SITE WORKS COST ESTIMATE

ORBITENGINEERING
Consulting Engineers

DEVELOPERS NAME: HAT HoangAnhTuan
79 COLUMBIA STREET, WATERLOO
Prepared by: Rasheed Ahmad

Orbit Engineering Ltd.

SUMMARY

Date: Oct. 19, 2025

UNDERGROUND SERVICING WORKS	Total Cost
SANITARY SERVICE	$ 24240
STORM SEWERS	$ 81155
WATER SERVICE	$ 13780
Sub-Total	**$ 119175**
Engineering Review Fee (5%)	**$ 5958.75**
Developer (50%)	**$ 59587.5**

ABOVE GROUND WORKS	Total Cost
SITE SURFACE WORKS	$ 71600
ROADWORKS/SURFACE CONSTRUCTION	$ 12325
Sub-Total	**$ 83925**
Engineering Review Fee (5%)	**$ 4196.25**
Developer (50%)	**$ 41962.5**

LANDSCAPE WORKS	Total Cost
PLANT MATERIAL AND INSTALLATION	$ -
LANDSCAPE STRUCTURES	$ -
Sub-Total	**$ -**
Engineering Review Fee (5%)	**$ -**
Developer (50%)	**$ -**

TOTAL (all parts)	**$ -**
Total Engineering Review Fee (5%)	**$ -**
Total Developer (50%)	**$ -**

PRELIMINARY SITE SERVICING COST ESTIMATE

OWNER NAME: HAT HoangAnhTuan

79 COLUMBIA STREET, WATERLOO

SANITARY SERVICE

ITEM #	SPEC.	ITEM DESCRIPTION	Unit	Estimated Quantity	Unit Price	Total Cost
1	OPSS 410	Supply and install 150mm PVC SDR 28 Sanitary Service Connections, complete with all appurtenances, plug and marker, bedding, etc.	m	27	$ 120	$ 3240
2	OPSS 410	Supply and install 250mm PVC SDR 28 Sanitary Service Connections, complete with all appurtenances, plug and marker, bedding, etc.	m	0	$ -	$ -
3		Connection with existing municipal sanitary sewer. Complete with all appurtenances, etc.	LS	1	$ 4000	$ 4000
4	OPSS 407	Supply and install sanitary sewer manholes complete with all appurtenances, benching, granular backfill, etc. 1200 mm	ea	2	$ 8500	$ 17000

SUBTOTAL	$	24240

STORM SEWERS

ITEM #	SPEC.	ITEM DESCRIPTION	Unit	Estimated Quantity	Unit Price	Total Cost
1	OPSS 410	Supply and install storm sewer including excavation, approved bedding, backfill and compaction to final grade, plugs, etc. and disposal of any excess material.				
a)		200 mm PVC (SDR 35)	m	0	$ -	$ -
b)		250 mm PVC (SDR 35)	m	40	$ 140	$ 5600
c)		300 mm PVC (SDR 35)	m	33	$ 160	$ 5280
d)		350 mm PVC (SDR 35)	m	11	$ 200	$ 2200
2	OPSS 407	Supply and install storm sewer manholes complete with all appurtenances, benching, granular backfill, etc.				
a)		1200 mm	ea	3	$ 9000	$ 27000
b)		600x600mm catchbasin	ea	2	$ 4500	$ 9000
c)		Stormceptor 300	ea	1	$ 32000	$ 32000
3	OPSS 1860	Supply and install geotextile beneath catchbasin grates.	ea	5	$ 15	$ 75

SUBTOTAL	$	81155

WATER SERVICE

ITEM #	SPEC.	ITEM DESCRIPTION	Unit	Estimated Quantity	Unit Price	Total Cost
1	OPSS 701	Supply and install 100mm water service, to property line, including curb stop, marker, etc.	m	18	$ 200	$ 3600
2	OPSS 701	Supply and install 150mm water service, to property line, including curb stop, marker, etc.	m	19	$ 220	$ 4180
3	OPSS 701	Pressure test, swab, flush and chlorinate mains to satisfaction of Engineer per City Standards.	LS	1	$ 6000	$ 6000
4		Water Metre Chamber	LS	0	$ -	$ -

SUBTOTAL	$	13780

PRELIMINARY SITE SERVICING COST ESTIMATE

OWNER NAME: HAT HoangAnhTuan

79 COLUMBIA STREET, WATERLOO

SITE SURFACE WORKS

ITEM #	SPEC.	ITEM DESCRIPTION	Unit	Estimated Quantity	Unit Price	Total Cost
1	OPSS 310	Supply, place and compact Asphalt HL4 (90mm thick)	t	120	$ 110	$ 13200
2	OPSS 314	Supply, place and compact (100% SPD) granular B (350mm thick)	t	187	$ 40	$ 7480
3	OPSS 102	Supply, place and compact (100% SPD) granular A (150mm thick)	t	418	$ 45	$ 18810
4	SS-17OPSS- 351	Concrete sidewalk, patio and garbage area with 75 mm depth of Granular 'A' bedding: 125mm thick concrete sidewalk	m²	85	$ 150	$ 12750
5	OPSS 353	Supply and install concrete curb.	m	80	$ 120	$ 9600
6		Supply and place sod and 150mm topsoil.	m²	244	$ 40	$ 9760
10		Supply and place concrete Redi-Rock retaining wall - 0.50m wide	m	0	$ -	$ -
11		Supply and place low decorative concrete wall - 0.20m wide	m	0	$ -	$ -

SUBTOTAL	$ 71600

ROADWORKS/SURFACE CONSTRUCTION

ITEM #	SPEC.	ITEM DESCRIPTION	Unit	Estimated Quantity	Unit Price	Total Cost
1		Remove and dispose of asphalt in roadway, full depth, including saw cutting.	m²	25	$ 25	$ 625
2		Remove and dispose of existing concrete sidewalk and concrete driveway ramps, all widths and thicknesses, including private concrete	m²	10	$ 45	$ 450
3		Remove and dispose of existing concrete curb and curb & gutter all types and sizes.	m	10	$ 50	$ 500
4		Excavate and dispose of material to road sub grade.	m³	4	$ 50	$ 200
5		Supply and place imported Granular 'B' material with Type II gradation as per OPSS 1010 for road subbase construction as per OPSS 314	t	21	$ 40	$ 840
6		Supply, place, grade and compact Granular 'A' material as per OPSS 1010 for road base construction as per OPSS 314	t	10	$ 45	$ 450
7		Supply, place and compact 80mm HL-8 hot mixed binder asphalt as per OPSS 310 including asphalt cement as per OPSS 1101 for road	t	3	$ 50	$ 150
8		Supply, place and compact 40mm HL-3 hot mixed surface asphalt at intersections as per OPSS 310 including asphalt cement as per OPSS	t	4	$ 60	$ 240
9		Supply and install concrete barrier curb and gutter as per OPSS 353 and OPSD 600.040	m	10	$ 150	$ 1500
10		Supply and install concrete sidewalk and private walk including Granular 'A' bedding.	m²	10	$ 160	$ 1600
11		Supply, place, grade and compact topsoil to a thickness of 100 mm as per OPSS 570 and install No.1 nursery sod as per OPSS 571	m²	9	$ 30	$ 270
12		Disconect and cap at main existing water service line. Existing service pipe to be removed and disposed.	ls	1	$ 3000	$ 3000
13		Disconect and cap at property line existing sanitary service line. Existing service pipe to be removed and disposed.	ls	1	$ 2500	$ 2500

SUBTOTAL	$ 12325