

APPENDIX D

PRELIMINARY CONSTRUCTION COST ESTIMATE

UNIVERSITY AVENUE (Bridge to Lexington)
ALTERNATIVE #1: DO NOTHING
 (Repair asphalt and place surface asphalt)

ITEM #	ITEM DESCRIPTION	Unit	Estimated Quantity	Engineer's Estimate	
				Unit Price	Total Cost
1	Provide Traffic Control and maintain two-way traffic throughout duration of contract including all signage, barrels, barricades, flagging, etc.	LS	1.0	\$15,000.00	\$15,000
2	Sawcut, excavate, load, haul and dispose of offsite, existing asphalt road surface (assume 33% of road).	m2	10,000.0	\$10.00	\$100,000
3	Subexcavation and disposal off-site all deficient materials and replacement with granulars (assume 50% of repaired asphalt area).	LS	1.0	\$100,000.00	\$100,000
4	Adjust existing structures to match surface asphalt.	ea	70.0	\$400.00	\$28,000
5	Supply, place and compact Base Asphalt (80mm thick).	t.	2,100.0	\$80.00	\$168,000
6	Supply, place and compact Surface Asphalt HL3 (50mm thick).	t.	3,750.0	\$90.00	\$337,500
7	Supply and place pavement markings.	LS	1.0	\$5,000.00	\$5,000

Subtotal	\$753,500
Contingency & Engineering (30%)	\$226,050
TOTAL	\$979,550
SAY	\$1,000,000

UNIVERSITY AVENUE (Bridge to Lexington)

ALTERNATIVE #2: TWO LANES WITH MEDIAN

(Install centre median, repair asphalt and place surface asphalt)

ITEM #	ITEM DESCRIPTION	Unit	Estimated Quantity	Engineer's Estimate	
				Unit Price	Total Cost
1	Sawcut, excavate, load, haul and dispose of offsite existing asphalt within medians.	m2	8,700.00	\$10.00	\$87,000
2	Excavate, load, haul and place/compact on site as required, and dispose offsite all surplus material.	LS	1.00	\$50,000.00	\$50,000
3	Remove, salvage and replace street signs as required.	LS	1.00	\$2,500.00	\$2,500
4	Supply, place and compact (100% SPD) granular B (600mm thick).	t.	1,700.00	\$11.00	\$18,700
5	Supply, place and compact (100% SPD) granular A (150mm thick).	t.	500.00	\$12.00	\$6,000
6	Supply and place concrete curb for median.	m	3,500.00	\$60.00	\$210,000
7	Supply, place and compact Base Asphalt HL8 (80mm thick).	t.	250.00	\$90.00	\$22,500
8	Supply, place and compact Base Asphalt HL4 (50mm thick).	t.	175.00	\$100.00	\$17,500
9	Supply and place 100mm topsoil and sod in median.	m2	8,700.00	\$12.00	\$104,400
10	Supply and install trees.	ea	30.00	\$500.00	\$15,000
11	Supply and install pedestrian crossing refuge island complete including all curbs, concrete, handrailings, signs,	ea	7.00	\$10,000.00	\$70,000
12	Repair existing asphalt and place surface asphalt (per Alternative #1).	LS	1.00	\$1,000,000.00	\$1,000,000
13	Supply and install new street signs.	ea	10.00	\$400.00	\$4,000

Subtotal	\$1,607,600
Contingency & Engineering (30%)	\$482,280
TOTAL	\$2,089,880
SAY	\$2,100,000

UNIVERSITY AVENUE (Bridge to Lexington)

ALTERNATIVE #3: FOUR LANES, NO MEDIAN

(Widen road for 4 lanes, repair asphalt and place surface asphalt)

ITEM #	ITEM DESCRIPTION	Unit	Estimated Quantity	Engineer's Estimate	
				Unit Price	Total Cost
1	Sawcut, excavate and dispose offsite, existing curb (asphalt and/or concrete).	m	1,740.00	\$10.00	\$17,400
2	Sawcut, excavate, load, haul and dispose of offsite, existing asphalt.	m2	750.00	\$10.00	\$7,500
3	Excavate, load, haul and place/compact on site as required, and dispose offsite all surplus material (including topsoil, granulars, etc.).	LS	1.00	\$50,000.00	\$50,000
4	Remove, salvage and replace street signs as required.	LS	2.00	\$1,000.00	\$2,000
5	Remove and dispose of trees including branches, trunk, stump and roots (Provisional).	ea	9.00	\$500.00	\$4,500
6	Supply and install single catchbasins including all appurtenances, bedding, backfill, etc. (w/ 'FISH' type cover per W-520).	ea	8.00	\$1,750.00	\$14,000
7	Remove, salvage and relocate existing catchbasins.	ea	12.00	\$1,250.00	\$15,000
8	Supply and install catchbasin leads including all appurtenances, bedding, backfill, etc. 300mm	m	50.00	\$250.00	\$12,500
9	Relocate existing hydro poles.	ea	20.00	\$7,500.00	\$150,000
10	Fine grade and proof roll road allowance and shape boulevards (payment based on area from 0.5 m behind curb line).	m2	2,650.00	\$5.00	\$13,250
11	Supply, place and compact (100% SPD) granular B (600mm thick).	t.	3,900.00	\$11.00	\$42,900
12	Supply, place and compact (100% SPD) granular A (150mm thick).	t.	1,000.00	\$12.00	\$12,000
13	Supply and place concrete curb and gutter (OPSD 600.04).	m	1,740.00	\$60.00	\$104,400
14	Supply, place and compact Base Asphalt HL8 (80mm thick).	t.	600.00	\$90.00	\$54,000
15	Supply, place and compact Base Asphalt HL4 (50mm thick).	t.	400.00	\$100.00	\$40,000
16	Supply and install pedestrian crossing refuge island complete including all curbs, concrete, handrailings, signs, etc.	ea	7.00	\$10,000.00	\$70,000
17	Adjust existing hydrants to match revised grading.	ea	4.00	\$700.00	\$2,800
18	Repair existing asphalt and place surface asphalt (per Alternative #1).	LS	1.00	\$1,000,000.00	\$1,000,000
19	Supply and install new street signs.	ea	8.00	\$400.00	\$3,200
20	Supply and place 100mm topsoil and sod.	m2	4,000.00	\$12.00	\$48,000

Subtotal	\$1,663,450
Contingency (15%)	\$249,518
TOTAL	\$1,912,968
SAY	\$2,000,000

UNIVERSITY AVENUE (Bridge to Lexington)

ALTERNATIVE #4a: FOUR LANES WITH FULL MEDIAN

(Widen road to 4 lanes, install full centre median, repair asphalt and place surface asphalt)

ITEM #		Unit	Estimated Quantity	Engineer's Estimate	
				Unit Price	Total Cost
1	Sawcut, excavate and dispose offsite, existing curb (asphalt and/or concrete).	m	3,100.00	\$10.00	\$31,000
2	Sawcut, excavate, load, haul and dispose of offsite, existing asphalt road surface.	m2	4,500.00	\$10.00	\$45,000
3	Excavate, load, haul and place/compact on site as required, and dispose offsite all surplus material (including topsoil, granulars, etc.).	LS	1.00	\$50,000.00	\$50,000
4	Remove, salvage and replace street signs as required.	ea	10.00	\$1,000.00	\$10,000
5	Sawcut, excavate and dispose offsite, existing concrete sidewalk.	m2	1,900.00	\$10.00	\$19,000
7	Remove and dispose of trees including branches, trunk, stump and roots (Provisional).	ea	15.00	\$1,000.00	\$15,000
8	Remove, salvage and relocate existing hydro poles	ea	30.00	\$7,500.00	\$225,000
9	Supply and install single catchbasins including all appurtenances, bedding, backfill, etc. (w/ 'FISH' type cover per W-520).	ea	9.00	\$1,750.00	\$15,750
10	Remove, salvage and relocate existing catchbasins.	ea	30.00	\$1,250.00	\$37,500
11	Supply and install 300mm catchbasin leads including all appurtenances, bedding, backfill, etc.	m	100.00	\$250.00	\$25,000
12	Fine grade and proof roll road allowance and shape boulevards (payment based on area from 0.5 m behind curb line).	m2	7,880.00	\$5.00	\$39,400
13	Supply, place and compact (100% SPD) granular B (600mm thick).	t.	11,820.00	\$11.00	\$130,020
14	Supply, place and compact (100% SPD) granular A (150mm thick).	t.	3,000.00	\$12.00	\$36,000
15	Supply and place concrete curb and gutter (OPSD 600.04).	m2	6,200.00	\$60.00	\$372,000
16	Supply, place and compact Base Asphalt HL8 (80mm thick).	t.	1,600.00	\$90.00	\$144,000
17	Supply, place and compact Surface Asphalt HL3 (50mm thick)	t.	1,000.00	\$100.00	\$100,000
18	Repair existing asphalt and place surface asphalt (per Alternative #1).	LS	1.00	\$1,000,000.00	\$1,000,000
19	Supply and place concrete sidewalk	m	1,900.00	\$60.00	\$114,000
20	Supply and install pedestrian crossing refuge island complete including all curbs, concrete, handrailings, signs, etc.	ea	7.00	\$10,000.00	\$70,000
21	Adjust structures and castings to match new curb and gutter.	ea	16.00	\$500.00	\$8,000
22	Adjust existing hydrants to match revised grading.	ea	4.00	\$700.00	\$2,800
23	Supply and install new street signs.	ea	10.00	\$400.00	\$4,000
24	Supply and place 100mm topsoil and sod.	m2	8,000.00	\$12.00	\$96,000

Subtotal	\$2,589,470
Contingency & Engineering (30%)	\$776,841
TOTAL	\$3,366,311
SAY	\$3,400,000

UNIVERSITY AVENUE (Bridge to Lexington)

ALTERNATIVE #4b: FOUR LANES WITH PARTIAL MEDIAN
(Widen road to 4 lanes, install partial centre median, repair asphalt and place surface asphalt)

ITEM #		Unit	Estimated Quantity	Engineer's Estimate	
				Unit Price	Total Cost
1	Sawcut, excavate and dispose offsite, existing curb (asphalt and/or concrete).	m	3,100.00	\$10.00	\$31,000
2	Sawcut, excavate, load, haul and dispose of offsite, existing asphalt road surface.	m2	2,800.00	\$10.00	\$28,000
3	Excavate, load, haul and place/compact on site as required, and dispose offsite all surplus material (including topsoil, granulars, etc.).	LS	1.00	\$50,000.00	\$50,000
4	Remove, salvage and replace street signs as required.	ea	10.00	\$1,000.00	\$10,000
5	Sawcut, excavate and dispose offsite, existing concrete sidewalk.	m2	1,900.00	\$10.00	\$19,000
7	Remove and dispose of trees including branches, trunk, stump and roots (Provisional).	ea	15.00	\$1,000.00	\$15,000
8	Remove, salvage and relocate existing hydro poles	ea	30.00	\$7,500.00	\$225,000
9	Supply and install single catchbasins including all appurtenances, bedding, backfill, etc. (w/ 'FISH' type cover per W-520).	ea	9.00	\$1,750.00	\$15,750
10	Remove, salvage and relocate existing catchbasins.	ea	30.00	\$1,250.00	\$37,500
11	Supply and install 300mm catchbasin leads including all appurtenances, bedding, backfill, etc.	m	100.00	\$250.00	\$25,000
12	Fine grade and proof roll road allowance and shape boulevards (payment based on area from 0.5 m behind curb line).	m2	7,880.00	\$5.00	\$39,400
13	Supply, place and compact (100% SPD) granular B (600mm thick).	t.	11,820.00	\$11.00	\$130,020
14	Supply, place and compact (100% SPD) granular A (150mm thick).	t.	3,000.00	\$12.00	\$36,000
15	Supply and place concrete curb and gutter (OPSD 600.04).	m2	5,100.00	\$60.00	\$306,000
16	Supply, place and compact Base Asphalt HL8 (80mm thick).	t.	1,600.00	\$90.00	\$144,000
17	Supply, place and compact Surface Asphalt HL3 (50mm thick)	t.	1,000.00	\$100.00	\$100,000
18	Repair existing asphalt and place surface asphalt (per Alternative #1).	LS	1.00	\$1,000,000.00	\$1,000,000
19	Supply and place concrete sidewalk	m	1,900.00	\$60.00	\$114,000
20	Supply and install pedestrian crossing refuge island complete including all curbs, concrete, handrailings, signs, etc.	ea	7.00	\$10,000.00	\$70,000
21	Adjust structures and castings to match new curb and gutter.	ea	16.00	\$500.00	\$8,000
22	Adjust existing hydrants to match revised grading.	ea	4.00	\$700.00	\$2,800
23	Supply and install new street signs.	ea	10.00	\$400.00	\$4,000
25	Supply and place 100mm topsoil and sod.	m2	6,500.00	\$12.00	\$78,000

Subtotal	\$2,488,470
Contingency (30%)	\$746,541
TOTAL	\$3,235,011
SAY	\$3,300,000