

# CONSERVATION PLAN (STAGE 1)

for

# 15 Bramalea Road Simmons Factory Office

Brampton, ON (GBCA Project No: 17040.01)

Date of 1st issue: **15 February 2019**Date of 2nd issue: **6 June 2019** 

prepared by:

**GBCA Architects** 

362 Davenport Road, suite 100 Toronto, Ontario M5R 1K6



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# 1. INTRODUCTION

GBCA Architects was retained by Carttera Private Equities in January 2019 to prepare a Conservation Plan to satisfy a Site Plan Application for the property at 15 Bramalea Road, in the City of Brampton. The Site Plan Application proposes to augment the industrial opportunities of the site by increasing the footprint of the warehouse facility, and improving the visibility of the new project from Bramalea Road, which will be fronted by flex offices.

# 1.1 Site description

The property at 15 Bramalea Road is located at the northeast corner of Bramalea Road and Steeles Avenue East and is approximately 19.75 acres in total area. The site includes a large industrial facility fronted by a one-storey office wing. This one-storey office wing is the portion of the site which is of heritage value and is the subject of this Conservation Plan.

# **Current Owner**

ADMNS Brampton Investment Corp. c/o Carttera 20 Adelaide Street East, Suite 800 Toronto, Ontario, M5C 2T6

Contact Lewis Poplak Ipoplak@carttera.com 416-687-2786



Aerial view of the subject site, highlighted in a red dashed boundary. The building that is subject to this Conservation Plan is indicated in yellow.



General view of the subject building: the office wing.

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#### 2. CONSERVATION STRATEGY

This Conservation Plan details the Conservation Strategy outlined in the Heritage Impact Assessment, dated February 11th 2019. The proposed redevelopment of the site at 15 Bramalea Road is to increase the industrial warehouse facility, with separate "fiex office" structures to support the industrial uses of the site. The office wing, identified as the heritage building on the site, will be documented, dismantled and reconstructed using select salvaged items of the original building as part of the reconstruction. The reconstructed building will be relocated closer to the Bramalea Road frontage and will maintain its original footprint on the property.

## 2.1 Compliance with applicable standards and guidelines

#### 2.1.1 Parks Canada's Standards and Guidelines

The Conservation Strategy complies with the intents of the Standards and Guidelines for the Conservation of Historic Places in Canada (SGCHPC). Conceived as a manual for use by various levels of government in the conservation of heritage sites, the document, after its release, has become adopted as a code of practice both municipally and provincially across Canada. As it relates to rehabilitation, the SGCHPC stipulates that:

Rehabilitation involves the sensitive adaptation of an historic place or individual component for a continuing or compatible contemporary use, while protecting its heritage value.

In this instance, the relocated and reconstructed office wing will remain for a compatible office use. Character-defining features in good condition will be repaired while those that are in poor condition, unsafe for reuse, or no longer comply with Building Code requirements will be replaced with new elements that match the forms, materials and detailing of the current versions as they are physical evidence that can be reproduced. The new addition on the property, consisting of a larger warehouse facility will be physically distinct from the reconstructed office wing and is compatible with the industrial use of the site and the original scale of the previous warehouse facility.

# 2.1.2 Appleton Charter for the Protection and Enhancement of the Built Environment

The Conservation Strategy also complies with the intents of the Appleton Charter (which includes similar provisions to the SGCHPC) as it relates to the intervention chosen for the heritage resource's conservation. The Charter recognizes that:

Decisions concerning the relative importance of these factors [cultural significance, condition and integrity of the fabric, contextual value, appropriate use of available physical as well as social and economic resources] must represent as broadly based a consensus as possible.

R,

Legitimate consensus will involve public participation and must precede initiation of work.

The development balances the various requirements and factors applicable to the project and the site, particularly as they relate to heritage issues, and is achieved in a manner that conserves the visible form, scale and massing of the Simmons office wing. Further, this balance was achieved following discussions and coordination with various City departments to arrive at a favourable development.

# 2.2 Preliminary recommendations for adaptive reuse

The original use of the Simmons Canada Company's office wing was for administrative operations related to the bedding manufacturer. The relocated and reconstructed office wing is intended to be re-used as multitenant office spaces. Prospective tenants are not known at the time of this Conservation Plan (the development is at an SPA stage). The proposed office use is compatible with the heritage resource and will not impact the heritage value of the reconstructed building.

#### 3. SCOPE OF CONSERVATION WORK

The conservation work proposed for the project outlines the means in which the conservation strategy will be executed as part of the development. It is to be noted that this scope has been prepared at the SPA stage, in consultation with the Client and the Architect. Other consultants will be added to the project, as required, during subsequent stages of the development process. At this stage, the following information is provided.

#### 3.1 Conservation measures: pre-reconstruction

# 3.1.1 Documentation of the heritage resource

Documentation includes the assembly of existing information related to the heritage resource prior of any intervention, for the purposes of understanding its existing condition and inform on required conservation treatments. Documentation has been performed in compliance with acceptable conservation standards and practices.

<u>Photography</u> has been completed, providing sufficient images to understand the current exterior appearance of the office wing. Relevant photos are included in this Conservation Plan.

<u>Building measurements</u> have been completed and has been translated into as-found exterior elevation drawings. These drawings are included in this Conservation Plan. It is to be noted that no original drawings showing the construction details of the office wing have been found.

A <u>condition assessment</u> has been performed as part of the Heritage Impact Assessment and is available, under separate cover in this document. Key conditions are included in this Conservation Plan as they inform on the required conservation treatments.

<u>Cataloguing</u> will be completed, which consists of attributing a number or code for each item to be salvaged, so their identification can inform on their original and final positions in the reconstructed building. The cataloguing system is typically performed by the Contractor, and reviewed by the Heritage Consultant.

# 3.1.2 Salvage and storage of key architectural features

As documentation of the heritage resource is completed, steps to commence interventions can proceed. Interventions will consist of dismantling and salvage of key architectural features. Prior to dismantling, the Contractor will provide for review to GBCA the proposed means of dismantling, salvage, temporary palletizing and storage to ensure no damage to the salvaged features. Heritage staff can be informed on such means, at their discretion.

Partial removals will be required for safe access to salvaged items. For instance, non-structural items such as doors, windows and fiashings may be removed in a first step with no impact on the structural integrity of the building for safe access to the salvaged items. Temporary structural support may be needed as an interim measure during the removal of panels as they contribute to the structural support of the building.

Items that will not be salvaged in the reconstruction (existing windows and doors, steel columns, concrete bases and canopy) can be safely disposed of as these items have been documented in the previous phase. This work is typically under the responsibility of the Contractor and will comply with applicable legislation.

# 3.1.3 Conservation treatments of salvaged architectural features

Conservation treatments vary depending on the condition of salvaged features and consist of cleaning, repair, repointing, reinforcing and partial replacements. It is recommended to salvage the elements as a first stage and apply conservation treatments once the items are within a controlled environment and easily accessible.

It is also possible to apply conservation treatments once the panels are reinstated in the reconstructed building. The final decision can be left at the discretion of the Contractor and coordinated with available resources, and timing . Whether treatments are sooner (within a controlled environment) or later (once reinstated) will have no impact on the salvaged heritage attributes.

#### Brick veneer panels

#### **OBSERVATIONS**

- Speckled white-glazed brick veneer, backed by concrete masonry units. Thickness of brick is 4 inches.
- Total thickness of assembly and air space (if present) is not known. This information can only be obtained upon dismantling.
- Bricks are generally in good condition, with some units showing dirt resulting from water damage or atmospheric pollution.
- Fastenings to secure lighting fixtures or signage have damaged the brick units.





Example of brick panel on the main (west) elevation. Dirt from water damage is noticeable at the top and will be cleaned. The signage post will be removed and mortar patched.

Example of brick panel on the north elevation. Note the stepped cracking (red arrow) which shows that some movement has occurred in the veneer. The untypical opening in this panel will be challenging to safely dismantle and salvage without placing additional stress and strain to the assembly. This panel is proposed to be dismantled and rebuilt with bricks to match.

#### **ACTIONS**

- Dismantle and salvage
  - Document conditions (thickness, construction assembly, etc.)
  - Additional information upon dismantling may be uncovered, but below are the intended actions:
    - Secure and protect the panels with support framing, as appropriate
    - Reinforce, where required to solidify the brick veneer with the concrete backing to ensure they hold together during the dismantling process.
    - Reinforcement can include additional metal ties, through the mortar joints to bond the layers together, or another method as suggested by the Contractor.
    - Metal ties that go through the mortar joints will require to be patched with mortar to match in colour, texture and material.
- Store panels See Section 3.4 for a discussion on options
- Conservation measures
  - Remove all residual sealant material
  - Repair stepped cracking
  - Remove damaged mortar joints and replace with new to match
  - Repair damaged bricks with epoxy or replace severly damaged bricks with new to match
  - Clean bricks by hand washing (this measure can be performed once the panels are reinstated in the reconstructed building).

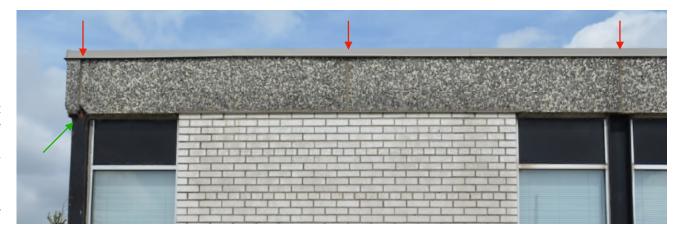


Example of brick panel on the south elevation, adjacent to the existing warehouse building. Dirt from water damage is noticeable at the top and will be cleaned. The lighting fixture will be removed. The hole (red arrow) will be patched. The residual brick pilaster (green arrow) will be removed and rebuilt as it can not be salvaged in one piece and removal of bricks, laid in a cement-based mortar, will damage the edges of the brick.

#### Aggregate panels

#### **OBSERVATIONS**

- Layer of pebble aggregate rocks, laid over a bed of cement-based grout.
- Total thickness of assembly is not known. This information can only be obtained upon dismantling.
- Panels were found to be in generally good condition with no visible signs of deterioration
- South corner, at the junction with the steel column is cracked



#### **ACTIONS**

- Dismantle and salvage
  - ▶ Document conditions (thickness, construction assembly, etc.)
  - Additional information upon dismantling may be uncovered, but below are the intended actions:
    - Secure the panels with support framing, as appropriate and protect the panels from scratching or damage from the temporary framing.
    - Additional reinforcement may be required to solidify the panel with a backing.
    - Reinforcement can include a new wire mesh attached to the back and solidified with shotcrete.
- Store panels See Section 3.4 for a discussion on options
- Conservation measures
  - Remove all residual sealant material
  - ▶ Clean aggregates with low pressure water wash (this measure can be performed once the panels are reinstated in the reconstructed building)

Example of aggregate panels on the south elevation. Note the typical joints (red arrows), which are anticipated cut lines for their dismantling. The corner (green arrow) is damaged and will require repair by patching with similar aggregates and grout.



Example of aggregate panels at the main (west) elevation. Underside of the panel shows a thin assembly.

#### 3.2 Conservation measures: reconstruction and post-reconstruction

Most of the conservation measures are anticipated to be applied during the previous stages of the project (documentation, salvage and off-site conservation). Specifically, cleaning, repair, etc. is anticipated to occur when the panels are stored.

In coordination with the construction of the new office building, the salvaged items will be brought back to be reinstated in the reconstructed building. The brick veneer panels and the aggregate panels will be considered "pre-cast" elements, which will require a fastening method to the new base building structure.

The reconstructed building will consist of a steel structure. Structural and architectural construction details are yet to be developed. As it relates to the reinstatement of the brick and aggregate panels, new fastening methods will require to be coordinated with a structural engineer and the prime architect, to consider required expansions and contractions, weight support, required fire ratings etc.

Once reinstated into the reconstructed building, the panels may require additional touch-ups (cleaning, repointing, etc.) to finalize conservation measures in its final reconstructed appearance.

A final on-site review will be performed to verify that all conservation measures identified under the drawings and specifications have been completed. This review can be performed in the presence of City Staff.

# 3.3 Reproduction of non-salvaged items

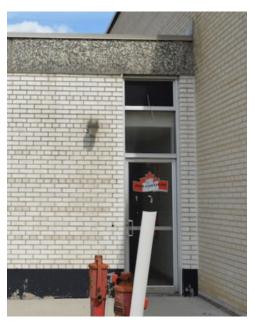
Some architectural features that are part of the original office wing's building envelope have not been selected for salvage. These items will be reproduced and therefore no conservation measures are proposed. As they will be part of the recreated building, they are discussed in the following pages.

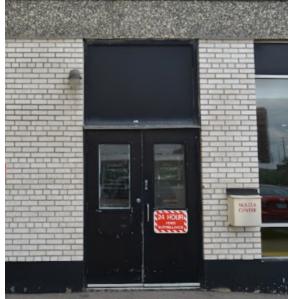
#### New windows and doors

Existing windows are aluminum frame and single-glazed. Their salvage is not recommended due to their poor thermal performance and low material value. New windows on the reconstructed building will be aluminum frame with similar design features (tripartite design) and finishes to the original ones, with better performing insulated glazed units.

Existing doors are of low material value and are not recommended for reuse. New doors that are similar to the existing ones in materiality and design will be included in the reconstructed building.

Refer to Architectural drawings for details on replacement doors and windows on the reconstructed building.







Door at south elevation

Double door at north elevation

Single door at north elevation and typical window at right

Examples of doors and typical windows on the existing building. All doors and windows will be removed and replaced. Replacements will be of modern design and materiality with similar appearances than the current ones.

#### New exterior steel columns

Existing exterior steel columns between the windows, at the corners and supporting the canopy all show rust near the bases as a result of the cracking of the base. Their salvage is not recommended due to their present condition and their low material value. New columns on the reconstructed building will be of the same type, size, material and finish to the original ones.

## New canopy

The existing canopy is built of open web steel joists and covered with a corrugated metal panel with a standard roof membrane on the top and finished with stucco on the underside. The siding consists of prefinished metal fiashing. The canopy's roofing, after more than 50 years, is approaching the end of its life cycle. The canopy's salvage is not recommended. It will be recreated with new materials to maintain the current appearance. Materials will include prefinished metal siding and an underside of stucco finishing. The top will be an asphaltic membraned fiat roof.

#### New concrete bases and foundations

The current concrete bases and foundations are of standard reinforced poured-in place concrete construction and covered in paint, which is fiaking. The salvage is not recommended due to the low material value of concrete and their current condition. The bases will be reproduced in a similar material and will be painted black to mimic the existing appearance.

#### 3.4 New items

The reconstructed building will be used for commercial purposes. As such, new items on the exterior walls may be added to support such uses New items can include wall-mounted light fixtures near door entries and security cameras. These items already exist on the building and are in need of replacement.

Details on these fixtures have not been determined at the Site Plan Approval stage, and can be provided at a later stage, upon request.



Close-up of canopy metal siding, with horizontal seams



Close-up of main entrance with the display case, double door and canopy supported by steel columns, which will all be replaced with new reproductions.

#### 3.4 Security requirements - storage of salvaged items

There are two possible options for the storage of salvaged items. Whether the items are left on-site, or brought off-site, the Contractor will require to ensure the stored items are located and positioned in a manner that will not damage the items (ie. a dry and warm place, positioned so they do not warp or break with time). Further, the items will require to be secured so that they are not subject to vandalism. If stored off-site, the facility will need to be locked and secured with adequate staffing and equipment. If stored on-site, additional security measures may be provided , such as adequate staffing, proper lighting, cameras, fencing etc.

Both storage options can be implemented and are suitable for this project. The challenges presented can be mitigated by additional precautions, such as extra care in the palletizing and storage process, which will result in the same end product if implemented appropriately.

The final decision can be left at the discretion of the Contractor as long as the above described requirements are satisfied.

For purposes of pricing, the option of storage off-site will be chosen as it is the most conservative option.

STORAGE OF SALVAGED ITEMS								
	ON-SITE	OFF-SITE						
PROS	<ul> <li>no transportation needed</li> <li>reduced risk of loosing and damaging pieces (risk not eliminated)</li> </ul>	<ul> <li>controlled environment</li> <li>eliminates risk of potential weather damage</li> <li>controlled security</li> <li>conservation treatments can be effectively completed</li> </ul>						
CONS	<ul> <li>subject to potential weather damage (if not properly protected)</li> <li>additional security measures required</li> </ul>	<ul> <li>requires transportation</li> <li>transportation can damage the salvaged items (additional precautions required)</li> <li>risk of loosing pieces (additional precautions required)</li> </ul>						

#### 3.5 Qualifications of Contractors and tradespeople

The conservation scope of work includes salvage, dismantling, structural reinforcement, masonry restoration work (repointing, repair, cleaning) and reconstruction. Considering the complexity of this type of conservation strategy, the completion will require Contractors and tradespeople that are qualified and experienced in the field of dismantling, reinforcing and rebuilding.

The building is of modern construction, which is typically familiar with many current Contractors. Modern materials employed on the building and are well known with many Contractors. No specialised skill is required for the conservation of these modern materials.

A prospective Contractor will need to provide examples of previous projects where similar material salvaging was part of the scope of work. This Contractor will need to include tradespeople who are familiar with the work, take extra care and precaution during dismantling and are also qualified with masonry restoration and cleaning.

The Contractor will also require to include a structural engineer who is experienced with reinforcement methods to ensure the dismantling will not result in further damage of the items removed.

Personnel working on the conservation scope of work will require to apply conservation principles and practices. In addition to the conservation measures described above, throughout the project, Contractors and tradespeople will require to document the process, take extra precaution of the salvaged items, inform the Heritage Consultant of any new conditions found and provide recommendations on proposed interventions that maintain the integrity of the salvaged items.

# 3.6 Preliminary Specifications

Specifications related to the reconstructed fiex office are anticipated to be prepared by the design team and will be revised as they will need to be coordinated at a stage following Site Plan Approval in conjunction with additional consultants. Draft specifications are included in Appendix III.

# 4. IMPLEMENTATION OF THE SCOPE OF WORK

# 4.1 Short, Medium and Long Term Actions

	ACTIONS	ADDITIONAL COMMENTS
SHORT TERM (CRITICAL)	<ul> <li>Maintain the existing office building secured.</li> <li>Provide minimal heating and venting as required (open windows and leave interior doors open)</li> </ul>	
SHORT TERM	<ul> <li>Take photographs (completed)</li> <li>Measure building (completed)</li> <li>Assess condition of building (completed)</li> <li>Catalogue (label / identify) elements to be salvaged</li> </ul>	
	<ul> <li>DISMANTLE, SALVAGE, PACKAGING AND STORAGE</li> <li>Salvage brick veneer panels and aggregate panels</li> <li>Heritage Consultant to be present on site to observe and review the work</li> <li>Dismantling process to be documented with photographs, measurements and assessment of exposed new conditions, if applicable</li> <li>Package items with appropriate materials</li> <li>Reinforce back of panels as necessary, and in conversation with a structural engineer.</li> <li>Store salvaged items in secure location off-site</li> </ul>	Dismantling may reveal additional unforeseen conditions. The identified actions are anticipated and intended. Any unforeseen conditions that require a change to the conservation strategy will be communicated to City Staff immediately.  Reinforcing may require to be done on-site, once relocated to an off-site location or a combination of both.  Milestone: Notify Heritage Staff of removal of salvaged
MEDIUM TERM	<ul> <li>CONSERVATION TREATMENTS</li> <li>Brick masonry restoration (cleaning, repointing, brick repair or replacement)</li> <li>Aggregate restoration (cleaning, repair where required, replacement of damaged patches, regrouting)</li> <li>Panel reinforcement as required</li> </ul>	attributes on site is complete.  Conservation treatments may be completed prior to reconstruction (preferable) or after reconstruction, in coordination with the Contractor.
	<ul> <li>REINSTATEMENT AND RECONSTRUCTION</li> <li>Construction of new fiex office base structure in its new location on the site</li> <li>Coordination and Installation of anchoring system at backing of salvaged panels</li> <li>Coordination and Installation of salvaged panels onto new structure.</li> <li>Installation of new windows, doors, canopy &amp; Commemorative plaque</li> </ul>	Actions to be coordinated and discussed with Contractor for staging and process.  Milestone: Notify Heritage Staff of removal of completion of new fiex office exterior envelope.
LONG TERM	<ul> <li>Provide standard maintenance and upkeep of building envelope as appropriate by new building manager</li> </ul>	

# 4.1 Phasing and Scheduling of the Conservation Measures and Treatments

At this stage in the project, phasing of the conservation work has not been determined or confirmed.

Phasing and Scheduling of the conservation measures identified in the previous pages, is typically determined by a team that includes contractors involved in the construction of the project Considering the reconstruction nature of this project, phasing and scheduling will need to rely on their expertise for this portion of the work.

#### 4.1.1 Dismantling procedure

The dismantling process will require a methodology that ensures no damage to salvaged items. Select elements of the building may require to be removed for easy access to dismantle savaged items (i.e. windows and doors) and additional temporary support may be required to ensure structural integrity at the building perimeter during dismantling procedures.

See Draft Specifications included in Appendix III which provide preliminary direction for the dismantling and salvage of the brick veneer and aggregate panels. These specifications may need to be revised to capture information that is revealed during dismantling.

#### 5. PRELIMINARY COSTING

Estimates for the proposed work have been developed by a variety of means, which include:

- Reference to the areas requiring work and application of standard industry rates
- Consultation with Contractors to provide budget information
- Reference to other experience related to conservation work, dismantling and rebuilding.

Please note that the estimates provided are based on visible information and current conditions at the time of our inspections, and is therefore elemental. The budget is provided in constant current dollars for full work. However, the budget will be subject to prevailing market conditions, escalations or reductions in material and labour costs over which the consultant has no control.

A preliminary estimated budget is available under separate cover.

#### 6. CONCLUSION AND NEXT STEPS

This Stage 1 Conservation Plan takes into account the latest advancements related to the office wing of the property at 15 Bramalea Road and its dismantling and reconstruction. This Plan is consistent with the Heritage Impact Assessment prepared for the property, dated February 11th 2019 and provides additional details of the salvage of the heritage attributes at the Site Plan Approval stage.

#### **Next Steps**

As with all heritage related projects, new information may come to light as conservation work is undertaken. A Stage 2 Conservation Plan is anticipated to be presented at such time when sufficient dismantling has occurred, where information presented in this Stage 1 Conservation Plan can be either confirmed or reviewed, based on new findings. Additional coordination with the design team, which could not be completed at the Site Plan Approval Stage, will include details of the reconstruction of the salvaged items into the new relocated fiex office as well as details of the connection between the reconstructed office and new items (such as the new windows, back wall, canopy, etc.)

# Commemorative plaque

Text and layout for a commemorative plaque has been prepared by GBCA in 2015 and submitted to the City of Brampton in that same year. This information is provided in previous versions of the HIA under the Background Research section and can be used as the text and layout for the commemorative plaque, which is proposed to be installed near the main entrance of the reconstructed fiex office.

#### 7. CLOSURE

The information and data contained herein represents GBCA's best professional judgment in light of the knowledge and information available to GBCA at the time of preparation. GBCA denies any liability whatsoever to other parties who may obtain access to this report for any injury, loss or damage suffered by such parties arising from their use of, or reliance upon, this report or any of its contents without the express written consent of GBCA and the client.

# APPENDIX I

Select Site Plan Approval Drawings

Select Architectural Drawings by Glenn Piotrowski Architect

Landscape Drawings by INSITE Landscape Architects Inc.

#### GENERAL NOTES

- CONTRACTOR ALL OF THE SOME RESIDENCE FOR THE REPORT OF THE COMPANIES.

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- THE CONTRACTOR SHALL PROVIDE FOR THE SHET AND ORDERLY PASSAGE OF PEDESTRIANS AND TRAFFIC WHERE HERE OFERMIONS ABUT PUBLIC THOROLOGHARES AND ADJACENT PROPERTY IN COMPLIANCE WITH LOCAL CODE. EQUILIZATION OF ANY AUTHORITY HANDOL JURISDICTOR.

- (10) CONNECTION OF ROOF DRAININGS TO SITE STORM SYSTEM IS REQUIRED AT LOCATIONS INDICATED (REFER TO CIVIL) FOR COORDINATION), C.C. TO COORDINATE BOTH AS REQUIRED.
- (11) ALL SURFACES TO BE CLEANED AFTER CONSTRUCTION TO SATISFACTION OF CLIENT,
- (1) ALL ENGINEERS TO BE ROUNDE FROM SEE AND EXECUTION FOR SEE OF BY GERML CONTINUED AT COMMUNICION CORRECTOR SECOLAL WHICH PROVIDE TO RECUCE OVERALL ENVIRONMENTAL AMPLIT. REFER TO SPECIALLE DIVIDENCE OF SOUTH, ADMINISTRA
- CONTRACTORS SCOPE OF MORK TO INCLUDE, BUT BE NOT LIMITED TO CONSTRUCTION OF NEW FINISHED SHELL

  BUILDINGS, CURRS, STEMORY, & LANDSCAPING AS INDICATED. (SEE OVERALL PLANS FOR ADDITIONAL NOTES AND

  REFER TO SPETS.)

- (16) DESCREETLY, AMAY FROM PETESTRIAN TRAVEL ROUTES AND SCREENED FROM PUBLIC VENI.

- ADDITIONAL NOTES
- ALL SURFACE DRAINAGE WILL BE SELF CONTINED, COLLECTED AND DISCHARGED AT A LOCATION TO BE APPROVED PRIOR TO THE ISSUANCE OF BUILDING PERMIT.
- At the entrances to the site, muncipal curb will be continuous through the drivenay and curb depi will be provided for each entrance.
- THE TOPS OF ANY CURBS BORDERING THE DRIVEWAYS WITHIN THE MUNICIPAL BOULEVARD WILL BE FLUSH WITH THE MUNICIPAL ROAD CURB AND SIDEWALK.

- 8. ROOF LEADERS ARE NOT PERMITTED TO DISCHARGE ONTO OR ACROSS DRIVEWAYS OR WALKWAYS
- 9. ALL BUILDING ACCESS POINTS ARE NEW AS SCHEDULED.
- PROVIDE TWO BACKLIT PYLON SIGNS AT LOCATIONS T.B.D. FOR WAY—FINDING & ADDRESS' c/w CONDUIT FROM RESPECTIVE BUILDINGS. EXACT LOCATIONS TO BE COORDINATED WITH FINAL LANDSCAPE PLAN & BE APPROVED BY AUTHORITIES.

**GBCA ARCHITECTS** 

- 4. ALL FIRE ROUTES TO BE CONSTRUCTED MIN. 6.0M WIDE WITH HEAVY-OUTY ASPIRALT, CENTERLINE TURNING ROOM 12.0m TO THE SATISFACTION OF THE CITY OF BRAMPTON, AS BRAMPTON FIRE DEPARTMENT. FIRE ROUTE MUST BEEN THE COMPUNION WITH THE CASE, A SEPARATE FIRE-FAULT EARLY ASPICATION TO BE FILED WITH ADDITIONAL PROBMATION.
- ALL BARRER FREE PARKING STALLS INDICATED ARE TO RECEIVE BOTH ASPHALT PAINT MARKINGS AND POLE MOUNTED SIGNAGE TO THE SATISFACTION OF THE CITY OF BRAMPTON.
- ALL SET-OUT DIMENSIONS ARE FROM OUTSIDE FACE/CORNER OF FOUNDATION WALL, AND ARE PERPENDICULAR TO PROPERTY-LINE(TYP.)

# 15 BRAMALEA RD PROPOSED WAREHOUSE & FLEX OFFICE DEVELOPMENT

ARCHITECT LTD.

BRAMPTON, ONTARIO

ARCHITECTURAL DRAWING LIST

INSITE

LANDSCAPE ARCHITECTS INC.

COURS HEST
OFFER HEST
SITE PLAN
SITE DETAILS
PARKING SPACE & SIGNAGE DETAILS
BLIGH-A OVERBAL ROOF PLAN
BLIGH-A OVERBAL ROOF PLAN
BLIGH-A OVERBAL REDATION
BLIGH-G HESTAL
BLIGHTONS
BLIGH-G OVERBAL REDATION
BLIGH-G OVERBAL REDATION
BLIGH-G OVERBAL REDATION
BLIGH-G OVERBAL ELEVATIONS
BLIGH-G OVERBAL ELEVATIONS
BLIGH-G OVERBAL ELEVATIONS
BLIGH-G OVERBAL ELEVATIONS

(17) GAS PIPES SERVICING ROOF TOP MECHANICAL EQUIPMENT SHALL NOT BE VISIBLE TO ANY PUBLIC VIEW AND SHALL (17) GE INSTALLED MITHIN THE WALL CONSTRUCTION.

ZONING & OTHER GEN	NERAL INFORMATION				
CURRENT USE		WAREHOUSE	& DISTRIBUTION-TO	88	DEMOUSHE
PROPOSED USEZONING - (EXISTING)				ZON	Æ
BUILDING SETBACKS(CITY of BRAMPTON)		Ξ	9.0m 4.0m 0.0m 0.0m	=	9.25m 9.25m 12.15m 5.65m 5.65m
OTHER LIMITATIONS (CITY of BRAMPTON)	N/A				

OVERALL SITE STATISTICS		
	IMPERIAL	METRIC
- TOTAL SITE AREA	19.70 Ac	7.97 Ha
- TOTAL GFA	9.31 Ac	3.77 Ha
- LOT COVERANCE (GFA AS PERCENTAGE OF LOT AREA	47.26 %	<u> </u>
- TOTAL LANDSCAPED AREA	3.11 Ac	1.26 Ha
- LANDSCAPED ARE AS PERCENTAGE OF SITE	15.80 %	
- TOTAL HARD SURFACE AREA	7.28 Ac	2.95 Ha

OVERALL BUILDING STATISTICS			_
BUILDING - A - WAREHOUSE BUILDING - B - OFFICE BUILDING - C - OFFICE	Phase - I 373,756 sq.ft. 21,726 sq.ft. 19,120 sf.ft.	34,723.11 m2 2,018.38 m2 940.16 m2	
TOTAL BUILDING AREA	405,602 sf.ft. (9.31 Ac)	37,681.64 m2 (3.77 Hg)	1

OVERALL PARKING STATISTICS			
Based on the City of Brampton requirement of 168 + 1/170m2 over 20,000m2) - Warehouse and 1/25m2 - Office area	Bldg Area	Stalls Reg'd	Stalls Provided
BUILDING - A - WAREHOUSE BUILDING - B - OFFICE BUILDING - C - OFFICE	34,723.11 m2 2,018.38 m2 940.16 m2 37,681.64 m2	255 81 38	255 81 38
SUBTOTAL PARKING REQ'D	57,001.04 1112	374	374
TOTAL PARKING PROVIDED (including 14 barrier-free stalls)			374
TRAILER STAGING PROVIDED LOADING POSITIONS REQUIRED (3+1/9300m; LOADING POSITIONS PROVIDED	2 above14,000m	2) (3.7x9.0m)	<u>€</u>

le7 I	of Project	reet, Oal at: G-A	kville, O	td. n. L6J 2Zi		05.338.88	55/ f.90	5.338.8868		
	tion (addn	_	BRAMPT	ON, ONTA	RIO				exercised control with	ct above has responsible n respect to activities
tem	_			Ontario Bui	dina Code	Data				Reference
1.					Change of Yes		□ Additi	Construction on tion/ Renovation		.1.1
2.	Major Occ	upancy (s)	GROUP F	, INDUSTRIA	L				3.1.	2.1.(1)
3.	Building A	rea	Existing		New 34,73	23 m2	Total 34,	723 m2	1.1	1.3.2
4.	Gross Are		Existing		New 34,72		Total 34,	723 m2	1.1.3.2	
5.	Number of		Above Gra		ONE (1) Below Grade n/a s ONE (1) Streets			n/a	3.2.1.1 & 1.1.3.2	
6,	Number of	Streets/ Fin	re Fighter A	coess ONE				3,2,2,10 & 3,2,5		
7.			GROUP F							.2.67
8.	Sprinkler S	system		■ Entire Building  In Lieu of Roof Rating			3.2.2.2083			
				☐ Baseme	nt Only	1				.2.17
9.	Standpipe	Required		☐ Yes		■ No			3.2.	9.1(c)
10.	Fire Alarm					t req'd per		4.1.(2)		
11.		ice/ Supply is	Adequate	Yes			.2.4.1			2.6.7
12.	High Build			☐ Yes		■ No		D Both		.2.6
13.		Construction Construction		☐ Combu			mbustble mbustble	□ Both □ both	3.2.2.67	
14.		(s) Area (m		La Comeu	80040	- Nonco	TICUSTOR	La con	224	1.(3)-(8)
15		Load based		☐ m²/pers	200	■ Design	of Building			1.17
	- Basemer	st.		Occupancy	n/a	Load	n/a		1	
	- 1st Floo - 2nd Floo	-		Occupancy	GROUP F	Load		NANT LAYOUT	BASEC	ON
	- 3rd Floo	r		Occupancy	n/a	Load	rs/a			
16.	Barrier Fre			Yes		□ No				3.8
17.		is Substand		☐ Yes		■ No				8. 3.3.1.19
18.	Resistan	ed Fire ce Rating RR)		Horizontal Assemblies (FRR (Hours)		Assemblies Listed Design No. (Hours) or Description (SG-2)			83 & 3.2.1.4	
	(1-1	111/	Floor	2	Hours	n/a				3.2.2.67
			Roof	0	Hours	n/a			1 1000	supF2)
				ine 1 RR of Suppor	1 Hours n/a of Supporting Listed Design No.				4	
				Members	ting	or E	sted Design Rescription (			
			Floor	2	Hours	n/a			1	
			Roof	0	Hours	n/a			4	
			Mezzan		Hours	n/a			-	
19.	Spatial Se	Area of	L.D.(m)	of Exterior W	als Permitted	Description 6/	COD (her.)	Comb. Constr.	Comb. 3	.2.3 None
	7181	EBF (m <sup>r</sup> )	Lastin)	OH or HIL	Maximum 9 of Opening	of Openings	rer (nts.)	Comp. Constr.	Constr. w/ Nonc. Cladding	Constr. w Nonc Cladding
	North	NOTE 1			100 %	NOTE 1		NO		YES
_	00				400.00	MOTE 4		110		VEC

INSITE

LANDSCAPE ARCHITECTS INC.

167 I Name BUI	Navy Str of Project LDING	± 6 -B	wille, O				55/ f.90	5.338.8868		
	ion (addri	_	BRAMPT	ON, ONTAI	RIO				The Archite exercised o	
em			_	Ontario Buil	dina Codo I	Data				Reference
1.	Project De One starsp Office			Origino Don	Change of I		☐ Additi	onstruction on ion/ Renovation		1.1
2.	Major Occ	upancy (s)	GROUP D	, BUSINESS & F	ERSONAL SER	VICES			3.1.2	1.1.(1)
3.	Building Are		Existing Existing		New 2,018 New 2,018			18.4 m2 18.4 m2		32
	Number of		Above Gra	ide ONE		Below Gra		nia		8 1.1.3.2
6		Streets/ Fin			(1) Streets	Described Cities		100		0 6 3.2.5
7.				up to 2 Storeys		Group: D		Division: •		2.67
8.	Sprinkler System			■ Entire Building □ In Lieu of Roof Rating □ Basement Only □ Not Required					3,2,2,20-,83 3,2,1,5 3,2,2,17	
9.	Standpipe	Required		☐ Yes		■ No			3.7	1.9.1
10.	Fire Alarm			☐ Yes			lote: F/A no	reg'd per	3.2.4	1.(24)
11.	Water Servi	ice/ Supply is	Adequate	Yes			.2.4.1		3.2.5.7	
12.	High Build	ing		☐ Yes		■ No			3.	2.6
13.		Construction Construction		Combustible Combustible		Noncombustible Both Noncombustible both			.2.54	
		(s) Area (m								(8)-(8).
15.	- Basemer - 1st Floo - 2nd Floo - 3rd Floo		on	m² /pers Occupancy Occupancy Occupancy Occupancy	n/a GROUP F2 n/a n/a	Load Load Load Load Load	of Building n/a T.B.D n/a TE n/a	NANT LAYOUT	3.1 BASED	1.17 ON
	Barrier Fre			Yes		□ No				1.8
		is Substano		☐ Yes		■ No				3.3.1.19
18.	Required Fire Resistance Rating (FRR)		Hor	tzontal Assem (FRR (Hours	blies )	or D	sted Design lescription (	No. 3G-2)		33 & 3,2,1,4
	(**	***/	Floor	2	Hours	nia				3.2.2.56 D, up to 2
			Roof	0	Hours	n/a			Sto	reys)
			Mezzani	ne 1 RR of Support	Hours	n/a	sted Design	N/o	1	
				Members	-	or E	sted Design lescription (			
			Floor	2	Hours	n/a			1	
			Roof	0 no 1	Hours	n/a n/a			1	
19.	Spotal Sa	naration • C		of Exterior W		199				2.3
	Wal	Area of EBF (m²)	L.D.(m)	L/H or H/L	Permitted Maximum % of Openings	Proposed % of Openings	FRR (hrs.)	Comb. Constr.	Comb. Constr. w/ Nonc. Cladding	Nonc. Constr. w/ Nonc. Cladding
	North	NOTE 2			100 %	NOTE 1		NO		YES
	South	NOTE 2			100 %	NOTE 1		NO.		YES
	East	NOTE 2			100 %	NOTE 1		NO.		YES
	West	NOTE 2			100.90	NOTE 1		NO		YES

A.M.CANDARAS

ASSOCIATES INC

UI	Navy Street, Oakville, On. L6J 226. L905.338.8855/ f.905.338.8868 each froilect: JILDING - C W ONE STOREY OFFICE BUILDING									
	ion (addre	_		ON, ONTAF		Data			coccust with	responsible respect to scivities.
	Project Dec One story Office			Ontario Buili	Change of Yes No		☐ Addition			1.1
	Major Occu	apancy (s)	GROUP D	, BUSINESS & P	ERSONAL SER	VICES	□ Altera	tion/Renovation	3.1.:	1.1.(1)
Ξ	Building Ar Gross Area	1	Existing Existing		New 2,018 New 2,018	.4 m2	Total 2,0	18.4 m2 18.4 m2	1,1,3,2	
_	Number of Number of Building Cl	Streets/ Fir			(1) Streets	Below Grade n/a  Group: D Division: -		3.2.1.1 & 1.1.3.2 3.2.2.10 & 3.2.5 3.2.2.67		
	0		☐ In Lieu of ☐ Basemer	Entire Building in Lieu of Roof Rating Basement Only Not Required				3.2	2083 :1.5 :2.17	
	Standpipe	Required		☐ Yes	■ No		3.2.9.1 3.2.4.1.(2d)			
	Fire Alarm Water Service/ Supply is Adequate		■ Yes		No Note: F/A not reg'd per  No 3.2.4.1		3.2.5.7			
	Permitted 0 Proposed 0			Combus		■ Nonco	mbustible mbustible	□ Both □ both		2.6 .2.64
4. 5.	Meczanine(s) Area (m²)  Cocupant Load based on  - Basement - 1st Floor - 2nd Floor - 2nd Floor - 3rd Floor - Cocupanoy - 3rd Floor - Cocupanoy - Cocup		n/s GROUP F2 n/s n/s	Design of Building Load n/s Load T.B.D			1,(3)-(8) 1,17 ON			
à.	Barrier Fre			■ Yes		Q No				18
7. B.	Resistance Rating (FRR) Floor Roof		izontal Assem (FRR (Hours)			sted Design Rescription (		3.2.2.20	3.3.1.19 3 & 3.2.1.4	
				2 0 ine 1	Hours Hours	n/a n/a n/a			See - 3.2.2.56 (Group D, up to 2 Storeys)	
	'		FRR of Supporting Members		Listed Design No. or Description (SG-2)					
	Floor Roof		0	Hours Hours	n/a n/a		1			
9	Mezzanine 1 Hours n/a Spatial Separation - Construction of Exterior Walls							23		
•	Wall	Area of EBF (m²)	L.D.(m)	L/H or H/L	Permitted Maximum % of Openings	of Openings		Comb. Constr.	Comb. Constr. w/ Nonc. Cladding	None. Constr. w None. Cladding
	North South	NOTE 2		•	100 %	NOTE 1	-	NO NO	- :	YES

JANICK ELECTRICAL LTD

CARTTERA



Glenn Piotrowski Architect



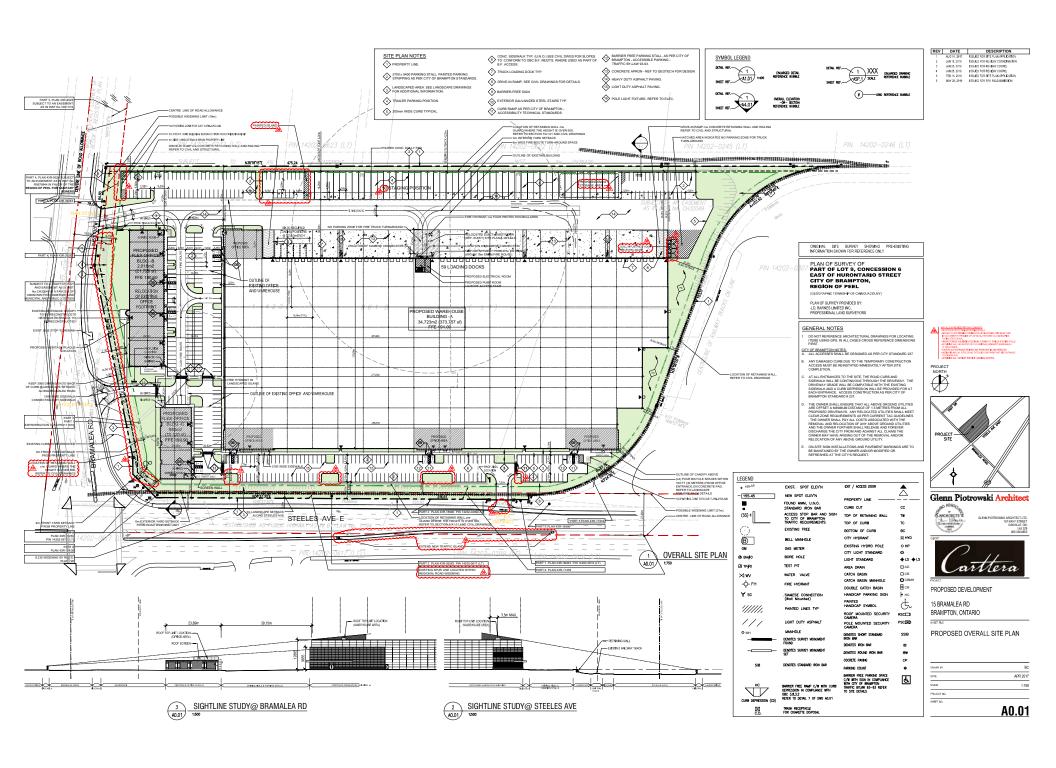
PROPOSED DEVELOPMENT

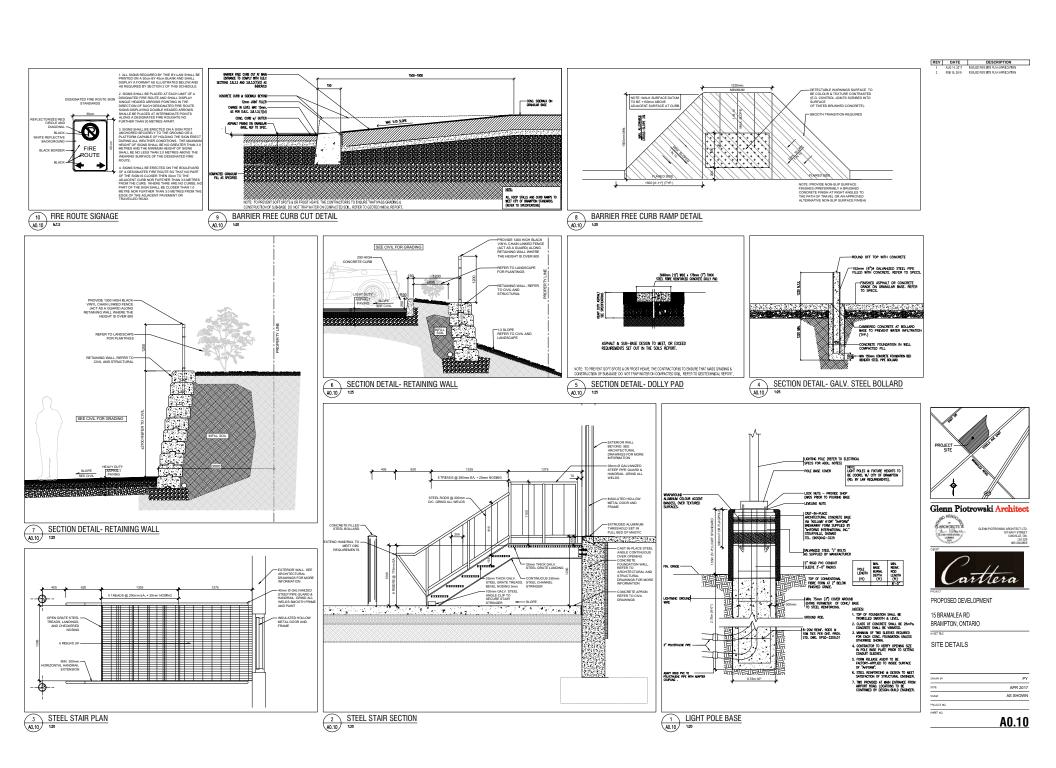
15 BRAMALEA RD BRAMPTON, ONTARIO

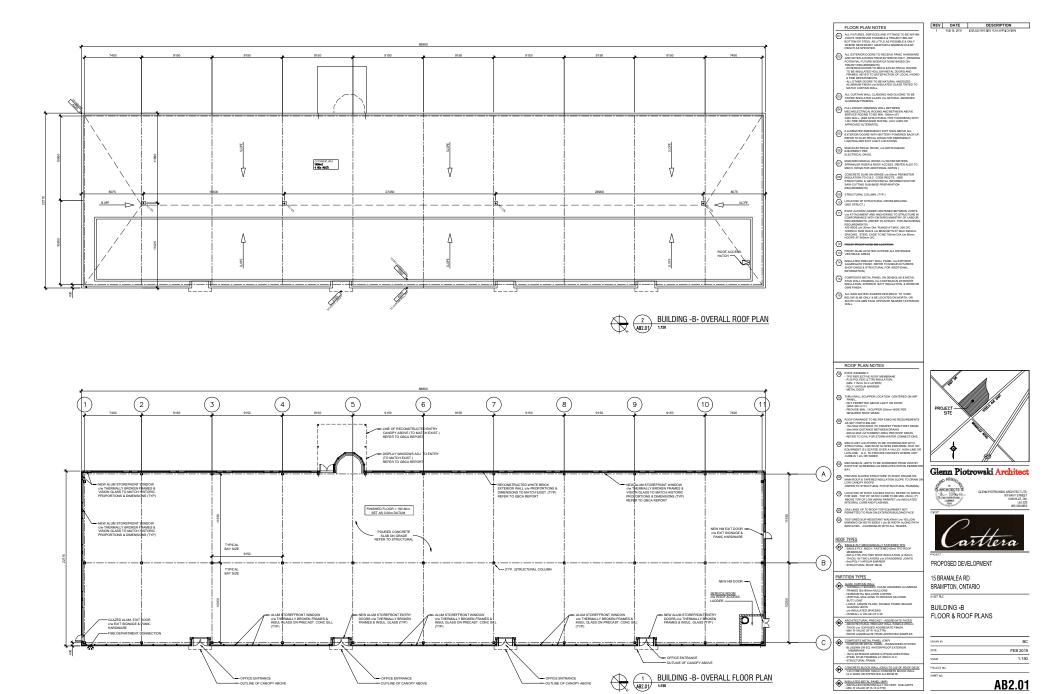
COVER SHEET, GENERAL NOTES AND OBC MATRIX

unin GY	PY/BC
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LE	AS SHOWN
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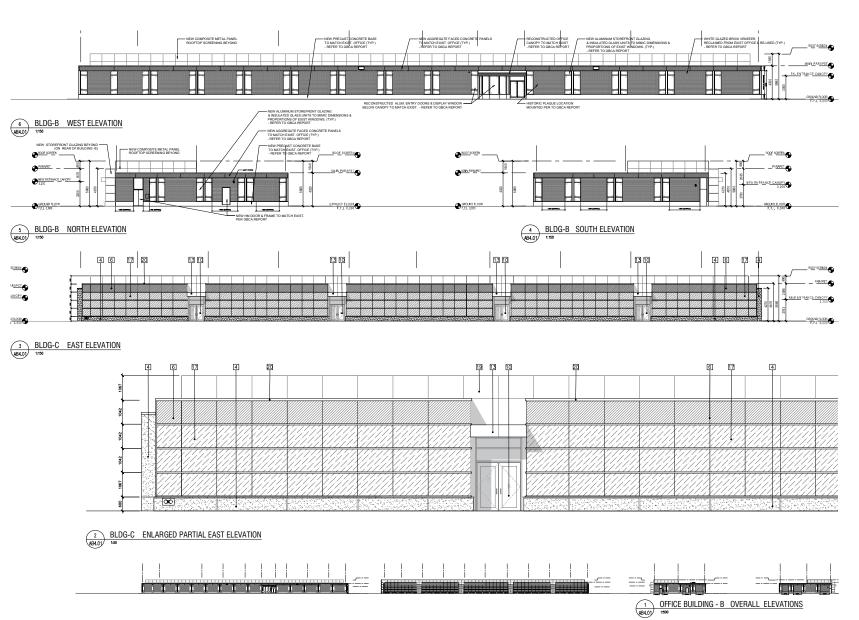






 REV
 DATE
 DESCRIPTION

 1
 FEB 16, 2019
 ISSUED FOR SITE PLAN APPLICATION



EXTERIOR INSULATED HOLLOW METAL MAN DOOR WITH THERMALLY BROKEN FRAME
 EXTERIOR ALLIMINUM SWING DOOR AND FRAME THERMALLY BROKEN, TINTED GLASS TO BE PPG GREEN TINT.

PREFINISHED ALPOLIC OR EQUAL COMPOSITE METAL PANEL, COLOR TO BE WHITE, 762X762 REVEAL SIZE

LED LIGHT FIXTURE LOCATION. (MOUNTING HEIGHT PER ELECT.)

PREFINISHED ALPOLIC OR EQUIAL METAL PANELS AT FRONT FACE OF ELEVATION AND CANOPY FINISH INCLUDING SOFFIT.

PREFINISHED METAL SIDING ROOF EQUIPMENT SCREENING (METALIC SILVER)

[5] GALVANIZED METAL GUARDRAIL ON DRIVE-IN RAMP.

[6] GALVANIZED METAL GUARD/LANDING AND STAIR TO GRADE.

LOW REFLECTANCE, DOUBLE GLAZED VISION PANEL, TINTED PPO GREEN IN THERMALLY BROKEN CURTAIN WALL SYSTEM OF PREFIX ANOLOGED ALLIMINIAN FRAMES.

1600 SSG BY KANNEER OR EQUAL

EXPOSED FOUNDATION WALL

19 COMPOSITE METAL PANEL

20 PREFINISHED METAL FLASHING

EXTERIOR MATERIAL LEGEND & NOTES

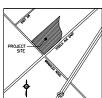
ARCHITECTURAL PREFINISHED INSULATED HORIZONTAL METAL WALL PANEL, COLOR TO BE BRIGHT WHITE

PREFINISHED VERTICAL "FIN" SECURED BETWEEN INSULATED METAL PANEL JOINTS (PREFIN. METAL "DARK GREY") Vertical precast concrete wall panel natural grey colour, (type-1)
 Prefinished concrete precast panel, color to be "Light dreen"

6 LOW REFLECTANCE, SPANDREL GLAZED, TINTED 'PPG GREEN TINT'
THERMALLY BROKEN CURTAIN WALL SYSTEM IN PRE-FINISHED
ANODIZED ALUMNUM FRAMES. 1600 SSG BY KAWNEER OR EQUAL

PREFINISHED INSULATED SECTIONAL OVERHEAD DOCK DOOR (WHITE) WITH GLAZED UNIT

B PREFINISHED INSULATED SECTIONAL OVERHEAD DRIVE-IN DOOR (WHITE) WITH GLAZED UNIT



Glenn Piotrowski Architect





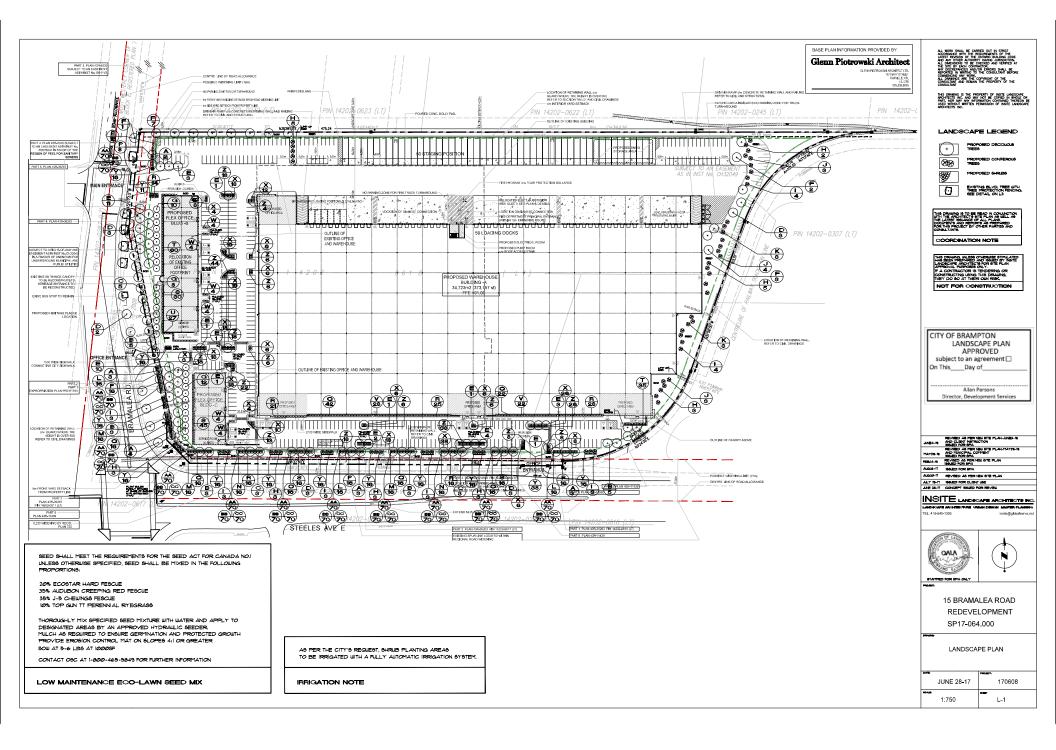
PROPOSED DEVELOPMENT

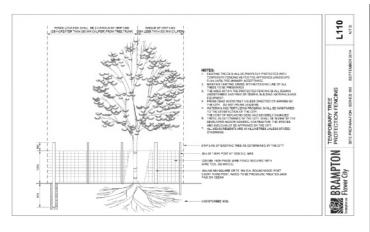
15 BRAMALEA RD BRAMPTON, ONTARIO

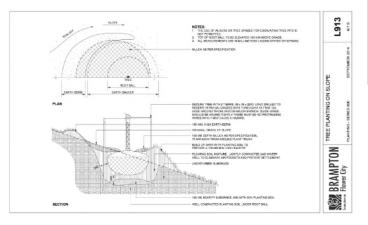
BUILDING -B OFFICE BUILDING ELEVATIONS

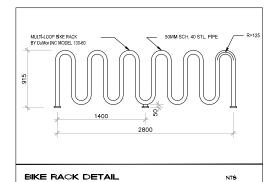
DRIVAN BY	BC
DATE	FEB 2019
SCALE	AS NOTED
PROJECT NO.	
SHEET NO.	

**AB4.01** 









#### GENERAL NOTES

- ALL LANDSCAPE WORKS UNLESS OTHERWISE NOTED SHALL BE EXECUTED BY ONGITE CREW AND FORE PERSON WITH MINIMUM THREE YEARS OR MORE RELATED EXPERIENCE.
- LANDSCAPE DRAWING ARE NOT BE SCALED.
- NO EXTRA WILL BE CONSIDERED FOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS UNLESS REPORTED IN WRITING TO COMMENCEMENT OF WORK.
- DO NOT LEAVE ANY EXCAVATED HOLES OPEN OVERNIGHT. MAKE GOOD ALL DAMAGE RESULTING FROM THE WORK AT NO
- KEEP AREA OUTSIDE CONSTRUCTION ZONE CLEAN AND USABLE BY OTHERS AT ALL TIMES.
- NO STOCKPILE IS ALLOWED ON SITE WITHOUT OWNER'S APPROVAL AND DIRECTION.
- F REQUESTED CONTRACTOR IS TO SUBMIT SAMPLES OF ALL PROPOSED MATERIALS IN THIS CONTRACT FOR APPROVAL BY CONSULTANT PRIOR TO COMMENCEMENT OF WORK.

  CONTRACTOR RESPONSIBLE FOR STAKE OUT AND VERIFY
- LOCATIONS FOR ALL UTILITIES PRIOR TO ANY CONSTRUCTION, AND REPORT ALL CONFLICTS TO CONSULTANT IN WRITING, CONTRACTOR TO OBTAIN WRITTEN INSTRUCTIONS PRIOR TO STARTING WORK.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECT'S SITE PLAN, ENGINEERING DRAWINGS, SOIL REPORTS AND ALL OTHER APPLICABLE DOCUMENTS.
- ALL SHRUBS AND GROUND COVER TO BE IN CONTINUOUS PLANTING BEDS. ALLPLANTING TO MEET MUNICIPALITY'S SPECIFICATIONS.
- DEUS, ALPLANTING TO THE THAT THAT IS STEUTICATIONS

  12. IF REQUESTED CONTRACTOR TO LAYOUT ALL LANDSCAPE
  ELEMENTS, AND COMFIRM LOCATIONS WITH THE CONSULTANT PRIOR
  TO COMMENCEMENT OF WORK.
- CONTRACTOR MUST ALIMAYS FOLLOW THE APPROVED ENGINEERING GRADING PLANS, REPORT ANY DISCREPANCIES TO CONSULTANTS AND SITE SUPERVISOR IMMEDIATELY.
- ALL PLANT MATERIAL TO BE NURSERY GROWN STOCK BY NURSERY KNOWN IN THE INDUSTRY, PROVIDE IN WRITING SOURCE OF PLANT MATERIAL TO CONSULTANT.
- TAILERAL TO CONSULTANT.

  CONTRACTOR TO CONFIRM THAT THE PLANT GUANTITIES SHOWN ON THE PLANT LIST CONFORM TO THE LANDSCAPE DRAWINGS, ANY DISCREPANCIES NOT REPORTED AT TIME OF TENDER, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL NOTES

NTS

- CONTRACTOR SHALL PROVIDE MARKED-UP REDLINE PLANS SHOUNG AS-BUILT CONDITIONS TO THE LANDSCAPE ARCHITECT PRIOR TO OBTAINING SUBSTANTIAL COMPLETION.
- CONTRACTOR TO NOTIFICE, NEW SOO AND NEW TOPSOIL AS PER SPECIFICATIONS AND GENERAL NOTES THROUGHOUT THE SITE AS DESIGNED, CONTRACTOR TO VERIFY WITH OWNER AT THE OF TENDER IF NEW TOPSOIL AND SOO SHALL EXTEND THROUGH THE MULICIPAL BOULEVARD TO THE REAR OF THE MUNICIPAL CURB.
- CONTRACTOR MUST ADVISE AND OBTAIN WRITTEN APPROVAL FROM THE CONSULTANT AND MINCIPALITY OF ANY PLANT MATERIAL SUBSTITUTIONS PRIOR TO COMMENCEMENT OF WORK
- CONTRACTOR WILL NOTIFY THE LANDSCAPE ARCHITECT WHEN WORK IS COMPLETED, WARRANTY PERIOD COMMENCES ONLY WHEN THE CERTIFICATE OF COMPLETION, SUBJECT TO DEFICIENCIES IS
  RECEIVED BY OWNER
- 20. CONTRACTOR TO VERIFY ON SITE ALL DIMENSIONS AND SATISFY THEMSELVES OF SITE CONDITIONS, ADVISE CONSULTANT
  IMMEDIATELY OF ANY CONCERN, PRIOR TO CONSTRUCTION.
- CONTRACTOR TO CONFIRM 199UED DRAWINGS ARE LATEST REVISED DRAWINGS PRIOR TO TENDER AND/OR PRIOR TO CONSTRUCTION.
- DRAWINGS PRIOR TO TENDER AND/OR PRIOR TO CONSTRUCTION.

  DRAWINGS AND PLANS ARE THE COPYRIGHT PROPERTY OF NOTE

  LANDSCAPE ARCHITECT INC. ANY UNAUTHORIZED USE IN ANY FORM

  IS PROHIBITED BY LAW INTRIFIER. ANY DISTRIBUTION OF DRAWINGS

  TO UNAUTHORIZED PERSONS, FIRM'S OR COMPANIES IS NOT

  PERMITTED UNITHOR INSITE LANDSCAPE ARCHITECT INC.

  PERMITSSION. ANY AND ALL VIOLATIONS ARE SUBJECT TO PROSECUTION IN A COURT OF LAW.

GENERAL NOTES - continued

INTRACTOR TO NYORM CONSULTANT PHEDIATELY IF ANY ERRORS OR DISCREPANCES ARE NOTED A DISCREPANCY COCAR BETWEEN HAAT LIST AND KEYS, THE GREATER TOTAL SHALL TAKE FRE NITAL OR DISCREPANCY COCAR BETWEEN HAD ALLEY AND TO ENTERING INTO AUGISTISM HIT LAUGHT.

	BOTANICAL NAME	COMMON NAME	OCINED.	CAL	HT./OPR.	PERMAPAGE	OTY.
		<u> </u>					
A	ACER × FREEMANII "AUTUMN BLAZE"	AUTUMN BLAZE MAPLE	BB4B	16711		UNIFORM SPECIMEN	15
В	ACER PLATINOIDES "PARKUAY BROAD"	PARKWAY MAPLE	8848	ъ		UNFORM SPECIMEN	20
C	ACER SACCHARUM "GREEN MOUNTAIN"	GREEN MOUNTAIN SUGAR MAPLE	8848	16711		UNIFORM SPECMEN	11
D	QUERCUS MACROCARPA	BUR OAK	BBAB	16711		UNIFORM BPECMEN	14
E	GLEDITSIA TRIACANTHOS SKYLINE	SKYLINE HONEY LOCUST	BB48	167111		UNPORM SPECMEN	40
F	CELTIS OCCIDENTALIS	COMMON HACKBERRY	8848	ъ		UNIFORM SPECMEN	6
G	SYRINGA RETICULATA IVORY SILK	IVORY SILK LILAC TREE	DD.485	46YM		UNIFORM SPECMEN	11
Н	PICEA GLAUCA	WHITE SPRUCE	BBAB		I,8M	UNFORM SPECMEN	27
ı	PICEA PUNGENS	COLORADO SPRUCE	8848		1,811	UNIFORM SPECIMEN	23
J	PNUS RESINOSA	RED PINE	8848		2.5M	UNPORT SPECIMEN	10
ĸ	PNUS SYLVESTRIS	SCOTS PINE	BBAB		2,581	UNIFORM SPECMEN	6
٦	RIBES ALPINUM	ALPINE CURRANT	POT		90CH	EVENLY SPACED	64
м	ROSA RUGOSA	RUGOSA ROSE	POT		46CM	EVENLY SPACED	45
7	PHYSOCARPUS OPULIFOLIUS	COMMON NINEBARK	POT		69CH	SPACED	32
0	CORNUS ALBA "ELEGANTISSIMA"	SILVER LEAF DOGWOOD	POT		60CH	EVENLY SPACED	32
P	6PIREA BUMALDA GOLDFLAME	GOLDFLAME SPIREA	POT		6 <b>6</b> CH	EVENLY SPACED	56
0	CARAGANA AURANTIACA	PYGMY PEASHRUB	РОТ		60CM	EVENLY SPACED	112
R	POTENTILLA FRUTICOSA "ANNETTE"	ANNETTE CINQUEFOIL	POT		escH	BYBNLY SPACED	132
8	POTENTILLA FRUTICOSA 'GOLDFINGER'	GOLDFINGER CINQUEFOIL	POT		90CH	UNFORM SPECMEN	112
Т	HTDRANGEA ARBORESCENS "ANNABELLE"	ANVABELLE HYDRANGEA	POT		<b>66</b> CH	UNPORT SPECMEN	95
υ	HYDRANGEA ARBORESCENS "BOBO"	BOBO HYDRANGEA	POT		66CH	EVENLY 6PACED	27
٧	SPIREA BUMALDA "ANTHONY WATERER"	ANTHONY WATERER SPIREA	POT		<b>600</b> 11	EVENLY 5P4CED	50
٧	CHASMANTHUM LATIFOLIUM	NORTHERN SEA OATS	POT		1 GAL	EVENLY 6PACED	24
x	CALAMAGROSTIS ACUTIFOLIA	REED FEATHER GRASS KARL FOERSTER	POT		104	BVBNLT SPACED	251
Y	HEMEROCALLIS MIX	VARIETY MIX OF DAYLILLIES	POT		1 GAL	UNIFORM BPECMEN	249
z	RUDBECKIA HIRTA	BLACK-EYED SUSAN	POT		1 GAL	EVENLY SPACED	261
9.6.	NARCISSUS BULBS "DUTCHMASTER"	DUTCHMASTER DAFFODIL	BLB		14-16	EVENLY SPACED	776
эb	NARCISSUS BULBS "CEYLON"	CEYLON DAFFODIL	DLD		14-16	EVENLY SPACED	776
cc	TULIP BULBS "RED PARADE"	RED PARADE TULIP BULB	DLD		14-16	EVENLY 8PACED	772

PLANT LIST

- The Contractor must notify the Open Space Development Section of the City of Brampion prior to commensement of any planting.
- The facations of all trees an street frantages must be approved by the Open Space Development
- The Coursion of an Other an invest principles. As about a department of the Coursion of the Co
- All landscape works will be gwaranteed for one year following inspection. Plant material, which is net in healthy armyling coulifiers one was after inspection, shall be replaced to the extinfaction of the nat in remany growing comman one year giver inspection, man an reported to the introduction of an City of Brimpton with an additional one-year maintenance guarantee period. Supply and plant of replacements in shirt accordance with plans and specifications. Soid that is damaged or missing on the public balleward is to be repaired/installed at the Danier's
- Any chief link fericing and components that are notated subsiguent to life Flam oparanal shall have a black place primari finals by provider cost application. First is application of finals, treat with Farber foundering and Christoffers a shared applied in individual or for the provincial by extensionable could used oven cured for a amount and even surface. All cham this faither data to brice skipt country.
- The Contractor is responsible for location of all underground services prior to excusorion of tree pits and shout bods.
- All T-bots to be removed at the conclusion of the warrantee pirital, whies otherwise specified by the Open Space Section of the City of Brampeon.

  Any transformer installed subsequent to site plan approved shall be servened with plant material to
- the satisfaction of the City of Brampton and meet of requirements of Hydro One Brampton planting
- Any demage due to construction is required to be reductored at the applicant's eigense. All demages will be completed accordingly to the satisfaction of the Oty of Bramaton'

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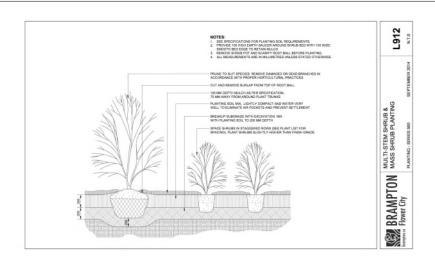
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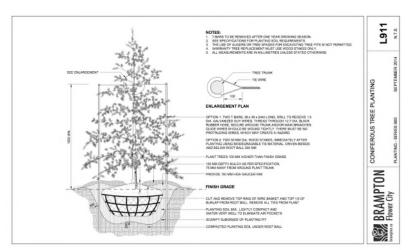
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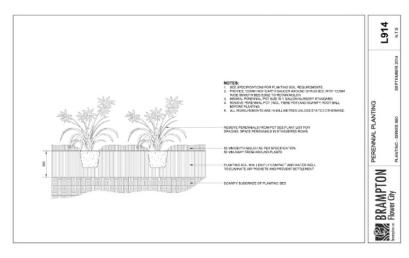
LANDSCAPE NOTES AND DETAILS

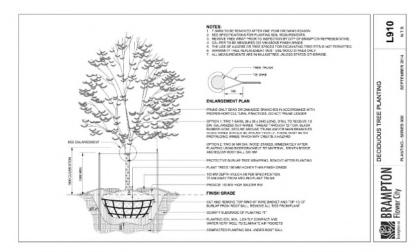
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BRAMPTON STANDARD NOTES









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TEL: 416-545-1308 Inside@gbbalerve.net





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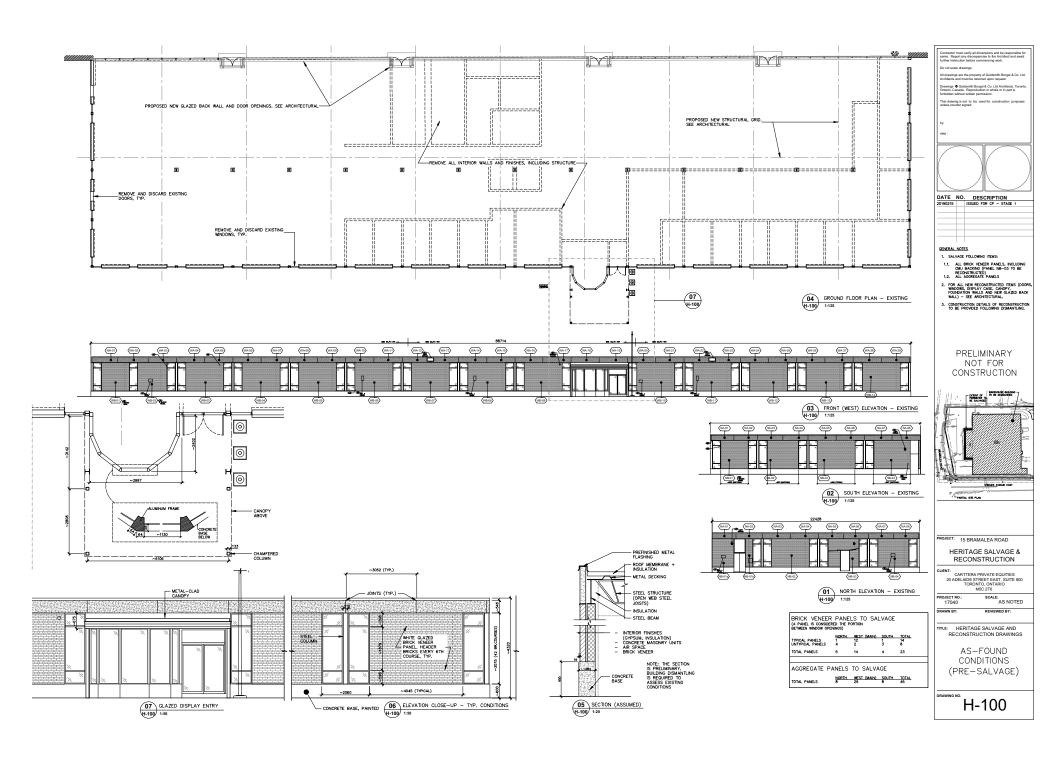
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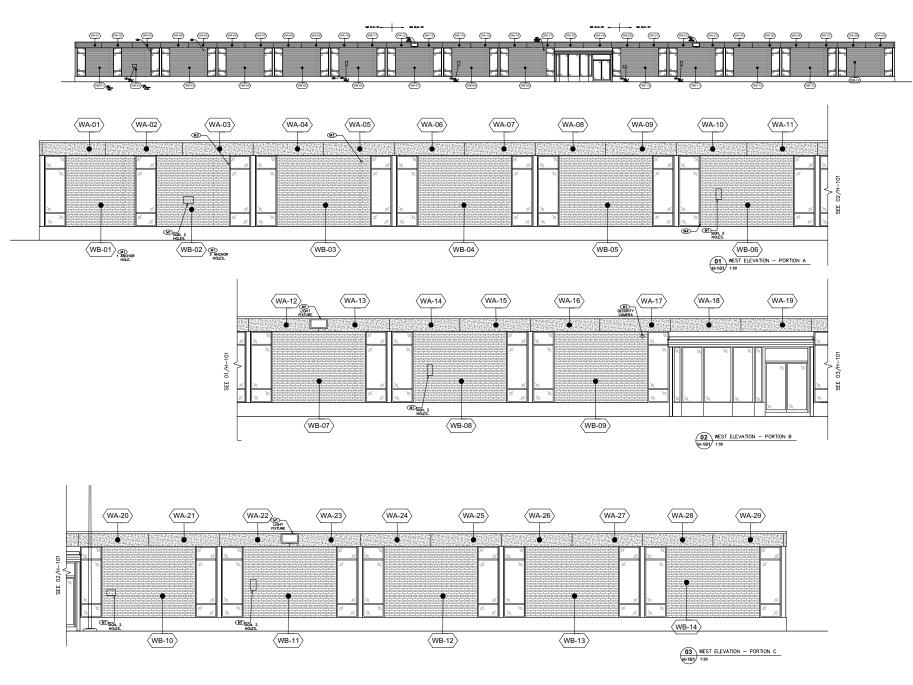
LANDSCAPE NOTES AND DETAILS

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# APPENDIX II

Existing Drawings by GBCA Architects





DATE NO. DESCRIPTION 20190215 ISSUED FOR CP - STAGE 1

GENERAL DISMANTLING AND SALVAGE NOTES MI. REMOVE MISCELLANEOUS ITEM(S) FROM MASONRY AS REQUIRED (ELECTRICAL WRING, BOX, LIGHT FIXTURES, CAMERAS, SIGNAGE, VENT UNITS AND/OR NETAL ANCHORS AND OTHERS). TYPICAL REPAIR HOLES AS FOLLOW

HOLES LESS THAN 1" (25 mm) LENGTH OR DIAMETER: USE COLOURED PLASTIC MORTAR TO MATCH EXISTING BRICK

CLEAN ALL SURFACES FOLLOWING REMOVAL

M3. CHIPPED GLAZED BRICKS: PARGE SPALLED AREA WITH VAPOUR PERMEABLE ELASTOMERIC SUCONE COATING TO MATCH EXISTING COLOUR PROVIDE SHOP DRAWING FOR REMEW

M5. CHIPPED/BROKEN AGGREGATE PANEL: DUTCHMAN REPAIR TO USE NEW AGGREGATES AND GROUT TO MATCH EXISTING, PROVIDE SHOP DRAWING FOR REVIEW.

#### GENERAL CONSERVATION NOTES BRICK PANELS & AGGREGATE PANELS

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2. CLEAN SOLED MOSTRIA CONTS (TYP.)

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5. AGRECATE SUFFACES

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PRELIMINARY NOT FOR CONSTRUCTION

PROJECT: 15 BRAMALEA ROAD

HERITAGE SALVAGE & RECONSTRUCTION

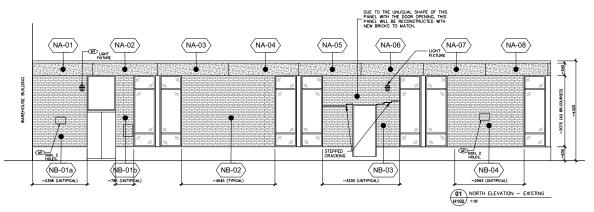
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CARTTERA PRIVATE EQUITIES
20 ADELAIDE STREET EAST, SUITE 800
TORONTO, ONTARIO
M5C 2T8

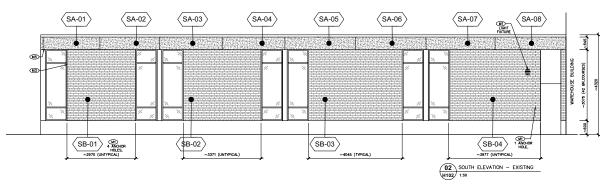
PROJECT NO.: 17040 SCALE: AS NOTED DRAWN BY:

TITLE: HERITAGE SALVAGE AND RECONSTRUCTION DRAWINGS

AS-FOUND CONDITIONS WEST ELEVATION (PRE-SALVAGE)

H-101





Contractor must verify all dimensions and be responsible for same. Report any discrepancies to the Architect and await further instruction before commencing work.

DATE NO. DESCRIPTION 20190215 ISSUED FOR CP - STAGE 1

GENERAL DISMANTLING AND SALVAGE NOTES M1. REMOVE MISCELLANEOUS ITEM(S) FROM MASONRY AS REQUIRED (ELECTRICAL WRING, BOX, LIGHT FIXTURES, CAMERAS, SIGNAGE, VENT UNITS AND/OR METAL ANCHORS AND OTHERS). TYPICAL REPAIR HOLES AS FOLLOW

HOLES LESS THAN 1" (25 mm) LENGTH OR DIAMETER: USE COLOURED PLASTIC MORTAR TO MATCH EXISTING BRICK

HOLES GREATER THAN 1" (25 mm) LENGTH OR DIAMETER: REPLACE BRICK AND KEY INTO EXISTING. CLEAN ALL SURFACES FOLLOWING REMOVAL

M3, CHIPPED GLAZED BRICKS: PARGE SPALLED AREA WITH VAPOUR PERMEABLE ELASTOMERIC SULCONE COATING TO MATCH EXISTING COLOUR, PROVIDE SHOP DRAWING FOR REVIEW

CHIPPED/BROKEN AGGREGATE PANEL: DUTCHMAN REPAIR TO USE NEW AGGREGATES AND GROUT TO MATCH EXISTING, PROVIDE SHOP DRAWING FOR REVIEW.

#### GENERAL CONSERVATION NOTES BRICK PANELS & AGGREGATE PANELS

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2. CLEAN SOLED MOCHAN JOINTS (TYP.)

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PRELIMINARY NOT FOR CONSTRUCTION

PROJECT: 15 BRAMALEA ROAD

HERITAGE SALVAGE & RECONSTRUCTION

CLIENT: JENT:
CARTTERA PRIVATE EQUITIES
20 ADELAIDE STREET EAST, SUITE 800
TORONTO, ONTARIO
M5C 2T6

PROJECT NO.: 17040 SCALE: AS NOTED

DRAWN BY: REVIEWED BY:

TITLE: HERITAGE SALVAGE AND RECONSTRUCTION DRAWINGS AS-FOUND CONDITIONS NORTH & SOUTH ELEVATIONS

(PRE-SALVAGE)

DRAWING NO. H-102

# APPENDIX III

Select Draft Specifications by GBCA Architects

# PART 1- GENERAL

# 1.1 General

- 1.1.1 This Section specifies general requirements and procedures for submission of shop drawings, product data, samples and mock- ups to Consultant for review.
  - .1 Additional specific requirements for submissions are specified in individual sections of Divisions 1 to 16.
  - .2 Provide submittals until approved by consultant. Be responsible for the cost of submittals that are not accepted and re-submissions due to non-compliance with Consultant requirements
- 1.1.2 Submit a list of submittals for review by Consultant as required in the respective Sections no more than 10 working days (two weeks) after Contract is awarded
- 1.1.3 Submit, as may be required, construction schedules, shop drawings, samples, records, certificates, requests, "as built", manuals, guarantees, lists and written queries in good time to avoid delay.
- 1.1.4 Provide sample installation of typical methods of constructions and assemblies as may be requested by the Owner or Consultant.

# 1.2 <u>Alternatives:</u>

- 1.2.1 Where the words "... or approved equal" appear, the Contractor may propose the use of similar products, materials, etc., to the Consultant and the Owner.
  - .1 Proposed alternatives must be approved in writing by the Consultant and the Owner before they may be used in the work.
- 1.2.2 Prior to the award of the Contract, the Consultant will consider requests for alternatives, providing that requests are submitted with Tender, describing such alternatives in full detail, type of material, equipment or method and reasons for deviating from the Tender.
  - .1 Submit any increase or decrease in price of any alternative.
- 1.2.3 In making a request for an alternative, ensure that:
  - .1 Proposed product and method has been investigated and determined to be equal or superior in all respects to that specified.
  - .2 The same guarantee is given for the alternative as for the product and method originally specified.
  - .3 Installation of the accepted alternative is coordinated into the Work, and such changes made as may be required for the Work to be completed in all respects.
  - .4 Do not substitute materials, equipment or methods into the Work unless such alternatives have been specifically approved for in writing by the Owner.
- 1.2.4 Alternatives will not be considered if:
  - .1 They are indicated or implied on Shop Drawings or project data without formal request submitted as specified above.

.2 Acceptance will require substantial revision of the Contract Documents.

# 1.3 Records and Schedules:

- 1.3.1 Arrange participation, on site and off site, with subcontractors and Suppliers as and when necessary for the purpose of updating and monitoring progress.
- 1.3.2 Keep a permanent record on site of work progress, commencement and completion dates, weather conditions, numbers of men engaged on site and important events such as visits to site by Owner, Consultant, Engineers, jurisdictional authorities, testing companies, etc.

## 1.4 **Samples:**

- 1.4.1 Submit samples with project name, proposed use and material description as may be requested.
- 1.4.2 Do not use materials for which samples are requested until written approval is obtained from the Consultant.

# 1.5 **Shop Drawings:**

- 1.5.1 Submit Shop Drawings with project name, proposed use and material description as may be required.
- 1.5.2 Do not initiate fabrication for which shop drawings are requested until written approval is obtained from the Consultant.

#### 1.6 **Mock-ups:**

- 1.6.1 Mock-ups: field-erected example of work complete with specified materials and workmanship.
- 1.6.2 Prepare as may be requested and as work sequence allows "in place" samples of the work which would show all materials, the completed assembly, as well as the sequence of the work.
- 1.6.3 Erect mock-ups at locations acceptable to Consultant.
  - .1 Notify the Consultant, requesting a review of the proposed mock-up.
  - .2 Reviewed and accepted mock-ups will become standards of workmanship and material against which installed work will be verified.
  - .3 Mock-ups may be incorporated as part of the finished work if acceptable to the Consultant.
- 1.6.4 Materials or assemblies, whether incorporated in the work or not, which do not match reviewed and accepted samples, shall be removed and replaced at no extra cost to the Owner.
- 1.6.5 Refer also to Section 01 00 00.

# 1.7 **List of Materials:**

1.7.1 Submit a complete list of each product together with the names, addresses and phone numbers of the manufacturer and the supplier, the product name, number

and colour (if applicable) and its end use in the construction to the Owner upon completion of construction.

# 1.8 **Affidavits**

- 1.8.1 Submit affidavits, which are required in other sections of the specification. Deliver affidavits to Architect with all charges pre-paid.
- 1.8.2 Submit affidavits in duplicate and signed and notarized by a responsible officer of the certifying company.
- 1.8.3 Materials or assemblies for which affidavits are submitted, whether incorporated in the work or not, which do not match reviewed and accepted samples, shall be removed and replaced at no extra cost to the Owner.

# 1.9 <u>Extended Warranties, Bonds and Guarantee</u>

- 1.9.1 Submit extended warranties as specified in each applicable section of this specification.
  - .1 Extended warranties shall commence on termination of the standard one year warranty in this contract as specified and shall be an extension of these same provisions.
  - .2 Complete and submit a Form of Guarantee as requested in the Contract.
- 1.9.2 Separate each warranty or bond or guarantee with index tab sheets keyed to Index.
  - .1 List subcontractor, supplier and manufacturer with name, address, and telephone number of responsible principal.
  - .2 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers and manufacturers within ten (10) days after completion of the applicable item of work.
- 1.9.3 Except for items put into use by Architect's permission, leave date of beginning of time of warranty until the date of substantial performance is determined.
  - .1 Retain warranties and bonds until time specified for submittal.
- 1.9.4 Verify that documents are in proper form, contain full information, and are notarized.

# 1.10 Cost Breakdown:

1.10.1 Submit a contract cost breakdown in accordance with Section 01 00 00.

# 1.11 Pricing of Changes to Work:

1.11.1 Submit with quotations for changes to work detailed estimate sheets showing contracted and revised quantities of labour, materials and equipment, and the related unit costs.

- 1.11.2 Payment for use of small tools, traveling, out-of-town accommodations and preparation of price change submittals will be considered a part of overhead.
- 1.11.3 Submit quotations for changes to work with full documentation simultaneously to Architect, Owner and consultants where applicable.
- 1.11.4 Do not proceed with any changes to the Work without prior approval in writing from the Owner of both the scope of work and the price.
  - .1 If the Contractor proceeds without written permission he does so at his own peril.

## 1.12 **Applications for Payment:**

- 1.12.1 Applications for Payment must be accompanied by:
  - .1 The Contractor's Statement of Payment.
  - .2 A progress draw showing a schedule of billing values of various trades and for various parts of the work and in a format acceptable to the Architect.
  - .3 A Statutory Declaration stating that all sub-contractors and their sub contractors and suppliers have been paid to date and that there are no construction liens outstanding or filed.
  - .4 Workers compensation Certificate.
  - .5 Send application for payment to the Architect
- 1.12.2 Co-ordinate progress draws with cost breakdown.
- 1.12.3 Include gross and net value of work completed during billing period.
- 1.12.4 Include running total of gross and net value of work completed by the end of the billing period.
- 1.12.5 Break down progress draw into segments which match the Specification sections. Agree divisions with Architect.

# 1.13 Publication of Notice of Substantial Performance:

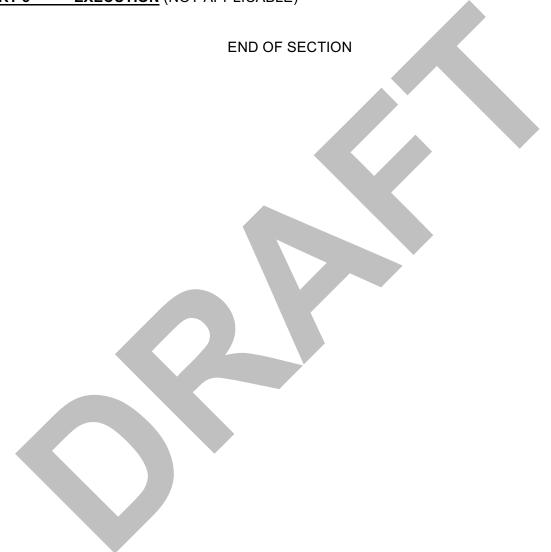
- 1.13.1 In accordance with the requirements of The Construction Lien Act, 1983, and amendments, be responsible for publication of a Notice of Substantial Performance in a format approved by the Architect and the Owner, in the <u>Daily Commercial News</u> and/or other periodicals deemed to meet the requirements of the Act.
- 1.13.2 The date of publication of this notice shall constitute the commencement of the period for registration of liens.
- 1.13.3 Provide to the Owner a copy of the issue of the publication in which the notice appeared as soon as it is available.
  - .1 Be responsible for paying the cost of publishing the notice.

#### 1.14 Project Record Documents

1.14.1 At regular intervals, provide copies of record documents to Architect for incorporation into master record drawings for site.

- 1.14.2 Identify drawings as "Project Record Copy".
  - .1 Maintain in new condition and make available for inspection on site by Architect.
- **PART 2- PRODUCTS** (NOT APPLICABLE)

**PART 3- EXECUTION** (NOT APPLICABLE)



# 1. GENERAL

#### 1.1 Work included

- 1.1.1 Comply with Division 1, General Requirements and documents referred to therein.
- 1.1.2 Provide labour, materials, products, equipment and services to complete the selective dismantling and removals work specified herein.

#### 1.2 Definitions

- 1.2.1 In this Section, specific words have specific meaning as follows:
  - .1 Demolition means the careful destruction of specific building components or areas by whatever means can be effected without risk to the components of the building which are to be preserved or risk to adjacent areas, or workers. Items so demolished are the responsibility of the demolition contractor.
  - .2 Dismantling means the careful disassembly of specific building components from their existing location, detailed documentation, packaging and relocation to a protected location off site in a condition which will permit restoration of the component and subsequent re-installation in its original or revised location.
  - .3 Items so dismantled shall be provided with safe storage containers custom made to ensure that they are protected from damage until such time as they are either repaired, modified or restored off site and/or re-installed in the building.
  - .4 The Contractor is to review the storage container types with the Consultant prior to commencing the dismantling work.
  - .5 Prior to dismantling, each fragment to be removed should be identified in a standardized labeling system. The same identifier should be included on a photographic and drawing record.

#### 1.3 Scope of Work

- 1.3.1 Generally, the intent of the Work of this Section is to systematically measure, photograph, number, verify restoration requirements, prepare temporary supports, cut out assemblies intact, prepare a carrier and support frame and move panel assemblies (brick veneer with backing and aggregate panel with backing) into prepared transfer cases, remove from site and transport securely in an offsite facility for conservation Prepare a detailed list of the elements to be included in the Preconstruction Condition Survey.
  - .1 Components are to be confirmed and documented with respect to condition and repairs required.
  - .2 Stored components must be fully accessible for restoration, re-assessment or inspection purposes.
- 1.3.2 Components identified for preservation which are immediately adjacent to the items to be demolished are to be carefully removed by Conservator/Contractor prior to any demolition work (by others). Carefully expose the edges of the

- subject panels to accommodate carriers and supports. Do not damage the subject panels.
- 1.3.3 Heritage Contractor is to oversee removal of demolition items to ensure the correct scope of work is carried out and no damage occurs to elements which are to remain.

#### 1.4 Related work

1.4.1 Coordinate with Demolition Contractor to ensure garbage chutes, weather barriers, scaffolding, site enclosure and public safety works are installed in accordance with Health and Safety regulations and without damage to elements which are to be restored.

# 1.5 Existing Conditions

- 1.5.1 Take over areas of the structure to be selectively dismantled as identified on the drawings and this Section of the Work based on the conditions prevailing at the time of examination prior to tendering.
- 1.5.2 Assess current wall assembly adherence to structural substrate and determine least obstructive method for dismantling of whole assembly that includes brick veneer and aggregate finishes.

#### 1.6 Protection

- 1.6.1 Specific protection of various components of the building and removed elements is noted in Part 3 of this Section.
- 1.6.2 In general, prevent movement, sudden settlement or damage to the components to be disassembled.
- 1.6.3 Provide bracing, and shoring as required to support the Work of this Section and correct situations that may render the components to be disassembled unstable or at risk of damage.
- 1.6.4 Make good damage and be liable for injury caused by dismantling.
- 1.6.5 If building components to be disassembled or adjacent areas appear to be endangered, cease operations and notify Consultant.
- 1.6.6 At end of each day's work, leave work in safe condition so that no part is in danger of toppling or falling.

# 1.7 Qualifications

- 1.7.1 Use only skilled workers for this work.
  - .1 Specialized Contractor:
  - .2 Use the same Contractor for all work related to the disassembly, stabilization, and safe storage of masonry panels identified on the drawings and in the Conservation Plan. Conservator to have a minimum of 5 years of field experience in the disassembly and relocation of masonry panels
  - .3 Ensure Contractor has good level of understanding of structural behaviour of exterior wall assemblies and methods of anchorage.

- .4 Employ the services of a Professional Structural Engineer registered in the Province of Ontario to design the carrier frame system for the removal, stabilization and storage of the masonry panels
- .5 Engineer shall produce shop drawings under seal for the carrier frame and movement procedures and shall supervise and review the fabrication and application of the carrier frame system.

#### 1.8 Submittals

- 1.8.1 Prepare shop drawings and submit in accordance with the General Conditions of the Contract as follows:
- 1.8.2 Prepare a shop drawing showing the method of dismantling of the panels from the existing structure.
- 1.8.3 Prepare a shop drawing showing the support system to demonstrate understanding of the specifications. This drawing shall be prepared under the seal of a Professional Structural Engineer.
- 1.8.4 Prepare a shop drawing showing the anchorage system (including new supportive frame of restored panels) to new structure and reconstructed building. This drawing shall be prepared under the seal of a Professional Structural Engineer.
- 1.8.5 Prepare a condition assessment and dismantling plan for the masonry panels including drawings, photographs and text. The dismantling plan should include a description of facing, consolidation, cutting, handling and packing procedures as well as a diagram indicating the locations of the cuts.

# 2. PRODUCTS

# 2.1 Framing Materials

#### 2.1.1 Lumber

- .1 Except as indicated or specified otherwise lumber shall be softwood, S4S, moisture content (MC) not greater than 19% at time of installation, in accordance with following standards:
  - .1 CSA 0141-1970.
  - .2 NLGA Standard Grading Rules for Canadian Lumber, latest edition.
- .2 Machine stress-rated (MSR) lumber is acceptable for all purposes unless otherwise noted.
- .3 Glued end-jointed (finger-joined) lumber products certified under NLGA Special Products Standard are acceptable.
- .4 Framing and board lumber: in accordance with Table 9.3.2.A of OBC 1990 except as indicated [or specified] otherwise.
  - .1 Framing for jacking frames and storage boxes: SPF species, NLGA #2 grade, 15% moisture content.

#### 2.1.2 Sheet Plywood

- 1 Panels for storage boxes and jacking frame shall be of type, grade and thickness as specified, in accordance with following standards:
  - .1 Poplar plywood (PP): to CSA 0153-1980.
  - .2 Except as specified otherwise panels shall be sized as required for

application.

# 2.2 Insulation material for pads

2.2.1 Rigid Insulation: expanded polystyrene, min. 25mm thickness

#### 2.3 Steel sections

- 2.3.1 Include all materials, products, accessories and supplementary parts necessary to complete assembly and installation of Work of this Section.
- 2.3.2 Incorporate only metals that are free from defects which impair strength or durability or which are visible. Install only new metals of best quality, and free from rust or waves and buckles and that are clean, straight and with sharply defined profiles.
  - .1 Steel sections, bars and plates: to CAN3-G40.21- M81, Grade 350W.
  - .2 Welding materials: to CSA W59-1984.
  - .3 Steel, hollow structural sections: hot-formed, seamless, to meet specified requirements of CSA Standard G40.21, Grade 350W, Class H.
  - .4 Bolts and anchor bolts: to ASTM A307-84a. Where exposed to view, to match metal anchors.

# 2.3.3 Welding

- .1 Fabricate work square, true, straight and accurate to required size, with joints closely fitted and properly secured.
- .2 Fabricate work with materials, component sizes and configurations, metal gauges, reinforcing, anchors and fasteners of adequate strength to withstand intended use and within allowable design factors imposed by jurisdictional authorities. Fabricate items from steel unless otherwise noted.
- .3 Ensure that Work will remain free of warping, buckling, opening of joints and seams, distortion and permanent deformation.

# 2.3.4 Steel Sections - Assembly

- .1 Accurately cut, machine and fit joints, corners, copes and mitres so that junctions between components fit together tightly and in true planes.
- .2 Weld all connections where possible, bolt where not possible and cut off bolts flush with nuts. Countersink bolt heads and provide method to prevent loosening of nuts. Ream holes drilled for fastenings.

#### 3. EXECUTION

# 3.1 Examination and detailed documentation

- 3.1.1 Prior to commencing work, examine site and all areas and items to be removed or dismantled.
- 3.1.2 Verify that conditions are similar to those prevailing at the time of tender and notify Consultant of any discrepancies.
- 3.1.3 Contractor to verify extent of disassembly work outlined on drawings. Review adjustments to the scope and methodology of repairs with Consultant on site as required and adjust catalogue record accordingly as directed.

3.1.4 Based on condition assessment and this specification, Contractor to develop a dismantling plan including photographs, drawings and text. Submit both condition assessment and dismantling plan to Consultant for review.

# 3.2 Heritage Protection

- 3.2.1 Protect all adjacent panels to be dismantled during the course of work for any individual panels.
- 3.2.2 Ensure that isolating material of lumber or plywood with additional padding as necessary is installed to prevent damage to the adjacent panels by temporary works.
- 3.2.3 Based on condition assessment and dismantling plan, protect the surface of the panels prior to dismantling. This may include facing and/or consolidation and/or other procedures. Submit surface protection plan to Consultant for review.

# 3.3 Temporary and Permanent Labeling of Panels

- 3.3.1 Confirm overall dimensions of panels to be removed and catalogue individual panel sizes and depths prior to design and fabrication of carrier frames.
- 3.3.2 Temporarily mark face of panels using pencil on removable tape which can be completely erased when required without damage or staining to masonry or pebblework.
- 3.3.3 When edges of panels have been exposed by cutting away adjacent panels, select an area that will be hidden after assembly and apply an isolating layer of acrylic varnish to the edge where the label will be written. Apply the identifying number using indelible ink.
- 3.3.4 Where bags or containers are used to hold detached elements, label the bags or containers in such a way that the contents can be located in relation to adjacent panels and can be reinstalled in the correct location. Detached elements are fractured areas that cannot safely be removed intact with the overall panel and which have been detached. They will be reattached during the conservation process at a later date.

#### 3.4 Preparation of Dismantling Equipment

- 3.4.1 Measure the dimensions of the panels and confirm with Consultant the final dimensions of the panels to be removed.
- 3.4.2 Create a protection panel to match the overall dimensions of the piece to be removed using wood framing elements.
- 3.4.3 Face of protection panel to be minimum 1/2" construction grade plywood supported by an external 2x6 frame with corner reinforcement.
- 3.4.4 Line the face of the panel unit with padding (expanded polystyrene)

## 3.5 Support frame

- 3.5.1 Design support frame with sufficient strength to fully support the jacking frame, the salvaged panel and itself. Submit shop drawings.
- 3.5.2 Frame shall, when installed, be fully rigid and allow the plaster panel and all frames to be lifted and stored on its side and transported as required.

3.5.3 Do not damage arris or edges of panels when installing support frame.

# 3.6 Storage container for transport

- 3.6.1 Fabricate and provide suitable protection in the form of a wooden transport container sized to fit the full assembly.
- 3.6.2 Submit shop drawing. Container should be capable of being manipulated by a fork lift with sides capable of removal to permit removal of encased panels in a manner permitting the exposure of the brick face or aggregates for conservation work.
- 3.6.3 Mark container "This side up" for storage orientation and with tracking number.
- 3.6.4 Remove containers to temporary storage area as soon as possible after they are secured and ready for transport.

# 3.7 Off-site storage

- 3.7.1 Relocate containers to a secure facility within 80 km of construction site.
- 3.7.2 Storage shall be heated interior space protected from the weather and risk of damage.
- 3.7.3 Layout storage so that each panel will have faces visible, and be accessible or removable without having to move adjacent panels.
- 3.7.4 Store components and turn over to conservation contractor when required. For the purposes of the tender assume 1 year of storage

**END OF SECTION** 

#### 1 GENERAL

#### 1.1 SECTION INCLUDES

- .1 Labour, Products, equipment and services necessary for masonry Work in accordance with the Contract Documents including, but not limited to;
  - .1 Concrete block wall.
  - .2 Brick veneer.
  - .3 Aggregate work
- .2 Comply with the Ontario Building Code, latest edition, and all applicable industry standards.

#### 1.2 SUBMITTALS

- .1 Submit shop drawings indicating wall sections and details, reinforcing and anchors, special detailing, patterning and locations of control joints.
- .2 Submit manufacturer's certificates stating that materials supplied are in accordance with this Specification.
- .3 Submit sample of brick replacement to match existing bricks

#### 1.3 QUALITY ASSURANCE

- .1 Mock-up:
  - .1 Construct one mock-up of brick veneer restoration, showing brick repair and mortar repairs in a location accepted by Consultant.
  - .2 Construct one mock-up of aggregate panel repair/ reconstruction to demonstrate matching aeasthetic with adjacent aggregate panels
  - .3 Demonstrate use of reinforcement, ties,
  - Once reinstated in reconstructed building, demonstrate use of through-wall flashing, weep holes, control joints, and workmanship.
  - .5 Mock-up may form part of Work if accepted by Consultant. Mock-ups which do not form part of Work are to be removed from Site during final cleanup, or when directed by Consultant.

# 2 PRODUCTS

#### 2.1 MASONRY UNITS

- .1 White glazed clay bricks: Speckled texture. To match existing clay brick:
- .2 Concrete block units: to match existing in dimensions and materials.
- .3 Aggregates: to match existing style

#### 2.2 ACCESSORIES

- .1 Reinforcement: CAN3-A370-M, CAN3 A371, and CSA G30.3, all components to be hot dip galvanized unless otherwise specified.
- .2 Loose steel lintels and lateral support angles: Supplied as part of Work of Others
- .3 Dampproof course and flashing: Reinforced SBS rubberized asphalt compound laminated to cross-laminated polyethylene film, 40 mils thick; Blueskin TWF by Bakor Inc. or approved alternative. Complete with primer and adhesive recommended by flashing manufacturer.
- .4 Compressible filler: 75 x 13 mm x continuous roll; Sof-Joint Seal by Emseal Ltd.
- .5 Mortar net: 250 mm high x thickness to suit cavity; Mortar Net by Mortar Net USA Ltd.
- .6 Weep hole vents: Moulded PVC grilles, insect proof.

#### 2.3 **MORTAR MATERIALS**

- .1 Loadbearing masonry: CSA A179, Type S, proportion method.
- .2 Interior non-loadbearing masonry: CSA A179, Type N, proportion method.
- .3 Exterior non-loadbearing masonry: CSA A179, Premixed 1-1-6 Type N, portland cement/lime, proportion method.
- .4 Cement: CAN/CSA A3000, normal Portland.
- .5 Hydrated lime: ASTM C207, Type S.
- .6 Masonry sand: CSA A179.
- .7 Water: Clean potable, free from deleterious elements and free from salts that can cause efflorescence.

#### 3 EXECUTION

# 3.1 MASONRY INSTALLATION

- .1 Construct masonry work as required by jurisdictional authorities.
- .2 Before commencing masonry work, verify required limitations for wall heights, wall thicknesses, openings, bond, anchorage, lateral support, and compressive strengths of masonry units and mortars.
- .3 Do not butter corner units, throw mortar droppings into joints, or excessively furrow bed joints. Do not shift or tap units after mortar has taken initial set. If adjustment is necessary after mortar has started to set, remove and replace with fresh mortar.
- .4 Do not use admixtures without Consultant's written acceptance.
- .5 Install masonry walls 25 mm clear of underside of steel building frames, roof or floor deck. Install masonry with a 19 mm space beneath shelf angles and install compressible filler.

- Cut masonry units with a wet saw to obtain straight, clean, even, unchipped edges. Cut units as required to fit adjoining work neatly or for flush mounted electrical outlets, grilles, pipes, conduit, leaving 3 mm maximum clearance. Use full-size units without cutting wherever possible.
- .7 Reinforce veneer walls with adjustable wall reinforcing at maximum 400 mm o.c. vertically and 600 mm o.c. horizontally. Install reinforcing in accordance with manufacturer's instructions. In veneer walls extend reinforcement from support wall, spanning cavity into exterior wythe. Place at maximum 75 mm o.c. each way around perimeter of openings, within 300 mm of openings.
- .8 Reinforce block walls with continuous wire reinforcement in every second block course. Supply and install prefabricated L and T sections. Cut, bend and lap reinforcing units as per manufacturer's printed directions for continuity at returns, offsets, pipe enclosures, and other special conditions. Bending of masonry reinforcement is not permitted.
- .9 Reinforce masonry walls with reinforcing steel as indicated on Drawings. Vertical reinforcing shall be fully grouted in masonry cores with grout.
- .10 At openings in block walls install extra reinforcement, so that first and second courses above and below openings are reinforced. Extend extra reinforcement 600 mm beyond opening in each direction.
- .11 Reinforce joint corners and intersections with strap anchors 400 mm o.c.
- .12 Do not place reinforcement across masonry wythes at control joints.
- .13 Install masonry with 10 mm thick joints unless indicated otherwise. Make vertical and horizontal joints equal and of uniform thickness.
- .14 Build control joints in masonry walls at intervals and in locations shown. Form joints for block walls using sash block units in accordance with details shown. Form joints for veneer walls by leaving head joints between stacked units void of mortar. Fill chase and joint with joint filler full height of control joints. Leave a depth of 13 mm for sealing unless otherwise shown.
- .15 If required, provide movement joints, similar to building control joints, installed between areas with different support conditions.
- .16 Do not tooth intersections of walls except as otherwise indicated.
- .17 Install weep hole vents in accordance with manufacturer's directions, in exterior wythe of masonry above dampproof courses and flashings and at tops of walls. Space weep hole vents maximum 600 mm o.c. horizontally. Prevent weep hole vents from becoming plugged with mortar or debris.
- 18 Coordinate installation of masonry with installation of air barrier and vapour retarder to ensure continuity of these systems.

#### 3.2 **REPAIR AND POINTING**

.1 Remove and replace masonry units which are loose, chipped, broken, cracked, marked, stained, discoloured, or otherwise damaged. Supply and install new units to match adjoining units and install in fresh mortar, and point to eliminate evidence of replacement.

- .2 During tooling of joints, enlarge any cracks, holes, or other defects, point and completely fill with mortar.
- .3 Point-up joints including corners, openings and adjacent Work for a neat, uniform appearance, properly prepared for application of sealant compounds.

#### 3.3 **CLEANING**

- .1 Obtain and follow unit masonry manufacturer's written instructions for cleaning of masonry.
- .2 Clean exposed, masonry surfaces, removing excess mortar as work progresses. Allow mortar droppings to partially dry then dry brush with a stiff fibre brush.
- .3 Cleaning glazed bricks:
  - .1 Hand clean with water using a damp sponge or towel applied in a circular motion. If articles are hard to remove, repeat the process.
  - .2 Do not clean glazed bricks with acid solution.
  - .3 Do not clean glazed bricks with pressure cleaning equipment
- .4 Cleaning aggregate surfaces
  - .1 See Cleaning glazed bricks above.
- .5 Clean surfaces of mortar droppings, stains and other blemishes resulting from work of this contract as work progresses. Do further cleaning after mortar has set and cured
- .6 Clean masonry surfaces after repairs have been completed and mortar has set.
- .7 Clean masonry surfaces of grout or mortar residue resulting from work performed without damage to masonry or joints.
- .8 Clear site of debris, surplus material and equipment, leaving work area in clean and safe condition.

**END OF SECTION**