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Ms. Rose Caterini
 City Clerk
 City of Hamilton
 71 Main Street West
 Hamilton, ON.
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Dear Ms. Caterini:

RE: Submission for the February 18th Planning Committee Meeting - Airport Employment Growth District (AEGD), Employment Lands and Brownfields

I have been following with interest the OMB Hearing, media reports and opinion pieces surrounding the AEGD. One issue that has been of particular interest to me based on my professional background and extensive work in the field of brownfield redevelopment over the last 15 years is the hypothesis proffered by some that the City of Hamilton has a large amount of brownfield lands in the Bayfront Industrial Area that could be readily used to accommodate future demand for employment land in Hamilton. This submission analyzes this hypothesis.

The conclusion of the analysis contained herein is that while the City of Hamilton should certainly engage in a comprehensive planning exercise for the Bayfront Industrial Area, the reality is that even if the City is very successful in overcoming all of the significant financial and other obstacles to brownfield redevelopment, the contribution of brownfields to the overall supply of employment land in the city over the next 20 years will be modest at best. This is because:

- the amount of brownfield land in the Bayfront Industrial Area that has an active potential for redevelopment is being overestimated by some due to a number of limiting factors not being taken into consideration, including contamination levels, instability of fill, inadequate servicing infrastructure, and corporate brownfield ownership practices;
- the numerous impediments to brownfield redevelopment in the Bayfront Industrial Area and the sheer size of the area mean that redevelopment of the area will be complex and costly, and experience in other jurisdictions has shown that it likely be many years before any significant amount of brownfield land in Hamilton is available for redevelopment;
- some companies prefer greenfield locations over brownfield locations and will simply not entertain location on a brownfield site; and,
- employment densities in the Greater Golden Horseshoe have been declining and are expected to continue to decline as a result of larger structural economic changes.

Some have suggested that the City delay planning for greenfield employment land development while focusing on planning for brownfield redevelopment. While I fully support the City undertaking a comprehensive planning exercise for the Bayfront Industrial Area, to ignore or delay the planning for greenfield employment lands that is already underway while the City is planning for brownfield redevelopment represents poor and incomplete planning. The two approaches can and should go hand in hand and a **balanced approach** with planning for both brownfield and greenfield employment areas will lead to optimal economic development results in the long-term. Land use planning, by its very nature, and especially planning for employment lands, should be done for the long-term, and this planning should reflect the future realities of employment land demand and development.

ANALYSIS

I was the Brownfield Coordinator for the City of Hamilton from 1999 to 2004 during which time I was the architect of Hamilton's Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan (CIP). The ERASE CIP was the first comprehensive municipal brownfield redevelopment plan in Canada. This plan won numerous provincial and national planning and economic development awards, and to this day, remains the most successful Brownfield CIP in Canada. Some 50 municipalities in Ontario have followed Hamilton's lead since 2001 and developed plans and programs to promote brownfield redevelopment.

In addition to the five years I spent as Hamilton's Brownfield Coordinator, I have specialized in brownfield redevelopment planning for over 10 years in my private planning practice. During this time, I have prepared brownfield redevelopment plans and strategies for well over a dozen municipalities in Ontario. I was the lead consultant on the Province of British Columbia's Brownfield Redevelopment Strategy and I have provided brownfield redevelopment planning services to the Province of Ontario. I have also provided planning and economic development services to numerous developers of brownfield sites across Ontario, including industrial, commercial, residential and mixed use development projects. Over the last 15 years, I have appeared before numerous government committees and municipal councils and delivered countless presentations and submissions advocating for additional resources for brownfield redevelopment. Having specialized in brownfield redevelopment in both the public and private sector for 15 years, I can safely say that I am a strong supporter and advocate for brownfield redevelopment.

While at first blush it may appear that the City of Hamilton has large amounts of brownfield land readily available for employment uses, a more thorough and knowledgeable examination of this issue demonstrates that this is not actually the case. As a result of the typical impediments to brownfield redevelopment and the time and expense required to overcome these impediments, the actual amount of brownfield land in Hamilton's older industrial area is in reality far less than the figures being tossed about by some in media reports.

Are these sites even "brownfields"?

Much of the land in the Bayfront Industrial Area that is considered "brownfields" by some does not actually meet the accepted industry definition of "brownfields". The National Roundtable on the Environment and the Economy prepared a national brownfield redevelopment strategy in 2003 that defined "brownfields" as "abandoned, vacant, derelict or underutilized commercial or industrial property where past actions have resulted in actual or perceived contamination **and where there is an active potential for redevelopment**"¹.

Hamilton's older industrial area totals approximately 1,415 ha. (3,500 acres). Notwithstanding U.S. Steel's recent decision to cease steel production in Hamilton, most of the land in Hamilton's older industrial area is still actively being used for employment. These lands are not abandoned, vacant or derelict, and they do not currently have an "active" potential for redevelopment because they are being used by their current owners and tenants. Therefore, these lands do not meet the accepted industry definition of "brownfields".

¹ National Roundtable on the Environment and the Economy. (2003). A National Brownfield Redevelopment Strategy for Canada. Page A-3

Turning to the lands in Hamilton's older industrial area that are actually abandoned, vacant, derelict or underutilized, some of these lands also do not meet the definition of brownfields because they do not currently possess an "active potential for redevelopment". This is due to a myriad of key impediments to brownfield redevelopment in Hamilton's Bayfront Industrial Area such as the:

- type and level of contamination of these lands;
- load bearing capacity of the soils (much of it fill);
- condition, location and capacity of municipal infrastructure; and,
- lack of willingness on the part of current corporate owners to willingly sell these lands for redevelopment purposes.

Taking into consideration all of U.S. Steel's land holdings in the Bayfront Industrial Area, some of these lands will be retained by U.S. Steel for their remaining operations, some of these lands may ultimately be redeveloped for non-employment uses, some of these lands may not be developable at all for the reasons cited above, and even the lands that become surplus to U.S. Steel and are developable will not necessarily be available for redevelopment in the short to medium term for the reasons explained below.

Impediments to Brownfield Redevelopment

It is a well-known fact in the brownfield redevelopment industry that some brownfield sites are simply too contaminated to be remediated and redeveloped. These are known in the industry as "negative cash value" sites, i.e., the cost to remediate this type of site exceeds the value of the site in its clean state, often by several times. Even a risk assessment approach may not necessarily be acceptable on these highly contaminated sites. The reality is that without major infusions of government funding for remediation, major advances in remediation technologies that significantly lower remediation costs, and/or major advances in risk assessment, such negative cash value brownfield sites will not be remediated and redeveloped in our lifetime.

Despite municipal governments in Ontario consistently requesting financial assistance from upper levels of government for brownfield redevelopment, the federal government and the provincial government in Ontario have shown little appetite to provide significant funding for brownfield redevelopment on a major scale as the federal and numerous state governments in the United States have done. While there have been some advances in remediation technology and risk assessment practices over the last 20 years, their impact on the amount of brownfield land that has been redeveloped in Ontario and Canada has been modest at best. In fact, soil and groundwater standards in Ontario recently became more stringent and will likely become even more stringent in the future as advances in science lead to a better understanding of environmental impacts, and technological advances improve our ability to measure contaminants at ever-minute levels.

Those not familiar with servicing in the Bayfront Industrial Area often make the mistake of assuming that all industrial properties in the area have access to full municipal services (water, sanitary sewer, and storm sewer). My experience working with companies wishing to locate in this area shows that this is not always the case. Historical development and servicing patterns in the area resulted in some industrial properties or parts of these properties not having access to full municipal services. Where this is the case, municipal services would have to be extended to these lands at a significant cost to the City and/or developer. The age of both municipal (off-site) and private (on-site) infrastructure in the Bayfront Industrial Area also presents financial challenges. While reuse of existing infrastructure is one of the most often-cited benefits of brownfield redevelopment, the reality is that in an older industrial area like Hamilton's Bayfront, some of the municipal infrastructure and some of the on-site private infrastructure will have to be upgraded or replaced at a significant cost to both the City and the developer. Furthermore, the nature of the fill in the Bayfront Industrial Area will mean that parts of some industrial

properties will not be able to accommodate building footprints, or expensive engineering and construction techniques will be required to accommodate building construction.

Finally, another major impediment to brownfield redevelopment is the corporate practice known as “mothballing”. Based on a number of large awards in court cases, big corporations in Canada fear the regulatory and civil liability associated with their brownfield sites. These corporate owners often find it far cheaper and safer to simply fence their vacant sites and pay property taxes than to remediate the site and sell it to a developer or end user, only to have the regulatory authority (Ontario Ministry of Environment) order the “deep pockets” corporation to clean up the site if there is an environmental impact down the road. These corporate owners also do not want exposure to potential civil liability from a future site user who may be impacted by contamination. While liability is less of an issue when industrial brownfields are reused for industrial employment, it still prevents some corporate owners from disposing of their surplus brownfield lands.

Because all these impediments to brownfield redevelopment must be overcome, even brownfield sites that do have an “active potential” for redevelopment cannot realistically be redeveloped in a short time period. I have seen smaller brownfield sites take five years or more from the planning stage through to environmental assessment, remediation, development and building construction. Therefore, to contemplate that a large brownfield area such as U.S. Steel’s considerable land holdings in Hamilton’s Bayfront Industrial Area could be made available for redevelopment in just a few years is not realistic.

How long will it take?

A good example of how long it takes to redevelop a large brownfield site can be found in the Bethlehem Steel site in Bethlehem, PA. This plant totaling 648 ha. (1,600 acres) closed in 1995. Bethlehem Steel retained land use and environmental consultants to explore new uses for the plant even before the plant closed. Yet, it still took almost four years to develop and approve a master plan for redevelopment of the site². This was followed by a number of ownership changes and partitioning of the site into three parcels (124 acres, 450 acres, and 1,000 acres) for redevelopment by three separate developers. To date, the 124 acre parcel has been redeveloped with a casino, hotel, performing arts center, conference center and outlet mall. Approximately 400 acres of the 1,000 acre parcel has successfully been redeveloped with almost 1 million square feet of office and warehousing space³. Typically, large brownfield sites are remediated and re developed in several phases with profits from previous phases helping to finance the remediation and redevelopment of future phases.

It is important to note that much of the redevelopment on the Bethlehem Steel site took place just in the last five years. While progress on redevelopment of the former Bethlehem Steel site has been impressive, and the project has been touted as a national model in the U.S. for coordination on brownfield redevelopment⁴, well over half of the original site or almost 1,000 acres remains vacant and undeveloped some 20 years after the plant closed. This despite millions of dollars in government funding being funneled into the project for new infrastructure and environmental cleanup.

This real world example (there are many others) demonstrates the timeline required for the planning, remediation and redevelopment of a large industrial area. Therefore, to suggest that significant amounts of brownfield land in Hamilton’s older industrial area could be readily available for redevelopment for new employment uses in the short or even medium term is unrealistic. The lessons learned elsewhere

² http://en.wikipedia.org/wiki/Bethlehem_Works

³ HDR Inc. Brownfield Redevelopment of Bethlehem Steel Plant. www.hdrinc.com/portfolio/brownsfields-redevelopment-of-bethlehem-steel-plant

⁴ US EPA. Capacity Building Issue Brief. Page 2.

www.cclr.org/media/publications/Redeveloping%20Brownfield%20Sites%20Issue%20Brief.pdf

suggest that even if planning for the remediation, risk assessment and redevelopment of Hamilton's Bayfront Industrial Area begins now, it will be 10 years or more before most of these lands are available for employment land use, and upwards of 20 years or more before most of these lands are actually redeveloped for employment and other uses.

What about the ERASE CIP?

Since 2001, the ERASE CIP has resulted in over 30 brownfield redevelopment projects with approximately 73 ha. (181 acres) of brownfield land redeveloped, and the creation of almost 600 new jobs⁵. But, it is important to remember that not all of this 73 ha. was employment lands redevelopment. Some of it was commercial and residential development. Furthermore, it has taken over a dozen years to realize even these modest levels of brownfield redevelopment during a strong economic period in Hamilton. Therefore, one must pose the question, "if there is so much brownfield land available to be redeveloped in Hamilton's Bayfront Industrial Area, and the City of Hamilton has what is universally recognized as one of the best brownfield incentive programs in the country, why wasn't more brownfield land redeveloped in the Bayfront Industrial Area over the last dozen years?" The answer lies in the impediments to brownfield redevelopment outlined herein. Brownfield redevelopment is complex and not easily accomplished. Even when it can be successfully accomplished, brownfield redevelopment takes considerable time, resources, and often requires financial assistance from government.

Employment Land Densities

Another argument that I have seen put forward in the AEGD debate is that the City of Hamilton somehow "manufactured" its employment land crisis. This argument ignores a number of key realities of employment land development. First, recent reports⁶ suggest that overall employment land densities are declining in the Greater Golden Horseshoe, and are likely to continue to decline. This trend is related to structural economic changes, including increased automation in the manufacturing sector, and increased demand for large scale warehousing and distribution facilities. Therefore, even if the City of Hamilton targets higher order, higher density manufacturing, research and office employment uses (which the Economic Development Department already does) the reality is that lower density employment uses will also locate in Hamilton, and overall, employment densities are expected to continue to decline.

Regardless of the best efforts of municipal economic development staff, some companies in certain industries simply will not consider a brownfield site for their location. I certainly experienced this first hand during my tenure in Hamilton's Economic Development Department, as well as in other municipalities that I have assisted in attracting employment uses to their brownfield sites. If companies that prefer greenfield sites are directed towards brownfield sites, they will simply locate in another community that offers an appropriate greenfield site, and the investment and jobs that company could have brought to Hamilton will go elsewhere.

In my considerable experience as a professional planner and economic development practitioner, the municipalities that are most successful in attracting sustainable employment uses are those that take a **balanced approach** to planning for employment lands by offering both greenfield and brownfield development opportunities. Capital moves very quickly in today's economy and both global and local firms make their location investment decisions quickly. That means that communities need "shovel ready" land available at all times to respond to business development and investment enquiries. Many

⁵ Up to date statistics provided by City of Hamilton Economic Development Department.

⁶ Watson & Associates. 2010. Town of Ajax Employment Lands Strategy, p. 2-7, and Hemson Consulting. 2009. Hamilton Employment Area Land Budget Update. Pages 23 and 24.

companies will not, and cannot, wait years for an appropriately located and sized brownfield site to become available.

Conclusion – A Balanced Planning Approach is Best

In conclusion, the argument that there are currently large amounts of developable brownfield land in the Bayfront Industrial Area that can readily accommodate demand for employment land in Hamilton is not realistic. There are a number of impediments that will limit the amount of brownfield land in the Bayfront Industrial Area that can be reutilized as employment lands, and these lands will not become fully available for development for many years to come. The realistic and fact based conclusion is that while planning for brownfield redevelopment in its older industrial area is very important for the City of Hamilton, and the City should certainly be pursuing this planning exercise, even if the City is very successful in overcoming all of the significant financial and other obstacles to brownfield redevelopment, the contribution of brownfields to the overall supply of employment land in the city over the next 20 years will be modest at best.

I strongly support the City undertaking a comprehensive planning exercise for the Bayfront Industrial Area to ensure that as much brownfield land as possible is made available for redevelopment to employment uses. I suggested such an initiative many years ago. But, to ignore or delay the planning for greenfield employment lands that is already underway while the City is planning for brownfield redevelopment represents poor and incomplete planning. The two approaches can and should go hand in hand. **A balanced approach with planning for both brownfield and greenfield employment areas will lead to optimal economic development results.** Land use planning, by its very nature, and especially planning for employment lands, should be done for the long-term, and this planning should reflect the future realities of employment land demand and development.

I thank you for the opportunity to provide this submission to the City of Hamilton. If you have any questions, please feel free to contact me.

Sincerely,



Luciano P. Piccioni, M.C.I.P., R.P.P, Ec.D.
President
RCI Consulting

cc. Guy Paparella, Director of Growth Planning, Planning and Economic Development Department,
City of Hamilton