

## Economic and Community Development

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**From:** Oasis SJT <oasisfoodhub@gmail.com>  
**Sent:** November 12, 2020 3:11 PM  
**To:** Economic and Community Development  
**Subject:** Fwd: Urgent! Major issues re the St. James Town food hub report- item EC17.6  
**Attachments:** St. James Town Food Hub Report with Highlists and list of Concerns(1).pdf; City motion and Briefing Note Dec 2019.docx; OASIS Food Hub Benefit Chart.pdf

Dear Councillors,

We are emailing to raise our deep concerns over the Feasibility Assessment of the St. James Town Food Hub, item EC17.6 of the agenda.

We are asking the committee to decline approval of this report.

We ask the committee to direct city staff to work on pathways to approval for the OASIS Food Hub, as originally intended.

### **Overarching Concerns:**

- 1) This report was originally intended to be a report on "pathways to approval" to facilitate the implementation of the Organic Agro-ecological Sustainable Integrated Systems (OASIS) Food Hub project-not a feasibility assessment for a different project. In fact, the City had invested \$50,000 into a feasibility study and technical report for the OASIS Food Hub in 2018. A Powerpoint presentation based on that study is attached here. We would be happy to send you a copy of both the feasibility study and technical report if you would like to read them.
- 2) This report only offers one recommendation: for the City to engage in another lengthy and undetermined process to set up a food partnership framework, one that may or may not present an opportunity for the proposed OASIS Food Hub model. Given the mandate of the Motion, why is this the only pathway being proposed? (Please see attached motion and briefing note.)
- 3) The Report outlines that zoning changes would be needed but does not detail the specifics of these changes. We knew before this working group began that zoning and building code changes were needed – this report does not provide any answers to the key question of how to change zoning to support climate resilient, sustainable, full-cycle urban healthy food security. (Please see our list of concerns attached.)
- 4) The Report does not provide any ideas to enable the creation of the OASIS Food Hub, which was its original mandate. It lists obstacles and barriers, many of which are inaccurate or irrelevant. Instead, it offers an "assessment" of an undefined process and framework for a food hub in St. Jamestown, despite the fact that we presented a very defined framework for our own St James Town community-created food hub model. The Report represents a step backward, which would substantially delay the creation of a food hub to increase the supply of healthy food in St James Town, an under-served and long-neglected community still awaiting NIA designation.

5) The OASIS Food Hub model is not clearly described in this report. Important goals, such as community employment and training, economic and ecological sustainability, climate resilience, and on-site emergency preparedness goals have been left out. The Report seems to confuse the OASIS Food Hub model with a loosely defined Food Hub model from another neighbourhood. (Please see attached powerpoint and community benefit chart prepared by OASIS team for the working group.)

6) The OASIS Food Hub model aligns with all the City's food security, climate and poverty reduction policies and commitments. None of these are mentioned in the report. It also claims to align with Anti Black Racism and Indigenous Health strategies, yet the report misrepresents, ignores and obstructs the hard work and continuing efforts of a racially diverse, marginalized community for a sustainable food hub. How does the report serve these goals given it impedes progress towards increasing healthy food supply to the people of St James Town?

7) This report was due in March 2020. That it is presented now with so many errors and omissions is very frustrating. During the summer - while we were working in good faith to adapt phase 1 to deal with the pandemic, in collaboration with TCHC technical staff - the process of the working group appears to have been hijacked for a different purpose, as well as the report itself. Most of the work accomplished so far by the OASIS team and the City working group has disappeared in this report.

The St. Jamestown Community Co-op is more than ready to implement the City's commitments towards food security, climate and poverty reduction. We look forward to working together - as we have been for the past 7 years - with our many partners and the City to bring the OASIS Food Hub into reality for our community.

Yours sincerely,

OASIS Food Hub project team,  
of the St. James Town Community Enterprise Co-operative  
[www.oasisfoodhub.ca](http://www.oasisfoodhub.ca)  
[www.stjamestowncoop.org](http://www.stjamestowncoop.org)

# Feasibility Assessment of the St. James Town Food Hub

**Date:** October 28, 2020

**To:** Economic and Community Development Committee

**From:** Executive Director, Social Development, Finance and Administration **Wards:** Ward 13, Toronto Centre

## SUMMARY

The St. James Town neighbourhood is bounded by Bloor Street East to the north, Parliament Street to the east, Wellesley Street East to the south and Sherbourne Street to the west. Though the area is densely populated, it is served by only two grocery stores. These stores offer important food access points, but these retailers alone do not ensure affordable access to healthy and fresh food for all residents of the neighbourhood, particularly those with lower incomes. A neighbourhood food hub model in this area may help to address food insecurity concerns among the community.

The St. James Town Community Co-operative has proposed the creation of the OASIS Food Hub. The food hub proposal involves several components including a community food space that offers food storage and distribution, a commercial kitchen and food production underground, at-grade and on a building rooftop, as well as a permanent retail structure.

The purpose of this report is to provide the findings of the review of the actions and approvals necessary for: a) the creation of an underground aquaponics farm at 325 Bleecker Street, a Toronto Community Housing Corporation Building and b) a location for the OASIS Food Hub for the production, distribution and management of food and water in St. James Town. This report assesses the feasibility of the various components of the OASIS Food Hub proposal and highlights the need for local food partnerships between community agencies to address food insecurity in St. James Town. Overall, City staff found the proposal for the aquaponics farm and bio-digester not feasible while the other components may be possible if required re-zoning is obtained in some instances.

There are two appendices attached to this report. Appendix A outlines potential residential zoning issues related to food hub activities, and Appendix B is a non-exhaustive list of relevant governing bodies, legislation and regulations related to the development of an aquaponics farm.



## RECOMMENDATIONS

The Executive Director, Social Development, Finance and Administration recommends that:

1. City Council direct the Chief Planner and Executive Director, City Planning, in consultation with the President and Chief Executive Officer, Toronto Community Housing Corporation, and other City divisions as required, to work with the i) successful proponents to ii) determine the necessary municipal planning approvals that could allow for an integrative food partners framework in the Toronto Community Housing Corporation's buildings at 275, 325, and 375 Bleecker Street and 200 Wellesley Street East in St. James Town, with a specific focus on Phases 0.5 (Preparing for a Neighbourhood Food Hub), 1 (Neighbourhood Food Hub Programming), and 4 (Rooftop Food Production and Permanent Retail Space), as outlined in this report.

## FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendation in this report.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

## EQUITY IMPACT STATEMENT

iii) The Neighbourhood Food Hub model has been analysed at the conception & initiation stage for potential impacts on Indigenous, Black and Equity-seeking groups of Toronto. A Neighbourhood Food Hub should increase access to affordable and nutritious food for community residents and, help to better coordinate food programs and service delivery in the St. James Town community. Improved access to affordable, nutritious food will benefit women, immigrants, refugees, undocumented individuals, vulnerable seniors, vulnerable youth, Black, Indigenous and racialized residents in the St James Town neighbourhood.

iv) v) This report is in line with the Confronting Anti-Black Racism Action Plan recommendation number eight; to improve food access for low income Black Torontonians. (1) It is also in line with The Toronto Indigenous Health Strategy strategic direction number two which includes strategies to increase access to affordable, healthy food. (2)

1 <https://www.toronto.ca/legdocs/mmis/2017/ex/bgrd/backgroundfile-109127.pdf> 2  
<https://www.toronto.ca/legdocs/mmis/2016/hl/bgrd/backgroundfile-93077.pdf>

## DECISION HISTORY

At its October 2019 meeting, City Council adopted motion MM10.3 requesting the **vi) review of the required actions and approvals necessary to facilitate the creation of an aquaponics farm at 325 Bleecker St as well as a location for the OASIS Food Hub in St. James Town.** The City Council Decision is available here:  
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.MM10.13>

## COMMENTS

The proposed site for the OASIS Food Hub is in the St. James Town area bounded by Bloor Street East to the north, Parliament Street to the east, Wellesley Street East to the south and Sherbourne Street to the west. According to the 2016 TOCore study, St. James Town has the second highest population density in the Downtown core with 26,000 people living in the neighbourhood. (3) Much of the housing in the area is provided by 18 high-rise apartment buildings ranging from 14 to 32 storeys, all generally built in the early 1960s and mid-1970s. Four of these buildings are Toronto Community Housing buildings at 275, 325, 375 Bleecker Street and 200 Wellesley Street East.

### Food Insecurity in St. James Town

St. James Town, though densely populated, **vii) is served only by two grocery stores.** Although these stores offer important food access points, these retailers alone do not ensure affordable access to healthy and fresh food for all residents of the neighbourhood, particularly those with lower incomes. Residents in this neighbourhood tend to be low income, new immigrants and families with young children from very diverse backgrounds. Demographic and neighbourhood data shows that the area has a high percentage of people over 65 years and a high number of children 0-9 years. The area also has the highest number of persons living below the Low Income Measure-After Tax (LIM-AT) and the level of unemployment is second highest in the downtown core. Nearly a quarter of those who are employed have only part-time employment.

Food is one of the many basic expenses for which low-income households struggle to meet. For several years, Toronto Public Health has been involved with a "Nutritious Food Basket" research initiative that measures the minimum cost for a person or family to purchase healthy food. In 2019 the report indicated that approximately 64% of residents who rely on social assistance experience food insecurity, which can lead to an increased risk of chronic disease, depression, anxiety and mortality. (4) Food insecure households are often forced to use their food budget to pay for other expenses. As a result, these households tend to resort to nutrient-poor foods and emergency food services. (5)

3 <https://www.toronto.ca/wp-content/uploads/2017/12/9386-city-planning-to-core-neighbourhood-population-profiles-aoda-07-04-2016.pdf>

4 <https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/nutrition-food-basket/>

5 <https://www.toronto.ca/legdocs/mmis/2019/hl/bgrd/backgroundfile-138987.pdf>

St. James Town's high population density and prevalence of low income and food insecure households present notable challenges in securing affordable, accessible and culturally-appropriate foods for its diverse community. The rising cost of food will also have a disproportionate impact on residents who already face food insecurity.

All of these factors suggest a targeted approach is needed to combat food insecurity in a community that already faces heightened vulnerability to external shocks and emergencies.

### **Neighbourhood Food Hub Model**

viii) As a result of the pressing food security needs of the St. James Town neighbourhood, City staff recommend a Neighbourhood Food Hub. This food hub must be built on partnerships between local community organizations and residents with support from Toronto Community Housing and relevant City divisions. This is in alignment with the OASIS Food Hub proposal Phase 0.5 and 1.

Neighbourhood Food Hubs can serve a multitude of non-stigmatizing functions for residents, including food access, wrap-around social services and workshops dedicated to, for example, fostering food security, social enterprise, food gardening, and intergenerational cooking for newcomer families. ix) In 2018, the Social Development, Finance and Administration Division supported the creation of the Neighbourhood Food Hub Model at Glen Rhodes Church 1470 Gerrard Street East in the Coxwell-Gerrard community in Toronto. (6) This food hub model has demonstrated success in promoting access to food and supporting broader community initiatives.

For example, in response to COVID-19, the Neighbourhood Food Hub mobilized to provide emergency food support to residents in need. (7) This included delivering food bank baskets with fresh produce to seniors and vulnerable families, and delivering freshly prepared meals, frozen meals and emergency food. The hub coordinated food supports in partnership with various organizations including Applegrove Community Complex, FoodShare Toronto, and Feed it Forward. The success of the Neighbourhood Food Hub model is built on partnerships and coordination between multiple stakeholders and agencies in the community. This model has the potential to be replicated across the City, supporting the goals of emergency preparedness, resilience and many City strategies.

### **Toronto Community Housing Integrative Food Partnership in St. James Town**

Toronto Community Housing is issuing a Request for Expression of Interest for community agencies or groups to submit proposals to develop a collaborative framework for an integrative food partnership in St. James Town. The successful proponents may have access to available Toronto Community Housing space and resources in order to address food insecurity in St. James Town. Xi) Toronto Community Housing will evaluate the proposals based on the required space,

**programming model and business case.** Further information will be provided once the open call is issued by Toronto Community Housing **xii) later this year.**

6 <https://www.toronto.ca/legdocs/mmis/2020/ec/bgrd/backgroundfile-141436.pdf> 7  
<https://www.neighbourhoodfoodhub.com/>

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## **Oasis Proposal and Feasibility**

In response to the food insecurity in St. James Town, local community groups have taken action. This includes the St. James Town Community Co-operative that has operated food initiatives since 2015. The co-operative evolved from a resident led initiative to create a community café back in 2011, offering healthy and affordable meals for neighbourhood residents. More recently, the St. James Town Community Co-operative developed a proposal for the OASIS Food Hub that aims to meet local demands for access to healthy and affordable food through a neighbourhood food hub and local food production. The proposal is divided into 5 phases:

- Phase 0.5: Preparing for a Neighbourhood Food Hub - Phase 1: Neighbourhood Food Hub Programming
- Phase 2: Food Production
- Phase 3: Composting & Bio-digestion
- Phase 4: Rooftop Food Production & Permanent Retail Space

**xiii) A fulsome consultation** was conducted, over several months, with staff from relevant City divisions and Toronto Community Housing to assess and give feedback on the feasibility of the OASIS proposal. Staff from a combination of these City entities included: City Planning, Toronto Buildings, Parks, Forestry and Recreation, Poverty Reduction Strategy Office, Toronto Public Health and Toronto Community Housing. Below is a summary of the feasibility findings which evaluates each phase of the OASIS Proposal and ranks its feasibility.

### *Summary of Feasibility Findings*

| Feasibility Criteria | Phase 0.5<br>Preparing for a Neighbourhood Food Hub                                                                     | Phase 1<br>Neighbourhood Food Hub Programs                                                                                  | Phase 2<br>Food Production                                                                                        | Phase 3<br>Composting and Bio-digestion                                                                                          | Phase 4<br>Rooftop Food Production and Permanent Retail Space                                |
|----------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Description          | <sup>xiv</sup><br>Community and workshop office within or near Toronto Community Housing building and food buying club. | <sup>xv</sup><br>Launching food hub in shipping container with food storage and distribution space, and commercial kitchen. | Underground aquaponics farm and indoor mushroom farm at 325 Blecker Street, a Toronto Community Housing building. | On-site bio-digestion to offset energy use, provide emergency back-up power and create compost at 325 Blecker.<br><sup>xix</sup> | Develop at-grade and rooftop gardens plus a permanent retail space to grow and sell produce. |
| Technical            | Requires space, shipping containers that move to                                                                        |                                                                                                                             | Residential and                                                                                                   | Bio-digestion cannot be                                                                                                          | Re-zoning required. <sup>xxi</sup>                                                           |



|                    |                                                                                                                                               |                                                                                                         |                                                                                 |                                                     |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------|
|                    | three locations in the neighbourhood during construction, craning to move the containers and utility connections at each site. <sup>xvi</sup> | agricultural uses cannot be housed in the same space as per the Ontario Building Code. <sup>xviii</sup> | located near residential areas as per the Nutrient Management Act <sup>xx</sup> | Residential zoning does not permit a Market Garden. |
| Costs to Develop*: | Approx. \$519,000 (appears to be a low-end estimate)                                                                                          | Approx. \$1.7 Million (appears to be a low-end estimate)                                                | Approx. \$1 Million (appears to be a low-end estimate)                          | Approx. \$2.5 Million                               |
| Operating Costs*:  | Approx. \$125,000 for first year (appears to be a low-end estimate)                                                                           | Approx. \$450,000 annually (appears to be a low-end estimate)                                           | Approx. \$10,000 annually (appears to be a low-end estimate)                    | TBD                                                 |
| Timeline           | 9 to 21 months                                                                                                                                | N/A                                                                                                     | N/A                                                                             | 5 years                                             |
| Ranking            | Feasible if necessary <sup>xvii</sup> planning approvals are obtained and updated costs estimates are completed and                           | Not feasible                                                                                            | Not feasible                                                                    | Only feasible with zoning change                    |

\*All costs are estimates provided by the St. James Town are very conservative. <sup>xxii</sup> Staff recommend a cost escalation of at least 30% in each of these phases.

## Feasibility Assessment of the OASIS Food Hub Proposal by Phase

### *Phase 0.5 and 1: Preparing for a Neighbourhood Food Hub and Programming*

These two phases are comprised of developing a community food hub in a shipping container or in a ground level space <sup>xxiii</sup> within a Toronto Community Housing building in the neighbourhood. The programming for the hub includes a bulk food buying club, a food storage and distribution space, and a commercial kitchen. Due to ongoing and future construction in the parking garage of the Toronto Community Housing buildings and the surrounding greenspace, the St. James Town Community Co-operative has proposed to locate these programs in a shipping container. This shipping container would be placed in three different locations over the duration of construction. <sup>xxiv</sup> The group proposed that the first location would be by the outdoor pool near 200 Wellesley

Street East, then moved a little north next to 325 Bleecker Street and finally, in the area at Ontario Street and Wellesley Street East. Xxv) Moving the shipping container will require craning and site utility servicing for water and electricity at each new site, triggering additional costs.

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### Community Co-operative and

According to the St. Jamestown Community Co-operative, the estimated combined cost of Phase 0.5 and 1 is over \$644,000 including \$125,000 in operating costs for the first year. These costs are considered very conservative and have not properly factored in planning fees, studies, legal agreements and site plan agreements that need to be put in place. xxvi) For instance, the cost cited by the community group for zoning, legal, and consulting fees is only \$15,000 however, the site plan control application fees alone start at \$22,000 not including any consultants, legal agreements or planning studies. (8) Given the additional costs related to craning, utility servicing and construction delays, a cost increase of at least 30% is anticipated.

The timeline provided by the proponents is 9 to 21 months, 9 months to get the shipping container placed next to 200 Wellesley Street East and 12 months to start programming. Xxvii) This time estimate does not include the timeline to get the necessary regulatory approvals in place and site plan agreements usually take 12 months to approve.

A key requirement for both phases is space and Toronto Community Housing is currently undertaking an inventory of spaces in and around their four St. James Town buildings to determine where non-profit food partners could be located to offer programming. Based on the spaces available, as noted above, Toronto Community Housing is preparing a Request for Expression of Interest call for local community agencies looking to provide food programming. Interested agencies can respond with details on their services, provide updated start up and operating costs, and identify sources of funding.

The Apartment Neighbourhood policies in the City's Official Plan are supportive of small-scale commercial, community and institutional uses and outdoor food garden cultivation. (9) However, under Zoning By-law 569-2013, the Toronto Community Housing buildings at 275, 325, 375 Bleecker Street and 200 Wellesley Street East are zoned "Residential" which allows for the residential and residential-related uses. (10) Staff from City Planning and Toronto Buildings have indicated that it is not clear to what extent the Residential zoning, which currently applies to the area, would allow the activities proposed. Appendix A outlines types of uses that the activities of the neighbourhood food hub may fall into and potential changes to zoning that would be required.

Phases 0.5 and 1 are considered feasible if the xxviii) necessary planning approvals for the different proposed uses are obtained. Xxix) Clarity on the desired uses and further study is necessary to determine the use classification of the proposed activities, the

requirement for a zoning by-law amendment application, the feasibility associated with a zoning by-law amendment application, and determination of whether the site will be subject to the City's site plan approval process. The St. James Town Community Co-operative would

8 <https://www.toronto.ca/city-government/planning-development/application-forms-fees/fees/>

9 St. James Town is designated as *Apartment Neighbourhoods* in the Official Plan. See Official Plan Policies 10 and 11, Chapter 2.3. <https://www.toronto.ca/wp-content/uploads/2017/11/9048-cp-official-plan-chapter-2.pdf>

10

[https://www.toronto.ca/zoning/bylaw\\_amendments/ZBL\\_NewProvision\\_Chapter10.htm](https://www.toronto.ca/zoning/bylaw_amendments/ZBL_NewProvision_Chapter10.htm)

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also need to complete updated cost estimates in order to move forward. Xxx) If the community food hub includes a commercial kitchen and selling of any produce, zoning approvals may be necessary for these uses and permission for operating the space in this way must be granted by Toronto Community Housing.

### *Phase 2: Food Production*

In this phase, the OASIS Food Hub would expand to develop an underground aquaponics farm and an indoor mushroom farm. The proposed site for this is in the underground space and pool at 325 Bleecker Street, a Toronto Community Housing building. This underground pool was identified as the potential site for the aquaponics farm. The size of this underground pool is 60 ft. by 40 ft. and the total area is 2,400 square feet.

According to the OASIS Food Hub website, aquaponics is "[a] semi-closed system in which plants and fish live in a symbiotic relationship. The system combines aquaculture (fish farming) and hydroponics (growing plants in water)." (11) Mushroom farming can be done indoors in low light but a major requirement is cold storage as the shelf life can be quite short. The OASIS proposal includes harvesting produce, primarily lettuce, mushrooms, and fish, rainbow trout in particular, to sell to co-op members in the community at a reduced cost.

Based on estimates provided by the St. James Town Community Co-operative, the cost to develop these two facilities is over \$2.1 million and this includes operating costs for the first year of \$450,000. This cost appears very low given level of regulatory approvals, technical studies and construction that would be required. For instance, xxxi) just retrofitting the pool at 325 Bleecker Street including accessibility upgrades, architectural finishes, and pool mechanical equipment could cost between \$750,000 and \$1.25 million. Currently, the underground garage at 325 Bleecker Street is undergoing construction with a multi-level, phased slab repair and replacement by Toronto Community Housing. During this construction project, the pool cannot be accessed and a significant amount of additional planning and funding would be required

to retrofit the pool for use as an aquaponics farm as well as ensure the safety and security of the space. In addition, xxxii) introducing aquaponics would increase the pressure on energy and water utility costs at the building.

xxxiii) The timeline to develop the proposed 6,458 square foot, commercial size aquaponics farm could take several years and is not a feasible endeavor. The proponents need to consider the required regulatory approvals at the Federal, Provincial and Municipal level as well as planning, design, retrofit of the existing building, and construction of the two new facilities, final inspections for health and safety, and then actual operations. This does not include any delays that might occur due to COVID-19.

In comparison, Scadding Court Community Centre located at 707 Dundas St West houses a small, 297.5 square foot, aquaponics demonstration project launched in 2016. The cost to develop this size of a facility was approximately \$30,000 and it currently requires two part-time staff as well as one or two regular volunteers to operate. Annual operating costs are estimated at \$14,500 which is comprised of mainly labour and a

11 <http://www.oasisfoodhub.ca/home/oasis-core-elements/>

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small amount for fish feed as well as seeds. The cost of this aquaponics farm is about \$139/per square foot including operating costs. Approvals for the aquaponics demonstration project at Scadding Court Community Centre took at least five years with conversations on zoning approvals dating back to early 2011. The zoning by-law under which this aquaponics demonstration project was approved has since been changed with the updates to the zoning by-law in 2013. Once approvals were in place, this site took 12 months to develop. Xxxiv) As this site does not include any residential uses and is considered a small demonstration project, with no food processing, the approval pathway is much simpler than the proposed OASIS Food Hub aquaponics farm.

Regulatory approvals of an aquaponics farm of the scale proposed by the St. James Town Community Co-operative present a significant challenge. There is no one governing body for aquaponics in Ontario or Canada. Based on research undertaken by staff, it seems there are approvals required at the Federal, Provincial and Municipal level. Appendix B outlines, to the extent possible, the different governing bodies and regulations that need to be reviewed and complied with in order to develop an aquaponics farm of the size proposed. Below are select regulatory hurdles that make the proposal for aquaponics unviable.

#### *Municipal*

xxxv) The proposed aquaponics farm would likely be determined to be an "agricultural use" (16) and the mushroom farm may be determined to be an agricultural use or market garden use, both of which are not listed in the Residential Zone and therefore not permitted.

#### *Provincial*

There are a number of provincial ministries that should be involved in the approval process of an aquaponics farm within 325 Bleecker Street. The closest provincial approvals would be under the Province's rules for greenhouse operators (12) and aquaculture licenses (13) as an approvals process for aquaponics is not expressly provided at any level of government. As the Phase 2 proposal is essentially to construct a new indoor farm within a residential apartment building, the Ontario Building Code applies. The closest definition in the Ontario Building Code that relates to an aquaponics farm is a "farm building". As per Article 1.3.1.2. of Division A, of the Building Code:

*Farm building means all or part of a building,*  
*(a) that does not contain any area used for residential occupancy,*  
*(b) that is associated with and located on land devoted to the practice of farming, and*  
*(c) that is used essentially for the housing of equipment or livestock or the production, storage or processing of agricultural and horticultural produce or feeds.*

Based on the Ontario Building Code, a farm building cannot have any area with residential occupancy, must be located on or associated with land designated for farming, as defined in the Building Code. Further, in a 2015 hearing at the Ontario Building Code Commission, there was a dispute involving two buildings that would

12 <https://www.ontario.ca/page/rules-greenhouse-operators>

13 <https://www.ontario.ca/page/aquaculture-and-fish-stocking-licences>

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house aquaponics farms qualified as farm buildings in the City of Hamilton. In this dispute, the Commission ruled that the buildings complied with the definition of farm buildings in the Building Code. (14) Applying this ruling to the aquaponics proposal in St. James Town means that it does not satisfy any of the requirements and would fail to meet the Ontario Building Code.

Since the Ontario Building Code prohibits agricultural and residential uses to be in the same building, irrespective of municipal planning documents like the official plan and zoning by-law, this proposal cannot contravene provincial legislation.

Therefore, staff have assessed that given the building code, required approvals, and cost, the aquaponics farm is not feasible in the Toronto Community Housing Building at 325 Bleecker Street.

### *Phase 3: Composting and Bio-digestion*

xxxvii) In Phase 3, the group proposed to retrofit the underground space in the building at 325 Bleecker Street with onsite bio-digestion to offset energy use, provide emergency back-up power, and create compost. Bio-digestion known as anaerobic digestion is the process of using organic matter such as solid effluent to produce biogas like methane

which is then used in a cogeneration system to provide electricity and heat to the facility as well as emergency backup power. The estimated cost for this system provided by the St. James Town Community Co-operative is almost \$1 million. This cost appears to be low in comparison to the level of regulatory approvals, technical studies and construction that would be required. The timeline to approve of such a system could take several years due to the regulatory approvals, planning, design, retrofit, and commissioning of the new system.

Although bio-digestion was proposed to offset increased utility costs, 325 Bleecker St is actually electrically heated. This means the current power and heating system in the building would need to be switched to natural gas to take advantage of the benefits of a cogeneration system. This would require an assessment of whether this switch would be in line with the City's TransformTO low carbon goals. In addition, this retrofit would be costly and only makes economic sense when the back-up power generator is coming to the end of its useful life. The cost to switch the building to natural gas, install new piping and a cogeneration plant would be in the several millions. Many regulatory approvals and technical feasibility studies are required to connect the cogeneration plant to the electricity grid including Ontario Energy Board (15), Toronto Hydro (16), and Environmental Compliance Approval.

A significant concern would be the safety risks associated with having an underground or an at grade level bio-digester, specifically with its close proximity to the open community space just south of the building. In addition to combustibility risks due to the production of methane gas, there is a potential risk to produce other dangerous gases that can lead to serious health impacts and these contaminants could then be released

14 <http://www.mah.gov.on.ca/Page11348.aspx>

15 [https://www.oeb.ca/documents/cases/EB-2005-0447/appendixf\\_201206.pdf](https://www.oeb.ca/documents/cases/EB-2005-0447/appendixf_201206.pdf) 16 <https://www.torontohydro.com/grid-connections/connection-process>

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in the air or discharged into the environment. (17)

#### *Municipal - Official Plan*

The Official Plan designates this specific area of St. James Town, as *Apartment Neighbourhoods*, which does not permit industrial uses; industrial uses are incompatible with residential uses.

#### *Provincial*

Anaerobic digestion is regulated under the Provincial Nutrient Management Act and the Environmental Protections Act. In the Nutrient Management Act, a "farm unit" is defined as land used for agricultural operation such as aquaculture. In Part 9.1, Article 98.2.1 of this Act, there is a requirement for anaerobic digestion facility to be setback more than 450 meters from a residential area, commercial space, community or institutional use on a farm unit. There are also Renewable Energy Approvals in the Environmental



Protections Act that apply if the area is not considered a farm unit however, as noted in Phase 2 the aquaponics farm would require agricultural use zoning.

Since the Nutrient Management Act prohibits residential uses within 450m of a farm unit, regardless of municipal planning documents like the official plan and zoning by-law, this proposal cannot contravene provincial legislation.

In conclusion, this phase is not feasible due to the cost, required regulatory approvals, safety risk, and technical compatibility.

#### *Phase 4: Rooftop Food Production and Permanent Retail Space*

As part of this phase, the St. James Town Community Co-operative intends to develop at-grade and rooftop gardens as well as a permanent retail space to grow and sell produce. The estimated cost for this phase as provided by this group is \$2.5 million and the timeline to develop this phase of the proposal could take five years.

In terms of Zoning By-law 569-2013, the rooftop gardens would likely be determined to be a market garden use which as stated previously is not listed in the Residential Zone and therefore is not permitted. Permanent retail space would likely be determined as a "retail store" use which is defined as "premises in which goods or commodities are sold, rented or leased." and is listed in the Residential Zone and permitted with conditions.

The technical feasibility of retrofitting a building with a green roof would need to be assessed and the retrofit must comply with the Toronto Green Roof Construction Standard (18) and the Ontario Building Code. A Green Roof Building Permit is required and can be obtained by submitting an application with all drawings, plans, engineering studies and other documentation as required to the Toronto Buildings department. The planting of produce would require additional reinforcement for the roof and would further increase the cost.

17 <http://www.omafra.gov.on.ca/english/engineer/facts/15-031.htm#9>

18 <https://www.toronto.ca/wp-content/uploads/2017/08/7eb7-Toronto-Green-Roof-Construction-Standard-Supplementary-Guidelines.pdf>

Feasibility of St. James Town Food Hub Page 11 of 12

Further study is necessary to determine the use classification of the proposed activities and developments, the requirement for a zoning by-law amendment application, and the complexity, feasibility associated with a zoning by-law amendment application and a determination of whether the site will be subject to the City's site plan approval process. Overall, the feasibility of this Phase is dependent upon the outcomes of the necessary municipal planning approvals including a zoning change as well as the technical and structural feasibility of the building selected for a green roof. Phase 4 should be considered after Phases 0.5 and 1 become operational, and an assessment of the

impact of these phases can be made. A potential retail space may become available in the area however the timeline for the construction of that space is in 2025.

## **Next Steps**

xxxviii) The Request for Expression of Interest from Toronto Community Housing for an integrative food partnership framework to address food insecurity in St. James Town will be issued later this year. It creates an opportunity for the e St. James Town Community Cooperative to participate using phases 0.5 and 1 of their food hub proposal as part of their application as these components are considered feasible, if the necessary planning approvals are obtained.

## **CONTACT**

Fariha Husain, Project Manager, Tower and Neighbourhood Revitalization Unit, Social Development, Finance and Administration, 416-392-9688, [fariha.husain@toronto.ca](mailto:fariha.husain@toronto.ca)

## **SIGNATURE**

Denise Andrea Campbell  
Executive Director, Social Development, Finance and Administration

## **ATTACHMENTS**

Appendix A: Potential Residential Zoning Applicable to Food Hub Activities

Appendix B: Non-exhaustive list of relevant governing bodies, legislation and regulations, at all levels of government, related to the development of an aquaponics farm

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## Appendix A: Potential Residential Zoning Applicable to Food Hub Activities

| Food Hub Activity                       | Type of Use                                                                                                                                                                                                             | Permitted under Residential Zoning                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Growing and selling food                | Market garden use, defined as "premises used for growing and harvesting vegetables, fruits, flowers, shrubs, trees or other horticultural products for the purpose of sale." (1)                                        | Not permitted, re-zoning is required.<br><br>* what re-zoning would be needed, RAC?                                                            |
| Selling products other than food grown  | Retail store use, defined as "premises in which goods or commodities are sold, rented or leased."                                                                                                                       | Permitted with conditions.<br><br>* what conditions?                                                                                           |
| Community café with seating or take-out | Eating establishment use, "where food or beverages are prepared and offered for sale to patrons for immediate consumption on the premises while they are seated, and which may include an incidental take-out service." | Not permitted, re-zoning is required.<br><br>* what re-zoning would be needed, RAC? What about other restaurants in R zones in St. James Town? |
| Community café with take-out            | A take-out eating establishment means premises "where food or beverages are prepared and offered for sale to patrons for consumption off the premises."                                                                 | Not permitted, re-zoning is required.                                                                                                          |

**Overarching Concerns:**

- 1) This report only offers one recommendation, which is for TCHC and the City to engage in another lengthy and undetermined process to set up a food partnership framework that may present an opportunity for us. Is this only possible path proposed?
- 2) The report outlines zoning changes are needed but does not detail the specifics of these changes. We knew before this working group began that zoning changes were likely needed – this report does not clarify anything further
- 3) The report does not provide alternatives or support mechanisms to enable the creation of the OASIS Food Hub. It lists obstacles and barriers, not actions and approvals
- 4) The OASIS Food Hub model is not clearly defined and our climate resilience, sustainability, community empowerment, and on-site emergency preparedness goals have been left out. Furthermore, this version seems to be confused with another undefined concept of “The Neighbourhood Food Hub.”

**POINT BY POINT DETAIL:****Recommendations:**

- i) What is the definition of “successful proponent”?
  - a. Does this refer to the OASIS Food Hub? It is unclear as stated.
- ii) “To determine the necessary municipal planning approvals that could allow for an integrative food hub partners framework”
  - a. The motion triggering this report asked that this working group determine the “actions and approvals necessary to facilitate” an aquaponics facility and locations for the OASIS Food Hub.
  - b. This recommendation repeats the motion’s request, but leaves out the Executive Director, Social Development, Finance and Administration, OASIS and other key actors such as Waste Management and Parks from the directive.
  - c. This recommendation is for the development of an integrative food hub partners framework. This was not the directive of the 2019 City Motion.
  - d. This section is vague. There is no clear path laid out in this recommendation.
- iii) By whom has it been analyzed? And what neighbourhood food hub model are you referring? There are multiple models bearing that title.
- iv) Unclear what this means. Are you saying the ‘neighbourhood food model’ is in line with the Plan and Strategy, or that the recommendations of this report are in line with these policies? If the latter, this certainly needs further justification.
- v) Why these two policies? What about other key policies, that we have outlined in multiple presentations? Milan Food Pact, TransformTO, Toronto Food Strategy, GrowTO etc. How does further delaying action on healthy food security align with Anti-Black racism and Indigenous health strategies?
- vi) How does a report on the “Feasibility of the St. James Town Food Hub” align with this directive? Is a feasibility assessment the same as a plan outlining approvals and actions needed to facilitate the creation of the OASIS food hub? These are two different goals.

- a. It is clear in this motion that the report was to speak on the OASIS Food Hub – yet the report is titled the “St. James Town Food Hub” and speaks to a different food hub model than the OASIS model.

**COMMENTS:**

- vii) St. James Town is served by two major grocery stores as well as a fruit and vegetable store and stand, and a convenience store with some fruits and vegetables and a Philipino variety store.
- viii) This paragraph seems to confuse events and seems to invisibilize OASIS in this process. The city staff is recommending this model because we brought the idea of a food hub in St. James Town to the table. Based on a city-funded feasibility study, resident engagement, and a network of local community partner organizations. We came to the city and TCHC seeking collaboration. Now we are being told city staff recommend a different food hub model and claim that two elements of our plan align with their new idea?
  - a. Furthermore, there is still no clear definition of a “Neighbourhood Food Model.”
- ix) This report is meant to be on the OASIS Food Hub Model. Where is the commentary on its history and development?
  - a. For example, the City-funded feasibility study, a petition with over 1000 resident signatures gathered over a short period, an in depth community engagement and design process, as well as a list of our neighbourhood community organizations and food organization partners and collaborators that make up the collaborative partnership structure embedded in the OASIS Food Hub Model.
- x) From this description, the Food Hub Model you proposed appears to rely on a charity dependency model. How does this support economic sustainability, climate resiliency, and on-site emergency preparedness?
- xi) In this section, it seems to be assumed that
  - a. TCHC is the right body to head a multi-stakeholder multi-agency food hub. What evidence is there to support the feasibility of this?
  - b. 4/18 buildings in St. James Town are TCHC, yet this report implies TCHC should have decision-making power over a food hub for the whole neighbourhood? What about the majority of non-TCHC residents?
    - i. The second half the City Motion asked for OASIS Food Hub locations and did not specify that these had to be in TCHC. Does this report then also recommend implicitly that TCHC space is the best space for the OASIS Food Hub? Given they are developing their own framework, it seems this is not the most actionable path. Why is this being recommended?
- xii) Given the drastic food insecurity scenario you described in the previous section, how does this timeline support the needs of the neighbourhood?

**OASIS Proposal and Feasibility**

- xiii) An important piece of background information is needed. From 2018-2019 the St. James Town Co-op conducted a \$50,000 feasibility study on the OASIS Food Hub,

- funded by the City of Toronto, in which residents and experts were engaged. Our study found the hub feasible, desirable, and replicable.
- xiv) This is inaccurate. Phase 0.5 is a shipping container commercial kitchen and bulk buying club, and can be located anywhere in the neighbourhood.
  - xv) This is semi-accurate. Phase 1 is the office and workshop space as well as expanded storage and distribution to support our current food buying club.
  - xvi) This was the plan proposed by TCHC's technical team. If this is the only option the working group came up with, it should be then clear that this was the best path determined by members of the working group and TCHC technical staff. This was not the suggestion of the co-op, though we are amenable.
  - xvii) Where is the list of required planning approvals? We were under the impression that this was a key task assigned to the working group.
  - xviii) Again, what changes would be needed to enable this solution? This was the task of the working group to determine. Clearly amendments are possible. The Ontario Building Code says that farm and residential functions can't be in the same building yet the city has balcony gardens, and rooftop farms/gardens. What are the actions needed to amend this situation for underground unused space as well?
  - xix) This is inaccurate. Phase 3 consists of composting. We proposed bio-digestion as well as vermicomposting and anaerobic composting systems as possibilities. We worked with our technical partner, CCI BioEnergy Inc., to present two bio-digestion design options: one located underground, and the second in a shipping container. At first, TCHC technical staff were excited about the prospect of hooking up the bio-digestion to the building's power; however, by the end of that same meeting, it was determined this was not ideal, and that the bio-digestion system should be in a shipping container outdoors. Why did the report cite concerns about connecting biogas to 325 Bleecker when this idea was already rejected?
  - xx) What are the actions and approvals that would be required to enable bio-digestion? This was the task of the working group
    - a. What about the other forms of composting? Doesn't the city need to work on managing organic waste from high rise buildings?
  - xxi) What is the current zoning and what would be the required zoning? What is the process by which this change is made?
  - xxii) Why were these cost recommendations not shared with OASIS at any of the 3 key working group meetings held? We presented budgets and asked for integrated feedback so we could amend them. Why was this knowledge withheld from the process?

## **Feasibility Assessment of the OASIS Food Hub Proposal by Phase**

### ***Phase 0.5 + 1:***

- xxiii) This was never specified as the only option by the City Motion nor any communication from OASIS and the St. James Town Co-op. Where did this assumption come from?

- xxiv) This is unclear. This proposal of a 3-staged location was put forward by the TCHC technical team to accommodate Parks plans and the construction described. When the report names “the group” it is unclear who this represents. To be clear, this was TCHC staff/working group members’ proposal to which the OASIS Food Hub Project team was amenable.
- xxv) The costs were included in estimates. What is the purpose of this sentence?
- xxvi) Again, why were these costs never shared with the OASIS Food Hub representatives? What is the purpose behind concealing this information until the report?
- xxvii) These timelines were never shared with the OASIS Food Hub team across multiple meetings and conversations. Why did SDFA choose not to disclose this information in a process meant to be done “in conjunction and in consultation” with us?
- xxviii) What are the necessary planning approvals?
- xxix) Wasn’t this the task set out to the working group?
  - a. Who is responsible for these studies? What is the zoning by-law amendment application process?
- xxx) The food hub does include a commercial kitchen and selling produce.

#### *Phase 2: Food Production*

- xxxi) What are these numbers based on? Why were they not shared during working group meetings?
- xxxii) Utility and energy costs were included in our projections, put together by our technical consultants, WaterFarmers. This sentence implies that TCHC and residents would bear the cost, which they would not.
- xxxiii) Is the argument here that because it will take a long time it is not possible? This seems like a challenge that can be overcome/endured.
- xxxiv) The Scadding Court demonstration project took time and approvals (it did not take 5 years). This comparison seems to imply that we as citizens should expect that climate and food security solutions should continue to take over 5 years to be approved? Should not, during a climate emergency, the city strive to do better each time it engages in the same solution with collaborative community partners? The same company that built the Scadding Court aquaponics system calculated the costs for the OASIS system. It is therefore inaccurate to use Scadding Court’s costs as a reason to reject our aquaponics budget.
- xxxv) Is this a zoning policy the city is comfortable with in the age of climate change and growing food insecurity? Should people in high rises not have a right to grow food where they live?
  - a. Furthermore, there is an omission in this report. At a meeting with SDFA staff in charge of this report and zoning staff, the proponent brought up the idea that given the city has declared a climate emergency, and under zoning 5.10.20.1(1) that the city can use space in any zone for emergency services (a term left undefined in Chapter 800 of zoning by-laws). It was raised that climate resilient food services could be considered an emergency service. OASIS Representative was told by Zoning it was interesting, and later in an email that they “didn’t think

the strategy would work” but didn’t extrapolate or answer emails that asked why and did not give a definition of emergency services.

### *Phase 3: Composting and Bio-Digestion*

xxxvi) Who is this group? As previously stated, OASIS Food Hub proposed two options developed by our technical partners, one underground, and another option with bio-digestion in a shipping container. In working group meetings, it was shared that 325 Bleecker ran on electrical heat. Additionally, concerns were shared regarding the underground storage of methane. Both technical staff and OASIS agreed on bio-digestion in a shipping container that powered other elements of the food hub, not the 325 building, as a more viable route. This discussion is not reflected in this report.

### **Next Steps:**

xxxvii) Once again, why is the next step solution for us to wait for another framework to be developed by an agency who has no mandate nor has expressed any interest in running a food hub until this working group, which we may be able to participate in.

### **Appendix A:**

- What is the re-zoning that is required? Not only is it not laid out, but certain things were made clear during the working group process that are not presented. For example, in a meeting with Fariha and Jason Xie from planning and Frank Stripe with Zoning on January 9<sup>th</sup> 2020, we explored together that a rezoning from R to RAC zone may be needed, as well as amendments to the official plan to allow for commercial use in the underground garage – SASP-171. Why is this information not in this report? Where is this level of detail as to the zoning changes that would be needed?

## ST JAMES TOWN CO-OP OASIS FOOD HUB

| OASIS FOOD HUB BENEFITS                                          | 1Food Production | 2. Distribution | 3.Processing | 4.Consumption | 5. Food Recycling |
|------------------------------------------------------------------|------------------|-----------------|--------------|---------------|-------------------|
| <b>Social Benefits</b>                                           |                  |                 |              |               |                   |
| Nutrition/Health                                                 |                  |                 |              |               |                   |
| Education                                                        |                  |                 |              |               |                   |
| Community building                                               |                  |                 |              |               |                   |
| Social inclusion and dignity                                     |                  |                 |              |               |                   |
| Food and Nutrition Security                                      |                  |                 |              |               |                   |
| Emergency Preparedness                                           |                  |                 |              |               |                   |
| <b>Economic Benefits</b>                                         |                  |                 |              |               |                   |
| Employment                                                       |                  |                 |              |               |                   |
| Canadian Experience                                              |                  |                 |              |               |                   |
| Canadian Experience/access to professions                        |                  |                 |              |               |                   |
| Reduce the cost of healthy nutritious food                       |                  |                 |              |               |                   |
| Food Entrepreneurship Incubation                                 |                  |                 |              |               |                   |
| Community Financial Accountability                               |                  |                 |              |               |                   |
| <b>Enviromental Benefits</b>                                     |                  |                 |              |               |                   |
| Climate Adaptation/Mitigation                                    |                  |                 |              |               |                   |
| GHG reduction (methane, nitrous oxide, C02)                      |                  |                 |              |               |                   |
| Water use efficiency                                             |                  |                 |              |               |                   |
| Reduce chemicals in food growing/processing                      |                  |                 |              |               |                   |
| Compost for restoring soil                                       |                  |                 |              |               |                   |
| Organic Fertilizer                                               |                  |                 |              |               |                   |
| Clean Energy Production                                          |                  |                 |              |               |                   |
| <b>Policy Acheivements</b>                                       |                  |                 |              |               |                   |
| TransformTO                                                      |                  |                 |              |               |                   |
| Toronto Food Strategy (2018)                                     |                  |                 |              |               |                   |
| Toronto - Milan Food Pact (2015)                                 |                  |                 |              |               |                   |
| GrowTO Urban Agriculture Plan for Toronto (2012)                 |                  |                 |              |               |                   |
| Ontario - Made-in-Ontario Environment Plan (2018)                |                  |                 |              |               |                   |
| Ontario - Circular Economy Act (2016)                            |                  |                 |              |               |                   |
| Pan-Canadian Framework on Clean Growth and Climate Change (2016) |                  |                 |              |               |                   |
| 17 UN Sustainable Development Goals                              |                  |                 |              |               |                   |



|         |        |         |  |          |
|---------|--------|---------|--|----------|
| MM10.13 | ACTION | Adopted |  | Ward: 13 |
|---------|--------|---------|--|----------|

## Providing an OASIS for Food Security in St. James Town - by Councillor Kristyn Wong-Tam, seconded by Councillor Gord Perks

### City Council Decision

City Council on October 2 and 3, 2019, adopted the following:

1. City Council request the Executive Director, Social Development, Finance and Administration, in conjunction and in consultation with OASIS Food Hub, the Chief Planner and Executive Director, City Planning, the Chief Executive Officer, Toronto Community Housing Corporation, the General Manager, Parks, Forestry and Recreation, the General Manager, Solid Waste Management Services and other divisions as required to review the actions and approvals necessary to facilitate the following matters, and to report back to the March 10, 2020 meeting of the Economic and Community Development Committee:
  - a. the creation of an underground aquaponics farm at 325 Bleecker Street, a Toronto Community Housing Corporation Building; and
  - b. the location for OASIS Food Hub for the production, distribution and management of food and water in St. James Town.

### Background Information (City Council)

Revised Member Motion MM10.13

(<http://www.toronto.ca/legdocs/mmis/2019/mm/bgrd/backgroundfile-138289.pdf>)

### Communications (City Council)

(September 30, 2019) Submission from Josephine Grey, OASIS Food Hub Project, Director, St. James Town Community Co-operative and LIFT Toronto (MM.Supp.MM10.13.1)

(<http://www.toronto.ca/legdocs/mmis/2019/mm/comm/communicationfile-97477.pdf>)

(October 1, 2019) E-mail from Nicole Corrado (MM.Supp.MM10.13.2)

(October 1, 2019) E-mail from Nicole Corrado (MM.New.MM10.13.3)

(October 2, 2019) Petition from 20 persons regarding "Urgent! Stop Toronto proposal to cage fish for food Program" (MM.New.MM10.13.4)

### Motions (City Council)

*Motion to Waive Referral (Carried)*

Speaker Nunziata advised Council that the provisions of Chapter 27, Council Procedures, require that Motion MM10.13 be referred to the Economic and Community Development Committee. A two-thirds vote of the Council Members present is required to waive referral.

**Vote** (Adopt Item)

Oct-03-2019 2:26 PM

**Result: Carried**

Majority Required - MM10.13 - Adopt the item

Paul Ainslie, Ana Bailão, Brad Bradford, Shelley Carroll, Mike Colle, Gary Crawford, Joe Cressy, John Filion, Paula Fletcher, Mark Grimes, Stephen Holyday, Jim Karygiannis, Cynthia Lai, Mike Layton, Josh Matlow, Jennifer McKelvie, Frances Nunziata (Chair), James Pasternak, Gord Perks, Anthony Perruzza, Jaye Robinson, Michael Thompson, Kristyn Wong-Tam

Yes: 23

No: 2

Michael Ford, Denzil Minnan-Wong

## Briefing Note: Working Group on OASIS Food Hub in St. James Town

First meeting: December 13<sup>th</sup>, 2019

**OASIS: Organic Agro-Ecological Sustainable Integrated Systems:** a full cycle food hub model to address systemic, equity-based, and emergency food insecurity in vulnerable communities.

### *Background:*

- [OASIS Food Hub](#) Pilot Project will be the world's first climate resilient full-cycle food hub
- Developed in St. James Town out of local community food projects, safety concerns and dialogue
- The Food Hub will be governed and managed by the St. James Town Community Co-operative, an established legal entity that maintains an at least 50% resident membership, and also includes non-resident volunteers, customers, and organizational members; see [Appendix 4](#) for governance structure
- In 2017-18, over 1,000 St. James Town residents, almost half of whom are TCHC tenants, signed a petition in support of an OASIS Food Hub in St. James Town
- [Frequently Asked Questions](#): what is aquaponics? what will be grown? etc.

### *Currently:*

St. James Town Community Co-op completed a one-year city-funded feasibility study that found OASIS to be both desirable and feasible in St. James Town:

- Feasibility study included community design gatherings to ensure the design of OASIS stays true to the needs and visions of St. James Town residents; included tenants of 325 Bleeker
- The Community Co-op now runs a bulk food buying club, the recommended 1<sup>st</sup> step after the study
  - Volunteer-run for 4 months, self-sustaining; profitable by year 1; supplies Winchester School lunch program
- Partnerships with Ryerson University and tech companies in place to support operationalization, R&D

### *Key Sites Under Review:*

- Proposing retrofit of the underground swimming pool at 325 Bleeker St. into [aquaponics facility](#)
- Proposing retrofit of the underground parking beside 325 Bleeker St.: organic waste & [bio-generation](#)
- City Land for shipping containers and/or in-building spaces to house the distribution and management of food and water from the aquaponics farm in St. James Town
  - Office, Education, Commercial Kitchen and Storage Space

### *Benefits to the Community:*

1. Greater Food Security: enhance access to healthy, affordable, and sustainably sourced food for low-income families including during emergencies
2. Reducing Environmental Impacts: Soil depletion, agri-chemical pollution, GHG emissions and waste related to food; up to 30% of Canada's GHG emissions can be traced to the agricultural industry
3. More Sustainable Employment: for youth and immigrants in renewable energy and food sectors
4. Youth Education and Development: train youth and residents to build and maintain OASIS
5. Increasing Social Inclusion: strengthen social networks, social capital, & sense of belonging

*Key Components:* See [Appendix 1](#) for space requirements, and [Appendix 3](#) for cost estimates

- Food Production and composting
  - Aquaponics Growing: fish and plants in integrated no-soil, water-efficient system
  - Rainwater Collection: water treatment and reserve storage
  - Mushroom Growing: low input, high yield and revenue, can be future component
  - Commercial Kitchen: processing food; support cottage-industry food start-ups; serve café
- Compost and bio-generation revenue
  - Soil restoration and
  - On-site energy provision

- Community Capacity-Building
  - The Timebank model increases affordability, community well-being, and economic activity
  - Bulk Food Buying Club, CSA local suppliers and farm partners (future food retail co-op)
  - Workshop Space for training, on-site management, skills building, social enterprise
  - Café for building membership, social inclusion, food service training, revenue

#### *Key Findings from City-Funded OASIS Feasibility and Technical Study:*

- The co-op model is the sweet spot between for-profit and charitable ventures
- Measures are proven, off-the-shelf, easily deployed, and scalable
- OASIS will significantly increase climate resilience and emergency preparedness that can be replicated in other communities
  - Modules are adjustable to site availability, funding and community priorities
- Redeploying unused/under used space increases asset and community value
- OASIS can employ at least 35 people in Phase 1
  - 15 temporary staff for launch, and 20 permanent staff

#### *Important Factors for Success Identified in 2018-2019 OASIS Feasibility Study and Technical Study:*

- Below-market real estate / subsidized rents with long-term leases
  - Non-recoverable grants for start-up costs will significantly reduce cost-recovery period
  - Possible Sources: Federal Citizenship Settlement Fund, community bonds, Section 37, FCM, etc.
- High-end customers and products to subsidize affordable prices for residents
  - Rosedale and Cabbagetown are perfect markets; prepared foods company ready to purchase
- Kitchen is needed to process prepared meals and cottage-industry food goods
- Onsite capacity building and ownership is essential
  - Large capital expenses for composting/bio-gen equipment must be paired with proportional capacity to collect, process, and utilize the product
- Education and event space for trainings, tours, and rentals to supplement revenues
- Partnerships with universities and college for research and development funds, and training capacity
- Developmental evaluation, R&D/CBA and effective government and community partnerships will enable rapid replication of Pilot Food Hub to support other communities in need

#### *Costs and Revenue Estimates:*

- The OASIS Project has an estimated combined start-up cost of **\$5.75 million**, a combined operating cost of **\$2.09 million**, potential revenue of **\$2.43 million**, with an estimated net revenue of **\$342,000**. This results in an overall simple gross margin of **14.05%**. ([consultants' projections, 2019](#))

#### *Alignments with City Policy:*

- [Toronto Food Strategy](#)
- [Resilience Strategy](#)
- [TransformTO](#)
- [Milan Food Pact](#)
- [GrowTO Urban Agriculture Plan for Toronto](#)
- [City Council Motion](#) Declaring a Climate Emergency – October 2<sup>nd</sup>, 2019

#### *Questions to Consider before Meeting:*

- What are the top 3 opportunities for your department that you can see in the OASIS Food Hub Pilot?
- What are the top 3 challenges you can foresee in your department in the implementation of OASIS?

#### *Contact:*

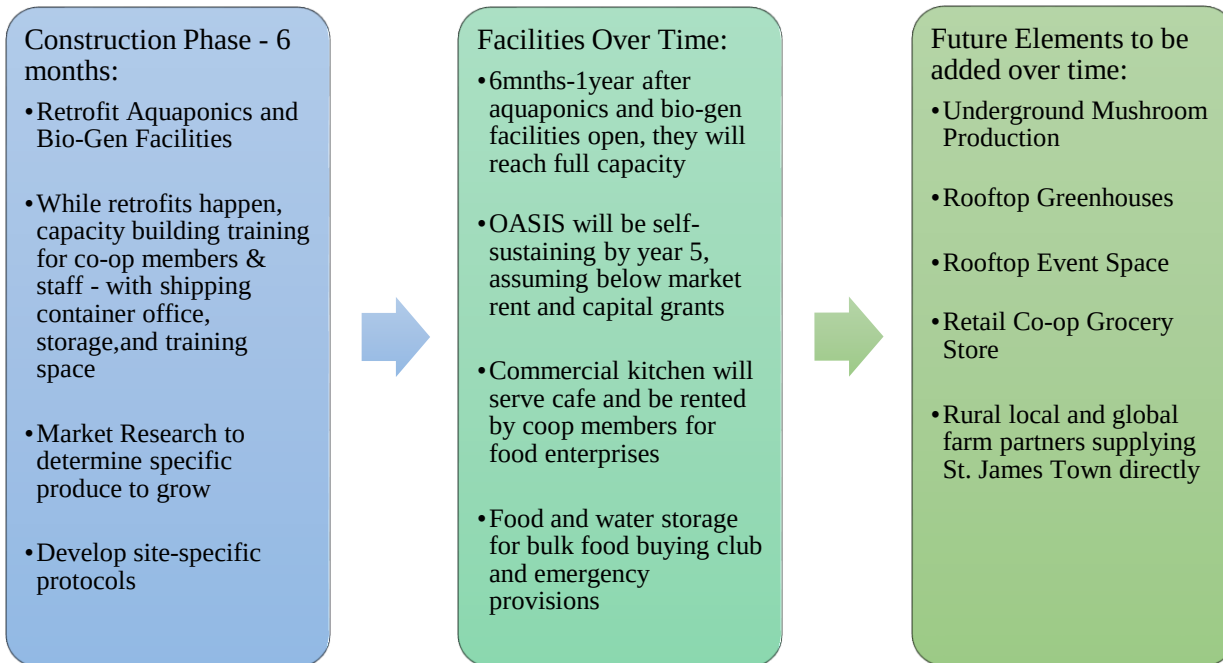
Josephine Grey, Founding Director: OASIS Food Hub Project, [oasisfoodhub@gmail.com](mailto:oasisfoodhub@gmail.com)

## Appendix 1: Space Requirements

Below is a chart of the OASIS Food Hub components. Given that there are multiple site possibilities, our technical partner, WaterFarmers, developed this chart to show the minimum space requirements for each component, and its site options. This modular design work increases OASIS's adaptability and replicability.

|                                      |                      | <div>Rooftops</div> <div>Basement Rooms</div> <div>Parking Garage</div> <div>Gyms</div> <div>Unused Indoor Pool Space</div> <div>Above Ground - Grade</div> <div>Above Ground - Mezzanine</div> <div>Shipping Container</div> |   |   |   |   |   |   |   |
|--------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| Component                            | Minimum Size (sq. m) |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Community Spaces                     |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Reserve Food Storage                 | 50                   | x                                                                                                                                                                                                                             |   |   |   |   | x | x | x |
| Office & Meeting Space               | 25                   |                                                                                                                                                                                                                               |   |   |   |   | x | x | x |
| Workshop Space                       | 25                   | x                                                                                                                                                                                                                             | x | x |   |   | x | x | x |
| Commercial Kitchen                   | 50                   | x                                                                                                                                                                                                                             |   |   |   |   | x | x | x |
|                                      |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Growing Spaces                       |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| CEA Aquaponics                       | 300                  | x                                                                                                                                                                                                                             |   |   | x | x |   |   |   |
| & Recirculating Aquaculture System   | 300                  | x                                                                                                                                                                                                                             | x | x | x | x |   |   |   |
| Rainwater Collection                 | 50                   | x                                                                                                                                                                                                                             | x | x |   | x | x | x | x |
|                                      |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Waste and Power                      |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Composting and Bio-Generation        | 400                  | x                                                                                                                                                                                                                             | x | x |   |   |   |   |   |
|                                      |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Future Components                    |                      |                                                                                                                                                                                                                               |   |   |   |   |   |   |   |
| Mushroom Facility                    | 200                  | x                                                                                                                                                                                                                             | x | x |   |   |   |   | x |
| Retail Food / Grocery Distribution   | 200                  | x                                                                                                                                                                                                                             |   |   |   |   | x | x | x |
| Green Roof Event / Programming Space | 100                  | x                                                                                                                                                                                                                             |   |   |   |   |   | x |   |
| Green Roof Farm                      | 1,000                | x                                                                                                                                                                                                                             |   |   |   |   |   | x |   |
| Pop-up Shop Installation Space       | 100                  |                                                                                                                                                                                                                               |   |   |   |   | x | x | x |

## Appendix 2 Phasing Considerations:



### Appendix 3 Estimated Costs and Revenue and Production Summary:

Below are projections developed by WaterFarmers as part of the Feasibility Study. Once sites have been confirmed, more cost details will be calculable. Components may be implemented in different ordering than shown below, as space opportunities and this city process unfold. For example, since the feasibility study, OASIS has come into partnership with bio-gen corporation CCI, which has made composting a module 1 component. CCO is currently developing modified cost projections on composting and bio-gen components.

| Module                       | Module 1                                                             | Module 2                                                                                                                         | Module 3                                                                                                                                                                                    | All         |
|------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Startup Cost                 | \$1,229,172                                                          | \$1,676,755                                                                                                                      | \$2,839,450                                                                                                                                                                                 | \$5,745,378 |
| Operating Cost               | \$1,230,850                                                          | \$385,863                                                                                                                        | \$475,147                                                                                                                                                                                   | \$2,091,860 |
| Revenue                      | \$1,350,057                                                          | \$532,269                                                                                                                        | \$551,500                                                                                                                                                                                   | \$2,433,826 |
| Net Revenue                  | \$119,207                                                            | \$146,406                                                                                                                        | \$76,353                                                                                                                                                                                    | \$341,966   |
| Simple Gross Margin          | 8.83%                                                                | 27.51%                                                                                                                           | 13.84%                                                                                                                                                                                      | 14.05%      |
| Simple Payback Period        | 10                                                                   | 11                                                                                                                               | 37                                                                                                                                                                                          | 17          |
| Space (sqft)                 | 3,767                                                                | 8,719                                                                                                                            | 17,760                                                                                                                                                                                      | 30,247      |
| Startup \$/sqft              | \$326                                                                | \$192                                                                                                                            | \$160                                                                                                                                                                                       | \$190       |
| Components                   | Retail Grocery, Bulk Storage, Commercial Kitchen, and Office Space   | Aquaculture, Aquaponics, Mushroom Farm, Backup Power                                                                             | Composting, Rooftop Farm + Event Space, Rainwater Collection, Pop-up Market                                                                                                                 | -           |
| Production & Revenue Sources | Sales of groceries, commercial kitchen rental, extension programming | 188,000 heads/year of leafy greens, 7.6 tonnes/year fish biomass, 15,900 lbs/year of speciality mushrooms, extension programming | 9,400 lbs/year of tomatoes and 1,900 lbs/year of lettuce, 77 tonnes of premium worm compost, 290 tonnes of compost, 765 cu. m of rainwater, rooftop farm event space, extension programming | -           |

### Appendix 4: Co-operative Food Hub Management and Governance Structure:

