

**HDR Computation**

Project MAJOR MACKENZIE DRIVE EA Computed P.Yiu Date 8/16/2018  
 Subject CLASS EA OPINION OF PROBABLE COST Checked A. Reilmaler Date 8/16/2018  
 Task MAJOR MACKENZIE DRIVE Sheet 1 of 1  
 From: McNaughton To: Keete Street

Component/ Category	Item Description	Units	2015 Unit Price	Quantity	Total
Utility Conflicts	Hydro Pole Relocation	each	\$35,000.00	17	\$595,000
	Light Pole Relocation	each	\$10,000.00	22	\$220,000
	Water Main Relocation	m	\$1,200.00	0	\$0
	Gas Main Relocation	m	\$150.00	0	\$0
	Underground Bell relocation	m	\$100.00	0	\$0
	Sanitary relocation	m	\$250.00	0	\$0
	Storm Sewer Upgrade	m	\$500.00	465	\$232,500
	Contingency (20%)				\$163,000
	<b>Sub Total</b>				<b>\$1,210,500</b>
	Road Work	Excavation/Earthworks	m3	\$18.00	11902
Install storm sewer		m	\$230.00	1462	\$336,260
Granular 'A'		tonne	\$36.00	3916	\$140,976
Granular 'B'		tonne	\$32.00	3263	\$104,416
Asphalt Base (SP 19)		tonne	\$75.00	2556	\$191,700
Asphalt Top (SP 12.5)		tonne	\$80.00	1278	\$115,020
Install curb and gutter		m	\$50.00	1462	\$73,100
Install concrete median		m2	\$75.00	317	\$23,775
Install MJP/ sidewalk		m2	\$60.00	5796	\$347,760
Install subdrains		m	\$26.00	1462	\$38,012
Install catch basin		each	\$2,000.00	20	\$40,000
Install manhole		each	\$75,000.00	4	\$30,000
Oil-Grit Separator		each	\$75,000.00	1	\$75,000
Full Depth Asphalt removal		m2	\$3.00	9188	\$27,564
Install Curbstone		m	\$100.00		\$0
Install Extruder Terminal		each	\$3,000.00		\$0
Retaining Wall		m2	\$1,000.00		\$0
Permanent Pavement Marking		m	\$26.00	4065	\$105,690
Structure Adjustment		each	\$600.00	21	\$12,600
Contingency (20%)					\$372,702
<b>Sub Total</b>				<b>\$2,248,811</b>	
Streetsights	Both sides (assume 50m spacing)	each	\$5,000.00	58.48	\$292,400
	Contingency (20 %)				\$58,480
	<b>Sub Total</b>				<b>\$350,880</b>
Traffic Signals	Permanent (intersection)	each	\$250,000.00	2	\$500,000
	Temporary (intersection)	each	\$100,000.00		\$0
	Contingency (20 %)				\$100,000
	<b>Sub Total</b>				<b>\$600,000</b>
Retaining Wall	Toe Wall	m	\$2,000.00	25	\$50,000
	Contingency (30 %)				\$15,000
	<b>Sub Total</b>				<b>\$65,000</b>
Landscape	Landscape (3% of road work cost)	LS	\$60,000.00	1	\$60,000
	Contingency (20%)				\$12,000
	<b>Sub Total</b>				<b>\$72,000</b>
Traffic control	Traffic Control and Staging Plan (10% of construction cost)	LS	\$360,000.00	1	\$360,000
Engineering	Design and Contract Administration (30% of construction cost)	LS	\$1,080,000.00	1	\$1,080,000

**TOTAL** \$5,990,000

# Appendix Q

## Preliminary Cost Estimate