

2.3.2 Can you provide a summary of the project requirement and methodology/ approach for project delivery?

The execution of We will execute the [REDACTED] project will be done in a safe and orderly manner and comply with all rules, bylaws, regulations, and policies of the local Authority Having Jurisdiction (AHJ), [REDACTED] Housing Corporation [REDACTED].

With an We have the in-depth knowledge and experience working with Affordable Housing (AH) and previous AH projects we can recommend the right approach for the project delivery.

Introduction

This project proposal is for the construction of a new 6-storey wood frame AH rental building with one level of underground parkade, amenities, and childcare. Existing buildings would be demolished by others prior to before starting on site with the exception of the South foundation wall.

Below-grade construction Construction of below-grade activities work includes civil tie-ins, excavation and shoring systems, foundations, and formwork activities at the Parkade Level, below-grade waterproofing, service installs below the slab-on-grade for mechanical equipment, electrical rough-ins, and provisions for a pad mount transformer (PMT), communications kiosk ([REDACTED]), parkade ventilation, fire suppression, and mechanical service tie-ins.

Construction of above-grade Above-grade structure, envelope, and exterior works activities construction includes completing the wood frame structure, masonry elevator core, building envelope, cladding, roofing, constructing the mechanical penthouse and elevator overrun, landscaping, hardscaping, irrigation systems, exterior lighting, balcony & exterior railings, and installation of vinyl windows and balcony swing doors.

The interior Interior construction activities include mechanical and electrical rough-ins, a fire suppression system and fire and alarm systems, floor topping, installation and commissioning of a double bank elevator from the parkade to L6, insulation, firestopping and smoke seal, drywall finishing, paint finishes, mechanical and electrical finishes, millwork, trims and casings, doors and hardware, washroom accessories, flooring, tilework, and appliances.

Commissioning activities include for mechanical commissioning, elevator commissioning, fire alarm commissioning and verification inspection, life safety systems testing, permanent power energization, and air balancing.

Project closeout activities include Closeout of the project includes satisfying AHJ occupancy requirements required from the AHJ for the final occupancy permit, completing deficiencies, are completed, and delivering final closeout documents are provided to the owner.

We will secure long lead items and key trades during During pre-construction, long lead items and key trades will be secured. We will focus on submittals for all long lead items to Prioritizing submittals for long lead items after key trades are procured will be essential to ensure construction timelines are maintained.

Key trades will need to be procured and contracted for the following work packages; include excavation and shoring, civil tie-ins, framing, formworks, mechanical, electrical and below-grade waterproofing.

Key procurement items and their submittals include that need to be prioritized include for the double bank elevator (to ensure adequate pit design and sizing), concrete mix design approved for formwork construction, below-grade mechanical sump submittals reviewed, below-grade waterproofing submittal, dewatering and water treatment, hoisting, electrical equipment, and mechanical equipment.

Project construction will include the following main elements and activities:

- Excavation and shoring
- Foundation and parkade structure
- Civil tie-ins
- Framing
- Envelope
- Exterior improvements
- Interior finish works
- Elevator installation
- Energization
- Commissioning.

We will perform all AHJ project work associated with this project will be performed according to the attached time schedule. The sequence is based on the proposed 18-month schedule.

Construction Procedures

1.0 Pre-Construction

We can provide BIM VDC services for clash detection at the building corridor to ensure adequate ceiling height by planning for service rough-ins through the corridors. As well further, we can provide BIM VDC services for clash detection at the parkade to ensure we meet the minimum required height.

2.0 Procurement

The last (3) years has brought created drastic supply challenges. While [REDACTED] cannot improve the supply chain, we can will do our part to make things as smooth as possible ensure construction proceeds as smoothly during construction as possible. This includes Our efforts include identifying items with long lead times and, expediting, shop drawing approvals, and ensuring that shop drawings are submitted to the architect in a timely manner. This We start this process starts at the time of tender so that [REDACTED] we are ready to act immediately upon award in the best interest of [REDACTED] by ensuring project delivery is on time. We will actively be managing the shop drawing process to get equipment and materials ordered upon notice of award. Select key materials and equipment may need to be ordered immediately upon the project award to meet the project schedule.

3.0 Schedule and Sequencing

The project schedule call for a timeline of 18 months from start to finish is 18 months long. Site activities will start with We commence the project by setting up the site by establishing with fencing, ingress and egress, and a site laydown area. We establish traffic control points will be instituted and install site safety signage, in will be put in place. Within a few weeks, of mobilizing to site temporary gas, electrical, and water servicing services will be put in place installed. A dewatering plant follows. This will follow with a dewatering plant setup.

Excavation will start from west to east as soon as the necessary we complete the site setup. is completed working from west to east. As the excavation advances halfway across the building footprint, the formwork contractor will mobilize, and setup, re-establishing gridline (GL) offsets and working with the excavation contractor to complete detailed excavation for pads and footings from west to east. During the foundation activities As the foundation work progresses, waterproofing will proceed at the shoring.

Formwork will advance from pads and footings to exterior walls, followed by interior walls and Slab-on-Grade (SOG). Prior to SOG We will complete the elevator pit and Electrical and Mechanical installations, including tanking as required, before completing the SOG. will be completed and tanked as required as well as the elevator pit. The next step will be the suspended slab will follow the SOG construction constructed from west to east, allowing for a staggered start of the framing at the suspended slab. The final and second second and final pours of the suspended slab will be weeks from after the initial pour, allowing for framing to sequence from west to east and up to the 6th floor.

We will backfill to rough grade after completing the suspended slab, preparing After completion of the suspended slab the backfill will be done to rough grade in preparation for manlifts to access the building exterior. As framing is progressing progresses, mechanical and electrical trades will work on the water entry room rough-ins and building the substation room. Once the framing is complete, we proceed with the roof assembly, triggering will proceed which will trigger interior rough-ins to go up run vertically from the parkade in preparation for floor topping which will start starting at level 6 and through to L2.

Mechanical and electrical rough-ins commence at level 6 will start and work their way down at the start of roofing when roofing work starts. Dry-out occurs and then we apply floor topping. By the time floor topping is applied, dry-out will have been achieved. We establish Mechanical and Electrical (M&E) penetrations through the exterior walls, will be established and detailed by the envelope contractor, at the same time as we detail all exterior opening membranes. Then we install detailing which will follow with waterproofing membranes, vinyl windows, and swing doors, installations and cladding assemblies from the brick through to the composite metal and cementitious panels.

Insulation, vapour barrier and drywall activities will follow behind after rough-ins are completed and the exterior envelope being is confirmed watertight. We intend to build out the The elevator cab as soon as possible after will get built out after envelope and checklist requirements are met as quickly as possible to achieve section 5 use for construction. We will complete The permanent power requirements will be met as the upper levels are finished, in order to achieve energization.

Once we install the drywall, we apply a primer coat and install pre-painted trim and doors. Following drywall, will be the primer coat of paint and shortly after the installation of trims and doors which will be pre-painted. After the finish painting is complete on walls and trim, we will install millwork, M&E finishes, washroom accessories, and appliances followed by final paint touch-ups. Finish paint coats will be applied to the wall and trims which will proceed flooring, millwork, m&e finishes, washroom accessories and appliances and final paint touch-ups.

Fire alarm testing and verification plus the final elevator inspection will take place as we complete the finish work on L1. We expect to complete the final occupancy inspection and deficiencies list six weeks after either Substantial Performance or Occupancy, whichever occurs last. As the final elevator is completing on level 1 fire alarm testing and verification will be achieved as well as final elevator inspection which will give way to final occupancy inspection and deficiency works for 6 weeks after the later of Substantial Performance or Occupancy.

4.0 Project Setup

We always start Construction projects will always start with a meeting between [REDACTED] [REDACTED]. Our A review meeting will be held to set expectations, Key Project Indicators, and reporting requirements and frequency, contact information, and project documentation workflow. We will complete and submit project specific project-specific written plans for First Aid Locations, Site Safety Plans, Traffic Management Plans, Emergency Response Plans and Construction Phasing plans to the [REDACTED] Project Manager.

5.0 SITE Mobilization

Site mobilization will include for setting up the site office and safety trailers, site fencing around the perimeter perimeter of the site with secure access and check points checkpoints, muster points, installation of site safety signage, and installation of provisions for ESC requirements.

6.0 Site Setup and Laydown Area's

[REDACTED] proposes We propose that the future Building C lot will be utilized used for as a laydown area for the length duration of the project. A pad construction of geogrid and pit run could provide for the bearing capacity to allow for a mobile crane setup for hoisting of the roof top to hoist rooftop mechanical and pump truck and concrete trucks for concrete placing activities. As well this could provide for a This area can also double as a clean location to receive and stage materials, set up the site office, and offer limited personnel parking, clean area for staging of materials, delivery of materials, site office and limited personnel parking.