



Contract 2823Q

Installation of Sports Lighting System at Hugh Boyd Park

Bidders are requested to respond to this Quotation call as instructed subject to the provisions contained herein.

Name of Bidder: _____

Address: _____

City: _____

Province: _____ Postal Code: _____

Telephone No: _____ Fax No.: _____

E-mail: _____

Contact Person: _____

Title: _____

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Instructions to Bidders

1. Sealed quotations, plainly marked on the envelope:

**CONTRACT 2823Q - INSTALLATION OF SPORTS LIGHTING SYSTEM AT
HUGH BOYD PARK**

will be received at the Information Counter, Main Floor, Richmond City Hall, addressed to the Purchasing and Risk Department, 6911 No. 3 Road, Richmond, BC, V6Y 2C1, until 2:00pm, Local time:

Thursday, May 4th, 2006

2. Quotations received in the office of the Purchasing and Risk Department after the above-mentioned time and date will be returned unopened.
3. Quotations must be submitted on the attached Forms and be authorized by a signing officer of the Bidder's company. The entire Request for Quotation must be returned to the City.
4. This Document and completed Forms will become part of the Contract Documents between the City and the successful Bidder.
5. The City reserves the right to accept all or any part of a quotation or to waive irregularities at their own discretion. The lowest or any quotation will not necessarily be accepted.
6. Proprietary names, unless otherwise stated, are used solely to establish standards of materials and finish. Items of other manufacture may be accepted as equal to those specified, at the discretion of the City.
7. The City of Richmond estimates that this contract will be awarded within 3 - 4 weeks of the closing date. All bidders submitting Quotations for the Project will be advised as to the outcome. Please note that Bid results for those contracts posted on the City Web Site and/or BC Bid will be listed on BC Bid within two (2) weeks of the award of Contract.
8. Prices, in Canadian currency, shall be shown for the work specified and shall include all wages and benefits for those personnel engaged on this contract, expenditures for materials, equipment, travel expenses, assessments for Workers' Compensation, Unemployment Insurance, Canada Pension Plan or any similar statute, costs of subcontracts, insurance premiums, bonds, royalties, permits and licences, taxes, tariffs and duties, overhead, profit, and all other expenditures in connection with the work.

Instructions to Bidders (Cont'd)

9. The contractor will be required to Indemnify and Insure the City as shown in the General Conditions of the Contract.

Bidders shall have the Undertaking of Liability Insurance Form Letter L1-1 (attached) completed and submitted with their Quotation.

All policies and certificates shall be submitted to the Purchasing and Risk Department before a contract is issued to carry out the work.

10. Bidders shall examine the contract documents and visit the site of the work to understand the contract requirements of the project. The City will not make allowances for the contractor's failure to make proper site investigation.
11. Bidders shall review and consider, in preparing their quotations, the specifications and supplementary conditions provided in Appendix A *INSTALLATION OF SPORTS LIGHTING AT HUGH BOYD PARK ELECTRICAL SPECIFICATIONS CONTRACT 2823Q* provided by Stantec Consulting Ltd. on behalf of the City.
12. Each Bidder shall state on the lists provided to be submitted as part of his quotation, information regarding their previous contracts, subcontractors and equipment that he proposes to use to carry out this contract to completion. It is the intention of the City not to award the contract to any Bidder who does not furnish satisfactory evidence that he has the ability and experience to perform the various works covered under this Contract, and that he has sufficient capital and plant to enable him to execute the said works successfully, and to the satisfaction of the City, and to complete and deliver said works as quoted in his Quotation.
13. Inquires during submission of Quotation should be directed as follows:

Purchasing

Kerry Lynne Young,
Purchasing Department
City of Richmond

Telephone: 604-276-4287
E-mail: purchasing@richmond.ca

Technical

Chris Chadwick,
Stantec Consulting

Telephone: 604-696-8272

Technical

Marcus Liu,
Parks Department
City of Richmond

Telephone: 604-233-3313
E-mail: mliu@richmond.ca

Instructions to Bidders (Cont'd)

14. Quotations may be withdrawn by written notice only, provided such notice is received at the office of the City's Purchasing Department prior to time set as closing time for receiving Quotations.
15. Quotations shall be open for acceptance for 90 days following the submission closing date.
16. Bidders are advised that submissions of quotes shall be in compliance to the Freedom of Information and Privacy Act.
17. All work shall be done in accordance to the specifications, drawings and attachments set herein this document.
18. Any interpretation of, additions to, deletions from, or any other corrections to the Contract documents, will be issued as written addenda by the City of Richmond. It is the sole responsibility of the potential bidders to check the City of Richmond Web Site and BC Bid to ensure that all available information has been received prior to submitting a bid.

Quotation Form

Purchasing and Risk Department
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

The undersigned Bidder, having carefully read and examined the Instructions to Bidders, Undertaking of Liability Insurance, Quotation Form, Quotation Annexures, General Conditions of Contract, Specifications and Drawings, and having full knowledge of the work required, does hereby offer to provide all necessary materials in strict accordance with the Specifications and to do all therein called for on the terms and conditions and under the provisions therein set forth at the:

LUMP SUM TOTAL QUOTED PRICE OF \$ _____

PAYMENT TERMS: _____

The above price includes and covers duties, Federal, (including G.S.T.), Provincial Taxes, handling and transportation charges, and all other charges incidental to and forming part of this Quotation.

The undersigned Bidder agrees to complete the whole of the works within _____ weeks of acceptance.

Name of Bidder: _____

Address: _____

Telephone No: _____

Name, Signature,
and Title of
Signing Officer: _____

Date: _____

E-mail: _____

Web Address: _____

FORM LETTER LI-1

Undertaking of Liability Insurance

(To be submitted with Quotation)

City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

Dear Sirs:

We, the undersigned (insert insurance company's name) _____ do hereby undertake and agree to insure the Contractor in the amount of \$5,000,000.00 as outlined in the attached "General Conditions of the Contract" and agree to:

- a. Name the City of Richmond, its officers, officials, agents, and employees as additional insured in connection with the work being proposed by the Contractor.
- b. State that such policy applies to each insured in the same manner and to the same extent as if separate policy had been issued to each insured named in the policy.
- c. State that the policy cannot be cancelled, lapsed, or materially changed without at least 30 days written notice of cancellation delivered to the City Clerk of the City of Richmond at 6911 No. 3 Road, Richmond, BC V6Y 2C1.
- d. State that coverage provided by such insurance shall protect the Contractor and the City of Richmond during the performance of the works and services specified in the attached Form of Quotation and specifically that the insurance required by such Quotation shall be consistent with the requirements therein.

if the Contract is awarded to (insert bidder's name) _____

EXCEPTIONS:

Dated at _____, British Columbia, this ____ day of _____, 2006.

BY: _____ TITLE: _____

This form must be signed by the Insurance Company or an authorized Broker on behalf of the Insurance Company.

A SEPARATE FORM MUST BE SIGNED FOR EACH POLICY IF MORE THAN ONE POLICY.

List of Previous Contracts

The Bidder has recently undertaken and completed the Contracts described following and authorizes the City of Richmond to inquire as to the nature of the Bidders performance on these contracts.

	DESCRIPTION OF CONTRACT	TOTAL PRICE OF CONTRACT	DATE COMMENCED	DATE COMPLETED
--	-------------------------	-------------------------	----------------	----------------

Owner:

Located at:

Contract for:

Owner:

Located at:

Contract for:

Owner:

Located at:

Contract for:

Owner:

Located at:

Contract for:

(If additional space is required, attach additional)

List of Subcontractors

The Bidder agrees that the subcontractors shown herein is the list of subcontractors that he proposes to use to carry out those part of the work shown on the list and, subject to their approval by the City, the Bidder agrees to so employ the listed subcontractors and no others in their stead.

Nothing contained in the contract documents shall create any contractual relation between any subcontractor and the City.

The Bidder agrees that if he is awarded the contract, he will bind every subcontractor by the terms of the contract documents, as far as applicable to his work.

Description of Parts of Work to be Sublet to Subcontractors	Name, Address, and Telephone Number of Subcontractor(s) to be Used to Carry Out the Various Parts of the Work Described
--	--

(If additional space is require, attach additional)

List of Equipment

The Bidder proposes to use the equipment listed below in carrying out the work covered by this Contract (list only the major pieces of equipment to be used):

Number of Units	Brief Description of Equipment (state its use, make, age, and general condition)	Check Whether:	
		Owned by Bidder	Rented/ Leased

(If additional space is require, attach additional)

List of Drawings

Drawing No.	Sheet No.	Title
EO1	1 of 1	Sports Lighting Site Plan
EO2	1 of 2	Single Line Diagram Panel Schedule & Lighting Control Details

(If additional space is require, attach additional)

Specifications

Please refer to **Attachment A** – Electrical Specifications prepared by Stantec Consulting Ltd.

Environmental Terms and Conditions of Contract

1.0 Environmental Policy Requirements

1.1 The City of Richmond's Environmental Purchasing Policy

The City of Richmond's Environmental Purchasing Policy states:

In order to increase the development and awareness of environmentally sound products and services, City of Richmond staff will review their contracts and tender specifications for goods and services, to ensure that wherever possible and economically feasible, specifications are amended to provide for consideration of environmental characteristics. Consideration may be given to those environmental products that are certified by an independent accredited organization.

The City of Richmond as a whole will endeavour to increase its use of products and services that are more responsible to the environment in the way they are made, used, transported, stored and packaged and disposed of. It is recognized that analysis is required in order to ensure that the products are made available at competitive prices, and that the environmental benefits provided by a product or service should not significantly affect the intended use of that product or service.

- 1.1.1 The City of Richmond reserves the right to request information from bidders that will demonstrate compliance to this environmental purchasing policy.
- 1.1.2 Bidders are asked to supply information on environmentally preferable products and services that meet all specifications and performance requirements.
- 1.1.3 Placing the City of Richmond in breach of its environmental policy or environmental laws will result in the termination or suspension of an agreement, at the sole discretion of the City.

General Conditions Of The Contract

1. Definitions

The two parties to this contract are the Contractor and the City, defined as follows:

The Contractor: The successful bidder for the work upon receipt of a purchase order and written acceptance of his Quotation from the City.

The City: City of Richmond.

Contract Documents: Means and includes the Instructions to Bidders, General Conditions of the Contract, Specifications, Drawings, Quotation Form, and the awarding Purchase Order to the successful bidder.

2. Work to Satisfaction of City

The whole of the works and the manner of performing this Contract shall be done to the entire satisfaction and approval of the City, and it shall be the sole judge of the work and materials in respect of both quality and quantity, and its decision with regard to work or materials, or as to the meaning and intention of this Contract, or any part or parts thereof, shall be binding and final upon the Contractor.

3. Work to be in Conformity with Contract Documents and Drawings

All work shall be done in strict conformity with the Contract Documents and drawings which form a part of the Contract. The intent of the contract documents is to include all labour, materials, equipment, services, supplies and all the things necessary for the proper and complete execution of the work.

4. Permits

The Contractor shall comply with all codes, laws, regulations, and ordinances which concern the work, and unless otherwise provided herein shall obtain and pay for all applicable permits, licences, and certificates.

5. Use of Premises

The Contractor shall confine the use of the premises for his work as directed by the City and shall comply with regulations which govern the building or institution where the work is located.

At the conclusion of the work, the Contractor shall clean up and remove all debris and rubbish to the satisfaction of the City.

General Conditions of the Contract (Cont'd)

6. Light, Power, and Heat

The City's supply of electrical energy will be available to the Contractor without charge.

The City's supply of water will be available to the Contractor without charge.

The Contractor, upon completion of the work, shall remove temporary connections and extension of services, leaving the existing structures and services undamaged.

7. Warranty

Unless otherwise specified, the Contractor warrants that only the best workmanship and materials will be employed and if, within a period of one (1) year from the date of acceptance of the work by the City, such work or supplies or any portion thereof are found by the City to be defective or faulty due to imperfect or bad workmanship or material, the Contractor agrees to replace such defective supplies and correct such defective work forthwith without expense to the City.

8. Liens

The Contractor shall fully indemnify the City from and against any and all liability or expenses by way of legal costs or otherwise in respect of any claim which may be made for a lien or charge at law or inequity or to any claim or liability under the Builders Lien Act, or to any attachment for debt, garnishee process, or otherwise.

9. Patent Fees

The Contractor shall pay all royalties and licence fees and shall save the City harmless from loss on account of suits or claims of infringement of patents in the doing of the work.

10. Default

- (a) The City may, by notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to perform any provision of this Contract within the time specified or to perform any other provision of this contract.
- (b) In the event the City terminates this Contract in whole or in part as provided in clause (a), the City may procure supplies or services similar to those so terminated, and the Contractor shall be liable to the City for any excess costs for such similar supplies or services.

General Conditions of the Contract (Cont'd)

- (c) The Contractor shall not be liable for any excess costs under clause (b) if failure to perform the Contract arises by reason of strikes, lockouts, acts of God, or acts of the City.

11. Taxes

Unless otherwise provided herein, the Contractor shall pay all government sales or excise taxes in force at the date of the Agreement, provided that any increase or decrease in such taxes shall increase or decrease the amount due under the Contract accordingly. Invoices shall show the appropriate amounts for Goods and Services Taxes and Provincial Sales Taxes separately.

12. Laws

The laws of British Columbia shall govern the work.

13. Time

Time shall be the essence in this Contract.

14. Assignment

Neither party to the Contract shall assign the Contract without the written consent of the other.

15. Notices

Any notice required to be given in this Contract shall be deemed to be duly given to the City if sent by registered mail addressed to the City's Purchasing and Risk Department at Richmond "City Hall, 6911 No. 3 Road, Richmond, BC V6Y 2C1" and to the Contractor if sent by registered mail addressed to the Contractor at the address set forth in the Quotation.

16. Inquiries

Contractor's inquiries to the City during construction should be directed to the following:

Technical
Soolim Co
Stantec Consulting

Telephone: 604-696-8275
Cellular: 778-837-5278
E-mail: sgco@stantec.com

General Conditions of the Contract (Cont'd)

17. Settlement of Complaints Re: Work

If, in the opinion of the Purchasing and Risk Department, the work is improperly, defectively, or insufficiently performed, or being performed, the Purchasing and Risk Department may, in writing, order the Contractor to re-execute or correct the work in accordance with such order; and if the Contractor fails to comply with such order within ten working days, the Purchasing and Risk Department may, at any time thereafter, execute or cause to be executed the order so given, and the Contractor shall, on demand, pay to the City of Richmond, all costs, damages, and expenses incurred in respect thereof or occasioned by reason of the non-compliance by the Contractor with any such orders; and if the Contractor fails to pay such costs, damages, and expenses, the City of Richmond may retain and deduct such costs, damages, and expenses from any amount then or thereafter payable to the Contractor under this Contract.

18. Other Contractors

The City may have his own work forces and other contractors on the site while the work of this Contract is under way. The City shall coordinate the work of all Contractors on the site and require their coordination with each other.

The Contractor shall report to the City any apparent deficiencies in other contractors' work which would affect the work of this Contract immediately the deficiencies come to his attention.

19. Changes in the Work

The City may make changes to the work; the Contract price, and time being adjusted accordingly. Except for emergencies, all changes will be made by written order.

20. Protection

The Contractor shall maintain protection of all his work and materials from damage and shall protect the City's and any adjoining property from injury due to the Contractor's work.

21. Payments

The City shall make progress payments once a month for work completed and materials on the site upon receipt of the Contractor's invoice.

Except for the final payment, the City shall holdback 10% of the amount of progress claims. The City shall pay the holdback 55 days after completion of the work upon receipt of the contractor's written claim for final payment accompanied by a Statutory Declaration stating that the Contractor has discharged every obligation and paid or satisfied every just claim incurred by him in connection to the Contract, including claims

General Conditions of the Contract (Cont'd)

by his subcontractors, and upon receipt of clearance from the Workers' Compensation Board.

22. Indemnification and Insurance

The Contractor will indemnify, hold, and save harmless the City from and against all claims, losses, damages, costs, actions, and other proceedings, made, sustained, brought or prosecuted in manner, based upon, occasioned by, attributable to any injury, including death, property damage, infringement, or damage arising from any act or omission of the Contractor, his employees, officers, volunteers, servants, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of this agreement.

The Contractor shall, at his own expense, through the terms of the contract secure, maintain, and pay for the following coverages:

- (a) Comprehensive General Liability Insurance with a limit of not less than \$5,000,000 inclusive per occurrence for bodily injury and property damage and \$5,000,000 for personal injury. The policy or policies shall cover all premises and operations necessary or incidental to the performance of this agreement and include but not necessarily be limited to the following coverages:
 - 1. Contractual liability assumed under this agreement.
 - 2. Contingent employer's liability with respect to operations of sub-contractors.
 - 3. Owner's protective liability.
 - 4. Cross liability.
 - 5. Automobile liability (non-owned, hired).
 - 6. Completed operations liability 24 months after completed operations.
 - 7. Voluntary medical payments.

- (b) "Course of Construction" Property Damage Insurance covering all risks of physical loss or damage on an occurrence basis, including loss of use of property, and including losses or damage from flood or earthquake. The coverage provided shall amount to no less than 80% of the total value of the work done and material delivered to the site, or under the control of the Contractor, payable to the City and Contractor as their interests may appear, and protecting each in such terms as will preclude subrogation claims by the insurer against anyone insured thereunder.

General Conditions of the Contract (Cont'd)

The City, its officers, officials, and employees shall be added as additional named insured on all such policies. All such insurance provided by these policies shall be primary regardless of any insurance or self insurance that may be enforced at the time of any loss or claim that insures the City, its officers, officials, and employees.

The policy or policies shall be underwritten by an insurance company or companies licensed to do business in the Province of British Columbia and who meet with the reasonable approval of the City. Prior to the commencement of the work defined by this agreement, the Contractor shall furnish the City through the Office of the Purchasing and Risk Department a certified original copy of all such policies as evidence that such insurance is in force. The Contractor agrees that such insurance policies cannot be cancelled, lapsed, or materially changed without at least 30 days' written notice to the City.

Maintenance of such insurance and the performance of the Contractor of his obligations under this clause shall not relieve the Contractor of liability under the indemnification provisions here and above set forth. The foregoing insurance provisions shall not limit the insurance required by Municipal, Provincial, or Federal law.

It shall be the full responsibility of the Contractor to determine whether any additional insurance coverage is necessary and advisable for its own protection and/or to fulfil its obligations under this Contract. Any such additional insurance shall be provided and maintained by the Contractor its own expense.

It is understood that this agreement is strictly between the Contractor and the City and the Contractor is an independent contractor for the City and no employment relationship, partnership, agency, or joint venture exists between the City, the employees of the Contractor and/or its agents and/or their employees, and/or its Contractors and/or their employees. Any disputes between the Contractor and any of its employees and/or its agents and/or their employees and/or their Contractors and/or their employees shall be resolved by the Contractor with no involvement by the City.

23. Workers' Compensation Board Coverage/Prime Contractor

The Contractor agrees that it shall at its own expense procure and carry or cause to be procured and carried and paid for, full Workers' Compensation Board coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this contract. The Contractor agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for such Workers' Compensation Board coverage against any monies owing by the City to the Contractor. The City shall have the right to withhold payment under this contract until the Workers' Compensation Board premiums, assessments or penalties in respect of work done or service performed in fulfilling this contract had been paid in full.

General Conditions of the Contract (Cont'd)

The Contractor agrees that it is the Prime Contractor for the purposes of the Workers' Compensation Board Occupational Health and Safety Regulations for the Province of British Columbia. The Contractor shall have a safety program acceptable to the Workers' Compensation Board and shall ensure that all Workers' Compensation Board safety rules and regulations are observed during performance of this contract, not only by the Contractor but by all subcontractors, workers, material men and others engaged in the performance of this contract. Prior to commencement of construction, the Contractor shall complete and file a "Construction Notice of Project" with the Workers' Compensation Board and shall provide a copy of the same to the City confirming that the Contractor shall be the Prime Contractor responsible for coordination of safety and health under Part 3 of the Workers Compensation Act and Part 20 of the WCB Occupational Health and Safety Regulations.

The Contractor shall provide the City with the Contractor's Workers' Compensation Board registration number and a letter from the Workers' Compensation Board confirming that the Contractor is registered in good standing with the Workers' Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligation to pay monies under this contract. The Contractor shall also provide a signed copy of the Prime Contractor Designation Document.

The Contractor shall indemnify the City and hold harmless the City from all manner of claims, demands, costs, losses, penalties and proceedings arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this contract or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board



Note: Receipt of this completed form will assist us in calling for future bids. Please complete and submit this form prior to the closing date and time as shown on the Request for Quotation/Proposal/Tender form.
Please remember to include Quotation/Proposal/Tender No. at right.

Quotation/Proposal/Tender No

2823Q

A Quotation/Proposal/Tender is not being submitted for the following reason(s):

- | | |
|--|--|
| <input type="checkbox"/> We do not manufacture/supply the required goods/services | <input type="checkbox"/> Cannot obtain raw materials/goods in time to meet delivery requirements |
| <input type="checkbox"/> We do not manufacture/supply to stated specifications | <input type="checkbox"/> Cannot meet delivery requirements |
| <input type="checkbox"/> Specifications are not sufficiently defined | <input type="checkbox"/> Cannot quote/tender a firm price at this time |
| <input type="checkbox"/> Insufficient information to prepare quote/proposal/tender | <input type="checkbox"/> Insufficient time to prepare quote/tender. |
| <input type="checkbox"/> Quantity too small | <input type="checkbox"/> We are unable to competitively quote/tender at this time. |
| <input type="checkbox"/> Quantity too large | <input type="checkbox"/> We do not have facilities to handle this requirement |
| <input type="checkbox"/> Quantity beyond our production capacity | <input type="checkbox"/> Licensing restrictions (please explain) |
| <input type="checkbox"/> Cannot meet packaging requirements | <input type="checkbox"/> Agreements with distributors/dealers do not permit us to sell directly. |
| <input type="checkbox"/> Cannot handle due to present plant loading | <input type="checkbox"/> Other reasons or additional comments (please explain below) |

I / We wish to quote / tender on similar goods / services in future <input type="checkbox"/> Yes <input type="checkbox"/> No	Authorized Company Official – Signature and Title	Date
This space for City of Richmond Comments	Firm Name	
	Address	
	City	
	Province	Postal Code
	Telephone Number	

APPENDIX A

CITY OF RICHMOND

INSTALLATION OF SPORTS LIGHTING
AT HUGH BOYD PARK

ELECTRICAL SPECIFICATIONS

CONTRACT 2823Q

Prepared By:

Stantec Consulting Ltd.

#1100 – 111 Dunsmuir St.

Vancouver, BC

V6B 6A3

Projects: 1156 10303

April 2006

Revision: 1

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A. GENERAL**1. GENERAL**

The work covered in this Specification consists of the supply of all labour, materials, and equipment necessary to supply and install the electrical distribution and lighting control system and the installation of City supplied MUSCO sports lighting system in accordance with the Contract Drawings and this Specification.

The Contract Drawings and the Specification shall complement each other. What is called for by one shall be binding as if called for by both.

Only Contractors that have proven project installation experience (minimum 2 projects) with MUSCO sports lighting system will be considered. Project experience reference must be submitted with the bid.

2. LOCATION OF WORK

The work included in this Contract shall be done in the Hugh Boyd Park located at Francis and No. 1 Road, Richmond.

3. SCOPE OF WORK

The work to be executed under this Contract shall include the supply of all materials; erection equipment and all labour necessary to complete the installation as shown on the drawings and this specification. This work shall generally include, but is not limited to, the following:

- a) Supply and installation of all ducts, pull boxes including all fittings for the complete field lighting and distribution system as shown on the drawings.
- b) Supply and installation of control panel, circuit breakers, conductors and termination from the control panel inside the electrical kiosk to all the lighting poles and ballast control enclosures.
- c) Installation of City supplied MUSCO sports lighting system, including but not limited to pole layout, foundation excavation with caisson (steel piles driving required), relocation of existing poles, luminaires, ballast boxes, new and relocated poles erection, luminaire mounting, all wiring to and from the ballast enclosure and luminaires, all in accordance with the installation drawings and instruction manual issued by MUSCO.
- d) Coordinate with MUSCO in the delivery of City pre-purchase equipment. Unload the equipment at the City's Works Yard; deliver the same to the work site; protect and secure all equipment from damage, theft, or vandalism while under the custody of the Contractor. The Contractor may elect to have the MUSCO equipment deliver directly to site, and must assume full responsibility for the inventory and protection of all equipment.

- e) For existing lighting poles that are to be relocated, cut-off part of pole concrete foundation to allow for at least 600mm sand cover. Dispose concrete and rebars off site at Contractor's cost.
- f) Remove all redundant conductors and install pull strings in all empty conduits.

4. CONSTRUCTION STAGES

The electrical construction shall be done in stages.

- a) Stage 1 will include the relocation of the existing poles to new locations, and relocation of existing conduits and conductors to allow the artificial turf sub-base to be constructed. The installation of caissons by steel pile driving will have to be completed prior to relocating the existing poles. The City's survey crew will assist in locating the proposed artificial turf field layout.
- b) Stage 2 will include the installation of new conduits, junction boxes and conductors, modification and installation of lighting control equipment, and installation of new MUSCO poles and lighting equipment.
- c) Stage 3 will include the aiming of the existing luminaires per MUSCO instruction to achieve the desired illumination level and glare control.

5. LIST OF DRAWINGS

Contract Drawings:

- a) Hugh Boyd Park: Stantec Consulting Ltd. Drawing 1156 10303 E01 and E02 for electrical distribution, sports lighting power and control designs.
- c) Installation drawings and manuals to be issued by MUSCO for the project.

6. WORK PROGRAM

The Contractor shall, within one week of acceptance of his quotation, submit to Stantec Consulting Ltd. and the City of Richmond, Parks and Leisure Services, Physical Design & Project Management Section a work schedule outlining the starting date, manufacturing dates, and installation schedule. The desirable construction start date is first week of June 2006. A firm starting date shall be included in the Contractor's tender.

Provide firm dates in which work will interfere with the use of the sports field so that play schedule may be advised to the sports clubs.

7. PERMITS, FEES AND INSPECTION

The Contractor shall arrange for and obtain all necessary permits before he commences work on this project. The Contractor shall also arrange for all necessary inspection of the work as required by the Provincial Electrical Branch Inspector.

The Contractor shall pay all fees for any necessary permits. These costs shall be considered to be included in the Contractor's quotation.

8. DRAWINGS AND SPECIFICATIONS

The Contractor shall keep available at the site one set of approved plans, specifications, reference / supplementary drawings and any special provisions at all times.

9. 'AS CONSTRUCTED' DRAWINGS

The Contractor shall record on a set of drawings, in a neat manner, all changes, additions and deletions to the original Contract Drawings to show the 'As Constructed' installation. This set of drawings shall be returned to Stantec Consulting at the completion of the Contract.

10. EXISTING TREES, SHRUBBERY, ETC.

No trees whatsoever shall be cut down or pruned without the written permission of the Engineer. Trees, shrubbery, fences, poles and all other private property and surface structures shall be protected unless their removal is shown on the drawings or authorised by the Engineer.

11. PERFORMANCE GUARANTEE

The Contractor shall guarantee all electrical works for a period of one year from the date of the "Notice of Acceptance" by the City of Richmond. The Contractor shall promptly, upon receipt of notice in writing, make all repairs arising out of defective materials, workmanship, or equipment.

12. OTHER CONSIDERATIONS IN AWARDING THE CONTRACT

Proposed construction period, demonstrated experience and workmanship in prior projects, and familiarity with conditions in Richmond will also be considerations in awarding the Contract. The City will not necessarily accept the lowest or any bid.

13. BIDDERS TO INVESTIGATE

The bidder shall personally and thoroughly investigate the site, fully familiar with the MUSCO lighting system pre-purchased for the project, satisfied with the conditions that may be encountered at the site and the requirements of the works. Any question regarding scope and quantity of work shall be addressed to the Engineer at Stantec Consulting Ltd. prior to bidding. Bidder shall prepare his own quantity calculation for the bid.

14. OTHER CONDITIONS AFFECTING THE WORK

Contractor shall remove all debris, including concrete removed from existing foundation, from the site at his sole expense. Proper drainage shall be maintained at all times. No claim for extra payment to the Contractor because actual quantities for this Contract varied from the Contractor's own original estimates will be allowed or accepted.

15. SITE RESTORATION

Upon completion of the project, the working area and any damage areas are to be fully restored to their original condition, line and grade, all to the satisfaction of the City.

16. INQUIRIES

Requests for clarification of this specification and related Contract Drawings should be addressed to: **Mr. Soolim Co, P.Eng. at STANTEC CONSULTING LTD.**

17. PAYMENT

Payment of this Contract shall be equal to the amount of the Contractor's lump sums or unit prices, for installed equipment, and shall be considered full compensation for all work performed and materials provided as described in the Contract.

These prices shall be complete and contain all the elements of cost involved, provision of all things, superintendence and profits, and shall stand independent of any other tendered prices.

These lump sum and unit prices shall include all materials, installation, and all incidental work required to complete the project as specified.

All work must be completed, given final approval by the Electrical Inspector, be satisfactory to the Engineer at Stantec Consulting and City of Richmond Parks and Leisure Services, shall have been operating satisfactorily for at least one week before final payment will be authorised.

The Contractor is advised that extra work undertaken by the Contractor, beyond the scope of the Contract, without the prior approval of the City shall be deemed to be wholly at the Contractor's expense.

If in the opinion of the Engineer, extra work is required due to circumstances outside of the Contractor's control or beyond the scope of the Contract, it will be done on a mutually agreed lump sum price, negotiated prior to the commencement of the extra work. If this is not practical, it will be done on a time and material basis plus 10%, using rates and costs approved by the City prior to the commencement of extra work.

18. WORKERS' COMPENSATION BOARD

Attention is directed to the requirement of the Workers' Compensation Board in completing a Form 30M33 prior to working close to overhead power lines.

The Contractor's attention is also directed to Workers' Compensation Board Industrial Health and Safety Regulations, 24.02 and 24.04.

The successful Contractor on this project will be required to contact the Workers' Compensation Board and, if required, submit a notice of project form 52E49. All

requirements of the Workers' Compensation Board are the full responsibility of the Contractor.

19. FAIR WAGES

The Contractor shall ensure all work performed complies with the Provisions of the Employment Standards Act.

B. MATERIAL**1. GENERAL**

The Contractor shall supply all materials necessary for the satisfactory completion of this project. All materials supplied by the Contractor shall be new; CSA approved, and shall be subject to the approval of the Electrical Inspector. All materials shall conform to the requirements detailed on the drawings and other clauses of this specification. All similar items of material shall be of one type and from one manufacturer. No substitutions will be permitted without the written approval of the Engineer.

Provide all minor items not shown or specified but which are reasonably necessary to complete the work.

2. SHOP DRAWINGS

The Contractor shall submit to Stantec Consulting for review four sets of all shop, erection, and detail drawings before ordering equipment. Two sets shall be returned to the Contractor reviewed or marked with the corrections required; Stantec Consulting and the City will retain the other copies.

3. DUCTS

Ducts shall be of the sizes and types indicated on the drawings. RPVC conduit shall be to CSA C22.2 No. 211.2 – M1984

The exact location and routing of all ducts shall be confirmed by the Engineer at Stantec Consulting prior to installation.

4. SOCCER LIGHTING CONTROL PANEL

- a) Supply and install all operator control devices, relays, time clock, and contactors as per design drawings.
- b) Provide lamicoïd labels as shown.

5. CONDUCTORS

- a) All conductors shall be stranded, copper, minimum size #12 AWG, unless otherwise noted. Insulation for conductors installed in underground conduits shall be suitable for wet locations, and rated for 1000V insulation level.
- b) All conductors shall be color coded and labeled with indelible ink label of its respective power circuit (contactors no.) in all accessible points (e.g. underground junction boxes and pole hand holes).

6. JUNCTION BOXES

Junction boxes shall be AE Concrete Product type 37 and type 66, complete with steel lid marked 'Electric'. Install the required number of sections to achieve the desired depth, so as to allow conduit entry from the ends only. Drain rocks shall be installed to drain away any water from the junction box.

7. CONDUCTOR SPLICES

All conductor splices inside the junction boxes shall be with Marretts wire nuts, and taped with PVC tapes for conductors size #10 AWG and smaller. Compression connectors shall be used on conductors larger than #10 AWG. 3M Scotch Kote shall be applied to all the completed rubber and PVC taped splice.

C. EXECUTION**1. GENERAL**

All work shall comply with the BC Electrical Code.

2. HOURS OF WORK

The Contractor shall conform to all City bylaws concerning hours of work.

3. EXISTING UTILITIES

The Contractor shall take all precautions necessary to prevent damage to existing utilities. He will be held responsible for all damage to existing utilities. Prior to commencing construction in the vicinity of any utilities, including irrigation system, the Contractor must confirm the location, depth and nature these utilities by hand digging. The Contractor shall maintain safe working distances and comply with WCB regulations and Code standards.

4. MAKING GOOD

The Contractor shall make good all items damaged or destroyed either by accident or in order to put his work in place to the complete satisfaction of the Engineer. All sports field, roadways, sidewalks, and islands traversed by trenches or damaged during installations shall be returned to their original condition or better. The Contractor shall restore all disturbed sports field, and landscaping to its original condition.

5. LAYOUT OF WORK

The Contractor shall provide his own line and grade, and carefully set out his work, based on reference points provided by the City. Correct horizontal placement and vertical alignment of the light structure system is critical for the proper function of the lighting system and glare control.

(NOTE: Contractor shall contact Stantec Consulting and City of Richmond Parks and Leisure Services after equipment locations have been determined so they can approve the layout.)

6. LOCATION OF EQUIPMENT

- a) The drawings show approximate locations and routes and the right is reserved to make changes to meet exigencies of construction.
- b) No extra payment will be allowed for changes in location of equipment, fixtures and outlets, unless the distance moved exceeds three meters.

7. TRENCH EXCAVATION AND BACK FILL

Trenching, excavation and back fill shall be as per MMCD standard. All conduits shall be installed in 75mm of sand bedding.

8. SPECIAL AREAS

The Contractor shall follow accepted practices and code regulations in wet locations, area requiring weatherproof construction and areas subject to extreme temperatures and vibration.

9. SLEEVES, INSERTS AND OPENINGS

Where openings, sleeves, inserts, etc., are required for electrical lines, equipment, fixtures, etc., it shall be the Contractor's responsibility that these are properly placed and coordinated with other trades.

10. WIRING METHODS

- a) Underground conduits shall be installed with minimum 600mm cover and shall be surrounded by minimum 150mm sand bedding material. Road crossings shall be with minimum 900mm cover. A 150mm wide poly marker tape shall be installed 300mm below finished grade for the entire length of each conduit run.
- b) At the completion of work, insulation resistance tests shall be done in the presence of the Engineer from Stantec Consulting on all field wiring. Faulty wiring shall be immediately repaired.

11. MAKING GOOD

The Contractor shall make good any damage or destruction caused by him to the existing structures and equipment or work of other trades on this project.

12. PROTECTION OF WORK

The Contractor shall properly cover and protect from damage and weather all equipment and material related to his work.

13. CLEANUP

Upon completion of the work the Contractor shall remove all tools, debris and surplus materials and shall leave the areas neat and clean to the City and the Engineer's satisfaction.

14. MANUFACTURER'S INSTRUCTIONS

Where special instructions are issued with materials and equipment regarding installation methods, special tools, accessories, tests, etc., these shall be followed by the Contractor.

Contractor shall follow MUSCO drawings and instruction on the erection of poles, bases, ballast enclosure, and the installation and aiming of luminaires.

15. TESTS

- a) The Contractor shall supply all necessary instruments, equipment and qualified personnel to make tests on electrical equipment and wiring during construction and after installation when requested by the Engineer at Stantec Consulting.
- b) The following tests must be made:
 - Insulation resistance tests in accordance with the Canadian Electrical Code before energization of any circuits or equipment.
 - All tests as recommended in manufacturer's instructions.
 - Tests of adequacy of grounding system and connections.
 - Measure and record load current of each circuit phase conductors.
 - Demonstrate the correct functioning of all switches, time clock and time delay circuits.
- c) Typewritten copies of all test results shall be submitted to Stantec Consulting.

16. SUPERVISION and CONSTRUCTION INSPECTION

- a) The Contractor shall have a qualified supervisor on site at all times who shall be readily available for progress meetings, inspection tours of the work and to receive instructions from the Engineer.
- b) An up-to-date work schedule shall be available at all times.

17. FINAL COMPLETION REQUIREMENTS

Before the Engineer and City are requested to make a final completion inspection:

- a) Provide complete and corrected record drawing showing the “As Built”.
- b) Confirm in writing that the systems have been commissioned following completion of all test, dry run checkouts, adjustments, etc. and are ready for the final operating test.
- c) A final completion certificate will not be issued until all deficiencies are rectified.
- d) Operation and Maintenance manual with information pertaining to maintenance procedure, spare parts, and vendor contact information. Submit draft copies for review, and provide 3 final copies in 3 ring binders.

C RAM
PANEL SCHEDULE AND
LIGHTING CONTROL DETAILS

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