Coquitlam

City of Coquitlam

Request for Proposals

RFP No. 23-054

Asset Replacement Modelling System (ARMS)

Issue Date: June 5, 2023

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SUMMARY OF KEY INFORMATION

RFP Reference	**RFP No. 23-054** **Asset Replacement Modelling System (ARMS)**
Overview of the Opportunity	The purpose of this RFP is to invite Proposals from qualified firms for the provision of **Asset Replacement Modelling System (ARMS)**.
Closing Date and Time	**2:00 pm local time** **Wednesday, July 05, 2023**
Instructions for Proposal Submission	Proposal submissions are to be returned in Microsoft Word and any other supporting documents to be consolidated into one PDF file and uploaded through QFile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid 1. **In the "Subject Field" enter:** RFP Number and Name 2. **Add files in .pdf format and Send** (Ensure your web browser remains open until you receive 2 emails from QFile to confirm receipt.) Phone 604-927-3037 should assistance be required. The City reserves the right to accept Proposals received after the Closing Date and Time.
Obtaining RFP Documents	RFP Documents are available for download from the City of Coquitlam's website: https://www.coquitlam.ca/Bid-Opportunities Printing of RFP documents is the sole responsibility of the Proponents.
Instructions to Proponents	The guidelines for participation that will apply to this RFP are posted on the City's website: Instructions to Proponents
Questions	Questions are to be submitted in writing quoting the RFP number and name up to 3 business days before the Closing Date sent to email: bid@coquitlam.ca Questions received after that time may not receive a response.
Addenda	Proponents are required to check the City's website for any updated information and addenda issued, before the Closing Date at the following website: https://www.coquitlam.ca/Bid-Opportunities
Withdrawal of Submission	Proposals may be withdrawn by written notice only, made by an authorized representative of the Proponent sent to email: bid@coquitlam.ca prior to the Closing Date and Time.
Terms and Conditions of Contract	City of Coquitlam Standard Terms and Conditions - Purchase of Goods and Services are posted on the City's website and will apply to the Contract awarded as a result of this RFP.

DEFINITIONS

"Agreement" "Contract" means the contract for services or City Purchase Order that will be issued to formalize with the successful Proponent through negotiation process with the City based on the proposal submitted and will incorporate by reference the Request for Proposals, Specifications, Drawings, any additional subsequent information, any addenda issued, the Proponent's response and acceptance by the City.

"ARMS" means Asset Replacement Modelling System.

"Asset" means tangible infrastructure owned and / or operated by the City.

"Asset Category" means assets of different servicing groups such as water, sanitary sewer, drainage, road, transportation, park, facility asset, etc.

"Asset Owner" means the City department the asset is entrusted with to manage the asset.

"Asset Type" means different assets falling within Asset Categories, for e.g. in water, asset category asset types are: water main, water meter, water pump station, etc.

"City", "Owner" means City of Coquitlam.

"**Componentization**" means sub-dividing an asset in to many, based on specific reasoning such as

"Consultant" "Contractor" means the person(s) firm(s) or corporation(s) appointed by the City to carry out all duties, obligations, work and services described in the Request for Proposal and all associated documentation, which may also include mutually agreed revisions subsequent to submission of a Proposal. Both "Contractor" and "Proponent" are complementary in terms of duties, obligations and responsibilities contemplated at the Request for Proposals stage, through evaluation process, execution and performance of the services and works.

"**Cross-optimization**" means optimizing / prioritizing, based on a set of criteria, between two or more asset categories to create an intended alignment in priority between those assets.

"E&PW" means Engineering and Public Works Department of the City.

"Price" means the amount that will be paid by the City to the Contractor for delivery and acceptance of goods and Services;

"Project Manager" means the City staff member appointed to coordinate the work;

"**Project Milestones**" means stages of major accomplishments of a project, such as 'design', 'set-up/build', testing, training, etc.

"Proponent" means responder to this Request for Proposals;

"Proposal" means the submission by the Proponent;

"**Renewal**" means replacement (of assets) also includes rehabilitation, and maintenance activities, for the purpose of this contract.

"Request for Proposals" "RFP" shall mean and include the complete set of documents, specifications and addenda incorporated herein, and included in this Request for Proposals;

"Services" "Work" "Works" means and includes the provision by the successful Proponent of all services, duties, and expectations as further described in this RFP. This will also mean the whole of

the work, tools, materials, labour, equipment, travel, and all that is required to be done, furnished and performed by the Contractor;

"Shall" "Must" "Will" "Mandatory" means a requirement that must be met;

"Supply" "Provide" shall mean supply and pay for and provide and pay for.

1 INSTRUCTIONS TO PROPONENTS

1.1 Acknowledgement

The City acknowledges with gratitude and respect that the name Coquitlam was derived from the hən̓q̓əmin̓əm̓ word kʷikʷəƛ̓əm (kwee-kwuh-tlum) meaning "Red Fish Up the River". The City is honoured to be located on the kʷikʷəƛ̓əm (Kwikwetlem) traditional and ancestral lands, including those parts that were historically shared with the sq̓əc̓iy̓aʔɬ təməxʷ (Katzie), and other Coast Salish Peoples.

1.2 Purpose

The City requests Proposals from professional, qualified, experienced companies for the provision of Asset Replacement Modelling System (ARMS) software and services.

1.3 Proposal Submission

Proponents should complete and submit the information requested in this RFP document on the Proposal Submission Form or in a format that has been approved and is acceptable to the City.

1.4 Instructions to Proponents

Proponents are advised that the rules for participation that will apply to this RFP are located: Instructions to Proponents.

By submission of a Proposal in response to this RFP, the Proponent agrees and accepts the rules by which the bid process will be conducted.

The City will not be responsible for any delay or for any submission not received for any reason, including technological delays or issues by either party's network or email program, and the City will not be liable for any damages associated with submissions not received.

1.5 Prices

Prices shall be all-inclusive and stated in (Canadian Funds). Prices shall remain FIRM for the completion of the Services.

Prices shall include the provision of all tools, materials, equipment, labour, transportation, fuel, supervision, management, overhead, materials, traffic control, services, all necessary packing and crating (where applicable), Canadian Customs import and export duties, freight, handling, insurance, all other associated or related charges, foreign, federal, provincial and municipal taxes, bonding costs, all licences, permits, inspections and all other requirements necessary for the commencement, performance and completion of Services as described.

Taxes are to be shown separately at time of invoicing.

The lowest price of any Proposal will not necessarily be accepted but will be analyzed to determine best overall value.

1.6 Eligibility

For eligibility, and as a condition of award, the successful Proponent would be required to meet or provide the equivalent:

a) Commercial General Liability (CGL) insurance $5M coverage provided on the City's Standard Insurance Form
b) Be registered and provide WorkSafeBC clearance
c) Accept the City's standard Terms and Conditions posted on the City's website: Standard Terms and Conditions - Purchase of Goods and Services
d) A City of Coquitlam or Tri Cities Intermunicipal Business License

1.7 Requested Departures

The Proponent acknowledges that the departures requested in the Proposal Submission Form will not form part of the Contract unless and until the City specifically consents in writing to any of them. The City may not consider any departures not stated in the Proponent's Proposal Submission.

1.8 Evaluation Criteria

Evaluation Criteria of each proposal will be determined in accordance with the following:

Proposal Evaluation Summary	Maximum Points to be Awarded
Corporate	30
Sustainable Benefits and Social Responsibility	10
Technical	30
Financial	30
Total	100

The criteria for evaluation of the Proposals may include, but is not limited to:

Corporate Experience, Reputation, Capacity and Resources

- Proponent's qualifications, experience, and demonstrated performance providing services of similar size, scope and complexity
- Recent demonstrated successful municipal experience with implementation(s) of ARMS systems of similar size, scope and complexity
- References
- Key Personnel on project team, qualifications and experience, and their commitment period under this project
- Value added benefits

Sustainable Benefits and Social Responsibility

- Sustainable benefits
- Reconciliation
- Social Responsibility

Technical

- Technical Architecture that has agility to accommodate changes in data structure.

- Functionality and suitability of proposed solution that has reference to best practices like ISO 55000, International Infrastructure Management Manual (IIMM), etc.
- Proven Implementation methodology, plan and schedule, key deliverables and success factors
- Proven Training strategy
- Support, maintenance and upgrades plans
- Test and Acceptance Plan, giving details of testing carried out by the vendor/successful Proponent and users' roles, expectations, and timelines under the User Acceptance Testing (UAT)
- Compliance with the requirements specifications
- Proposed Project Schedule
- Project Plan

Financial

- Total price, including purchase cost, implementation costs, training costs, on-going software support, maintenance and/or subscription costs for five (5) years, and cost increases for the subsequent 5 years (6-10 years)
- The payment time-lines and amounts associated to the milestone completion stages, during the project implementation (must be included)

Demonstration

- Short-listed Proponents will be required to provide a demonstration of their proposed ARMS software solution, based on a demonstration script provided by the City.

A demonstration may be requested of those Proponents' Proposals that meet the criteria stated in this RFP and who have scored high in the evaluation or any Proponent at the City's sole discretion. Demonstrations will be evaluated for short-listed Proponents and the results will be included in the overall scoring. The duration of the demonstration should aim for 2 hours of presentation and a 1 hour of question period.

These criteria will be used to determine best overall value to the City. Proposals will be compared to select one or more Proponents that are most advantageous.

And, upon selection of one or more lead Proponent(s):

- References may be contacted
- Interviews may be conducted

The City reserves the right to check references on other projects even if they are not specifically listed. Information obtained from references will be confidential and will not be disclosed to any Proponents.

These criteria will be used to determine best overall value to the City as well as any other criteria that may become evident during the evaluation process.

The City may, at its discretion, request clarification or additional information from a Proponent with respect to any Proposal and the City may make such requests to only selected Proponents. The City may consider such clarifications or additional information in evaluating a Proposal.

Incomplete Proposals or Proposals submitted on forms other than the Proposal Form or Proposal violate the stipulated conditions stated in the RFP document may be rejected.

Proponents agree the City may disclose names of Proponents and total award amount, however, unevaluated results, unit prices, rates or scores will not be provided to any Proponents.

The City reserves the right to reject without further consideration any Proposal which in its opinion does not meet the criteria it considers essential for the work outlined in this RFP.

Where only one Proposal is received, the City may reject such and re-issue the RFP on a selected basis.

1.9 Term of Agreement

The initial term of the Contract is two (2) years with the option to extend the Contract by additional terms, upon mutual agreement of the parties. The Proposal will be evaluated based on a comprehensive 5 year cost to the City, with further consideration for a subsequent 5 year cost. Therefore the Proposal shall provide a fixed annual cost of services for a period of 10 years.

1.10 Clarifications

The Proponents are encouraged to contact, in writing, the City Purchasing contact to seek clarifications, not later than a calendar week to the Proposal submission deadline, with questions, request for data samples, and other details required to submit their Proposals.

2 GENERAL CONDITIONS OF CONTRACT

2.1 Terms and Conditions of Contract

The City's Standard Terms and Conditions - Purchase of Goods and Services, as published on the City's website, the Conditions listed in this RFP, along with the accepted Proposal, addenda and any subsequent clarifications, correspondence, the totality of which will constitute the Contract.

PROJECT SPECIFIC TERMS AND CONDITIONS

2.2 Software & Information/Intellectual Property

The Consultant warrants clear title to materials supplied by them and warrants them free from defects and/or imperfections, and will indemnify, defend and hold the City including its employees and agents harmless against any and all suits, claim demands and/or expenses, patent litigation, infringement, material, builders', labour's liens, or any claims by third parties in or to the services/supplies mentioned and supplied.

It is also the Consultant's responsibility to ensure that the City has all licenses required to use any software that may be supplied by the Consultant pursuant to the Contract.

Any and all information, reports, documents, data, computer software, or other items or any nature whatsoever, in any form, developed by the Consultant pursuant to this Contract whether completed or not, together with all designs or materials capable of intellectual property protection, prepared, developed or created by the Consultant, its employees or agents during the performance of and/or pursuant to this Agreement shall automatically become the exclusive property of the City.

The Consultant will execute any assignments of copyright required by the City to this provision effect. The Consultant will deliver all such property to the City forthwith upon demand by the City.

2.3 Warranty

The Consultant warrants that the Services and any products supplied with the services are free of all defects, deficiencies, and problems arising from workmanship for a period of one (1) year from the date of approved final completion.

2.4 All documents leading to the award, such as RFP and the proposal especially Appendix A, critical communications related to clarifications will be part of the agreement signed between the City and the successful Proponent, and omissions in the "Statement of Works", if one produced by the successful Proponent, will not nullify the original requirements specified, unless otherwise amendments specifically agreed upon by the City and documented under Appendix A or elsewhere.

3 SCOPE OF SERVICES

3.1 Purpose

The City requests Proposals from qualified, experienced Proponents for the supply and delivery of an **Asset Replacement Modelling System (ARMS).**

3.2 Scope

The scope of services for the ARMS software implementation includes but is not limited to:

- Initial software license for either a City-hosted (on premise) or SaaS solution (Cloud);
- Professional services for design, implementation, configuration and project management (if applicable) related to software delivery and implementation, working in conjunction with the City's technical and functional teams, and its agents;
- End-user, Super-user, and administrator training, including training materials and documentation;
- On-going software support, maintenance and/or subscription costs and version upgrade cost, if separate from annual subscription, for the next 5 years and increases for the subsequent 5 years (years 6 to 10); and
- Integration with the City's existing Computerized Maintenance Management System (IBM Maximo) and Geographic Information System (ESRI GIS) and other applicable City Corporate software systems, as chosen during the design stage. (e.g.: MS Office365 as needed, Reporting systems such as Cognos)
- Data Migration from legacy system, only if needed/ or in applicable areas (E.g.: Power plan, GIS, etc.)

3.3 System Requirements

The **ARMS** should provide the following high-level features. The detailed requirements specification is provided in **Appendix A – ARMS Functional Requirements Specifications:**

- Meet the Business needs described in Section 3.5; and
- Hosted or Software-as-a-Service (SaaS) models will be considered under the following additional criteria:

- Must comply with British Columbia Freedom of Information and Protection of Privacy Act (FOIPPA) requirements. Refer to https://www.oipc.bc.ca for more information.
- Concurrent users –Depending on the software functionalities and security features, the following **minimum number of users** shall be capable of accessing the system concurrently:
  - System Administrators and Super Users with highest privileges : 5 users
  - Modellers with high privileges except user profile and security setups: up to 5 users
  - Reviewers with Read only access : 30 users
  - Unlimited user offering will be valued unless has considerable cost implications.

3.4 Asset Categories and Classes/Types

The City models at least the following asset categories and the software shall be capable of modelling and setup for:

- Water (including but not limited to mains/pipes, pump stations, pressure reducing valve stations, reservoirs, service connections, SCADA systems, meters, etc.)
- Sanitary sewer (including but not limited to mains/pipes, siphons, force mains, pump stations, service connections, etc.)
- Drainage (storm) (including but not limited to mains/pipes, pump stations, manholes/catch-basins, outfalls/intakes, floodgates, culverts, dykes, service connections, methane systems, etc.)
- Roads and Traffic Operations (including but not limited to Pavements and bases, lanes, bridges, walls, sidewalks, curbs, streetlights, signals, signs, street-furniture, security cameras, etc.)
- Other assets categories such as Parks, Facility/Building assets, etc.

The software **shall allow unlimited asset categories** and asset records.

- Assets are componentized and thus have to be modelled at component level. Components are required due to their varying life expectancies or logical servicing nature. For example, Pump stations will be componentized in to structural, mechanical and electrical. Another example would be Bridges that are componentized in to 7 to 11 components and sub-components.

3.5 Project Background and Business needs

a. Introduction

The City of Coquitlam has a population of about 150,000. The Engineering and Public Works (E&PW) department is in possession of tangible infrastructure and related assets worth $3.5 billion (replacement value). To plan and effectively utilize these assets the City has embarked on an Asset Management Initiative since 2014.

The efforts under the Asset Management Initiative were carried out in general conformance with best practices and guidelines such as,

- International Infrastructure Management Manual (IIMM);
- InfraGuide;
- BC Asset Management Roadmap; and
- PAS55 (pre to ISO 55000).

While adopting the concepts and guidelines, the City has formed them to align with City's Strategic Goals and accepted practices.

Several associated studies and works were also completed as described below.

i. Asset Management Gap Analysis and Strategic Direction study

ii. Asset Management Condition Assessment Framework study

iii. Asset Management Condition Assessment Program Development study

iv. Asset Management Information System – Maximo Review

v. Risk Assessment Framework and Modelling

vi. Information system Framework Development and Implementation plan

The City has carried out studies and developed works based on inputs from City staff that practice concepts in planning to execution in the field. Based on these works, E&PW has developed an Asset Management Program ("AMP") that will help adopt strategic asset management towards sustainably managing its assets.

Sustainable asset replacement is an important strategy in E&PW's AMP and it requires implementing an optimized asset replacement modelling software system. The following sections describe the business requirements of this optimized ARMS.

b. City's current corporate software systems applicable to AMP

The City is aware of the data requirements and gaps for effective asset management, and is continuously working to bridge identified data gaps. To effectively utilize the vast amount of available data for strategic decision making, structured data analysis is required. Implementing ARMS aims meeting this objective. The City's asset management related data processing requirements are currently met by several systems as discussed below.

i. Maintenance Management System – Maximo (IBM)

All operational planning and maintenance management are carried out in Maximo (version 7.6) and this is expected to remain as a corporate software in the future. Maximo is set to handle work order management, work scheduling, inspections, condition assessment data handling, asset registry data handling, and report generation.

While Maximo will be the prime asset registry, data for some assets are retained in a GIS database, and may continue in future due to data management efficiency. These are data of non-liner (pooled) assets, generally for assets in large numbers such as street lights. This means asset inventory data, condition, risk, etc. may be stored in Maximo, GIS and on tertiary software, on a shared basis.

ii. Geographic Information System – ESRI ArcGIS

ESRI ArcGIS (version 10.2) software platform with Oracle backend database contains the City's spatial asset data. This includes all known linear assets such as pipes, pavements and associated assets like hydrants and valves. Further it has non-linear assets like pump stations, streetlights, etc. Assets like pump stations, bridges, and other similar structures are represented through notations spatially but the associated data are only available in hardcopy / digital pictorial file formats and to a limited scale in Maximo.

The City expects GIS (ESRI) to remain as the base spatial asset platform. Supplementary asset data that are not practical to hold in the GIS database or in Maximo are to be retained in ARMS.

Currently viewing of the assets is enabled through a browser based GIS application, *QtheMap*. For general users this will remain the same. However, the ARMS related outputs must be viewed in a GIS enabled window of the ARMS software.

iii. Financial Management System – Oracle E-Business Suite (EBS)

The City's financial system is Oracle EBS (Financials version 12.1.3).

iv. Cognos (IBM) Reporting

Currently report generation is carried out through Cognos (version 10.2.2) and this is expected to remain. Any integration to City's reporting systems, should be flexible enough to accommodate future changes of City's corporate software (flexibility such as data transfer through xml/flat files). In addition, a GIS based Dashboard reporting system has been developed by the City to bring all reports in to a single location and provide improved and effective user interaction and experience. The ARMS reports may be linked to these dashboard(s) on a need basis directly or indirectly.

In addition, dashboards will be created in ARMS, to report/review ARMS outputs, the City may choose to bring in data from other systems to create dashboards in ARMS where feasible.

The conceptual relationship between the City's relevant corporate information systems and the ARMS is described in Figure No. 1:

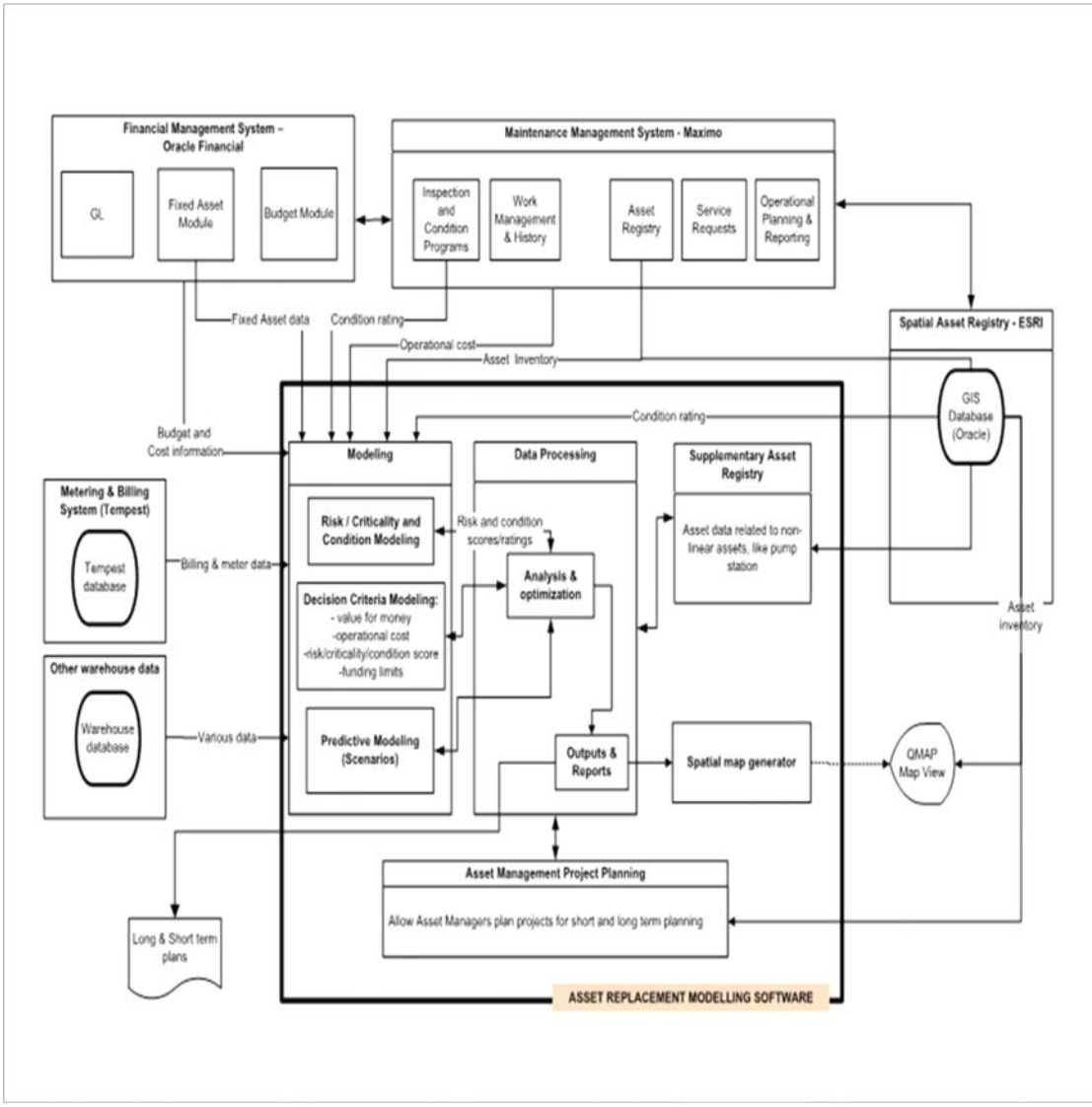

Figure No. 1 - Conceptual relationship between City's data systems and ARMS

c. Functions ARMS to perform

The ARMS software can be an all-in-composite software or be a software and/or middleware combination that can perform the following functions including, but not limited to:

- Contain necessary data to model renewals that is received via data input function.
- Model with replacement criteria and scenarios for optimized asset renewal decision making;
- Analyse asset data based on modelled multi-criteria and scenario with optimization algorithms, and report;
- Allow to register supplementary asset data for non-linear assets. This is to cater for assets like pump stations and bridges where the assets are currently registered as location only in GIS asset registry;
- Has ability to carry out cross asset optimization, meaning prioritizing between many asset categories such as water main, sewer main, road pavements, etc., to develop synergy in replacement planning and reduce cost via optimization analysis; and
- Allow to set business rules to input prioritization rules – like tree diagrams, formulae, etc.

i. Model criteria and scenarios for decision optimization

Modelling includes using condition ranking, risk ranking, value-for-money, and other criteria for prioritization/optimization; setting up asset performance indicator; etc. for multiple years and scenarios. These models will then be used by the software's analysis and optimization engine to develop optimized asset replacement decision outputs.

The software should be capable of handling multi-period, multi-criteria / multi-objective, and performing multi-constraint analysis and optimization.

The optimization should result in informed decisions with regard to asset investments, maintenance, rehabilitation, and renewal/replacement based on decision making criteria such as:

1. Value for money;
2. Risk based condition ranking (that may also reflects level of service commitments);
3. Operational maintenance and rehabilitation treatment cost;
4. Funding constraints; internal priorities.

Best practice frameworks and life-cycle-cost concept will be fundamental to asset management and the software should be able to adequately accommodate such concepts.

The software must have advanced analytical tools for predictive modelling with built-in and user-defined algorithms, deterioration curves, etc., that can be applied

to existing condition data to predict how assets will degrade over time. Having the ability to set rules on intervention levels and appropriate treatments for ultimate optimized selection is necessary.

ii. Data Processing: Analyse the asset data based on modelled criteria and scenario and report

The proposed software should contain analysis engine to utilize modelled criteria and data to analyse and provide optimized outputs that could be considered informed decision-support data. Also required is the ability to report in various formats including data export features in standard file formats: MS Excel, XML, etc. In addition to tabular reporting, the outputs must be capable of reported spatially in a browser of its own or through the City's ESRI based QtheMap / Portal browsers.

Reporting may include smart reports such as dynamic charts that show how asset replacement are trending with specific set parameters, levels of service, KPI, etc.

iii. Supplementary Asset Registry

The software should be an asset registry to hold additional asset specific attributes that are not available in or cannot be held in the GIS database or Maximo. This includes the ability to link the data in the software to spatial points so that the data can be used from spatial reference.

iv. Planning platform

The ARMS to have a planning module where asset owning managers, who are primarily engineering asset planning staff, can plan their works related to new assets, asset rehabilitation/replacements and asset retirements. Such planning environment could preferably be a spatially enabled platform where existing assets can be reviewed / removed and new assets can be added to develop / plan scenarios.

In addition, multiple assets view will be needed when cross optimization is planned / reviewed. For example, when planning a sewer main in a sector of the street, other assets currently in and works planned in the same sector such as water / drainage upgrades, road works, etc. should be made visible to utilize in proper cross optimization.

Purposely the functional requirements discussed above are kept broad and open-ended as optimized modelling for asset replacement can be achieved in various ways based on different software architecture.

Functional Requirements Specifications are detailed in Appendix A - ARMS Functional Requirements Specifications.

d. Data Availability and Adequacy

The available data for ARMS modelling may be limited in some cases while complete in most others.

i. Asset inventory data: location (spatial), install date, size, length, etc. are available to almost all assets.

ii. Asset condition data: standardized condition data are available for pavements, sidewalks, some sewer and drainage mains, bridges, streetlights, and signals. For assets like pressure reducing valves and pump stations, maintenance inspection reports are available but condition data are not available in standard format. Further, for assets like water mains no condition data are available but condition rating is carried out through indirect data such as main break data.

iii. The City has a comprehensive condition assessment program that will systematically collect structured condition data and continue to fill in data gaps where exist. Therefore, in the interim some assets will be modelled without condition data but using available data such as age, break history, etc. However, ability to incorporate condition data as and when collected must be considered in system setup.

iv. Asset Risk data: Risk modelling for specific assets is conceptualized and available for modelling to get risk / criticality rating.

v. Asset Cost data: Capital cost, replacement cost, and operations cost data are available from Maximo, Oracle Financial system and other ancillary databases.

e. Data Transfer / Integration

The City anticipates that the data transfer between City's data systems and ARMS will occur via time-specified file transfers. This will eliminate expensive data field to field integration between systems that is unnecessary because ARMS does not require real time data accuracy for its modelling and analysis. However, some commercially available software systems may have been developed pre-integrated with major software like ESRI GIS and Maximo, and this will be considered preferable as effective integration is possible with minimal effort.

The data transfer between ARMS and GIS database is required to access some base asset data from the GIS database and to transfer the output data from ARMS to the GIS environment. The ability to handle spatial reference in ARMS will be a preferred feature. Optionally ARMS may even have its own spatial /GIS map display window to facilitate spatial display of its output.

f. Data and Process Mapping, Business Rules and Data Development

The data and process mapping, and business rule development required for the implementation of the ARMS and design documents will be documented by the successful Proponent, during the software implementation period – particularly the design stage, to facilitate implementation. These documents must be provided to the City for confirmation and approval. Providing direction on preparation of the data, and implementation facilitation may be carried out by the City project Manager.

The Data and Process Mapping, and Business Rules document may cover the following:

i. Concept and terminology definition

ii. Event / action / solution options definition

iii. Asset inventory summaries including network asset hierarchy/grouping, valuation, quantity/length, material, size, estimated service life, deterioration selection/ suggestion, criteria for modelling, asset network shape files
iv. Segmentation and intersection polygonization methodology and rules
v. Organization chart or asset tree
vi. Capital asset planning process diagram
vii. Asset renewal/ rehabilitation logic/flow chart and decision criteria
viii. Asset maintenance activity logic / flow chart
ix. Data source diagram / map / table
x. Conceptual risk model, criteria, weights and scores
xi. Asset consolidation logic / rules / polygon definition
xii. Data flow / data attribute diagram
xiii. Expected service lives of assets
xiv. Renewal unit rates (costs) for synergy and stand-alone scenarios
xv. Deterioration curves (data)
xvi. Renewal costs and cost calculation methodology and formulae
xvii. Report requirements (strategic, tactical and operational, and administrative)
xviii. Other formats and templates as determined by the City

APPENDIX A

ARMS FUNCTIONAL REQUIREMENTS SPECIFICATIONS

Appendix A: ARMS Functional Requirements Specifications				
Ref	**Requirement Submitted by:** (insert company name)	**Requirements: Must Have or Preferred to have**	**Proponent to indicate whether your software meets this functionality by filling with 'Yes' or 'No' only.** Any related comments, provide in the next column. **Any non-reported rows will be considered as 'not meeting' the requirement. This Appendix A will form part of the Statement of**	**Comments** Comments cannot alter or negate the "Yes" or "No" indicated in the pervious column, rather can substantiate with explanation. The "Yes" or "No" response will be considered in RFP evaluation, and Comments will not be considered in the RFP evaluation.
1.0	**GENERAL**			
	The software should allow optimization modelling, analysis and reporting of infrastructure asset renewals. Renewals refers to replacement, rehabilitation or maintenance. 'Post Implementation stage' means when user is using the software system. Proponents completing this document must contact the City, in writing, in case any clarification is required. PROPONENTS MUST NOT CHANGE /ALTER REQUIREMENTS SPECIFIED IN THIS COLUMN. SUBMISSIONS WITH CHANGES TO THE REQUIREMENT SPECIFICATIONS MAY BE REJECTED. ANY DETAILS MUST BE PROVIDED AS COMMNETS IN THE "COMMENTS" COLUMN.			
1.1	System must be a multi-user environment either in local server (On premise) or on a web browser/cloud environment (in compliance with City's legal requirements and BC regulations related to data management and privacy).	**Must have**		
1.2	System must be capable of accessing the software from a handheld device in addition to (Must have) via a desktop computer.	**Preferred to have**		
1.3	System will communicate to 'other corporate systems' through data file transfer; the 'other corporate systems' include, but not limited to, ESRI GIS, IBM Maximo Maintenance Management System, Oracle Financial, Tempest, and other database systems.	**Must have**		
1.4	System should allow input and output of data through digital files, such as XML or otherwise. Indicate other input out put file formats such as xls, csv, shp, etc. in the "Comments" column.	**Must have**		
1.5	System must have complete referential integrity.	**Must have**		
1.6	System will allow creating additional user defined windows (flexi-windows) and associated user-defined fields / attributes (flexi-fields) in post implementation stage; access to this will be allowed through advanced/super user access defined by role (e.g. system administrator).	**Preferred to have**		
1.7	System will allow user defined fields/attributes.	**Preferred to have**		
1.8	System will allow defining character length and data type for regular and user defined field/attributes in post implementation stage.	**Must have**		
1.9	System should allow to set data fields to populate data from asset inventory and other databases.	**Must have**		
1.10	System should allow to set data fields capture value based on look-up data sets or otherwise.	**Must have**		
1.11	System will allow Systems Administrator to setup security for different user-classes with different access levels for user actions such as read, write, modify, close, etc.	**Must have**		
1.12	System will allow Systems Administrator to assign users to security classes in user defined groups, in addition to ('Must have') individual assignment.	**Must have**		
1.13	System will automatically log audit trails on user activity to the point of a user's last edited record/field with date and time stamp.	**Must have**		
1.14	System will retain deleted records / scenarios / etc. in archived status for a system administer specified period.	**Preferred to have**		
1.15	System will allow setting time periods applicable for various system related business rules to define business rule expiry.	**Preferred to have**		
1.16	System should allow to set up business processes related rules (e.g. to prevent including a abandoned/retired asset record in an analysis - based on asset status attribute: abandoned or retired)	**Must have**		
1.17	System should allow setting up duration of an attribute status.	**Preferred to have**		
1.18	System should allow deleted records be archived based on business rules.	**Preferred to have**		
1.19	System will have 'Help' facility for user reference or have knowledge support files accessible for users elsewhere.	**Must have**		
1.20	System should have out-of-box or standard created reports related to commonly needed Infrastructure Asset Management (see Reports section 5.0 below for details).	**Must have**		

1.21	System should be able to interact with City's Document Management System. Please refer to the Corporate software systems listed in the RFP.	**Preferred to have**		
1.22	System must have its own strong GIS interface or integration capability with ESRI GIS software. System should allow pushing output data to City's ESRI based GIS environment (Portal preset map or otherwise) even with its own GIS/ spatial display.	**Must have**		
1.23	System should allow transferring outputs to MS Excel spreadsheet or MS Access database or other relational databases. Please indicate the file formats your software allows in the 'Comments' column next.	**Must have**		
1.24	System will allow data be viewed in datasheet view (similar to MS Excel) to process/edit multiple record sets of data in a single window.	**Preferred to have**		
1.25	System may optionally have Work Breakdown Structure (WBS) capability and to assign City employees/staff to elements of WBS manually or based on pre-set rules and set-up.	**Preferred to have**		
1.26	System should be able to archive records based on setup logic or rules set by the user.	**Preferred to have**		
1.27	System should allow user to edit attribute data, manually, on attributes defined at the design stage. These are not limited to, but attributes such as material, size, adjusted replacement year, global cost numbers, unit rates used in cost calculations, etc.	**Must have**		
1.28	System should allow switching between asset text record to GIS display of it and vice-versa by quick and simple switching	**Must have**		
1.29	System should allow accessing an asset record starting from the GIS view in its own GIS viewer window. Users are more likely to access an asset record from the GIS location rather than remembering their reference ID.	**Must have**		
2.0	**ASSETS AND DEFINITIONS**			
	Assets are tangible infrastructure identified in City's corporate information systems such as Maximo (IBM), ESRI GIS, Oracle Financial, Tempest, and other databases			
2.1	System will have a unique identifier for individual assets. It is preferred to consider City's GIS defined Asset ID as the unique identifier.	**Must have**		
2.2	System will allow add, edit or delete assets as unique records one at a time or in a batch.	**Must have**		
2.3	System will allow unlimited groups/categories or hierarchy (tree structure or otherwise) to assign to assets such as asset, class, category, section, department, etc.	**Must have**		
2.4	System will allow add/edit/delete assets through system screen/window interfaces.	**Must have**		
2.5	System will allow grouping of assets at many (preferably unlimited) levels (like grand-parent, parent and child) and display for view/review- tree structure or otherwise.	**Must have**		
2.6	System will allow assets moved from one group to another without loosing its referential integrity / links to other attributes such as costs, references, etc.	**Must have**		
2.7	System will allow multiple asset type screen display templates to show attributes/data fields for different asset categories/types/groups. The templates may be similar to many asset types but could be different for some due to their additional critical attributes. For e.g. componentized assets may have more attributes to display than a non-componentized asset when comes to displaying a particular data view screen.	**Must have**		
2.8	System will create references to unique identifiers from other systems for an asset or otherwise to ensure that no duplicate instances of an asset within the system. For example systems unique identifier may maintain relationships with unique identifier of the CMMS/Maximo system, ESRI GIS system, etc.	**Must have**		
2.9	System will allow Linear assets defined in other systems (e.g. GIS) broken into sub-assets (e.g. pipe sections) in ARMS with appropriate references or otherwise. One to many relationships between the system and other corporate systems.	**Must have**		
2.10	System will allow appurtenances of an asset defined as unique assets either by hierarchy relationship or otherwise. A tree structure, with complete referential integrity, will be necessary to classify assets in a structure.	**Must have**		
2.11	System will allow assets to be assigned to an owner (e.g.: Engineering Department) with a secondary owner. This may be useful when more than one departments work on a single asset, especially when the asset is componentized. For. E.g. Engineering department may own pump station assets while Facilities department may rehabilitate parts of it such as roof and envelope.	**Must have**		
2.12	System will allow assets to have defined status: proposed, in use, retired/abandoned, etc.	**Must have**		
2.13	System will allow unlimited attributes to an asset to define it adequately, such as asset ID, name, description, location, material size, installed date, retired/abandoned date, various condition data, various risk data, various cost data, etc.	**Must have**		
2.14	The system should allow various data formats for attributes such as text, currency, etc.	**Must have**		

2.15	The system should allow organizing various data attributes such as asset description, risk data, condition data, cost data, levels of service data, operating cost data, value for money data, as separate sections of the asset data record display.	**Must have**		
3.0	**ASSET DATA & MODELLING**			
	Asset data means various data attributed to assets used in prioritization/optimization modelling of assets for replacement			
	Modelling means the ability to plan for the capital renewal (meaning Replacement, rehabilitation, and maintenance) of assets over the short to long term horizons as assets approach their end of service lives or other defined considerations, and prioritize based on six (6) criteria scores related to 1) risk, 2)condition, 3)value-for-money, 4) Levels of service, 5) Operating cost, and 6) Internal priorities. Further cross-optimization of one asset with another to align their replacement timelines based on set rules.			
3.1	System will allow developing multiple scenarios for asset renewal analysis, store and compare them, and report in tabular and graphical forms for the following, but not limited to:	**Must have**		
	- budget dependent scenario: multiple budgets comparison	**Must have**		
	- renewal dependent scenario: multiple renewal types or strategies	**Must have**		
	- compare asset renewal cost against budget	**Must have**		
	- calculate and compare net present values (between scenarios) - of future year values	**Must have**		
	- calculate and compare backlog work quantity/value (gaps) between scenarios	**Must have**		
	- compare and identify renewal opportunities (such as synergies - e.g.: Two categories and or types of assets be replaced at the same location at the same year) amongst various categories of assets (asset cross optimization) based on predefined business rules.	**Must have**		
3.2	System should be able to adjust cost of renewal works for assets identified with synergies. This means a sewer main renewal is carried out in the same location with water main renewal will have lower renewal (unit rate) and/or cost, compared to stand alone work.	**Must have**		
3.3	System will allow defining unlimited number of 'global' data parameters such as interest rate that are common for all asset records and be able to apply in present value calculations and / or in future cost calculations .	**Must have**		
3.4	System will accept asset data as records from GIS with unique asset ID and several other descriptor/classification and linked to subsequent user defined attributes (if applicable) that will be utilized in prioritization modelling.	**Must have**		
3.5	System will provide/allow for planning / modelling for user defined future timeline, including to a longer future period of up to 100 years.	**Must have**		
3.6	System will accommodate scenario setup, storage, review, comparison, and removal if needed, while modelling multiple scenarios, preferably using predefined templates, that comprise of several fields.	**Must have**		
3.7	System will allow modelling criteria for replacement optimization/prioritization, at least six: 1) condition, 2) risk, 3) value-for-money, 4) Levels of service, 5(Operating cost, 6) internal priorities. System should allow to define weightages to these criteria and incorporate in calculations.	**Must have**		
3.8	System will allow to input prioritization logic through facilities such as tree diagram or other logic definition means.	**Must have**		
3.9	System will allow several financial numbers such as unit cost, total costs (for several years), discount rates, capital cost, operations cost, etc., be stored, edited, and used in calculations, and allow input of annual budget numbers for user defined number of years for each asset category and type.	**Must have**		
3.10	System will allow various asset attributes / data fields compared amongst various assets.	**Must have**		
3.11	System will allow to model using limiting dependencies such as ceiling-budget and/or floor-budget.	**Must have**		
3.12	System will have analysis engine (pre-defined, and in addition preferably user-defined) to analyze various scenarios created through prioritization logic (tree diagram or otherwise).	**Must have**		
3.13	System will allow to calculate various financial indicators such as Net Present Value, Future value, etc.	**Must have**		
3.14	System will allow to calculate differences between expected/budgeted value and actual value and show as gap in individual years and cumulatively over years; also graph the numbers.	**Must have**		
3.15	System will display modelled assets as records in tabular format as well as on GIS environment either through its own GIS window or by pushing out data to GIS-enabled data format.	**Must have**		
3.16	System will identify multiple asset records in proximity (location) or other criteria to select them for modelling using logic provided through decision tree or otherwise	**Preferred to have**		
3.17	System will report prioritized assets based on prioritization logic, in tabular format.	**Must have**		
3.18	System will report prioritized assets based on prioritization logic, in spatial format(s).	**Must have**		

3.19	System will allow to select assets in a geographic boundary from a spatial environment (like by a polygon), to select and perform actions such as addition of costs or listing of assets, etc.	**Preferred to have**		
3.20	System will allow reporting through queries and filters and/ or other report generating facilities available as part of the software.	**Must have**		
3.21	System will generate graph based on user defined data fields in addition to the ('Must have') out-of-the-box standard graphs.	**Preferred to have**		
3.22	System will allow setting up user-defined graphs based on defined data fields on post implementation.	**Preferred to have**		
3.23	System should allow defining life-cycle-cost (LCC) and develop analysis scenarios based on LCC and report. This may require other data handling to compute LCC.	**Must have**		
3.24	System should allow storing and utilizing asset condition data in optimization analysis ; one (asset) to many (condition values) relationship should be allowed.	**Must have**		
3.25	System should allow storing and utilizing asset risk data in optimization and analysis ; one (asset) to many (risk values) relationship.	**Must have**		
3.26	System should allow storing and utilizing asset value-for-money (VFM) data in optimization and analysis ; one (asset) to many (VFM values) relationship.	**Must have**		
3.27	System should allow storing and utilizing Levels of service (LOS) in optimization and analysis; one (asset) to many (values) relationship.	**Must have**		
3.28	System should allow defining relationship between analysis criteria such as risk, condition, VFM, LOS, and other attributes such as remaining service life, etc. This will help define rules when dealing with data gaps. For example in the absence of condition data of an asset record the condition can be calculated from the age, and adjusted by other factors such as risk, etc.	**Must have**		
3.29	System should have the optimization engine to optimize / prioritize assets based on multi-criteria such as Risk, Condition, Value-for-money, LOS, Operating cost, internal priorities, etc. (criteria definition should be allowed separately).	**Must have**		
3.30	System should be able to graph renewal profiles by asset quantity, by total cost or other defined basis.	**Must have**		
3.31	System should schedule/list prioritized renewals based on conditions such as whole list without limits, limited by upper budget limit, limited by the number of projects, etc. as defined by the user.	**Must have**		
3.32	System should schedule/list prioritized renewals based on selected area on spatial window.	**Preferred to have**		
3.33	System should schedule/list prioritized renewals with proposed timeline (e.g.: date) of replacement	**Must have**		
3.34	System should allow to select renewal list based on relationship hierarchy such as asset category, department, etc.	**Must have**		
3.35	System should allow assigning values to attributes based on another attribute attached to the asset record.	**Preferred to have**		
3.36	System should be capable of defining custom 'Asset deterioration curves' for assets, by users, via formula or tabular coordinates and utilizing the curve in optimizing/prioritizing analysis. In addition system should have standard asset deterioration curves offered from a selection list. System should allow users to switch between deterioration curves (standard and user defined) when setting up scenarios.	**Must have**		
3.37	System should be capable of graphing 'Asset deterioration curves' used for the assets, on demand.	**Must have**		
3.38	System to deduce remaining service life based on predefined formula or otherwise.	**Must have**		
3.39	System to have what-if-analysis capabilities.	**Preferred to have**		
3.40	System will provide ability to specify project, process, and task dependencies from asset records.	**Must have**		
3.41	System will provide ability to setup and track asset life cycle through various user defined phases (e.g., planning, design phase, construction phase, commissioning, and disposal).	**Must have**		
3.42	System should calculate 'smoothed annual replacement cost' for assets based on the smoothing logic defined during the design phase of software implementation or otherwise as user input. Smoothing means averaging annual replacement costs, for example in 5-year intervals so that the replacement cost will be in steps (every 5-years) and not up and down between consecutive years.	**Must have**		
3.43	System shall compute various numbers related to condition, risk, value for money, levels of service, operating cost and internal priorities to fulfill the requirements specified in this document.	**Must have**		
4.0	**COSTS**			
4.1	System will maintain direct relationship between asset and cost data fields	**Must have**		
4.2	System should have ability to have several rates associated to an asset record	**Must have**		
4.3	System should have ability to have several costs associated to an asset record	**Must have**		
4.4	System should accept various cost and rate data through digital file transfer from other corporate systems such as IBM Maximo, Oracle Financials, Tempest, ESRI GIS, etc.	**Must have**		

4.5	System should compute multiple costs such as asset replacement cost, smoothed replacement cost, operating cost, rehabilitation cost, costs as standalone, costs under synergy (align with other asset replacement work)	**Must have**		
4.6	Cost numbers must be formatted to Canadian dollars	**Must have**		
4.7	Costs must be available at the lowest asset level to all rolled up group levels all the way to the overall City level	**Must have**		
4.8	System must calculate various numbers that are required to fulfil the requirements specified in this document.	**Must have**		
5.0	**REPORTS**			
5.1	System should have a set of standard reports. Minimum, must have the following reports:	**Must have**		
	- Cost comparison of multiple scenario runs , given in graphical form and tabular forms, for user defined number of years.	**Must have**		
	- Comparison of projected conditions of multiple scenario runs, given in graphical form and tabular forms, for user defined number of years.	**Must have**		
	- Condition projection for asset groups (mains, pump stations, etc.) and categories (Water, Sewer, etc.) for user defined number of years based on varying budget allocations for those years, given in graphical and tabular forms.	**Must have**		
	- Replacement profile (similar to Nessie) and funding gap graph for asset groups and categories for user defined number of years based on varying budget allocations for those years, given in graphical and tabular form.	**Must have**		
	- Asset summary report (tabular) showing asset category, type, quantity, and replacement value.	**Must have**		
	- Asset Risk status as represented in a particular model run and multiple runs	**Must have**		
	- System should allow all tabular reports be exported as csv or excel file formats.	**Must have**		
	- Model run results with Asset ID, type of replacement proposed, modelled replacement, rehabilitation or maintenance year, adjusted replacement, rehabilitation or maintenance year where applicable, cost of replacement, rehabilitation or maintenance.	**Must have**		
5.2	System should allow to set up user defined reports	**Preferred to have**		
5.3	System should allow to create custom graphs based on available relevant attributes/fields/values.	**Must have**		
5.4	System should allow to transfer/export graphs as picture files (e.g.: jpeg format)	**Must have**		
5.5	System will have standard query/filters to get reports on screen and exported in csv or Excel formats.	**Must have**		
5.6	System should allow user developing queries, filter reports, for report outputs.	**Preferred to have**		
5.7	System will provide information in dashboard and drillable format to reach detailed information	**Preferred to have**		
5.8	System should be capable of creating other reports, by vendor, as discussed at the design stage of software implementation.	**Must have**		

APPENDIX B

CURRENT TECHNOLOGY

Desktop PCs	Windows 10
Servers	Windows Server 2016 Standard, Windows Server 2019 Standard, VMWare vSphere 7, Hyper-V 2019
Database	Oracle 12.2, Oracle 19c, Oracle VM
LDAP	Azure AD, Microsoft Active Directory Functional Level 2016
Applications	IBM Maximo 7.6.x ESRI ArcGIS Enterprise 10.8.1; ArcGIS Desktop 10.5.1/10.8.1; ArcGIS Pro 2.9.5Oracle E-Business Suite (Financials) 12.2.11 Cognos Business Intelligence and Reporting 10.2.2/11 OpenText eDOCS DM 16.4 Microsoft Office 2016 (Word, Excel, etc.) Adobe Acrobat Adobe Acrobat Reader DC 2019 Autodesk AutoCAD 2022 (LT, base AutoCAD, Map 3D, Civil 3D)

City of Coquitlam

PROPOSAL SUBMISSION FORM

RFP No. 23-054

Asset Replacement Modelling System (ARMS)

Proposals will be received on or before 2:00 pm local time on

Wednesday, July 05, 2023

(Closing Date and Time)

INSTRUCTIONS FOR PROPOSAL SUBMISSION

Proposal submissions are to be consolidated into one PDF file and uploaded through QFile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid

1. **In the "Subject Field" enter:** RFP Number and Name
2. **Add files in .pdf format and "Send"**

   (Ensure your web browser remains open until you receive 2 emails from QFile to confirm upload is complete.)

Proponents are responsible to allow ample time to complete the Proposal Submission process. If assistance is required phone 604-927-3037.

Legal Name of Proponent	
Contact Person and Title	
Business Address	
Telephone	
Email Address	

1. DEPARTURES AND AWARD

a) CONTRACT - I/We have reviewed the City's Standard Terms and Conditions - Purchase of Goods and Services and would be prepared to enter into in an agreement that incorporates the City's Standard Terms and Conditions, amended by the following departures (list, if any):	
Section	**Requested Departure(s) / Alternative(s)**

b) SERVICES - I/We have reviewed the Scope of Services as descibed in this RFP and are prepared to meet those requirements, amended by the following departures and additions (list, if any):
Requirements – Requested Departure(s) / Alternate(s) / Addition(s)

c) AWARD - For eligibility of award, the City requires the successful Proponent to complete and have the following in place before providing the Goods and Services. **Section 1c items are not required as part of this Proposal but may be required prior to entering into an agreement with the City.**	
i. **WCB** - WorkSafe BC coverage in goodstanding and further, if an "Owner Operator" is involved, personal operator protection (P.O.P.) will be provided:	WCB Registration Number:
ii. **Insurance** – Provide Insurance coverage as per the City's Standard Insurance Form	
iii. **Vendor Info** - Complete and return the City's Vendor Profile and Electronic Funds Transfer Application (PDF)	
iv. **Business License** - A City of Coquitlam or Tri Cities Intermunicipal Business License	
As of the date of this Proposal, we advise that we have the ability to meet all of the above requirements except as follows (list, if any):	

2. CORPORATE

a) CAPABILITIES, CAPACITY AND RESOURCES - Proponents to provide information on the following (use the spaces provided and/or attach additional pages, if necessary)**:**
i. Structure of the Proponent, background, how many years they have been in business and organizational history (e.g. mission, vision, corporate directions, years in business, etc.):
ii. Proponent is to state relevant experience and qualifications as to the Services requested in the RFP:
iii. Proponent is to state any value added benefits and activities they can provide in delivering the Services. Provide details:
iv. Proponent is to describe their capabilities, resources and capacities, as relevant to the Services requested in the RFP: This includes their capacity to take on this project in regards to other work the Proponent may have ongoing:

b) REFERENCES – Proponent shall be competent and capable of performing the Services requested and successfully delivered service contracts of similar size, scope and complexity. The City reserves the right to contact any person(s), agency(ies) or firm(s) not listed as part of an independent review (use the spaces provided and/or attach additional pages, if necessary):	
Reference No. 1	
Description of Contract	
Size and Scope	
Work Performed	
Start Date	
End Date	
Contract Value	
Project completed on budget	

Project completed on schedule	
Reference Information	Company
	Name:
	Phone Number:
	Email Address:

Reference No. 2	
Description of Contract	
Size and Scope	
Work Performed	
Start Date	
End Date	
Contract Value	
Project completed on budget	
Project completed on schedule	
Reference Information	Company
	Name:
	Phone Number:
	Email Address:

Reference No. 3	
Description of Contract	
Size and Scope	
Work Performed	
Start Date	
End Date	
Contract Value	
Project completed on budget	
Project completed on schedule	
Reference Information	Company
	Name:
	Phone Number:
	Email Address:

c) KEY PERSONNEL – Proponent proposes the following key personnel for the Services stated in the RFP. No changes, additions or deletions are to be made to these Key Personnel without the City's written approval.

LINE ITEM	NAME	TITLE/POSITION	EXPERIENCE AND QUALIFICATIONS	YEARS WITH YOUR ORGANIZATION
i.				
ii.				
iii.				

(use the spaces provided and/or attach additional pages, if necessary)

d) SUB-CONTRACTORS - The following Sub-contractors will be utilized in provision of the Services and will comply with all the terms and conditions of this RFP. No changes, additions or deletions are to be made to these subcontractors without the City's written approval:

Sub-Contractor No. 1	
Legal Name	
Trade/Services Performed	
Background and Experience	
Contact Information	Name:
	Phone Number:
	Email Address:

Sub-Contractor No. 2	
Legal Name	
Trade/Services Performed	
Background and Experience	
Contact Information	Name:
	Phone Number:
	Email Address:

3. SOCIAL RESPONSIBILITY

a) SUSTAINABLE BENEFITS AND SOCIAL RESPONSIBILITY I. Describe all initiatives, policies, programs and product choices that illustrate your firm's efforts towards sustainable practices and environment responsibility in providing the services that would benefit the City
II. What policies does your organization have for hiring apprentices, indigenous peoples, recent immigrants, veterans, young people, women, and people with disabilities:
III. What policies does your organization have for the procurement of goods and services from local small and medium sized business or social enterprises or Indigenous owned businesses:
IV. What policies does your organization have to support reconciliation with indigenous peoples?

4. TECHNICAL

a) APPROACH and METHODOLOGY – PROJECT PLAN Summarize the key features of your Proposal and the Technical Approach to be used. Provide a brief description the various components required for successful completion of the work.
I. Delivery, Set-Up and Execution - Proposals should address the plan for the project delivery, set up and execution of the work:
II. Quality Assurance - Provide the measures the Proponent will use to maintain quality control for the Services being performed.
III. Training Strategy - Describe the training strategy the Proponent proposes to utilize:
IV. Test and Acceptance - Proponent is to provide details as to the Test and Acceptance plan along with timelines for the plan:
V. Appendix A – ARMS Functional Requirements Specifications – Compliance with the specifications and **included along with the Proposal submission:**
VI. Support , Maintenance and Upgrade Plans – Proponent to provide details as what is offered:
VII. Support Services - include an in-depth view of support services including online resources (forums, support groups, etc.) and emphasis on availability of local resources who are highly qualified to support the product.

b) PROJECT SCHEDULE

The Proponent proposes the following project schedule below:

INDICATE ACTIVITIES INCLUDING KEY DELIVERABLES - CONTRACTOR TO ADD ACTIVITIES WITH DURATIONS AS REQUIRED

SCHEDULE OF ACTIVITIES										

5. FINANCIAL

a) PRICE - Prices proposed are to be all inclusive; therefore, include all labour, material, tools, equipment, transportation, fuel, supervision, disposal fees, permit fees and any other items required for provision of the services (exclude GST):

PURCHASE

ITEM	SCOPE OF WORK	Unit of Measure	PRICE (exclude GST)
i.	PURCHASE OF SOFTWARE	Each	$
ii.	IMPLEMENTATION	Lump Sum	$
iii.	TRAINING _____hours	Per Hour	$
iv.	ANNUAL MAINTENANCE/SUBSCRIPTION	Lump Sum	$
v.			$
vi.			$
vii.			$
viii.	Other not Listed:		$
	TOTAL		**$**

Attention Purchasing Manager:

6. **I/We, the undersigned duly authorized representative of the Proponent**, having received and carefully reviewed all of the Proposal documents, including the RFP and any issued addenda posted on the City's website www.coquitlam.ca/Bid-Opportunities , and having full knowledge of the Site, and having fully informed ourselves as to the intent, difficulties, facilities and local conditions connected to performing the Services, submit this Proposal in response to the RFP.
7. **I/We** agree to the rules of participation outlined in the Instructions to Proponents and should our Proposal be selected, agree to the City's Standard Terms and Conditions - Purchase of Goods and Services and will accept the City's Contract as defined within this RFP document.
8. **I/We acknowledge** receipt of the following Addenda related to this Request for Proposals and have incorporated the information received in preparing this Proposal.

Addendum No.	Date Issued

This Proposal is submitted this ____day of _____, 20_____.

I/We have the authority to sign on behalf of the Proponent and have duly read all documents.

Name of Proponent	
Signature(s) of Authorized Signatory(ies)	**1.**
	2.
Print Name(s) and Position(s) of Authorized Signatory(ies)	**1.**
	2.