1 - VECC - 1

Reference:

Exhibit 1, pgs. 45-

Question:

a) Please provide the cost of (1) the Innovative Research Group engagement and (2) the Utility Pulse Survey undertaken for this application.

Response:

a) The total cost of the Innovative Research engagement (Phase I and Phase II) was $149,432; and the cost of the Utility Pulse Survey was $26,250.

1 - VECC - 2

Reference:

Exhibit 1

Question:

a) Please provide the year-end 2018 audited financial statements.

Response:

a) The audited ENWIN Utilities Ltd. Financial Statements for the year-ended December 31, 2018 were filed on May 17, 2019 along with ENWIN's responses to the Incomplete Letter. The file is titled "ENWIN_2018 Audited Financial Statements_20190517" on the Board's RESS system.

1 - VECC - 3

Reference:

Exhibit 1, page 17

Question:

a) Are the employees who listed in Appendix 2-K employees of ENWIN Utilities Ltd. or one of the affiliated companies?

Response:

a) The employees listed are all ENWIN Utilities Ltd. employees related to the electricity business.

2 - VECC - 4

Reference:

Exhibit 2, page 40

Question:

a) Has the net book value of all meters removed as part of the smart meter program been removed from the 2020 rate base calculation? If yes, please explain how this has been achieved in the filed continuity schedules and provide an explanation as to the remaining $1,814,586 of net book value of meters in account 1860 – thermal (not smart) meters.

Response:

a) Yes, the net book value of all meters that were part of the smart meter program been removed from the 2020 rate base calculation.

   The filed continuity schedule reflects disposals of stranded meters amounting to a gross asset value of $3,640,071. The remaining $1,814,586 of net book value of meters in account 1860 is made up of large commercial and wholesale meters.

2 - VECC - 5

Reference:

Exhibit 2

Question:

a) Please create a table showing the number of vehicles and total cost of those vehicles purchased in each year 2009 through 2020 (forecast).

b) What was the average and median age of the Utility's fleet (excluding trailers) in 2017 and what will it be in 2020?

c) How many vehicles were, or are, being purchased between 2018 and 2020? How many were purchased between 2009 and 2017. Please list the number of vehicles purchased by type: Heavy Truck, Light Truck/SUV/ Car.

d) Please confirm (or correct) that ENWIN spent no capital on vehicles in the years 2009 through and including 2017. If correct, please explain why after a number of years of no or minimal spending on vehicles ENWIN has spent or now proposes to spend some $5,090,301 on vehicles between 2018 and 2020.

Response:

a) Prior to 2018, ENWIN's fleet was entirely leased vehicles. In some cases, vehicles were purchased at the end of their lease terms depending on the condition and usefulness of the vehicles. If purchased, the cost of these vehicles was minimal. During 2018 all existing vehicle leases were bought out. The following table shows the number and cost of vehicles purchased in 2018 and forecast to be purchased in 2019 and 2020.

Type	Description	2018 Vehicles Purchased	2018 Purchase Cost (Excl. Tax)	2019 Vehicle Purchases (forecast)	2019 Capital Cost (forecast)	2020 Vehicle Purchases (forecast)	2020 Capital Cost (forecast)
Class 4	Cars	-	-	-	$ -	1	$ 32,000
Class 5	Vans & Pick up Trucks	21	$ 353,769	5	$ 267,015	10	$ 426,400
Class 6	Dump & Utility Trucks	9	$ 275,289	5	$ 519,150	-	$ -
Class 7	Bucket & Line Trucks	13	$ 2,203,350	3	$ 1,198,939	4	$ 1,461,176
Class 8	Specialty Vehicles	2	$ 77,411	2	$ 361,704	-	$ -
Class 9	Trailers	6	$ 103,644	-	$ -	-	$ -
Total		51	$ 3,013,464	15	$ 2,346,808	15	$ 1,919,576

b) As discussed above and in part d) below, the leases for the entire fleet were bought out prior to the end of 2018. As at the end of 2018 the approximate average and median ages of ENWIN's fleet were 3.98 and 3 years, respectively. At the end of 2020, the approximate average and median ages of ENWIN's fleet are expected to be 4.14 and 4 years, respectively.

c) The table below shows the number of vehicles purchased in 2018 by class as well as the forecasted number of vehicle purchases for 2019 and 2020. For the period between 2009 and 2017, the entire fleet was comprised of leased vehicles, which were only purchased at the end of the lease for a minimal amount and typically not capitalized.

Type	Description	2009-2017 Vehicles Bought	2018 Vehicles Bought	2019 Vehicles Forecast	2020 Vehicles Forecast
Class 4	Cars		-	-	1.00
Class 5	Vans & Pick up Trucks	4.00	21.00	5.00	10.00
Class 6	Dump & Utility Trucks	1.00	9.00	5.00	-
Class 7	Bucket & Line Trucks	1.00	13.00	3.00	4.00
Class 8	Specialty Vehicles		2.00	2.00	-
Class 9	Trailers		6.00	-	-
Total		6.00	51.00	15.00	15.00

d) ENWIN confirms that it spent minimal capital on vehicles in the years 2009 through to, and including, 2017. Prior to 2018, ENWIN's fleet was entirely lease vehicles and, depending on their condition and usefulness, these vehicles were possibly purchased at the end of the lease for a minimal amount and administration charge. On November 14, 2018, ENWIN's Board of Directors approved management's recommendation to purchase vehicles rather than lease vehicles and buyout all existing vehicle leases prior to the end of 2018. In 2018 ENWIN's capital forecast for vehicles only included 1 heavy duty truck, however in 2019, ENWIN has budgeted to take delivery of 3 heavy duty trucks. It should be noted that the actual capital spend on Hydro vehicles for 2018 was $3,013,464. This was significantly higher than budget due to the large number of leases being bought out prior to the end of 2018 in addition to the new vehicles which were purchased in 2018.

2 - VECC - 6

Reference:

Exhibit 2, pgs. 29

Question:

a) Please provide a table showing the annual capital costs for the NorthStar CIS from the year of implementation to 2020. Also show the maintenance (non-capitalized licensing etc.) for the system for the same period.

b) Please explain why further capital upgrades or other spending will be made to this system over the 2019 to 2024 period.

Response:

a) Please see the table below for the capitalized costs and maintenance.

NorthStar Costs	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Budget	2020 Budget
Total Capitalized Costs	$ 8,924,584	$ 67,841	$ 14,280	$ -	$ -	$ 324,000	$ -
Total Maintenance Costs	$ 120,012	$ 136,256	$ 125,165	$ 176,718	$ 134,925	$ 201,848	$ 206,943

b) Further capital upgrades and spending for the CIS system is planned over the 2019 to 2024 period to ensure this system continues to meet the needs of ENWIN, its customers, and regulatory requirements. An Oracle to SQL database conversion in 2019 will help provide stability to software while also updating it to the latest version. This will make it easier to upgrade to future versions that will contain other benefits such as payment priority and the tracking of customer communication preferences.

Also in 2019, a customer portal has been deployed in response to feedback provided from customer surveys. The new portal is now mobile friendly and will offer new features such as green button and connect my data functionality to help customers manage their consumption. ENWIN chose the customer portal solution of another Ontario LDC to leverage efficiencies and have worked closely to implement the new portal. ENWIN will continue to work together to share its knowledge and develop the product to meet the specific needs of Ontario customers.

No specific spending has been projected in the periods 2020-2024 relating to NorthStar upgrades however regulatory changes, security patches and customer demands may require future changes to the system.

2 - VECC - 7

Reference:

Exhibit 1, pgs. 41 & Attachment 2-A DSP page 271 Table 131

Question:

a) For each project line listed in the System Access category please show the capital contributions received or expected for the 2018 through 2021 (inclusive) period.

b) At page 271 of the DSP it states "System Access expenditures are forecasted to be somewhat lower in 2019 than 2018, with the bulk of the change in underground customer connections." The following text appears to confirm this statement. However Table 131 shows the opposite ($1.4m in 2018 vs $2.3m in 2019). Please clarify.

Response:

a) System Access details are provided in the tables below:

Projects	**2019 Gross Forecast**	**Less Capital Contribution**	**2019 Net Forecast**
Overhead Customer Connections	$525,000	$163,000	$362,000
Underground Customer Connections	$750,000	$330,000	$420,000
GHIB Plaza	$1,700,000	$1,700,000	$0
Ambassador Bridge	$2,000,000	$2,000,000	$0
City Driven Road Work	$1,886,000	$705,000	$1,181,000
Wholesale Metering: Keith TS Feeders	$0	$0	$0
Meter Work - New Customers	$406,000	$0	$406,000
Sub-Total	$7,267,000	$4,898,000	$2,369,000

Projects	**2020 Gross Forecast**	**Less Capital Contribution**	**2020 Net Forecast**
Overhead Customer Connections	$536,000	$163,000	$362,000
Underground Customer Connections	$525,000	$330,000	$420,000
GHIB Plaza	$1,000,000	$1,000,000	$0
Ambassador Bridge	$1,000,000	$1,000,000	$0
City Driven Road Work	$2,250,000	$631,000	$1,619,000
Wholesale Metering: Keith TS Feeders	$477,000	$118,000	$359,000
Meter Work - New Customers	$417,000	$0	$17,000
Sub-Total	$6,205,000	$3,252,000	$2,953,000

Projects	**2021 Gross Forecast**	**Less Capital Contribution**	**2021 Net Forecast**
Overhead Customer Connections	$547,000	$170,000	$377,000
Underground Customer Connections	$1,301,000	$343,000	$958,000
GHIB Plaza	$0	$0	$0
Ambassador Bridge	$0	$0	$0
City Driven Road Work	$1,200,000	$300,000	$900,000
Wholesale Metering: Keith TS Feeders	$0	$0	$0
Meter Work - New Customers	$429,000	$0	$429,000
Sub-Total	$3,477,000	$813,000	$2,663,000

b) The statement, “System Access expenditures are forecast…”, should have read, “System Access expenditures for *new connections* are forecast…..”.

2 - VECC - 8

Reference:

Exhibit 1, pgs. 45

Question:

a) Please provide a table showing the actual and forecast costs associated with the Howe Bridge-Highway 401 extension for the period 2018 to expected completion date of these projects.

b) For each year please provide the actual and expected capital contributions associated with the Howe Bridge – Highway 401 projects.

c) Are there other projects associated with the new bridge? If so please identify these and the associated forecast costs over the next 5 year period.

Response:

a) Actual (2018) and forecast costs associated with the relocations associated with the GHIB project are as follows:

Year	Capital Expenditure
2018	$ 225,202
2019	$ 1,700,000
2020	$ 1,000,000

b) ENWIN successfully argued with the federal government that the Gordie Howe International Bridge benefits the province and country as a whole and Windsor residents should not be expected to pay for utility relocations. Consequently, the project is being done on the basis of 100% utility relocation funding by the federal government.

c) The only other project associated with the new bridge is the new service required for the bridge plaza. The capital expenditure and customer contribution is not known yet since the design is not complete and estimate has not been finalized.

2 - VECC - 9

Reference:

Exhibit 1, Attachment 2-A, DSP, pg. 64

Question:

a) Please update Tables 18 and 19 to show the outage data for the 2009 to 2012 period.

Response:

a) Please see the updated tables below:

Table 18 Number of Interruptions and Customers

Number of Interruptions	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Adverse Environment	13	18	22	10	11	15	12	10	3	7
Adverse Weather	23	55	80	53	54	23	58	32	46	98
Defective Equipment	296	379	348	251	346	312	243	277	270	335
Foreign Interference	65	29	59	84	105	102	83	84	95	70
Human Element	7	4	7	3	2	1	13	4	1	2
Lightning	13	22	34	13	12	24	11	5	2	5
Loss of Supply	3	1	4	9	6	3	4	27	7	21
Scheduled Outage	290	296	259	299	395	379	374	447	383	500
Tree Contact	37	60	107	38	38	53	29	23	31	21
Unknown / Other	25	17	33	37	47	33	29	28	55	44

Table 19 Number of Interruptions and Customers

Number of Customers	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Adverse Environment	5086	3746	10210	3842	7438	13220	12368	5736	70	1674
Adverse Weather	8368	72260	22692	21529	41148	4091	14887	11119	30802	84769
Defective Equipment	37008	36763	43946	21326	48218	46346	40178	26820	27995	52801
Foreign Interference	13450	32713	23568	34113	28830	35399	48100	36176	13407	26646
Human Element	668	7515	4324	2332	6	104	12549	7345	131	2906
Lightning	854	9066	6362	9272	482	13427	4930	5412	7402	3426
Loss of Supply	5902	4920	31	25369	11820	5408	10403	56964	4746	27145
Scheduled Outage	10394	8190	8858	13441	17927	21806	17051	21524	17213	23092
Tree Contact	9965	52137	22321	32782	15911	15124	3811	6834	5970	6929
Unknown / Other	10889	14268	16031	26535	40347	25857	15950	13545	46853	39896

2 - VECC - 10

Reference:

Exhibit 2, Attachment 2-A, DSP, pgs. 69-70

Question:

a) ENWIN states that its OMS system continues to have "bugs" which were not anticipated. Please explain what these are and what steps are being taken during the rate period to address them and at what cost.

Response:

a) ENWIN's Outage Management System (OMS) relies on real time data feeds from both its SCADA systems and Smart Meter AMI network to properly predict and identify faults in the network. The AMI network serves two primary functions for ENWIN, time of use meter reading for billing and power quality alarms for operations and outage management. When the AMI network was designed in 2010 by ENWIN's vendor it was optimized for high reliability scheduled meter reading. It was discovered in 2015 with the implementation of ENWIN's OMS that metering alarm performance was substandard and only delivering 10-15% of alarms reliably during a power outage. Over the past four years, ENWIN has been working with the vendor to isolate the issues and implement "low cost" adjustments to the network to increase alarm performance where ENWIN has seen marginal improvements.

   At this time, ENWIN has exhausted all "small step" changes with the vendor and in May of 2019 received a recommendation to reconfiguration the network based on an exhaustive communications modeling of performance. This will require converting the 5 communications towers from omni-directional (large coverage area) to multiple independent directional antennae to improve alarm message delivery to over 50% which is the necessary threshold for reliable OMS performance. A capital investment of $355,000USD will be required to implement these changes. Management has not budgeted this expense in the forward planning years and is reevaluating priorities in the 5 year capital plan.

2 - VECC - 11

Reference:

Exhibit 2, Attachment 2-A, DSP, pgs. 186, 196

Question:

a) ENWIN has antidotal evidence regarding customer expectations for power restoration. As part of its rate plan has the Utility established any metrics or goals for average restoration times? If yes please provide those. If not, please comment on how such objectives might be considered in its new rate plan.

Response:

a) ENWIN has not established a formal target for power restoration timing. ENWIN monitors and reports both SAIFI and SAIDI. SAIDI is the system average interruption duration index and represents the average total annual duration of interruption for the distribution system. ENWIN also calculates and reports CAIDI, the customer average interruption duration index and represents the average duration of an interruption on the distribution system. CAIDI is SAIDI/SAIFI so monitoring SAIFI and SAIDI provides the parameters for CAIDI. ENWIN believes that the duration of any particular outage is of most concern to customers. In the last 3 years, ENWIN's CAIDI was just under 30 minutes. ENWIN's goal for reliability is to maintain the level of reliability to which its customers are accustomed. ENWIN also has an internal reliability goal to keep the number of outages that affect more than 1,000 customers for more than 5 minutes to less than 5% of its total number of outages.

   Reliability results depend not only on the efforts of the utility but also of the impactors (storms, etc.) to the distribution system. While impactors "average out" over a long period, the results from any year can vary significantly. Consequently, ENWIN is of the opinion that reliability targets should not directly affect rate plans.

2 - VECC - 12

Reference:

Exhibit 2, Attachment 2-A, DSP, pgs. 267

Question:

a) Table 125-129 in the DSP label 2018 figures as forecast. The tables for detailed capital expenditures found at Exhibit 2, pgs. 43-44 (of 72) are not labelled as forecast for 2018 but appear to be the same as those in the DSP. Please clarify that the evidence is showing 2018 actual capital expenditures and if not please provide the 2018 actuals.

Response:

a) The 2018 expenditures in tables 125 – 129 in the DSP, labeled as "Forecast" are indeed forecast numbers. The actual 2018 expenditures from the updated Appendix 2-AA are shown below.

Projects	2018 Actuals
Reporting Basis	$ MIFRS
System Access	
Overhead customer connections	725,210
Underground customer connections	1,613,642
Bridge Plaza	225,202
Windsor-Essex Parkway	-
City driven road work	506,297
Wholesale metering: Keith TS feeders	-
Meter work - new customers	707,889
Smart meters	-
Wholesale meters	-
Sub-Total	3,778,240
System Renewal	

4 kV Conversion	-
27.6 kV Pole replacements	2,151,326
Planned cable replacements	84,444
Planned & reactive transformers	1,744,654
Reactive pole replacements	245,388
Reactive equipment replacements	223,584
Reactive conductor replacements	78,010
Manhole rebuilds	184,313
Switching units	548,634
Station equipment	2,658
Other renewal	1,089,524
Sub-Total	6,352,535
System Service	
Conductor upgrades	799,136
Feeder reliability improvement	1,379,842
New switches and sectionalizers	956,239
New tie connections	41,695
Padmounted SU automation	827,601
Radial branch back-ups	400,115
SCADA improvements	529,850
Transformer station upgrades	114,980
Other	-
Sub-Total	5,049,458
General Plant	
Building	189,779
Information Technology	659,193
Fleet & Welding	14,527
Tools	131,590
GIS	227,853
ERP	-
CIS	263,810
Sub-Total	1,486,752
Miscellaneous	
Total	16,666,985

Less Renewable Generation Facility Assets and Other Non-Rate-Regulated Utility Assets (input as negative)	-
Vehicles	3,093,253
Customer Contributions	- 3,227,478
Total	16,532,760

2 - VECC - 13

Reference:

Exhibit 2, Attachment 2-A, DSP

Question:

a) Federal Government PCB regulations require the testing electrical equipment and elimination of PCBs in equipment by the end of 2025. Please outline the program ENWIN is implementing during the rate period to achieve this requirement. Please show the spending per year from 2009 to 2024 on this program.

Response:

a) ENWIN had implemented a program to test and replace transformers with PCB content in excess of the regulation in prior years. That program was completed in 2008 and no further spending has been undertaken or contemplated since the program was completed.

2 - VECC - 14

Reference:

Exhibit 2, Attachment C, Business Facilities Plan

Question:

a) Which Option from Table 1 was selected by ENWIN?

b) Please provide a table showing the facilities plan option selected and:

1. The current forecast capital expenditure for that option in years 2018 through 2024, separated into construction and "soft costs"

2. The expected proceeds from sales of any buildings in the 2018 through 2024 period

3. Any incremental operating costs, including increased property taxes associated with the building projects.

4. The current square footage for office space and separately the square footage for service space (garage etc.). Please provide the same for the new or renovated buildings post consolidation.

5. The construction and occupancy timelines for this project

6. A copy of the most recent contractors cost estimates for this project.

7. Any real-estate property reports used in consideration of the acquisition or sale of property as part of this project.

Response:

a) Option 2 was selected.

b)

1. The current forecast capital expenditures for Option 2 in years 2018 through 2024 were expected to occur in 2019 and 2020. The summary of capital construction costs and "soft costs" are as follows:

4545 Rhodes Dr. Renovations

	2018	2019	2020	2021	2022	2023	2024
Capital Exp.	-	2,071,000	1,150,000	-	-	-	-
Soft Costs	-	99,000	180,000	-	-	-	-

Please also see the response to SEC-22.

2. The sale of the Ouellette Facility occurred in February 2019 with a sale price of $2,000,000 which will be offset with closing/legal costs. The closing date is June 30, 2020.

3. Incremental operating costs, including increased property taxes associated with the building projects will be more accurately estimated in August 2019 based on final design of the renovation project, and the increase of 100 employee occupancy for the 4545 Rhodes Dr. project. Those increased operating costs have not been included in the 2020 Test Year OM&A expenses.

4. The requested square footages are as follows:

Current Square Footage – Ouellette Site
10,900 sq. ft. storage and mechanical
32,698 sq. ft. office space
43, 597 sq. ft. total space

Current Square Footage – Rhodes Drive Site
27,712 sq. ft. warehouse
50,588 sq. ft. fleet garage
27,497 sq. ft. operations shops
61,946 sq. ft. office space
167,743 sq. ft. total space

Renovated Square Footage – Rhodes Drive Site
20,180 sq. ft. warehouse

50,588 sq. ft. fleet garage
23,380 sq. ft. operations shops
73,595 sq. ft. office space
167,743 sq. ft. total space

3665 Wyandotte St. East . – Server Room Addition
Server Room - 500 sq. ft. of vacant space to be renovated

5. Renovations of the Rhodes Drive and Wyandotte St sites are expected to occur over the October 2019 to May 2020 time period. Occupancy is expected by June 2020.

6. The Class "C" estimate from March 2018 is included as VECC 14 - Attachment 1. A summary of the reports' estimated costs is also provided in response to interrogatory SEC -22.

7. The property appraisal used to determine the sale price for the Ouellette Facility is included as VECC 14 - Attachment 2. The parking lot located at 741 Pelissier Street was appraised at $227,000, while the office building at 787 Ouellette Avenue was appraised at $1,965,000.

Alpha Cost Consultants

www.alphacostcon.com

Class "C" Cost Estimate Rev.1.0

Enwin Feasibility Study 4545 Rhodes Drive, Windsor

Prepared For : BAIRD /AE Architecture + Engineering

Alpha Cost Consultants Inc.
COST CONSULTANTS | QUANTITY SURVEYORS | PROJECT MANAGERS

510 Rowntree Dairy Road, Unit 3B, Woodbridge, ON, L4L 8H2
Phone: 416-855-2414, 416-561-5667
Email: info@alphacostcon.com , www.alphacostcon.com

March 8, 2018 **Project # 18005**

BAIRD / AE
Architecture + Engineering
1000-267 Pelissier Street
Windsor, ON, N9A 4K4
Ph-519-326-6161 ext. 201

Kind Attn: [redacted] **Senior Arch. Technologist**

Reference - **"Enwin Feasibility Study - Class "C" Cost Estimate Rev.1.0**

Dear Adam,

Please find enclosed our revised Class "C" Cost Estimate for the above project.

This estimate was prepared based on drawings and information provided by BAIRD/ AE Architecture + Engineering received on January 23, 2018. Architectural drawings prepared by, BAIRD/ AE Architecture + Engineering . As built drawings as provided were prepared by Giffels Associates Ltd, and Wilson Dario & Associates (WDA).

This estimate is meant to be indicative of the fair market value for renovations to existing office /warehouse building . This estimate is not intended to be the prediction of the lowest bid and should be representative of the median bid amount received.

We recommend that the owner and/or the design team carefully review the cost estimate report, including line item descriptions, unit price clarifications, exclusions, inclusions, assumptions, contingencies, escalation, and mark-ups.

Warm Regards,

[redacted]PQS, MRICS, B.Eng;
Partner
Alpha Cost Consultants Inc.
Encl: (Class "C" Cost Estimate Rev.1.0, March 8, 2018)

TABLE OF CONTENTS	PAGE

1. PROJECT INFORMATION

1.1 Project Type and Location

This project scope consists of renovations to existing office/ warehouse building located in the City of Windsor.

Location:

Windsor, ON.

1.2 Project Building Class

Canadian Institute of Quantity Surveyors (CIQS) building class for this project is Category 3 / 3.1 General Purpose Office Building

1.3 Project Delivery Method

Project will be tendered with standard stipulated sum contract method.

Project will be implemented in sequential phases as follows:

1) First Floor Warehouse construction will be **Phase 1** as this areas get renovated office staff from First Floor Offices will be moved here to vacate office areas on ground floor .

2) First Floor Office construction will be **Phase 2,** as office staff is moved in warehouse area; this office areas will get renovated.

3) Second Floor Office construction will be **Phase 3** ; once first floor office areas get renovated, staff from second floor will be moved to first floor offices. And upon work completion moved back to Second Floor .

2. ESTIMATE METHODOLOGY

2.1 Estimate Class

Class "C" Cost Estimate is intended to establish an indicative estimate of the hard construction costs based on the level of design information including floor plans, programme areas, design memorandum, test reports, site plans and other project specific requirements provided. This prepared estimate is our opinion on total hard construction cost of this project is based on current industry and market value for this type of project located in **City of Windsor ON.**

The accuracy of the estimate based on the documentation & level of information provided and design stage is intended to be +/- 5 to 20%. This is based on standard industry guidelines derived from the Federal Government definition of Estimate Class A/ B/ C/ D. Design contingency and construction contingency (post contract) has been included as % of total costs.

2.2 Quantity Take-Offs

Based on the project design information available at this time, we have measured quantities in accordance with CIQS elemental method of measurement, to establish a bill of material required for construction where possible and; applied our technical skills & expertise to bridge necessary design gaps to establish cost of associated elements; based on experience with project of similar nature and type.

2.3 Unit Rates

The unit rates developed for our estimate include material, labour, equipment, tools and contractor's overhead and profit specific to **City of Windsor, ON.**

The unit rates for each of the elements are developed specifically based on current industry median costs for the type of design, construction, and materials specified.

2.4 Cost Base

The site specific cost for this estimate is **4545 Rhodes Drive, Windsor, ON.**

Pricing is based on competitive tender results with a minimum of Four bid submissions at each major trade level. Tenders receiving less submissions (occasionally three) historically tend to have a much higher risk of an overrun in cost when compared to the budget established in an estimate.

Pre-qualification list for contractors may often incur additional financial costs subsequent to reduced level of competitiveness.

2.5 General Requirements and Fees

The General Requirements and Fees for the Contractor are included as a percentage of the hard construction cost. These costs include supervision and labour, access to the site, site

accommodations, site protection, temporary utilities, clean up, equipment, and other miscellaneous project requirements.

2.6 Bonding and Insurance

We have included the median estimated costs for 50% performance and 50% labour & material. These are the standard bonding requirements commonly requested by the owner.

The estimate includes an allowance for general liability and builder's risk insurance based on an average cost per $1,000 of estimated hard construction costs. The actual insurance costs would be subjected to the insurance requirements.

2.7 Soft Costs

The estimated ***soft costs have been included as suggested by the design team***. Please refer to Soft Cost Summary for inclusion and exclusions.

These costs include items traditionally funded by the owner and separate from the hard construction costs which would be applicable to the contractor. The soft costs include items such as consultant fees; disbursements; project management fees; independent inspection and testing; legal fees; permits and development charges; operational and moving expenses; financing and loan fees; owner supplied fixtures, and equipment; and Harmonized Sales Tax.

We recommend owner and design team to consider these costs to establish a complete construction budget for this project.

2.8 Taxes

Provision has been made for the Harmonized Sales Tax (HST) in our estimate.

2.9 Design Documents

Following is the list of design documents provided.

Reference	Document Description	Revision Date
Drawings	Architectural plans (8 sheets) + Updated Plans (8 sheets)	January 15, 2018+ Updated March 3, 2018
Drawing	As built drawings (Lot)	NA
Emails	Various emails	Jan.23 to Feb. 7,2018

3. CONTINGENCIES

3.1 Design and Pricing Contingency

A design contingency and pricing contingency of **10%** has been included as% of total costs.

The design contingency is an allowance to cover probable cost associated to bridge the minor design gap at this design stage and; anticipated to reduce with design advancement of the project during remaining design stage.

3.2 Escalation

No provisions for escalation has been made. Construction cost is based on **1st quarter 2018 Construction values.**

3.3 Construction Contingency (Post Contract Changes)

Construction contingency for post contract changes that may occur after the project is tendered to cover the cost of anticipated change orders, has been included as **5%** of total construction cost.

It is recommended that owner and design team carefully consider this allowance and include in program budget.

4. LIMITATIONS OF THE REPORT

4.1 Probable Costs

Alpha Cost Consultants Inc. cannot control the cost of construction or competitive bidding and market conditions. This opinion of probable cost of construction is based on our experience, qualifications, and best judgement with the construction industry. **Alpha Cost Consultants Inc.** cannot guarantee that proposals or actual construction costs will not vary from this or subsequent estimates.

Alpha Cost Consultants Inc. has prepared this report based on CIQS guidelines and standard industry accepted practices and principles.

4.2 Report use

This report has been prepared for use of owner; any duplication or transfer to third party will require consent from **Alpha Cost Consultants Inc.**

Alpha Cost Consultant Inc. recommends that the owner and design team carefully review the report including inclusions, exclusions, assumptions and notify **Alpha Cost Consultant Inc.** for any deviations including errors and omissions within 30 days of receipt of this report.

4.3 Canadian Anti Spam Legislation (CASL)

We comply with CASL requirements for providing our services. By receiving this report in electronic format via email you provide consent for email correspondence.

If you wish not to receive any email please notify us so we can unsubscribe you from future electronic correspondence list.

5. SCOPE CLARIFICATIONS

5.1 Assumptions

Architectural / Structural:

- Various assumptions were made based on the design information available and our experience with projects of a similar nature. Please refer to the specific items within the estimate for the detailed assumptions made.
- Our estimate is based on working during normal hours.
- Work to be performed by fair wage labour.
- We made assumptions for ceiling, wall and; floor finishes based on typical office requirements.
- Our estimate includes complete replacement of floor and ceiling finishes in renovation areas with the exception of corridors.
- Our estimate includes millwork and modular partitions for office areas.
- For shop areas storage racks/ other equipment are to be provided by owner hence as such has not been included in our estimate.
- Separate price for additional skylight, lightwell, universal washrooms, refirerating of second floor and HVAC replacements to existing shop areas have been provided on the master summary sheet.
- Site work is included with limited scope of access lane to the property.

Mechanical:

- Our mechanical scope estimate is based on architectural layout and as -built drawings. Mechanical drawings and specification for this feasibility study have not been developed or provided.
- We assume head end equipment for plumbing and HVAC system to remain as is hence no cost for such equipment has been included in our estimate with the exception of separate price item cost.
- Please refer to other scope specific assumptions within estimate.

Electrical:

- Our electrical scope estimate is based on architectural layout and as -built drawings. Electrical drawings and specification for this feasibility study have not been developed or provided.
- We assume existing head end equipment including incoming services, transformer and generator to remain as is.
- Please refer to other scope specific assumptions within estimate.

5.2 Exclusions

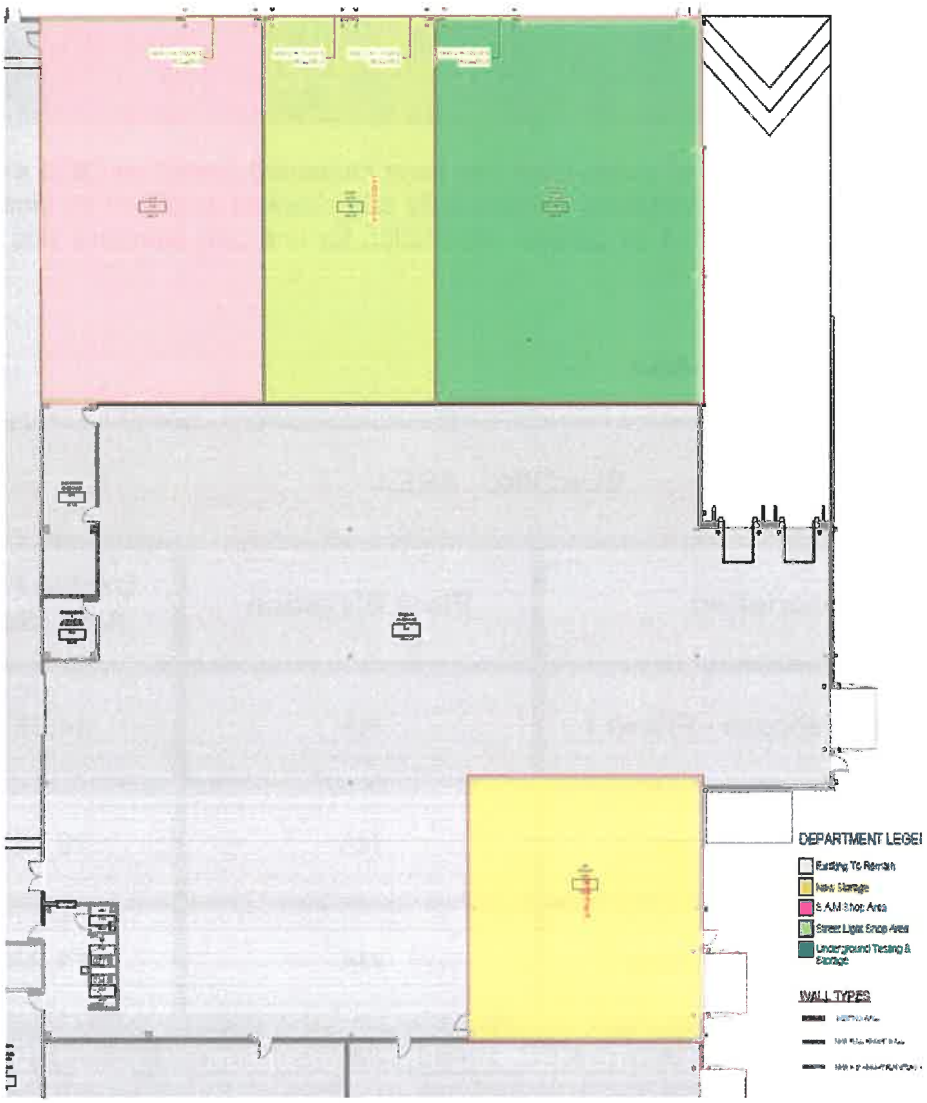
- Accelerated or prolonged construction schedule.
- Loose furniture, furnishings and other equipment.

6. BUILDING AREA

The following usable floor area of construction has been measured; based on CIQS methods of measurement. The area was measured electronically and checked longhand by dimensioning and scaling. The area is reported for general information for unit cost reference and reporting purpose only.

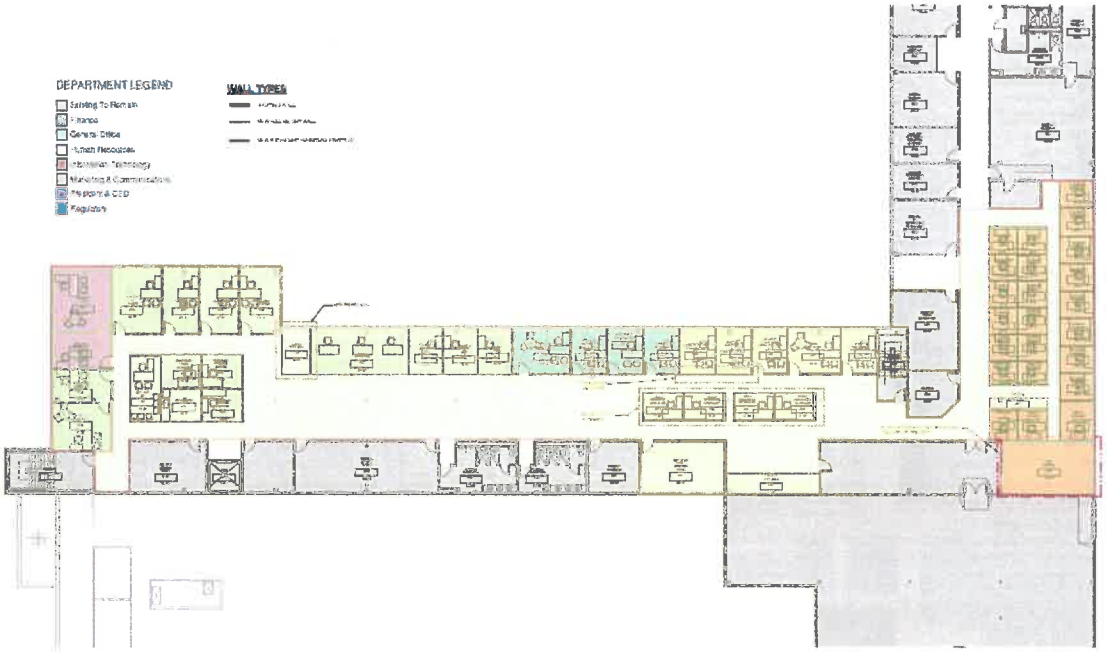
6.1 Summary of Usable Floor Area

BUILDING AREA		
Area Description	**Floor Elevation**	**Usable Floor Area (Sqft.)**
First Floor - Warehouse - Phase 1	NA	14,361
First Floor Offices - Phase 2	NA	29,680
Second Floor Offices - Phase 3	NA	11,692
Total Usable Floor Area (Sqft)		**55,733**



FIRST FLOOR WAREHOUSE

FIRST FLOOR OFFICES



SECOND FLOOR OFFICES

Project # 18005
ENWIN UTILITIES
Class "C" Cost Estimate Rev.1.
March 8, 2018

ACC Alpha Cost Consultants Inc.

Master Cost Summary			Gross Floor Area	55,733 SF	
Hard Construction Costs	**GFA (SF)**	**Unit (Cost/SF)**	**Sub - Elements Total**	**Element Total**	**% of Total**
A Building Shell					
A2 Structure	55,733	$1.03		$57,354.50	1.70%
A2.1 Lowest Floor Construction		$0.66	$37,017.00		
A 2.2 Upper Floor Construction		$0.36	$20,337.50		
A 2.3 Roof Construction		$0.00	$0.00		
A3 Exterior Enclosure	55,733	$2.15		$119,700.00	3.55%
A3.2 - Wall Above Grade		$0.59	$33,000.00		
A3.3- Windows & Entrances		$1.21	$67,500.00		
A3.4- Roof Finishes		$0.00	$0.00		
A3.5 - Projections		$0.34	$19,200.00		
B Interiors					
B1 Partitions & Doors	55,733	$13.48		$751,299.00	22.30%
B1.1 - Partitions		$12.58	$701,149.00		
B1.2 - Doors & Hardwares		$0.90	$50,150.00		
B2 Finishes	55,733	$7.21		$402,041.50	11.93%
B2.1 - Floor Finishes		$3.15	$175,537.00		
B2.2 - Ceiling Finishes		$2.57	$143,237.50		
B2.3 - Wall Finishes		$1.49	$83,267.00		
B3 Fittings & Equipment	55,733	$1.27		$71,000.00	2.11%
B3.1 - Fittings & Fixtures		$1.27	$71,000.00		
B3.3 - Conveying Systems		$0.00	$0.00		
C Services					
C1 Mechanical	55,733	$9.06		$505,141.35	14.99%
C11 Plumbing & Drainage		$0.47	$26,073.60		
C12 Fire Protection		$1.47	$81,747.75		
C13 HVAC		$6.05	$337,120.00		
C14 Controls		$1.08	$60,200.00		
C2 Electrical	55,733	$5.55		$309,224.50	9.18%
C21 Service & Distribution		$0.08	$4,200.00		
C22 Lighting, Devices & Heating		$2.56	$142,660.75		
C23 Systems & Ancillaries		$2.91	$162,363.75		
D Site & Ancillary Work:					
D1 Site Work	55,733	$2.19		$122,060.00	3.62%
D11 Site Development		$1.56	$87,060.00		
D12 Mechanical Site Services		$0.27	$15,000.00		
D13 Electrical Site Services		$0.36	$20,000.00		
D2 Ancillary Work	55,733	$2.54		$141,758.50	4.21%
D21 Demolition		$2.27	$126,758.50		
D22 Alterations		$0.27	$15,000.00		
Z General Requirements & Allowances					
Z1 General Requirements	55,733	$7.86		$437,900.00	13.00%
Z11 General Requirements		$5.60	$312,300.00		
Z12 Fees		$2.25	$125,600.00		
Z2 Allowances	55,733	$8.11		$452,158.97	13.42%
Z21 Design Allowances		$5.23	$291,700.00		
Z22 Escalation Allowances		$0.00	$0.00		
Z23 Construction Allowances		$2.88	$160,458.97		
Total Hard Construction Cost		**$60.46**		**$3,369,600.00**	**100%**

Separate List Price Items

SEPARATE PRICES (Not Included In Above Estimate)	Estimated Costs
1) Add new skylights (8 nos.) - 6' x 8'	$57,000.00
2)Readjust existing lightwell over the new offices along the corridor at ground floor (scope to be determined)	$45,000.00
3) Renovate universal washroom (2 nos.)	$48,000.00
4) Refire rating of existing second floor at the renovated offices space	$66,750.00
5) HVAC services to be installed for existing spaces to remain work shop areas. (scope including relocation of existing sprinklers/ light fixtures to facilitate replacement of HVAC system)	$290,000.00
TOTAL FOR SEPARATE PRICE ITEMS	$506,750.00

Project Work Schedule - Base Contract

Total Manhours	27,983
Estimate of construction time (project schedule based on 12 men crew)	14 to 18 Months

Soft Cost List

Soft Costs List	Cost
Consultant Fees (Architect, Mechanical, Electrical, Structural, Planning and; Civil Consultant) - 5.2% of construction cost	$175,219.200
Soil Testing - not required	Excluded
Disbursements - by owner	Excluded
Construction or Project Management Fees	Excluded
Independent Inspection and Testing - by owner, if required	Excluded
Third Party Commissioning - by owner, if required	Excluded
Legal Fees - by owner	Excluded
Permits and Development Charges - by owner	Excluded
Operational Expenses - by owner	Excluded
Financing , Loan Fees and Interest Charges - by owner	Excluded
Owner Supplied Furnishings, Fixtures, and Equipment - by owner	Excluded
Land Acquisition Costs - not required	Not applicable
Harmonized Sales Tax - 13%	$460,826.496
Soft Costs Total	**$636,000.00**

Hard Cost + Soft Cost Total	**$4,005,600.00**

Project # 18005
ENWIN UTILITIES
Class "C" Cost Estimate Rev.1.
March 8, 2018

Alpha Cost Consultants Inc.

Elemental Cost Summary						Gross Floor Area	55,733 SF		
CIQS Code		Ratio GFA	Element Quantity	Unit	Unit Rate	Sub Element Total	Element Total	Unit Cost /GFA	% of Total
A	Structure						$57,354.50	$1.03	1.70%
A2.1	- Lowest Floor Construction	0.62	34,425	SF	$1.08	$37,017.00		$0.66	
A2.2	- Upper Floor Construction	0.21	11,680	SF	$1.74	$20,337.50		$0.36	
A2.3	- Roof Construction	0.01	576	SF	$0.00	$0.00		$0.00	
A3	Exterior Enclosure						$119,700.00	$2.15	3.55%
A3.2	- Walls Above Grade	0.01	310	SF	$106.45	$33,000.00		$0.59	
A3.3	- Windows and Entrances	0.01	768	SF	$87.89	$67,500.00		$1.21	
A3.4	- Roof Finish	0.01	384	SF	$0.00	$0.00		$0.00	
A3.5	- Projections	1.00	55,733	SF	$0.34	$19,200.00		$0.34	
B1	Partitions & Doors						$751,299.00	$13.48	22.30%
B1.1	- Partitions	0.54	30,264	SF	$23.17	$701,149.00		$12.58	
B1.2	- Doors	0.03	1,512	SF	$33.17	$50,150.00		$0.90	
B2	Finishes						$402,041.50	$7.21	11.93%
B2.1	- Floor Finishes	0.82	45,497	SF	$3.86	$175,537.00		$3.15	
B2.2	- Ceiling Finishes	0.56	31,136	SF	$4.60	$143,237.50		$2.57	
B2.3	- Wall Finishes	0.94	52,178	SF	$1.60	$83,267.00		$1.49	
B3	Fittings & Equipment						$71,000.00	$1.27	2.11%
B3.1	- Fittings & Fixtures	1.00	55,733	SF	$1.27	$71,000.00		$1.27	
C	Services: Mechanical						$505,141.35	$9.06	14.99%
C11	- Plumbing & Drainage	1.00	55,733	SF	$0.47	$26,073.60		$0.47	
C12	- Fire Protection	1.00	55,733	SF	$1.47	$81,747.75		$1.47	
C13	- HVAC	1.00	55,733	SF	$6.05	$337,120.00		$6.05	
C14	- Controls	1.00	55,733	SF	$1.08	$60,200.00		$1.08	
C2	Electrical						$309,224.50	$5.55	9.18%
C21	- Service & Distribution	1.00	55,733	SF	$0.08	$4,200.00		$0.08	
C22	- Lighting, Devices & Heating	1.00	55,733	SF	$2.56	$142,660.75		$2.56	
C23	- Systems & Ancillaries	1.00	55,733	SF	$2.91	$162,363.75		$2.91	
D1	Site & Ancillary Work: Site Work						$122,060.00	$2.19	3.62%
D11	- Site Development		55,733	SF	$1.56	$87,060.00		$1.56	
D12	- Mechanical Site Services		55,733	SF	$0.27	$15,000.00		$0.27	
D13	- Electrical Site Services		55,733	SF	$0.36	$20,000.00		$0.36	
D2	Ancillary Work						$141,758.50	$2.54	4.21%
D21	- Demolition	1.00	55,733	SF	$2.27	$126,758.50		$2.27	
D22	- Alterations	1.00	55,733	SF	$0.27	$15,000.00		$0.27	
Z1	General Requirements & Allowances: General Requirements						$437,900.00	$7.86	13.00%
Z11	- General Requirements	1.00	55,733	SF	$5.60	$312,300.00		$5.60	
Z12	- Fees	1.00	55,733	SF	$2.25	$125,600.00		$2.25	
Z2	Allowances						$462,158.97	$8.11	13.72%
Z21	- Design Allowances	1.00	55,733	SF	$5.23	$291,700.00		$5.23	
Z22	- Escalation Allowances	1.00	55,733	SF	$0.00	$0.00		$0.00	
Z23	- Construction Allowances	1.00	55,733	SF	$2.88	$160,458.97		$2.88	
	Total Hard Construction Cost						**$3,369,600.00**	**$60.46**	**100%**

Phase Break Down	Estimated Costs
First Floor Warehouse - Phase 1	$481,500.00
First Floor - Phase 2	$1,209,600.00
Second Floor - Phase 3	$626,400.00
Common general items including contingencies, allowances, overhead & profit etc	$1,052,100.00
Total	$3,369,600.00

	Description	Quantity	Unit of Measurement	Rate	Subtotal	Total
	A2.1 STRUCTURE- Lowest Floor Construction					**$37,017.00**
	First Floor Warehouse (Phase -1)					
1	Allowance for patching slab on grade (partitions demolished areas and other areas as required)	14,361	SF	$1.00	$14,361.00	
	First Floor (Phase-2)					
2	Allowance for patching slab on grade (partitions demolished areas and other areas as required)	12,624	SF	$1.50	$18,936.00	
3	Resurfacing/patching at corridors	7,440	SF	$0.50	$3,720.00	
	Total Cost - LOWEST FLOOR CONSTRUCTION	**34,425**	**SF**	**$1.08**	**$37,017.00**	
	A2.2 STRUCTURE - Upper Floor Construction					
	A 2.21 Upper Floor Construction					**$20,337.50**
	Second Floor (Phase- 3)					
4	Allowance for patching upper floor (partitions demolished areas and other areas as required)	6,665	SF	$2.00	$13,330.00	
5	Resurfacing/patching at corridors	5,015	SF	$0.50	$2,507.50	
6	Re-firerating existing underside of second floor renovated office areas - separate price included in summary sheet	11,680	SF		Separate Price	
7	Housing keeping pad 4" thick for new air handling unit	1	NO	$4,500.00	$4,500.00	
	A 2.22 Stair Construction					
	Assumed no works required to stairs				Excluded	
	Total Cost - UPPER FLOOR CONSTRUCTION	**11,680**	**SF**	**$1.74**	**$20,337.50**	
	A2.3 STRUCTURE - Roof Construction					
	A 2.31 Roof Construction					**$0.00**
	First Floor (Phase-2)					
8	Make good roof structure around skylights - new skylights, separate price included in summary sheet	8	NO		Separate Price	
	Total Cost - ROOF CONSTRUCTION	**576**	**SF**	**$0.00**	**$0.00**	
	A3 Exterior Enclosure					
	A3.2 Wall Above Grade					
	A3.21 - Wall Above Grade					**$33,000.00**
	First Floor Warehouse (Phase -1)					
9	Allowance to make good walls at overhead door locations (4no)	1	LS	$15,000.00	$15,000.00	

	A3.22 - Structure Wall Above Grade				
	Assumed not required			Excluded	
	A3.23 - Curtain Walls				
	First Floor (Phase-2)				
10	New curtain wall glazing including tie into existing c/w aluminium frame and supports	120 SF	$150.00	$18,000.00	
	Total Cost - WALLS ABOVE GRADE	**310 SF**	**$106.45**	**$33,000.00**	
	A3.3 Windows and Entrances				
	A3.33 - Doors				
	First Floor Warehouse (Phase -1)				
11	New overhead doors (assumed 16'0"x 12'0") - non insulated, rolling steel service doors, photo eye, exit detector (automatic c/w mechanism)	4 NO	$16,000.00	$64,000.00	
	First Floor (Phase-2)				
12	New window in Room 1141 (VP Hydro Operations) c/w opening, lintel, frame and hardware - 5'x 5 '	1 NO	$3,500.00	$3,500.00	
	Total Cost - WINDOWS and ENTRANCES	**768 SF**	**$87.89**	**$67,500.00**	
	A3.4 Roof Covering				
	A3.41- Roofing				**$0.00**
	First Floor (Phase-2)				
13	Make good roof finishes around skylights - separate price included in summary sheet	8 NO		Separate Price	
	A3.42 - Skylights & Roof Glazing				
	First Floor (Phase-2)				
14	New skylights 6'0" x 8'0" including curbs - separate price included in summary sheet. Reuse existing sky lights and add new 8 X NOS.	8 NO		Separate Price	
	Total Cost - ROOF FINISHES	**384 SF**	**$0.00**	**$0.00**	
	A3.5 Projections				
	A3.51 Projections				**$19,200.00**
	First Floor Warehouse (Phase -1)				
15	Bollards at overhead door interior and exterior	16 NO	$1,200.00	$19,200.00	
	Total Cost - PROJECTIONS	**55,733 SF**	**$0.34**	**$19,200.00**	
	B INTERIORS				
	B1.1 Partitions & Doors				
	B1.11 - Partitions				**$701,149.00**
	B1.11 - Fixed Partitions				
	First Floor Warehouse (Phase -1)				

16	Block masonry wall	7,314	SF	$16.00	$117,024.00	
17	Allowance for tie-ins to new partitions with existing	1	LS	$500.00	$500.00	
18	Allowance to make good partitions at demolished locations	1	LS	$500.00	$500.00	
19	Allowance for rough carpentry and caulking	1	LS	$2,000.00	$2,000.00	
	First Floor (Phase-2)					
20	Interior drywall partitions c/w metal stud, sound batt insulation and gypsum board	17,152	SF	$7.50	$128,640.00	
21	Allowance for tie in new partitions with existing	1	LS	$3,000.00	$3,000.00	
22	Allowance to make good partitions at demolished locations	1	LS	$2,000.00	$2,000.00	
23	Extra over allowance for new glazed screens	1	LS	$5,000.00	$5,000.00	
24	Allowance for rough carpentry and caulking	1	LS	$10,000.00	$10,000.00	
	Second Floor (Phase- 3)					
25	Interior drywall partitions c/w metal stud, sound batt insulation and gypsum board	5,798	SF	$7.50	$43,485.00	
26	Extra over allowance for new glazed screens	1	LS	$2,000.00	$2,000.00	
27	Allowance for tie in new partitions with existing	1	LS	$1,500.00	$1,500.00	
28	Allowance to make good partitions at demolished locations	1	LS	$1,500.00	$1,500.00	
29	Allowance for rough carpentry and caulking	1	LS	$6,000.00	$6,000.00	
	Modular Partitions - 4' feet high					
	First Floor (Phase-2)					
30	New (8' 0"x7' 0") x 4' 0" high office modular cubicle	75	NO	$3,500.00	$262,500.00	
	Second Floor (Phase- 3)					
31	New (8'0"x7'0") x 4'0" high office modular cubicle	33	NO	$3,500.00	$115,500.00	
	Total Cost - PARTITIONS	**30,264**	**SF**	**$23.17**	**$701,149**	
	B1.2 Doors					
	B1.21 - Doors & Hardwares					**$50,150.00**
	First Floor Warehouse (Phase -1)					
32	Interior doors c/w HM frame, hardware and paint finishes - single panel	2	NO	$800.00	$1,600.00	
33	Interior doors c/w HM frame, hardware and paint finishes - double panel	1	PR	$1,400.00	$1,400.00	
34	Allowance for special doors/glazing panels/special hardware etc.	1	LS	$1,000.00	$1,000.00	
	First Floor (Phase-2)					
35	Interior doors c/w frame, hardware and paint finishes - single panel	36	NO	$650.00	$23,400.00	
36	Interior doors c/w frame, hardware and paint finishes - double panel	2	PR	$1,200.00	$2,400.00	
37	Allowance for special doors/glazing panels/special hardware etc.	1	LS	$5,000.00	$5,000.00	
	Second Floor (Phase- 3)					
38	Interior doors c/w frame, hardware and paint finishes - single panel	19	NO	$650.00	$12,350.00	
39	Allowance for special doors/glazing panels/special hardware etc.	1	LS	$3,000.00	$3,000.00	
	Total Cost - DOORS	**1,512**	**SF**	**$33.17**	**$50,150.00**	

	B2.1 Finishes				
	B2.11 - Floor Finishes				**$175,537.00**
	First Floor Warehouse (Phase -1)				
40	Clean and make good floors to receive new finishes	14,361 SF	$0.10	$1,436.10	
41	Epoxy paint for new finishes	14,361 SF	$2.50	$35,902.50	
	First Floor (Phase-2)				
42	Clean and make good floors to receive new finishes	12,624 SF	$0.10	$1,262.40	
43	Carpet floor and base (assumed for office areas)	10,914 SF	$6.50	$70,941.00	
44	Board room carpet and base (premium quality carpet)	740 SF	$8.50	$6,290.00	
45	Repair/ make good finishes in corridor areas	7,440 SF	$1.00	$7,440.00	
	Second Floor (Phase- 3)				
46	Clean and make good floors to receive new finishes	6,665 SF	$0.10	$666.50	
47	Carpet floor and base	6,573 SF	$6.50	$42,724.50	
48	CEO office room carpet and base (premium quality carpet)	454 SF	$8.50	$3,859.00	
49	Make good finishes at corridors	5,015 SF	$1.00	$5,015.00	
	Total For - FLOOR FINISHES	**45,497 SF**	**$3.86**	**$175,537**	
	B2.21 - Ceiling Finishes				**$143,237.50**
	First Floor Warehouse (Phase -1)				
50	Assumed not required			Excluded	
	First Floor (Phase-2)				
51	Acoustic ceiling tiles including suspension system	10,914 SF	$5.50	$60,027.00	
52	Suspended drywall ceiling for board room	740 SF	$8.50	$6,290.00	
53	Allowance for bulkheads	1 LS	$10,000.00	$10,000.00	
54	Make good ceilings at corridors at tie-ins to new ceiling locations	7,440 SF	$2.00	$14,880.00	
	Second Floor (Phase- 3)				
55	Acoustic ceiling tiles including suspension system	6,573 SF	$5.50	$36,151.50	
56	Suspended drywall ceiling for President/ CEO room	454 SF	$8.50	$3,859.00	
57	Allowance for bulkheads	1 LS	$2,000.00	$2,000.00	
58	Make good ceilings at corridors at tie-ins to new ceiling locations	5,015 SF	$2.00	$10,030.00	
	Total For - CELING FINISHES	**31,136 SF**	**$4.60**	**$143,237.50**	
	B2.31 - Wall Finishes				**$83,267.00**
	First Floor Warehouse (Phase -1)				
59	Paint finish to new walls	11,702 SF	$1.50	$17,553.00	
60	Allowance for paint finish to existing walls	1 LS	$1,500.00	$1,500.00	
	First Floor (Phase-2)				
61	Paint finish to new walls	28,685 SF	$1.50	$43,027.50	
62	Allowance for paint finish to existing walls	1 LS	$2,000.00	$2,000.00	
	Second Floor (Phase- 3)				
63	Paint finish to new walls	11,791 SF	$1.50	$17,686.50	

64	Allowance for paint finish to existing walls	1 LS	$1,500.00	$1,500.00	
	Total For - WALL FINISHES	**52,178 SF**	**$1.60**	**$83,267.00**	
	B3.1 Fittings & Equipment				
	B3.11 Fittings & Fixtures				**$71,000.00**
	B3.11 - Metals				
	First Floor Warehouse (Phase -1)				
65	Allowance for miscellaneous metals	1 LS	$5,000.00	$5,000.00	
	First Floor (Phase-2)				
66	Allowance for miscellaneous metals	1 LS	$10,000.00	$10,000.00	
	Second Floor (Phase- 3)				
67	Allowance for miscellaneous metals	1 LS	$3,000.00	$3,000.00	
	B3.12 - Millwork				
	First Floor Warehouse (Phase -1)				
68	Storage racks by Owner			Excluded	
	First Floor (Phase-2)				
69	Allowance for millworks - board room, bar, print /copy and storage rooms	1 LS	$30,000.00	$30,000.00	
	Second Floor (Phase- 3)				
70	Allowance for millworks - CEO/ President & meeting room	1 LS	$15,000.00	$15,000.00	
71	Millwork for printer & kitchenette area	1 LS	$2,500.00	$2,500.00	
	B3.13 - Specialties				
72	Universal washroom accessories			Separate Price	
	First Floor Warehouse (Phase -1)				
73	Door signage	1 LS	$500.00	$500.00	
	First Floor (Phase-2)				
74	Door signage	1 LS	$3,000.00	$3,000.00	
	Second Floor (Phase- 3)				
75	Door signage	1 LS	$2,000.00	$2,000.00	
	B3.14 - Furnishings				
76	Loose furniture and furnishings by owner			Excluded	
	Total For - FITTINGS & FIXTURES	**55,733 SF**	**$1.27**	**$71,000**	
	B3.3 Conveying Systems				**$0.00**
	B3.31 - Elevators				
77	Existing to remain as is, assume no work scope			Costing Base	
	Total For - CONVEYING SYSTEMS	**55,733 SF**	**$0.00**	**$0.00**	
	C1 MECHANICAL				
	C1.11 PLUMBING & DRAINAGE				
	C1.11 - Plumbing Equipment				**$0.00**

78	Existing plumbing equipment to remain as is; without any capacity upgrades.			Costing Base	
79	Domestic hot water heater and circulation system is adequate in capacity to serve new layout			Costing Base	
	C1.12 - Plumbing Fixtures				**$2,400.00**
80	New universal washrooms - please see separate price			Separate Price	
	First Floor (Phase-2)				
81	Bar sink (at board room) - counter mounted	1 NO	$650.00	$650.00	
82	Rough-in connections c/w domestic water hot/cold water branch drops, sanitary drain, p- trap connection	1 NO	$500.00	$500.00	
	Second Floor (Phase- 3)				
83	Kitchen sink - counter mounted	1 NO	$750.00	$750.00	
84	Rough-in connections c/w domestic water hot/cold water branch drops, sanitary drain, p- trap connection	1 NO	$500.00	$500.00	
	C1.13 - Domestic Water				**$5,700.00**
	First Floor (Phase-2)				
85	Extend domestic hot/cold water piping (thermally insulated) from nearest washroom - Copper type"L"	60 LF	$20.00	$1,200.00	
86	Connection to existing domestic water piping c/w freezing as required	2 NO	$350.00	$700.00	
87	Isolation valve & line items	1 LS	$150.00	$150.00	
	Second Floor (Phase- 3)				
88	Extend domestic hot/cold water piping (thermally insulated) from nearest washroom - Copper type"L"	140 LF	$20.00	$2,800.00	
89	Connection to existing domestic water piping c/w freezing as required	2 NO	$350.00	$700.00	
90	Isolation valve & line items	1 LS	$150.00	$150.00	
	C1.14 Sanitary Waste & Vent				**$4,680.00**
	First Floor (Phase-2)				
91	Extend below grade sanitary drain from nearest washroom - PVC	30 LF	$18.00	$540.00	
92	Trenching and bedding for below grade sanitary drain	30 LF	$10.00	$300.00	
93	Connection to existing below grade sanitary drain	1 NO	$250.00	$250.00	
94	Vent piping DWV/ Copper	1 LS	$200.00	$200.00	
95	Clean out and line items	1 NO	$250.00	$250.00	
	Second Floor (Phase- 3)				
96	Extend below grade sanitary drain from nearest washroom - Cast Iron / MJ	70 LF	$32.00	$2,240.00	
97	Connection to existing suspended sanitary drain	1 NO	$150.00	$150.00	
98	Vent piping DWV/ Copper	1 LS	$500.00	$500.00	
99	Clean out and line items	1 NO	$250.00	$250.00	
	C1.15 Storm Drainage System				**$5,000.00**
	First Floor (Phase-2)				
100	Modify and supplement existing roof drainage system to facilitate roofing work c/w new roof drain and rain water leader piping	1 LS	$5,000.00	$5,000.00	

	C1.16 Natural Gas					**$4,250.00**
	First Floor Warehouse (Phase -1)					
101	Extend existing natural gas piping to new gas fired unit heaters	1	LS	$2,500.00	$2,500.00	
102	Painting and hook up connections to unit heaters	5	NO	$350.00	$1,750.00	
	C1.17 Other Plumbing Systems:					
	C1.17.1 - Selective/ General Demolition					**$1,250.00**
103	Disconnect, remove and dispose off existing plumbing fixtures c/w plumbing piping & cap as needed.					
	First Floor Warehouse (Phase -1)					
104	Disconnect, remove and dispose off plumbing fixtures including sink/ eyewash/ funnel & floor drains	5	NO	$50.00	$250.00	
105	Cut/ cap abandoned sanitary drain& vent piping to above fixtures	1	LS	$500.00	$500.00	
106	Cut back existing domestic water lines serving above fixtures	1	LS	$500.00	$500.00	
107	Concrete saw cut of floor - included in architectural section				Included	
	C1.18 General Accounts					**$2,793.60**
108	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit etc.	1	LS	$2,793.60	$2,793.60	
	TOTAL FOR - PLUMBING & DRAINAGE	**55,733**	**SF**	**$0.47**	**$26,073.60**	
	C1.2 FIRE PROTECTION					
	C1.21 Fire Protection Equipment					**$0.00**
109	Existing fire protection equipment to remain for reuse				Costing Base	
	C1.22 Fire Stand Pipe					**$2,000.00**
	First Floor Warehouse (Phase -1)					
110	Relocate existing fire hose reel c/w feed in stock & storage rooms	2	NO	$1,000.00	$2,000.00	
	C1.23 Sprinklers Protection					**$79,747.75**
111	Modify existing sprinkler coverage in accordance with NFPA / OBC/ Local code requirements as follows:				Information	
	First Floor Warehouse (Phase -1)					
112	Drain and refill existing sprinkler mains after modification work in storage areas	1	NO	$1,000.00	$1,000.00	
113	Modify/ adjust supplement existing sprinkler coverage c/w sprinkler heads, run outs and branch piping - Ordinary Hazard Group 2	14,361	SF	$1.75	$25,131.75	
	First Floor (Phase-2)					
114	Drain and refill existing sprinkler mains after modification work in ground floor office areas	1	NO	$1,000.00	$1,000.00	

115	Modify/ adjust supplement existing sprinkler coverage in office areas c/w sprinkler heads, run outs and branch piping - Light Hazard	20,064	SF	$1.50	$30,096.00	
116	Drain and refill existing sprinkler mains after modification work in ground floor shop areas	1	NO	$1,000.00	$1,000.00	
117	Modify/ adjust supplement existing sprinkler coverage to facilitate replacement of HVAC services in shop areas (meter/water operations/ existing storage/ future office) c/w sprinkler heads, run outs and branch piping - Ordinary Hazard Group 2 - separate price included in summary sheet	9,166	SF		Separate Price	
	Second Floor (Phase- 3)					
118	Drain and refill existing sprinkler mains after modification work in second floor office areas	1	NO	$1,000.00	$1,000.00	
119	Modify/ adjust supplement existing sprinkler coverage in office areas c/w sprinkler heads, run outs and branch piping - Light Hazard	11,680	SF	$1.50	$17,520.00	
120	Preaction sprinkler system single interlock for file storage area c/w preaction valve assembly	1	LS	$3,000.00	$3,000.00	
	C1.25 General Accounts					**$0.00**
121	Miscellaneous cost including hydraulic calculations, drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit - included in above rates				Included	
	TOTAL FOR - FIRE PROTECTION	**55,733**	**SF**	**$1.47**	**$81,747.75**	
	C1.3 HVAC					
	C1.31 Heat Generation - Boiler Plant					**$110,100.00**
122	Existing head end equipment including boilers and distribution system to remain as is. Assumed it is adequate in capacity to meet new architectural layout requirements.				Costing Base	
	First Floor (Phase-2)					
123	Rework on existing hydronic heating system including fin tube radiators, reheat coils and the like in offices as follows:					
124	Adjust, modify and/ or existing fin tube radiators at North perimeter wall	98	LF	$70.00	$6,860.00	
125	Add new fin tube radiators to East perimeter walls	66	LF	$100.00	$6,600.00	
126	Add new reheat coils in the ductwork for new interior private offices and meeting rooms	25	NO	$550.00	$13,750.00	
127	Extend hot water piping to new and / or relocated fin tube radiators c/w thermal insulation and connections to existing	1	LS	$3,000.00	$3,000.00	
128	New hook up connections for control valves for individual room thermostats controls	41	NO	$700.00	$28,700.00	
	Second Floor (Phase- 3)					
129	Rework on existing hydronic heating system including fin tube radiators, reheat coils and the like in offices as follows:					
130	Adjust, modify and/ or existing fin tube radiators at North perimeter wall	232	LF	$70.00	$16,240.00	
131	Add new fin tube radiators to East perimeter walls	72	LF	$100.00	$7,200.00	
132	Add new reheat coils in the ductwork for new interior private offices and meeting rooms	3	NO	$550.00	$1,650.00	

133	Extend hot water piping to new and / or relocated fin tube radiators c/w thermal insulation and connections to existing	1	LS	$3,000.00	$3,000.00	
134	New hook up connections for control valves for individual room thermostats controls	33	NO	$700.00	$23,100.00	
	C1.32 Cooling Generation - Chiller Plant					**$6,000.00**
135	Existing chilled water plant assumed to be adequate in capacity to meet new architectural layout				Costing Base	
136	Extend chilled water piping to new air handling units c/w thermal insulation	1	LS	$3,500.00	$3,500.00	
137	Hook-up connections to air handling unit c/w valves, gauzes, thermometer and the like	1	NO	$2,500.00	$2,500.00	
	C1.33 Air Distribution and Devices					**$177,520.00**
138	Modify existing air ductwork distribution for renovated areas as follows:					
	First Floor Warehouse (Phase -1)					
139	Shop Areas : Add new gas fired unit heaters c/w combustion and flue vent assembly	5	NO	$1,000.00	$5,000.00	
140	New ceiling stratification fans - 24" blades	3	NO	$600.00	$1,800.00	
141	New overhead doors	4	NO	$3,000.00	$12,000.00	
	First Floor (Phase-2)					
142	Ground Floor Offices: Remove/ relocate existing ductwork and terminals including Variable Air Volume (VAV) boxes, Galvanized steel sheet metal ductwork (thermally insulated), supply air grilles, balancing / fire/motorized dampers:	20,064	SF	$5.00	$100,320.00	
143	Install new HVAC system c/w new make up air units and ductwork distribution for existing areas to remain to get new HVAC (meter/water operations/ existing storage/ future office) as follows: Separate price included in summary sheet					
144	New air handling unit c/w hot water heating coil, chilled water cooling coil, supply & return air fan, filters and operating safety & controls-10,000 CFM capacity	1	NO		Separate Price	
145	Provide new Variable Air Volume (VAV) boxes, Galvanized steel sheet metal ductwork (thermally insulated), supply air grilles, balancing / fire/motorized dampers :					
145.1	- Future Office Space	715	SF		Separate Price	
145.2	- Existing Storage	3,143	SF		Separate Price	
145.3	- Water Operations	2,754	SF		Separate Price	
145.4	- Meter Shop	2,554	SF		Separate Price	
146	**Second Floor (Phase- 3)**					
147	Second Floor Offices: Remove/ relocate existing ductwork and terminals including Variable Air Volume (VAV) boxes, Galvanized steel sheet metal ductwork (thermally insulated), supply air grilles, balancing / fire/motorized dampers:	11,680	SF	$5.00	$58,400.00	
	C1.35 Noise and Vibration Systems					**$0.00**
148	Noise and vibration isolation is included with above equipment rates				Included	
	C1.36 Testing, Balancing and Commissioning					**$7,500.00**
	Balancing					
149	Adjust set and balance air & fluid flow rates to design requirements. Submit balancing reports	1	LS	$7,500.00	$7,500.00	

	Commissioning				
150	Factory testing, start up and demonstration is included in above equipment/ devices rates			Included	
	C1.37 Other HVAC Systems:				
	C1.37.1 Selective / General Demolition				**$0.00**
151	Disconnect, remove and dispose off existing air distribution from existing areas to remain to get new HVAC - separate price included in summary sheet	9,166 SF		Separate Price	
	C1.38 General Accounts				**$36,000.00**
152	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit	1 LS	$36,000.00	$36,000.00	
	TOTAL FOR - HVAC	**55,733 SF**	**$6.05**	**$337,120.00**	
	1.4 CONTROLS				
	C1.41 Controls Equipment				**$60,200.00**
153	Relocate and provide new HVAC controls to integrate in existing automation as follows				
	First Floor Warehouse (Phase -1)				
154	Install and wire thermostats supplied with gas fire unit heaters	5 NO	$200.00	$1,000.00	
	First Floor (Phase-2)				
155	Install control valves, sensors and thermostats for fin tube radiators and reheat coils	41 NO	$800.00	$32,800.00	
156	Install controls for new air handling units and fan powered / VAV boxes for shop areas - separate price included in summary sheet	1 LS		Separate Price	
	Second Floor (Phase- 3)				
157	Install control valves, sensors and thermostats for fin tube radiators and reheat coils	33 NO	$800.00	$26,400.00	
	C1.42 Other Controls Systems:				
	C1.43 General Accounts				**$0.00**
158	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office etc. - included with above rates			Included	
	TOTAL FOR - CONTROLS	**55,733 SF**	**$1.08**	**$60,200.00**	
	C2 ELECTRICAL				
	C2.1 SERVICES & DISTRIBUTION				
	C2.11 - Incoming Services and Switchboard				**$0.00**
159	Assumed existing services is adequate to meet new demand			Costing Base	
	C2.12 - Emergency Power				**$0.00**
160	Existing generator to remain as is			Costing Base	

	C2.13 - Distribution				**$0.00**
161	All low voltage wiring to mechanical HVAC devices by controls contractor			Information	
162	Distribution wiring is included with lighting fixtures rates below			Included	
	C2.14 - Motor Controls & Wiring				**$4,200.00**
	First Floor Warehouse (Phase -1)				
163	Connect line and load side wiring to disconnect switch supplied with mechanical equipment as follows:				
163.1	- New air handling unit	1 NO	$1,500.00	$1,500.00	
163.2	- Gas fired unit heaters	5 NO	$300.00	$1,500.00	
163.3	- overhead door heaters	4 NO	$300.00	$1,200.00	
	TOTAL FOR - SERVICES & DISTRIBUTION	**55,733 SF**	**$0.08**	**$4,200.00**	
	C2.2 Lights, Devices & Heating				
	C2.21 - Lighting				**$61,221.50**
	First Floor Warehouse (Phase -1)				
164	Adjust and / or add existing type "P"metal halide, industrial luminaries c/w aluminium reflectors for shop areas - high ceiling work	14,361 SF	$1.50	$21,541.50	
	First Floor (Phase-2)				
165	Ground floor offices: Relocate/ replace existing type "A" recessed, 2 X 4 - 3 lamps, fluorescent light fixtures with new	20,064 SF	$1.25	$25,080.00	
166	Adjust existing type "D" light fixtures industrial grade 4 ' long for existing areas to remain to get new HVAC (meter/water operations/ existing storage/ future office) - separate price included in summary sheet	9,166 SF		Separate Price	
	Second Floor (Phase- 3)				
167	Second floor offices: Relocate/ replace existing type "A" recessed, 2 X 4 - 3 lamps, fluorescent light fixtures with new	11,680 SF	$1.25	$14,600.00	
	C2.22 - Devices				**$81,439.25**
	First Floor Warehouse (Phase -1)				
168	Duplex receptacles c/w wiring for storage areas	14,361 SF	$1.25	$17,951.25	
	First Floor (Phase-2)				
169	Ground floor Offices: 120 V, 15A duplex receptacles c/w wiring - relocate/ add as needed to suit new architectural lavout	20,064 SF	$2.00	$40,128.00	
	Second Floor (Phase- 3)				
170	Second floor Offices: 120 V, 15A duplex receptacles c/w wiring - relocate/add as needed to suite new architectural lavout	11,680 SF	$2.00	$23,360.00	
	C2.23 - Heating				**$0.00**
171	Heating by mechanical division				
	TOTAL FOR - LIGHT, DEVICES & HEATING	**55,733 SF**	**$2.56**	**$142,660.75**	
	C2.3 Systems & Ancillaries				
	C2.31 - Fire Alarm				**$38,924.50**

	First Floor Warehouse (Phase -1)				
172	Adjust, relocate existing fire alarm attenuating devices as need to reconfigure storage areas	14,361 SF	$0.50	$7,180.50	
	First Floor (Phase-2)				
173	Adjust, relocate existing fire alarm attenuating devices as need to reconfigure office areas	20,064 SF	$1.00	$20,064.00	
	Second Floor (Phase- 3)				
174	Adjust, relocate existing fire alarm attenuating devices as need to reconfigure office areas	11,680 SF	$1.00	$11,680.00	
	C2.32 - Communication				**$52,450.75**
	First Floor Warehouse (Phase -1)				
175	Combination tele/data outlets c/w cable, jack, assemblies - relocate/ add as needed to suite new architectural layout	14,361 SF	$0.75	$10,770.75	
	First Floor (Phase-2)				
176	Combination tele/data outlets c/w cable, jack, assemblies - relocate/ add as needed to suite new architectural layout	20,064 SF	$1.25	$25,080.00	
177	Relocate existing data/ voice tray in the corridor ceiling to suit new architectural layout	1 LS	$1,000.00	$1,000.00	
	Second Floor (Phase- 3)				
178	Combination tele/data outlets c/w cable, jack, assemblies - relocate/ add as needed to suite new architectural layout	11,680 SF	$1.25	$14,600.00	
179	Relocate existing data/ voice tray in the corridor ceiling to suit new architectural layout	1 LS	$1,000.00	$1,000.00	
	C2.33 - Security				**$30,988.50**
	First Floor Warehouse (Phase -1)				
180	CCTV Camera, access card readers and the like	14,361 SF	$0.50	$7,180.50	
	First Floor (Phase-2)				
181	CCTV Camera, access card readers and the like	20,064 SF	$0.75	$15,048.00	
	Second Floor (Phase- 3)				
182	CCTV Camera, access card readers and the like	11,680 SF	$0.75	$8,760.00	
	C2.34 - General Accounts				**$40,000.00**
183	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office and overhead & profit	1 LS	$40,000.00	$40,000.00	
	TOTAL FOR - SYSTEMS & ANCILLARIES	**55,733 SF**	**$2.91**	**$162,363.75**	
	D SITE & ANCILLARY WORK				
	D1.1 - SITE WORK				
	D1.11 - Site Development				**$10,000.00**
184	Allowance to make finishes good or repairs to disturbed site areas	1 LS	$10,000.00	$10,000.00	

	D1.12 - Hard Surfaces				**$69,895.00**
185	New access roads (3 lanes) from "Rhode Drive" to this property c/w heavy duty asphalt paving, excavation, bedding, backfill and removal of existing landscaping / sods	4,083 SF	$15.00	$61,245.00	
186	Sawcut and joining asphalt with existing parking area	173 LF	$50.00	$8,650.00	
	D1.13 - Improvements				**$7,165.00**
187	New concrete curbs for access road	228 LF	$25.00	$5,700.00	
188	Joining curbs with existing	4 NO	$150.00	$600.00	
189	Sawcut and remove curbs at Rhodes Drive and Parking area	173 LF	$5.00	$865.00	
	D1.14 - Landscaping				**$0.00**
190	Assumed no works required			Costing Base	
	TOTAL FOR - SITE DEVELOPMENT	**1 LS**		**$87,060.00**	
	D1.2 - MECHANICAL SITE SERVICES				
	D1.21 - Water				**$0.00**
191	Assume no work required			Costing Base	
	D1.22 - Sanitary				**$0.00**
192	Assume no work required			Costing Base	
	D1.23 - Storm				**$15,000.00**
193	Minor allowance for new storm manhole, lateral piping and connection to existing storm sewer mains with-in the property line for new access road	1 LS	$15,000.00	$15,000.00	
194	Excavation, bedding and backfill is included in above rates			Included	
	D1.24 - Natural Gas				**$0.00**
195	Assume no work required			Costing Base	
	TOTAL FOR - MECHANICAL SITE SERVICES	**1 LS**		**$15,000.00**	
	D1.3 - ELECTRICAL SITE SERVICES				
	D1.31 - Power				**$0.00**
196	Assume no work required			Costing Base	
	D1.32 - Communication				**$0.00**
197	Assume no work required			Costing Base	
	D1.33 - Lighting				**$20,000.00**
198	Provisional for street light fixtures c/w pole, base and duct bank for new access road	1 LS	$20,000.00	$20,000.00	
	TOTAL FOR - ELECTRICAL SITE SERVICES	**1 LS**		**$20,000.00**	

	D2.1 - ANCILLARY WORK					
	D2.11 - Demolition					**$126,758.50**
	First Floor Warehouse (Phase -1)					
199	Selective/ general demolition:					
199.1	- exterior glazed partitions	958	SF	$10.00	$9,580.00	
199.2	- block masonry/drywall partitions	1,516	SF	$1.00	$1,516.00	
199.3	- single doors	5	NO	$75.00	$375.00	
199.4	- floor finishes	14,361	SF	$0.30	$4,308.30	
199.5	- miscellaneous fittings and fixtures	1	LS	$1,000.00	$1,000.00	
199.6	- allowance for temporary protection/dust partitions (not Req)				Costing Base	
199.7	- concrete saw cut of floor for removal of existing below grade sanitary collection piping	1	LS	$2,000.00	$2,000.00	
	First Floor (Phase-2)					
200	Selective/ general demolition:					
200.1	- remove wall at new curtainwall location	120	SF	$10.00	$1,200.00	
200.2	- create skylight opening6'0x8'0"	12	NO	$1,000.00	$12,000.00	
200.3	- block masonry/drywall partitions	12,175	SF	$1.50	$18,262.50	
200.4	- single doors	26	NO	$75.00	$1,950.00	
200.5	- floor finishes	12,624	SF	$0.30	$3,787.20	
200.6	- ceiling finishes	12,624	SF	$1.00	$12,624.00	
200.7	- miscellaneous fittings and fixtures	1	LS	$2,000.00	$2,000.00	
200.8	- allowance for temporary protection/dust partitions (installation and Removing)	1	LS	$25,000.00	$25,000.00	
200.9	- Wall opening for new ductwork for areas to remain with new HVAC system installed	1	LS	$1,000.00	$1,000.00	
	Second Floor (Phase- 3)					
201	Selective/ general demolition:					
201.1	- remove firespray and clean - separate price included in summary sheet	11,680	SF		Separate Price	
201.2	- interior glazed partitions	1,952	SF	$3.00	$5,856.00	
201.3	- block masonry/drywall partitions	8,935	SF	$1.00	$8,935.00	
201.4	- single doors	16	NO	$75.00	$1,200.00	
201.5	- floor finishes	6,665	SF	$0.30	$1,999.50	
201.6	- ceiling finishes	6,665	SF	$1.00	$6,665.00	
201.7	- miscellaneous fittings and fixtures	1	LS	$2,000.00	$2,000.00	
201.8	- allowance for temporary protection/dust partitions (not Req)				Costing Base	
202	Floor coring for hot water piping to serve fin tube radiators	1	LS	$3,500.00	$3,500.00	
	D2.12 - Hazardous Material					**$0.00**
203	Asbestos abatement - not in scope				Excluded	
	TOTAL FOR - ANCILLARY WORK	**33,650**	**SF**	**$3.77**	**$126,758.50**	
	D2.2 - ALTERATIONS					
	D2.21 - Alterations					**$15,000.00**
	First Floor (Phase-2)					
204	Swing space cost for relocation of office staff to assigned space during construction (within property)	1	LS	$10,000.00	$10,000.00	
	Second Floor (Phase- 3)					
205	Swing space cost for relocation of office staff to assigned space during construction (within property)	1	LS	$5,000.00	$5,000.00	
	TOTAL FOR - ALTERATIONS	**1**	**LS**		**$15,000.00**	
	Z GENERAL REQUIREMENTS & ALLOWANCES					
	Z1.1 - GENERAL REQUIREMENTS					
	Z1.11 - Supervision & Labour Expenses					**$263,000.00**

206	Miscellaneous cost including supervision/ subtrades co-ordination/ project management, co-ordination, clean up, tool rentals, consumables, site office, site access and temporary conditions -7.5%	1 LS	$186,000.00	$186,000.00	
207	Premium for construction phasing, difficulty factor to work with-in operational facility	1 LS	$62,000.00	$62,000.00	
208	Premium for material handling to second floor	1 LS	$15,000.00	$15,000.00	
	Z1.12 - Temporary Conditions				**$0.00**
209	Included with above rates			Included	
	Z1.13 - Permits, Insurance & Bonds				**$49,300.00**
210	Building permits & MTO approval & fees - By owner			Excluded	
211	General liability and builder's risk coverage	1 LS	$20,000.00	$20,000.00	
212	Labour and material performance bond	1 LS	$29,300.00	$29,300.00	
	TOTAL FOR - GENERAL REQUIREMENTS	**1 LS**		**$312,300.00**	
	Z1.2 - FEES				
	Z1.11 - General Contractor Fees				**$125,600.00**
213	Contractor fees for overhead & profit - 4.5%	1 LS	$125,600.00	$125,600.00	
	TOTAL FOR - FEES	**1 LS**		**$125,600.00**	
	Z2.1 - ALLOWANCES				
	Z2.11 - Design Allowances				**$291,700.00**
214	Design contingency to cover design gap for design refinement & completion until further design stage - 10%	1 LS	$291,700.00	$291,700.00	
	Z2.21 - Escalation Allowances				**$0.00**
215	Cost based on current 1st Quarter 2018 construction values			Costing Base	
	Z2.31 - Construction Allowances				**$160,458.97**
216	Construction contingency for post construction changes (change orders/ change directives) - 5%	1 LS	$160,458.97	$160,458.97	
	TOTAL FOR - ALLOWANCES	**1 LS**		**$452,158.97**	

Alpha Cost Consultants
www.alphacostcon.com

Class "C" Cost Estimate Rev.1.0

Server Room Relocation Feasibility Study

3665 Wyandotte Street East, Windsor

Prepared For : BAIRD /AE Architecture + Engineering

Alpha Cost Consultants Inc.
COST CONSULTANTS | QUANTITY SURVEYORS | PROJECT MANAGERS

510 Rowntree Dairy Road, Unit 3B, Woodbridge, ON, L4L 8H2
Phone: 416-855-2414
Email: info@alphacostcon.com , www.alphacostcon.com

March 5, 2018 **Project # 18006**

BAIRD / AE
Architecture + Engineering
1000-267 Pelissier Street
Windsor, ON, N9A 4K4
Ph-519-326-6161 ext. 201

Kind Attn: [redacted]

Reference - **"Server Room Feasibility Study - Class "C" Cost Estimate Rev.1.0**

Dear Adam,

Please find enclosed our revised Class "C" Cost Estimate for the above project.

This estimate was prepared based on drawings and information provided by BAIRD/ AE Architecture + Engineering received on January 23, 2018. Architectural drawings prepared by, BAIRD/ AE Architecture + Engineering .

This estimate is meant to be indicative of the fair market value for renovations of existing space to server room. This estimate is not intended to be the prediction of the lowest bid and should be representative of the median bid amount received.

We recommend that the owner and/or the design team carefully review the cost estimate report, including line item descriptions, unit price clarifications, exclusions, inclusions, assumptions, contingencies, escalation, and mark-ups.

Warm Regards,

[redacted]

[redacted] **PQS, MRICS, B.Eng;**
Partner
Alpha Cost Consultants Inc.
Encl: (Class "C" Cost Estimate Rev.1., March 5, 2018)

TABLE OF CONTENTS — PAGE

1. PROJECT INFORMATION

1.1 Project Type and Location

This project scope consists of renovations to existing space to new server room at existing water treatment building located in the City of Windsor.

Location:

Windsor, ON.

1.2 Project Building Class

Canadian Institute of Quantity Surveyors (CIQS) building class for this project is Category 4 / 4.1 Defined Purpose Office Building

1.3 Project Delivery Method

Project will be tendered with standard stipulated sum contract method.

2. ESTIMATE METHODOLOGY

2.1 Estimate Class

Class "C" Cost Estimate is intended to establish an indicative estimate of the hard construction costs based on the level of design information including floor plans, programme areas, design memorandum, test reports, site plans and other project specific requirements provided. This prepared estimate is our opinion on total hard construction cost of this project is based on current industry and market value for this type of project located in **City of Windsor ON.**

The accuracy of the estimate based on the documentation & level of information provided and design stage is intended to be +/- 5 to 20%. This is based on standard industry guidelines derived from the Federal Government definition of Estimate Class A/ B/ C/ D. Design contingency and construction contingency (post contract) has been included as % of total costs.

2.2 Quantity Take-Offs

Based on the project design information available at this time, we have measured quantities in accordance with CIQS elemental method of measurement, to establish a bill of material required for construction where possible and; applied our technical skills & expertise to bridge necessary design gaps to establish cost of associated elements; based on experience with project of similar nature and type.

2.3 Unit Rates

The unit rates developed for our estimate include material, labour, equipment, tools and contractor's overhead and profit specific to **City of Windsor, ON.**

The unit rates for each of the elements are developed specifically based on current industry median costs for the type of design, construction, and materials specified.

2.4 Cost Base

The site specific cost for this estimate is **3665 Wyandotte Street East, Windsor, ON.**

Pricing is based on competitive tender results with a minimum of Four bid submissions at each major trade level. Tenders receiving less submissions (occasionally three) historically tend to have a much higher risk of an overrun in cost when compared to the budget established in an estimate.

Pre-qualification list for contractors may often incur additional financial costs subsequent to reduced level of competitiveness.

2.5 General Requirements and Fees

The General Requirements and Fees for the Contractor are included as a percentage of the hard construction cost. These costs include supervision and labour, access to the site, site

accommodations, site protection, temporary utilities, clean up, equipment, and other miscellaneous project requirements.

2.6 Bonding and Insurance

We have included the median estimated costs for 50% performance and 50% labour & material. These are the standard bonding requirements commonly requested by the owner.

The estimate includes an allowance for general liability and builder's risk insurance based on an average cost per $1,000 of estimated hard construction costs. The actual insurance costs would be subjected to the insurance requirements.

2.7 Soft Costs

The estimated ***soft costs have been included as suggested by the design team.*** Please refer to Soft Cost Summary for inclusions and exclusions.

These costs include items traditionally funded by the owner and separate from the hard construction costs which would be applicable to the contractor. The soft costs include items such as consultant fees; disbursements; project management fees; independent inspection and testing; legal fees; permits and development charges; operational and moving expenses; financing and loan fees; owner supplied fixtures, and equipment; and Harmonized Sales Tax.

We recommend owner and design team to consider these costs to establish a complete construction budget for this project.

2.8 Taxes

Provision has been made for the Harmonized Sales Tax (HST) in our estimate.

2.9 Design Documents

Following is the list of design documents provided.

Reference	Document Description	Revision Date
Drawings	Architectural plans (2 sheets)	NA
Emails	Various emails	Jan.23 to Feb. 7,2018

3. CONTINGENCIES

A design contingency and pricing contingency of **10%** has been included as% of total costs.

The design contingency is an allowance to cover probable cost associated to bridge the minor design gap at this design stage and; anticipated to reduce with design advancement of the project during remaining design stage.

3.2 Escalation

No provisions for escalation has been made. Construction cost is based on **1st quarter 2018 Construction values.**

3.3 Construction Contingency (Post Contract Changes)

Construction contingency for post contract changes that may occur after the project is tendered to cover the cost of anticipated change orders, has been included as **5%** of total construction cost.

It is recommended that owner and design team carefully consider this allowance and include in program budget.

4. LIMITATIONS OF THE REPORT

4.1 Probable Costs

Alpha Cost Consultants Inc. cannot control the cost of construction or competitive bidding and market conditions. This opinion of probable cost of construction is based on our experience, qualifications, and best judgement with the construction industry. **Alpha Cost Consultants Inc.** cannot guarantee that proposals or actual construction costs will not vary from this or subsequent estimates.

Alpha Cost Consultants Inc. has prepared this report based on CIQS guidelines and standard industry accepted practices and principles.

4.2 Report use

This report has been prepared for use of owner; any duplication or transfer to third party will require consent from **Alpha Cost Consultants Inc.**

Alpha Cost Consultant Inc. recommends that the owner and design team carefully review the report including inclusions, exclusions, assumptions and notify **Alpha Cost Consultant Inc.** for any deviations including errors and omissions within 30 days of receipt of this report.

4.3 Canadian Anti Spam Legislation (CASL)

We comply with CASL requirements for providing our services. By receiving this report in electronic format via email you provide consent for email correspondence.

If you wish not to receive any email please notify us so we can unsubscribe you from future electronic correspondence list.

5. SCOPE CLARIFICATIONS

5.1 Assumptions

Architectural / Structural:

- Various assumptions were made based on the design information available and our experience with projects of a similar nature. Please refer to the specific items within the estimate for the detailed assumptions made.
- Our estimate is based on working during normal hours.
- Work to be performed by fair wage labour.
- We made assumptions for ceiling, wall and; floor finishes based on typical server room requirements.
- Our estimate includes complete replacement of interior partitions, floor and ceiling finishes in existing ~~Ozone equipment room.~~
- Our estimate includes access raised floor (height 3') for cooling and electrical services requirements..
- Server room equipment including servers. rack etc. to be provided by owner.
- No site work is anticipated hence as such has not been included.

Mechanical:

- Our mechanical scope estimate is based on architectural layout. Mechanical drawings and specification for this feasibility study have not been developed or provided.
- Computer room air conditioning units (CRAC) - 1 + stand-by has been included in our estimate.
- Double interlock fire suppression system is assumed to be required and has been included in our estimate.
- Please refer to other scope specific assumptions within estimate.

Electrical:

- Our electrical scope estimate is based on architectural layout. Electrical drawings and specification for this feasibility study have not been developed or provided.
- We assume existing head end equipment including incoming services, transformer and generator to remain as is.
- Please refer to other scope specific assumptions within estimate.

5.2 Exclusions

- Accelerated or prolonged construction schedule.
- Loose furniture, furnishings and other equipment.
- Data room equipment

6. BUILDING AREA

The following usable floor area of construction has been measured; based on CIQS methods of measurement. The area was measured electronically and checked longhand by dimensioning and scaling. The area is reported for general information for unit cost reference and reporting purpose only.

6.1 Summary of Usable Floor Area

BUILDING AREA		
Area Description	**Floor Elevation**	**Usable Floor Area (Sqft.)**
First Floor - Server Room	NA	500
Total Usable Floor Area (Sqft)		**500**

Project # 18006
Server Room Relocation, Windsor Utilities Commission
Class "C" Cost Estimate Rev.1.
March 5, 2018

Alpha Cost Consultants Inc.

Master Cost Summary	Gross Floor Area	500 SF			
Hard Construction Costs	**GFA (SF)**	**Unit (Cost/SF)**	**Sub - Elements Total**	**Element Total**	**% of Total**
A Building Shell					
A2 Structure	500	$11.50		$5,750.00	1.64%
A2.1 Lowest Floor Construction		$1.50	$750.00		
A 2.3 Roof Construction		$10.00	$5,000.00		
A3 Exterior Enclosure	500	$8.88		$4,440.00	1.27%
A3.2 - Wall Above Grade		$8.88	$4,440.00		
A3.4- Roof Finishes		$0.00	$0.00		
B Interiors					
B1 Partitions & Doors	500	$9.66		$4,830.00	1.38%
B1.1 - Partitions		$6.86	$3,430.00		
B1.2 - Doors & Hardwares		$2.80	$1,400.00		
B2 Finishes	500	$25.82		$12,911.00	3.69%
B2.1 - Floor Finishes		$10.00	$5,000.00		
B2.2 - Ceiling Finishes		$12.00	$6,000.00		
B2.3 - Wall Finishes		$3.82	$1,911.00		
B3 Fittings & Equipment	500	$50.00		$25,000.00	7.14%
B3.1 - Fittings & Fixtures		$30.00	$15,000.00		
B3.2 - Equipment		$20.00	$10,000.00		
C Services					
C1 Mechanical	500	$304.48		$152,240.00	43.49%
C11 Plumbing & Drainage		$10.35	$5,175.00		
C12 Fire Protection		$20.00	$10,000.00		
C13 HVAC		$260.13	$130,065.00		
C14 Controls		$14.00	$7,000.00		
C2 Electrical	500	$87.40		$43,700.00	12.48%
C21 Service & Distribution		$40.40	$20,200.00		
C22 Lighting, Devices & Heating		$10.60	$5,300.00		
C23 Systems & Ancillaries		$36.40	$18,200.00		
D Site & Ancillary Work					
D1 Site Work	500	$0.00		$0.00	0.00%
D2 Ancillary Work	500	$5.00		$2,500.00	0.71%
D21 Demolition		$5.00	$2,500.00		
Z General Requirements & Allowances					
Z1 General Requirements	500	$103.40		$51,700.00	14.77%
Z11 General Requirements		$66.40	$33,200.00		
Z12 Fees		$37.00	$18,500.00		
Z2 Allowances	500	$94.00		$47,000.00	13.43%
Z21 Design Allowances		$60.60	$30,300.00		
Z22 Escalation Allowances		$0.00	$0.00		
Z23 Construction Allowances		$33.40	$16,700.00		
Total Hard Construction Cost		**$700.14**		**$350,071.00**	**100%**

Project Work Schedule	
Total Manhours	1,650
Estimate of construction time (project schedule based on 4 Men crew)	2 to 3 Months

Soft Cost List

Soft Costs List	Cost
Consultant Fees (Architect, Mechanical, Electrical and Structural Consultant) - 5% of construction cost	$17,503.55
Soil Testing - not required	Excluded
Disbursements - by owner	Excluded
Construction or Project Management Fees	Excluded
Independent Inspection and Testing - by owner, if required	Excluded
Third Party Commissioning - by owner, if required	Excluded
Legal Fees - by owner	Excluded
Permits and Development Charges - by owner	Excluded
Operational Expenses - by owner	Excluded
Financing , Loan Fees and Interest Charges - by owner	Excluded
Owner Supplied Furnishings, Fixtures, and Equipment - by owner	Excluded
Land Acquisition Costs	Not applicable
Harmonized Sales Tax - 13%	$47,784.69
Soft Costs Total	**$65,288.24**

Hard cost + Soft Cost Total	**$415,400.00**

Project # 18006
Server Room Relocation, Windsor Utilities Commission
Class "C" Cost Estimate Rev.1.
March 5, 2018

Alpha Cost Consultants Inc.

Elemental Cost Summary						Gross Floor Area	500 SF		
CIQS Code		Ratio GFA	Element Quantity	Unit	Unit Rate	Sub Element Total	Element Total	Unit Cost /GFA	% of Total
A2	Structure						$5,750.00	$11.50	1.64%
A2.1	- Lowest Floor Construction	1.00	500	SF	$1.50	$750.00		$1.50	
A2.3	- Roof Construction	1.00	500	SF	$10.00	$5,000.00		$10.00	
A3	Exterior Enclosure						$4,440.00	$8.88	1.27%
A3.2	- Walls Above Grade	0.89	444	SF	$10.00	$4,440.00		$8.88	
A3.4	- Roof Finish	1.00	500	SF	$0.00	$0.00		$0.00	
B1	Partitions & Doors						$4,830.00	$9.66	1.38%
B1.1	- Partitions	0.65	324	SF	$10.59	$3,430.00		$6.86	
B1.2	- Doors	0.04	21	SF	$66.67	$1,400.00		$2.80	
B2	Finishes						$12,911.00	$25.82	3.69%
B2.1	- Floor Finishes	1.00	500	SF	$10.00	$5,000.00		$10.00	
B2.2	- Ceiling Finishes	1.00	500	SF	$12.00	$6,000.00		$12.00	
B2.3	- Wall Finishes	2.18	1,092	SF	$1.75	$1,911.00		$3.82	
B3	Fittings & Equipment						$25,000.00	$50.00	7.14%
B3.1	- Fittings & Fixtures	1.00	500	SF	$30.00	$15,000.00		$30.00	
B3.2	- Equipment	1.00	500	SF	$20.00	$10,000.00		$20.00	
C	Services:								
C1	Mechanical						$152,240.00	$304.48	43.49%
C11	- Plumbing & Drainage	1.00	500	SF	$10.35	$5,175.00		$10.35	
C12	- Fire Protection	1.00	500	SF	$20.00	$10,000.00		$20.00	
C13	- HVAC	1.00	500	SF	$260.13	$130,065.00		$260.13	
C14	- Controls	1.00	500	SF	$14.00	$7,000.00		$14.00	
C2	Electrical						$43,700.00	$87.40	12.48%
C21	- Service & Distribution	1.00	500	SF	$40.40	$20,200.00		$40.40	
C22	- Lighting, Devices & Heating	1.00	500	SF	$10.60	$5,300.00		$10.60	
C23	- Systems & Ancillaries	1.00	500	SF	$36.40	$18,200.00		$36.40	
D	Site & Ancillary Work:								
D1	Site Work						$0.00	$0.00	0.00%
D2	Ancillary Work						$2,500.00	$5.00	0.71%
D21	- Demolition		500		$5.00	$2,500.00		$5.00	
Z	General Requirements & Allowances:								
Z1	General Requirements						$51,700.00	$103.40	14.77%
Z11	- General Requirements	1.00	500	SF	$66.40	$33,200.00		$66.40	
Z12	- Fees	1.00	500	SF	$37.00	$18,500.00		$37.00	
Z2	Allowances						$47,000.00	$94.00	13.43%
Z21	- Design Allowances	1.00	500	SF	$60.60	$30,300.00		$60.60	
Z22	- Escalation Allowances	1.00	500	SF	$0.00	$0.00		$0.00	
Z23	- Construction Allowances	1.00	500	SF	$33.40	$16,700.00		$33.40	
	Total Hard Construction Cost						**$350,071.00**	**$700.14**	**100.00%**

	Description	Quantity	Unit of Measurement	Rate	Subtotal	Total
	A. SHELL					
	A2.1 STRUCTURE- Lowest Floor Construction					**$750.00**
1	Allowance for patching slab on grade and level (after removal of existing water treatment)	500	SF	$1.50	$750.00	
	Total Cost - LOWEST FLOOR CONSTRUCTION	**500**	**SF**	**$1.50**	**$750.00**	
	A2.3 STRUCTURE - Roof Construction					
	A 2.31 Roof Construction					**$5,000.00**
2	Roofing work associated with installation of new condensers for CRAC units c/w openings, supports, curbs & flashings	1	NO	$5,000.00	$5,000.00	
	Total Cost - ROOF CONSTRUCTION	**500**	**SF**	**$10.00**	**$5,000.00**	
	A3.2 Wall Above Grade					
	A3.21 - Wall Above Grade					**$4,440.00**
3	Allowance to make good exterior wall of server room	444	SF	$10.00	$4,440.00	
	Total Cost - WALLS ABOVE GRADE	**444**	**SF**	**$10.00**	**$4,440.00**	
	A3.4 Roof Covering					
	A3.41- Roofing					**$0.00**
4	Provisional allowance for roofing work associated with condenser units - included with roofing work				Included	
	Total Cost - ROOF FINISHES	**500**	**SF**	**$0.00**	**$0.00**	
	B INTERIORS					
	B1.1 Partitions & Doors					
	B1.11 - Partitions					**$3,430.00**
5	New drywall partitions c/w metal studs, batt insulation and gypsum board for interior walls. Assume new wall be required	324	SF	$7.50	$2,430.00	
6	Allowance for rough carpentry & caulking	1	LS	$1,000.00	$1,000.00	
	Total Cost - PARTITIONS	**324**	**SF**	**$10.59**	**$3,430.00**	
	B1.2 Doors					
	B1.21 - Doors & Hardwares					**$1,400.00**
7	Interior door, solid core wood door, hardware and paint finish - single panel	1	NO	$1,400.00	$1,400.00	
	Total Cost - DOORS	**21**	**SF**	**$66.67**	**$1,400.00**	
	B2.1 Finishes					
	B2.11 - Floor Finishes					**$5,000.00**

8	Polyaspartic (resinous) flooring to data room requirements	500 SF	$7.00	$3,500.00	
9	Perforated floor tiles for directional air flow requirements	1 NO	$500.00	$500.00	
10	Make good floor finishes at corridor adjacent to the server room	1 LS	$1,000.00	$1,000.00	
	Total For - FLOOR FINISHES	**500 SF**	**$10.00**	**$5,000.00**	
	B2.21 - Ceiling Finishes				**$6,000.00**
11	Suspended ceiling c/w ACT and suspension system	500 SF	$9.00	$4,500.00	
12	Make good ceilings at corridor adjacent to the server room	1 LS	$1,500.00	$1,500.00	
	Total For - CELING FINISHES	**500 SF**	**$12.00**	**$6,000.00**	
	B2.31 - Wall Finishes				**$1,911.00**
13	Paint finish to exterior wall (inside)	444 SF	$1.75	$777.00	
14	Paint finish to interior walls (inside and outside of the server room)	648 SF	$1.75	$1,134.00	
	Total For - WALL FINISHES	**1,092 SF**	**$1.75**	**$1,911.00**	
	B3.1 Fittings & Equipment				
	B3.11 Fittings & Fixtures				**$15,000.00**
	B3.11 - Metals				
15	Allowance for miscellaneous metals including lintels, bracing etc.	1 LS	$2,000.00	$2,000.00	
	B3.12 - Millwork				
16	Shelving to data closets	1 NO	$2,500.00	$2,500.00	
	B3.13 - Specialities				
17	Raised access floor tile system c/w steel supports & beam and platform - 3' high	500 SF	$18.00	$9,000.00	
18	Extra structural supports for UPS/ transformer or other devices	1 NO	$1,000.00	$1,000.00	
19	Door signage	1 LS	$500.00	$500.00	
	Total For - FITTINGS & FIXTURES	**500 SF**	**$30.00**	**$15,000.00**	
	B3.2 Equipment				
	B3.21 - Equipment				**$10,000.00**
20	Data racks and equipment - install only. Will be relocated from current location	1 LS	$10,000.00	$10,000.00	
	Total For - EQUIPMENT	**500 SF**	**$20.00**	**$10,000.00**	

C1 MECHANICAL

C1.11 PLUMBING & DRAINAGE

	C1.13 - Domestic Water				**$2,000.00**
21	Extend domestic water piping (within immediate vicinity) to CRAC units humidifier c/w back flow preventor assembly	1 NO	$2,000.00	$2,000.00	
	C1.14 Sanitary Waste & Vent				**$2,500.00**
22	Condensate drain from CRAC units c/w connection to existing sanitary drain collection with in the vicinity	1 NO	$2,500.00	$2,500.00	
	C1.18 General Accounts				**$675.00**
23	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit	1 LS	$675.00	$675.00	
	TOTAL FOR - PLUMBING & DRAINAGE	**500 SF**	**$10.35**	**$5,175.00**	
	C1.2 FIRE PROTECTION				
	C1.23 Sprinklers Protection				**$9,000.00**
	Preaction double interlock fire suppression system				
24	Preaction system c/w double interlock valve, compressor, control panel etc.	1 NO	$7,500.00	$7,500.00	
25	Sprinkler coverage c/w sprinkler branch piping, run outs and sprinkler heads	500 SF	$3.00	$1,500.00	
	C1.24 Specialities				**$0.00**
26	Very Early Smoke Detection Apparatus (VESDA) system - assume not required			Excluded	
	C1.25 General Accounts				**$1,000.00**
27	Miscellaneous cost including hydraulic calculations, drawings, co-ordination, clean up, tool rentals, consumables, site office et, overhead & profit	1 LS	$1,000.00	$1,000.00	
	TOTAL FOR - FIRE PROTECTION	**500 SF**	**$20.00**	**$10,000.00**	
	C1.3 HVAC				
	C1.33 Air Distribution and Devices				**$113,100.00**
28	Computer room air conditioning unit (CRAC) refrigerant based, dual refrigerant circuit c/w humidifier, floor stand, return air plenum and; operating controls & safety (1+stand by for redundancy) - lead/ lag operation - 10 Tons each equal to Liebert DSE model	2 NO	$50,000.00	$100,000.00	
29	Outdoor air cooled condensers, assumed units to be located above server room at the second floor roof	2 NO		Included	
30	Aluminium water dam and leak detection assembly for CRAC unit	2 NO	$1,800.00	$3,600.00	
31	Interconnection refrigerant piping between indoor CRAC and condenser units - 200 LF of liquid & gas line	1 NO	$8,000.00	$8,000.00	
32	Minor ductwork distribution from CRAC units to data equipment c/w floor diffusers, return air plenum connections and dampers	1 NO	$1,500.00	$1,500.00	

	C1.36 Testing, Balancing and Commissioning				**$0.00**
	Balancing				
33	Air balancing is included in above rates			Included	
	Commissioning				
34	Start-up testing and commission is included in above equipment rates			Included	
	C1.37 Other HVAC Systems:				
	C1.38 General Accounts				**$16,965.00**
35	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit	1 LS	$16,965.00	$16,965.00	
	TOTAL FOR - HVAC	**500 SF**	**$260.13**	**$130,065.00**	
	1.4 CONTROLS				
	C1.41 Controls Equipment				**$7,000.00**
36	Install controls supplied with CRAC units	2 NO	$2,000.00	$4,000.00	
37	Leak detection system alarm and controls	2 NO	$1,500.00	$3,000.00	
	TOTAL FOR - CONTROLS	**500 SF**	**$14.00**	**$7,000.00**	
	C2 ELECTRICAL				
	C2.1 SERVICES & DISTRIBUTION				
	C2.11 - Main Service				**$0.00**
38	Assume existing service is adequate to meet new server room requirement			Excluded	
	C2.12 - Emergency Power				**$0.00**
39	Assumed generator and or UPS battery unit is existing and adequate in capacity to meet new server room requirements			Excluded	
	C2.13 - Distribution				**$15,000.00**
40	Transformer, panel and distribution feeder for CRAC units as required	1 NO	$15,000.00	$15,000.00	
	C2.14 - Motor Controls & Wiring				**$5,200.00**
41	Power connection to fire suppression system	1 NO	$500.00	$500.00	
42	Power connections to CRAC units c/w line & load side wiring and disconnect switch	2 NO	$1,500.00	$3,000.00	
43	Power connections to CRAC units c/w line & load side wiring and weatherproof disconnect	2 NO	$850.00	$1,700.00	
	TOTAL FOR - SERVICES & DISTRIBUTION	**500 SF**	**$40.40**	**$20,200.00**	
	C2.2 Lights, Devices & Heating				
	C2.21 - Lighting				**$3,800.00**
44	2'X 4' recessed light fixtures c/w wiring & supports	10 NO	$350.00	$3,500.00	

45	Exit pictograms	2 NO	$150.00	$300.00	
	C2.22 - Devices				**$1,500.00**
46	Duplex receptacles c/w wiring	10 NO	$150.00	$1,500.00	
	C2.23 - Heating				**$0.00**
47	By mechanical			Information	
	TOTAL FOR - LIGHT, DEVICES & HEATING	**500 SF**	**$10.60**	**$5,300.00**	
	C2.3 Systems & Ancillaries				
	C2.31 - Fire Alarm				**$4,200.00**
48	Existing fire alarm equipment to remain for reuse			Costing Base	
49	Fire alarm smoke detectors	4 NO	$250.00	$1,000.00	
50	Fire alarm smoke detectors underfloor c/w bracket	4 NO	$300.00	$1,200.00	
51	Fire alarm heat detectors	5 NO	$250.00	$1,250.00	
52	Fire alarm strobe/ horn	1 NO	$750.00	$750.00	
	C2.32 - Communication				**$5,000.00**
53	Telephone / data outlets c/w CAT6 cabling system within server room	1 NO	$5,000.00	$5,000.00	
	C2.33 - Security				**$4,200.00**
54	Security surveillance CCTV	1 NO	$3,000.00	$3,000.00	
55	Card readers at door	1 NO	$1,200.00	$1,200.00	
	C2.34 - Other Systems & Ancillaries				**$4,800.00**
56	Miscellaneous cost including shop drawings, co-ordination, clean up, tool rentals, consumables, site office, overhead & profit	1 LS	$4,800.00	$4,800.00	
	TOTAL FOR - SYSTEMS & ANCILLARIES	**500 SF**	**$36.40**	**$18,200.00**	
	D SITE & ANCILLARY WORK				
	D1.1 - SITE WORK				
57	No site work is anticipated			Costing Base	
	TOTAL FOR - SITE DEVELOPMENT	**1 LS**		**$0.00**	
	D2.1 - ANCILLARY WORK				
	D2.11 - Demolition				**$2,500.00**
58	Demolish existing partitions, flooring, finishes for new server room	500 SF	$5.00	$2,500.00	
	D2.12 - Hazardous Material				**$0.00**
59	Asbestos abatement is excluded from our scope			Excluded	

	TOTAL FOR - ANCILLARY WORK	**1 LS**		**$2,500.00**	
	Z GENERAL REQUIREMENTS & ALLOWANCES				
	Z1.1 - GENERAL REQUIREMENTS				
	Z1.11 - Supervision & Labour Expenses				**$27,700.00**
60	Miscellaneous cost including supervision/ subtrades co-ordination/ project management, co-ordination, clean up, tool rentals, consumables, site office, site access and temporary conditions -8.5%	1 LS	$21,400.00	$21,400.00	
61	Premium for difficulty factor to work in operational facility and after hours work for tie-ins, noisy work etc.	1 LS	$6,300.00	$6,300.00	
	Z1.12 - Temporary Conditions				**$0.00**
62	Included with above rates			Included	
	Z1.13 - Permits, Insurance & Bonds				**$5,500.00**
63	Permits - by owner			Excluded	
64	General liability and builder's risk coverage	1 LS	$2,200.00	$2,200.00	
65	Labour and material performance bond	1 LS	$3,300.00	$3,300.00	
	TOTAL FOR - GENERAL REQUIREMENTS	**1 LS**		**$33,200.00**	
	Z1.2 - FEES				
	Z1.11 - General Contractor Fees				**$18,500.00**
66	Contractor fees for overhead & profit - 6.5%	1 LS	$18,500.00	$18,500.00	
	TOTAL FOR - FEES	**1 LS**		**$18,500.00**	
	Z2.1 - ALLOWANCES				
	Z2.11 - Design Allowances				**$30,300.00**
67	Design contingency to cover design gap for design refinement & completion until further design stage - 10%	1 LS	$30,300.00	$30,300.00	
	Z2.21 - Escalation Allowances				**$0.00**
68	Cost based on current 1st Quarter 2018 construction values			Excluded	
	Z2.31 - Construction Allowances				**$16,700.00**
69	Construction contingency for post construction changes (change orders/ change directives) - 5%	1 LS	$16,700.00	$16,700.00	
	TOTAL FOR - ALLOWANCES	**1 LS**		**$47,000.00**	

Appraisal Report
of
787 Ouellette Avenue
Windsor, Ontario

Prepared For:
Enwin Utilities

Prepared By:
[redacted] AACI, P.App.
F.R. Jordan and Associates

Effective Date:
October 12, 2017

Report Date:
November 1, 2017

F.R. Jordan & Associates
3005 Marentette Avenue
Suite #120
Windsor, Ontario
N8X 4G1

[redacted] AACI, P.App.,FRI (1938-2006)
[redacted] AACI, P.App.
[redacted] B.E.S., AACI, P.App.
[redacted] AACI, P.App

[redacted]
[redacted]

November 1, 2017

Enwin Utilities
4545 Rhodes Drive
Windsor, Ontario

Attention: [redacted], Manager of Procurement & Supply Chain

Dear [redacted]:

Re: 787 Ouellette Avenue, Windsor, Ontario

In accordance with your request, I have completed an appraisal report of 787 Ouellette Avenue, Windsor, Ontario, legally described as follows:

Plan 256, Lots 15, 16, 17 and 18, Block 2, City of Windsor, Essex County, Ontario

The purpose of this appraisal is to estimate the market value, of the fee simple interest, of the subject property on October 12, 2017. As result of the analysis and interpretation of the accumulated data in this report, my estimate of the market value of the subject property is as follows:

$1,965,000
One Million Nine Hundred and Sixty Five Thousand Dollars

This estimate is subject to the limiting conditions attached to this appraisal and to which the reader's attention is specifically directed. This narrative appraisal report is prepared specifically for Enwin Utilities to estimate the Market Value for decision making purposes. Attached is the report of 54 pages.

Sincerely,

F. R. Jordan & Associates

[redacted]

[redacted], AACI, P.App.

PHOTOGRAPHS OF SUBJECT PROPERTY

FRONT VIEW OF BUILDING

REAR VIEW OF BUILDING

PHOTOGRAPHS OF SUBJECT PROPERTY

PARKING LOT

SOUTH ELEVATION OF BUILDING & REAR PARKING

PHOTOGRAPHS OF SUBJECT PROPERTY

MAIN FLOOR -FOYER

OPEN OFFICE AREA

PHOTOGRAPHS OF SUBJECT PROPERTY

SECOND FLOOR STAFF LUNCH ROOM

SECOND FLOOR STAFF LUNCH ROOM

PHOTOGRAPHS OF SUBJECT PROPERTY

EXECUTIVE OFFICE - SECOND FLOOR

BOARDROOM - SECOND FLOOR

PHOTOGRAPHS OF SUBJECT PROPERTY

BASEMENT LEVEL - MECHANICAL ROOM

MEETING ROOM - BASEMENT

PHOTOGRAPHS OF SUBJECT PROPERTY

OUELLETTE AVENUE - VIEW NORTH

OUELLETTE AVENUE - VIEW SOUTH

PHOTOGRAPHS OF SUBJECT PROPERTY

PELISSIER STREET - VIEW NORTH

ELLIOTT STREET - VIEW EAST

EXECUTIVE SUMMARY

Client:	Enwin Utilities
Address of Property:	787 Ouellette Avenue, Windsor, Ontario
Effective Date of Appraisal:	October 12, 2017
Report Date:	November 1, 2017
Date of Inspection:	October 12, 2017
Purpose of Appraisal:	To estimate market value
Size of Land:	170.83' x 180.0' - 30,749 ft²
Size of Improvements:	Main Floor - 11,555 ft² (Incl. Elevator Rm.) 2nd Floor - 10,040 ft² 3rd Floor - 10,105 ft² Basement - 11,897 ft² (Incl. Elevator Rm.) Total - 43,597 ft²
Existing Use:	Office Uses
2017 Assessment:	$2,445,250
2017 Taxes:	$115,950.06
Official Plan:	Mixed Use - Very High Profile Area & Medium Profile Area
Zoning:	CD 3.1 - Commercial
Highest and Best Use (As Vacant)	Commercial Development
(As Improved)	Existing Use
Value Indicated by Cost Approach:	N/A
Value Indicated by Direct Comparison Approach:	$1,962,000
Value Indicated by Income Approach:	$2,011,000
Final Estimate of Market Value:	$1,965,000

TABLE OF CONTENTS

1. INTRODUCTION

1.1 DEFINITION OF THE APPRAISAL PROBLEM

1.1.1 CIVIC ADDRESS

787 Ouellette Avenue, Windsor, Ontario

1.1.2 LEGAL DESCRIPTION

The subject property is legally described as follows:

Plan 256, Lots 15, 16, 17 and 18, Block 2, City of Windsor, Essex County, Ontario

1.1.3 PURPOSE OF THE APPRAISAL

The purpose of this report is to estimate the market value of the fee simple interest of the subject property as of October 12, 2017.

1.1.4 DEFINITION OF MARKET VALUE

Market Value is defined by the Appraisal Institute of Canada as:

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimuli. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*
>
> 1. *buyer and seller are typically motivated;*
> 2. *both parties are well informed or well advised, and acting in what they consider their best interests;*
> 3. *a reasonable time is allowed for exposure in the open market;*
> 4. *payment is made in terms of cash in Canadian dollars or in terms of financial arrangements comparable thereto; and*
> 5. *the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.*[1]

[1] Appraisal Institute of Canada, The Standards, pg. 48

1.1.5 INTENDED USE OF THE APPRAISAL

This report is intended solely for the use of Enwin Utilities to estimate the market value for decision making purposes and in order for it to be valid must be used in its entirety consisting of all pages including addendums and photographs.

1.1.6 PROPERTY RIGHTS APPRAISED

The property rights being appraised are those of the "Fee Simple".

Fee Simple is defined by Dictionary of Real Estate Appraisal (4th Edition) as:

Fee simple estate

Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation , eminent domain, police power and escheat.

1.1.7 PERTINENT DATES

Effective date of Appraisal:	October 12, 2017
Report Date:	November 1, 2017
Inspection Date:	October 12, 2017

1.1.8 SCOPE OF THE APPRAISAL

The scope of this narrative appraisal report encompasses the necessary research and analysis to prepare a report in accordance with the intended use and the Canadian Uniform Standards of Professional Appraisal Practice. In regard to the subject property this involved the following:

1. The property was inspected on October 12, 2017 by Dave Harris AACI, P.App. A full exterior and interior inspection was completed. The roof was not accessed and is assumed to be in good condition. The photographs contained in this report were taken at that time.

2. City data (legal maps, zoning bylaws, official plan designation) was based on information available in the offices of F. R. Jordan and Associates and information obtained from sources at the City of Windsor and the City of Windsor Web-Site.

3. Considered Highest and Best Use.

4. Subject property data was based upon observations made during the inspection and legal maps mentioned above as well as information supplied by Geowarehouse/Teranet, MPAC and/or the Land Registry Office.

5. Conducted market research in accordance with recognized appraisal practices. Public, private and commercial sources supplied the sources for property sales data. Not all sales have been verified with parties to the transactions.

6. The following Approaches to Value were utilized – Income Approach and Direct Comparison Approach.

7. After assembling and analyzing the data defined in this scope of the appraisal, an estimate of market value was made.

8. The extent of research and analysis is further detailed within the Assumptions and Limiting Conditions included at the end of this report as well as by any Extra-ordinary Assumptions and Limiting Conditions as detailed in this report.

1.1.9 SALES AND MLS HISTORY

Sales History

According to Canadian Uniform Standards of Professional Practice Rule 6.2.24, the appraiser must analyze any prior sales of the subject property. Subsection 7.25.1 states sales must be analyzed and reported if any sale of the subject property occurred within three years prior to the effective date of the appraisal, if such information is available as at the date of valuation to the appraiser in the normal course of business.

No sales of the subject property were registered within three years of the effective date of this appraisal.

MLS History

A search of the Multiple Listing Service of the Windsor-Essex County Real Estate Board indicated the following: No activity noted over the past 36 moths.

1.2 ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal is subject to the following limiting conditions.

1. The legal description of the subject property as stated herein is recorded by the Registrar of the Lands Title Office and assumed correct.
2. The subject property is appraised as though free and clear of all liens and encumbrances except as noted within the report and on the assumption that normal financing would be available.
3. Market conditions, including economic, social and political factors change rapidly and, on occasion, without warning, consequently the Market Value estimate expressed as of the date of this appraisal cannot be relied upon as of any other date except with further advice from the appraiser confirmed in writing.
4. No survey of the property has been provided. Sketches, drawings, diagrams, photographs etc., are presented in this report for the sole purpose of illustration.
5. This report is completed on the basis that testimony or appearance in court is not required as a result of this appraisal unless specific arrangements to do so have been made beforehand. Such arrangements will include, but not necessarily be limited to, adequate time to review the appraisal report and data related thereto.
6. Unless otherwise stated in the appraisal report, there are no known unapparent or hidden conditions of the properties (including but not limited to its soils, physical structure, mechanical and other operating system, its foundation etc.) or adverse environmental conditions (on it or a neighbouring property, including the presence of hazardous wastes, toxic substances etc.) that would make the property more or less valuable. It has been assumed that there are no such conditions unless observed at the time of inspection or they became apparent during the normal research involved in completing the appraisal. The attached report should not be construed as an environmental audit or a detailed property condition report, as such reporting is beyond the scope of this report and/or the qualifications of the appraiser. Responsibility is not accepted for any such unapparent or hidden conditions that do exist, or for any research, testing or engineering that might be required to discover whether such conditions exist. If the party relying on this report requires information about environmental issues then that party is cautioned to retain an expert qualified in such issues. We expressly deny any legal liability relating to the effect of environmental issues on fair market value of the property appraised.
7. Information, estimates, and opinions that have been expressed in the appraisal report are obtained from sources considered reliable and they are believed to be true and correct. A concerted effort has been made to verify the accuracy of the information contained herein, and the information is believed to be reliable and correct, and is assumed to have been gathered according to procedures that have been recognized by the Appraisal Institute of Canada. No responsibility is assumed for the accuracy of such items that were furnished by other parties.
8. Unless otherwise stated it is assumed no major changes have been made to the subject property between the date of inspection and the effective date of this appraisal.

9. No responsibility is assumed for matters of a legal nature that affect either the properties being appraised or the title to it. It has been assumed that the titles are good and marketable and, therefore, no opinion is rendered about the titles. The subject properties must comply with government regulations, including zoning, building code and health regulations and, if it doesn't comply, its non-compliance may affect market value. To be certain of compliance, further investigation may be necessary. The property is appraised on the basis of it being under responsible ownership.

10. This narrative appraisal report is intended solely for the use of Enwin Utilities to estimate the market value for decision making purposes. Any other use is not authorized. This report must not be used in part but must be viewed in its entirety. The appraiser assumes no liability to unintended users and for unintended uses.

11. The appraiser reserves the rights to review the entire content of this report and to revise the market value estimate if pertinent facts, trends or changing conditions existing prior to the effective date become known to the appraiser following the report's submission.

12. The existing use is a legal conforming use, which may continue, unless otherwise noted within the report.

13. Unless otherwise noted, there are assumed to be no patent or latent defects in the improvements and no objectionable materials present. Mechanical systems are assumed to be in good working order.

14. The bearing capacity of the soil is assumed to be suitable to support the existing structure(s) or proposed development.

15. The value conclusion reported herein is in Canadian dollars.

16. This value estimate does not include any consideration for the value of chattels or personal property existing as at the effective date.

17. No responsibility is accepted for any unauthorized alteration to this report.

18. The validity of this report requires the original signature of the appraiser.

19. In order for this appraisal report to be valid, it must be used in its entirety, consisting of all pages including addendums and photographs.

1.2.1 EXTRAORDINARY ASSUMPTIONS

None Noted

1.2.2 EXTRAORDINARY LIMITING CONDITIONS

1. The Cost Approach to value has not been included in this appraisal for reasons discussed on the Approaches to Value page of this report.

2. A title search was not performed on the property.

1.3 GEOGRAPHIC LOCATION AND ECONOMIC CONDITIONS

1.3.1 General Locale

The subject property is located in the City of Windsor, Ontario Canada. The City of Windsor is located in the north-west portion of Essex County, the most southern county of Ontario. It is bordered on the north by the Detroit River directly across from Detroit, Michigan U.S.A. and is approximately 385 km (240 miles) southwest of the provincial capital of Toronto.

1.3.2 Regional Background, Economic and Real Estate Market Conditions

The City of Windsor and Essex County have been a base for manufacturing since the 1800's. Early industry was based almost entirely on farm products. The Canadian Southern railway was constructed in 1872 and others were added later connecting other settlements in Essex County. Also during the 1880's, the Lake Erie, Essex and Detroit River railway was constructed to serve the southern port of Essex County. With the turn of the century Windsor developed, as did Detroit, as an automobile production centre. The Ford Motor Car Company was established in Windsor as early as 1904. Throughout the 1900's the auto industry and related fields such as tool and die companies have flourished in Windsor.

Since the events of September 11, 2001 the U.S. border has tightened dramatically, resulting in long delays for goods traveling to and from the U.S. This has impacted manufacturers who rely on just-in-time deliveries to assemble their goods. It is hoped that with the construction of the new border crossing and highway route leading to the bridge that many of the tie-ups at the border will become a thing of the past. Construction has recently started on the new Windsor Parkway which will connect Highway 401 to the proposed new bridge. The new bridge will be located down river from the Ambassador Bridge. The multi-billion dollar construction project is expected to take several years to complete and be one of the largest road construction projects in Canada.

The City is home to two post secondary institutions - the University of Windsor and St. Clair College. Both institutions have been expanding their facilities over the past few year due to increased enrollment and several buildings in the downtown core are being converted for use by the College and the University.

The Metropolitan Windsor area had one of the highest unemployment rates in Ontario for some period of time. The Statistics Canada figures indicated that the unemployment rate was up to 10.0% in November, 2015, however, dropped to 6.3% by July, 2017. Many local businesses who are automotive suppliers are hiring and expanding due increased work from the major auto makers. The FCA Windsor Assembly Plant hired over 1,200 new employees during the early part of 2016 and other automotive parts manufacturers have been quite busy as of late and have been expanding their work forces. The City is now home to a number of alternative energy suppliers, including a manufacturer of wind turbines and several manufacturers of solar panels.

The average vacancy rate for private apartments with three or more units in the Windsor CMA, declined from 3.9% in October, 2015 to 2.7% in October, 2016, according to the C.M.H.C. Rental Market Report dated October, 2016.

According to Statistics Canada, the population of the City of Windsor, increased 3% from 210,891 in 2011 to 217,188 in 2016. The Census Metropolitan area of Windsor, which also includes the Town of LaSalle, Town of Tecumseh, Town of Amherstburg and Town of Lakeshore had a population of 319,246 in 2011, which declined 1.3 percent from the previous census data in 2006. The City of Windsor has a diverse population, with over 20 percent of the population being foreign born and 21 percent of the population being visible minorities. This makes Windsor, the most diverse city in Ontario outside the Greater Toronto area.

1.3.3 Neighbourhood Data

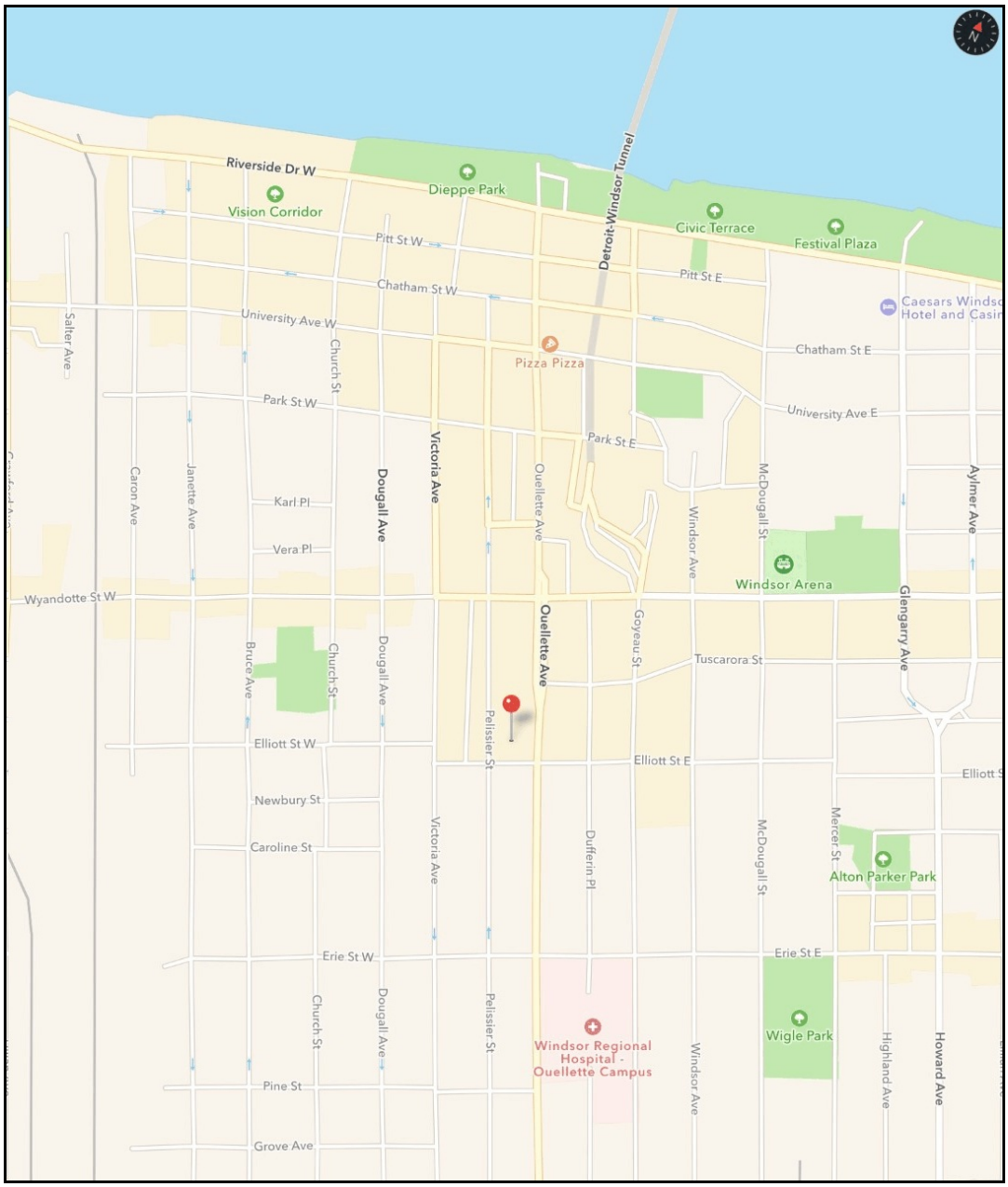
The subject property is located on the northwest corner of Ouellette Avenue and Elliott Street West in the south core area of the City. The property also extends through to Pelissier Street.

Development in the area of the subject property is mixed with some multiple two storey office buildings, commercial/residential structures, night club facilities and multi-unit residential buildings along Ouellette in the general area of the subject property.

Ouellette Avenue is the four lane roadway and is a main north-south route in the Downtown core. The route sees a steady flow of traffic.

Pelissier Street features a number of older walk-up apartment buildings and surface parking lots along the west side of the block, while the east side of the street features the rear sections of the a number of commercial and mixed use buildings which front on the west side of Ouellette Avenue. Pelissier Street in the area of the subject property is a two lane paved roadway which is a one-way street northbound. Some street parking is allowed along Pelissier Street in the area of the subject property.

1.3.4 Location Map



1.4 DESCRIPTION AND ANALYSIS OF THE SITE

1.4.1 Site

According to City of Windsor records this site features 170.83 feet of frontage on the west side of Ouellette and 180.0 feet of frontage on the north side of Elliott Street West. The subject property extends through the block to Pelissier Street and has 170.83 feet of frontage on the east side of Pelissier. The total site area is 30,749 square feet.

1.4.2 Topography and Drainage

The lot is level with the road and with the adjacent land surfaces. Ouellette Avenue, Elliott Street West and Pelissier Street all have storm drains so there should be no flood danger in this area.

1.4.3 Services

The subject property is serviced with electricity, natural gas, municipal water, sanitary sewers and telephone.

Street Improvements

Ouellette Avenue in the area of Subject Property is a four lane paved roadway with curbs and sidewalks. Elliott Street West is a two lane paved roadway with curbs and sidewalks. Pelissier Street in the area of the subject property is a two lane paved roadway with curbs and sidewalks.
This section of Pelissier Street is a one-way street northbound.

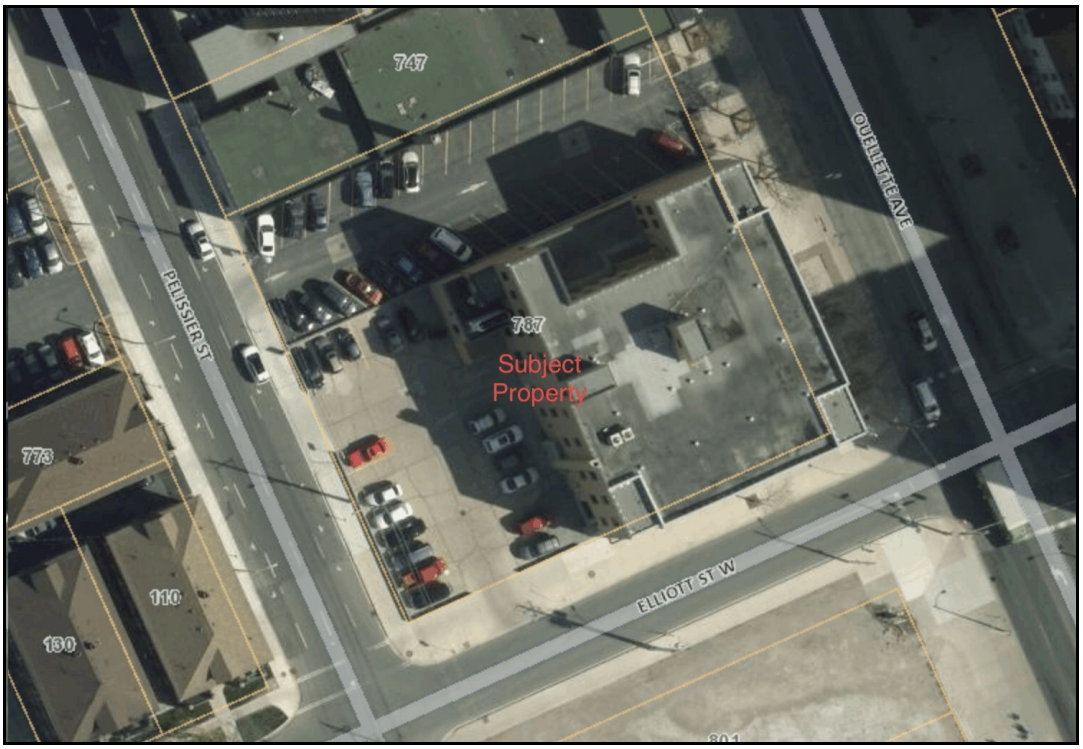
1.4.4 Encumbrances

A registry search was not performed on the subject property and for the purposes of this report, it is assumed that the subject property is not subject to any encumbrances.

1.4.5 Environmental

No environmental contamination problems have been noted on the subject property. If this factor is of concern, an environmental assessment should be completed by a qualified environmental inspector.

1.4.6 Aerial Photo of Subject Property



1.5 DESCRIPTION OF IMPROVEMENTS

According to information provided the building was erected in 1955. It is of good quality construction and good condition on the effective date of this appraisal.

1.5.1 Structural, Mechanical and Finish Details

The details are as follows:

Exterior	
Foundation:	Poured concrete footings, concrete block walls
Construction:	Brick veneer and stone veneer over concrete block
Roof:	Flat built-up roof
Interior	
Ceilings:	Drywall and acoustic panel on main floor and upper levels Exposed concrete ceilings in basement level
Walls:	Drywall ceilings on main floor and upper levels, painted concrete block and paneling in basement level, ceramic tile on walls in washrooms
Floors:	Carpet, ceramic, vinyl tile, terrazzo and concrete
Insulation:	Not viewed, assumed to be adequate
Windows:	Thermopane units
Electrical:	800 amp. Main panel
Plumbing:	Copper, PVC
Heating & Cooling:	Gas fired boiler & cooling system
Parking:	On-site parking lots

Remarks:

The total above grade building area is 31,700 square feet including the elevator room according to floor plans supplied. The basement level is mostly finished and features 11,897 square feet of space including the elevator room. Based on a main floor area of 11,555 and a site area of 30,749 square feet, the building site coverage is 37.6 percent.

The building is entirely occupied by the offices of Enwin Utilities.

Basement

This level of the building contains the boiler room, electrical room, men's and women's washrooms, a staff meeting room, a LAN room, a project room and records storage area. Finishes on the floor include concrete, terrazzo, carpet and vinyl tile. The walls feature concrete block, paneling, drywall and ceramic tile and ceilings are mainly exposed concrete. The washrooms inspected featured terrazzo flooring, painted concrete block or ceramic tile walls and concrete ceilings with standard grade white fixtures. The LAN room has its own air-conditioning system.

First Floor

The main floor space features a large open area used as a call centre, with private offices around the perimeter, employee lunch room with adjoining kitchenette, several washrooms, a number of private offices for the human resources department and a loading dock. Finishes are good quality with mainly wall to wall carpet, painted drywall walls and acoustic panel ceilings in the office areas. Finishes in the lunch room and kitchenette include ceramic tile flooring, painted drywall walls and acoustic panel ceilings with a set of arborite veneer cabinets.

Second Floor

On the second floor level is the finance department, a large lunch room area with adjoining kitchenette, several private offices and the board room. Finishes are good quality with wall to wall carpet in the office areas and lunch room area and ceramic tile in the washrooms and kitchen. The walls are finished with painted drywall or papered drywall except in the boardroom that features wood paneled walls and the ceilings are acoustic panel.

Third Floor

On the third floor level is the IT section, a training room, meeting rooms, several private offices and men's and women's washrooms. Finishes in the IT area include wall to wall carpet, painted drywall walls with some wood partition walls and acoustic panel ceilings. The training room and meeting room have similar finishes with wall to wall carpet, painted drywall walls and acoustic panel ceilings. Typically the washrooms are finished with terrazzo flooring, ceramic tile walls and painted drywall ceilings and feature standard grade white fixtures.

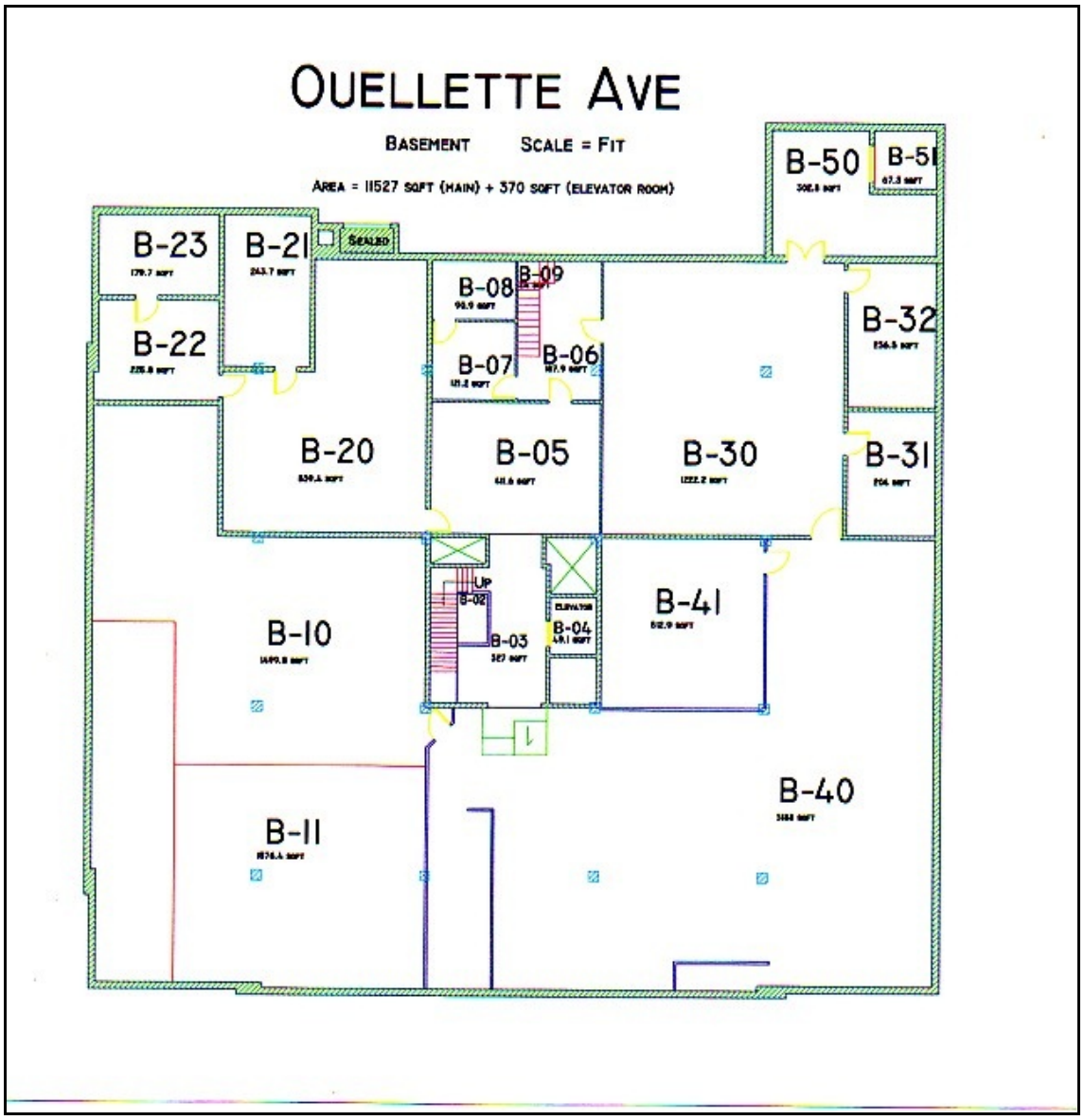
The four levels in the building are connected by two sets of stairs and a 15 person capacity elevator. In addition, there is a 1135 kg. freight elevator which runs between the basement and first floor level, with a loading dock with overhead door at the rear of the building. The main stairways and halls adjacent to the main stair well feature terrazzo flooring, ceramic tile and painted drywall walls and acoustic panel ceilings.

There have reportedly been a number of recent upgrades to the building including upgraded coils and dampers on the air handler, newer compressor for the cooling system, newer boiler and a newer humidifier system.

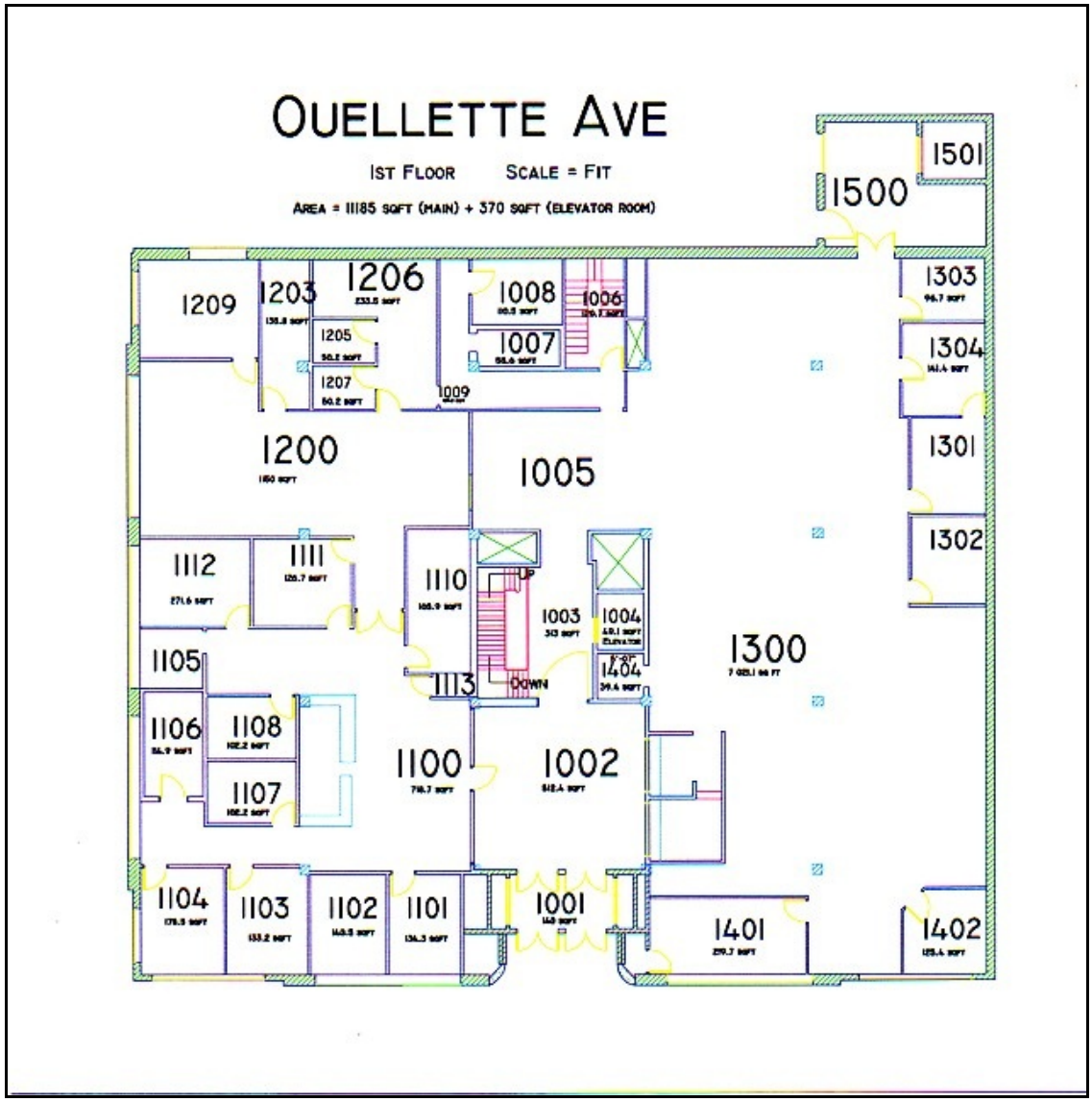
Site Improvements

A paved employee parking lot is located to the west of the building and a client parking lot is situated to the north of the building and extends from Ouellette Avenue through to Pelissier. Access to the employee parking lot is available from both Elliott Street West and Pelissier and the client parking lot can be accessed from either Ouellette Avenue or Pelissier.

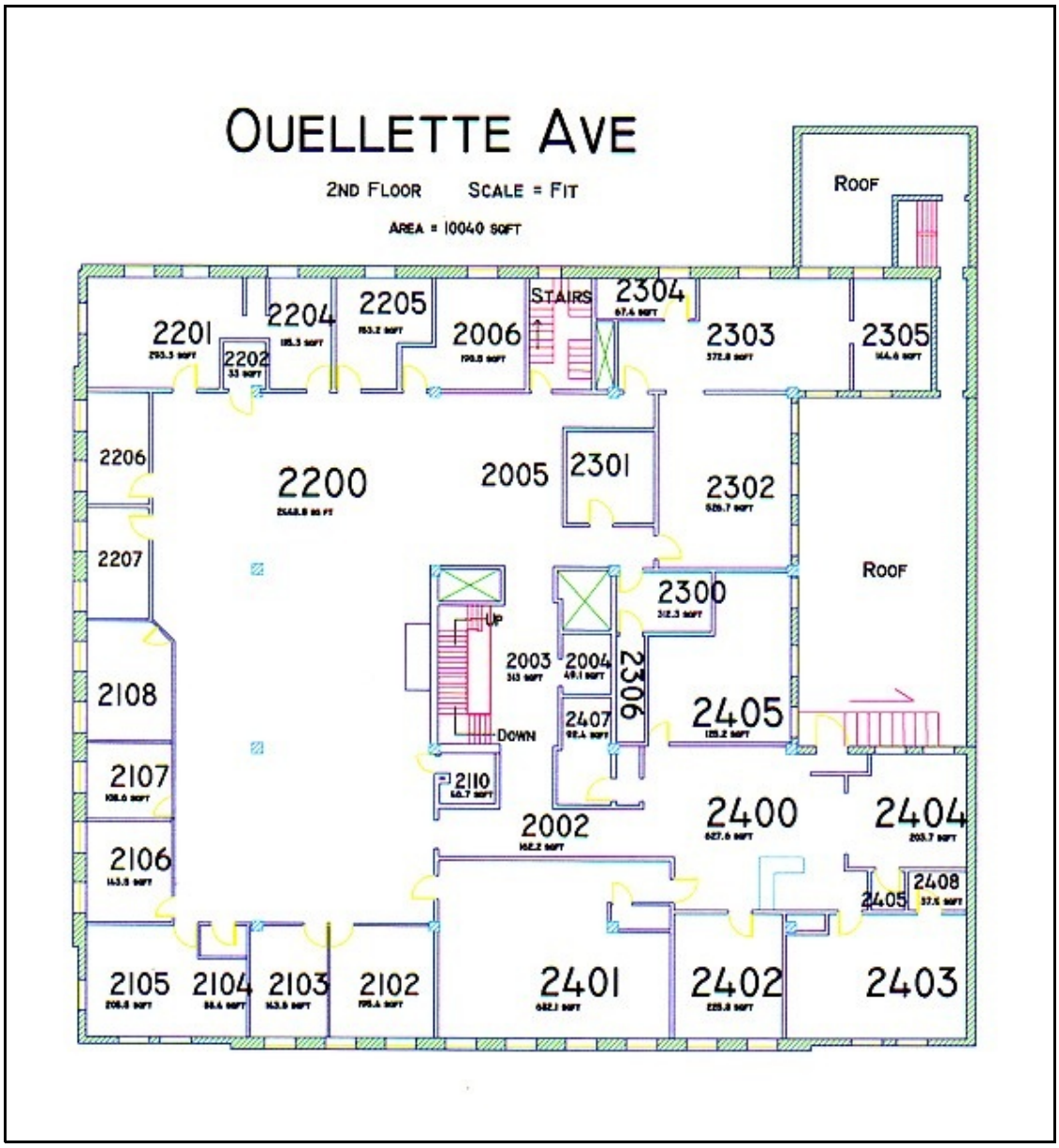
1.5.2 Basement Layout Sketch



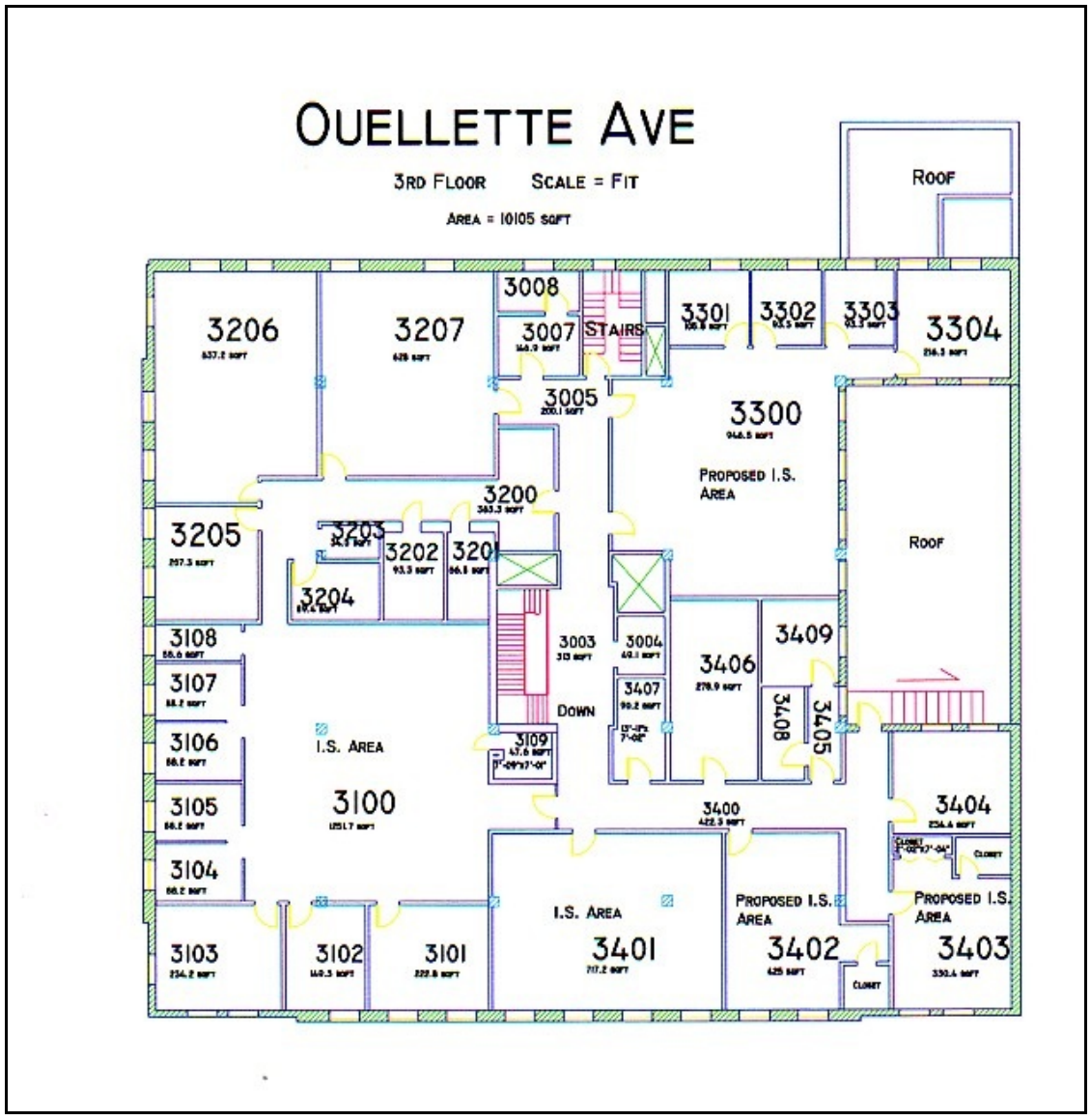
1.5.3 Main Floor Layout Sketch



1.5.4 Second Floor Layout Sketch



1.5.5 Third Floor Layout Sketch



1.6 ASSESSMENT AND TAXES

The Municipal Property Assessment Corporation (MPAC) assesses properties in Ontario. The assessed value represents the value opinion of the local assessing authority, utilizing mass assessment techniques and may or may not reflect market value. Mass appraisal is the process of valuing a group of properties as of a given date using common data, standardized methods, mathematical models and statistical testing. Both mass and single property appraisals have techniques rooted in standard approaches to value, but they differ in terms of scope and the tool sets used to arrive at value estimates.[1]

787 Ouellette Avenue, Windsor, Ontario - 2017 Assessment : $2,445,250

According to the City of Windsor Tax Department, the 2017 property taxes for subject property are as follows:

787 Ouellette Avenue, Windsor, Ontario - 2017 Property Taxes: $115,950.06

1.7 LAND USE CONTROLS

1.7.1 Official Plan

As of the effective date of this appraisal, the Official Plan of the City of Windsor, designates the subject property as Mixed Use, with the easterly section of the property being in the Very High Profile Area of the City Centre Planning District and the westerly section of the property being in the Medium Profile Area in the City Centre Planning District.

1.7.2 Zoning

The subject property is zoned CD3.1 - Commercial. The allowed uses under the CD3.1 zoning is shown on the following page of the report. The permitted uses include a number of commercial uses including business, financial or medical office uses. A full list of allowed uses is listed on the following page.

The subject property has been improved for many years with 3 storey office building with full basement. The current use appears to be in line with the allowed uses under the CD3.1 zoning.

[1] MPAC Guide to Property Assessment in Ontario

1.7.3 Zoning Bylaw Regulations

SECTION 16 - COMMERCIAL DISTRICTS 3. (CD3.)

(l) COMMERCIAL DISTRICT 3.1 (CD3.1)

(a) Permitted Uses

(i) A retail store, not including a retail store for the sale of motor vehicles or heavy machinery; outdoor market **(AMENDED by B/L 232-2006, Jan. 18, 2007)**

(ii) A personal service shop; day nursery; church; church hall;

(iii) A business, financial or medical office; professional studio; commercial school;

(iv) A light repair shop;

(v) A restaurant; take-out food outlet; micro-brewery.
(AMENDED by B/L 33-2001, October 23, 2001, OMB Decision/Order No. 1716, OMB Case No. PL010233 AND AMENDED by B/L 375-2004, Dec. 21, 2004 And AMENDED by B/L 164-2010, Nov. 17, 2010)

(vi) Place of entertainment and recreation not including a games arcade or bingo hall.

(vii) Hotel; motel;

(viii) Dwelling units in a combined use building with any one (1) or more of the foregoing uses, provided that all dwelling units, not including entrances thereto, are located entirely above every non-residential use(s);

(ix) A public parking area; parking garage; marina; ambulance service;
(AMENDED by B/L 363-2002, Dec. 31, 2002)

(x) A private hall; **(AMENDED by B/L 11828, May 30/1994)**

(xi) Any use accessory to the foregoing uses not including an outdoor storage yard, unless otherwise specifically permitted by this by-law
(ADDED by B/L 11828, May 30/94 AND by B/L 232-2006, Jan. 18, 2007)

(b) Regulations

(i) The maximum building height shall be equal to the length of the longest exterior lot line.

(ii) Minimum amenity area per dwelling unit, exclusive of the first eight (8) dwelling units:

1. Bachelor Unit - 7.5 square metres
2. One-Bedroom Unit - 10 square metres
3. Two or more bedroom units - 15 square metres

(AMENDED by B/L 162-1998, June 24, 1998 AND by B/L 33-2001, October 23, 2001, OMB Decision/Order No. 1716, OMB Case No. PL010233)

(iii) Exterior Finishing:

No exposed flat concrete block walls or exposed flat concrete walls, whether painted or unpainted, are permitted.

1.8 HIGHEST AND BEST USE

Highest and Best Use is defined by the Appraisal Institute of Canada as:

> *The reasonable, probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible and that result in the highest value.*

The Highest and Best Use of a property is an economic concept that measures the interaction of four critical criteria: legal permissibility, physical possibility, financial feasibility, and maximum productivity.[2]

The concept of highest and best use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use.

In the determination of highest and best use, a number of critical factors must be examined including, but not restricted to; locational characteristics; zoning and the potential for change; type and extent of existing improvements; marketability; profitability and development potential as dictated by site size and neighbouring land use.

The criteria for highest and best use of both the land as though vacant and property as improved must however meet four critical factors. The highest and best use must be legally permissible, physically possible, financially feasible and maximally productive.

The Appraisal Institute of Canada's Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP) requires an appraiser to consider the Highest and Best Use of the property as if vacant separately from the highest and best use of the property as improved. This is because the Highest and Best Use of the site as if vacant and available for development determines the value of the land, even if the property's existing improvement does not represent the highest and best use of the site.

Highest and Best Use (Improved)

The subject property is located in an area designated in the Official Plan as Mixed Use Very High Profile and Medium Profile area with CD3.1 - Commercial according to the Zoning Bylaw 8600 of the City of Windsor. The subject building is a three storey structure, which features business office uses, which is an allowed re allowed under the zoning in place. Considering the subject improvements as of the effective date, would appear to have sufficient remaining economic life and are compatible to the neighbourhood, the Highest and Best Use of the subject property, as improved, on the effective date of the appraisal, is the continuation of the existing use.

[2] The Appraisal Institute of Canada, The Standards, pg. 57

Highest and Best Use (As Though Vacant)

The subject property is located in on a corner on a main route and is zoned for commercial uses. The zoning is quite liberal and allows for quite a number of commercially related uses. If the subject were vacant, on the effective date of the appraisal, it is felt that the Highest and Best Use would be for development with commercial uses as allowed under the zoning by-law in place.

2. ANALYSIS AND CONCLUSIONS

2.1 PREAMBLE TO THE THREE APPROACHES TO VALUE

Cost Approach

Inherent in this test of value is the Principle of Substitution, which affirms that when a property is replaceable, its value tends to be set by the cost of acquiring an equally desirable substitute property, assuming no costly or unnecessary delay is encountered when making the substitution. The method of the Cost Approach is to employ the technique of estimating the value of the land and adding to that the estimated depreciated reproduction cost of the improvements. The difficulties inherent in the estimation of accrued depreciation reduce the reliability of this approach to value.

The improvements on Subject Property are 62 years of age and despite the upgrades over the years, would still be subject to various types of depreciation. While the Cost Approach could be completed, typically this approach is only utilized as a secondary indicator of value.

For these reasons, coupled with the fact that emphasis will be placed upon the other two approaches, this approach has not been completed for the Subject Property.

Direct Comparison Approach

This approach is based on the Principle of Substitution which maintains that a prudent purchaser will not pay more for a property than it would cost to buy an equally desirable substitute property provided there is no delay in making the acquisition.

This approach is the method most often used by prospective purchasers and vendors. It reflects market conditions and provides a reliable estimate of market value where sufficient sales data is available. Sufficient sales data has been found upon which a reliable estimate of value may be based. The subject property will be valued utilizing sales of office buildings and good quality retail/office buildings in the Metropolitan Windsor area.

Income Approach

This approach involves an estimate of the present value of the future benefits accruing to the property. It is based on the underlying principle that there is a relationship between the income (specifically the net income) that a property is capable of earning and its value at any given moment in time. As mentioned, the subject property is improved with a three storey building which is set up for office uses. It has been owner occupied for many years. Applicable lease rates for the various sections of the building will be estimated from the market. Vacancy rates and a capitalization rate will be estimated from the market.

In summary, the Direct Comparison Approach and Income Approach will be completed in this appraisal.

2.2 DIRECT COMPARISON APPROACH

This approach is based on the Principle of Substitution which maintains that a prudent purchaser will not pay more for a property than it would cost to buy an equally desirable substitute property provided there is no delay in making the acquisition.

The Direct Comparison Approach follows a logical, rational process, as outlined below. The steps are:

1. Survey the area to locate comparable properties that have sold recently, that are listed for sale, on which offers have been made, that are rented, that are offered for rent, that are vacant, or that are being constructed.

2. Gather and validate all pertinent information about each comparable property.

3. Analyze sales, listing, offers and leases; the length of time the property was listed for sale; the advertising and sales effort involved; the terms of sale; and the motivations of both buyer and seller.

4. Compare each benchmark sale to the subject property in detail, and make the necessary adjustments.

5. Reconcile the data and arrive at an indicated value.

An examination was made of five sales. These sales took place between June, 2014 and October, 2017. The sales consist of properties improved with office buildings and retail/office buildings containing between 10,695 square feet and 40,300 square feet and are located on the subject street, in the City of Windsor.

2.2.1 COMPARABLE SALES SUMMARY

Comparable Sales

Sale #	Location	Sale Price	Sale Date	Site Size (ft^2)	Bldg. Size (ft^2)	Site Cov.	Sale/ Ft^2 Bldg.	Exposure Time (Days)
1	736-44 Ouellette Ave. Windsor	$2,210,000	Oct-17	11,326	30,000	88.3%+-	$ 73.67	N/A
2	493 Ouellette Ave. Windsor	$600,000	Mar-17	3,180	10,695	81.6%±	$ 56.10	259
3	647 Ouellette Ave. Windsor	$1,273,383	May-16	18,296	40,300	92.0%+-	$ 31.60	N/A
4	875 Ouellette Ave. Windsor	$950,000	Apr-16	18,000	28,000	N/A	$ 33.93	487
5	443 Ouellette Ave. Windsor	$1,750,000	Jun-14	11,326	36,934	N/A	$ 47.38	141
	Average			**12,426**	**29,186**	**87.3%**	**$ 48.54**	**296**
	Median			**11,326**	**30,000**	**88.3%**	**$ 47.38**	**259**
Subject	**787 Ouellette Avenue Windsor**			**30,749**	**43,597**	**37.6%**		

COMPARABLE SALE # 1

736-44 Ouellette Avenue, Windsor

Sale Price:	$2,210,000	Sale Date:	October, 2017
Legal Description:	Plan 256 Blk I Part Lot 13 City of Windsor	Reference:	PIN 01172-0054
Site Size:	11,326 ft²	Building Size:	30,000 ft² (includes bsmt.)
Bldg. Site Coverage:	88.3%+-		
Sale Price Per Sq.Ft. Building (inclusive of land):		$73.67	

Comments: Sale 1 is located on the east side of Ouellette Avenue, almost directly across the street from the subject. The property is improved with a two storey building which appears to have had substantial recent renovation.

COMPARABLE SALE # 2

493 Ouellette Avenue, Windsor

Sale Price:	$600,000	Sale Date:	March, 2017
Legal Description:	Plan 195 Lots 25 Blk B City of Windsor	Reference:	MLS 1606833
Site Size:	3,180 ft²	Building Size:	10,695 ft² (includes bsmt.)
Bldg. Site Coverage:	81.6%+-		
Sale Price Per Sq.Ft. Building (inclusive of land):		$56.10	

Comments: Sale 2 is located on the west side of Ouellette Avenue at Maiden Lane. The property is improved with a three storey retail building with offices and a full basement. MLS indicates the building was renovated in 2014. The site has a small amount of parking.

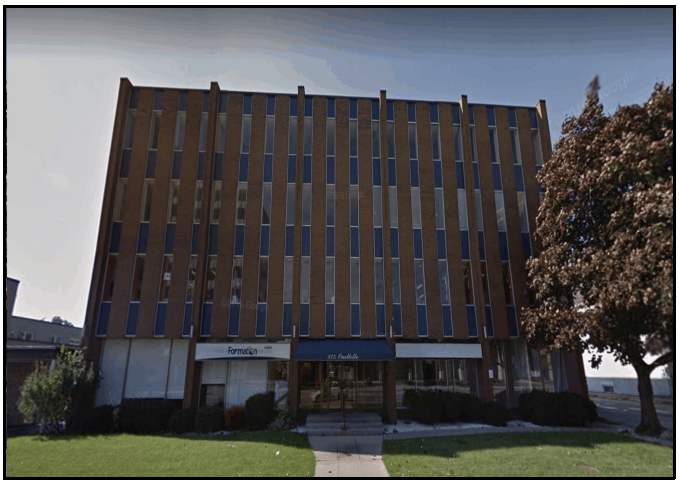
COMPARABLE SALE #3

647 Ouellette Avenue, Windsor

Sale Price:	$1,273,383	Sale Date:	May, 2016
Legal Description:	Plan 256, Block 2 Lots 4, 5 City of Windsor	Reference:	PIN 01191-0263
Site Size:	18,296 ft²	Building Size:	40,300 ft² (includes bsmt.)
Bldg. Site Coverage:	92.0%+-		
Sale Price Per Ft² Building (inclusive of land):		$31.60	

Comments: The next sale is the May, 2016 conveyance of a two storey office building located on the west side of Ouellette Avenue, a short distance north of the subject. There is limited/no on-site parking but there is a municipal lot behind the property. The building is currently being offered for sale for $2,900,000; this MLS listing indicates the building is currently 10% vacant.

COMPARABLE SALE #4



875 Ouellette Avenue, Windsor

Sale Price:	$875,000	Sale Date:	April, 2016
Legal Description:	Plan 256 Blk 4 Lots 6, 7 City of Windsor	Reference:	MLS #1511679
Site Size:	18,000 ft²	Building Size:	28,000 ft² (includes bsmt.)
Bldg. Site Coverage:	n/a		
Sale Price Per Ft² Building (inclusive of land):		$33.93	

Comments: Sale 4 is the April, 2016 conveyance of a four storey office building with some finished basement space. The building has an elevator and parking for 30 vehicles. The property sold on MLS with a market time of 487 days.

COMPARABLE SALE #5

443 Ouellette Avenue, Windsor

Sale Price:	$1,750,000	Sale Date:	June, 2014
Legal Description:	Plan 195 Lots 8, 9, 18 Part Lot 19 Blk 8 City of Windsor	Reference:	MLS #1400755.
Site Size:	11,326 ft²	Building Size:	36,934 ft²
Bldg. Site Coverage:	N/A		
Sale Price Per Ft² Building (inclusive of land):		$47.38	

Comments: Sale 5 consists of a three storey retail/office building located on Ouellette near Park Street. According to MLS the building features professional office space on the 2nd and 3rd floors. There is a direct bridge link to a parking garage on Pelissier Street.

2.2.2 ANALYSIS

The foregoing five comparable sales feature two to three and four storey office and office/retail buildings located on Ouellette Avenue, in the City of Windsor. The sales occurred between June, 2014 and October, 2017 and as mentioned are located on the subject street. The buildings range in size between 10,695 square feet and 40,300 square feet, with an average size of 29,186 square feet and a median size of 30,000 square feet. The site sizes range from 3,180 square feet up to 18,296 square feet with an average size of 12,426 square feet and a median size of 11,326 square feet. As noted, the Subject Property features a three storey plus finished basement office building located on the 700 block of Ouellette Avenue with a sizeable parking lot area adjacent to the building.

The five sales were examined in terms of sale price per square foot building area (inclusive of land), which is the traditional unit of measure for commercial properties. This exercise resulted in a sale price per square foot of building area (inclusive of land) between $31.60 for Sale 3 and $73.67 for Sale 1 with an average of $48.54 and a median of $47.38. While precise adjustments are not attempted, some general observations can be made of the foregoing five comparable sales.

As mentioned, the five comparable sales examined were transacted between June, 2014 and October, 2017. Although commercial property values in the Metropolitan Windsor Area have remained relatively stable over the past few years, Comparable Sales #1 and 2 best represent the subject in terms of effective date being most recent; having occurred in March and October of 2017. These sales have a sale price per square building area (inclusive of land) of $73.67 and $56.10 respectively, with an average of $64.89.

The subject property is located on the corner of Ouellette Avenue and Elliot Street West in the core are of the City. The closest sales in terms of location are Sales 1, 3 and 4, all of which are located on Ouellette south of Wyandotte Street. These three sales achieved rates of $73.67, $31.60 and $33.93 per square foot, with an average price of $46.40 per square foot.

Comparable Sale # 3 best represents the subject in terms of building size. This sale involves a 40,300 square foot two storey office building, with limited/no non-site parking. This sale achieved a rate of $31.60 per square foot of building area including land. The subject building contains a total area of 43,597 square feet on four levels.

In terms of site area, Comparable Sales #3 and 4 are most comparable to the subject property site area of 30,749 square feet. These sales achieved rates of $31.60 and $33.93 per square foot of building area including land with an average of $32.76.

The sales were also examined in terms of building site coverage. The building site coverage is relevant when referring to commercial properties, as extremely high building site coverage would reduce employee and customer parking, loading areas and inhibit expansion, while a low building site coverage may indicate surplus lands.

Site coverage figures were available for three out of the five sales. They ranged from 81.6%+- to 92%+- with an average and median of 87.3% and 88.3% respectively. The subject property has a building site coverage of 37.6%. Comparable Sale #2 best represents the subject in terms of building site coverage. This sale has a building site coverage of 81.6%+- and had a sale price per square foot building area (inclusive of land) of $56.10.

The subject property is 62+- years of age, but has received a number of upgrades on the interior in recent years. Upgrades have also been made to the heating and cooling systems. Some of the sales feature older buildings which are felt to be inferior to the subject, while others consist of older buildings, which have had superior renovations to the subject. Sales #3 and 4 are felt to be the most comparable in age and condition to the subject. These sales achieved rates of $31.60 and $33.93 per square foot of building area including land with an average of $32.76.

None of the sales like the subject are located on corners. Sale #2 is situated at Maiden Lane which is primarily a pedestrian walk way between Ouellette Avenue and Pelissier Street. This sale achieved a rate of $56.10 per square foot.

The following table summarizes the foregoing observations.

Unit of Comparison	Sales Emphasized	Average Sale Price Per Ft² Building (incl. of land)
Overall	1, 2, 3, 4, 5	$48.54
Effective Date	1, 2	$64.89
Location	1, 3, 4	$46.40
Building Size	3	$31.60
Site Size	3, 4	$32.76
Building Site Coverage	2	$56.10
Age/Condition	3, 4	$32.76
Corner Location	2	$56.10
Overall Average		**$46.14**

As can be seen from the foregoing table, examining the comparable sales by the degree of comparability of each attribute narrows the sale price per square foot building area (inclusive of land).

2.2.3 CONCLUSION

In conclusion, a total of five comparable sales were examined in this approach. The sales were examined in relation to specific attributes and units of comparability to the subject. Considering the size of the subject building, its condition and location on Ouellette Avenue, it is felt that an applicable rate would be between $44.00 and $46.00 per square foot of building area.

A value for the subject by the Direct Comparison Approach is calculated as follows.

Subject Building:

43,597	ft²	@	$45	per ft² =	$1,961,865
Rounded to					**$1,962,000**

2.3 INCOME APPROACH

The Income Approach involves an estimate of the present value of the future benefits accruing to the property. It is based on the underlying principle that there is a relationship between the income (specifically the net income) that a property is capable of earning and its value at any given moment in time.

In estimating the market value of income producing real estate, the three traditional methods of Capitalization are: Direct Capitalization Method, the Discounted Cash Flow Analysis and the Gross Income Multiplier (GIM).

The Direct Capitalization Method converts current earnings into an expression of capital value. The current net operating income is capitalized by an overall rate, which represents typical market expectations for the property being analyzed. This is the most commonly used approach for this type of property and will be utilized for the purpose of this report.

An alternate method of deriving an overall capitalization rate is the Band of Investment method of the Mortgage – Equity Concept. In this method of deriving a capitalization rate, the composite of the debt service and the net cash flow to the investor after debt service is considered. This method is only applicable when sufficient market data is available to extract capitalization rates and when equity dividends are the primary investment criteria used by buyers and sellers. Considering there was sufficient market data to derive a capitalization rate through Direct Capitalization, this method will not be used for the purpose of this appraisal.

The Discounted Cash Flow Analysis is a means of isolating differences in the timing of cash flows by discounting these cash flows to their present values. This type of property is typically not purchased based on the discounted cash flow method; therefore this method will not be used for the purpose of this appraisal.

The Gross Income Multiplier (GIM) reflects the ratio between the sale price and the effective gross income of the comparables as they relate to the subject property. It is typically considered a rule of thumb by investors. The GIM is a comparison of the subject property's potential gross income against that of the comparables with similar incomes, but it does not consider the quality of income, market rents or expense ratios.

The steps in the income approach to value

1. Estimate gross annual potential income at 100 per cent occupancy. Deduct from the gross potential income an allowance for vacancy and bad debts, and add other income (i.e., concessions, parking, laundry, etc.). The result is the Effective Gross Income (EGI).

2. Estimate the annual operating expenses, which include all the normal expenditures that must be made to generate and protect the income stream.

3. Determine the Net Operating Income (NOI), which is that income remaining after deducting operating expenses from the effective gross income, but before debt service (mortgage payments) and/or depreciation (Capital Cost Allowance (CCA) per federal income tax).

4. Select the appropriate method of capitalization.

5. Select the appropriate capitalization rate.

6. Using the appropriate mathematical technique, convert the income into an indication of the market value.

2.3.1 Subject Rental Summary

The subject property has been owner occupied for years and as such there is no rental data available.

2.3.2 Market Rent Survey

The Income Approach to value is based on the premise that value is the present worth of the income stream the property is capable of producing. The anticipated future net income is capitalized by an appropriate rate into an indication of the capital value of the property.

In all likelihood if the subject property were leased, the structure would be leased to more than one tenant, since there are few firms in the Windsor area that need to lease over 40,000 square feet of office space in the downtown core.

In order to estimate an applicable lease rate for the various sections of building, the appraiser has examined a number of leases of office space located in the City of Windsor.

COMPARABLE LEASES				
EXAMPLE #	**LOCATION**	**UNIT SIZE**	**RENT FT²**	**REMARKS**
1	Ouellette Ave. Windsor	2,297 ft²	$8.17	5 year gross lease escalates to $11.16/sq.ft yr 5 -leased May, 2017
2	Ouellette Ave. Windsor	21,514 ft²	$10.39	5 year gross lease escalates to $12.40/sq.ft yr 5 -leased April, 2017
3	3248 Electricity Dr. Windsor	1,943 ft²	$5.00+$4.62	5 yr lease - commercial-office space $5/sq.ft. +$4.62 /sq.ft. add rent - leased July, 2017
4	1501 Howard #205 Windsor	3,420 ft²	$7.02	2 year lease inc. all cost except utilities -2nd flr office space- leased June, 2017
5	2280 Foster Windsor	2,979 ft²	$13.15	1 yr lease 1st floor office - $7.25/sq.ft + CAM $5.90/sq.ft Leased April, 2017
6	4550 Rhodes Windsor	3,600 ft²	$6.00+$4.15	3 year lease -office/retail $6.00/sq.ft+ $4.15/sq.ft add rent. Leased March-2017

The appraiser does not have an exact figures on the amount of leaseable area in the building. It is estimated that roughly 9,000 square feet of space in the basement level leaseable area with roughly 11,000 square feet of leaseable main floor area and approximately 10,000 square feet of space on the second and third floor levels. The above are leases of commercial retail and office space in the City of Windsor. After reviewing the various lease examples and comparing them to the subject, it is felt that a reasonable rental rate for the subject main floor office space would be about $6.50 per square foot, while the basement level would lease at a rate at the lower end of the range say around $5.00 per square foot and upper levels would have a lease rate of $5.50 per square foot; on a net basis.

Potential Gross Income			
Basement	9,000 ft² @	$5.00	$45,000
Main Floor	11,000 ft² @	$6.50	$71,500
Floors 2 & 3	20,000 ft² @	$5.50	$110,000
	Total		$226,500

2.3.3 Vacancy and Collection Losses

Typically a 5% vacancy allowance was used for office space in Windsor. Considering the current economic climate, the location and overall size of the subject property, the appraiser feels that a 15% vacancy and collection allowance would be applicable.

2.3.4 Estimated Effective Gross Income

The results of the analysis are as follows:

Potential Gross Income		$226,500
Less: Vacancy & Collection	15%	($33,975)
Effective Gross Income		$192,525

2.3.5 Operating Expenses

With regards to operating expenses, if the property were leased on a triple net basis, all of the operating expenses are the responsibility of the tenant. Therefore, no deduction for operating expenses is required.

With respect to management, inquiries with local property management companies in Windsor indicate management fees from 4% to 6% depending on the type of property and the extent of the managerial duties. Due to the size of the subject building and that it would likely have three or more tenants, a management allowance of 6% is felt to be adequate.

2.3.6 Net Income Calculation

Effective Gross Income	$192,525
Less:	
Management - 6% of E.G.I.	$11,552
Net Income	$180,974

2.3.7 Overall Capitalization Rate – Direct Capitalization Method

As previously mentioned this approach is based on the underlying principle that there is a relationship between the net income a property is capable of earning and value. In order to determine this indication of value the potential net income must be capitalized with an appropriate market indicated capitalization rate.

The best way to determine an appropriate rate for the subject is to observe the market for comparable rates of real estate investment. The table on the following page represents capitalization rates in the region.

Capitalization Rates

Example	Building Size (ft²)	Location	Sale Date	Sale Price	Capitalization Rate
1	32,280	2437 Central Ave. Windsor	Feb-17	$2,165,000	7.8%
This is the February, 2017 sale of a two unit facility containing a large fitness centre and a chiropractor's office.					
2	6,515	7475-85 Tec. Rd. E.	Nov-16	$1,225,000	7.2%
The next example is a two building commercial plaza along Tecumseh Road in East Windsor. The tenants include a Pizza Hut and Cash Money franchise.					
3	7,727	4050 Walker Rd. Windsor	Feb-17	$1,269,000	7.46%
This is the February, 2017 conveyance of a modern commercial plaza along Walker Road. The building featured five main floor units and some second floor office space.					
4	23,552	Division Rd. Windsor	Aug-17	$3,250,000	8.1%
Example 4 features a 49 room chain hotel along Division Road near the Windsor Airport.					
5	3,800	1627 Front Rd. Lasalle	Nov-15	$270,000	10.4%
The fifth example is the sale of a two storey commercial/residential building situated on a main route in the Town of LaSalle. The property featured two main floor commercial units, one of which was vacant, and two apartment units.					
6	3,977	Malden Rd., LaSalle	Jan-14	$650,000	9.3%
The next example is the sale of a one storey non-chain restaurant in LaSalle.					
7	10,695	493 Ouellette Ave. Windsor	Mar-17	$600,000	9.7%
The last example was also used in the direct comparison approach earlier in the report. The building is used as retail space with some offices. MLS on the property indicated there were substantial renovations completed in 2014.					

2.3.8 Overall Capitalization Rate Analysis and Conclusion

The foregoing table utilizes various capitalization rates from real estate investments in the Windsor-Essex County area. These properties include single and multi tenant commercial properties with building sizes ranging from 3,800 ft² to 32,280 ft² and were transacted from January, 2014 to August, 2017. The sales indicate capitalization rates from 7.2% to 10.4%. Over the past two years, generally capitalization rates for I.C.I. properties have been declining.

Based on the foregoing data, a capitalization rate between 9.0 and 9.5% is felt to be appropriate, considering that the building is older, but solidly constructed and has been adequately maintained. Other factors considered in the overall selection of the appropriate capitalization rate for the subject are it's location in the city's core. This area has seen less demand than some other areas in the city such as the Walker Road corridor for example. Index #7 from the chart above is the only property found in the core area; this example achieved a rate of 9.7%. As mentioned earlier the building's large size may limit the number of end users as few potential purchasers require such a large space; although, this could be mitigated by the possibility of dividing the building into multiple units.

2.3.9 Value Calculation

Direct Capitalization

The process of capitalizing the estimated net income of the subject property is reflected in a single equation, V=I/R. Where V is the indicated market value, I is the estimated net income and R is the overall capitalization rate. The property value estimate is as follows:

$$\text{Value} = \frac{\text{Net Operating Income}}{\text{Capitalization Rate}}$$

$$= \frac{\$180,974}{0.090}$$

$$= \$2,010,822$$

Rounded to: $2,011,000

3. RECONCILIATION AND FINAL ESTIMATE OF VALUE

The three approaches to value generally encountered in appraisal were discussed under their appropriate headings. All three approaches were considered but only the Direct Comparison Approach and Income Approach were completed in the appraisal of the Subject Property.

Direct Comparison Approach	**$1,962,000**
Income Approach	**$2,011,000**

The Cost Approach is based on the estimated land value and the depreciated reproduction cost of the subject property. The depreciated reproduction cost presents a drawback to this approach. In a relatively new building depreciation can be reasonably accurately measured but as the age of a structure increases so does the potential for inaccurate measurement of all types of depreciation. As noted previously, the subject improvements are 62+- years old and despite some recent upgrades to the heating and cooling systems, would still be subject to depreciation from various factors. For this reason, coupled with the fact that emphasis will be placed upon the two other approaches, this approach has not been completed.

In the Direct Comparison Approach, a total of five comparable sales were examined in relation to the subject property. The sales involve office and office/retail buildings located in the City of Windsor. The sales occurred between June, 2014 and October, 2017. The sales were examined in terms of sale price per square foot building area (inclusive of land). The estimate of value by this approach was $1,962,000.

As mentioned, the Income Approach is based on the underlying principal that there is a relationship between the income (specifically the net income) that a property is capable of earning, and its value at any given moment in time. The subject property consists of three floors of finished office space above grade, plus finished space in the basement area. The building has been owner occupied for many years, and as a result, there is no rental history. In order to estimate applicable rental rates for the space in the building at 787 Ouellette Avenue, the appraiser has examined a number examples of leased office space in the Metropolitan Windsor area. The vacancy and collection allowance has also been estimated from market data. The overall capitalization rates in this report were derived from market data and appear to be reasonably well established. When applied to the subject property, the indicated value by this approach is slightly higher than the value indicated by the Direct Comparison Approach.

The estimates of value by the two approaches for the subject property are reasonably close together. The appraiser is inclined to put the most emphasis on the Direct Comparison Approach to Value. Therefore it is my opinion that the market value of the subject property as of October 12, 2017 was as follows:

$1,965,000
One Million Nine Hundred and Sixty Five Thousand Dollars

3.1 Exposure Time

Exposure time is always presumed to precede the effective date of the appraisal. It may be defined as:

> *The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal. This estimate is based upon an analysis of past events assuming a competitive and open market.*

A search was made regarding the average exposure time of I.C. & I. Properties which sold through the Multiple Listing Service of the Windsor-Essex County Real Estate Board.

Five comparable sales of office and retail/office buildings were utilized in preparation of this report. Of the five, three were sold through MLS. The exposure times on these MLS sales were from 141 days and 487 days, with an average exposure time of 296 days and a median of 259 days. Based upon this data, it was felt that a reasonable exposure time for the Subject Property would be between 6 - 9 months.

4. CERTIFICATION OF APPRAISER

I, Dave Harris, hereby certify that, to the best of my knowledge and belief:

1. That the subject property, 787 Ouellette Avenue, Windsor, Ontario, was inspected on October 12, 2017. Office areas and service rooms on all four levels were viewed. The appraiser walked around the exterior of the building, but did not access the roof.

2. The statements of fact contained in this report are true and correct.

3. The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions and conclusions.

4. I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

5. My compensation is not contingent upon the reporting of a predetermined value or direction in value that favours the cause of the client, the amount of the value estimate, the attainment of a stipulated result or the occurrence of a subsequent event.

6. My analysis opinions and conclusions were developed, and this narrative appraisal report has been prepared, in conformity with the requirements of the Appraisal Institute of Canada.

7. No one provided significant professional assistance to the person signing this report.

8. As of the date of this report, the undersigned has fulfilled the requirements of The Appraisal Institute of Canada Continuing Professional Development Program.

9. I have the knowledge and experience to complete this appraisal assignment competently.

As a result of the analyses, opinions and conclusions contained herein, the estimated market value of 787 Ouellette Avenue, Windsor, Ontario on October 12, 2017 is as follows:

$1,965,000
One Million Nine Hundred and Sixty Five Thousand Dollars

Signed on November 1, 2017

[redacted] AACI, P.App.

Appraisal Report
of
741 Pelissier Street
Windsor, Ontario

Prepared For:
Enwin Utilities

Prepared By:
[redacted] AACI, P.App.
F.R. Jordan and Associates

Effective Date:
December 6, 2017

Report Date:
December 14, 2017

F.R. Jordan & Associates
3005 Marentette Avenue
Suite #120
Windsor, Ontario
N8X 4G1

[redacted] AACI, P.App.,FRI (1938-2006)
[redacted], AACI, P.App.
[redacted], B.E.S., AACI, P.App.
[redacted], AACI, P.App

[redacted]

December 14, 2017

Enwin Utilities
4545 Rhodes Drive
Windsor, Ontario

Attention: [redacted], Manager of Procurement & Supply Chain

Dear [redacted]:

Re: 741 Pelissier Street, Windsor, Ontario

In accordance with your request, I have completed an appraisal report of 741 Pelissier Street, Windsor, legally described as follows:

Plan 381, Lots 51, 52, 53 and 54, West Side Pelissier, City of Windsor, Essex County, Ontario

The purpose of this appraisal is to estimate the market value, of the fee simple interest, of the subject property on December 6, 2017. As result of the analysis and interpretation of the accumulated data in this report, my estimate of the market value of the subject property is as follows:

$227,000 - Two Hundred and Twenty Seven Thousand Dollars

This estimate is subject to the limiting conditions attached to this appraisal and to which the reader's attention is specifically directed. This narrative appraisal report is prepared specifically for Enwin Utilities to estimate the Market Value for decision making purposes. Attached is the report of 28 pages.

Sincerely,

F. R. Jordan & Associates

[redacted]

[redacted], AACI, P.App.

PHOTOGRAPHS OF SUBJECT PROPERTY

VIEW OF SUBJECT PROPERTY

PHOTOGRAPHS OF SUBJECT PROPERTY

PELISSIER STREET - VIEW NORTH

PELISSIER STREET - VIEW SOUTH

EXECUTIVE SUMMARY

Client:	Enwin Utilities
Address of Property:	741 Pelissier Street, Windsor, Ontario
Effective Date of Appraisal:	December 6, 2017
Report Date:	December 14, 2017
Date of Inspection:	December 6, 2017
Purpose of Appraisal:	To estimate market value
Size of Land:	120.0' x 90.0', 10,800 ft²
Existing Use:	Parking Lot
2017 Assessment:	$202,250 (Total Assessed Value)
2017 Taxes:	$7,415.51 (Total Property Taxes)
Official Plan:	Mixed Use - Medium Profile Area
Zoning:	CD 2.2 - Commercial
Highest and Best Use (As Vacant)	Commercial Development
(As Improved)	Not Applicable
Value Indicated by Cost Approach:	N/A.
Value Indicated by Direct Comparison Approach:	$227,000
Value Indicated by Income Approach:	N/A
Final Estimate of Market Value:	$227,000

TABLE OF CONTENTS

1. INTRODUCTION

1.1 DEFINITION OF THE APPRAISAL PROBLEM

1.1.1 CIVIC ADDRESSES

741 Pelissier Street, Windsor, Ontario

1.1.2 LEGAL DESCRIPTION

The subject property is legally described as follows:

Plan 381, Lots 51, 52, 53 and 54, West Side Pelissier, City of Windsor, Essex County, Ontario

1.1.3 PURPOSE OF THE APPRAISAL

The purpose of this report is to estimate the market value of the fee simple interest of the subject property as of December 6, 2017.

1.1.4 DEFINITION OF MARKET VALUE

Market Value is defined by the Appraisal Institute of Canada as:

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimuli. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*
>
> 1. *buyer and seller are typically motivated;*
> 2. *both parties are well informed or well advised, and acting in what they consider their best interests;*
> 3. *a reasonable time is allowed for exposure in the open market;*
> 4. *payment is made in terms of cash in Canadian dollars or in terms of financial arrangements comparable thereto; and*
> 5. *the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.*[1]

[1] Appraisal Institute of Canada, The Standards, pg. 48

1.1.5 INTENDED USE OF THE APPRAISAL

This report is intended solely for the use of Enwin Utilities to estimate the market value for decision making purposes and in order for it to be valid must be used in its entirety consisting of all pages including addendums and photographs.

1.1.6 PROPERTY RIGHTS APPRAISED

The property rights being appraised are those of the "Fee Simple".

Fee Simple is defined by Dictionary of Real Estate Appraisal (4th Edition) as:

Fee simple estate
Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation , eminent domain, police power and escheat.

1.1.7 PERTINENT DATES

Effective date of Appraisal:	December 6, 2017
Report Date:	December 14, 2017
Inspection Date:	December 6, 2017

1.1.8 SCOPE OF THE APPRAISAL

The scope of this narrative appraisal report encompasses the necessary research and analysis to prepare a report in accordance with the intended use and the Canadian Uniform Standards of Professional Appraisal Practice. In regard to the subject property this involved the following:

1. The property was inspected on December 6, 2017 by Dave Harris AACI, P.App.. The photographs contained in this report were taken at that time.

2. City data (legal maps, zoning bylaws, official plan designation) was based on information available in the offices of F. R. Jordan and Associates and information obtained from sources at the City of Windsor and the City of Windsor Web-Site.

3. Considered Highest and Best Use.

4. Subject property data was based upon observations made during the inspection and legal maps mentioned above as well as information supplied by Geowarehouse/Teranet, MPAC and/or the Land Registry Office.

5. Conducted market research in accordance with recognized appraisal practices. Public, private and commercial sources supplied the sources for property sales data. Not all sales have been verified with parties to the transactions.

6. The following Approaches to Value were utilized – Direct Comparison Approach.

7. After assembling and analyzing the data defined in this scope of the appraisal, an estimate of market value was made.

8. The extent of research and analysis is further detailed within the Assumptions and Limiting Conditions included at the end of this report as well as by any Extra-ordinary Assumptions and Limiting Conditions as detailed in this report.

1.1.9 SALES AND MLS HISTORY

Sales History

According to Canadian Uniform Standards of Professional Practice Rule 6.2.24, the appraiser must analyze any prior sales of the subject property. Subsection 7.25.1 states sales must be analyzed and reported if any sale of the subject property occurred within three years prior to the effective date of the appraisal, if such information is available as at the date of valuation to the appraiser in the normal course of business.

No sales of the subject property were registered within three years of the effective date of this appraisal.

MLS History

A search of the Multiple Listing Service of the Windsor-Essex County Real Estate Board indicated the following: No activity noted over the past 36 months.

1.2 ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal is subject to the following limiting conditions.

1. The legal description of the subject property as stated herein is recorded by the Registrar of the Lands Title Office and assumed correct.
2. The subject property is appraised as though free and clear of all liens and encumbrances except as noted within the report and on the assumption that normal financing would be available.
3. Market conditions, including economic, social and political factors change rapidly and, on occasion, without warning, consequently the Market Value estimate expressed as of the date of this appraisal cannot be relied upon as of any other date except with further advice from the appraiser confirmed in writing.
4. No survey of the property has been provided. Sketches, drawings, diagrams, photographs etc., are presented in this report for the sole purpose of illustration.
5. This report is completed on the basis that testimony or appearance in court is not required as a result of this appraisal unless specific arrangements to do so have been made beforehand. Such arrangements will include, but not necessarily be limited to, adequate time to review the appraisal report and data related thereto.
6. Unless otherwise stated in the appraisal report, there are no known unapparent or hidden conditions of the properties (including but not limited to its soils, physical structure, mechanical and other operating system, its foundation etc.) or adverse environmental conditions (on it or a neighbouring property, including the presence of hazardous wastes, toxic substances etc.) that would make the property more or less valuable. It has been assumed that there are no such conditions unless observed at the time of inspection or they became apparent during the normal research involved in completing the appraisal. The attached report should not be construed as an environmental audit or a detailed property condition report, as such reporting is beyond the scope of this report and/or the qualifications of the appraiser. Responsibility is not accepted for any such unapparent or hidden conditions that do exist, or for any research, testing or engineering that might be required to discover whether such conditions exist. If the party relying on this report requires information about environmental issues then that party is cautioned to retain an expert qualified in such issues. We expressly deny any legal liability relating to the effect of environmental issues on fair market value of the property appraised.
7. Information, estimates, and opinions that have been expressed in the appraisal report are obtained from sources considered reliable and they are believed to be true and correct. A concerted effort has been made to verify the accuracy of the information contained herein, and the information is believed to be reliable and correct, and is assumed to have been gathered according to procedures that have been recognized by the Appraisal Institute of Canada. No responsibility is assumed for the accuracy of such items that were furnished by other parties.
8. Unless otherwise stated it is assumed no major changes have been made to the subject property between the date of inspection and the effective date of this appraisal.

9. No responsibility is assumed for matters of a legal nature that affect either the properties being appraised or the title to it. It has been assumed that the titles are good and marketable and, therefore, no opinion is rendered about the titles. The subject properties must comply with government regulations, including zoning, building code and health regulations and, if it doesn't comply, its non-compliance may affect market value. To be certain of compliance, further investigation may be necessary. The property is appraised on the basis of it being under responsible ownership.

10. This narrative appraisal report is intended solely for the use of Enwin Utilities to estimate the market value for decision making purposes. Any other use is not authorized. This report must not be used in part but must be viewed in its entirety. The appraiser assumes no liability to unintended users and for unintended uses.

11. The appraiser reserves the rights to review the entire content of this report and to revise the market value estimate if pertinent facts, trends or changing conditions existing prior to the effective date become known to the appraiser following the report's submission.

12. The existing use is a legal conforming use, which may continue, unless otherwise noted within the report.

13. Unless otherwise noted, there are assumed to be no patent or latent defects in the improvements and no objectionable materials present. Mechanical systems are assumed to be in good working order.

14. The bearing capacity of the soil is assumed to be suitable to support the existing structure(s) or proposed development.

15. The value conclusion reported herein is in Canadian dollars.

16. This value estimate does not include any consideration for the value of chattels or personal property existing as at the effective date.

17. No responsibility is accepted for any unauthorized alteration to this report.

18. The validity of this report requires the original signature of the appraiser.

19. In order for this appraisal report to be valid, it must be used in its entirety, consisting of all pages including addendums and photographs.

1.2.1 EXTRAORDINARY ASSUMPTIONS

None Noted

1.2.2 EXTRAORDINARY LIMITING CONDITIONS

1. The Cost Approach to Value and Income Approach to Value have not been included in this appraisal for reasons discussed on the Approaches to Value page of this report.

2. A title search was not performed on the property.

1.3 GEOGRAPHIC LOCATION AND ECONOMIC CONDITIONS

1.3.1 General Locale

The subject property is located in the City of Windsor, Ontario Canada. The City of Windsor is located in the north-west portion of Essex County, the most southern county of Ontario. It is bordered on the north by the Detroit River directly across from Detroit, Michigan U.S.A. and is approximately 385 km (240 miles) southwest of the provincial capital of Toronto.

1.3.2 Regional Background, Economic and Real Estate Market Conditions

The City of Windsor and Essex County have been a base for manufacturing since the 1800's. Early industry was based almost entirely on farm products. The Canadian Southern railway was constructed in 1872 and others were added later connecting other settlements in Essex County. Also during the 1880's, the Lake Erie, Essex and Detroit River railway was constructed to serve the southern port of Essex County. With the turn of the century Windsor developed, as did Detroit, as an automobile production centre. The Ford Motor Car Company was established in Windsor as early as 1904. Throughout the 1900's the auto industry and related fields such as tool and die companies have flourished in Windsor

Since the events of September 11, 2001 the U.S. border has tightened dramatically, resulting in long delays for goods traveling to and from the U.S. This has impacted manufacturers who rely on just-in-time deliveries to assemble their goods. It is hoped that with the construction of the new border crossing and highway route leading to the bridge that many of the tie-ups at the border will become a thing of the past. Construction has recently started on the new Windsor Parkway which will connect Highway 401 to the proposed new bridge. The new bridge will be located down river from the Ambassador Bridge. The multi-billion dollar construction project is expected to take several years to complete and be one of the largest road construction projects in Canada.

The City is home to two post secondary institutions - the University of Windsor and St. Clair College. Both institutions have been expanding their facilities over the past few year due to increased enrollment and several buildings in the downtown core are being converted for use by the College and the University.

The Metropolitan Windsor area had one of the highest unemployment rates in Ontario for some period of time. The Statistics Canada figures indicated that the unemployment rate was up to 10.0% in November, 2015, however, dropped to 6.3% by July, 2017. Many local businesses who are automotive suppliers are hiring and expanding due increased work from the major auto makers. The FCA Windsor Assembly Plant hired over 1,200 new employees during the early part of 2016 and other automotive parts manufacturers have been quite busy as of late and have been expanding their work forces. The City is now home to a number of alternative energy suppliers, including a manufacturer of wind turbines and several manufacturers of solar panels.

The average vacancy rate for private apartments with three or more units in the Windsor CMA, declined from 3.9% in October, 2015 to 2.7% in October, 2016, according to the C.M.H.C. Rental Market Report dated October, 2016.

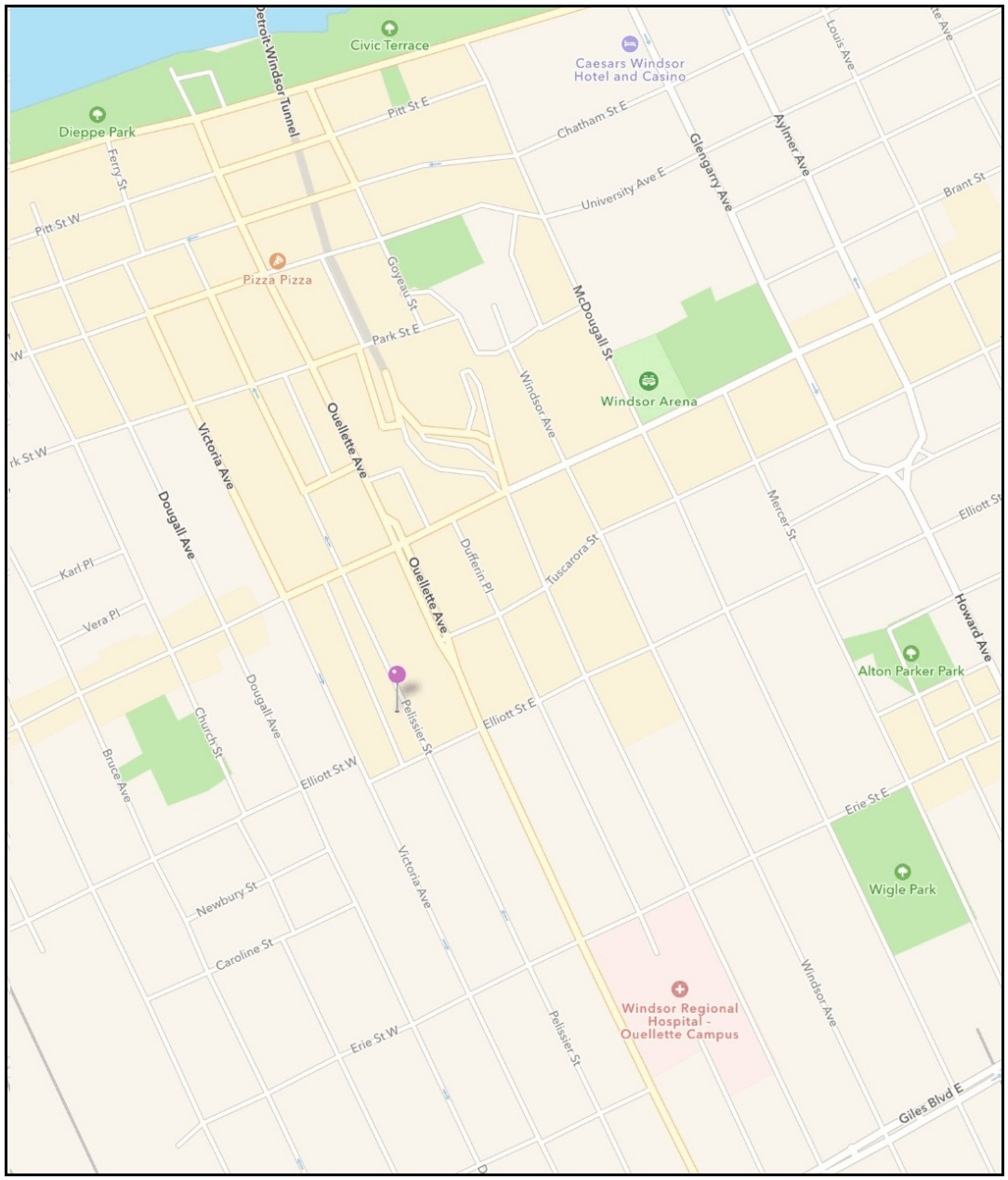
According to Statistics Canada, the population of the City of Windsor, increased 3% from 210,891 in 2011 to 217,188 in 2016. The Census Metropolitan area of Windsor, which also includes the Town of LaSalle, Town of Tecumseh, Town of Amherstburg and Town of Lakeshore had a population of 319,246 in 2011, which declined 1.3 percent from the previous census data in 2006. The City of Windsor has a diverse population, with over 20 percent of the population being foreign born and 21 percent of the population being visible minorities. This makes Windsor, the most diverse city in Ontario outside the Greater Toronto area.

1.3.3 Neighbourhood Data

The subject property is located on the west side of Pelissier Street, a short distance to the north of the intersection of Elliott Street West.

Pelissier Street in the area of the subject property features a number of older walk-up apartment buildings and surface parking lots along the west side of the block, while the east side of the street features the rear sections of the a number of commercial and mixed use buildings which front on the west side of Ouellette Avenue. Pelissier Street in the area of the subject is a two lane paved roadway which is a one-way street northbound. Some street parking is allowed along Pelissier Street in the area of the subject property.

1.3.4 Location Map



1.4 DESCRIPTION AND ANALYSIS OF THE SITE

1.4.1 Site

According to Geowarehouse records this site features 120.0 feet of frontage on the west side of Pelissier Street and 90.0 feet of depth. The total site area is 10,800 square feet. It should be noted that the City of Windsor has the subject under two assessment roll numbers. The northerly 40' x 90' section is listed as 741 Pelissier Street, while the southerly 80' x 90' section is listed as a vacant lot on the west side of Pelissier

.

1.4.2 Topography and Drainage

The lots are level with the road and with the adjacent land surfaces. Pelissier Street has storm drains so there should be no flood danger in this area.

1.4.3 Services

Full services extend along the Pelissier Street frontage of the subject property.

Street Improvements

Pelissier Street in the area of the subject property is a two lane paved roadway with curbs and sidewalks. This section of Pelissier Street is a one-way street northbound.

1.4.4 Encumbrances

A registry search was not performed on the subject property and for the purposes of this report, it is assumed that the subject property is not subject to any encumbrances.

1.4.5 Environmental

No environmental contamination problems have been noted on the subject property. If this factor is of concern, an environmental assessment should be completed by a qualified environmental inspector.

1.4.6 Aerial Photo of Subject Property

1.5 DESCRIPTION OF IMPROVEMENTS

The subject property is located on the west side of Pelissier and provides additional employee parking for the Enwin Utilities office building across the street. It has an asphalt surface and has two entry points from Pelissier Street.

1.6 ASSESSMENT AND TAXES

The Municipal Property Assessment Corporation (MPAC) assesses properties in Ontario. The assessed value represents the value opinion of the local assessing authority, utilizing mass assessment techniques and may or may not reflect market value. Mass appraisal is the process of valuing a group of properties as of a given date using common data, standardized methods, mathematical models and statistical testing. Both mass and single property appraisals have techniques rooted in standard approaches to value, but they differ in terms of scope and the tool sets used to arrive at value estimates.[1]

741 Pelissier Street - 2017 Assessment: $202,250* (Total)

*It should be noted that The City of Windsor has two separate assessments for the subject property. The northerly 40' x 90' section of the property has an assessed value of $117,000, while the southerly 80' x 90' section of the property has an assessed value of $102,750.

According to the City of Windsor Tax Department, the 2013 property taxes for subject property are as follows:

741 Pelissier Street, Windsor, Ontario - 2017 Property Taxes: $7,415.51*

*The 2017 property taxes for the northerly 40' x 90' section of the property are $4,089.85, while the 2017 property taxes for the southerly 80' x 90' section are $3,325.66.

1.7 LAND USE CONTROLS

1.7.1 Official Plan

As of the effective date of this report, the Official Plan of the City of Windsor, designates the subject property as Mixed Use, Medium Profile Area in the City Centre Planning District.

1.7.2 Zoning

The subject property is zoned CD2.2 - Commercial. The allowed uses under the CD2.2 designation are shown on Page 20 of this report. The permitted uses include a number of commercial uses including a public parking area.

The subject property has been used for a number of years as a paved employee parking lot for the staff that work at the office building at 787 Ouellette Avenue.

[1] MPAC Guide to Property Assessment in Ontario

1.7.3 Zoning Bylaw Regulations

(2) **COMMERCIAL DISTRICT 2.2 (CD2.2)**

(a) Permitted Uses

(i) A retail store, not including a retail store for the sale of motor vehicles or heavy machinery; wholesale store; bakery not exceeding 500 square metres in net floor area; confectionery not exceeding 500 square metres in net floor area; outdoor market within a Business Improvement Area;
(AMENDED B/L 8614, June 23, 1986 AND by B/L 232-2006, Jan. 18, 2007)

(ii) A personal service shop; day nursery; funeral home; church; church hall; tourist home. **(AMENDED BY B/L 11922, SEPT. 23/1994)**

(iii) A business, financial, medical or veterinary office; professional studio; commercial school;

(iv) A light repair shop; gas bar; an existing service station; an existing automobile repair garage. **(AMENDED B/L 11614, Nov.1/1993)**

(v) A restaurant; take-out food outlet; micro-brewery.
(AMENDED by B/L 33-2001, October 23, 2001, OMB Decision/Order No. 1716, OMB Case No. PL010233 AND AMENDED by B/L 375-2004, Dec. 21, 2004)

(vi) Place of entertainment and recreation; private hall;

(vii) Dwelling units in a combined use building with any one (1) or more of the foregoing uses, provided that all dwelling units, not including entrances thereto, are located entirely above the non-residential use(s);

(viii) A public parking area; parking garage;

(ix) Any use accessory to the foregoing uses, not including an outdoor storage yard unless otherwise specifically permitted by this by-law.
(AMENDED by B/L 232-2006, Jan. 18, 2007)

(aa) Prohibited Uses

Despite subclause (iv) of clause (a) of this subsection, a gar bar and a service station shall not be permitted uses on any lot situated within 63.5 metres of the east or west limits of Sandwich Street between Detroit and Brock Streets or within 30 metres of the south limit of Mill Street between Russell and Sandwich Streets. (ADDED B/L 11358, March 1/93)

(b) Regulations

(i) Maximum building height - equal to the length of the longest exterior lot line or 14 metres, whichever is the lesser;
(AMENDED by B/L 363-2002, Dec. 31, 2002)

(ii) Minimum amenity area per dwelling unit:

1. Bachelor Unit - 7.5 square metres
2. One-Bedroom Unit - 10 square metres
3. Two or more bedroom unit - 15 square metres

(AMENDED by B/L 162-1998, June 24, 1998 AND by B/L 33-2001, October 23, 2001, OMB Decision/Order No. 1716, OMB Case No. PL010233)

1.8 HIGHEST AND BEST USE

Highest and Best Use is defined by the Appraisal Institute of Canada as:

> *The reasonable, probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible and that result in the highest value.*

The Highest and Best Use of a property is an economic concept that measures the interaction of four critical criteria: legal permissibility, physical possibility, financial feasibility, and maximum productivity.[2]

The concept of highest and best use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use.

In the determination of highest and best use, a number of critical factors must be examined including, but not restricted to; locational characteristics; zoning and the potential for change; type and extent of existing improvements; marketability; profitability and development potential as dictated by site size and neighbouring land use.

The criteria for highest and best use of both the land as though vacant and property as improved must however meet four critical factors. The highest and best use must be legally permissible, physically possible, financially feasible and maximally productive.

The Appraisal Institute of Canada's Canadian Uniform Standards of Professional Appraisal Practice (CUSPAP) requires an appraiser to consider the Highest and Best Use of the property as if vacant separately from the highest and best use of the property as improved. This is because the Highest and Best Use of the site as if vacant and available for development determines the value of the land, even if the property's existing improvement does not represent the highest and best use of the site.

Highest and Best Use (As Improved)

The subject property is located in an area designated in the Official Plan as Mixed Use Medium Profile area with CD2.2 zoning according to the Zoning Bylaw 8600 of the City of Windsor. The subject property has been utilized as a parking lot in conjunction the Enwin Utilities office building across the street for the last few years. The site is not improved at the current time.

Highest and Best Use (As Though Vacant)

The subject property is located on the west side of Pelissier Street and is zoned for commercial uses. The zoning is quite liberal and allows for quite a wide range of commercial uses. It is felt that the Highest and Best Use for the subject site would be for commercial development as allowed under the zoning in place.

[2] The Appraisal Institute of Canada, The Standards, pg. 57

2. ANALYSIS AND CONCLUSIONS

2.1 PREAMBLE TO THE THREE APPROACHES TO VALUE

Cost Approach

Inherent in this test of value is the Principle of Substitution, which affirms that when a property is replaceable, its value tends to be set by the cost of acquiring an equally desirable substitute property, assuming no costly or unnecessary delay is encountered when making the substitution. The method of the Cost Approach is to employ the technique of estimating the value of the land and adding to that the estimated depreciated reproduction cost of the improvements. The inaccuracies inherent in the estimation of accrued depreciation reduce the reliability of this approach to value.

The subject property is currently vacant and is utilized as a paved parking lot. Typically the Cost Approach is not utilized in the valuation of vacant properties.

Direct Comparison Approach

This approach is based on the Principle of Substitution which maintains that a prudent purchaser will not pay more for a property than it would cost to buy an equally desirable substitute property provided there is no delay in making the acquisition.

In this instance, the appraiser has found a number of sales of vacant commercial land located on main routes in the City of Windsor. A number of these properties were improved with parking lots at the time of the sale.

Income Approach

This approach involves an estimate of the present value of the future benefits accruing to the property. It is based on the underlying principle that there is a relationship between the income (specifically the net income) that a property is capable of earning and its value at any given moment in time. Typically, vacant commercial sites are rarely leased and the appraiser has few examples of leased commercial sites in Windsor. As a result, the Income Approach will not be completed.

In summary, the Direct Comparison Approach will be completed in this appraisal.

2.2 DIRECT COMPARISON APPROACH

2.2.1 Comparable Sales Summary

A number of sales of commercial land in on main routes in Metropolitan Windsor were examined. The sales chart and sales information are below.

Commercial Land Sales

Sale #	Location	Sale Price	Sale Date	Site Size (ft²)	Sale/ Ft² of Land	Exposure Time (Days)
1	191 Bruce Windsor	$120,000	Oct-17	7,320	$16.39	87
2	3800 Walker Road Windsor	$560,000	Nov-17	44,940	$12.46	84
3	3048 Dougall Ave. Windsor	$1,600,000	Oct-15	86,249	$18.55	N/A
4	1504 Pelissier St. Windsor	$85,000	Aug-16	5,650	$15.04	N/A
5	525 & 535 Cabana E. Windsor	$369,500	Nov-15	29,041	$12.72	370
6	5178 Tec. Rd. E. Windsor	$250,000	Feb-17	15,725	$15.90	88
7	3461 Walker Rd. Windsor	$250,000	Sep-16	12,285	$20.35	94
	Average			**28,744**	**$15.92**	**145**
	Median			**15,725**	**$15.90**	**88**
	741 Pelissier St.			**10,800**		

Sale 1 is the October, 2017 conveyance of a corner site at the intersection of Bruce and Chatham Street. The site has an overall lot size of 8,276 square feet however, there is a utility easement on the north west corner of the site. The easement area contains two green metal boxes which have been reported to be automated switch gears; an integral part of the downtown electrical grid. These items cannot be removed and as such effectively reduce the "usable" size of the subject site to 7,320 square feet.

The second sale is the November, 2017 conveyance of a 44,940 square foot site situated on the east side of Walker Road. The property features 210 feet of frontage on Walker Road and achieved a rate of $12.46 per square foot.

Sale 3 is located in the 3000 block of Dougall Avenue, about 2 blocks south of the E. C. Row Expressway. The property was improved with an older motel at the time of sale. This building has since been razed and the property is being improved with a funeral home. This sale achieved a rate of $18.55 per square foot.

Sale 4 is the August, 2016 conveyance of a 5,650 square foot site situated southeast corner of Pelissier Street and Shepherd Street West in the core area of the City. The property was zoned for commercial use.

The next sale is the November, 2015 conveyance of a 29,041 square foot site on the south side of Cabana Road East, a short distance east of the subject property. The property was zoned commercially and is suitable for development with a 5,000 square foot commercial building.

Sale 6 is the February, 2017 conveyance of a 15,725 square foot site situated along Tecumseh Road east near Buckingham. The property was zoned for commercial use. The site has a billboard.

The final Sale is the September, 2016 conveyance of a 12,285 square foot site situated on the west side of Walker Road. At the time of the sale, the property was improved with two buildings, a small office building and a mechanic's shop; both of which were approximately 1,000 square feet. According to the selling realtor, the buildings will be retained, however, it is felt that they are an under utilization of the site. As a land sale, it achieved a rate of $20.35 per square foot.

2.2.2 Analysis

The sales occurred between October, 2015 and November, 2017 and consist of commercial land conveyances located in Metropolitan Windsor. The sites ranged in size between 5,650 square feet and 86,249 square feet, with an average size of 28,744 square feet and a median size of 15,725 square feet. The rates per square foot ranged between $12.46 and $20.35, with an average rate of $15.92 per square foot and a median rate of $15.90.

The most recent sales are Sales 1, 2 and 6, all of which occurred this year. These sales achieved rates of $16.39, $12.46 and $15.90 per square foot with an average rate of $14.92 per square foot.

In terms of lot size, the comparable with the closest lot size to the subject was Sale 7 with an area of 12,285 square feet. This sale achieved a rate of $20.35 per square foot.

In terms of location, the sales closest to the subject are Sales 1, and 4, which are located within a 1+-kilometre radius of the subject. These sales achieved rates of $16.39 and $15.04, with an average rate of $15.72 per square foot.

The table below summarizes the foregoing observations.

Unit of Comparison	Sales Emphasized	Average Sale Price/ft²
Overall	1, 2, 3, 4, 5, 6, 7	$15.92
Effective Date	1, 2, 6	$14.92
Lot Size	7	$20.35
Location	1, 4	$15.72
Overall Average		**$16.73**

2.2.3 Conclusions

After reviewing the size of the subject lot, its location and considering that it is paved and curbed and located in the downtown core, the appraiser feels that an applicable rate per square foot would be slightly higher than the overall average indicated in the table above between $20.00 and $22.00. The calculation is as follows:

Subject Land:

10,800	ft²	@	$21	per ft² =	$226,800
Rounded:					$227,000

3. RECONCILIATION AND FINAL ESTIMATE OF VALUE

The three approaches to value generally encountered in appraisal were discussed under their appropriate headings. All three approaches were considered but only the Direct Comparison Approach was completed in the appraisal of the Subject Property.

Direct Comparison Approach **$227,000**

The Cost Approach is based on the estimated land value and the depreciated reproduction cost of the subject property. The depreciated reproduction cost presents a drawback to this approach. In a relatively new building depreciation can be reasonably accurately measured but as the age of a structure increases so does the potential for inaccurate measurement of all types of depreciation. As noted previously, the Cost Approach is typically not used for vacant commercially zoned land.

In the Direct Comparison Approach, a total of 7 sales of commercially zoned sites situated on main routes in the Metropolitan Windsor area were considered. The sales occurred between October, 2015 and November, 2017 and ranged in size between 5,650 square feet and 86,249 square feet. The estimate of value by this approach was $227,000.

As mentioned earlier, the Income Approach is typically not used for the valuation of vacant commercial land.

Therefore it is my opinion that the market value of the subject property as of December 6, 2017 was as follows:

$227,000
Two Hundred Twenty Seven Thousand Dollars

3.1 Exposure Time

Exposure time is always presumed to precede the effective date of the appraisal. It may be defined as:

> *The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal. This estimate is based upon an analysis of past events assuming a competitive and open market.*

A search was made regarding the average exposure time of I.C. & I. Properties which sold through the Multiple Listing Service of the Windsor-Essex County Real Estate Board. Further, inquiries were made with several real estate brokers familiar with the Windsor retail market.

Seven comparable sales of vacant commercial land in the Metropolitan Windsor area were considered. Of the seven, five were sold through MLS. The exposure times on these MLS sales were from 84 days up to 370 days, with an average exposure time of 145 days and a median exposure time of 88 days. Based upon this data, it is felt that a reasonable exposure time for the subject property would be 3-5 months.

4. CERTIFICATION OF APPRAISER

I, Dave Harris, hereby certify that, to the best of my knowledge and belief:

1. That the subject property, 741 Pelissier Street, Windsor, Ontario, was inspected on December 6, 2017.

2. The statements of fact contained in this report are true and correct.

3. The reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions and conclusions.

4. I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

5. My compensation is not contingent upon the reporting of a predetermined value or direction in value that favours the cause of the client, the amount of the value estimate, the attainment of a stipulated result or the occurrence of a subsequent event.

6. My analysis opinions and conclusions were developed, and this narrative appraisal report has been prepared, in conformity with the requirements of the Appraisal Institute of Canada.

7. No one provided significant professional assistance to the person signing this report.

8. As of the date of this report, the undersigned has fulfilled the requirements of The Appraisal Institute of Canada Continuing Professional Development Program.

9. I have the knowledge and experience to complete this appraisal assignment competently.

As a result of the analyses, opinions and conclusions contained herein, the estimated market value of 741 Pelissier Street, Windsor, Ontario on December 6, 2017 was:

$227,000 - Two Hundred and Twenty Seven Thousand Dollars

Signed on December 14, 2017

[redacted]

[redacted] AACI, P.App.

3 - VECC - 15

Reference:

Exhibit 3, Attachment 3 A, pages 22, 23, 25, 27, 29, 31, 33 and 39

Load Forecast Model, CDM and Monthly Data Tabs

Question:

a) Please provide the OPA/IESO Reports that support CDM values used in the Load Forecast Model regarding the impact of programs implemented in 2006-2017.

b) For each of the classes with CDM savings in the years 2006-2017 and for the total CDM savings overall please complete the following schedule based on the annual verified savings:

Program Year	Calendar Year						
	2006	For each year 2007-> 2019					2020
2006							
2007							
2008							
2009							
2010							
2011							
2012							
2013							
2014							
2015							
2015							
2017							
Total							

c) The Load Forecast assumes (see referenced pages from Attachment 3-A) there is no loss in persistence of kWh in the years 2018-2020 for programs implemented in 2006-2017.

i. Is this consistent with the persisting values reported by the IESO/OPA?

ii. If not, please either explain why this is appropriate or revise the Load Forecast and the proposed LRAMVA threshold values accordingly.

d) The discussion on page 39 recognizes that the impact of CDM in the first year of a program will not be the full annualized amount. Given this observation why does the Load Forecast Model (Monthly Data Tab) assume that the annual CDM savings are equally spread over the 12 months of the year?

Response:

a) Please find attached the following Excel documents that support the impact of programs implemented in 2006-2017:

- VECC 15 - Attachment 1 2006-2010 Final OPA CDM Results_ENWIN Utilities Ltd.
- VECC 15 - Attachment 2 2011-2014 Final Results Report_ENWIN Utilities Ltd.
- VECC 15 - Attachment 3 Final 2015 Annual Verified Results Report_EnWin Utilities Ltd.
- VECC 15 - Attachment 4 Final Verified 2016 Annual LDC CDM Results_Report_EnWin
- VECC 15 - Attachment 5 2017 Final Verified Results_EWU_Report

b) Please find attached a copy of the completed schedule. The Excel file is titled VECC 15 - Attachment 6 Persistent CDM Savings per Rate Class".

c)

i.) No, there is some lost persistence of 2016-2017 programs between 2018 and 2020.

ii.) The updated load forecast considers this loss in persistence. Please note rows 15 and 16 in the Normalized Annual Summary tab of the updated load forecast model.

d) The load forecast recognizes only half of first year program savings. This method was selected to reduce the maximum differences between actual CDM activities in the month and what is included in the load forecast. A step approach would minimize average deviations at the cost of greater deviations. Please also see the response to OEB Staff-75.

3 - VECC - 16

Reference:

Exhibit 3, Attachment 3-A, pages 39-40

Load Forecast Model, CDM and CDM Adjustments Tabs Exhibit 3, Attachment D (ENWIN'S CDM Plan)

Question:

a) The kWh value in the CDM Adjustments Tab for total annualized savings from 2017 CDM programs (34.06) does not match the value in the CDM Tab for 2017 total program savings (36.71). Please reconcile.

b) None of the kWh values for the savings from 2017-2020 CDM Programs in either the CDM Tab or the CDM Adjustments Tab match the values set out in Attachment D (ENWIN's CDM Plan). Please reconcile and explain the source of the savings from 2018-2020 programs as used in the Load Forecast Model.

c) What is the source of the CDM breakdown by customer class as used in the CDM Adjustments Tab for the years 2017-2020?

Response:

a) The difference is 2.65 GWh related to an LED streetlight conversion program. In the original forecast, ENWIN provided additional data to have one full year of post-conversion demand and consumption for the class. The 2020 forecast is based on average consumption per connection during the post-conversion period, after CDM activities were complete. Elenchus believes this provides a more accurate forecast of future consumption than an alternate methodology involving adding and removing CDM activities. Further, LRAM recovery of CDM related to streetlights does not rely on an LRAMVA target for that class.

b) At the time of ENWIN populating the IESO's Cost Effectiveness Tool and CDM Plan template for submission to the IESO, the 2017 Final Verified Results Report had not yet been released. In the absence of this information, ENWIN utilized the IESO's Participation and Cost Report (May 2018) when modelling 2017 savings within its latest CDM Plan. The 2017 savings contained within the load forecast is a combination of savings taken from the IESO's 2017 Final Verified Results Report and unverified adjustments to 2017 savings reported in the IESO's Participation

& Cost Report (March 2018). The discrepancy in 2017 savings between the CDM Plan and the load forecast was created because ENWIN used different sources to populate these documents due to timing.

For the program years 2018-2020, ENWIN's CDM Plan contained savings related to energy efficiency projects subject to a Conservation First Framework contract, whereas the CDM forecast in the load forecast includes savings related to these same projects, as well as savings which are based on historical participation. These savings were intended to account for activities undertaken within ENWIN's service territory under the IESO's Interim Framework. Following the release of the OEB's addendum to the filing requirements for electricity distribution rate applications[1], ENWIN has since updated its CDM forecast within the Load Forecast to only include savings subject to a Conservation First Framework contract.

c) The CDM data in the CDM Adjustments tab is based on the table provided by ENWIN in the CDM tab. It is the first-year savings for each class from 2017 to 2020. In the updated model this has been corrected so savings are first year savings that persist to 2020.

For 2017, ENWIN used the detailed project list provided by the IESO to allocate savings to the various rate classes. The project list accompanies the IESO's Final Verified Results Report. Where CDM programs are only available to customers who reside in a particular rate class, the savings from said programs were allocated to the individual classes. Where CDM program eligibility spans multiple rate classes, ENWIN reviews each project contained within the list to determine which rate class each individual project belongs to. ENWIN verifies both the facility address and the account number provided in the project list against the data that resides in its Customer Information System to ensure accuracy in allocating savings.

As mentioned above, the CDM forecast for the years 2018-2020 was derived from ENWIN's approved CDM Plan, as well as historical participation rates. Given that ENWIN's CDM plan is comprised of projects currently under contract, ENWIN was able to leverage the participant's information contained within their application to allocate these savings to the various rate classes using the same methodology as described above. For the savings forecasted using historical participation rates, ENWIN relied on past allocation splits between the various rates classes to allocate these savings.

[1] Ontario Energy Board, *Addendum to Filing Requirements for Electricity Distribution Rate Applications – 2020 Rate Applications*, Issued July 15, 2019, section 2.3.1.3 CDM Adjustment for the Load Forecast for Distributors.

3 - VECC - 17

Reference:

Exhibit 3, Attachment 3-A, pages 26, 28, 30, 32 and 34

Load Forecast Model, CDM, CDM Adjustments and kW Forecast Tabs

Question:

a) Are the kW values reported in the CDM Tab for 2006-2017 annual peak savings as verified/reported by the IESO or estimates of the resulting impact on the billing demand for the respective customer classes? If the latter, how were these values derived from the OPA/IESO reported values?

b) What is the source of the kW savings from 2018-2020 CDM programs – per the CDM and CDM Adjustments Tab?

c) The kW forecasts With CDM Removed all assume that there is no loss in the persistence of the savings from 2006-2017 programs in the years 2018-2020.

i. Is this consistent with the persisting values reported by the IESO/OPA?

ii. If not, please either explain why this is appropriate or revise the Load Forecast and the proposed LRAMVA threshold values accordingly.

d) For all demand billed classes, the kW/kWh ratio (per the kW Forecast Tab) for Cumulative CDM is materially less than the ratio for actual load. Please explain why this is the case. Is it related to the issue raised in part (a)?

Response:

a) ENWIN confirms that the kW values reported in the CDM tab for 2006-2017 are annual peak savings as reported by the OPA/IESO. The source for these savings is the OPA/IESO final verified results reports.

b) The CDM forecast in the Load Forecast for the years 2018-2020 was derived from ENWIN's approved CDM Plan, as well as historical participation rates. These savings were intended to account for activities undertaken within ENWIN's service territory under the IESO's Interim Framework. Following the release of the OEB's addendum to the filing requirements for

electricity distribution rate applications[1], ENWIN has since updated its CDM forecast within the Load Forecast to only include savings subject to a Conservation First Framework contract.

c) i. No, there is some lost persistence of 2016-2017 programs between 2018 and 2020.

ii. The loss of persistence is reflected in the kWh forecasts (please see the response to VECC-15 c), which is carried through to the kW forecast. The kW CDM figures have been revised consistent with changes to the CCF and reflect only CDM savings persisting to 2020.

d) Yes, it is related to the issue raised in part (a). The CDM within this tab, and the CDM adjustment tab, originally included only annual peak savings and not monthly demand savings. For this reason, the kW Forecast and CDM Adjustment tabs have been revised. For the kW Forecast, consideration of CDM has been removed because billed demand reductions are not known for each month, only the peak month. The CDM Adjustment has also been revised to reflect forecast reductions in billed demand related to CDM activities.

[1] Ontario Energy Board, *Addendum to Filing Requirements for Electricity Distribution Rate Applications – 2020 Rate Applications*, Issued July 15, 2019, section 2.3.1.3 CDM Adjustment for the Load Forecast for Distributors.

3 - VECC - 18

Reference:

Exhibit 3, Attachment 3-A

Load Forecast Model, Connection Count Tab

Question:

a) Are the historic customer/connection counts use average annual values, mid-year values or year-end values?

b) Please provide the customer/connection counts by class as of most recent month available.

Response:

a) The historic customer count figures are the average of the values at the end of March, June, September, and December each year.

b) Please see below for the customer/connection count values at the end of June 2019.

Rate Class	Customer/Connections
Residential	80,118
GS<50	7,108
GS>50	1,196
Intermediate	3
Large Use	6
Large Use 3TS	2
Large Use FA	1
Street Light	24,452
Sentinel Light	512
USL	715
Total	**114,113**

3 - VECC - 19

Reference:

Exhibit 3-A, Attachment 3-A, page 31

Question:

b) Was all of the CDM implemented in 2006-2012 associated with the two customers still remaining in the Large Use 3TS class?

c) If not, what adjustments are required to the calculation of the forecast Normalized Load for this class?

Response:

b) There are no CDM activities for the Large Use 3TS class until 2012. All CDM activities are related to the remaining 2 customers.

c) No adjustments are necessary.

3 - VECC - 20

Reference:

Exhibit 3, page 3 and Attachment 3-D

Directive-CCF-Wind-down (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Directive-Interim-Framework (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Interim Framework CDM Plan – 20190524 (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Question:

a) Please confirm that the CDM Plan through to 2020 in Attachment 3-D is based on the Conservation First Framework implemented by the previous provincial government.

b) In March 2019 the current Minister of Energy issued directives i) discontinuing the Conservation First Framework and the Industrial Accelerator Program and ii) establishing a new Interim Framework. On June 5, 2019 the IESO published the new framework setting out both those programs that would be continued and those that would be discontinued. The IESO also released new program budgets and targets for 2019 and 2020. What impact will the revised framework (which only continues some of the of original Conservation First Framework's programs) have on the CDM Plan savings for 2019-2020 as set out in Attachment 3-D?

Response:

a) ENWIN confirms that its CDM Plan through to 2020 is based on the Conservation First Framework.

b) The IESO's Interim Framework will not have any impact on ENWIN's CDM Plan. ENWIN's CDM Plan only contains savings related to energy efficiency projects placed under contract by ENWIN as part of the former Conservation First Framework.

3 - VECC - 21

Reference:

Exhibit 3, Attachment 3-A, page 20

Load Forecast Model, CDM Adjustments Tab

Exhibit 3, Attachment 3-D

Directive-CCF-Wind-down (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Directive-Interim-Framework (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Interim Framework CDM Plan – 20190524 (http://www.ieso.ca/Sector-Participants/Conservation-Delivery-and-Tools/Interim-Framework)

Question:

a) Please confirm that the CDM forecast through to 2020 in the Load Forecast Model is based on the Conservation First Framework implemented by the previous provincial government.

b) In March 2019 the current Minister of Energy issued directives i) discontinuing the Conservation First Framework and the Industrial Accelerator Program and ii) establishing a new Interim Framework. On June 5, 2019 the IESO published the new framework setting out both those programs that would be continued and those that would be discontinued. The IESO also released new program budgets and targets for 2019 and 2020. What impact will the revised framework (which only continues some of the of original Conservation First Framework's programs) have on the forecast CDM savings for 2019-2022 as set out in the Load Forecast Model and Attachment 3-A?

Response:

a) Within the CDM forecast ENWIN had included savings related to energy efficiency projects placed under contract as part of the former Conservation First Framework, and savings which were based on past participation. These savings were intended to account for activities undertaken within ENWIN's service territory under the IESO's Interim Framework. Following the release of the OEB's addendum to the filing requirements for electricity distribution rate

applications[1], ENWIN has since updated its CDM forecast within the Load Forecast to only include savings subject to a Conservation First Framework contract.

b) The IESO's Interim Framework will not have any impact on ENWIN's forecasted CDM savings for 2019-2022. As mentioned above, ENWIN's CDM forecast has been updated to only include savings related to energy efficiency projects placed under contract by ENWIN as part of the former Conservation First Framework.

[1] Ontario Energy Board, *Addendum to Filing Requirements for Electricity Distribution Rate Applications – 2020 Rate Applications*, Issued July 15, 2019, section 2.3.1.3 CDM Adjustment for the Load Forecast for Distributors.

3 - VECC - 22

Reference:

Exhibit 3, Attachment 3-E

Question:

a) There are no revenues reported (actual or forecast) for account 4082 – Retail Service Revenues. Please explain why.

Response:

a) Please see ENWIN's response to Interrogatory OEB Staff - 120 b) i.

4 - VECC - 23

Reference:

Exhibit 4, pages 28-29

Question:

a) Please update the OM&A programs tables (page 27-29) to include 2018 actual results.

Response:

a) ENWIN has updated Appendix 2-JC with 2018 actual results as requested. An updated version of the Chapter 2 Appendices workbook has been filed with these interrogatory responses.

4 - VECC - 24

Reference:

Exhibit 4, pg. 17

Question:

a) Using the figures 4.8 please explain how the estimate of the annual increase in OM&A due to the IFRS related changes to capitalization policy account of $2,195,237 was derived.

Response:

a) The $2,195,237 IFRS Burden change for the 2020 Test Year was calculated comparing the IFRS burden rates calculated for 2020 against the burden rates that would have been applied if CGAAP was still being used.

   The IFRS burden rates are lower than what was previously allowed under CGAAP and those lower rates resulted in less amounts being capitalized and more costs remaining within OM&A under IFRS relative to CGAAP.

   As requested, the charts below for Figure 4-8 have been 'normalized' to isolate the IFRS burden rate change for each of the years between the 2009 Board Approved through the 2020 Test Year.

   The estimate for the 2020 Test Year specifically was derived through discussions with operational staff during the budgeting process along with review against historical information to ensure the 2020 Test Year assumptions were reasonable.

($000's)	2009 Board Approved	2009 Historical Year	2010 Historical Year	2011 Historical Year	2012 Historical Year	2013 Historical Year	2014 Historical Year
Total OM&A Before Capitalization (B)	26,057	23,456	25,441	25,946	28,277	25,149	27,395
Total Capitalized (B)	4,434	3,508	3,983	3,167	1,861	2,135	2,316
IFRS impact	-	-	-	-	(1,402)	(1,660)	(1,923)
Normalized 2009 approach Capitalized (C)	4,434	3,508	3,983	3,167	3,263	3,795	4,239
% of Capitalized OM&A (C/A)	17%	15%	16%	12%	12%	15%	15%

($000's)	2015 Historical Year	2016 Historical Year	2017 Historical Year	2018 Forecast	2019 Bridge Year	2020 Test Year
Total OM&A Before Capitalization	27,913	28,277	28,851	30,336	31,650	32,377
Total Capitalized (B)	2,520	2,169	2,092	2,813	2,876	3,030
IFRS impact	(2,077)	(1,756)	(1,779)	(1,985)	(2,160)	(2,195)
Normalized 2009 approach Capitalized (C)	4,597	3,925	3,871	4,798	5,036	5,225
% of Capitalized OM&A (C/A)	16%	14%	13%	16%	16%	16%

4 - VECC - 25

Reference:

Exhibit 4, pages 28-29/30

Question:

a) Please explain how the bad debt forecast for 2020 of $659,334 was derived.

Response:

The Bad Debt forecast for 2020 of $659,334 was derived by taking the 5 year average from 2013 – 2017 actual results.

4 - VECC - 26

Reference:

Exhibit 4, pages 28-29

Question:

a) Please explain the significant increase in the health and safety program spending in 2018 as compared to 2019 and 2020.

Response:

a) The increase in the health and safety program is effectively a reclassification of costs within different categories. Prior to 2018, a manager within Human Resources was responsible for the Health and Safety program along with other Human Resource related activities. In 2018, the Human Resources area restructured and more resources were allocated to Health and Safety activities. As a result, the Human Resource manager that previously split their role now is primarily responsible for the Health and Safety program(s). That focus resulted in costs being allocated from Human Resources to Health and Safety. The net result overall was neutral to the company but was a specific enhancement and refocus on the Health and Safety program.

4 - VECC - 27

Reference:

Exhibit 4, pages 43-45 / Appendix 2-K

Question:

a) Please update Appendix 2-K to show 2018 actual results. Please also add two rows showing the expensed and capitalized amounts of the total compensation costs in each year.

Response:

a) ENWIN has updated Appendix 2-K with 2018 actuals. The table below also contains total capitalized and expensed compensation costs.

Appendix 2-K

	Last Rebasing Year - 2009- Board Approved	Last Rebasing Year - 2009- Actual	2010 Actuals	2011 Actuals	2012 Actuals	2013 Actuals	2014 Actuals
Number of Employees (FTEs including Part-Time)[1]							
Management (including executive)	29	33	35	34	35	36	32
Non-Management (union and non-union)	171	162	157	159	161	162	158
Total	200	195	192	193	196	198	190
Total Salary and Wages including ovetime and incentive pay							
Management (including executive)	3,540,516	3,627,410	3,890,543	4,065,920	4,220,833	3,748,764	3,641,740
Non-Management (union and non-union)	10,076,854	10,043,554	10,772,117	11,257,699	11,126,534	11,703,666	12,368,365
Total	13,617,370	13,670,964	14,662,660	15,323,618	15,347,367	15,452,430	16,010,105
Total Benefits (Current + Accrued)							
Management (including executive)	1,281,641	1,014,346	1,226,360	1,495,632	2,190,001	1,572,346	1,471,273
Non-Management (union and non-union)	3,626,884	2,835,964	3,159,730	3,917,296	5,759,079	4,370,186	4,706,967
Total	4,908,525	3,850,310	4,386,090	5,412,928	7,949,080	5,942,532	6,178,240
Total Compensation (Salary, Wages, & Benefits)							
Management (including executive)	4,822,157	4,641,756	5,116,903	5,561,552	6,410,834	5,321,109	5,113,013
Non-Management (union and non-union)	13,703,738	12,879,518	13,931,847	15,174,995	16,885,613	16,073,852	17,075,332
Total	18,525,895	17,521,274	19,048,750	20,736,547	23,296,447	21,394,962	22,188,345
Capitalized compensation costs	4,622,280	3,109,469	3,261,572	3,561,213	3,299,318	3,830,397	4,080,532
Expensed compensation costs	10,166,553	9,103,210	11,374,733	15,989,046	18,983,147	15,852,303	16,666,196

Appendix 2-K

	2015 Actuals	2016 Actuals	2017 Actuals	2018 Actuals	2019 Bridge Year	2020 Test Year
Number of Employees (FTEs including Part-Time)[1]						
Management (including executive)	32	33	34	36	36	36
Non-Management (union and non-union)	157	165	164	152	159	161
Total	189	198	198	188	195	197
Total Salary and Wages including ovetime and incentive pay						
Management (including executive)	4,151,009	3,671,477	4,353,611	4,438,271	4,368,679	4,470,749
Non-Management (union and non-union)	12,327,765	12,999,356	12,942,613	12,698,263	13,512,481	14,017,942
Total	16,478,774	16,670,832	17,296,224	17,136,534	17,881,161	18,488,691
Total Benefits (Current + Accrued)						
Management (including executive)	1,732,351	1,533,659	1,785,211	1,895,561	1,870,235	1,904,813
Non-Management (union and non-union)	4,924,201	5,071,905	5,126,934	5,143,403	5,432,136	5,623,751
Total	6,656,552	6,605,564	6,912,145	7,038,964	7,302,371	7,528,564
Total Compensation (Salary, Wages, & Benefits)						
Management (including executive)	5,883,360	5,205,135	6,138,822	6,333,832	6,238,914	6,375,562
Non-Management (union and non-union)	17,251,966	18,071,261	18,069,547	17,841,666	18,944,617	19,641,693
Total	23,135,326	23,276,396	24,208,369	24,175,498	25,183,532	26,017,254
Capitalized compensation costs	4,169,610	4,060,037	3,731,802	4,767,857	4,510,309	4,935,751
Expensed compensation costs	17,463,633	17,691,283	18,247,103	18,613,673	19,447,291	19,828,860

4 - VECC - 28

Reference:

Exhibit 4, page 32

Question:

a) Please provide a reference for the IESO requirement to have a 24 hour control centre. Prior to 2017 did ENWIN operate a 24 hr. SCADA/Control room?

Response:

a) ENWIN has always had a 24/7 control centre based on the recollection of past and present staff. The need for this 24/7 control centre is driven in part by the fact that ENWIN owns and operates 5 transmission connected transformer stations. Three of these stations feed automotive plants that operate 24/7 and those customers have an expectation that if there is an interruption to their power supply, they will be able to contact ENWIN directly and without delay. ENWIN also operates a distribution SCADA system which provides real-time monitoring and messaging to operators regarding the state of the distribution system. When there is an upset due to a storm or other incident which affects power supply to customers, and that incident occurs outside normal working hours, then the operators are able to immediately begin switching to isolate the fault and restore power to unaffected sections, and also begin calling in staff and dispatching them to the point of the trouble. Without a 24/7 control centre, this process would likely add at least an additional half hour to the response time to restore power during the 76% of the week that is not regular working hours. ENWIN's CAIDI is just under a half hour for 2018. Adding this additional time would on average nearly double ENWIN's CAIDI and increase ENWIN's CAIDI to over 50 minutes.

   The IESO and Hydro One do not mandate that utilities that operate facilities connected to the transmission system have a 24/7 control room. However, there is an expectation that if there is an incident involving those facilities, that they will be able to reach someone with the authority and the ability to respond within a half hour.

4 - VECC - 29

Reference:

Exhibit 4, page 54

Question:

a) Is ENWIN a member of the Electricity Distributors Association? If yes please provide the annual fees paid to this organization for the years 2009 through 2020 (forecast).

Response:

a) ENWIN is a member of the Electricity Distributors Association.

The annual fees for the years 2009 and 2010 are not available. Those balances were captured within a legacy ERP system that no longer is accessible.

The remaining annual fees are as follows:

Year	Annual Fees
2011	$ 64,700
2012	$ 68,200
2013	$ 71,500
2014	$ 74,600
2015	$ 77,100
2016	$ 77,900
2017	$ 78,700
2018	$ 80,300
2019 Bridge Year	$ 80,274
2020 Test Year	$ 81,879

4 - VECC - 30

Reference:

Exhibit 4, page 55 /Appendix 2-M

Question:

a) Please provide a breakdown of the $1,135,883 in one-time costs (Appendix 2-M) incurred for this Application into the following categories:

- Legal costs
- External Consultant costs
- Internal staff costs
- Intervenor costs

For each category please show the amount of costs incurred to-date.

b) What portion of the one-time regulatory costs are included in the presentation of OM&A costs as shown in Appendix 2-JA for 2018, 2019 and 2020?

Response:

a) The breakdown of the $1,135,883 in one-time costs (Appendix 2-M) incurred for this Application are as follows:

	Incurred	Forecast	**Totals**
Legal Costs	$ 205,505	$ 207,435	**$ 412,940**
Consultant Costs	$ 361,001	$ 100,000	**$ 461,001**
Internal Staff Costs	$ 52,066	$ 34,875	**$ 86,941**
Intevenor and OEB Costs	$ -	$ 175,000	**$ 175,000**
	$ 618,572	$ 517,310	**$ 1,135,882**

b) ENWIN has removed all of the one-time regulatory costs from the 2018 – 2020 years within Appendix 2-JA.

ENWIN has included 1/5 of the total regulatory costs or $227,177, which is calculated within Appendix 2-M, in the 2020 Test Year.

4 - VECC - 31

Reference:

Exhibit 4, Section 4.9, page 56

Question:

a) Has the LEAP funding provided to ENWIN's lead social agency been fully utilized in each of the past five years?

b) Does ENWIN direct/inform customers facing disconnection about the LEAP program?

Response:

a) Yes, the LEAP funding provided to ENWIN's lead social agency has been fully utilized every year for the past five years.

b) Yes, as per Distribution System Code requirements and to better serve our customers, ENWIN informs all of its customers facing disconnection of the additional assistance that may be available to them, including the LEAP program.

4 - VECC - 32

Reference:

Exhibit 4, Section 4.13, page 62

Question:

a) Please provide the actual PILs paid in each year 2009 through 2018 and the forecast amounts to be paid in 2019 and 2020,

---

Response:

a) Below is a schedule of actual PILs paid, not incurred, in each year 2009 through 2018 and the forecast amounts to be paid in 2019 and 2020 as submitted April 26, 2019.

Tax Year	PILs Paid in Year
2009	$ 6,133,015
2010	5,492,799
2011	3,203,549
2012	1,772,589
2013	7,416,192
2014	4,691,248
2015	3,221,000
2016	2,854,099
2017	5,993,226
2018	3,663,764
2019 Forecast	2,389,585
2020 Forecast	2,885,660

4 - VECC - 33

Reference:

Exhibit 4, Attachment 4-J/Appendix 4-K pg.85-

Question:

a) Does ENWIN continue to do water meter reading on behalf of the City of Windsor (WUC)? If yes please indicate how many electricity meters are manually read each month by ENWIN and how many water meters are read each month. Please also provide the annual charge to the City for water meter reading in each year 2009 through 2020.

b) Are water charges billed on the ENWIN utility bill? If yes please provide the annual fees for this service for the period 2009 through 2020.

Response:

a) ENWIN provides meter reading and billing services to the Windsor Utilities Commission ("WUC"). ENWIN entered into a Water System Operating Agreement where ENWIN operates the Water Treatment, Transmission and Distribution and other water related activities on behalf of WUC, which includes meter reading and billing functions.

   As of December 2018, ENWIN manually read 669 electric meters each month. For the same period, ENWIN read 12,580 water meters monthly. However, WUC has undertaken a project to convert their traditional meters to Radio Frequency ("RF") meters. That project to convert water meters within WUC is currently underway and, as a result, it is expected that ENWIN will only have a limited number of water meters that do not end up being converted.

The amount charged to WUC for the period 2009 – 2020 for meter reading services is as follows:

Year	Meter Reading Cost allocation - Water
2009	$ 611,445
2010	$ 653,991
2011	$ 308,558
2012	$ 344,407
2013	$ 347,531
2014	$ 320,936
2015	$ 325,942
2016	$ 345,934
2017	$ 309,758
2018	$ 295,138
2019 Bridge Year	$ 271,219
2020 Test Year	$ 223,979

b) Yes, ENWIN has adopted a single utility model which includes one monthly billing to customers for electricity, water and waste water in an attempt to improve the customer's experience.

As part of the single utility model, ENWIN uses an internal cost allocation model to allocate shared service costs to other affiliates. ENWIN also charges a return on assets to affiliates. The rate of return is 8.21% on any applicable net book value balance for a shared service asset.

It is important to distinguish that ENWIN does not isolate charges for each service but rather allocates the costs of operations to the affiliates. Billing charges, as an example, are embedded in the overall Customer Service allocation that is charged to affiliates. In this case, the cost allocation model applies the total cost of the Customer Service cost centre, which includes billing, and allocates charges every year based on the cost drivers associated with that function or area.

The costs and associated charges for billing are also embedded in the mail processing center as well. Those costs are shared and allocated to affiliates as determined by the appropriate cost drivers similar to all other shared service costs.

The chart below summarizes the 'Customer Service' and 'Mail Processing Centre' charges the Water affiliate received which includes the cost of billing, customer service and collections.

Year	Customer Service & Mail processing Cost allocation - Water
2009	$ 1,118,961
2010	$ 1,234,802
2011	$ 1,258,497
2012	$ 1,294,511
2013	$ 1,329,292
2014	$ 1,611,862
2015	$ 1,492,330
2016	$ 1,513,587
2017	$ 1,459,131
2018	$ 1,524,672
2019 Bridge Year	$ 1,626,298
2020 Test Year	$ 1,657,203

4 - VECC - 34

Reference:

Exhibit 4, pages 67-72

Question:

a) Please provide a schedule setting out ENWIN's calculation of its (unverified) results for 2018 in a format similar to that used by the IESO in its verified CDM Reports.

b) Has any independent 3rd party audited/verified the 2018 activity/participation level by CDM program used in the calculation of the 2018 results? If yes, please provide a copy of the verification report.

c) Please provide the IESO verified results report used in the determination of the impact in 2017 and 2018 of CDM programs implemented in the years 2011-2017.

d) On June 20, 2019 the OEB issued a letter regarding the "Lost Revenue Adjustment Mechanism for 2020 Rate Applications" which acknowledged that verified results reports would not be available from the IESO regarding 2018 CDM programs and indicating that further information would be forthcoming on the supporting documentation that should be provided by distributors with any LRAM claim related to conservation program activities undertaken under the CFF. Has ENWIN received any further information from the OEB regarding the supporting documentation that will be required?

Response:

a) Please see the response to 4 – OEB Staff – 107 b). Please refer to the "2018" worksheet of OEB Staff 107 – Attachment 2 titled "OEB Staff 107 Attachment 2011-2018 Persistence Report_ENWIN Utilities Ltd.xlsx".

b) No, ENWIN has not engaged a third party to audit/verify 2018 savings information. The Net-to-Gross ratios and persistence rate used by the IESO in their monthly Participation & Cost Reports have been applied by ENWIN to arrive at both the net incremental and net persistent savings at the program level.

c) Please see the following files attached to response 3 – VECC – 15:

- VECC 15 – Attachment 2 "2011-2014 Final Results Report_ENWIN Utilities Ltd..xlsx";

- VECC 15 – Attachment 3 "Final 2015 Annual Verified Results Report_EnWin Utilities Ltd..xlsx";
- VECC 15 – Attachment 4 "Final Verified 2016 Annual LDC CDM Results_Report_EnWin.xlsx"; and
- VECC 15 – Attachment 5 "2017 Final Verified Results_EWU_Report.xlsx"

d) On July 15, 2019, the OEB released an addendum to the filing requirements for electricity distribution rate applications.[1] Within the addendum, the OEB states that distributors should rely on the IESO's Participation & Cost (P&C) Reports which have applied the "IESO's 2017 program evaluation results against January 1, 2018 to March 31, 2019 gross unverified savings values, including net-to-gross factors and gross realization rates". Additionally, the "OEB will rely on the P&C report as supporting documentation when assessing distributor applications for lost revenues in relation to energy and demand savings from programs delivered under the CFF".

ENWIN confirms that it has used the IESO's Participation & Cost Reports to support the 2018 unverified results contained within its LRAMVA claim.

[1] Ontario Energy Board, *Addendum to Filing Requirements for Electricity Distribution Rate Applications – 2020 Rate Applications*, Issued July 15, 2019, section 2.3.1.3 CDM Adjustment for the Load Forecast for Distributors.

5 - VECC - 35

Reference:

Exhibit 5

Question:

a) Please provide the achieved return on equity for the years 2009 through and including 2018.

Response:

Please refer to the response provided for OEB Staff Interrogatory #6.

5 - VECC - 36

Reference:

Exhibit 5

Question:

a) Please clarify whether ENWIN considers all of its affiliate long-term debt subject to the maximum of the Board's deemed long-term debt rate (currently at 4.13%)

b) What due diligence did ENWIN undertake to ensure that the replacement of debentures in 2012 was at a competitive rate?

c) Please explain why ENWIN did not take advantage of historically low interest rates between 2015 and 2017 to lower the debt costs its customers pay in rates?

Response:

a) ENWIN considers the Revolving Credit Promissory Note to be 4.134% which is consistent with the actual interest rate for that debt instrument. The other Promissory Note is using the deemed weighted average cost of debt which is 4.133% but has been rounded to 4.13% for the purposes of the calculation.

b) ENWIN engaged a third party consultant (Ernst & Young) to assist with the analysis and refinancing activities related to the maturing Electricity Distributors Finance Corp. ('EDFIN') debt in 2012.

   ENWIN acquired the appropriate internal approvals as required to refinance the debt.

   ENWIN worked with Ernst & Young to market the debenture. Several investor presentations were made throughout Ontario and Quebec. Ernst & Young assisted in combining the financing needs of other affiliates as well as ENWIN to leverage the total borrowing power of the group and ensure a competitive market rate for the debenture. The refinancing at that time resulted in a reduction in the long term borrowing rate from 6.45% to 4.134%.

c) ENWIN inquired with a financial institution in 2018 about potential refinancing alternatives given the market rates at that time and it was determined that a redemption would result in a significant premium being paid. Based on that outcome, ENWIN determined it was appropriate to keep the existing debenture and Promissory Notes in place at that time.

7 - VECC - 37

Reference:

Exhibit 7, page 3

Question:

a) Please provide a history (for the period 2008-2017) of the year to year customer migration between the current GS>50 class and the current Intermediate class.

b) Please provide a version of the Cost Allocation Model where the current Intermediate and Large Use-Ford Annex classes are maintained.

c) Based on the results from part (b) please provide a schedule that, for each of the current GS>50, Intermediate, Large Use 3TS and Large Use-Ford Annex, compares: i) the allocated customer-related cost per customer and ii) the allocated demand costs per kW of billing demand. (Note: For purposes of these calculations please assume the costs related to the directly allocate transformer stations are all demand-related).

Response:

a) Between 2008-2017, ENWIN has maintained the same three (3) customers in its Intermediate class.

b) Please see response to AMPCO 40 e) and f).

c) The requested information is provided below:

Cost Allocation Model Source: AMPCO 40 e) and f).	GS - 50-4,999 KW Regular	GS - 3,000-4,999 KW Intermediate	Large Use - 3TS	Large Use - Ford Annex
Total Expenses (Tab O1, Row 34) (A)	$10,991,280	$292,924	$862,041	$567,691
Customer Related Cost				
Minimum System Customer Costs Adjusted for PLCC - High Limit Fixed Customer Charge (Tab O2, Row 237) (B)	$1,423,728	$4,313	$7,623	$20,094
Add back reduction for Miscellaneous Revenue included in Tab O2, Row 237 (C)	$60,871	$302	$0	$0
Total Customer Related Costs (D) = (B) + (C)	$1,484,599	$4,614	$7,623	$20,094
Customers (Tab I6.2, Row 23) (E)	1,272	3	2	1
Allocated Customer-Related Cost Per Customer (F) = (D) / (E)	$1,167.14	$1,538.14	$3,811.32	$20,094.16
Total Demand Related Costs (G) = (A) - (D)	$9,506,681	$288,310	$854,418	$547,596
kW of Billing Demand (Tab I6.1, Row 26) (H)	2,342,144	123,780	474,530	66,595
Allocated Demand Costs Per kW of Billing Demand (I) = (G) / (H)	$4.06	$2.33	$1.80	$8.22

7 - VECC - 38

Reference:

Exhibit 7, page 5

Exhibit 8, Attachment 8-C

Question:

a) Please confirm that ENWIN currently has a Standby Charge which has been approved on an interim basis.

b) Does ENWIN currently have any customers to which this Standby Charge applies? If so, how many?

c) In the Application, ENWIN states that "ENWIN is not seeking approval for Standby Rates in this application". Does this mean that ENWIN is seeking to eliminate the current approved (on an interim basis) Standby Charge from its 2020 Tariff Schedule?

Response:

a) ENWIN currently has a Standby Charge which has been approved on an interim basis.

b) ENWIN does not currently have any customers to which this Standby Charge applies.

c) ENWIN has not applied for approval of a Standby Charge in this Application.

7 - VECC - 39

Reference:

Exhibit 7, page 7

Question:

a) Please provide the analysis supporting the derivation of the billing and collecting weighting factors as described in Section 7.3.2.2.

Response:

a) The billing and collecting weighting factors described in section 7.3.2.2 are calculated based on the following costs:
   a. Labour and software required to obtain meter reads
   b. Labour to create, validate and produce bills
   c. Labour to review accounts that are past due, notifications, and collection services
   d. Labour for cashiers to accept payment and ship payments to the bank
   e. Labour for Call Centre support
   f. Letters, bill stock, & postage

   If a rate class utilized a particular service, then it was given a portion of the cost proportional to the number of customers in that rate class.

   Please see the derivation of the billing and collecting weighting factors below.

Detailed Line Items	Total Cost	Residential	GS <50	GS >50kW - 4,999kW	Large Use	Street Light	Sentinel	Unmetered Scattered Load
Hydro MET Meter Reads	$19,584.00	$0.00	$0.00	$19,584.00	$0.00	$0.00	$0.00	$0.00
Sensus	$316,334.00	$287,497.95	$28,836.05	$0.00	$0.00	$0.00	$0.00	$0.00
MDMR/Sync Operator - ERTH	$126,000.00	$114,514.22	$11,485.78	$0.00	$0.00	$0.00	$0.00	$0.00
Meter Reading Salaries & Benefits	$276,530.53	$208,184.59	$20,880.92	$47,039.96	$354.22	$70.84	$0.00	$0.00
Itron MV90	$39,411.00	$0.00	$0.00	$39,058.07	$294.11	$58.82	$0.00	$0.00
Call Centre Salaries & Benefits	$1,172,264.13	$975,003.75	$109,691.18	$68,106.45	$14,648.96	$1,286.39	$1,601.54	$1,925.86
Brinks	$3,935.14	$3,511.78	$352.23	$58.06	$0.44	$0.09	$11.19	$1.36
Global Payments	$13,039.86	$11,816.96	$1,185.24	$0.00	$0.00	$0.00	$37.66	$0.00
Letters, bill stock & postage	$391,832.93	$349,681.68	$35,073.08	$5,780.94	$43.53	$4.35	$1,114.40	$134.95
Collection Services of Windsor	$50,064.48	$44,807.71	$4,505.80	$750.97	$0.00	$0.00	$0.00	$0.00
Cashier Salaries & Benefits	$54,356.86	$48,525.62	$4,867.12	$802.23	$6.04	$1.21	$154.65	$0.00

Total by Rate Class	$2,043,544.26	$216,877.40	$181,180.67	$15,347.30	$1,421.70	$2,919.43	$2,062.16
Quantity	80329	8057	1328	10	2	256	31
Total per Customer by Rate Class	$25.44	$26.92	$136.43	$1,534.73	$710.85	$11.40	$66.52
Ratio to Residential	1.0	1.1	5.4	60.3	27.9	0.4	2.6

7 - VECC - 40

Reference:

Exhibit 7, page 9

Question:

a) For purposes of the 2004 Informational Filing were separate load profiles developed for the current GS>50 and Intermediate classes?

b) If the response to part (a) is affirmative, please explain how the derivation of the GS>50 class load profile for 2020 takes into account the fact this class now includes the former Intermediate class' customers.

c) For purposes of the 2004 Informational Filing were separate load profiles developed for the current Large Use-3TS and Large Use-Ford Annex classes?

d) If the response to part (c) is affirmative, please explain how the derivation of the Large Use-3TS class load profile for 2020 takes into account the fact this class now includes the former Large Use-Ford Annex class.

Response:

a) For purposes of the 2004 Informational Filing there were separate load profiles developed for the GS>50 and Intermediate classes.

b) In order to derive the GS>50 class load profile for 2020, the separate 2004 load profiles used in the Informational Filing for the GS>50 and Intermediate classes were first combined and then the combined load profile was scaled to reflect the 2020 load forecast value for the new combined GS>50 class.

c) For purposes of the 2004 Informational Filing there were separate load profiles developed for the Large Use-3TS and Large Use-Ford Annex classes.

d) In order to derive the Large Use-3TS class load profile for 2020, the separate 2004 load profiles used in the Informational Filing for the Large Use-3TS and Large Use-Ford Annex classes were first combined and then the combined load profile was scaled to reflect the 2020 load forecast value for the new combined Large Use-3TS class.

7 - VECC - 41

Reference:

Exhibit 7, Cost Allocation Model, Tabs I6.2, I7.1 and I7.2

Question:

a) Please explain why, for the Residential and GS<50 classes, the customer counts used in Tab I7.1 (Meter Capital) and I7.2 (Meter Reading) don't match those in Tab I6.2.

Response:

In the Cost Allocation Model, Tab I7.1 (Meter Capital) and Tab I7.2 (Meter Reading), for the Residential and GS<50 classes, the total number of meters by class (Tab I7.1), and the total units by class (Tab I7.2) do not match the total number of customers (Tab I6.2) due to the following:

i. The forecast number of customers in the test year (Tab I6.2) is based on historical active accounts by rate class, which exclude vacant premises with meters that are still installed and being read; and

ii. There was a count error in the total number of meters for Meter Capital (Tab I7.1) and Meter Reading (Tab I7.2) for the GS < 50kW class. These counts have been corrected in the revised version of the Cost Allocation Model filed as part of these interrogatory responses.

8 - VECC - 42

Reference:

Exhibit 8, page 6

Cost Allocation Model, Tab O2

Question:

a) Please provide a schedule that sets out for each customer class: i) the current monthly service charge, ii) the proposed monthly service charge and ii) the Customer Unit Cost per Month – Minimum System with PLCC Adjustment (per Tab O2).

Response:

Please see the attached table below. Note: the proposed monthly service charges are based on the versions of the Cost Allocation Model and Revenue Requirement Work Form filed as part of these interrogatory responses.

Customer Class	2019 Monthly Service Charge	2020 Proposed Monthly Service Charge	Customer Unit Cost per Month - Minimum System with PLCC Adjustment
Residential	$ 26.57	$ 28.15	$ 18.31
General Service < 50 kW	$ 27.18	$ 28.07	$ 26.68
General Service > 50 to 4,999 kW	$ 107.93	$ 110.49	$ 93.33
Large Use 3TS	$ 28,953.80	$ 36,890.42	$ 1,314.02
Large Use - Regular	$ 8,176.21	$ 9,207.51	$ 268.35
Street Lighting	$ 6.07	$ 5.21	$ 5.15
Sentinel Lighting	$ 12.59	$ 13.34	$ 14.19
Unmetered Scattered Load	$ 10.97	$ 11.62	$ 13.87

8 - VECC - 43

Reference:

Exhibit 8, pages 8-10

Question:

a) Which of the customer classes listed on page 10 currently have customers that would be impacted by the implementation of Gross Load Billing for Retail Transmission Rate – Line and Transformation Connection Service Rate?

b) Based on actual customer usage and self-generation patterns in 2018, please provide the impact of Gross Load Billing on the billing demand determinant for these classes for Line and Transformation Connection Service.

Response:

a) As of the date of this interrogatory response, ENWIN has one (1) General Service 50-4,999 kW customer which qualifies for Gross Load Billing for Retail Transmission Rate – Line and Transformation Connection Service, pursuant to the OEB's rate order for 2019 Uniform Electricity Transmission Rates.[1]

   ENWIN further has one (1) Large Use – Regular customer that is installing a 9MW behind the meter generator, and when commissioned (currently expected in Q1 2020), Gross Load Billing would be applied if approved in this Application.

b) The impact of Gross Load Billing for the one (1) General Service 50-4,999 kW customer in 2018 (for 8 months) was $29,923 for 12,787.76 incremental kW.

[1] EB-2018-0326, Appendix B 2019 Uniform Transmission Rate Schedules, page 5 of 6, note 3.

8 - VECC - 44

Reference:

Exhibit 8, pages 10-11

RTSR Work Form, RRR Data Tab

Question:

a) Which year is the RRR data based on?

b) Please confirm that in the RRR Data Tab: i) the GS>50 data is based on the sum of the current GS>50 and Intermediate class' data and ii) the Large Use-3TS data is based on the sum of the current Large Use-3TS and Large Use-Ford Annex class' data.

Response:

a) The data in the RRR Data tab in the original RTSR Work Form was based on ENWIN's 2020 load forecast. ENWIN has submitted a revised RTSR Work Form, where the RRR Data tab now uses 2018 RRR data, to align with the 2018 historical wholesale billing detail submitted on Tab 6.

b) Confirmed.

8 - VECC - 45

Reference:

Exhibit 8, pages 19-20

Question:

a) Please also provide bill impact calculations for the following:

i. A customer currently being billed based on the (2019) Intermediate class rates but who will be billed on the GS>50 in 2020.

ii. The Large Use-Ford Annex customer that will be billing on the Large Use-3TS rates in 2020.

b) If the total bill impacts in either situation exceed 10%, why has ENWIN not proposed a mitigation plan?

Response:

Please see the attached tables below.

a) i. Bill impacts for Intermediate Class under an uncombined class scenario:

Customer Class:	GENERAL SERVICE 3,000 TO 4,999 KW - INTERMEDIATE USE SERVICE CLASSIFICATION	
RPP / Non-RPP:	Non-RPP (Other)	
Consumption	1,142,000	kWh
Demand	3,600	kW
Current Loss Factor	1.0377	
Proposed/Approved Loss Factor	1.0311	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 2,255.46	1	$ 2,255.46	$ 1,699.54	1	$ 1,699.54	$ (555.92)	-24.65%
Distribution Volumetric Rate	$ 2.0852	3600	$ 7,506.72	$ 2.3525	3600	$ 8,469.00	$ 962.28	12.82%
Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Volumetric Rate Riders	-$ 0.0212	3600	$ (76.32)	-$ 0.8157	3600	$ (2,936.52)	$ (2,860.20)	3747.64%
Sub-Total A (excluding pass through)			**$ 9,685.86**			**$ 7,232.02**	**$ (2,453.84)**	**-25.33%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	-$ 0.4011	3,600	$ (1,443.96)	-$ 0.3722	3,600	$ (1,339.92)	$ 104.04	-7.21%
CBR Class B Rate Riders	$ -	3,600	$ -	$ -	3,600	$ -	$ -	
GA Rate Riders	$ -	1,142,000	$ -	-$ 0.0034	1,142,000	$ (3,882.80)	$ (3,882.80)	
Low Voltage Service Charge	$ -	3,600	$ -		3,600	$ -	$ -	
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		3,600	$ -	$ -	3,600	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 8,241.90**			**$ 2,009.30**	**$ (6,232.60)**	**-75.62%**
RTSR - Network	$ 3.4737	3,600	$ 12,505.32	$ 2.6315	3,600	$ 9,473.40	$ (3,031.92)	-24.25%
RTSR - Connection and/or Line and Transformation Connection	$ 2.5223	3,600	$ 9,080.28	$ 1.8591	3,600	$ 6,692.76	$ (2,387.52)	-26.29%
Sub-Total C - Delivery (including Sub-Total B)			**$ 29,827.50**			**$ 18,175.46**	**$ (11,652.04)**	**-39.06%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,185,053	$ 4,029.18	$ 0.0034	1,177,516	$ 4,003.56	$ (25.63)	-0.64%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,185,053	$ 592.53	$ 0.0005	1,177,516	$ 588.76	$ (3.77)	-0.64%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	1,185,053	$ 130,474.38	$ 0.1101	1,177,516	$ 129,644.53	$ (829.85)	-0.64%
Total Bill on Average IESO Wholesale Market Price			**$ 164,923.84**			**$ 152,412.56**	**$ (12,511.28)**	**-7.59%**
HST	13%		$ 21,440.10	13%		$ 19,813.63	$ (1,626.47)	-7.59%
Total Bill on Average IESO Wholesale Market Price			**$ 186,363.94**			**$ 172,226.19**	**$ (14,137.75)**	**-7.59%**

Bill impacts for existing Intermediate Class customer under a combined class scenario:

Customer Class:	GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION	
RPP / Non-RPP:	Non-RPP (Other)	
Consumption	1,142,000	kWh
Demand	3,600	kW
Current Loss Factor	1.0377	
Proposed/Approved Loss Factor	1.0311	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 107.93	1	$ 107.93	$ 110.49	1	$ 110.49	$ 2.56	2.37%
Distribution Volumetric Rate	$ 4.9839	3600	$ 17,942.04	$ 5.2934	3600	$ 19,056.24	$ 1,114.20	6.21%
Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Volumetric Rate Riders	$ 0.2177	3600	$ 783.72	-$ 0.2325	3600	$ (837.00)	$ (1,620.72)	-206.80%
Sub-Total A (excluding pass through)			**$ 18,833.69**			**$ 18,329.73**	**$ (503.96)**	**-2.68%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	-$ 0.4702	3,600	$ (1,692.72)	-$ 0.4491	3,600	$ (1,616.76)	$ 75.96	-4.49%
CBR Class B Rate Riders	$ -	3,600	$ -	$ -	3,600	$ -	$ -	
GA Rate Riders	$ 0.0019	1,142,000	$ 2,169.80	-$ 0.0034	1,142,000	$ (3,882.80)	$ (6,052.60)	-278.95%
Low Voltage Service Charge	$ -	3,600	$ -		3,600	$ -	$ -	
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		3,600	$ -	$ -	3,600	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 19,310.77**			**$ 12,830.17**	**$ (6,480.60)**	**-33.56%**
RTSR - Network	$ 2.5629	3,600	$ 9,226.44	$ 2.6315	3,600	$ 9,473.40	$ 246.96	2.68%
RTSR - Connection and/or Line and Transformation Connection	$ 1.8611	3,600	$ 6,699.96	$ 1.8591	3,600	$ 6,692.76	$ (7.20)	-0.11%
Sub-Total C - Delivery (including Sub-Total B)			**$ 35,237.17**			**$ 28,996.33**	**$ (6,240.84)**	**-17.71%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,185,053	$ 4,029.18	$ 0.0034	1,177,516	$ 4,003.56	$ (25.63)	-0.64%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,185,053	$ 592.53	$ 0.0005	1,177,516	$ 588.76	$ (3.77)	-0.64%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	1,185,053	$ 130,474.38	$ 0.1101	1,177,516	$ 129,644.53	$ (829.85)	-0.64%
Total Bill on Average IESO Wholesale Market Price			**$ 170,333.51**			**$ 163,233.43**	**$ (7,100.08)**	**-4.17%**
HST	13%		$ 22,143.36	13%		$ 21,220.35	$ (923.01)	-4.17%
Total Bill on Average IESO Wholesale Market Price			**$ 192,476.86**			**$ 184,453.77**	**$ (8,023.09)**	**-4.17%**

a) ii. Please see the response to AMPCO - 40 (g).

b) The total bill impacts do not exceed the 10% threshold.

9 - VECC - 46

Reference:

Exhibit 9, page 15

Question:

a) With respect to the (pre-interest) balance of $902,145 in account 1508, please provide a list of the productivity initiatives, the year in which that initiative was undertaken and completed, and the cost of the initiative.

Response:

a) Please refer to the response to interrogatory SEC - 34.

9 - VECC - 47

Reference:

Exhibit 9, page 15-26.

Question:

a) Please file the post audit updated Group 1 and Group 2 balances including interest that ENWIN is seeking for disposition in this proceeding.

b) Please also update the Group 1 and Group 2 rate rider calculations

---

Response:

a) ENWIN filed the Group 1 and Group 2 Audit Reports along with the balances including interest on June 11, 2019. The submission can be found under docked EB-2019-0032 on the OEB website. The file is labelled "ENWIN_EX 9_EVD_Update_20190611".

b) An updated DVA Workform has been filed along with responses to interrogatories. This includes updated Group 1 and Group 2 rate rider calculations.

9 - VECC - 48

Reference:

Exhibit 9, page 27

Question:

a) Please explain why account 1575 CGAAP to IFRS Rate Rider calculation uses number of customers rather than kWh to allocate costs to the residential class?

Response:

a) ENWIN calculated the residential rate rider for account 1575 using the number of customers pursuant to Section 2.8.2, Rate Design Policy of the Chapter 2 filing requirements, which states: "Generally speaking, distributors must propose a fully fixed rate design for charges applicable to the residential class provided that those charges are specifically related to the distribution of electricity". The footnote to this section provides additional clarification such that "Examples of distribution-specific charges include: Group 2 Deferral and Variance Accounts including balances in accounts 1575/6, ACM and ICM rate riders".

   This requirement is also listed in the OEB's DVA Workform, "Rate Rider Calculations" tab.