HIGHER DENSITY MULTI-LEVEL INDUSTRIAL BUILDING FEASIBILITY STUDY

CONCEPTUAL BUILDING PLANS AND FINANCIAL MODELS

February 2013

Prepared for:
Metro Vancouver Regional District

Prepared by:
Site Economics Ltd. and Omicron

File 12-43
February 21, 2013

Metro Vancouver
4330 Kingsway
Burnaby, BC V5H 4G8

Attention: Eric Aderneck – Senior Regional Planner

RE: HIGHER DENSITY MULTI-LEVEL INDUSTRIAL BUILDING FEASIBILITY STUDY

Site Economics Ltd and Omicron were retained in December 2012 to provide an independent summary assessment of the feasibility of developing higher density multi-level industrial buildings in Metro Vancouver, BC.

The Metro Vancouver industrial land supply is constrained while demand remains strong, and this study explores whether industrial buildings could add density by locating industrial space on a second level or some other means of intensifying. There exist numerous documents on the industrial land market, best practices for industrial development, and strategies to optimize industrial land uses. This study does not recount these existing reports or studies. Rather this study defines under what conditions multi-level industrial buildings and uses are feasible in Metro Vancouver.

The method for exploring intensification potential is to model multi-level industrial buildings in terms of:

- Site and Building Plans
- Financial Pro Formas

Site Economics Ltd has completed approximately 1,000 development studies since 1984 and understands the methods of this type of analysis very well. Omicron has designed and estimated costs on hundreds of buildings and has experience in all forms of industrial development, including multi-level. Please see the Appendix for our Assumptions & Limiting Conditions.

If you have any questions or require further information, please contact the undersigned.

Sincerely,

Site Economics Ltd.

Richard Wozny, Principal
BACKGROUND

Modern industrial buildings have been primarily single level. Single level industrial buildings are “functional and efficient” and their construction and use is driven based entirely on financial and user considerations. There is little or no concern for form, unless it yields some financial benefit. Businesses which develop and occupy industrial buildings are subject to a highly competitive environment where they must almost always seek the lowest cost premise possible. To date, conventional single level industrial buildings offer the benefits of low cost, efficient design and maximum flexibility of use. If there is a second level or mezzanine (on 10-20% of the floor plate) it is typically used for related office space. Innovation driven by increasing land costs and need for greater efficiencies will gradually lead to higher intensities.

Multi-level industrial buildings are rare worldwide but they do exist in global markets with extreme land shortages, very high industrial land prices and rents, strong government regulatory roles, and the types of businesses or throughput volumes which can warrant the tenant paying high rents. Multi-level industrial is feasible in instances where there exists high value industrial users who can operate in an expensive premise and who can afford to pay the high rents required, sufficient to support the additional cost of multi-level construction. There are examples in high value markets like London and Rotterdam in Europe and in some Asian ports such as Hong Kong and Shanghai. These are huge international gateways shipping vital goods to tens of millions of people. As these jurisdictions have absolutely no land alternatives then high rent is not an impediment as the flow of trade is simply too important to the economy to be curtailed.

INTERNATIONAL EXAMPLE – AIRFREIGHT TERMINAL

An example of a multi-level industrial building is the Asia Airfreight Terminal (AAT) in Hong Kong. The warehouse occupies 166,000 m² (1.8 million sq.ft.) across 4 levels with each level designed and equipped with advanced facilities for handling different types of cargo. To increase working efficiency, the terminal has truck docks in every level for quick loading of cargo. The building construction cost was more than $200 per sq.ft. due to its innovative architectural design which allows for advanced material handling systems and pioneering IT applications. AAT is one of the world’s leading air cargo terminals handling 1.5 million tons per annum.

The AAT facility was designed as a multi-level building due to the constrained land available at the Hong Kong airport. Similar air cargo facilities in North America such as the FedEx facility in Memphis are designed as a one-level building with all truck access on the ground level as there is ample land available to develop the 1 million sq.ft. facility.

ASIA AIRFREIGHT TERMINAL, HONG KONG
NATIONAL EXAMPLE - INDUSTRIAL INTENSIFICATION WITHOUT MULTIPLE LEVELS

The logistics industry has dealt with high land costs by making better use of its space by increasing ceiling heights to allow extensive vertical stacking. These complex, high level, stacking and automated racking systems are getting ever higher and they allow the building to function like a multi-level storage building only they are on a single level. Industrial building heights have gone from 18 ft to 24 ft to 30 ft to 36 ft and even higher. These ‘high bay’ industrial buildings effectively accommodate the volume and activity of a multi-level buildings but within single level building designs. In the newest warehouses the raking and stacking equipment systems employed by the largest “bricks and mortar” and “on line” retailers represent a very substantial investment. They can equal the value of traditional heavy industrial machinery. Site coverage however will likely not exceed 60% as it is constrained by the amount of site surface area needed for truck manoeuvring, truck and private automobile parking, and in some cases outdoor storage.

Best Buy’s new warehouses in Toronto provide a very good example which is extremely relevant to Metro Vancouver. Best Buy’s vast distribution properties on Airport Road in Brampton, Ontario, store and ship items as tiny as a memory stick and as bulky as a refrigerator-freezer. There are 1.6 million sq.ft. of distribution space in three buildings. This building complex is summarized as follows:

Size: About 520,000 sq.ft. in one building linked by an overhead conveyance tunnel to about 480,000 sq.ft. in another. (About 10 football fields could be laid out in each.) A newer building in Bolton, Ontario, boasts another 630,000 sq.ft.

Ceiling Height: 30 ft. high ceilings maximize the floor footprint for racking and multi-level towers for picking orders.

Rack Locations and Conveyances: 30,000 product places and over 7 km of conveyer belts.

Automation: Sorting system handles 150 cartons per minute and 200,000 outbound units per day.

Outbound Doors: 50 doors dedicated to trucks leaving for stores, with 200 doors in total.

Equipment: About 300 radio-frequency units used by workers on the floor to locate, pick or put away items.

Number of Workers: 250 full and part-time staff plus seasonal workers which means approximately 6,400 sq.ft. of building space per employee.

LOCAL EXAMPLE - INDUSTRIAL INTENSIFICATION WITH MULTIPLE LEVELS

A partial 2-level industrial building is currently being developed by Canada Post at the Vancouver International Airport. The 700,000 sq.ft. mail and package processing plant has a 500,000 sq.ft. footprint on 40 acres of land with some of the processing occurring on the 2nd level (0.28 site coverage and 0.40 floor area ratio). All truck access and vehicle parking are on the ground level. This building is unique in the Metro Vancouver market and is the largest industrial building developed here in the last 30 years. Building cost (excluding equipment) is close to $200 per sq.ft. which is far higher than industry standards (approximately $60 per sq.ft.).
HISTORICAL LOCAL EXAMPLES

An example of a multi-level warehouse developed in Metro Vancouver 30 years ago in 1982 is the former Woodward’s department store facility. The 690,000 sq.ft. building in New Westminster was designed as a partial 2-level structure with truck loading on the 2nd level taking advantage of the site topography. Unfortunately the department store model was nearing the end of its business cycle and the building was only used for its intended purpose for a few years. The asset was purchased by Bentall on behalf of a pension fund who have been leasing the facility to a variety of industrial tenants at sub-market rents. Bentall has initiated a rezoning application to redevelop the site to a mixed-use commercial-residential village to take advantage of the Braid Street Rapid Transit Station located adjacent to the site.

Of note, when The Bay developed its 500,000 sq.ft. logistics centre in Richmond 10 years ago (which was and still is considered one of the largest and most efficient warehouse logistics facilities in the region), it chose its building design based on one-level with 36 foot ceilings and sophisticated racking and inventory retrieval systems.
Most multi-level industrial buildings in North America were built a century ago under very different economic and transportation circumstances at the time, and are not viable under current conditions. Metro Vancouver is not comparable to other larger, diverse international cities; however it is important to determine under what conditions such high density industrial buildings and uses could, if ever, be warranted here.

Historically, multi-level industrial buildings in the Metro Vancouver market have worked for a limited number of specific user types including:

- Hi-tech research/lab space (i.e. QLT - Vancouver, Ballard Fuel Cell - Burnaby, Powertech Labs - Surrey)
- Food processing (Hallmark Poultry - Vancouver)
- Mail processing (Canada Post - Richmond)
- Needle Trade (Mr. Jax - Vancouver)
- Department Store Warehousing (Woodward’s - New Westminster)

As can be seen by these examples, they are all unique types of users which suggest that there would be a very limited demand or requirement for multi-level facilities.

**BUILDING LOCATION AND FORM - HYPOTHETICAL EXERCISE**

Four basic site and building plans are proposed for four different types of locations. The attached sketches illustrate options for increasing the development density of industrial land within Metro Vancouver. An alternative option does not require a site plan as it simply assumes putting the required light vehicle parking on the industrial building’s roof, allowing a higher building site coverage, similar to some inner urban retail developments.

We have chosen smaller scale developments that would appeal to a broad range of industrial users rather than the very specific larger buildings noted in the preceding section. We would expect that these smaller bay users (5,000 to 10,000 sq. ft.) could include a variety of local distribution and manufacturing businesses.

The hypothetical site sizes vary from approximately 5 acres to 10 acres. The 5 acre site is reflective of an inner urban location (i.e. Vancouver), whereas the 10 acre site is reflective of an urban edge location (i.e. Burnaby). The roof top parking on a five acre site is modelled assuming a site in the best suburban location, North Surrey. The study assumes serviced, level building plots with suitable soil conditions on an appropriately zoned site within the Metro Vancouver study area. We have indicated notional locations, however, if a particular user preferred one location over another (i.e. Burnaby rather than North Surrey), the scenarios could be interchanged although the land cost component (and soil condition and site preparation costs) could skew the pro forma. For instance, land cost in Burnaby typically would be higher as well as site preparation as all of the low lying flat areas usually require piling.

Given the direct correlation of density with land prices:

- the “Inner Urban Location Scenario” would be in the City of Vancouver
- the “Urban Edge Location Scenario” would be in the City of Burnaby
- the “Suburban Location Scenario” would be in the City of Surrey
- the “Inner Urban Location Mixed with Office Scenario” would be in the City of Vancouver

Multi-level industrial development on the south side of the Fraser River or the distant suburbs, typically with much lower land prices and rents and larger scale warehouse type buildings, would not logically warrant the additional construction costs of multi-level industrial. This principle of development is analogous to all other forms of real estate development where high density apartments and office
buildings tend to only be warranted in high value urban locations or frequent transit service areas. Adding real estate building density in relation to high land values applies even more strictly to cost conscious and functionally efficient industrial buildings. This is the high level explanation of why so few multi-level industrial buildings actually exist, anywhere.

COSTING ASSUMPTIONS

For the purposes of the costing portion of this exercise, it is assumed that the proposed soils are suitable for supporting the proposed structure(s) using conventional foundation systems. Of note, the Lower Mainland, and particularly Richmond, Delta and South Westminster in Surrey, have a combination of earthquake risks and poor soil conditions. Because of these risks, the site development costs for all asset classes are higher (including industrial). Adding a second level increases costs per sq.ft. for large industrial buildings which have light roofs and almost no improvements other than the walls. Creating additional development density is limited by other parameters such as user needs, site coverage, parking and loading standards.

The methods of construction and building systems would be those typically associated with the building type. Building envelopes would be constructed primarily from “tilt-up” concrete construction with a ballasted, loose-laid, EPDM roofing system over steel deck on open web steel joists. Floor loading would be 300-500 lbs/sf on the lower level and 150 lbs/sf on the upper level. The ceilings would be 24-ft clear on the lower level and 14-ft clear on the upper level. The second floor would typically be used for light industry or local distribution such as a cabinet maker or plumbing distributor and similar uses as allowed by most cities in their industrial zones. Access to the second floor would be by non-articulated trucks only (i.e. panel vans and up to 10-ton cube trucks).

Windows and doors would be aluminum, storefront type and overhead doors would be pre-finished aluminum, minimally insulated. Lighting would be fluorescent, T-5 lamps in both warehouse and office areas. Mechanical systems would typically be pre-packaged, roof-top units servicing both office and industrial spaces. Exterior finishes would consist of asphalt driving and parking areas, concrete aprons at loading areas with lawn areas and minimal, low maintenance planting at site entrances and along the main frontage road(s).

TENANT ASSUMPTIONS

In Metro Vancouver, logistics and all forms of good handling is by far the largest sector which uses and occupies significant new industrial space. This type of business tends to locate in large scale, low cost, single level premises in the suburbs proximate to highways and other transportation infrastructure. This type of business is highly cost sensitive due in part to the mobility of logistics firms which can relocate to low cost jurisdictions, although benefit from being proximate to highway and port facilities. Most new facilities developed for the logistics marketplace tend to be between 200,000 and 500,000 sq.ft. in size whereby efficiency of layout and cost is paramount. Examples of these “new generation” warehouses would be the Hopewell Buildings in Port Metro Vancouver’s Richmond Logistics Hub where maximum rents achieved are in the $7 to $9 psf range. If occupancy costs go above this range then the user will typically look to locate its facility in other markets, such as Calgary.

In addition to the logistics market, Metro Vancouver has a healthy inventory of smaller scale facilities that service the local or regional marketplace. These facilities are typically owner-users in 10,000 to 50,000 sq.ft. buildings that were design-built for their use and ownership or small bay rental or strata bays in the 5,000 to 10,000 sq.ft. range. These would be the type of tenants/users that would consider a multi-level building if the economics made sense.
PRICE SENSITIVITY

It cannot be overstated how price sensitive the Metro Vancouver industrial marketplace is. For example, the City of Richmond implemented a “green roof” bylaw in 2008, whereby all new industrial buildings greater than 20,000 sq. ft. are required to install a vegetated roof on 80% of the roof area or as an alternative the developer must include a suite of upgrades to storm water management, and landscaping intensification. The result of this bylaw has been a sharp drop in new industrial buildings being developed in Richmond because the added cost of the upgrades is too high to warrant new buildings. Analysis by Omicron of the additional costs suggest that a minimum of $1 per sq. ft. of additional rent would be required by the developer to recover the additional capital costs. The marketplace will currently not pay this additional burden and as such users have chosen to locate in neighbouring communities where the additional cost is not required. The same principle applies to placing structured parking on roofs. If it adds 50% to the total construction cost then rents must go up very significantly, far higher than market rents.

This analogy is important to consider when exploring intensification options that will add significant capital costs and subsequently increases rental costs of a development.

A recent example of the limited demand for manufacturing facilities in Metro Vancouver is the shut-down of the Buckeye Technologies facility in Delta. Buckeye is a billion dollar American firm that found it uneconomic to continue its business of turning pulp into absorbent paper (used in diapers and medical applications). Buckeye had been trying to find a new manufacturing tenant or buyer for its 300,000 sq. ft. complex in Tilbury Industrial Park for the past 18 months. Despite the best efforts of the top realtors, no user could be found for the buildings that feature a superb location adjacent to the new South Fraser Perimeter Road, 10 MVA of manufacturing power, 30 foot ceilings, dock and grade loading, and rail service. The buildings were recently sold to a Canadian pension fund who are converting the buildings to logistics warehouse at a renovation cost of $6 million and Buckeye consequently had to accept a sale price much lower than they could have obtained from a manufacturing user that could value the features of the facility.

A recent example of the low cost and flexibility of single level buildings is exemplified by the recent sale of 16131 & 16133 Blundell Road, Richmond, the Hopewell Distribution Centre Phase I & II. The sale price for almost 1 million sq. ft. of new fully leased buildings was just over $100 million or $100 per sq. ft. of building area. While these are on leased land this demonstrates how very low cost some industrial buildings are. These industrial properties include buildings land, tenants and everything else all for only $100 per sq. ft. of building. This is far less than just the hard cost for a multi-level building.

CONCLUSION

There has been to date very limited new multi-level industrial development in Metro Vancouver and in North America. Multi-level industrial development will not be feasible until such time as net rents have reached the range of approximately $13 to $14 per sq. ft. As they are still in the range of $7 to $9 or lower in virtually all primary North American markets, including Metro Vancouver, this means that rents must increase by approximately 50+% to warrant multi-level industrial buildings. Rents at this required level equal net rents paid by some large format retail stores and that is far higher than industrial tenants can afford to pay. Due to the pending land shortage industrial rents will likely rise over the long term, however, rents have only increased one or two percent a year over the past ten years.

Industrial landlord’s ability to demand higher rents are limited by tenants ability to relocate to other low rent cities such as Calgary. Many dozens of large scale industrial users including Costco and Wal-Mart and recently Target tried to locate in Metro Vancouver but gave up due to limited and high cost land and moved to Calgary where they developed warehouses over 1 million sq. ft. in size. In some instances goods which come in through the Port of Metro Vancouver are moved by train in containers to Calgary distributions centres and then some of the goods are returned for sale in Metro Vancouver area stores. All
this extra shipping is still more economically attractive for some businesses than locating within the high
cost Metro Vancouver region.

Such a large increase in industrial rents may not be possible even over the long term as many tenants
would relocate to other cities and ports or go out of business, before paying such high rents. Rents have
risen very slowly over the past 30 years and increases are not expected to be significant, despite the
increase in land prices. The only way development has been made feasible is by keeping buildings costs
low to ensure relatively low rents. With the pending land shortage, rents for some special and unique
areas may increase quickly but most industrial areas will see the same historic rent increases. The Port
maintains a large industrial land ownership program designed specifically to provide affordable land and
buildings to select goods handling industrial users who otherwise could not afford a location in Metro
Vancouver.

Another important finding is that loading and circulation is complicated and costly to accommodate in a
multi-level structure and in general truck movements should remain on grade level. Roof top parking is
still too expensive to build for industrial tenants but over the long term this may eventually prove to be the
most viable way to increase site density.

It should be noted that multi level industrial reduces building flexibility and thus increases owner’s leasing
risk if the tenant vacates. This creates a financing problem for the developer similar to any unique design
build project which is customized to one tenant.

In addition, by placing a large share of the investment into an expensive building the owner reduces their
redevelopment options. Most industrial developers would prefer the opportunity to reuse their sites as the
market and the highest and best use for the land evolves over time. A high capital investment in a multi-
level building is a major commitment increasing risk and reducing flexibility.

Given the above analysis, the question remains whether there are tenants or users that would pay a
premium in higher rents or higher capital costs for higher intensity industrial building designs. We would
suggest that there may be specific situations where a user needs a specific constrained location (i.e. east
Vancouver or at the airport) or their operations can benefit from being on multiple levels but these would
typically be one-off type users. The majority of industrial users are very price sensitive and will look to
minimize their occupancy costs in low cost premises or low cost jurisdictions.

The uses for industrial real estate are wide, however most space in Metro Vancouver is given over to
goods handling and logistics. Multi level industrial is difficult for the logistics business in particular
because of the high building costs associated with loading. Western Canada has never had a significant
manufacturing base due to high local costs, the small population base and relatively low transportation
costs. If BC could attract large scale manufacturing tenants engaged in a high value activity, where the
cost of a premise is not critical, this may generate some measurable demand for multi-level industrial. In
other markets where they do have manufacturing, land is typically low cost so it remains single level.
Metro Vancouver has a high cost environment making it difficult for our market to compete with other
large industrial markets such as Calgary. A recent analysis of the recovery in manufacturing in North
America indicated it is concentrated in the lowest cost areas of the USA and implied the trend would have
no impact on Metro Vancouver.
SCENERIO 1
INNER URBAN SCENARIO - VANCOUVER

PROJECT COMMENTARY

This is a 2-storey industrial building with bays or units of 7,500 sq.ft. typical of most multi-tenant strata warehouses common in Metro Vancouver. The building has a total leasable area of 86,000 sq.ft. on a 5 acre site. The Floor Area Ratio (FAR) is 0.73 and the lot coverage is 0.54. It also includes a 72,000 sq.ft. 2nd level structural loading area for truck loading. In this scenario, the project is divided into two smaller, 4-bay units but this model could be equally adapted to a single, larger facility. We have not included the 72,000 sq.ft. structural loading area into the FAR as the structured loading has no utility for storage and rent can therefore not be financially recovered.

The lower loading area is “depressed” slightly below the main slab level to create dock-height loading and to reduce the length of the vehicle ramps required to access the upper level. The upper level is accessed by an upward ramp on one side and a downward ramp on the other side of the building. In this scenario, both goods vehicles and private automobiles can access the upper level. Commercial vehicles access the loading areas while private automobiles can access the parking area in front of the “flex” space (see section on the attached sketch).

Surface parking is also provided at grade for the office and industrial uses on the lower level. The footprint of the upper level is smaller than the lower level due to the external vehicle circulation and parking spaces around the enclosed space(s). The ground floor has a floor load capacity of 500 pounds per sq.ft. and the second floor a capacity of 150 pounds per sq.ft.

COST AND REVENUE COMMENTARY

The cost estimates provided below were used in the pro forma. The numbers used in these studies have been grouped and adjusted in various ways to reflect the practical hands-on nature of modelling a development. As such, they sometimes do not appear to match a simple list of hard costs, but in fact they are all consistent. Building hard construction costs are expected to average $192 per sq.ft. GLA (Gross Leasable Area). This is a very high capital cost driven by the cost of the second level loading structure which totals $6.8 million.

Building (Ground and Second Floor) 86,000 sq.ft. @ $112 psf = $9,651,000
Second Level Loading Structure 72,000 sq.ft. @ $95 psf = $6,840,000

Total Cost - $16,491,000 = $192 psf based on 86,000 sq.ft. GLA

This cost is much greater than a conventional one-level warehouse development which would typically cost $60 per sq.ft. for all hard costs associated with construction, except site preparation and servicing. The form of building is suited to a wide variety of small and medium scale industrial tenants who require an inner urban location. Premises with each one or two loading bays would be 7,500 sq.ft. with a column grid of 25 feet, which is suitable for most tenants.

Rents are expected to reflect the surrounding area which would be in the range of $8.50 – $9.50 per sq.ft., net plus CAM (Common Area Maintenance) and property taxes. The CAM for industrial buildings is very low and is simply a required cost of doing business anywhere. Property taxes are relatively high in Metro Vancouver. If municipalities reduced industrial property taxes substantially and the savings were added to net rent and passed on to the landlord, the transferred amount of value could go directly into paying for...
more expensive buildings. Property taxes for a multi-level building with a high capital cost would be higher in general and per sq.ft. due to the construction values indicated in the building permits.

**PRO FORMA COMMENTARY AND FINDINGS**

The pro forma simply models the financial aspects of the project in terms of cost and revenues and helps isolate various individual elements of the project, such as land costs. The first section outlines the land and building, the second details soft and hard costs and the third provides project revenues, profit and the residual land value. The rents are shown at market and in terms of what rent level would be required for the project to be financially feasible.

**INNER URBAN SCENARIO 1 - VANCOUVER**

The second floor shows elevated docks and paved apron as if semi-trailers used the second storey access, yet the ramp is not configured to allow semis up, the scenario does not contemplate semis on the second floor and the load bearing capacity of 150 psi would not allow heavy trucks.

The second floor should be configured for light trucks. The second storey does not require access from two sides as shown. There may be ways to efficiently reduce the floor area of upper levels and thus reduce costs even if it also reduces revenues.
The analysis reveals that this project would be feasible and support current market land values ($1.4 million per acre of serviced industrial land) if net rents were $22.5 per sq.ft., which is far higher than any industrial market in North America. The land value would have to be much higher than current market and equate to land which is zoned for retail and commercial and much higher value land uses. As the current market industrial rent is at most $9.5 per sq.ft., multi-level industrial with elevated loading will not be feasible within the foreseeable future or until land values have increased very substantially.

It is clear that loading and truck circulation is extremely costly to elevate above grade and is and will remain not feasible for the long term. Cost saving may be possible if the building were located on a site with a topographical slope and thus no ramp required as grade level access and truck access is possible from two grade levels. The savings would reduce the cost of structured loading area making the Vancouver scenario costs more in line with the Burnaby ‘urban edge’ scenario costs. However, ideal sites with one story grade changes and level ground on either side of the slopes are rarely available anywhere, let alone on suitable industrial land. Given the rarity of such sites plus unstable soil conditions (excavation and retaining walls) the cost of using the slope could quickly outweigh the benefits.
INNER URBAN SCENARIO 1

### Vancouver Multi Level Industrial Building Development Specifications

<table>
<thead>
<tr>
<th></th>
<th>Intensive</th>
<th>Actual</th>
<th>Conventional</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Site Area Acres / Sq. Ft. (Uncumbered)</td>
<td>5.00</td>
<td>217,800</td>
<td>5.00</td>
<td>217,800</td>
</tr>
<tr>
<td>Gross Building Area Sq. Ft. (FAR)</td>
<td>0.73</td>
<td>158,000</td>
<td>0.42</td>
<td>91,476</td>
</tr>
<tr>
<td>Building Efficiency - Gross to Net Rentable Space</td>
<td>54%</td>
<td>86,000</td>
<td>100%</td>
<td>91,476</td>
</tr>
<tr>
<td>Building Site Coverage</td>
<td>39%</td>
<td></td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Net Rentable Building Area Sq. Ft. Loading</td>
<td>72,000</td>
<td>158,000</td>
<td>-</td>
<td>91,476</td>
</tr>
<tr>
<td>Stalls Per 1000 Sq. Ft. and Parking Area</td>
<td>86</td>
<td>30,100</td>
<td>91</td>
<td>32,017</td>
</tr>
</tbody>
</table>

### Development Costs

- **On Site Fill - Per Land Acre (Already Filled)**: $15,000 - $75,000
- **On Site Servicing - Per Acre (Some Existing)**: $30,000 - $150,000
- **Access and All Other Off Site Costs**: $50,000
- **Hard Construction Costs @ Sq. Ft. Building**: $102 - $16,116,000
- **All Other Paving and Landscaping Etc.**: $100,000
- **Total Hard Costs**: $16,491,000

### Market Rent

- **Development Revenues & Land Values**:
  - Nett Rent Per Sq. Ft. (Level 2 ~ 90% of Level 1): $8.50
  - Cap Rate and Project Value: 6.25% $11,695,000
  - Value of Net Built Space Per Sq. Ft: $136.00
  - Selling Costs as a Percent of Value: 1.50% $175,440
  - Total Value: $11,520,560
  - Profit @ % of Dev. Costs Plus Interest on Equity: 12.5% $2,572,927
  - Site Land Value: ($11,635,787) $7,031,063
  - Land Value @ Sq. Ft: ($53.42) $32,280
  - Land Value @ Acre: ($2,227,157) $1,406,201
  - Total Project Cost: $14,266,445

### Required Rent for Market Land Values

- **Development Revenues & Land Values**:
  - Nett Rent Per Sq. Ft: $22.50
  - Cap Rate and Project Value: 6.25% $30,960,000
  - Value of Net Built Space Per Sq. Ft: $196.95
  - Selling Costs as a Percent of Value: 1.50% $464,400
  - Total Value: $30,495,600
  - Profit @ % of Dev. Costs Plus Interest on Equity: 12.5% $2,572,927
  - Site Land Value: $7,339,253
  - Land Value @ Sq. Ft: $33.70
  - Land Value @ Acre: $1,467,915
  - Total Project Cost: $30,495,600
SCENERIO 2

URBAN EDGE SCENARIO - BURNABY

PROJECT COMMENTARY

This is a 2-storey “flex” project with premises of 7,500 sq.ft. (or multiples thereof). Each premise would have one or two loading bays. The total size is 360,000 sq.ft. of leasable space on a 10 acre site representing 48% site coverage based on the ground level (excluding the access ramps), with a total of 78% floor area ratio based on the 2-storey gross leasable area. The upper deck between the buildings is utilized for loading only.

Parking for private automobiles is at grade. The 2\textsuperscript{nd} floor office/mezzanine space is accessed through common-area lobbies (2 per building) each with a staircase and an elevator from the ground level. The ground floor has a floor load capacity of 500 pounds per sq.ft. and the second floor a capacity of 150 pounds per sq.ft.

The upper deck (for truck loading and circulation) would be accessed by non-articulated trucks (i.e. not tractor trailers) via a structural ramp. Ground level warehouse could accommodate all vehicle sizes. This model would be well-suited to an “urban edge” location where there is already a significant amount of context developed around the site as the loading and heavy vehicle manoeuvring is restricted to the centre of the site (and out of view from the perimeter of the site).

COST AND REVENUE COMMENTARY

Building hard construction costs are expected to average $92 per sq.ft. of gross building area (inclusive of the structured truck loading). This construction cost is much greater than a typical one-level warehouse development which would typically cost $50 per sq.ft. for large 24 ft to 30 ft high buildings. The higher construction cost relates to the access ramps and 2\textsuperscript{nd} level loading/parking as well as the second level floor structure and additional building height to accommodate 2 floors (a single level building would likely be 30 feet high and it is assumed that the 2\textsuperscript{nd} building would be 40 feet high.)
The form of building is suited to a wide variety of small and medium scale industrial tenants who require an urban edge location. Typical minimum unit sizes for this concept are 7,500 sq.ft. This is a common unit size in the Metro Vancouver market place that is attractive to users that purchase a strata unit or lease a unit in a multi-tenant rental building. The 2nd level loading area has an area of 100,000 sq.ft. including the access ramps.

Rents are expected to reflect the surrounding area which would be in the $8 to $9 per sq.ft. net plus Common Area Maintenance (CAM) and property taxes. It could be anticipated that the ground floor would command a slightly higher rent than the second floor due to the additional utility of the greater floor load capacity on the ground floor (500 lbs/sq.ft. versus 150 lbs/sq.ft.) and more convenient access.

**PRO FORMA COMMENTARY AND FINDINGS**

The pro forma simply models the financial aspects of the project in terms of cost and revenues and helps isolate various individual elements of the project.

The analysis reveals that this project would be feasible and support market land values ($1.3 million per acre) if net rents were on the order of $12.75 per sq.ft. As the market is only $8 to $9 currently, such development would require much higher rents to become feasible. Due to the pending land shortage industrial rents will rise over the long term faster than inflation but this scale of increase is not expected until the long term. Land values would have to increase approximately 50% over current levels to consider multi-level industrial building construction, assuming construction costs do not rise.
<table>
<thead>
<tr>
<th>BURNABY MULTI LEVEL INDUSTRIAL BUILDING DEVELOPMENT SPECIFICATIONS</th>
<th>INTENSIVE</th>
<th>CONVENTIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SITE AREA ACRES / SQ. FT. (Unencumbered)</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>GROSS BUILDING AREA SQ. FT. (FAR)</td>
<td>1.06</td>
<td>0.42</td>
</tr>
<tr>
<td>BUILDING EFFICIENCY</td>
<td>78%</td>
<td>100%</td>
</tr>
<tr>
<td>BUILDING SITE COVERAGE</td>
<td></td>
<td>48%</td>
</tr>
<tr>
<td>NET RENTABLE BUILDING AREA SQ. FT. AND PARKING AREA</td>
<td>100,000</td>
<td>183</td>
</tr>
<tr>
<td>STALLS PER 1000 SQ. FT. AND PARKING AREA</td>
<td>360</td>
<td>126,000</td>
</tr>
</tbody>
</table>

**DEVELOPMENT COSTS**

- ON SITE FILL - PER LAND ACRE (PARTIAL): $15,000
- ON SITE SERVICING - PER ACRE (SOME EXISTING): $30,000
- ACCESS AND ALL OTHER OFF SITE COSTS: $100,000
- HARD CONSTRUCTION COSTS @ SQ. FT. BUILDING: $42,320,000
- ALL OTHER PAVING AND LANDSCAPING ETC: $200,000
- TOTAL HARD COSTS: $43,070,000

**ARCH/CONSULTANTS/PERMITS % TOTAL HARD COSTS**

- 6.5%: $2,799,550
- 5.5%: $544,368

**MUNICIPAL DEVELOPMENT CHARGES - PER SQ FT**

- $0.00
- $0.00

**REGIONAL DEVELOPMENT CHARGES - PER SQ FT**

- $0.81
- $0.81

**PARK AND AMENITIES - PER SQ. FT. BUILDING**

- $0.00
- $0.00

**TAXES PER $1000 OF HARD COSTS**

- $13.00
- $13.00

**TENANT IMPROVEMENTS / LEASING - SQ FT**

- $1.97
- $2.19

**CONSTRUCTION FINANCING**

- 5.0%
- 5.0%

**CONTINGENCY / MISC / PROVISIONAL HARD COSTS**

- 7.5%
- 5.0%

**TOTAL SOFT COSTS**

- $9,825,020
- $2,211,378

**TOTAL DEVELOPMENT COSTS**

- $52,895,020
- $12,106,978

**MARKET RENT**

<table>
<thead>
<tr>
<th>DEVELOPMENT REVENUES &amp; LAND VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET RENT PER SQ FT</td>
</tr>
<tr>
<td>CAP RATE AND PROJECT VALUE</td>
</tr>
<tr>
<td>VALUE OF NET BUILT SPACE PER SQ FT</td>
</tr>
<tr>
<td>SELLING COSTS AS A PERCENT OF VALUE</td>
</tr>
<tr>
<td>TOTAL VALUE</td>
</tr>
<tr>
<td>PROFIT @ % OF DEV. COSTS PLUS INTEREST ON EQUITY</td>
</tr>
<tr>
<td>SITE LAND VALUE</td>
</tr>
<tr>
<td>LAND VALUE @ SQ FT</td>
</tr>
<tr>
<td>LAND VALUE @ ACRE</td>
</tr>
<tr>
<td>TOTAL PROJECT COST</td>
</tr>
</tbody>
</table>

**REQUIRED RENT FOR MARKET LAND VALUES**

<table>
<thead>
<tr>
<th>DEVELOPMENT REVENUES &amp; LAND VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET RENT PER SQ FT</td>
</tr>
<tr>
<td>CAP RATE AND PROJECT VALUE</td>
</tr>
<tr>
<td>VALUE OF NET BUILT SPACE PER SQ FT</td>
</tr>
<tr>
<td>SELLING COSTS AS A PERCENT OF VALUE</td>
</tr>
<tr>
<td>TOTAL VALUE</td>
</tr>
<tr>
<td>PROFIT @ % OF DEV. COSTS PLUS INTEREST ON EQUITY</td>
</tr>
<tr>
<td>SITE LAND VALUE</td>
</tr>
<tr>
<td>LAND VALUE @ SQ FT</td>
</tr>
<tr>
<td>LAND VALUE @ ACRE</td>
</tr>
<tr>
<td>TOTAL PROJECT COST</td>
</tr>
</tbody>
</table>
SCENERIO 3

SUBURBAN SCENARIO - SURREY

PROJECT COMMENTARY

This is a standard 100,000 sq.ft. single level, single tenant industrial warehouse on a 5 acre site, however with approximately 60 vehicle parking stalls on the roof (1 stall per 1,000 sq.ft. of net area). It would be located in North Surrey in the most desirable suburban industrial market. Without the need for surface on-site parking the non-improved portion of the site would be used for loading, the Floor Area Ratio could reach 55%, up from the typical FAR of approximately 40%. It is not expected to reach higher for logistics businesses due to the need for truck turning.

COST AND REVENUE COMMENTARY

Building construction costs are expected to average $82.50 per sq.ft. of gross building area, as only 66% of the roof is required to be constructed to a high standard capable of supporting the limited number of employee’s vehicles. This cost is greater than a typical one-level warehouse development ($50 per sq.ft.). The approximate 50% higher construction cost relates to the reinforced roof which could support the weight of light passenger vehicles as well as the ramp to allow roof access.

The form of single tenant building is suited to a wide variety of medium scale industrial tenants who require a suburban location. This is a common size in the Metro Vancouver market place that is attractive to users that purchase or rent.

Rents are expected to reflect the surrounding area which would be $8.25 at most, for an ideal location, net plus Common Area Maintenance (CAM) and property taxes.

PRO FORMA COMMENTARY AND FINDINGS

The pro forma simply models the financial aspects of the project in terms of cost and revenues and helps isolate various individual elements of the project.

The analysis reveals that this project would be feasible and support current market land values ($1 million per acre) if net rents were on the order of $11 per sq.ft. The market here is strong, however rents for large premises are approximately $8 per sq.ft. The building form would not be feasible currently, but possibly over the long term if rents increase faster than construction costs. This type of building may be possible in an inner urban location sooner than the suburbs given the higher rents in the inner urban markets.
## Suburban Scenario 3

<table>
<thead>
<tr>
<th>Development Specifications</th>
<th>Intensive Factor</th>
<th>Intensive Actual</th>
<th>Conventional Factor</th>
<th>Conventional Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Site Area Acres / Sq. Ft. (Uncumbered)</td>
<td>5.00</td>
<td>217,800</td>
<td>5.00</td>
<td>217,800</td>
</tr>
<tr>
<td>Gross Building Area Sq. Ft. (FAR)</td>
<td>0.55</td>
<td>119,790</td>
<td>0.40</td>
<td>87,120</td>
</tr>
<tr>
<td>Building Efficiency (Minus Ramp)</td>
<td>95%</td>
<td>113,801</td>
<td>100%</td>
<td>87,120</td>
</tr>
<tr>
<td>Building Site Coverage</td>
<td></td>
<td></td>
<td>55%</td>
<td>40%</td>
</tr>
<tr>
<td>Net Rentable Building Area</td>
<td></td>
<td>113,801</td>
<td></td>
<td>87,120</td>
</tr>
<tr>
<td>Stalls Per 1000 Sq. Ft. and Parking Area</td>
<td>39.830</td>
<td>114</td>
<td>30.492</td>
<td>87</td>
</tr>
</tbody>
</table>

### Development Costs

- **On Site Fill - Per Land Acre (Partial)**: $15,000, $75,000
- **On Site Servicing - Per Acre (Some Existing)**: $25,000, $125,000
- **Access And All Other Off Site Costs**: $50,000
- **Hard Construction Cost @ Sq. Ft. Building**: $82.5, $8,828,675
- **All Other Paving And Landscaping Etc**: $126,000
- **Total Hard Costs**: $10,257,675, $4,731,000
- **Architect/Consultants/Permits % Total Hard Costs**: 5.5%, $554,172, 5.5%, $250,205
- **Municipal Development Charges - Per Acre**: $72,879, $364,395
- **Regional Development Charges - Per Sq. Ft**: $0.81, $97,750
- **Park And Amenities - Per Sq. Ft. Building**: $0.00
- **Taxes Per $1000 Of Hard Costs**: $12.00, $123,692
- **Tenant Improvements / Leasing - Sq Ft**: $1.00, $119,790
- **Construction Finishing**: 5.0%, $12,884
- **Contingency / Misc / Provisional Hard Costs**: 7.5%, $769,325
- **Total Soft Costs**: $2,550,808, $1,430,521
- **Total Development Costs**: $12,808,483, $6,161,521

### Market Rent

<table>
<thead>
<tr>
<th>Development Revenues &amp; Land Values</th>
<th>Intensive</th>
<th>Conventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Rent Per Sq. Ft</td>
<td>$8.25</td>
<td>$8.25</td>
</tr>
<tr>
<td>Cap Rate And Project Value</td>
<td>6.25%</td>
<td>6.00%</td>
</tr>
<tr>
<td>Value Of Net Built Space Per Sq. Ft</td>
<td>$15,021,666</td>
<td>$11,979,000</td>
</tr>
<tr>
<td>Selling Costs As A Percent Of Value</td>
<td>1.50%</td>
<td>1.50%</td>
</tr>
<tr>
<td>Total Value</td>
<td>$14,796,341</td>
<td>$11,799,315</td>
</tr>
<tr>
<td>Profit @ % Of Dev. Costs Plus Interest On Equity</td>
<td>12.5%</td>
<td>10.00%</td>
</tr>
<tr>
<td>Site Land Value</td>
<td>$386,797</td>
<td>$5,021,642</td>
</tr>
<tr>
<td>Land Value @ Sq. Ft</td>
<td>$1,78</td>
<td>$23.06</td>
</tr>
<tr>
<td>Total Project</td>
<td>$14,796,341</td>
<td>$11,799,315</td>
</tr>
</tbody>
</table>

### Required Rent For Market Land Values

<table>
<thead>
<tr>
<th>Development Revenues &amp; Land Values</th>
<th>Intensive</th>
<th>Conventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Rent Per Sq. Ft</td>
<td>$11.00</td>
<td>$1,251,605</td>
</tr>
<tr>
<td>Cap Rate And Project Value</td>
<td>6.25%</td>
<td>6.00%</td>
</tr>
<tr>
<td>Value Of Net Built Space Per Sq. Ft</td>
<td>$20,028,888</td>
<td>$176,00</td>
</tr>
<tr>
<td>Selling Costs As A Percent Of Value</td>
<td>1.50%</td>
<td>300,433</td>
</tr>
<tr>
<td>Total Value</td>
<td>$19,728,455</td>
<td>$5,318,911</td>
</tr>
<tr>
<td>Profit @ % Of Dev. Costs Plus Interest On Equity</td>
<td>12.5%</td>
<td>1,601,060</td>
</tr>
<tr>
<td>Site Land Value</td>
<td>$5,318,911</td>
<td>$24.42</td>
</tr>
<tr>
<td>Land Value @ Acre</td>
<td>$1,063,782</td>
<td></td>
</tr>
<tr>
<td>Total Project</td>
<td>$19,728,455</td>
<td></td>
</tr>
</tbody>
</table>
SCENARIO 4
MULTI-LEVEL INDUSTRIAL WITH OFFICE

PROJECT COMMENTARY

This is a 2-storey industrial building with 5-floors of office above. It is notionally located in an industrial area in Metro Vancouver that is close to frequent transit service to reduce the amount of passenger vehicle parking required. The conceptual site is 7 acres and there would be 136,000 sq.ft. of industrial space on 2 levels – the ground floor for general warehousing or manufacturing and the 2nd floor for light industrial (with a floor load capacity of 150 pounds per square foot). Above would be 5 floors of office totalling 72,000 sq.ft. gross with a typical floor plate of 14,400 sq.ft. The net leasable office area is 63,300 sq. ft. based on an efficiency ratio of .88%.

The project would provide 68 parking stalls for the industrial (at 0.5 stalls/1,000 sq.ft.) and 144 parking stalls for the office (at 2.0 stalls/1,000 sq.ft.).

More specifically the project would have the following form and function:

- 40 ft x 200 ft general industrial bays with “rear loading”. Proposed up to 10% mezzanine area. A modest amount of parking provided in “front” for this use.
- 40 ft x 160 ft single-sided, light industrial loading bays on a second storey with suspended parking over the general industrial area. Proposed up to 10% mezzanine area.
- 120 ft x 120 ft office floor plates x 5 floors.
- Exiting from the superimposed uses is proposed as follows:
  - The middle (light industrial) occupancy will require two means of egress from each unit which would require a rated exit corridor running continuously along the rear of the units connected to internal or external stairs to grade.
  - Exiting from the front of the units also requires access stairs to grade which could either be external or internal (though internal stairs will impinge on the functionality/leasability of the General Industrial units).
  - Office exiting is more straightforward but does require a “break” in the general industrial units to provide direct access to refuge at grade. The egress from the General Industrial units is straightforward as they are at grade and have ample frontage/surface area to permit exiting.
- Build Site Coverage Ratio – 28%
- Floor Area Ratio – 0.68
- Total building height – 120 ft (30 f-f, + 25 f-f, + 5 x 13 f-f)
- The lower level would have 26 ft clear in the bays and the upper level would have 22 ft clear. The office floors are 13 ft floor to floor.
- Floor loading would be 300-500 lbs/sf on the lower level and 150 lbs/sf on the suspended (second level).
MULTI-LEVEL INDUSTRIAL WITH OFFICE BUILDING SCENARIO 4

Proposed Site Area:
560' x 560' (72 acres)

A. General Industrial
80,000 sq. ft.

B. Light Industrial
56,000 sq. ft.

C. Office
72,000 sq. ft.
(5 stories)
COST AND REVENUE COMMENTARY

- Building construction costs are expected to average $154 per sq.ft. GLA (Gross Leasable Area).
- Building Warehouse (Ground and Second Floor) 136,000 sq.ft. @ $100 psf = $13,600,000
  Includes enhanced roof structure and access ramps
- Building Office (Floors 3 to 7) 72,000 sq.ft. @ $210 psf = $15,120,000
- Building Site Work – 313,632 sq.ft. @ $10.50 psf = $3,293,136
- **Total Cost - $32,497,000 = $156 psf based on 208,000 sq.ft. Gross Building Area**

Rent would be reflective of a transit oriented industrial site likely close to the urban edge. Anticipated industrial rent would be $9.50 psf and office would be $31 psf including a typical $25 psf tenant improvement allowance applicable for each lease agreement period (typically five years).

The CAM will be higher than a typical industrial building as offices require a higher level of maintenance and attention. We have estimated a blended CAM of $4.06 psf (warehouse at $2 psf and office at $8 psf). Property taxes will reflect the two uses and we have estimated the warehouse at $1 psf and the office at $4 psf for a blended rate of $2.02 psf.

PRO FORMA COMMENTARY AND FINDINGS

The pro forma models the cost and revenues and isolates various individual elements of the project. The rents are shown at market and in terms of what rent level would be required for the project to be financially feasible to support the market cost of land. The analysis reveals that this project is very costly and just feasible if office rents were 10% to 15% above market. Office rents are estimated for an urban location along the frequent transit network at $31 per sq.ft. Office rents are much more volatile than industrial rents and they could readily experience an increase in rents to the required level of $34 per sq.ft. This type of mixed use project would be immediately feasible, even on a less prime site, and have much less risk, if the industrial space remained one level and only the office was above grade.
### Multi-Level Industrial with Office Building Scenario 4

#### Development Specifications

<table>
<thead>
<tr>
<th>Net Site Area Acres / Sq. Ft. (Uncumbered)</th>
<th>7.00</th>
<th>304,920</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Building Area Sq. Ft. (FAR)</td>
<td>0.68</td>
<td>208,000</td>
</tr>
<tr>
<td>Building Efficiency - Gross to Net Rentable Space</td>
<td>96%</td>
<td>199,360</td>
</tr>
<tr>
<td>Building Site Coverage</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Industrial Building Area Level 1 and Level 2</td>
<td>56,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Net Rental Industrial Area</td>
<td>136,000</td>
<td></td>
</tr>
<tr>
<td>Gross and Net Office Area</td>
<td>72,000</td>
<td>63,360</td>
</tr>
<tr>
<td>Stalls Office and Industrial</td>
<td>190</td>
<td>136</td>
</tr>
</tbody>
</table>

#### Development Costs

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Factor</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Site Fill - Per Land Acre (Already Filled)</td>
<td>$15,000</td>
<td>$105,000</td>
</tr>
<tr>
<td>On Site Servicing - Per Acre (Some Existing)</td>
<td>$30,000</td>
<td>$210,000</td>
</tr>
<tr>
<td>Access and All Other Off Site Costs</td>
<td></td>
<td>$50,000</td>
</tr>
<tr>
<td>Hard Construction Costs @ Sq. Ft. Building</td>
<td>$154</td>
<td>$32,032,000</td>
</tr>
<tr>
<td>All Other Paying and Landscaping Etc</td>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td><strong>Total Hard Costs</strong></td>
<td></td>
<td>$32,497,000</td>
</tr>
<tr>
<td>Arch/Consultants/Permits % Total Hard Costs</td>
<td>6.25%</td>
<td>$2,031,063</td>
</tr>
<tr>
<td>Municipal Development Charges - Per Sq. Ft.</td>
<td>$5.00</td>
<td>$1,040,000</td>
</tr>
<tr>
<td>Regional Development Charges - Per Sq. Ft.</td>
<td>$0.44</td>
<td>$92,144</td>
</tr>
<tr>
<td>Park and Amenities - Per Sq. Ft. Building</td>
<td>$0.00</td>
<td>$0</td>
</tr>
<tr>
<td>Taxes Per $1000 of Hard Costs</td>
<td>$15.00</td>
<td>$487,455</td>
</tr>
<tr>
<td>Tenant Improvements / Leasing - Sq. Ft</td>
<td>$8.17</td>
<td>$1,628,060</td>
</tr>
<tr>
<td>Construction Financing</td>
<td>5.0%</td>
<td>$1,624,850</td>
</tr>
<tr>
<td>Contingency / Misc / Provisional Hard Costs</td>
<td>7.5%</td>
<td>$2,437,275</td>
</tr>
<tr>
<td><strong>Total Soft Costs</strong></td>
<td></td>
<td>$9,340,867</td>
</tr>
<tr>
<td><strong>Total Development Costs</strong></td>
<td></td>
<td>$41,837,867</td>
</tr>
</tbody>
</table>

#### Market Rent

<table>
<thead>
<tr>
<th>Rent Description</th>
<th>Factor</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Rent Per Sq Ft. Industrial</td>
<td>$9.50</td>
<td>$1,292,000</td>
</tr>
<tr>
<td>Net Rent Per Sq Ft. Office</td>
<td>$31.00</td>
<td>$1,964,160</td>
</tr>
<tr>
<td>Total Rent</td>
<td>$16.33</td>
<td>$3,256,160</td>
</tr>
<tr>
<td>Cap Rate and Project Value</td>
<td>6.25%</td>
<td>$52,098,660</td>
</tr>
<tr>
<td>Value of Net Built Space Per Sq. Ft</td>
<td></td>
<td>$261,33</td>
</tr>
<tr>
<td>Selling Costs as a Percent of Value</td>
<td>1.50%</td>
<td>$781,476</td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td></td>
<td>$51,317,082</td>
</tr>
<tr>
<td>Profit @ % of Dev. Costs Plus Interest on Equity</td>
<td>12.5%</td>
<td>$5,229,733</td>
</tr>
<tr>
<td>Site Land Value</td>
<td></td>
<td>$4,249,482</td>
</tr>
<tr>
<td>Land Value @ Sq Ft</td>
<td>$13.94</td>
<td></td>
</tr>
<tr>
<td>Land Value @ Acre</td>
<td></td>
<td>$607,069</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td></td>
<td>$9,584,215</td>
</tr>
</tbody>
</table>

#### Required Office Building Rents

<table>
<thead>
<tr>
<th>Rent Description</th>
<th>Factor</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Rent Per Sq Ft. Industrial</td>
<td>$9.50</td>
<td>$1,292,000</td>
</tr>
<tr>
<td>Net Rent Per Sq Ft. Office (10% Above Market)</td>
<td>$34.10</td>
<td>$2,160,676</td>
</tr>
<tr>
<td>Total Rent</td>
<td>$17.32</td>
<td>$3,452,576</td>
</tr>
<tr>
<td>Cap Rate and Project Value</td>
<td>6.25%</td>
<td>$55,241,216</td>
</tr>
<tr>
<td>Value of Net Built Space Per Sq. Ft</td>
<td></td>
<td>$277,05</td>
</tr>
<tr>
<td>Selling Costs as a Percent of Value</td>
<td>1.50%</td>
<td>$828,618</td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td></td>
<td>$54,412,588</td>
</tr>
<tr>
<td>Profit @ % of Dev. Costs Plus Interest on Equity</td>
<td>12.5%</td>
<td>$5,229,733</td>
</tr>
<tr>
<td>Site Land Value</td>
<td></td>
<td>$7,344,998</td>
</tr>
<tr>
<td>Land Value @ Sq Ft</td>
<td></td>
<td>$33.72</td>
</tr>
<tr>
<td>Land Value @ Acre</td>
<td></td>
<td>$1,469,000</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td></td>
<td>$54,412,588</td>
</tr>
</tbody>
</table>
APPENDIX 1 – ASSUMPTIONS & LIMITING CONDITIONS

This market, economic, land use or development report / study has been prepared at the request of the client for the purpose of providing an estimate of economic feasibility or impact, development strategy or range of possible market values. It is not reasonable for any person other than the person or those to whom this report is addressed to rely upon this without first obtaining written authorization from the client and the author of this report. This report has been prepared on the assumption that no other person will rely on it for any other purpose and all liability to all such persons is denied.

This report has been prepared at the request of the client, and for the exclusive (and confidential) use of the recipient as named herein and for the specific purpose and function as stated herein. The client has provided much of the site information and has represented that such material, such as ownership, rents, size, etc. is reliable. All copyright is reserved to the author and this report is considered confidential by the author and the client. Possession of this report, or a copy thereof, does not carry with it the right to reproduction or publication in any manner, in whole or in part, nor may it be disclosed, quoted from or referred to in any manner, in whole or in part, without the prior written consent and approval of the author as to the purpose, form and content of any such disclosure, quotation or reference.

Without limiting the generality of the foregoing, neither all nor any part of the contents of this report shall be disseminated or otherwise conveyed to the public in any manner whatsoever or through any media whatsoever or disclosed, quoted from or referred to in any report, financial statement, prospectus, or offering memorandum of the client, or in any documents filed with any governmental agency without the prior written consent and approval of the author as to the purpose, form and content of such dissemination, disclosure, quotation or reference.

If an estimate of economic, market or financial value of the real property / subject site which is assessed in this report is provided then it pertains to the approximate and general range of possible values of the freehold or fee simple, or leasehold or leased fee estate in the real property, based on vacant possession or subject to terms and conditions of the existing tenancy as described in this report. The property rights exclude mineral rights, if any.

An estimate of economic, market or financial value, if any, contained in this report is founded upon a thorough and diligent examination and analysis of information gathered and obtained from numerous sources. Certain information has been accepted at face value, especially if there was no reason to doubt its accuracy. Other empirical data required interpretive analysis pursuant to the objective of this report. Certain inquiries were outside the scope of this mandate. In addition, any economic or financial estimates in this report are approximations only and may vary from final and actual market values. For these reasons, the analyses, opinions, and conclusions contained in this report are subject to the following contingent and limiting conditions.

The property has been assessed on the basis that title to the real property is good and marketable.

The author of this report cannot accept responsibility for legal matters, questions of survey, opinions of title, hidden or unapparent conditions of the property, toxic wastes or contaminated materials, soil or sub-soil conditions, environmental, engineering or other technical matters which might render this property more or less valuable than as stated herein. If it came to our attention as the result of our investigation and analysis that certain problems may exist, a cautionary note has been entered in the body of the report.

The legal description of the property and the area of the site was obtained from sources which are deemed to be reliable. Further, the plans and sketches contained in this report are included solely to aid
the recipient in visualizing the location of the property, the configuration, and boundaries of the site and the relative position of the improvements on the said lands.

The property, if any, has been described on the basis that the real property is free and clear of all value influencing encumbrances, encroachments, restrictions or covenants except as any be noted in this report and that there are no pledges, charges, lien or social assessments outstanding against the property other than as stated and described herein.

The property if any, has been described on the basis that there are no outstanding liabilities except as expressly noted herein, pursuant to any agreement with a municipal or other government authority, pursuant to any contract or agreement pertaining to the ownership and operation of the real estate or pursuant to any lease or agreement to lease, which may affect the stated value or saleability of the subject property or any portion thereof.

The interpretation of any leases and other contractual agreements, pertaining to the operation and ownership of the property, as expressed herein, is solely the opinion of the author, and should not be construed as a legal interpretation. Further, any summaries of these contractual agreements, which may appear in the Addenda, are presented for the sole purpose of giving the reader an overview of the salient facts thereof.

The property, if any, has been described on the basis that the real property complies in all material respects with any restrictive covenants affecting the site and has been built and is occupied and being operated, in all material respects, in full compliance with all requirements of law, including all zoning, land use classification, building, planning, fire and health by-laws, rules, regulations, orders and codes of all federal, provincial, regional and municipal governmental authorities having jurisdiction with respect thereto. (It is recognized there may be work orders or other notices of violation of law outstanding with respect to the real estate and that there may be certain requirements of law preventing occupancy of the real estate as described in this report. However, such possible circumstances have not been accounted for in the reporting process.)

Investigations have been undertaken in respect of matters that regulate the use of land. However, no inquiries have been placed with the fire department, the building inspector, the health department, or any other government regulatory agency, unless such investigations are expressly represented to have been made in this report. The subject property must comply with such regulations and, if it does not comply, its non-compliance may affect the market value of this property. To be certain of such compliance, further investigations may be necessary.

The property, if any, has been assessed and possibly valued in a general analysis on the basis that all rents referred to in this report are being paid in full and when due and payable under the terms and conditions of the attendant leases, agreements to lease or other contractual agreements. Further, it is assumed that all rents referred to in this report represent the rental arrangements stipulated in the leases, agreements to lease or other contractual agreements pertaining to the tenants' occupancy, to the extent that such rents have not been prepaid, abated, or inflated to reflect extraordinary circumstances, and are fully enforceable notwithstanding that such documentation may not be fully executed by the parties thereto as at the date of this reporting, unless such conditions have been identified and noted in this report.

The data and statistical information contained herein were gathered from reliable sources and are believed to be correct. However, these data are not guaranteed for accuracy, even though every attempt has been made to verify the authenticity of this information as much as possible.
Any estimated economic or market or financial value does not necessarily represent the value of the underlying shares, if the asset is so held, as the value of the shares could be affected by other considerations. Further, the estimated market value if any does not include consideration of any extraordinary market value of the property, unless the effects of such special conditions, and the extent of any special value that may arise therefrom, have been described and measured in this report.

Should title to the real estate presently be held (or changed to a holding) by a partnership, in a joint venture, through a co-tenancy arrangement or by any other form of divisional ownership, the value of any fractional interest associated therewith may be more or less than the percentage of ownership appearing in the contractual agreement pertaining to the structure of such divisional ownership.

In the event of syndication, the aggregate value of the limited partnership interests may be greater than the value of the freehold or fee simple interest or leasehold interest in the real property, by reason of the possible contributory value of non-realty interests or benefits such as provision for tax shelter, potential for capital appreciation, special investment privileges, particular occupancy and income guarantees, special financing or extraordinary agreements for management services.

Should the author of this report be required to give testimony or appear in court or at any administrative proceeding relating to this report, prior arrangements shall be made therefore, including provisions for additional compensation to permit adequate time for preparation and for any appearances that may be required. However, neither this nor any other of these contingent and limiting conditions is an attempt to limit the use that might be made of this report should it properly become evidence in a judicial proceeding. In such a case, it is acknowledged that it is the judicial body which will decide the use of this report which best serves the administration of justice.

Because market conditions, including economic, social and political factors, change rapidly and, on occasion, without notice or warning, the estimate of market value expressed herein, as of the effective date of this report, cannot necessarily be relied upon as any other date without the subsequent advice of the author of this report. All macro economic data has been obtained from reliable sources however major changes in the economy are possible which could move entire markets and a reported value, if any, would move up or down with that market. The report typically assumes stable background economic conditions.

If any economic, market or financial value or measure has been expressed herein it is in Canadian dollars.
APPENDIX 2 – PROFESSIONAL RESUME

SITE ECONOMICS LTD.

Richard Wozny, Principal

Company Overview

Site Economics Ltd. provides real estate development consulting services to developers, land owners, investors and the public sector. We have completed close to 1,000 major projects and conduct an average of 40 per year. We have very extensive experience in all forms of large scale commercial, industrial, residential and institutional land development projects.

Strategic Real Estate Services

- Market Analysis and Feasibility
- Impact Analysis
- Financial Analysis and Site Valuation
- Highest and Best Use Studies
- Absorption and Demand Assessment
- Development Strategies
- Project Optimization
- Market Input for Land Use Planning
- Transit Oriented Development (T.O.D.)
- Property Acquisition and Disposition Strategies
- Strategic Review of Redevelopment Options
- Shopping Centre / Downtown Revitalization
- Employment Land Strategies
- Site Selection and Location Assessment

Richard Wozny, Principal

Richard has conducted hundreds of development and financial studies of shopping centres and commercial districts. He has worked on the development of thousands of acres of industrial buildings, including complex logistics parks. He has also worked on many thousands of acres of residential sub divisions and hundreds of high density residential buildings and office towers. Richard has also conducted hundreds of store location and feasibility studies for retailers and financial institutions. Richard combines a creative project vision with pragmatic development analysis.

Past Employment and Education

Richard’s past work experience includes: Vice President and Manager of Advisory Services, Cushman & Wakefield Inc., from 2000 to 2009; Principal, Site Economics Ltd., from 1990 to 2000; Manager of Retail Development for Western Canada, Marathon Realty Company Ltd., from 1987 to 1990; and Senior Consultant for Shopping Centre Development, Thomas Consultants Inc., from 1984 to 1987. Richard completed a Master’s Degree in Regional Science at the University of Pennsylvania, Philadelphia, PA, in 1984, a Master’s Degree in Religion at Temple University, Philadelphia, PA, in 1982 and a Bachelor’s Degree in Philosophy at the University of British Columbia, Vancouver, BC, in 1978.

Site Economics Ltd.
Suite 1500 – 701 West Georgia Street
Vancouver, BC V7Y 1C6 Canada
tel: 604.224.1369 / fax: 604.801.5911
e-mail: info@siteeconomics.com
website: www.siteeconomics.com