

# THE CORPORATION OF THE CITY OF CORNWALL

## Request for Proposal 20-P10 *Design and Construction Administration Services for the Municipal Works and Infrastructure Administration and Garage/Multiuse Buildings*

### ***Appendix A – Terms of Reference***

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The City of Cornwall invites Proposals from qualified Multidisciplinary Consulting firms and/or architectural consulting firms to provide architectural and engineering design services for the future Municipal Works and Infrastructure Administration Building and Garage/Multiuse Building located at 1225 Ontario Street. The scope of work to be completed by the Proponent includes: a functional design study and space/needs analysis, a geotechnical investigation, schematic and detailed building design, interior design, preparation of tender specifications and contract documents, LEED v4.1 Gold Level certification, public consultations, construction supervision and administration, building commissioning and post-construction services.

#### **1. BACKGROUND**

##### **1.1. Project Background**

A Municipal Works (MW) Yard Redevelopment Environmental Assessment (EA) was completed in 2016 by AECOM Canada Consulting Engineers. The EA proposed a multiyear project to reconfigure and reconstruct all of the MW Yard facilities in order to meet the City's Municipal Works service requirements for the foreseeable fifty (50) year growth period.

In 2017, WSP Canada Inc was retained to prepare a Site Servicing and Grading Plan (Plan) for the redevelopment of the Municipal Works Yard. The Plan outlined a multi-year, multi-phase approach for the construction of new buildings and upgrades to infrastructure within the MW Yard in four (4) general phases. The Plan specified the location, building corner elevations and approximate envelope for each of the proposed structures within the yard. The Plan also

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includes sub-surface utility (storm, sanitary, watermain, gas, electrical, network) tie-in locations and elevations.

In 2018, the first phase of utility relocations within the Municipal Works Yard took place. A portion of the Municipal Works Yard was formerly a roadway (Ontario Street), and as a result, an overhead pole line extended from Twelfth St. northerly to Lemay Street. In 2018, an underground utility trench was constructed along Twelfth Street and St Michel Ave, and a new overhead pole line was constructed along the new extension of Lemay St. The underground utility trench includes designated conduits for Bell, Cogeco, Rogers and Cornwall Electric. As part of the first phase of utility relocations, the individual utility companies relocated a portion of their infrastructure to the newly constructed utility trench and pole line. The southern half of the pole line along the former Ontario Street was left in place in 2018, in order to provide continuous service to the existing buildings in the MW Yard. During the second phase of redevelopment the removal of the remaining portion of the pole line will be required in order to accommodate the proposed Garage/Multiuse building. Consideration must be given to any temporary power supply requirements to existing buildings.

In 2019, a new parking lot was constructed on Twelfth Street, directly across the street from the location of the proposed Administration building. The new parking lot is for the personal vehicles of all Municipal Works and Infrastructure Planning department staff only. As part of the design process for Phase 2, a review of parking requirements for all City owned vehicles which typically park in the vicinity of the existing administration and various MW section buildings is required. In addition, a new visitor parking area directly adjacent to the proposed administration building is also required.

In 2019, construction of the first phase of redevelopment of the MW Yard commenced; the work is scheduled for completion by the end of 2020. The scope of work included in the first phase of redevelopment included the construction of

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a new staff parking lot, noise barrier wall along the west property boundary, a salt storage facility, as well as a utility compound area which includes a standby power system and designated electrical and communications buildings for the distribution of power and networking services for all future buildings within the MW Yard. Construction of Phase I in 2019 also included the installation of a new water network complete with servicing tie-ins to each of the proposed buildings, natural gas network, and internal storm and sanitary sewer networks designed with the capacity to service all facilities within the MW Yard.

As part of the design process for the first phase of development, a Noise Impact Assessment was completed. The result of the assessment determined that a noise barrier wall would be required along both the east and west property boundaries, as well as the east section of the southern property boundary. It was determined that the construction of a noise barrier wall along the various property boundaries would be necessary in order to minimize impacts to local residents, as the area surrounding the MW Yard is zoned residential. As indicated above, the installation of the noise barrier wall along the western property boundary is included in the scope of construction for the first phase of development and is scheduled for installation by the end of 2020.

The second phase of redevelopment within the MW Yard calls for the construction of a new Administration building in the vacant south west quadrant of the MW Yard, complete with a visitor parking area. In addition, as part of an on-going review of the MW Yard Redevelopment Plan, it was noted that additional greenspace may be obtained in both the southeast and southwest quadrants of the MW Yard. A review of this consideration will be included as part of the design process. Also included in the second phase of redevelopment is a new Garage/Multiuse building and the demolition of existing buildings in the south east quadrant of the MW Yard. Due to site constraints, the east portion of the Garage/Multiuse building cannot be constructed until the existing

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administration and traffic buildings have been demolished. As part of the design process, a significant amount of consideration must be given to construction phasing and timelines, as the continuous operation of all facilities within the MW Yard during construction is required.

The MW Yard Redevelopment Plan and phasing schedule has continued to evolve as the needs of the individual departments within the Municipal Works Division change. Within the EA, the Public Properties (now Facilities) section buildings (2A-2E) were located in the south east quadrant of the MW Yard. In recent years, the Facilities section has relocated to Optimist Park, and the Parks and Landscaping section now occupies the former Facilities section buildings. As a result of departmental changes/needs in conjunction with a review of the MW Yard Redevelopment Plan, it has been determined that the proposed “Optimist Park Equipment Storage Building E” will no longer include office/working spaces for the Parks and Landscaping section and that the proposed building will be for storage purposes only. The office/workspaces for both the Facilities and Parks and Landscaping sections are to be included in the Garage/Multiuse building.

Additionally, the Stores building section indicated in the EA has been removed and is no longer included as part of the MW Yard redevelopment; the building section is not included in the Site Servicing and Grading Plan (Plan) prepared by WSP. The Plan indicates that there are multiple sub-phases within the second phase of redevelopment, with the construction of the administration building and west half of the garage/multiuse building occurring in a single phase and the east half of the building taking place in the next phase. It has been determined that it is in the best interest of the Corporation to construct the entire garage/multiuse building in a single phase, following the construction of the new administration building. Proponents are advised that the project is to be considered a multi-year construction project.

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The design component of each phase of redevelopment shall include a review of both the work proposed in the current phase, as well as the entire MW Yard Redevelopment Plan as a whole. The Proponent will be responsible for evaluating the Plan and proposed sequencing for construction and providing recommendations for optimization or changes that may be of benefit to the Corporation.

## 1.2. Design Considerations

### 1.2.1. *Administration Building Design – Phase IIA*

Following the completion of the Site Servicing and Grading Plan of the Municipal Works Yard, it was determined that it would be necessary to replace the existing Administration Building in the second phase of development in order to facilitate the construction of other buildings within the MW Yard. As identified in the EA, the existing fifty-six year old Administration Building is substandard, extremely energy inefficient and has insufficient office space for the number of employees working within the building. It is proposed that the new Administration Building consist of a 1,200 square meter multi-level structure, with a design focus on operational efficiency and accessibility between the various buildings within the MW Yard.

The EA redevelopment schedule called for the construction of a new LEED v4.1 Gold Level certified Administration Building to be constructed on or before 2027 in the vacant southwest corner of the yard. As part of an ongoing review of the plan, it was recommended that the construction of the new building be designed in 2020 and constructed in 2021 in order to accommodate the construction of other buildings within the yard, namely the new Garage/Multiuse Building. It was proposed that the new Administration Building be designed to accommodate Infrastructure & Municipal Works administrative staff, training rooms, meeting rooms, lunch rooms, storage areas, offices and public spaces. As part of the Functional Design Study, included in the pre-design phase of the project, the

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Proponent will be responsible for reviewing the individual requirements of the various departmental staff and determining the optimal size and layout requirements for the various spaces within the building.

The current Administration Building is a two-storey, 900m<sup>2</sup> structure constructed in 1964. The existing building has insufficient office space for the current number of employees working within the building. The EA suggested that the new administration building have the capacity for a future occupancy load of 60 employees, in comparison to the current occupancy load of 33 employees. The AECOM EA suggested that the Administration Building be located separately from the Garage/Multiuse building in an effort to minimize the noise and disruption generated by the activities and varied work hours of Municipal Works staff. However, in order to ensure operational efficiency, the proposed buildings must be designed in a way that focuses on accessibility and ease of traffic flow between the two buildings.

As per the Site Servicing and Grading Plan prepared by WSP, the proposed Administration building is to be serviced with water and sewer via the existing infrastructure located on Twelfth Street East. The Proponent will be responsible for ensuring that there are no conflicts with servicing tie-ins. Alternatively, municipal services could be brought to the building via the municipal infrastructure installed in 2019, however this option is considered less desirable due to the length of services required to tie into the new water/sewer mains. Electrical, communications and natural gas servicing, are to be brought to the new Administration building via the new infrastructure/services installed in 2019 and as indicated in the WSP Site Servicing and Grading Plan. As part of the utility compound design for the MW Yard, a 200A-3P panel dedicated for future electrical servicing of the new Administration building was installed in 2020. For additional information regarding servicing and tie-ins, refer to the 19-T40 – *Municipal Works Salt Storage Facility Construction and Phase I Yard*

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*Redevelopment (IFC)* drawing set, included in Section 1.3 – *Available Documents*. The Proponent will also be responsible for finalizing the Site Servicing and Grading Plan requirements indicated in the Plan under Phases 2A through 3 of Redevelopment and incorporating the various components into the detailed design documents.

Phase IIA of the project also includes a number of exterior site works, including dedicated parking areas for City vehicles, storm network upgrades and the design of a visitor parking lot adjacent to the new Administration Building. The detailed design of the visitor parking lot shall include all lighting, landscaping and accessibility requirements. An automated gate system at the entrance to the MW Yard from Ontario St. is also included in the scope of work. It is anticipated that the automated gate system will be located immediately North of the entrance to the visitor parking lot of the Administration Building. Phase IIA of the project also includes landscaping design, as well as the design of outdoor eating areas for staff, complete with covered canopies.

#### *1.2.2. Garage/Multiuse Building Design & Demolition Works – Phase IIB*

The 2016 EA redevelopment schedule called for the construction of a new MW Garage/Multiuse Building to be constructed on or before 2021. The new building will replace a number of existing structures within the MW yard, including the existing MW Garage, Public Property (now called Facilities) Section buildings, Roads Section buildings, Water Distribution and Sewer Collection Section buildings, Traffic Shop and the Tire Storage building. Accordingly, it is proposed that the new combined Garage/Multiuse Building consist of a 4,000 square meter LEED v4.1 Gold Level certified structure with a layout that focuses on effective space planning and minimizes building and maintenance costs through the consolidation of amenities such as offices and lunchrooms.

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The second phase (Phase IIB) of the project will involve demolition of the existing administration building, as well as the various buildings/structures that are to be replaced by the new Garage/Multiuse building – with the exception of the existing MW Garage and the Water/Sewer building. The Proponent is responsible for providing a recommendation for proposed future uses of the existing Water/Sewer Shop and MW Garage buildings, until future phases of redevelopment. The phasing of construction and demolition activities must include consideration of any necessary temporary measures (relocating offices/workspaces, etc.) to ensure continuity of Municipal Works day-to-day operations. The demolition of the existing Administration building is not scheduled to occur until the new Administration building is constructed and all staff have been relocated. The Proponent is responsible for working with the Corporation to determine all temporary phasing requirements and for incorporating them into the design drawings and tender documents.

As per the Site Servicing and Grading Plan prepared by WSP, the proposed Garage/Multiuse building is to be serviced with water, storm/sanitary sewers, electrical, natural gas and communications via the new infrastructure installed in 2019. As part of the utility compound design for the MW Yard, a 100A-3P panel and a 200A-3P panel were installed in 2020 for future electrical servicing of the new Garage/Multiuse building. For additional information regarding servicing and tie-ins, refer to the 19-T40 – *Municipal Works Salt Storage Facility Construction and Phase I Yard Redevelopment (IFC)* drawing set, included in Section 1.3 – *Available Documents*.

Phase IIB of the project also includes exterior site works, servicing and grading in the southern half of the MW Yard. Exterior site works include upgrades to the storm sewer network as indicated in Phase 2B and Phase 3 of the Site Servicing and Grading Plan prepared by WSP. In addition, the installation of the noise barrier wall (NBW) system along the southeast and east property boundaries is

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also included in the scope of work. Based on the geotechnical investigations previously completed in the MW Yard, poor soil conditions are anticipated, and the design of a strip footing foundation for the NBW system will likely be required.

### 1.3. Available Documents

The following drawings and reports are available for review using the link for supporting documents: <https://bit.ly/2SpcoKR>

- Municipal Works Yard Redevelopment Environmental Assessment – *AECOM Consulting Engineers*
- Draft\* Cornwall Municipal Works Yard Redevelopment Servicing and Stormwater Management Design Report – *WSP Canada Inc.*
- Limited Geotechnical Investigation – Proposed Municipal Salt Storage Facility Building – *Morey Associates Ltd.*
- Additional Geotechnical Information – Proposed Municipal Salt Storage Facility Building – *Morey Associates Ltd.*
- Cornwall Municipal Works Noise Wall Geotechnical Subsurface Investigation Report No. 17C234 – *St. Lawrence Testing and Inspection Co. Ltd.*
- Noise Impact Assessment – City of Cornwall Municipal Works Yard – *WSP Canada Inc.*
- Draft\* Standby Power System Assessment – City of Cornwall Municipal Works Yard – *WSP Canada Inc.*
- 19-T40 – Municipal Works Salt Storage Facility Construction and Phase I Yard Redevelopment (IFC)

*\*Please note that the final version of this document will be provided to the successful proponent; the report is currently in the final stages of review.*

## **2. ENGINEERING AND ARCHITECTURAL DESIGN SERVICES**

The successful Proponent shall complete the following tasks related to the design of the new Administration and Garage/Multiuse Buildings within the Municipal Works Yard.

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## 2.1. Review of Existing Information

- Review all available existing drawings, reports, etc. related to the project and project area included in the link to supporting documents and summarized in Section 1.3 – *Available Documents*.
- All dimensions, condition grades, materials, equipment, elevations, etc. as described in As-Built Drawings, Service Location Sheets, reports, etc. must be verified; the Proponent shall confirm that all information used in the design is correct. The Corporation of the City of Cornwall is not responsible for any errors or omissions in the information provided to the successful Proponent. The successful Proponent is responsible for the verification of all existing documentation and shall take responsibility for all existing information.
- Carry out additional field inspections and subsurface investigations as required to assess existing conditions and to supplement the available information.
- Prior to commencing the design, the successful Proponent shall complete a pre-construction photo survey for record purposes which shall include but not be limited to: roadways, sidewalks, driveways, retaining walls, handrails, vegetation, trees, entrances, steps, porches, foundations, buildings, dwellings, pumping stations, equipment, etc. Photos shall be taken during a time that weather will not impact the photos. The pre-construction photo survey shall accurately indicate the condition of all pre-existing features. The pre-construction photo survey shall be provided to the Corporation upon completion for record purposes.
- Review the Environmental Assessment for the Municipal Works Yard Redevelopment and advise of any additional requirements that will need to be satisfied prior to commencing the next phase of redevelopment.

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## 2.2. Topographic Survey Coordination

- The Proponent is responsible for coordinating directly with an Ontario Land Surveyor retained by the Corporation for the completion of a topographic survey of the project area. The Proponent shall advise the OLS of specific survey requirements, and/or if additional information is required following the completion of the original survey. The Proponent shall review the provided topographic survey and confirm that all necessary information has been included.
- The Proponent shall be responsible for coordinating with utility companies (Cornwall Electric, Bell, Cogeco, Rogers, Union Gas, etc.) to confirm the location of all utility plants. Additionally, the Proponent shall coordinate with the OLS in conjunction with the utility companies in order to obtain survey information for utility owned buried infrastructure. The Proponent shall be responsible for adding the existing utilities to all relevant design drawings.
- The survey will be provided to the successful Proponent in the NAD83 coordinate system in an AutoCad format, consisting of points.
- The Proponent shall prepare the base plans using the survey information provided; however, the Proponent shall be responsible for verifying the accuracy of the information provided.
- The Proponent shall coordinate directly with the OLS throughout the duration of the project, as required.

## 2.3. Geotechnical Services Coordination

- The Proponent is responsible for coordinating directly with a Geotechnical Consultant retained by the Corporation for the completion of a detailed geotechnical investigation of the project area.
- The Proponent shall coordinate with the Geotechnical Consultant to determine the recommended location, quantity and depth of boreholes, pavement cores, rock cores, granular samples, etc. required to properly

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characterize the nature of existing fill materials within the extents of the project area.

- The Proponent shall circulate the detailed design drawings to the Geotechnical Consultant for review and commentary at all design milestones (30%, 60%, 90%, 100%, Issued for Tender, Issued for Construction, etc.). The Geotechnical Consultant shall provide commentary to the Proponent on the design drawings as required and highlight any geotechnical considerations.
- Continually coordinate with the Geotechnical Consultant during the design process; confirm/verify the design meets the recommendations provided in the geotechnical report(s).

#### 2.4. Utility Coordination

- Identify each of the utility companies located within the project area.
- Coordinate with all relevant utility companies (Cornwall Electric, Bell, Cogeco, Rogers, Union Gas, etc.).
- Collect all available Utility Plant As-Built Drawings from the relevant utility companies.
- Confirm location of all utility plants and prepare a Composite Utility Plan (CUP). Both existing utilities and any proposed relocations must be shown on all relevant design drawings.
- All communications with utility companies shall be carefully documented throughout the design phase and included in the Final Design Report; all documentation/correspondence compiled throughout the construction phase must be submitted to the City with the Post-Construction document package.
- Conduct Utility Coordination Meetings, with utility companies as needed, at the City of Cornwall's Infrastructure & Municipal Works office, located at 1225 Ontario Street, Cornwall, Ontario, K6H 4E1. Additionally, coordinate

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any required field visits necessary to confirm that proposed utility relocations meet the requirements of all utility companies involved.

- The Proponent shall coordinate with each of the respective utility companies to determine the extent of utility daylighting required to provide an accurate representation of the type/location/elevations of buried infrastructure within the corridor. The Proponent is responsible for arranging any daylighting of utilities, as required. Invoices will be paid directly by the Corporation.
- Complete QA/QC review of As-Built information, design information, etc. provided by the utility companies. Complete any necessary field review/verification as required.
- Identify any utility conflicts within the proposed work area and coordinate any required utility relocation with each respective utility company. If required, complete the design of any required utility relocations, temporary or permanent supports, etc.
- The Proponent shall act as Lead Coordinator for the rerouting of utilities within the Municipal Works Yard. The Proponent shall verify that the proposed relocations and/or extension of the network meet the requirements/needs of each of the respective utility companies.
- The Proponent shall make certain that any utility requirements/future servicing connections are included in the detailed design.
- The Proponent is responsible for including any utility requirements in the detailed design drawings and tender specifications.
- Continually consult with utility companies throughout the design process; confirm that each of the utilities have a thorough understanding of the project scope and that the proposed design meets utility company minimum standards/clearances for both overhead transmission lines and buried infrastructure.

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- Act as liaison between the various utility companies, as needed, to make certain that the proposed relocations meet the requirements/needs of each of the respective utility companies.
  - Provide the City with a detailed schedule for completion of the utility companies portion of the work, including scheduling and phasing for each utility companies work. Where required, provide a timeline for the completion of utility works within the construction schedule and coordinate with each of the respective utility companies to verify the accuracy of proposed timelines.
  - Verify that utility relocations do not conflict with any proposed future phases of development within the MW Yard.
  - Review cost estimates submitted by utility companies for any relocations, temporary supports, servicing, etc.; verify that proposed relocation solutions are the most economically feasible option available.
  - Continually coordinate and monitor all work to be completed by utility companies for the duration of the project.
  - The Corporation will not consider delays to the Proponent's schedule as a result of utility company delays. The Proponent shall coordinate and secure any necessary information, approvals, etc. from the utility companies such that the design and construction phases of the project remain on schedule.
  - Continually coordinate with utility companies throughout the design process to make certain that the design meets the requirements and minimum standards of each of the respective utility companies.

## 2.5. Design Services

Complete the detailed design for the Administration and Garage/Multiuse Buildings as described herein. The Proponent shall prepare a separate tender package for each phase of redevelopment (Phase 2A –

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Administration Building and Phase 2B – Garage/Multiuse Building Construction and Demolition Works).

*2.5.1. General Design Services*

- Prepare detailed design drawings and construction specifications for the proposed building construction and demolition works.
- Prepare and update construction cost estimates as the design progresses.
- Detailed Design Drawings shall be submitted to the City of Cornwall for review at the following stages for each phase of redevelopment:
  - 30% Design (PDF, CAD)
  - 60% Design (PDF, CAD)
  - 90% Design (PDF, CAD)
  - 100% Design (PDF, CAD)
  - Issued for Tender (PDF, CAD)
  - Issued for Construction (PDF, CAD)
  - As-Built (PDF, CAD)
- Specifications shall be submitted to the City of Cornwall for review at the following stages:
  - 60% Design (PDF, Word)
  - 90% Design (PDF, Word)
  - 100% Design (PDF, Word)
  - Issued for Tender (PDF, Word)
  - Issued for Construction (PDF, Word)
- Cost estimates for each phase of redevelopment shall be provided to the City of Cornwall for review at the following stages:
  - 30% Design (PDF, Excel)
  - 60% Design (PDF, Excel)
  - 90% Design (PDF, Excel)
  - 100% Design (PDF, Excel)

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- Issued for Tender (PDF, Excel)
    - Issued for Construction (PDF, Excel)
  - Construction specifications shall be completed in City of Cornwall/NMS standard templates.
  - The City shall be responsible for the printing of all “Issued for Tender” and “Issued for Construction” drawing sets and contract specifications.
  - All “Draft” and “Final” submission described herein shall be reviewed by City staff.
  - All drawings, specifications, reports, memorandums, etc. must be signed and stamped by a Professional Engineer licensed in the Province of Ontario and/or a registered Architect licensed in the Province of Ontario.
  - Specifications shall be prepared based on NMS and City of Cornwall standards. The Proponent shall complete the Form of Tender (Schedule of Unit Prices) to be included in the tender document. The tender shall be prepared as an OPS unit rate contract.
  - Tender specifications shall comply with the City’s Purchasing Policy.
  - All design drawings shall be prepared in accordance with the City of Cornwall, MECP, OPS, and RRCA standards.
  - The Proponent shall prepare Construction Phasing and Sequencing Drawings as necessary.
  - All design drawings shall include property limits, easements, municipal services, roadway, ditches, sidewalks, driveways, culverts, utilities both above and below ground, dwellings, structures, entrances, pavement markings, traffic signs, trees/vegetations, etc.
  - The Proponent shall prepare an Erosion and Sediment Control Plan drawings as required.
  - The Proponent shall prepare a Composite Utility Plan (CUP) and any necessary utility relocation plans.

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- Review all available drawings, specifications, reports, etc. pertaining to the project. The Proponent shall conduct site visits as required to confirm accuracy of the information provided. Any costs associated with redesign work as a result of a failure to review available documents or conduct necessary site visits will not be paid by the Corporation.
  - The Proponent shall continually monitor and effectively control project costs so that the project remains within budget.

#### *2.5.2. LEED Certification*

The Proponent shall be advised that all work associated with LEED components and certification in the Detailed Design through the Building Commissioning Phase is subject to approval, and not guaranteed.

Following the completion of the Predesign and Schematic Design Phases, the Proponent will be advised as to whether or not the Corporation will be proceeding with all LEED components of the project in the remaining phases of the project.

The decision to proceed with LEED is at the discretion of the Corporation. In the event that the Corporation elects to remove LEED associated works from the scope of the Request for Proposal, it shall not constitute a basis for claims, damages or anticipated profits for the amount that may be dispensed with in part or in full. *Please note that where an asterisk (\*) is indicated beside LEED throughout the Request for Proposal, the Proponent is to be reminded that the work is provisional.*

- Following the completion of the Schematic Design Phase, the Corporation will review the preliminary designs, estimates and LEED options.
- The Proponent shall compile a list of recommended LEED credits, based on the assumption that the Corporation is pursuing LEED v4.1 Gold level certification.

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- Additional requirements relating to LEED certification and commissioning are specified throughout each of the individual building design phases.

#### *2.5.3. Quality Assurance and Quality Control (QA/QC)*

- The Proponent shall conduct a QA/QC review of all “Draft” and “Final” submissions as described herein. The Proponent shall be fully responsible for the QA/QC of all project deliverables including any Sub-Proponents.
- The QA/QC of all project deliverables shall be completed by a Senior Engineer with a minimum of ten (10) years experience on projects of a similar scope. The QA/QC Engineer shall not be directly involved in any other facets of the project.
- The Proponent shall include a detailed description of the QA/QC process to be conducted in accordance with the terms of the RFP, including a QA/QC process for the work to be completed by all Sub-Proponents.
- A QA/QC review shall be conducted for all “Draft” and “Final” drawings, specifications, reports, memorandums, etc. At a minimum, QA/QC reviews shall be conducted at the following stages: 60%, 90%, 100%, Issued for Tender and Issued for Construction.
- The Corporation reserves the right to audit the Proponent’s QA/QC practices. The Corporation may request clarification and/or request additional information from the Proponent to verify that the QA/QC requirements described herein are adhered to.
- The Proponent shall maintain a detailed log where all QA/QC comments are documented. The Proponent shall provide a copy of the logs with each submission (30%, 60%, 90%, 100%, IFT, IFC) to the City.
- The Proponent shall be responsible for the coordination, review, etc. of any work completed by a Sub-Proponent. The Proponent shall be responsible for the completion of QA/QC reviews of all work produced by any Sub-Proponent(s).

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#### 2.5.4. *Pre-Design*

- Review the existing Servicing and Stormwater Management Report prepared by WSP to determine whether it is feasible to include additional greenspace in the Municipal Works yard. It is proposed that the 4,800m<sup>2</sup> area (60m North by 80m East) in the southwest quadrant of the yard be reconfigured to allow for additional greenspace in the vicinity of the proposed administration building. It is also proposed that the 2,400m<sup>2</sup> area (120m East by 20m North) in the southeast quadrant of the MW Yard be converted into greenspace as well. At minimum, the review shall consider all associated impacts to the MW Yard that will result from converting the areas into greenspace, including impacts to turning radii for vehicles in nearby paths of travel, parking options for City vehicles and stormwater runoff.
- The Proponent shall complete a detailed Functional Design Study (FDS) for both the Administration and Garage/Multiuse Buildings, which shall include but not be limited to the following:
  - Identification of the current site and space deficiencies, layout capacity needs, areas for improved service delivery, safety and functionality.
  - Review the current offices/workspaces in operation; the review shall include a comprehensive analysis of the various types workspaces (i.e. carpentry shop, welding area, etc.) and the individual requirements of each of the workspaces. The 2016 EA includes a general overview of the types of workspaces/sections included within each building.
  - The existing buildings to be reviewed include the following:
    - Administration Building
    - Water/Sewer Building;
    - Roads Section Buildings;

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- Facilities (formerly Public Property) Buildings at Optimist Park;
  - Parks and Landscaping Buildings;
  - Garage;
  - Traffic Building;
  - Old Water/Sewer Building (currently used for storage purposes)
- Consult with the Corporation and various stakeholders regarding individual needs and departmental requirements.
  - Identify the various functional components, adjacency requirements, security needs, circulation, flow of operations and individual area requirements. Review and address adjacency requirements of departments; consider the needs and working relationships of all internal departments, communication and interaction requirements, acoustics, security and public access needs.
  - Determine the demand for common use spaces within each of the proposed buildings – i.e. conference rooms, reception, lunch rooms, washrooms and showers, waiting, storage and display areas, outdoor sitting areas, etc. Common spaces could be rooms, work areas or other forms of space for all/several units within the organization. Convert the demand into a list of shared spaces with defined user requirements for each.
  - Speak with staff and encourage them to raise any issues, requests and suggestions of anything that requires correctional measures.
  - Prepare an analysis of the space/needs to determine the optimum size and features of the new buildings, including consideration of the long-term space needs. Within the space needs analysis, both functional and spatial standards shall be considered. Functional requirements shall include workspace layout, size of personal workspaces/surface area, furniture, workspace storage, shared

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equipment and social spaces. Spatial standards developed shall consider minimum space allocation for staff and serve to establish guidelines and procedures for equitable distribution of space. Space and design allocations should be based on the functions carried out and the amount of time spent in the space.

- Consider any equipment items that may influence the overall space and any potential demands generated by equipment. Include any equipment requirements that may affect the building and its systems and consequently workflow and productivity levels within the organization, as well as provisions needed to accommodate the works of these equipment items.
- Prepare a Furnishings, Fixtures and Equipment (FFE) brief that outlines all equipment and furnishings to be transported from the existing buildings for reuse, as well as a verified list of items to be purchased by the Corporation. A draft of the FFE brief shall be submitted to the Corporation for review and approval. Additionally, the brief shall include the performance specifications for all new FFE, communications, security and signage. The Proponent shall assist the Corporation with the evaluation and procurement of all equipment and furnishings.
- Coordinate with the Corporation's ITT Department to determine network/communication needs for the next ten (10) years.
- Coordinate with the Division Manager of Facilities to determine building automation system requirements, among other building system needs/recommendations.
- Complete a review of Intelligent Building Management Systems and feasibility of integration for this project.
- Optimize the location/footprint of the proposed buildings within the Municipal Works Yard.
- Prepare Predesign Report that compiles the findings of the Functional Design Study, and any recommendations therein. Additionally, the report

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should identify any potential challenges and propose possible solutions for any concerns identified.

#### *2.5.5. Schematic Building Design*

- Based on the information provided in the functional design study, geotechnical investigation and background information provided, prepare a minimum of three (3) design concepts for review and approval for each of the proposed buildings.
- Prior to preparing the schematic design options, the Proponent shall be responsible for compiling an initial collection of architectural style and interior design options for review and comment. The collection shall include samples of interior/exterior finishes and layouts that have been utilized in other municipal or commercial buildings with success. Additionally, examples of LEED credits should be included.
- The three (3) design concepts for each of the proposed buildings shall illustrate the layout and character of the building and indicate how the functional design requirements are included in the proposal. Additionally, each design concept shall include:
  - Spatial relationship and interior circulation diagrams.
  - Typical building sections.
  - Principal floor plans.
  - Preliminary landscape plan.
  - Primary target LEED credits and options.
  - Enhanced accessibility options including wayfinding elements.
- The design concepts shall be presented in both plan view and three-dimensional (3D) modelling layouts, and in digital and PDF formats. The 3D model presented shall include both 360 degree views of the exterior of the building and surrounding areas, as well as a 3D rendered walkthrough of the interior spaces.

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- Each of the three (3) design concepts shall be accompanied by a Design report that includes, at a minimum, the following elements:
    - Adaptability Considerations – Illustrate how the proposed building layout can adapt to future needs and/or space requirements.
    - Identify any enhanced accessibility features included in the proposed concept.
    - A Class 'D' Cost Estimate.
    - A Strength Weakness Opportunities Threats (SWOT) analysis of each option that includes an examination of costs, accessibility and adaptability considerations.
    - Foundation options based on geotechnical and structural design recommendations. Include a review of basement vs. slab foundations.
    - Proposed LEED Certification Level – Discuss options that are common to all three design concepts and those that are unique to each specific design; indicate why specific credits are proposed, and the long-term benefits of each (include both economical considerations as well as benefits to the environment and community). Include a summary that illustrates any advantages of LEED options over standard building systems/technologies and proven reliability of the proposed systems.

#### *2.5.6. Detailed Building Design*

- The detailed design phase involves the preparation of a final design concept for the proposed Administration and Garage/Multiuse Buildings, visitor parking area and surrounding greenspace based on one of the three options provided in the schematic design phase, or a combination thereof. This phase shall include the detailed design of all facets of the proposed

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buildings and surrounding areas, including but not limited to: architectural, structural design, servicing requirements, mechanical systems, communications systems, security systems, Heating Ventilation and Air Conditioning (HVAC) systems (including separate controls for each individual space and a non-proprietary building automation system), electrical systems, fire protection and interior design. Additionally, the detailed design phase includes the following components:

- Concept submissions at the 30%, 60%, 90% and 100% design phase for review and comment. The 30% and 60% submissions must include physical samples for proposed building finishes (both interior and exterior).
- Prepare a Class 'C' Cost Estimate at the 60% Design Stage for review.
- Prepare a proposed LEED\* Scorecard for review at the 60% Design Stage. The scorecard must identify the credits/points that are being targeted, those which will not be considered and those which should be discussed further prior to finalizing all LEED\* considerations. At the 90% design stage, a final proposed LEED\* Scorecard shall be submitted for review and approval.
- The preparation and submission of all necessary permits and applications and approvals, including, but not limited to: site plan application package and building permits. All permit fees shall be paid by the Corporation.
- Tender specifications shall be provided at the 60% design phase for review and comment by the Corporation. Additional information on tender specification requirements is available in Section 2.6 - *Tendering Services*.
- Prepare a Class 'A' Cost Estimate at the 100% Design Stage. The estimate shall incorporate all identifiable components (including LEED\* elements, interior furnishings, exterior elements, etc.) for Phase IIA and Phase IIB of Redevelopment.
- Prepare a facility lifecycle cost analysis that evaluates the proposed mechanical, HVAC, electrical, communication systems, proposed LEED\* credit recommendations, among others. The analysis must be thorough

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enough to confirm that the initial vs. maintenance costs are considered and that the comparative merits of alternative options are discussed and evaluated. The analysis must also include a recommendation of preferred options from the Proponent, as well as any value engineering or cost reduction strategies.

- Prepare all documentation required for the LEED\* registration and certification process, and act as LEED Coordinator during both the design and construction phases of the project.

#### *2.5.7. Landscaping*

A detailed Landscaping Plan for Phase IIA and Phase IIB works is required; the Plans shall include a detailed landscape design, restoration requirements, tree planting, etc.

- As part of the design process, the Proponent shall prepare two (2) landscaping design options for each phase of redevelopment, complete with cost estimates. The options shall be included in the Final Design Report.
- Following the selection of the preferred landscaping design option, the Proponent shall prepare a detailed Landscaping Plan for the area surrounding the Administration and Garage/Multiuse Buildings. The landscaping plan shall include accessible outdoor eating areas (complete with covered canopies) for City staff.
- The Proponent shall consult with the City's Parks and Landscaping Department regarding species selection and preferred options for tree and shrubbery selection.
- The landscaping plan shall consider alternatives to sod, where possible, and include as many natural features as possible.
- Complete a Tree Inventory for any trees which could be impacted by the proposed construction; the Proponent shall preserve as many trees as

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possible. All trees removed shall be replaced in accordance with the City's Tree Planting Policy.

- The detailed design drawings shall clearly identify which trees are to be removed, protected, transplanted, replaced, remain, etc.

#### *2.5.8. Demolition and Temporary Phasing Requirements*

- The Proponent shall prepare a detailed demolition plan as part of Phase IIB of Redevelopment. The demolition plan shall include the removal of the existing Administration Building as well as buildings being replaced by the proposed Garage/Multiuse Building.
- The Proponent shall coordinate directly with the Consultant retained by the Corporation for the completion of a Designated Substances Study of the buildings to be demolished. The Proponent shall include any demolition/phasing recommendations from the Consultant into the proposed demolition plan. Based on the information currently available, it is anticipated that designated substances are present in the existing Administration Building.
- Complete a detailed review of offices/workspaces and exterior spaces that will be impacted during demolition and/or construction. The Proponent shall identify any temporary conditions necessary as the continuous operation of all facilities within the Municipal Works Yard is required.
- Complete a review of parking spaces available/required for all City vehicles that are currently parked within the MW Yard and prepare a temporary parking plan. In future phases of redevelopment, designated covered parking areas are to be constructed; however, the Proponent is responsible for ensuring that adequate parking areas are specified in the interim.
- Include all temporary requirements in the design of both Phase IIA and Phase IIB of the work. It is anticipated that some temporary works will be necessary; however, the Proponent is responsible for optimizing the

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construction and phasing plan; temporary requirements are to be kept to a minimum.

- Complete a review of the existing MW Garage (Building 5A-5C, as per the AECOM EA) and Water/Sewer Building (Building 10) and provide a recommendation for potential future uses of the structures following the construction of the new Garage/Multiuse Building.

#### *2.5.9. Exterior Site Works*

- Complete a detailed review of *Phases 2A, 2B and 3 Site Plan Grading and Services* drawings included in the Site Servicing and Grading Plan prepared by WSP. Site grading and servicing requirements indicated in the southern half of the Municipal Works Yard shall be included in the scope of work for Phase IIA and Phase IIB of Redevelopment. The Proponent is responsible for updating the drawings as required, based on any changes to the building footprint and/or surrounding areas during the detailed design of the Administration and Garage/Multiuse Buildings.
- Complete the detailed design of the proposed Visitor Parking Lot, located east of the proposed Administration Building. The design shall include lighting requirements, drainage and grading plan, and an assessment of accessibility options/requirements.
- Phase IIA shall include the installation of an automated gate system, located just north of the entrance to the visitor parking lot. The gate system shall have the ability to be operated remotely from the new Administration, as well as via RFID tag readers. The City currently uses an RFID tag reading system at the Snow Management Facility. The Proponent shall confirm that the RFID system for the automated gate system are compatible with the existing system and that a single tag can be used for both gate systems.

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- Phase IIB shall include a review of exterior lighting requirements in the southern half of the Municipal Works Yard and prepare a corresponding detailed lighting plan.
  - Complete the detailed design of the proposed noise barrier wall (NBW) system to be located along both the southeastern and eastern property boundaries. The Proponent shall assume that a strip footing foundation (or equivalent) will be required to support the proposed NBW as a result of poor soil conditions in the area. For additional information on soil conditions refer to the geotechnical reports included in Section 1.3 – *Available Documents*.
    - The noise barrier wall system shall be the same type/style of wall system constructed along the western property boundary in Phase I of redevelopment.
    - Continuously coordinate with the Geotechnical Consultant to verify footing requirements for the noise barrier wall system.
  - Prepare Plan and Profile drawings for the proposed upgrades to the storm sewer network located in the southeast quadrant of the Municipal Works Yard. All storm sewer upgrades located south of CBMH210 shall be included in the Proponents scope of work.

#### 2.5.10. *Design Reports*

- Complete a review the Storm Water Management (SWM) Plan prepared by WSP Inc. in the Servicing and Stormwater Management Design Report and prepare an updated SWM plan for the south half of the Municipal Works Yard. The updated plan should account for any changes resulting from detailed design as well as for the additional greenspace in the south section of the MW yard. The final design/report must verify that the site generated storm flows in the revised design do not exceed the flows identified in the original report.

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- The Proponent shall complete a Comprehensive Final Design Report for Phases IIA and IIB of the Municipal Works Yard Redevelopment. The design report shall be continually updated throughout the entirety of the design phase of the project and submitted periodically to the Corporation for review and commentary. The Design Report shall be finalized at the end of the design phase of the project.
  - Prepare a final design report that includes all elements of the final design (as per section 2.3.1), a copy of the life cycle cost analysis, LEED\* recommendations and requirements, the FFE brief, a final cost estimate and the geotechnical recommendations. Additionally, comment on construction scheduling, phasing and tendering (i.e. separate tenders for specific equipment, etc.).
  - The Comprehensive Final Design Report shall include at a minimum the following information:
    - Design Criteria and Rationale for Proposed Building Design
    - Geotechnical Considerations and Proposed Foundation Design
    - Construction Methodologies in Poor Geotechnical Conditions
    - Schematic Building Design Options
    - Functional Design Considerations
    - FFE Brief
    - Updated Stormwater Management Report
    - LEED v4.1 Gold Level Certification Criteria and Considerations
    - Consideration of Designated Substances
    - Construction Phasing Considerations
    - Landscape Design Alternatives

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- The Comprehensive Final Design Report shall include itemized construction cost estimates using estimated quantities and unit rates. The cost estimate shall be continually updated as the design progresses.
  - The design report shall also include discussion/recommendations on the proposed construction schedules.
  - The design report shall include detailed discussion of construction phasing, staging, sequencing, etc. and provide commentary on different alternatives.
  - The design report shall be signed and stamped by a Professional Engineer licensed in the Province of Ontario.
  - The Proponent may also elect to prepare Technical Memoranda as the design progresses to be compiled into the Final Design Report at the conclusion of the design phase of the project.
  - All versions of the Design Report(s) shall be submitted to the City in “Draft” for review by City staff. The Proponent shall incorporate all City comments into subsequent versions of the report. All reports shall be submitted to the City in PDF as well as three hard copies are to be delivered to the City’s Engineering office. All costs and/or disbursements associated with printing reports are to be included in the Proponent’s fee.

## 2.6. Tendering Services

Prepare a tender package for Phase IIA – Administration Building Construction and Phase IIB – Garage/Multiuse Building Construction and Demolition Works. Tender specifications shall be prepared using City of Cornwall format which would include all necessary sections such as Information to Tenderers, General Conditions, Supplementary General Conditions, Special Provisions and Standard Detail Drawings.

- Complete a pre-tender construction estimate and submit to the City a minimum of four (4) weeks in advance of tender issuance.
- The tender period shall be four to six weeks.

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- Provide support to City staff during the tendering period. Prepare and answer all tender requests for clarification. Prepare Clarifications and Addenda using the City of Cornwall format.
  - Verify that the tender documents are complete. A QA/QC review of all tender documents shall be completed prior to tendering. The Proponent shall be responsible to conduct comprehensive QA/QC reviews of any tender documents prepared by Sub-Proponents.
  - Review contractor/supplier requests for alternate equipment and products.
  - Assist the City in evaluating the tender submissions and preparing award recommendations.
  - Assist the City in contacting contractor references. Participate in interviews with contractor references with City staff.
  - Upon tender award, prepare Final Contract Documents including all addenda, updated drawings and specifications for contract execution. The Proponent shall prepare four hard copies and an electronic version in PDF of the Final Contract Documents to be executed.

#### 2.7. Permits and Approvals

- Coordinate and undertake all work associated with securing the necessary approvals, including but not limited to:
  - Ministry of the Environment, Conservation and Parks (MECP)
  - Ministry of Natural Resources (MNR)
  - Raisin Region Conservation Authority (RRCA)
  - Ministry of Labour (MOL)
  - Electrical Safety Authority (ESA)
  - Technical Standards and Safety Authority (TSSA)
  - City of Cornwall Building Department

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- City of Cornwall Site Plan Control
    - All applicable utility companies (Cornwall Electric, Bell, Cogeco, Rogers, Union Gas, etc.)
  - Obtain the following permits and approvals:
    - MECP Permit to Take Water
    - MECP Sewage Environmental Compliance Approval
    - RRCA Permits and Approvals as required
    - City of Cornwall Site Plan Control Approval
    - City of Cornwall Building Permit Approvals
    - City of Cornwall Right-of-Way/Road-Cut Permit
    - ESA Approvals
    - TSSA Approvals
  - The Proponent shall be advised that the existing Municipal Works Yard is currently zoned Residential 20. The Municipal Works Yard currently holds a legal, nonconforming status. Although the site is not zoned Industrial, all design and construction works will be subject to City of Cornwall Site Plan stands so that any negative impacts associated with development are mitigated. The Proponent does not need to submit the proposed plans to the City's Planning Department for formal Site Plan Control Approval; however, as indicated above, the Proponent must confirm that all work meets the requirements listed in the Site Plan Application checklist.
  - The Proponent shall be responsible to prepare a list of the required permits/approvals. The list shall include a log documenting the status of all approvals. The Proponent shall assess and determine/confirm the required approvals/permits. Any approvals/permits not listed above shall be included

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in the Proponent's fee. The Corporation will not consider additional fees from the Proponent related to required approvals/permits not listed above.

- Assess the utility impacts and requirements for the proposed project. Coordinate with each utility company and secure all necessary approvals/permits. Incorporate all utility requirements and comments into the detailed design as required. The coordination with each utility company shall occur as soon as reasonably possible to avoid any design and/or construction delays.
- The Proponent shall acquire all necessary approvals from each of the respective utility companies. The Proponent shall coordinate any required TSSA and ESA approvals.
- Apply and obtain approvals/permits from MECP, RRCA, City of Cornwall, ESA, etc. any other Federal, Provincial, Municipal regulatory authorities.
- The Proponent shall coordinate and liaise with all relevant authorities, prepare all necessary forms and applications, submit any necessary supporting documentation, etc.
- The Corporation shall pay all approval/permit fees directly.
- The Proponent shall pre-consult with all relevant approval agencies as required.
- As the numerous approvals/permits are a significant risk to the overall project schedule, the Proponent shall provide a detailed plan to mitigate approval/permit issues as a component of the proposal.
- All construction administration related permits/approvals shall be included in the construction administration component of the RFP.

## 2.8. Public & Stakeholder Consultation

- The Proponent shall plan and present information regarding the proposed design for each of the buildings at a maximum of two (2) City of Cornwall Council Meetings.

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- The Proponent shall plan and present at two Public Information Centres to the general public prior to construction for each phase of redevelopment. The Public Information Centres will be held at the City of Cornwall Infrastructure & Municipal Works boardroom located at 1225 Ontario Street, Cornwall, Ontario, K6H 4E1.
  - The Proponent shall prepare all necessary presentation materials for the Public Information Centres.
  - Prepare 3D renderings for each of the two (2) proposed buildings, complete with site and landscaping works for presentation at public meetings. The 3-D rendering should show the buildings relevant to existing buildings, roads, vegetation, etc.
  - Prepare all necessary public notices using the City of Cornwall template and circulate to the public and adjacent landowners.
  - Prepare various types of documents (brochures, video clips, drawings, social media posts and information pages for the City website) to be distributed to various stakeholders and the public for educational purposes.
  - The landowner and public consultation for construction is included in the construction component of the RFP.

## 2.9. Coordination Meetings

- Coordinate with City of Cornwall staff throughout the design phase of the project. The Proponent shall assume monthly coordination meetings with City staff during the design phase. All meetings will occur at the City of Cornwall's Infrastructure & Municipal Works boardroom located at 1225 Ontario St., Cornwall, Ontario, K6H 4E1.
- The Proponent shall assume each coordination meeting will be four hours long.
- The Proponent shall prepare and circulate all meeting materials a minimum of three days in advance of the meeting.

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- The Proponent shall arrange to have all key team members at each coordination meeting.
  - The Project Director and Project Manager shall attend each coordination meeting.

### **3. CONSTRUCTION ADMINISTRATION**

The Proponent shall provide full-time contract administration and inspection services for the duration of construction of each phase of redevelopment. The Site Inspector must be adequately trained and have a minimum of five (5) years experience in projects of a similar scope. The Contract Administrator must have a minimum of ten (10) years progressive experience in projects of a similar scope. The Proponent shall hold all unit rates for Construction Administration for a minimum of three (3) years.

#### **3.1. Construction Administration**

The Proponent shall coordinate with the City in order to provide the following construction administration services, as deemed necessary by the Corporation:

- Complete a review of the Contractors proposed construction schedule; the Proponent shall advise the Corporation of any potential concerns or issues with the schedule and coordinate with the Contractor in an effort to remediate any issues.
- Complete a review of the Contractors Health & Safety Plan and provide recommendations as necessary. Should any unsafe practices occur throughout construction, the Proponent is responsible for taking appropriate action on behalf of the Corporation.
- Prepare a list of submission requirements required from the Contractor; all submissions (shop drawings, etc.) must meet tender specifications and shall be provided to the Corporation for review and approval.

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- Chair all meetings (including the pre-construction and bi-weekly site meetings), act as note taker and prepare minutes for distribution at each meeting.
  - Verify that the work is undertaken in accordance with tender specifications and drawings.
  - Liaise with various stakeholders and the public throughout the construction phase.
  - Maintain a document management system to track any necessary changes to drawings, revisions to specifications, manage any site instructions, change directives, extra work orders, claims, etc.
  - Coordinate with the Contractor to arrange for any inspections (i.e. permits, LEED\*, TSSA, Electrical Safety Authority, etc.). The Proponent is to maintain records of all inspections throughout construction.
  - Coordinate with all approval agencies (RRCA, MECP, etc.) throughout construction. Provide all necessary documentation, reports, etc., as required. Provide all documentation in a timely manner so that the project is not delayed. The Proponent shall not defer coordination with approval agencies to the Contractor.
  - Identify and prepare Deficiency Reports throughout the course of construction, complete with recommended repair methodologies and dates of identification/correction.
  - Maintain daily written and photographic work records. At minimum, daily records must include detailed descriptions of contract operations, quantity measurements, grading/tie-in information (may be included in a separate field book), calculations, pertinent conversations with the Contractor (or residents, the Corporation or any other stakeholder), site visits, difficulties encountered, on-site staff and production, weather conditions, subsurface conditions, any claims or complaints, verbal and written instructions given to the Contractor,

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explanatory notes and any work that occurs that falls outside of the scope of the contract.

- Coordinate all geotechnical review/inspections required. The Geotechnical Proponent that conducted the initial site investigation shall be responsible for the inspection of the excavation, construction of the building foundation and any subsurface concerns identified.
- Coordinate materials testing required throughout all phases of construction. Additionally, the Proponent is responsible for reviewing all materials testing reports received, and where deficiencies are found, identifying any corrective measures to be taken. The Corporation and the Contractor shall be made aware of any deficient material as soon as the information is available. Please note that materials testing shall be completed by the Corporation's materials testing consultant, obtained under a separate tendering agreement.
- The Proponent shall act as LEED\* Coordinator during construction and is responsible for the preparing/obtaining/submitting any documents required for certification during the construction phase. The Proponent shall also assist the Contractor by ensuring that LEED\* related features and requirements are being installed and/or implemented correctly.
- Obtain any necessary construction related approvals/permits required for the project. The Proponent shall complete any necessary documentation to obtain and/or maintain permits/approvals.
- Prepare a detailed shop drawing log for each phase (Phase IIA and Phase IIB) in Excel format and provide the Corporation with the updated log on a bi-weekly basis.
- Promptly respond to all Contractor enquiries, RFI's, etc. within five business days. The Proponent shall assign resources to the project as required so that the Contractor's schedule is not impacted as a result of awaiting further information from the Proponent.

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- Issue supplementary drawings, details, information, etc., for clarification of contract documents, as needed.
  - Review any Contractor extra work requests and claims. Issue Contemplated Change Orders (CCO) and Change Orders (CO) complete with all required design drawings, details, specifications, etc., to the Contractor as necessary. The Proponent shall be responsible for any extra work/costs resulting from design error, negligence, etc. City staff shall approve all Change Orders.
  - Notify all approval agencies when work has begun and is completed. Provide all necessary reports, documents, etc. as required. Coordinate any required inspections.
  - The Proponent shall assume construction site meetings are to occur bi-weekly. Construction meetings will occur at the City of Cornwall Infrastructure and Municipal Works boardroom at 1225 Ontario Street, Cornwall, Ontario, K6H 4E1.
  - Prior to construction, the Proponent, Corporation and Geotechnical Consultant will develop a Materials Testing Plan which will indicate the type and frequency of material testing to be completed throughout the course of construction.
  - Following the completion of each supply/sub-contracts, verify that all applicable Construction Act forms have been received (i.e. Form 10 - *Certificate of Completion of Subcontract under Subsection 33(1) of the Act*).
  - Following the completion of the construction, Prepare and issue a Form 9 – *Certificate of Substantial Performance of the Contract under Section 32 of the Act*, in accordance with the standards specified in the Construction Act. Following the 60-day waiting period (should no claims arise), prepare a progress payment for the release of statutory holdback.
  - The Proponent shall base the Contract Administration services on the Fee Schedule included in Section 3.2 – *Construction Administration and Inspection Fees*.

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### 3.2. Construction Administration and Inspection Fees

As the time commitments for Construction Administration and Site Inspection services are difficult to anticipate, the Proponent shall base the cost of these services, detailed in Section 3.1 and 3.2, on the estimates provided below:

#### *3.2.1. Construction Administration and Inspection Fees - Phase IIA Works*

<b>Role</b>	<b>No. of Hours</b>
Project Director	40
Project Manager	80
Contract Administrator	160
Site Inspector	1,600
Civil/Municipal Engineer	80
Architect	120
Structural Engineer	120
Mechanical Engineer	120
Electrical Engineer	80
Interior Designer	120
Landscape Designer/Architect	40
CAD Operator	80
Administrative Support	80

#### *3.2.2. Construction Administration and Inspection Fees - Phase IIB Works*

<b>Role</b>	<b>No. of Hours</b>
Project Director	80
Project Manager	120
Contract Administrator	320
Site Inspector	2,080

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Civil/Municipal Engineer	120
Architect	160
Structural Engineer	160
Mechanical Engineer	120
Electrical Engineer	120
Interior Designer	160
Landscape Designer/Architect	80
CAD Operator	120
Administrative Support	120

- All disbursements associated with Construction Administration and Site Inspection services such as mileage, lodging, meals, supplies, etc. shall be included in the staff unit rate and will not be paid for in addition to the staff unit rate provided in the submission. All costs associated with travel time to and from the project site are to be included in the staff unit rate and will not be paid for by the Corporation of the City of Cornwall.
- The fee for Construction Administration and Site Inspection services shall be time and material to an upset limit. The time allotment shown in the table above is estimated and the Proponent shall be paid based upon the actual time spent.
- If determined that a discipline not listed in the table above is required, the Proponent is responsible for providing a proposal that includes the rate/quantity of hours, roles and responsibilities and an explanatory note that describes why their presence is essential for the success of the project. The addition of any discipline to the Construction Administration team is subject to approval by the Corporation.
- The Proponent shall notify the Corporation immediately should the Proponent expect to exceed the allotted time. The Proponent shall require City approval prior to exceeding the estimated time allotment. The Proponent shall provide

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detailed justification for additional time required. The Corporation will not compensate the Proponent for additional time should the Proponent fail to provide sufficient notification and/or justification to the Corporation.

- The Corporation will not be responsible for any overtime, rate premium, etc. Any mandated rate premiums shall be the responsibility of the Proponent. The Proponent shall not transfer these rate premiums to the Corporation in any manner.
- The Corporation shall not be responsible for costs related to design error, omissions, negligence, etc. The Proponent shall be responsible for all costs related to re-design work due to the Proponent's error, negligence, etc.

#### **4. BUILDING COMMISSIONING**

##### **4.1. Building Commissioning**

- The Proponent shall engage an independent third-party Building Commissioning Consultant to coordinate all activities related to commissioning and confirm that all tests performed by the building contractor, sub-contractors, and equipment manufacturers are conducted and documented. As indicated above, the Proponent is responsible for retaining the Building Commissioning Consultant; however, the Corporation will pay all invoices directly.
- The Commissioning Consultants work shall include but not be limited to the following:
  - Prepare a Commissioning Plan for the effective commissioning of the facility. The plan must include details of the procedures and processes to be followed and include a building transfer process from the Proponent/building contractor to the Corporation.
  - Prepare a schedule of seasonal tasks to be completed during the first year of operation.

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- Review the following for each building system: installation procedures, documentation received, design criteria and intent, special features, cleanliness of the system, electrical characteristics of connected equipment and commissioning procedures.
  - Review and approve the building contractors commissioning schedule.
  - Prepare performance verification forms or test sheets for each piece of equipment and system specified in the electrical and mechanical tender specifications.
  - Prepare a document package that includes all equipment/building system warranties, operation and maintenance manuals, etc. The package shall include a summary of equipment specific warranties and applicable warranty timeframes as well as any maintenance or other requirements necessary so that warranties remain valid.
    - Arrange for any equipment/building system training indicated in the contract documents.
  - Report any faults and/or defaults affecting commissioning to the Corporation.
  - Act as LEED Commissioner

#### 4.2. Building Commissioning Fee Schedule

The Proponent shall base the costs of the independent Building Commissioning Consultant on the hours estimated below.

##### 4.2.1. *Building Commissioning Fee Schedule – Phase IIA*

Role	No. of Hours
Building Commissioning Consultant	120

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#### 4.2.2. Building Commissioning Fee Schedule – Phase IIB

Role	No. of Hours
Building Commissioning Consultant	160

- All disbursements (travel, mileage, lodging, meals, supplies, etc.) shall be included in the applicable unit rates provided. No additional costs will be considered by the Corporation. Please note that all hours indicated are estimates only and will be paid based on actual time spent.
- If, at any time the proponent anticipates that the estimated hours will be exceeded, the Corporation must be notified immediately. Detailed justification for additional time required must be provided. The Proponent will not be compensated for additional time spent unless sufficient notification and/or justification is provided to the Corporation.

### 5. POST CONSTRUCTION SERVICES

#### 5.1. Post Construction Services

- The Proponent shall prepare a complete tender close-out package that includes all tender/construction documentation prepared or received throughout the construction phase of the project as well as a complete set of as-built drawings. Additionally, the close-out package shall include a final lifecycle cost analysis of the building for asset management purposes, complete with any building maintenance schedules recommended so that the maximum lifespan of the building is achieved.
- Provide any follow-up documentation necessary for LEED\* certification.
- Complete warranty inspections for each discipline twelve months and twenty-four months following Substantial Performance for each phase of the project. Issue Warranty Inspection Site Reports immediately following each site visit
- Assist the Corporation as required during the warranty period. Confirm that all warranty issues have been addressed and resolved.

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- Conduct additional inspections as required for any outstanding or deficient work.
  - Coordinate with the Corporation and the Contractor to confirm that all warranty, deficiency and/or outstanding work is completed.
  - Assist the Corporation and coordinate with the contractor to review and resolve any third-party claims.

## 5.2. Post-Construction Services Fee Schedule

- As the time commitments associated with post-construction, testing, training and commissioning services are difficult to anticipate, the Proponent shall base the cost of these services, as detailed in Section 4.1 and 4.2, on the estimates provided below:

### 5.2.1. *Post-Construction Services for Phase IIA Works*

ROLE	NO. OF HOURS
Project Director	8
Project Manager	16
Construction Administrator	8
Site Inspector	40
Architect	16
Civil/Municipal Engineer	8
Structural Engineer	8
Mechanical Engineer	8
Electrical Engineer	8
Interior Designer	16
Landscape Architect	16
CAD Operator	40

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### 5.2.2. Post Construction Services for Phase IV Works

ROLE	NO. OF HOURS
Project Director	8
Project Manager	8
Construction Administrator	16
Site Inspector	40
Architect	24
Civil/Municipal Engineer	40
Structural Engineer	16
Mechanical Engineer	16
Electrical Engineer	16
Interior Designer	32
Landscape Architect	16
CAD Operator	40

- All disbursements associated with post-construction and inspection services such as mileage, lodging, meals, supplies, etc. shall be included in staff unit rate and will not be paid for in addition to the staff unit rate provided in the submission. All costs associated with travel time to and from the job site are to be included in the unit rate and will not be paid for by the Corporation of the City of Cornwall.
- The fees for post-construction services shall be time and material to an upset limit. The time allotment shown in the table above is estimated and the Proponent shall be paid based upon the actual time spent.
- The Proponent shall notify the Corporation immediately should the Proponent expect to exceed the allotted time. The Proponent shall require Corporation approval prior to exceeding the estimated time allotment. The Proponent shall provide detailed justification for the additional time required. The Corporation

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will not compensate the Proponent for additional time should the Proponent not provide sufficient notification and/or justification to the Corporation.

#### *5.2.3. Record Drawings*

- Prepare detailed Record Drawings and submit to the City in AutoCad and PDF format.
- Record Drawings shall be submitted to the City no later than three months after Substantial Performance for each phase of the project.
- The Corporation will review the submitted Record Drawings and provide comments to the Proponent. The Proponent shall update the Record Drawings as required and re-submit to the City.
- The Proponent shall coordinate with the OLS, as required, for any additional field surveying as required as a result of incomplete as-built information.
- The Proponent shall submit a time and material to upset limit fee for the preparation of Record Drawings. The Proponent shall not include the labour required for As-Built Drawings in the time and material estimates in Section 5.2 – *Post-Construction Services Fee Schedule*

### **6. SCHEDULE & PROJECT RISKS**

- The Corporation intends for the construction tender(s) for both phases to be issued in 2021, with the construction of Phase IIA commencing in 2022 and the construction of Phase IIB commencing in Spring of 2023. The Proponent shall prepare a detailed schedule for the entire project including the design, tender, construction and post-construction phases of the project. If the Proponent does not believe the completion date is achievable, the proposed schedule should indicate the earliest possible completion date.

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- The Proponent shall base the schedule on the following:

Item	Date
Issue of RFP	October 28, 2020
Mandatory Site Meeting	November 9, 2020
Deadline for Questions	November 17, 2020
Deadline for Submission	December 2, 2020
Award of RFP – Council Meeting	January 11, 2021
Project Commencement	January 18, 2021

*Note: although every attempt will be made to meet dates as listed, the Corporation reserves the right to modify any or all dates at its sole discretion*

- The Proponent shall provide a detailed project schedule identifying all tasks required to complete the project on time and on budget.
- The Proponent shall detail the proposed project management and methodology so that the project remains on schedule.
- The proposed project has numerous project risks which can impact the project schedule and budget. The Proponent shall identify all project risks and provide a detailed project methodology which will mitigate the project risks. The Proponent shall also include any actions required by the Corporation.
- The Proponent shall identify the design, tender, construction, etc., methodology and strategy to accelerate the project schedule.
- The quantity of regulatory approvals required for the project present significant risk to the project schedule as well as the budget. The Proponent shall include details on the proposed strategy to secure permits and approvals in a timely fashion in order to mitigate project delays and cost overruns.

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- The Proponent shall consider various tendering and construction phasing alternatives which could expedite the overall project schedule.
  - The Proponent shall review various construction methodologies which could expedite the project schedule and mitigate costs.
  - Continually update the project schedule and submit an updated version monthly to the City to be reviewed at monthly progress meetings. The schedule shall include City review time.