

### UNIVERSITY OF TORONTO INNIS COLLEGE ADDITION & RENOVATION CONSTRUCTION MANAGEMENT PLAN FOR COMMUNITY ENGAGEMENT PLAN

PROJECT #: 231901 | MAY 17, 2023







# DRAFT CONSTRUCTION MANAGEMENT PLAN

### SCOPE OF WORK

The Innis College Addition and renovation project includes the following:

- Demolition of existing building located at the rear of the Victorian House
- A new addition to the West Wing, which will include:
  - Dedicated work/study/meeting/lounge spaces and an expanded food servery for the entire Innis College student population
  - Relocation of the Library
  - Area for future offices and classrooms to accommodate Innis College academic growth and student population
- The renovation and addition will provide approximately 2,236 m<sup>2</sup> of gross building area on the site

Urbacon understands the sensitivity of the project given the proximity to residential building in the community as well as the connection to the Victorian House and its associated Heritage designation.

# COMMUNICATION PROTOCOLS AND UPDATES

#### **PROCESSES & TECHNIQUES**

Urbacon believes organizations with effective communication management skills are more likely to stay within scope, meet quality standards, and achieve intended financial goals. Proper response to the who, what, when and how of information flow and risk escalation is defined by a well developed Communication Management Plan. Effective communication requires prior decision-making about who needs to receive information and in what context. Beginning with comprehensive stakeholder consultation, the Communication Management Plan will identify and analyze stakeholder communication requirements including format and frequency. Specific to the Innis College Project, Urbacon will create communication strategies with not only University of Toronto stakeholders, but also the surrounding community. This process will be recorded in a Communication Matrix assembled by all stakeholders including Owner,

Consultants and Urbacon. An Urbacon Single Point of Contact (SPOC) will be established at the outset to address critical or time sensitive issues.

Innis College Faculty will create a project specific website which can be shared and accessed by the University community and surrounding neighbourhood members. This website will provide a general overview of the project scope,, schedule, major milestones, renderings of new building, and mitigation plans to address risks related to site safety, dust control and noise.

#### **MONTHLY STATUS REPORT**

At the conclusion of every month a comprehensive Monthly Status Report will summarize project updates, changes and risk items. This will be distributed to University of Toronto and project team members. Innis College University of Toronto Faculty may then upload any major changes or revisions to the project plan to the projectwebsite. This Monthly Status Report may generally include:

- Executive summary
- Health, Safety and Environmental Issues
- Design status
- Schedule Update
- Quality Assurance and Quality Control
- Risk Management
- Commissioning, occupancy and completion
- Site photos

#### DOCUMENT CONTROL AND COMMUNICATION

All project documents are kept on PROCORE and are accessible to all project team members involved at various levels of security – drawings and specifications, schedules, RFIs, change events, directories, meeting minutes, progress photos, daily reports, testing and inspection reports, commissioning forms, and close-out documents are examples. All project documentation is located on PROCORE and can be updated and distributed in real time.

### SAFETY

The health and safety of all parties involved in the Project is Urbacon's primary objective. We achieve our goals with respect to health and safety by thoroughly evaluating the surrounding site and community, understanding the project requirements, and maintaining clear lines of communication and notification. Urbacon operates a COR® certified safety program to help ensure a safe and consistent approach to all projects. At Urbacon, the most important part of any work we perform is protecting the safety of University of Toronto's students, staff, delivery personnel, visitors and the surrounding neighbourhood – as well as our employees and subcontractors. Safety must never be compromised.

Urbacon will make every reasonable effort to prevent incidents and to provide safe working conditions. We will comply with, and in some cases, exceed government standards, safety laws and regulations. Urbacon is responsible and accountable to lead and implement the safety, health and risk management process. All employees must comply with safety, health, and risk management requirements.

A Joint Health and Safety Committee will be established including representatives from Urbacon, the consultant team, and subcontractors – and will meet as required. The success of our safety and loss prevention program requires the dedication, commitment, involvement, and participation of all personnel working together to achieve the common goal.

All workers on site will receive a comprehensive site orientation prior to starting any work. Urbacon will safeguard all impacted persons by operating a clearly defined worksite area with restricted access to the construction zone using fencing, signage, and a communication protocol. All access to the construction zone must be approved by the Site Superintendent.

Urbacon will maintain an information board adjacent to the site that will be visible to any visitors to allow for timely updates of construction progress, changes in access/ egress points, and communication of major activities, Additionally, Urbacon will issue a safety plan and any important updates to the Innis College University of Toronto Faculty and update the project website as required.

A site-specific Job Hazard Analysis (JHA) and Project Specific Safety Plan (PSSP) will be completed by the Urbacon Safety Officer, Site Superintendents, Supervisors, Trades, members from the Ownership group (optional) and the trades completing the specific tasks. After review by Urbacon senior staff, it will be communicated to all site personnel before proceeding with any task that could reasonably be predicted to produce a potentially hazardous condition.

#### **CRANE SAFETY MANAGEMENT**

The project will require the use of a self-erecting tower crane for (6 to 8) months. Urbacon will mitigate the risks associated with crane use by enforcing Subtrades to provide a method of procedure (MOP) document which will detail the location of crane, size and scale of crane, intended use of crane, crane reach area. Urbacon will also follow the necessary crane permit processes on a Municipal and Federal level. Proper maintenance and inspections of the crane will be done by crane supplier along with crane operator as per required inspection intervals determined by AHJ.

The project will also require use of small mobile cranes to hoist material and equipment once the self-erecting tower crane has been dismantled.

Urbacon will issue the notice to University of Toronto Innis College, which then will distribute to the community through the project website when the crane mobilization and demobilization is planned, along with any use of mobile cranes when required.

Traffic control measures and any required street occupation permits will be implemented and acquired during hoisting activities.

Site hoarding, secured gates and security monitoring will implemented to ensure pedestrian safety and avoidance of the crane area while in use or offline.

# ENVIRONMENTAL CONSIDERATIONS NOISE MITIGATION

Urbacon recognizes the challenges and impact that construction noise will have on the surrounding community as well as University operations. Urbacon proposes that all interior work expected to generate noise and having a negative impact on University operations should be completed after hours (subject to hours determined by University of Toronto). However, the City of Toronto noise bylaws only permits construction noise between 7am and 7pm Monday to Friday, and 9am to 7pm Saturday. No construction noise is permitted on Sundays or statutory holidays without special permitting.

Some noise mitigation strategies Urbacon will implement as required includes the following:

- All construction equipment shall be turned off when not in use
- All equipment used on site shall be maintained in proper operating condition

- Use of vehicle back up alarms shall be minimized wherever possible
- Use of pneumatic tools shall be limited wherever possible
- Stationary noise sources such as generators and or compressors shall be located as far from the university entrances and the residential surrounding areas as possible and shall be muffled for noise reduction
- All hoarding walls erected, separating construction areas from the existing facility, shall receive acoustic attenuation treatment in order to mitigate the sound traveling to the neighbourhood and throughout the University
- Subcontractors shall be required to submit Noise Mitigation Plans outlining expected dB levels and identifying alternate means of execution or substitution
- Monitoring devices can be utilized to track dB levels
- Isolation where activities are expected to exceed tolerable levels and cannot be performed outside of work hours, temporary means of isolation utilizing baffles and attenuators can be constructed.

### DUST MITIGATION

### Interior Dust Control Measures

- Entrance Points to Construction Areas
  - Urbacon will seek to minimize access points to construction areas as these are potential points of dust migration. All adjacencies between construction areas and the existing facility will be full sealed with plywood and polyethylene sheeting. Sheeting will be fully sealed at joints with sheeting tape. Access points between the construction site and the existing facility can be equipped with an air lock to prevent dust migration. Entrance points and air locks will be under negative pressure and be equipped with adhesive floor mats.
- Site Management & Communication
  - Urbacon's on-site manager will assign one (1) individual to monitor dust control measures daily. Emergency contact lists will be prepared for direct communication between Urbacon, University of Toronto facilities staff and the surrounding neighbourhood community.
- Dust Mitigations Plans by Subcontractors
  - All demolition activities and Designated Substances Abatement activities will require that subcontractors provide a site-specific Dust Mitigation Plan and Methods of Procedure for all demolition, removal, disposal, cleaning, and testing for clearances. All Methods of Procedure shall be submitted to Urbacon, Consultants, and the University for review.
- Positive Pressurization
  - Sensitive areas should be placed into a state of positive pressure if possible, meaning more air is

supplied to the room than is removed from it. This serves to protect dust migration to the room when access points are open as air is rushing out rather than in.

- Negative Pressurization
  - Construction Areas will be placed into a state of negative pressurization when possible. Negative Air Units draw air in from the construction site and expel to the exterior through filters which capture dust for proper disposal. The work area has a lower pressure than the adjacent "sensitive area" causing dust particles to rush into the construction area rather than out.
- Monitoring Devices
  - Monitoring devices can track air and dust pressure levels and signal notification if pressure is not maintained. Air Quality Monitoring Stations can be utilized to monitor indoor air quality.
- Housekeeping
  - Daily housekeeping is essential to limiting dust and will be managed by Urbacon.

### **Exterior Dust Control Measures**

- Dedicated Construction Site Entrance and Exit for Construction Activities
  - A single entry point from St. George Street will be used to control vehicular traffic and a single exit point onto BP Nichol Lane. Both entrance and exits will have stone mud mats to reduce any migrating soils onto surrounding roads.
- Water
  - Water/mist spray will be used when appropriate. It is the most effective dust mitigation tool and helps to control any form of wind erosion.
- Sweeping Equipment
  - Street sweepers will be utilized on a regular basis during shoring, excavation, site servicing and landscape works. Frequency will be increased after rain events as required. Daily records shall be kept for all on site and off-site street sweeping.
- ESC Measures
  - ESC measures will be in place to reduce migration of dust onto neighbouring properties and public roads. Such measures are filter cloth on site fencing, mud mats at each vehicular entrance and exit, sediment control devices will be placed at surrounding catch basins on the roadway and internal stone driveway to reduce soils from migrating to surrounding roads by construction vehicles and equipment.
- Site Management
  - Urbacon's on-site manager will assign an individual to monitor dust mitigation measures daily. Emergency contact lists will be prepared for direct communication between Urbacon and University of Toronto facilities staff.

### **TRAFFIC CONSIDERATIONS**

This project is bordered by St George Street to the East, Sussex Ave to the South, and BP Nichol Lane to the West. Urbacon recognizes there is a significant pedestrian and vehicular traffic flow on St. George Street and residential neighbourhoods in close proximity. Our plan is to minimize and avoid where possible, interaction of construction logistics with the traffic flow on St George Street, BP Nichol Lane and Sussex Ave. To achieve this, we are installing (2) construction entry gates one at BP Nichol Lane and one at St George St to create a "drive through" for entry and exit from site. Additionally, Urbacon will deter any stopped or parked traffic along BP Nichol Lane to ensure the flow of traffic and access to parking is generally available. This will minimize the need for vehicles to reverse out of the project site and mitigate impact to traffic and pedestrian flow. If major deliveries are not able to be managed through the proposed "drive-thru" and require entering and exit from St George Street, deliveries would be assisted by flag men equipped with stop signs and high visibility vests to direct and manage traffic flow and public safety. These deliveries would be scheduled outside of major rush hour periods but within the municipal noise restriction limits. In rush hour periods, or if traffic flow cannot be managed with flag men, Urbacon would propose to engage Pay Duty Police Officers to manage public safety.

Due to the proximity of the Innis College addition to BP Nichol Lane and the surrounding residential neighbourhood, overhead protection/covered walkways/ driveways will be constructed as required on BP Nichol Lane. This will be reviewed on site with the Consultants, University of Toronto and the Subtrades once engaged. Proper housekeeping, maintenance, and clear lines of communication are key to ensuring positive interaction in the community. Our commitment to cleaning and maintenance extends beyond the boundaries of our site. The appearance of our street scape including architectural hoardings, temporary protections, roadways, and sidewalks are inspected daily for cleaning and maintenance requirements.

Any changes to access and logistics will be communicated through the identified communication protocols through the University of Toronto to the surrounding neighbourhood and University.

Please see attached Urbacon Site Logistics Plan showing the entry and exit points, staging of materials and equipment for reference.

# CONSTRUCTION MILESTONES & SCHEDULE

A summary project schedule has been provided within this Construction Management Plan outlining project key milestone dates and activities as well as construction phasing for activities – see attached document for details. All work is scheduled on a standard (5) day work week from Monday to Friday based on (8) hours shifts. There is no weekend work or no work on standard holidays at this time.

The project is planned to begin June 26, 2023 and complete by February 17, 2026. A phasing plan has also been included outlining areas being affected by construction activities as well as timelines of major activities on a Site Plan.

If there are any changes to the Schedule or major construction milestones, Urbacon will communicate this to University of Toronto and ensure the memo is included on the project website.

# CONSTRUCTION SITE LOGISTICS & PHASING PLAN

In reference to the attached Urbacon Phasing & Site Logistics Document, please find enclosed Site Logistics plans along with detail description for all construction activities that will occur such as demolition, shoring, excavation, below and above grade concrete forming, steel erection for building structure, hollow core slabs for floors, exterior cladding and window installation, interior finishing, roof top mechanical equipment installation, site service installation (water, sanitary, storm, electrical duct banks) and landscaping.



# URBACON // Site Logistics Plan Construction Phasing

		2023					2024											2025									
Phase	Description	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	
1	Demo + Site Prep																										
2A	Structural Framing																										
2B	Envelope																										
ЗA	Servicing (City)																										
3B	Servicing (UofT)																										
3C	Servicing (Bldg)																										
4	Interior + Systems																										
5A	Landscape North																										
5B	Landscape South									•																	· · · · · · · · · · · ·

# URBACON // Site Logistics Plan: Site Orientation Access & Egress

- Gate "A" is on St. George Street and Gate "B" is situated on bpNichol Lane.
- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue and east to St. George St.
- Construction Personnel will enter through Gate "A" and Gate "B" only.
- Traffic Control Personnel will be in place when required.
- bpNichol Lane access will be restricted to 13'-0" wide for the majority of the project.
- While access to the rest of the Innis College building will be maintained through construction, the Victorian house-form will be closed to public access.
- Mid-block Pedestrian Access to be maintained for majority of the project.





### URBACON // Site Logistics Plan: Site Orientation Construction Zone Enclosure

- 6'-0" tall construction fence with filter cloth will be situated as shown on the following series of diagrams for each phase of work to ensure separation between the construction zone and the public right of way.
- Along bpNichol Lane, the construction fence with filter cloth will be situated 6'-0" to separate the construction zone from the vehicles using the Lane.
- Gate "A" will be a 6'-0" high sliding gate.
- Gate "B" will be a 6'-0" high inward swinging gate.





# URBACON // Site Logistics Plan: Phase 1

Tree Removal, Demolition, Shoring, Excavation & Foundation Works

August 2023–January 2024 (5 months)

- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue.
- Sequence of events:
  - Secure the site and construct construction zone enclosure
  - Build tree protection and remove the requisite trees
  - Demolition of 1970s addition to the north of Victorian houseform
  - Shoring, excavation and foundation works for the addition
- Dust & Noise Mitigation and Vibration Monitoring protocols will be in effect.





# URBACON // Site Logistics Plan: Phase 2A

Above Grade Forming & Structural (Hollow Core + Steel Structure)

CONSTRUCTION

CONSTRUCTION

CONSTRUCTION

CONSTRUCTION

WASHROOM FACILITIES

PARKING PROHIBITED

MATERIAL STORAGE

SITE TRAILER

WASTE BIN

FIRST AID

STATION

AREA

**i** 

January 2024–June 2024 (6 months)

- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue.
- Sequence of events:

CONSTRUCTION

CONSTRUCTION

& EGRESS

MUD MAT &

ZONE (TPZ)

PERSONNEL ACCESS

PEDESTRIAN ACCESS

6' HIGH FAST FENCE

STONE DRIVEWAY

TREE PROTECTION

W/ SEDIMENT FILTER CLOTH

VEHICLE ACCESS

- Self-erecting tower crane will be in place and picking up loads from the assigned loading area within the Innis College Courtyard.
- No loads will be hoisted over the existing Innis College or neighbouring buildings



### URBACON // Site Logistics Plan: Phase 2B Exterior Cladding & Roofing

May 2024-March 2025 (10 months)

- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue.
- Similar conditions to Phase 1





# **URBACON // Site Logistics Plan: Phase 3A**

Site Servicing from Mains to Property Line (By City Water Sub-Contractor)

May 2024-June 2024 (2 months)

- Construction Vehicles will enter the site and exist through Gate "B" via bpNichol Lane and down to Sussex Avenue.
- Activity will be scheduled based on Toronto Water's Subcontractor availability.
- Closures to be in sequence, not simultaenous.
- Sidewalk and road closures will be required along the west lane of St. George Street and Sussex Avenue (both ways) for this duration.
- Gate "A" will be closed during this construction activity.
- Only sub-phase where construction vehicles will be travelling on Sussex Ave. west of bpNichol Lane.





# **URBACON // Site Logistics Plan: Phase 3B**

Site Servicing in the Laneway and Along Sussex Ave.

June 2024-July 2024 (2 months)

- Construction Vehicles will enter and exit the site through Gate "A" at St. George Street.
- Closure of south portion of bpNichol Lane for the duration of this scope, thus limiting access to the parking spaces noted on the diagram. Access to the rear of the properties along the Lane will be maintained from the north.
- Closure of sidewalk and road for a portion of Sussex Avenue at bpNichol Lane for the duration of this scope of work.
- Gate "B" will be closed during this construction activity.





### **URBACON // Site Logistics Plan: Phase 3C** Site Servicing from the Property Line to the Building

CONSTRUCTION

CONSTRUCTION

CONSTRUCTION

CONSTRUCTION

PARKING PROHIBITED

MATERIAL STORAGE

SITE TRAILER

WASTE BIN

FIRST AID

STATION

AREA

**i** 

July 2024–August 2024 (2 months)

- Construction Vehicles will enter the site ٠ and exist through Gate "B" via bpNichol Lane and down to Sussex Avenue.
- Installation of the below-grade Storm-٠ water Retention tank
- Sidewalk and road closures will be ٠ removed.
- Gate "A" will be continue to be closed ٠ during this construction activity to allow for the below grade work at the northeast corner of the site.

CONSTRUCTION

CONSTRUCTION

& EGRESS

MUD MAT &

ZONE (TPZ)

PERSONNEL ACCESS

PEDESTRIAN ACCESS

W/ SEDIMENT FILTER CLOTH

6' HIGH FAST FENCE

STONE DRIVEWAY

TREE PROTECTION

VEHICLE ACCESS



# URBACON // Site Logistics Plan: Phase 4

Interior Finishes, Interior Electrical, Mechanical and Systems Commissioning

May 2024-Aug 2025 (15 months)

- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue.
- Similar conditions to Phase 1





# URBACON // Site Logistics Plan: Phase 5A

Landscaping North (St. George, Courtyard, Mid-Block Tie-in)

April 2025-May 2025 (2 months)

- Construction Vehicles will enter the site and exit through Gate "B" via bpNichol Lane and down to Sussex Avenue.
- Sidewalk and potentially road closures will be required along St. George Street.
  Pedestrian traffic will be diverted into parking lane along St. George Street during this construction activity.
- Pedestrian access will not be available along mid-block connection between St. George Street and bpNichol Lane.
- Gate "A" will only be used by the Landscape Subcontractor during this construction activity.
- Exact enclosures and diversion of pedestrian and vehicular traffic to be determined by CoT traffic zone coordinator.





### URBACON // Site Logistics Plan: Phase 5B Landscaping South (Along Sussex Ave.)

May 2025-June 2025 (2 months)

- Construction Vehicles will enter the site and exist through Gate "B" via bpNichol Lane and down to Sussex Avenue.
- Sidewalk and road access to be reinstated along St. George.
- Pedestrian access reinstated along mid-block connection between St.
  George Street and bpNichol Lane.
- Potential sidewalk and road closures may be required along Sussex Avenue.
- Exact enclosures and diversion of pedestrian and vehicular traffic to be determined by CoT traffic zone coordinator.





# URBACON // Site Logistics Plan: Phase 4

Interior Finishes, Interior Electrical, Mechanical and Systems Commissioning

May 2024-Aug 2025 (15 months)

- Construction Vehicles will enter the site through Gate "A" and exit the site through Gate "B" onto bpNichol Lane and down to Sussex Avenue.
- Similar conditions to Phase 1



