



**TO:** INFRASTRUCTURE, INVESTMENT AND DEVELOPMENT SERVICES COMMITTEE **File: D14-SHI**

**FROM:** S. NAYLOR, M.E.S., M.C.I.P., R.P.P., DIRECTOR OF PLANNING SERVICES

**NOTED:** R. FORWARD, MBA, M.Sc., P. ENG.   
GENERAL MANAGER OF INFRASTRUCTURE & GROWTH MANAGEMENT

C. LADD, CHIEF ADMINISTRATIVE OFFICER 

**RE:** SHIPPING CONTAINERS FOR USE AS BUILDINGS, BUILDING ADDITIONS AND ACCESSORY STRUCTURES

**DATE:** JUNE 8, 2016

On April 11, 2016, City Council directed Planning Services staff to “investigate the advisability of permitting shipping containers to be used for buildings, building additions and accessory structures in all land use zones within the City”.

The purpose of this memorandum is to provide an overview of the use of shipping containers in other municipalities in Ontario and to discuss the advisability of permitting shipping containers to be used for buildings, building additions and accessory structures in all land use zones within the City of Barrie.

Shipping containers are reusable transport and storage units of steel construction and are loaded on trucks, trains or ships for moving products and materials. A shipping container can also take the form of the body of a transport trailer, straight truck, and/or any prefabricated metal portable storage unit. Shipping containers commonly range in size from 2.4 m (8') high and 6.1 m (20') long, to 3.2 m (10.5') high and 16.2 m (53') long. The typical width of a shipping container is 2.4 m (8'). Due to their portability, strength, security and affordability, shipping containers are gaining popularity for use as buildings, building additions and accessory structures. Shipping containers are widely available for sale or rent in Canada, from numerous sources, such as shipping, trucking, moving or logistic companies, warehouses, rail yards, industrial or commercial establishments, private dealers, etc.

Planning Services staff have reviewed how a number of local and comparative municipalities regulate shipping containers. The majority of municipalities permit the use of shipping containers as temporary and/or accessory buildings, while some municipalities prohibit them entirely for reasons mainly related to preserving the character of neighbourhoods, tidiness and aesthetics. Brampton, Hamilton, Mississauga and Oakville are the only municipalities that permit shipping containers for use as a principal building. Shipping container regulations are summarized in the following table:

| Municipality              | Permitted | Permitted<br>(Accessory or Temporary) | Prohibited |
|---------------------------|-----------|---------------------------------------|------------|
| Bradford West Gwillimbury |           | X                                     |            |
| Burlington                |           |                                       | X          |
| Caledon                   |           | X                                     |            |
| City of Brampton          | X         |                                       |            |
| City of Hamilton          | X         |                                       |            |
| City of Guelph            |           | X                                     |            |
| City of Mississauga       | X         |                                       |            |
| City of Sudbury           |           | X                                     |            |
| County of Brant           |           | X                                     |            |
| Fort Erie                 |           | X                                     |            |
| Georgina                  |           | X                                     |            |
| Milton                    |           | X                                     |            |
| Newmarket                 |           |                                       | X          |
| Oakville                  | X         |                                       |            |

| Municipality           | Permitted | Permitted<br>(Accessory or Temporary) | Prohibited |
|------------------------|-----------|---------------------------------------|------------|
| Orangeville            |           | X                                     |            |
| Orillia                |           | X                                     |            |
| Quinte West            |           | X                                     |            |
| Whitchurch-Stouffville |           |                                       | X          |

Common to many municipalities, the main concern surrounding shipping containers is aesthetics. In their regular form, shipping containers may be viewed to be incompatible with buildings constructed of traditional materials and in traditional styles. However, shipping containers can be modified to resemble and/or exceed the design character of a traditional building. The photos in Appendix A provide positive examples of residential and commercial buildings that have been constructed using shipping containers.

Most of the municipalities surveyed use the Zoning By-law to regulate the use of shipping containers, and this approach has proven to be effective. Shipping containers are also considered buildings under the *Ontario Building Code* and are subject to the same requirements as a traditional building. There is an opportunity for the City of Barrie to take a similar approach by including regulations for shipping containers in the City's Zoning By-law.

The City's Zoning By-law does not have a definition for shipping containers. As a fundamental element for any possible regulations, the City may consider adding a definition to the Zoning By-law to clearly define this type of structure.

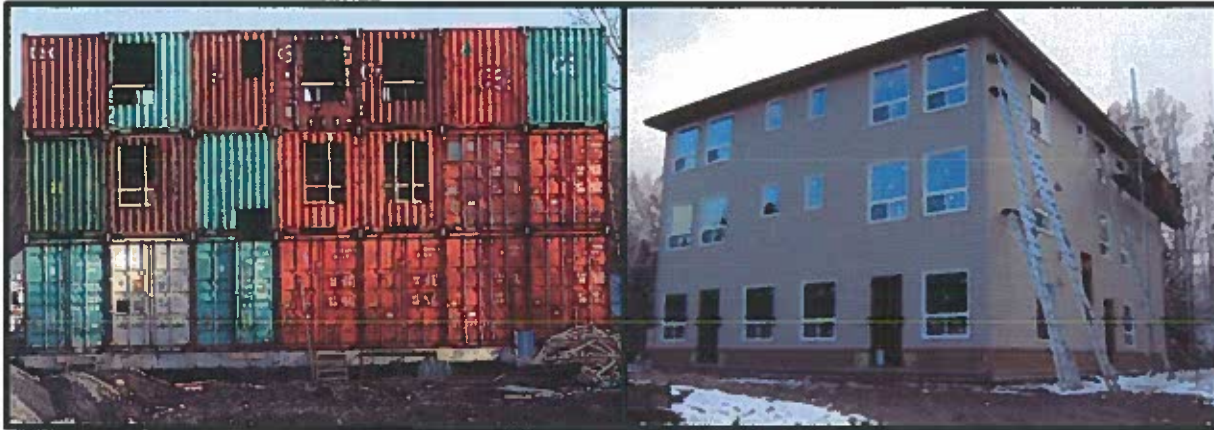
As discussed above, the main concern associated with the use of shipping containers is aesthetics. In some municipalities, such as the Town of Milton, the use of shipping containers is subject to site plan control. This provides the municipality with the opportunity to regulate building materials, as well as the location and design of container buildings to ensure that they are compatible with the character of the neighbourhood in which they are located. There is an opportunity for the City of Barrie to take a similar approach with shipping containers. Commercial, industrial and multi-residential projects can be subject to a full site plan application, while smaller projects, such as single-detached dwellings and accessory buildings, can be subject to a minor site plan application at a reduced cost. Minor site plan applications can be reviewed by Planning Services staff through the City's building permit process.

Planning Services staff have reviewed the relevant regulations from various municipalities and researched the use of shipping containers, and think that there is an opportunity to consider the use of shipping containers for buildings, building additions and accessory structures in all land use zones on a controlled basis through zoning provisions and site plan control. Staff would like the opportunity to report back to the Infrastructure, Investment and Development Services Committee with provisions that could be presented through a Public Meeting for an amendment to both the Zoning By-law and Site Plan Control By-law to incorporate possible regulations for shipping containers.

  
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S. Naylor, M.C.I.P., R.P.P.  
Director of Planning Services

Attachment: Appendix A

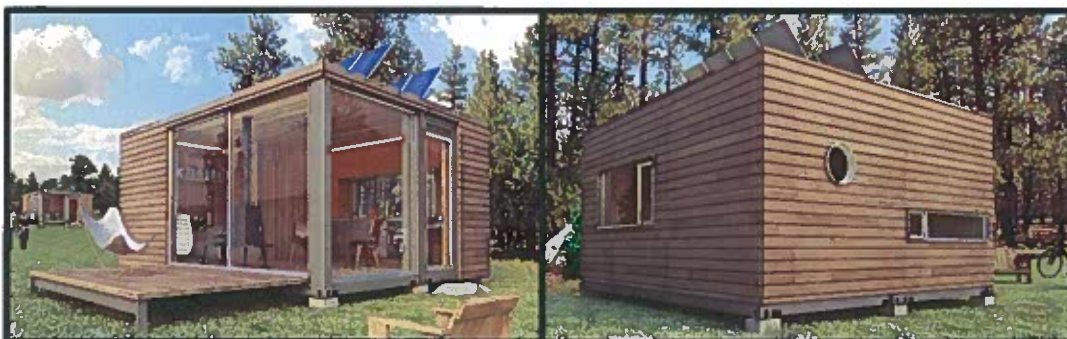
**APPENDIX A**



1. Multi-residential Container Building (Before and After) – Burk's Falls, Ontario



2. Multi-residential Container Buildings – Amsterdam, Netherlands



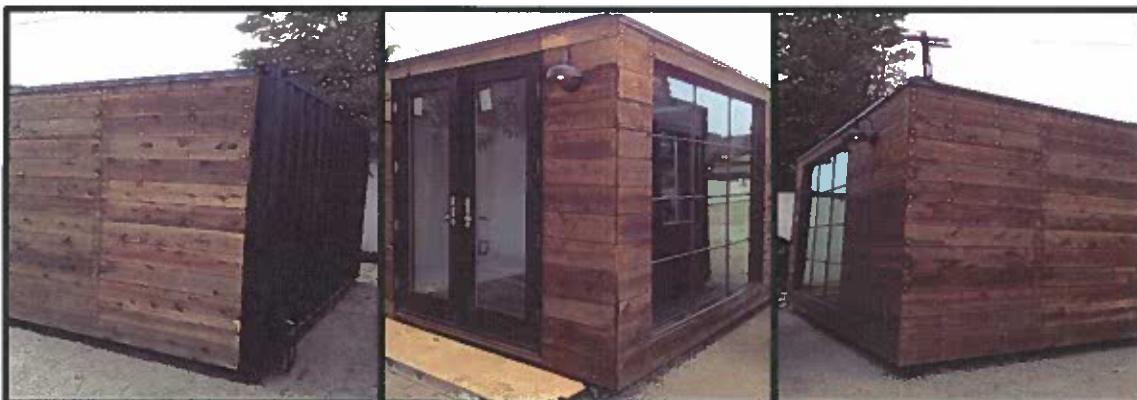
3. Container Model Home – Toronto-based Home Builder (Meka)



4. Container House (Under Construction) – Hamilton, Ontario



5. Container House – Quebec, Canada



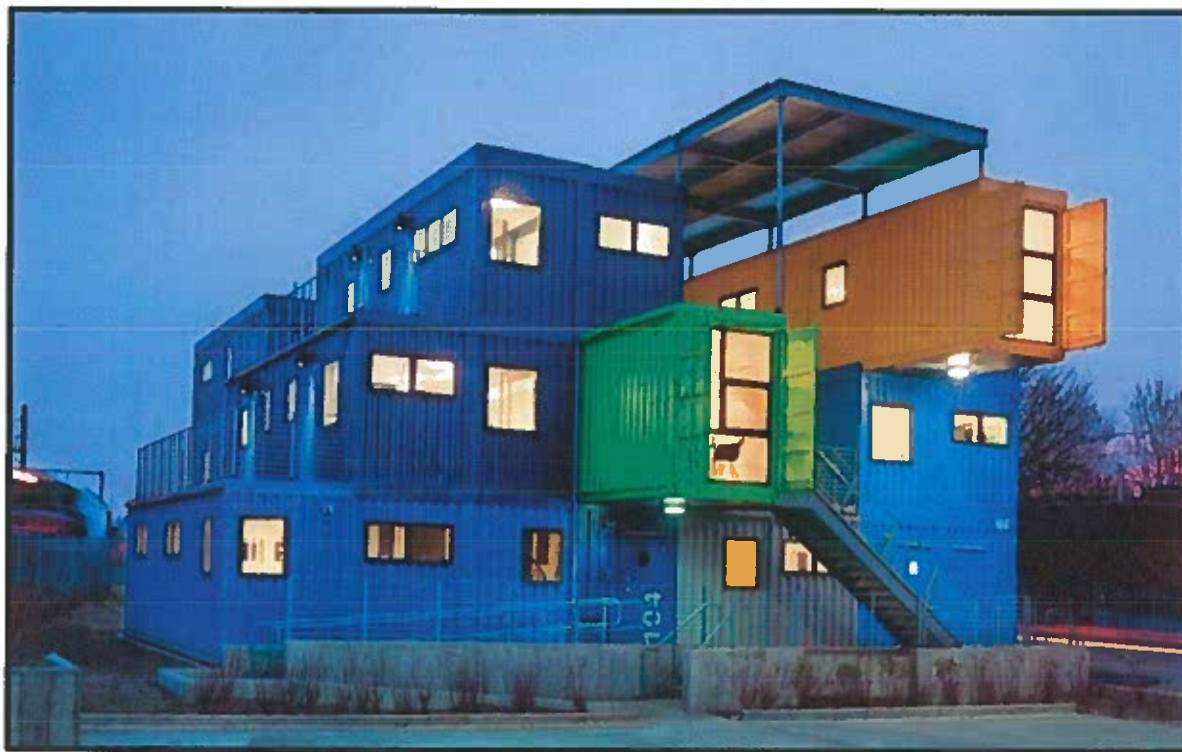
6. Residential Accessory Structure



7. Container Building – Starbucks Coffee Shop



8. Office Building Built from Shipping Containers – Israel



9. Office Building Built from Shipping Containers – Rhode Island, New York



10. Residential Accessory Structures



11. Apartment Building – New York, USA