\$ 177,174,289	\$ 115,163,288	
D	Total for Implementation Phase	\$ 624,208,877	\$ 187,262,663	\$ 121,720,731
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 688,678,191		
F	Contingency (Assessed/Analysed)	(A+B+C+D)	Excluded	
G	Project Expected Estimate	(E+F)	Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed)	(A+B+C+D)	Excluded	
I	95th percentile Project Estimate	(G+H)	Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	
Date of Estimate:		Cost Index (Qtr/Year)		
Estimate prepared by		Signed		
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Project Estimate - Form B

IBE

LGWM - SHI - opt i,ii,iii - basin GS

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
B	Project Development Phase			
	- Consultancy Fees	4,711,765	1,413,530	918,794
	- NZTA Managed Costs	2,355,882	706,765	459,397
B	Total Project Development	7,067,647	2,120,294	1,378,191
C	Pre-Implementation Phase			
	- Consultancy Fees	18,552,574	5,512,765	1,074,989
	- NZTA Managed Costs	4,711,765	1,413,530	918,794
C	Total Pre-implementation	23,264,339	6,926,294	1,993,783
D	Implementation Phase			
	Implementation Fees			
	- Consultancy Fees	2,355,882	706,765	137,819
	- NZTA Managed Costs	4,711,765	1,413,530	918,794
	- Consent Monitoring Fees	4,711,765	1,413,530	918,794
	Sub Total Base Implementation Fees	11,779,412	3,533,824	1,975,407
	Physical Works			
	1 Environmental Compliance	2,360,604	708,181	460,318
	2 Earthworks	34,779,725	10,433,918	6,782,046
	3 Ground Improvements	2,320,350	696,105	452,468
	4 Drainage	14,360,161	4,308,048	2,800,231
	5 Pavement and Surfacing	7,125,003	2,137,501	1,389,376
	6 Bridges & Tunnels	34,009,200	10,202,760	6,631,794
	7 Retaining Walls	4,050,000	1,215,000	789,750
	8 Traffic Services	6,954,395	2,086,319	1,356,107
9 Service Relocations	20,000,000	6,000,000	3,900,000	
10 Landscaping	18,908,370	5,672,511	3,687,132	
11 Traffic Management and Temporary Works	14,866,377	4,459,913	2,898,944	
12 Preliminary and General	31,946,837	9,584,051	6,229,633	
13 Extraordinary Construction Costs	510,400	153,120	99,528	
14 Contractor's Offsite OH&P	25,945,842	7,783,753	5,059,439	
13 Contractor's Design	17,450,981	5,235,294	3,402,941	
Sub Total Base Physical Works	235,588,245	70,676,474	45,939,708	
D	Total for Implementation Phase	247,367,657	74,210,297	47,915,115
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 277,699,644		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	

Date of Estimate:	Cost Index (Qtr/Year)
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Estimate external peer review by	Signed
Estimate accepted by NZTA	Signed

Project Estimate - Form B

LGWM - MRT - opt ii - BRT - S

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 7,840,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 7,840,000	\$ -	\$ -
B	Total Project Development	\$ 15,680,000	\$ 3,178,053	\$ 5,575,248
	Pre-Implementation Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 12,936,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 10,584,000	\$ -	\$ -
C	Total Pre-implementation	\$ 23,520,000	\$ 8,967,080	\$ 8,362,872
	Implementation Phase	\$ -	\$ -	\$ -
	Implementation Fees	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 21,950,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 14,900,000	\$ -	\$ -
	- Consent Monitoring Fees	\$ -	\$ -	\$ -
	Sub Total Base Implementation Fees	\$ 36,850,000	\$ 2,298,158	\$ 7,735,728
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 1,493,880	\$ 1,565,106	\$ 1,115,848
2	Earthworks	\$ 29,839,115	\$ 7,024,176	\$ 3,100,335
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 7,664,195	\$ 8,455,473	\$ 2,588,371
5	Pavement and Surfacing	\$ 36,010,336	\$ 13,652,795	\$ 3,713,622
6	Bridges	\$ -	\$ -	\$ -
7	Retaining Walls	\$ 1,745,380	\$ 700,000	\$ 963,091
8	Traffic Services	\$ 16,611,550	\$ 2,087,423	\$ 976,151
9	Service Relocations	\$ 41,186,300	\$ 6,252,832	\$ 2,921,601
10	Landscaping	\$ 50,660,735	\$ 33,025,797	\$ 5,770,657
11	Traffic Management and Temporary Works	\$ 19,690,000	\$ 15,309,197	\$ 8,337,246
	Tunnelling	\$ -	\$ 4,556,000	\$ 2,035,143
	Rail Infrastructure	\$ 3,819,300	\$ 127,311	\$ 213,955
	Buildings	\$ 16,203,700	\$ 5,114,123	\$ 1,612,728
12	Preliminary and General	\$ 86,130,000	\$ 6,088,014	\$ 6,676,620
13	Extraordinary Construction Costs	\$ 2,600,000	\$ 3,416,667	\$ 1,232,200
	Fleet	\$ -	\$ -	\$ -
	SH1 Project Contribution	\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 313,654,491	\$ 107,374,914	\$ 41,257,569
D	Total for Implementation Phase	\$ 350,504,491	\$ 109,673,072	\$ 48,993,297
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 389,704,491		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)			Excluded
I	95th percentile Project Estimate (G+H)			Excluded
	Nett Project Property Cost 95th percentile Estimate			Excluded
	Project Development Phase 95th percentile Estimate			Excluded
	Pre-implementation Phase 95th percentile Estimate			Excluded
	Implementation Phase 95th percentile Estimate			Excluded

Date of Estimate:	Cost Index (Otr/Year)
Estimate prepared by	Signed
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Estimate external peer review by	Signed
Estimate accepted by NZTA	Signed

Project Estimate - Form B

LGWM - MRT - opt ii - BRT - E

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 8,275,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 8,275,000	\$ -	\$ -
B	Total Project Development	\$ 16,550,000	\$ 2,723,245	\$ 4,879,021
	Pre-Implementation Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 13,648,750	\$ -	\$ -
	- NZTA Managed Costs	\$ 11,171,250	\$ -	\$ -
C	Total Pre-implementation	\$ 24,820,000	\$ 4,084,868	\$ 7,318,531
	Implementation Phase	\$ -	\$ -	\$ -
	Implementation Fees	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 17,280,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 10,415,000	\$ -	\$ -
	- Consent Monitoring Fees	\$ -	\$ -	\$ -
	Sub Total Base Implementation Fees	\$ 27,695,000	\$ 1,237,433	\$ 4,819,675
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 986,760	\$ 756,533	\$ 569,812
2	Earthworks	\$ 9,942,575	\$ 2,324,061	\$ 1,140,380
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 901,480	\$ 2,576,716	\$ 1,406,503
5	Pavement and Surfacing	\$ 16,698,859	\$ 6,528,172	\$ 2,372,892
6	Bridges	\$ -	\$ -	\$ -
7	Retaining Walls	\$ 697,060	\$ 394,951	\$ 465,168
8	Traffic Services	\$ 11,401,625	\$ 2,451,235	\$ 1,281,380
9	Service Relocations	\$ 28,984,160	\$ 18,896,249	\$ 4,379,968
10	Landscaping	\$ 13,885,110	\$ 6,208,784	\$ 3,854,484
11	Traffic Management and Temporary Works	\$ 7,620,000	\$ 1,974,000	\$ 988,128
	Tunnelling	\$ -	\$ -	\$ -
	Rail Infrastructure	\$ -	\$ -	\$ -
	Buildings	\$ 61,274,600	\$ 8,709,320	\$ 3,745,681
12	Preliminary and General	\$ 55,100,000	\$ 2,398,027	\$ 4,674,502
13	Extraordinary Construction Costs	\$ 5,620,000	\$ 3,718,667	\$ 1,671,694
	Fleet	\$ 123,690,000	\$ 15,407,083	\$ 12,589,094
	SH1 Project Contribution	\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 336,802,229	\$ 72,343,798	\$ 39,139,687
D	Total for Implementation Phase	\$ 364,497,229	\$ 73,581,231	\$ 43,959,362
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 405,867,229		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	
Date of Estimate:		Cost Index (Otr/Year)		
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Estimate external peer review by		Signed		
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Project Estimate - Form B

LGWM - MRT - opt iii,iv - Bus - E

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 6,915,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 6,915,000	\$ -	\$ -
B	Total Project Development	\$ 13,830,000	\$ 2,162,659	\$ 3,666,960
	Pre-Implementation Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 11,409,750	\$ -	\$ -
	- NZTA Managed Costs	\$ 9,335,250	\$ -	\$ -
C	Total Pre-implementation	\$ 20,745,000	\$ 3,243,988	\$ 5,500,439
	Implementation Phase	\$ -	\$ -	\$ -
	Implementation Fees	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 19,365,000	\$ -	\$ -
	- NZTA Managed Costs	\$ 13,130,000	\$ -	\$ -
	- Consent Monitoring Fees	\$ -	\$ -	\$ -
	Sub Total Base Implementation Fees	\$ 32,495,000	\$ 1,286,650	\$ 5,527,214
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 1,534,350	\$ 1,820,399	\$ 1,320,888
2	Earthworks	\$ 15,923,230	\$ 3,158,769	\$ 1,600,656
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 1,311,300	\$ 4,817,043	\$ 2,451,951
5	Pavement and Surfacing	\$ 30,474,224	\$ 10,224,332	\$ 3,689,555
6	Bridges	\$ -	\$ -	\$ -
7	Retaining Walls	\$ 1,371,370	\$ 764,523	\$ 887,245
8	Traffic Services	\$ 14,677,125	\$ 4,050,504	\$ 1,849,191
9	Service Relocations	\$ 85,749,120	\$ 40,424,579	\$ 11,061,737
10	Landscaping	\$ 21,192,930	\$ 10,293,215	\$ 5,383,669
11	Traffic Management and Temporary Works	\$ 15,895,000	\$ 3,969,667	\$ 1,950,029
	Tunnelling	\$ -	\$ -	\$ -
	Rail Infrastructure	\$ -	\$ -	\$ -
	Buildings	\$ 12,450,000	\$ 4,620,500	\$ 1,733,821
12	Preliminary and General	\$ 75,945,000	\$ 3,844,250	\$ 6,288,155
13	Extraordinary Construction Costs	\$ -	\$ -	\$ -
	Fleet	\$ -	\$ -	\$ -
	SH1 Project Contribution	\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 276,523,649	\$ 87,987,781	\$ 38,216,897
D	Total for Implementation Phase	\$ 309,018,649	\$ 89,274,431	\$ 43,744,111
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 343,593,649		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-Implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	

Date of Estimate:	Cost Index (Qtr/Year)
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Estimate external peer review by	Signed
Estimate accepted by NZTA	Signed

Project Estimate - Form B

LGWM - SHI- opt iii,iv - Tunnel

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	\$ -	\$ -	\$ -
	Project Development Phase	\$ -	\$ -	\$ -
	- Consultancy Fees	\$ 2,902,477.80	\$ 870,743.34	\$ 565,983.17
	- NZTA Managed Costs	\$ 1,081,936.29	\$ 324,580.89	\$ 210,977.58
B	Total Project Development	\$ 3,984,414.10	\$ 1,195,324.23	\$ 776,960.75
	Pre-Implementation Phase			
	- Consultancy Fees	\$ 12,452,402.54	\$ 3,735,720.76	\$ 2,428,218.50
	- NZTA Managed Costs	\$ 2,163,872.59	\$ 649,161.78	\$ 421,955.15
C	Total Pre-implementation	\$ 14,616,275.13	\$ 4,384,882.54	\$ 2,850,173.65
	Implementation Phase			
	Implementation Fees			
	- Consultancy Fees	\$ 2,773,523.78	\$ 832,057.13	\$ 540,837.14
	- NZTA Managed Costs	\$ 2,086,861.62	\$ 626,058.49	\$ 406,938.02
	- Consent Monitoring Fees	\$ 5,587,360.27	\$ 1,676,208.08	\$ 1,089,535.25
	Sub Total Base Implementation Fees	\$ 10,447,745.66	\$ 3,134,323.70	\$ 2,037,310.40
	Physical Works	\$ -	\$ -	\$ -
1	Environmental Compliance	\$ 5,412,146.00	\$ 1,623,643.80	\$ 1,055,368.47
2	Earthworks	\$ 12,509,823.00	\$ 3,752,946.90	\$ 2,439,415.49
3	Ground Improvements	\$ 10,485,463.00	\$ 3,145,638.90	\$ 2,044,665.29
4	Drainage	\$ 5,387,302.00	\$ 1,616,190.60	\$ 1,050,523.89
5	Pavement and Surfacing	\$ 4,481,770.00	\$ 1,344,531.00	\$ 873,945.15
6	Tunnelling	\$ 70,693,521.91	\$ 21,208,056.57	\$ 13,785,236.77
7	Retaining Walls	\$ -	\$ -	\$ -
8	Traffic Services	\$ 2,083,402.00	\$ 625,020.60	\$ 406,263.39
9	Service Relocations	\$ 7,679,912.00	\$ 2,303,973.60	\$ 1,497,582.84
10	Landscaping	\$ 3,625,267.00	\$ 1,087,580.10	\$ 706,927.07
11	Traffic Management and Temporary Works	\$ 1,999,930.00	\$ 599,979.00	\$ 389,986.35
12	Preliminary and General	\$ 49,777,278.00	\$ 14,933,183.40	\$ 9,706,569.21
13	Extraordinary Construction Costs	\$ 217,239.00	\$ 65,171.70	\$ 42,361.61
	Sub Total Base Physical Works	\$ 174,353,053.91	\$ 52,305,916.17	\$ 33,998,845.51
D	Total for Implementation Phase	184,800,800	55,440,240	36,036,156
E	Project Base Estimate (exc property cost) (A+B+C+D)	\$ 203,401,488.80		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	
Date of Estimate:		Cost Index (Qtr/Year)		
Estimate prepared by		Signed		
Estimate internal peer review by		Signed		
Estimate external peer review by		Signed		
Estimate accepted by NZTA		Signed		

Project Estimate - Form B

LGWM - MRT - opt iv - MRT - S (Taranaki)

IBE

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
	Project Development Phase	\$ -		
	- Consultancy Fees	\$ 16,580,000		
	- NZTA Managed Costs	\$ 16,580,000		
B	Total Project Development	\$ 33,160,000	\$ 5,475,578	\$ 10,404,848
	Pre-Implementation Phase			
	- Consultancy Fees	\$ 27,357,000		
	- NZTA Managed Costs	\$ 22,383,000		
C	Total Pre-implementation	\$ 49,740,000	\$ 12,413,368	\$ 15,607,273
	Implementation Phase	\$ -		
	Implementation Fees	\$ -		
	- Consultancy Fees	\$ 41,250,000		
	- NZTA Managed Costs	\$ 26,830,000		
	- Consent Monitoring Fees	\$ -		
	Sub Total Base Implementation Fees	\$ 68,080,000	\$ 3,190,617	\$ 12,299,060
	Physical Works	\$ -		
1	Environmental Compliance	\$ 2,175,360	\$ 2,464,777	\$ 1,460,359
2	Earthworks	\$ 39,639,925	\$ 9,915,540	\$ 3,426,897
3	Ground Improvements	\$ -	\$ -	\$ -
4	Drainage	\$ 8,582,395	\$ 9,672,747	\$ 3,078,367
5	Pavement and Surfacing	\$ 52,826,762	\$ 23,714,135	\$ 5,156,524
6	Bridges	\$ -	\$ 700,000	\$ 772,176
7	Retaining Walls	\$ 2,711,800	\$ 3,605,964	\$ 2,186,879
8	Traffic Services	\$ 18,455,650	\$ 11,216,220	\$ 3,000,592
9	Service Relocations	\$ 91,019,120	\$ 52,846,512	\$ 8,801,466
10	Landscaping	\$ 61,053,810	\$ 15,653,067	\$ 10,306,359
11	Traffic Management and Temporary Works	\$ 25,475,000	\$ 10,518,333	\$ 2,406,525
	Tunnelling	\$ -	\$ -	\$ -
	Rail Infrastructure	\$ 23,641,950	\$ 4,034,262	\$ 4,084,251
	Buildings	\$ 70,903,400	\$ 19,719,532	\$ 3,936,371
12	Preliminary and General	\$ 150,820,000	\$ 10,274,264	\$ 8,842,090
13	Extraordinary Construction Costs	\$ 12,340,000	\$ 4,390,667	\$ 1,665,589
	Fleet	\$ 108,832,500	\$ 14,741,646	\$ 7,899,449
	SH1 Project Contribution	\$ -	\$ -	\$ -
	Sub Total Base Physical Works	\$ 668,477,672	\$ 193,467,666	\$ 67,023,895
D	Total for Implementation Phase	\$ 736,557,672	\$ 196,658,283	\$ 79,322,955
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 819,457,672		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	

Date of Estimate: 5 July 2021	Cost Index (Qtr/Year)
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Estimate external peer review by	Signed
Estimate accepted by NZTA	Signed

Project Estimate - Form B



LGWM - SHI - opt iv - Basin (at grade)

Indicative Business Case Estimate

Item	Description	Base Estimate	Contingency	Funding Risk Contingency
A	Nett Project Property Cost	Excluded	Excluded	Excluded
B	Project Development Phase			
	- Consultancy Fees	229,694	68,908	44,790
	- NZTA Managed Costs	114,847	34,454	22,395
B	Total Project Development	344,540	103,362	67,185
C	Pre-Implementation Phase			
	- Consultancy Fees	459,387	137,816	89,580
	- NZTA Managed Costs	229,694	68,908	44,790
C	Total Pre-implementation	689,081	206,724	134,371
D	Implementation Phase			
	- Consultancy Fees	459,387	137,816	89,580
	- NZTA Managed Costs	229,694	68,908	44,790
	- Consent Monitoring Fees	229,694	68,908	44,790
	Sub Total Base Implementation Fees	918,774	275,632	179,161
	Physical Works			
	1 Environmental Compliance	187,062	56,119	36,477
	2 Earthworks	1,881,908	564,572	366,972
	3 Ground Improvements	62,516	18,755	12,191
	4 Drainage	1,185,712	355,714	231,214
	5 Pavement and Surfacing	920,329	276,099	179,464
	6 Bridges & Tunnels	3,302,850	990,855	644,056
	7 Retaining Walls	283,750	85,125	55,331
	8 Traffic Services	771,800	231,540	150,501
9 Service Relocations	238,350	71,505	46,478	
10 Landscaping	227,163	68,149	44,297	
11 Traffic Management and Temporary Works	478,743	143,623	93,355	
12 Preliminary and General	1,908,037	572,411	372,067	
13 Extraordinary Construction Costs	36,456	10,937	7,109	
	Sub Total Base Physical Works	11,484,676	3,445,403	2,239,512
D	Total for Implementation Phase	12,403,450	3,721,035	2,418,673
E	Project Base Estimate (exc property cost) (B+C+D)	\$ 13,437,071		
F	Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
G	Project Expected Estimate (E+F)		Excluded	
	Nett Project Property Cost Expected Estimate		Excluded	
	Project Development Phase Expected Estimate		Excluded	
	Pre-implementation phase Expected Estimate		Excluded	
	Implementation Phase Expected Estimate		Excluded	
H	Funding Risk Contingency (Assessed/Analysed) (A+B+C+D)		Excluded	
I	95th percentile Project Estimate (G+H)		Excluded	
	Nett Project Property Cost 95th percentile Estimate		Excluded	
	Project Development Phase 95th percentile Estimate		Excluded	
	Pre-implementation Phase 95th percentile Estimate		Excluded	
	Implementation Phase 95th percentile Estimate		Excluded	
Date of Estimate		Cost Index (Qtr/Year)		
Estimate prepared by		Signed		
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