PORT LANDS ACCELERATION INITIATIVE

Appendix 3
Development Model Assessment

Rendering of Promontory Park by Michael Van Valkenburgh Associates courtesy of Waterfront Toronto

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1.0 Introduction

The City of Toronto, Toronto and Regional Conservation Authority, and Waterfront Toronto have been engaged in a process that has explored opportunities to accelerate the redevelopment of the Toronto Port Lands. As part of the Port Lands Acceleration Initiative (PLAI), Cushman and Wakefield Valuation and Advisory Division (C&W) tested the financial viability of the development concepts emerging from the PLAI process. This work was based on extensive research including market soundings from the development industry.

The primary output of the work carried out by C&W is a development pro-forma that incorporates revenues from the sale of serviced land and from an area-wide development charges that would be paid by the developers of the serviced land. The results of this work yielded negative results. N. Barry Lyon Consultants Limited (NBLC) has been retained by the City of Toronto to provide a land developer's perspective on potential ways in which the development model for the Port Lands could potentially be improved to advance the pace of revitalization and reduce the net cost to the three levels of government.

1.1 Summary of Conclusions

1. The approach and methodology of C&W is sound and reasonable given the current state of planning for the area and limitations associated with the costing of infrastructure.

2. The model, however, underestimates demand for residential development. We would also suggest several other adjustments to the inflation and discount rates as well as the residential units sizes employed in the model.

3. In any case, the development community, especially those who are invested in the area, would view the C&W model as a high level of assessment of development viability. It identifies significant challenges related to infrastructure funding and development phasing and timing. It would not be viewed as an immediate deterrent to development. From their perspective, the issues of immediate concern are:

    a. certainty of land use; and,

    b. timing to development.

4. The PLAI process has revealed a requirement for over $350M in infrastructure spending to be funded prior to any development revenues. A core issue will be how to finance this amount. However, before this question can be answered, several areas require study that would be best accomplished with the involvement of the benefiting landowners.

5. To address the funding issues there are several required intermediary steps. The next step in our view is to move this work forward and begin to "flush out" the details through a Land Owners Group which would include the City. The terms of reference of the Land Owners group could include:

    a. The development of a formal working structure including methodologies for cost sharing and arbitration.

b. Helping to advance the Planning Act instruments necessary to provide certainty in land use, better estimates of development timing and make more accurate revenue projections.

c. Develop more detailed plans for required infrastructure from the PLAI process that will be satisfactory to the City and the TRCA.

d. With more detailed costing and better estimates of revenue and timing, participating land owners will be in a better position to discuss front ending contributions.

e. This more detailed work will also allow the City to explore with greater confidence development charge revenue opportunities and approval feasibility.

f. From this, determine how much can be raised by participating land owner front ending contributions.

g. Finally, an assessment of City revenue sources such as the sale or joint venture opportunities on real estate could be made available.

With the advancements in the planning process accomplished through the PLAI process, it is appropriate to engage the landowners and development community towards development implementation. This group has significant skill sets and resources that have overcome many challenges such as those facing the Port Lands.

2.0 Commentary on Market Forecast for the Port Lands

The C&W analysis assumes the following in terms of market demand for various classes of real estate. These assumptions are important as they have a bearing on the accompanying financial model.

C&W Absorption Assumptions[1]				
Totals				
Year	**Residential (Number of Units)**	**Office (Square Feet)**	**Retail (Square Feet)**	**Hotel (Number of Units)**
2015 to 2016 (First 2 Years)	172	289,402	49,503	0
2017 to 2021 (Next 5 Years)	1,048	674,635	83,291	225
2022 to 2026 (Next 5 Years)	2,711	868,207	1,092,790	100
2027 to 2031 (Next 5 Years)	3,469	1,061,779	51,790	125
2032 to 3036 (Next 5 Years)	1,243	788,000	59,000	0
2037 to 2041 (Next 5 Years)	1,032	788,000	64,626	0
Total Absorption	**9,675**	**4,470,023**	**1,401,000**	**450**
Annual Basis				
Year	**Residential (Number of Units)**	**Office (Square Feet)**	**Retail (Square Feet)**	**Hotel (Number of Units)**
2015 to 2016 (First 2 Years)	86	144,701	24,752	0
2017 to 2021 (Next 5 Years)	210	134,927	16,658	45
2022 to 2026 (Next 5 Years)	542	173,641	218,558	20
2027 to 2031 (Next 5 Years)	694	212,356	10,358	25
2032 to 3036 (Next 5 Years)	249	157,600	11,800	0
2037 to 2041 (Next 5 Years)	206	157,600	12,925	0
Average Annual Absorption	**358**	**165,556**	**53,885**	**30**

[1]Based on C&W's Breakdown using Planning Alliance Development Densities for C&W's Revenue Projections, which is differs from the Demand Summary

In terms of office and retail development we believe that these estimates are appropriate. However, for residential development, the inputs into the financial model are conservative. While we understand and appreciate the rationale of C&W in developing these forecasts, we offer the following comments for consideration.

The core element of the forecast is the residential component. Given the large amount, acknowledged market demand, and development charge revenue potential, an understanding of the potential demand of residential development is critical and has the most bearing on any financial model.

There is no doubt that as we move into the summer of 2012, the condominium market is finally slowing after several record breaking years. Economic uncertainties, pricing detaching from incomes, building performance issues and new mortgage rules all are having an impact on demand from a range of buyer groups. However, thanks to Provincial legislation and a limited supply of low density land, as well as changing demographics and buyer preferences, high density living in the City of Toronto is likely here to stay. So while we see a near term softening, Toronto is likely to see consistent demand for some time to come. In fact, to achieve the Provincial forecast to 2030, NBLC forecasts a required average annual demand of about 14,000 to 15,000 each year within the City. While we expect some of this demand to spread out into areas such as the Eglinton corridor with the new LRT, buyers will for some time prefer the downtown and waterfront areas.

The majority of the City of Toronto's demand materializes in the downtown core and waterfront area. To date much of the demand has focused in the core and downtown west with over 2,500 and 5,000 sales respectively in the past year. In the past few years, new investments such as the East Bayfront, Distillery District, Regent Park and Pan Am Games Athlete's Village have begun to shift demand eastward. Downtown East as a submarket is expected to compete strongly for the West's market share by 2015 when the West Donlands development is complete. With the downtown east area already accounting for about 1,000 sales a year, even with a modest shift and softening in the market, demand of 2,000 to 3,000 units in the east end is feasible.

Assuming the Port Land emerges as the planners have proposed, we expect that the waterfront properties, especially Polson and Cousin Quays will represent the most sought after properties in the City. This because, unlike existing waterfront sites, they will offer a good number of units not only with waterfront views but also, city views. This and the proximity to the massive Cherry Beach park system, highway access and transit will, in our view, drive very strong demand.

Based on this, we would expect that a conservative estimate of residential demand in the order of 500 to 750 units per year would be appropriate for modeling purposes.

3.0 The Financial Model

C&W, as part of PLAI reporting, has employed a financial model that examines, based on development costs and expected revenues, the viability of the plan from the perspective of a Master Developer over a 30 year period. This is a well accepted approach to assessing, at very high level, the development feasibility of a project. At this stage in the process of the planning and development of the Port Lands it is the only viable tool to develop an early picture of viability and indicator of key issues.

However, development pro forma, in general, can be very sensitive to certain variables and small changes can have a large impact on the results, especially 1) if analyzed over a long period of time and 2) for a large scale project such as the one anticipated for the Port Lands. While we understand and appreciate the opinion of the authors in developing their assumptions we offer a differing view that would support a different result.

The assumptions used within the report that we would revisit are as follows:

C&W Pro Forma Assumptions	
Inflation Rate	2.5%
Average Residential Gross Unit Size (square feet)	1,000
Discount Rate	10%
Average Residential Absorption Rate (units per year)	358

3.1 Inflation Rate of 2.5%

For some context, the average inflation rate in Toronto for the past four years (furthest back data) has averaged 2.1%[1]. National historical data also show an average inflation rate of 2.1%[2] for the past 10 years. The inflation rate specifically for owned accommodation in Ontario for the past 5 years has been 2.48%[3]. However, this average includes both new and resale housing and includes homes in cities with little investment and typically low appreciation rates.

Based on the Toronto's Real Estate Board's (TREB) MLS Home Price Index, created this year, the average appreciation has been 4.07% year over year from June 2011 to June 2012 for the whole City. The value of the Port Lands is anticipated to carry at least this much once construction begins. Based on market sales data from TREB, the average condominium apartment sale price was $184,000 in June 2003. In June 2012, the average sale price of a condo unit was $342,044. This represents an annualized return of 6.40% over a 10 year period for high rise units in the City. Townhouse appreciation would be even greater.

A masterplanned, high investment community such as the one planned for the Port Lands has a high potential for above average value appreciation over the course of all its phases. New (at the time) successful master communities at a much smaller scale across the City, such as CityPlace and the Bayview and Sheppard area, have observed substantial value increases over a relatively short time frame. For instance, a one bedroom condominium apartment unit in CityPlace's *Parade* sold for

[1] Statistics Canada.
[2] Statistics Canada.
[3] Statistics Canada.

approximately $220,000 in 2007 and the same unit would sell for about $300,000 in 2012, an increase of 35% in five years or an annualized return of 6.0%. Also, a two bedroom unit in *NY Towers* in North York sold for about $420,000 in 2012 compared to about $210,000 in 2000, representing an annualized increase of 5.94%.

In addition, the phasing of each development parcel in the Port Lands will allow each subsequent phase of development to piggyback off the value created from the previous phase. As the community is beautified and services offered flow into the community from the increased population, home values and land values in the Port Lands will increase.

This means a non-uniform inflation rate on the appreciation of land values in the Port Lands. During the pre-development stage, land values may increase at a normal inflation rate like 2.5%. However, once much of the infrastructure has been put in, construction begins, and presales start, land values should begin to appreciate at a faster rate than average. Below shows a staggered schedule of the rate of appreciation of land in the Port Lands from 2012 to 2041, based on the C&W's absorption of residential units projected for each year.

Appreciation rates are estimated to be highest at the peak of sales and should remain higher than average while the Port Lands community as a whole is still undergoing improvements. If the master planned community becomes what it is envisioned to be, appreciation rates could be even higher than our assumptions and remain high after the entire project is completed.

NBLC Inflation Rate Assumptions - Residential		
Year	**Residential Inflation Rate (Per Year)**	**Residential C&W Absorption Rates (Number of Units)**
2012 to 2014 (Pre-Development)	2.5%	-
2015 to 2016 (First 2 Years)	3.0%	86
2017 to 2021 (Next 5 Years)	5.0%	349
2022 to 2026 (Next 5 Years)	8.0%	678
2027 to 2031 (Next 5 Years)	8.0%	867
2032 to 3036 (Next 5 Years)	7.0%	310
2037 to 2041 (Next 5 Years)	6.0%	263

The appreciation of value for commercial property is expected to follow a similar pattern with slow initial growth and an acceleration of growth as overall development at the Port Lands proceeds. The difference between residential and commercial inflation rates is that there must be a critical population present to support commercial development. This population comes from the future residents of the Port Lands. Therefore, the lands are expected to have a higher initial residential value increase and a slower initial commercial value increase reflecting commercial development occurring after residential development.

NBLC Inflation Rate Assumptions - Office & Retail	
Year	**Office & Retail Inflation Rate (Per Year)**
2012 to 2014 (Pre-Development)	2.5%
2015 to 2016 (First 2 Years)	3.0%
2017 to 2021 (Next 5 Years)	4.0%
2022 to 2024 (Next 3 Years)	6.0%
2025 to 2031 (Next 7 Years)	7.0%
2032 to 3036 (Next 5 Years)	6.0%
2037 to 2041 (Next 5 Years)	5.0%

Following these schedules, the value increase to the City is estimated to be $14.0 which improves the resulting net present value from ($189.2 million) to ($175.2 million).

3.2 Discount Rate of 10%

The discount rate which determines the net present value of the project is naturally a very important variable to consider. Particularly because the Port Lands project is large scale and long term in nature, the project can actually show a large positive future value, but a negative present value, especially with large expenditures at the start of the project.

In order to consider an appropriate discount rate for the project, let us consider how funds/revenues used for project costs (ie. proceeds from land sale and DC charges) would alternatively be invested.

First, because these funds belong to the City, it must be invested under the constraints of the City's investment policy on asset class restrictions in terms of type and maximum value, and quality restrictions, which reflects the City's more conservative risk profile. We do not know what this mix is, but it is not 100% in stocks and risky investments. The lower risk taken necessarily impacts the corresponding expected return on the investment, used as the discount rate.

Over the past 10 years, the S&P/TSX Composite Index has had an annualized return of 5.40%[4]. This is very different from looking at the shorter five-year boom period of 2003 to 2008 in which returns on the TSX composite averaged 9.1%[5] annually.

This suggests we can lower the discount rate assumption to 8.0% to reflect lower average investment returns expected over a regular economic cycle. If the funding gap is negative, lowering the discount rate will obviously create a larger present value gap. Conversely, if the project has extra funding (positive gap), the project's present value will be higher.

[4] Calculated based on TSX Composite Index level in June 12, 2002 at 6,820.0 to June 12, 2012 at 11,554.64.

[5] Calculated based on TSX Composite Index on March 14,2003 at 6,304.0 to June 18, 2008 at 15,073.13. This period was selected because it represented a constant rise in index value on an almost daily basis.

3.3 Market Assumptions and Absorption Rates

The C&W absorption assumptions on page 3 of this report are used in the revenue projections. These have some impact on the funding gap, but not as substantial as the foregoing variables. If we adjust the absorption for residential units alone, assuming an average of about 500 residential units per year instead of 358 (see market commentary in this memo), then the gap would decrease by $10.1 million, assuming a shorter development timeline.

3.4 Unit Sizing of 1,000 Square Feet Gross

The average size of a new condominium apartment unit in the City is 848 square feet, which translates to a gross size of 1,000 square feet, based an 85% efficiency factor. This average includes larger condominium units more common to suburban locations in Scarborough and Etobicoke. The average net unit size in the downtown Toronto is smaller. We have estimated a net unit size of 800 square feet or 941 square feet on a gross basis.

Reducing the assumption for unit size means that there will be more residential units. Based on a unit size of 941 square feet, this adds approximately 594 more units to the E1, E2 and F Precincts. This has an effect on revenues in two ways: 1) development charges, which are collected on a per unit basis and, 2) land values, as smaller units have higher values on a per square foot basis.

3.5 Combined Impact

Combining these assumptions (see table below) results in an improvement of approximately $20 million in net cash flow to the City. These profit figures should be viewed as results of a sensitivity analysis based a reasonable set of assumptions. Assumptions are subject to market performance based on the Canadian and world economies as a whole.

NBLC Pro Forma Assumptions - Residential	
Year	**Residential Inflation Rate (Per Year)**
2012 to 2014 (Pre-Development)	2.5%
2015 to 2016 (First 2 Years)	3.0%
2017 to 2021 (Next 5 Years)	5.0%
2022 to 2026 (Next 5 Years)	8.0%
2027 to 2031 (Next 5 Years)	8.0%
2032 to 3036 (Next 5 Years)	7.0%
2037 to 2041 (Next 5 Years)	6.0%
Average Residential Gross Unit Size (square feet)	941
Discount Rate	10%
Average Residential Absorption Rate (units per year)	500

NBLC Inflation Rate Assumptions - Office & Retail	
Year	**Office & Retail Inflation Rate (Per Year)**
2012 to 2014 (Pre-Development)	2.5%
2015 to 2016 (First 2 Years)	3.0%
2017 to 2021 (Next 5 Years)	4.0%
2022 to 2024 (Next 3 Years)	6.0%
2025 to 2031 (Next 7 Years)	7.0%
2032 to 3036 (Next 5 Years)	6.0%
2037 to 2041 (Next 5 Years)	5.0%

Projected Net Cashflows to the City of Toronto ($Millions)		
Assumptions	**C&W Assumptions**	**NBLC Assumptions**
Total Future Net Cashflow	($540.4)	($506.2)
Total Present Value	($189.2)	($169.0)

The core, unresolved issue, is the significant infrastructure costs that are required in the early years of the development program before development revenues can be realized. It is this large amount of investment that both the C&W and NBLC would likely agree inhibit a more positive outlook at this initial stage. However, as stated at the outset, this is a very early indicator of the project and more detailed analysis is now required to determine the best approach to funding and development implementation.

4.0 The Development Model

The PLAI process has helped refine the vision of the Port Lands and identified a broad list of infrastructure projects. It is appropriate now to consider the involvement of land owners and associated development interests to explore with the City, Waterfront Toronto and the TRCA, the initial phases of development at greater detail.

4.1 Issues to be Considered

The PLAI has clearly advanced the discussion of accelerating development in the Port Lands. It has identified several key issues included the early requirement for significant funding. However, to move the project further a development model that forms a basis by which the necessary up front planning and infrastructure work can be funded and implemented is required. In considering this model the following issues must be addressed.

1. Land ownership in the Port Lands is highly fragmented. Each owner is likely to have a variety of interests and real estate objectives as well as skill sets. For some with operating businesses, there may be no interest in redevelopment. Others are highly sophisticated real estate developers who are actively engaged in the future of the Port Lands. A process must be devised that recognizes the variety of skill sets and interests within the area. It must recognize and provide for a vehicle for owners not interested in funding at this time. It must also establish a process to adjudicate differences.

2. While the PLAI has advanced the vision on the Port Lands, translating the vision into Planning Act instruments is still required. Typically this is the process that offers developers/land owners certainty in terms of timing and revenue. Currently, developers in the Port Lands do not have enough confidence to understand what is likely to be approved and the timing of the approvals to make accurate revenue projects. These revenue projections are necessary to assess what contributions could be made toward area wide infrastructure requirements.

3. In terms of revenues, the City owned lands will appreciate in value rapidly as the planning instruments become confirmed and the market continues its eastern movement. In the Etobicoke Motel Strip land values increased from about $22 psf in 2003 to over $50 psf in 2011. Deferring land sales or joint venturing sites that reward the City for deferred land payments is worthy of serious consideration as part of any model.

4. The development model should focus only on the areas that have the greatest development potential. Within the initial phase the model has to assume that some areas, such as expansion to Filmport, could proceed immediately while other parcels and land uses will take longer.

5. On the costs side, the supporting costing memorandum acknowledges that the estimates are necessarily at a high level and include significant contingencies.

   "The cost estimates in this report are generally based on limited site investigation data and very preliminary design information or extrapolation of designs from on-going waterfront

development. …. The area is too big and the roll-out of development still too ill-defined to allow revitalization of the Port Lands to fit the traditional definition of a project."

Work is therefore required to take the PLAI projects and costing estimates to the next stage that will allow more accurate cost estimates and consideration of the impacts of timing and approvals.

4.2 Land Owner Groups

There are numerous examples in the GTA that faced the same set of dynamics as those facing the Port Lands. Typically found suburban greenfield areas where there are large numbers of owners, and extensive infrastructure requirements including land dedications for schools and open spaces these new communities are realized through the co-operative efforts of a Land Owners Group. Land owner groups are established with an understanding that each owner shares a common interest in resolving issues that extend beyond their lands.

Land Owner Groups are established for a variety of reasons but are commonly used where external infrastructure costs will be shared by a large number of benefiting owners and frequently where the municipality is unable or unwilling to fund these costs, in whole or in part. The land owner group frequently self finances/front ends a portion or all of the infrastructure costs to service land, which is typically administered by a third party legal practice. Land owners are not obligated to join the cost sharing agreement. However, the cost sharing agreement typically allows the required funding to be extracted from the non-contributing owners, through a local area development charge, prior to redevelopment in the future which is then returned to contributing parties.

4.3 Port Lands Owner Group

In the case of the Port Lands, as indicated earlier, there are likely a number of parties with a variety of interests in the area, not all of whom will be fully aligned. There are also many issues to be addressed. It may be appropriate therefore, at the outset for the City, to explore the idea of initiating meetings on an informal basis with a view to identifying participating parties and to structuring terms of reference that will form the basis of the formal group.

The terms of reference of this group could include items such as:

1. Helping to advance the Planning Act instruments necessary to provide certainty in land use, better estimates of development timing and make more accurate revenue projections.

2. Develop more detailed plans for required infrastructure from the PLAI process that will be satisfactory to the City and the TRCA.

3. The development of a formal working structure including methodologies for cost sharing and arbitration.

With more detailed costing and better estimates of revenue and timing, participating land owners will be in a better position to discuss front ending contributions. This more detailed work will also allow the City to explore with greater confidence development charge revenue opportunities and approval feasibility.

As with the developers, a better assessment of development potential and timing will allow the City to explore the role of revenue sources such as the sale or joint venture real estate opportunities in any funding solution.

We recognized that even after all this, there still may be a funding issue. However, the work should be able to clearly define the unfunded component of the Port Lands which sets the basis for a senior level funding request. We also recognize that in the current environment a successful request of this nature is dubious at best. However, in the event the political environment evolves favourably, the basis and rationale for the request will be available.