



Corporate Services Department
Materials Management
8th Floor, Chancery Hall
3 Sir Winston Churchill Square
Edmonton, Alberta Tel.: (780)496-5333
CANADA T5J 2C3 Fax: (780)496-5015

REQUEST FOR PROPOSAL NO. 915921

Issue Date: August 13, 2009

THIS IS NOT AN ORDER

SUBMISSIONS WILL BE
CONSIDERED IF RECEIVED IN THE
MATERIALS MANAGEMENT
BRANCH OFFICE NO LATER THAN

4:00 P.M. September 1, 2009

MATERIALS
MANAGEMENT
BRANCH PER

June Elgert
Phone: 496-2776
Fax: 496-5015

PROPONENT / COMPANY NAME: (Please Print)		
STREET ADDRESS:		
CITY:	PROVINCE:	POSTAL CODE:
REPRESENTATIVE: (Please Print)		PHONE NUMBER:
E-MAIL:		FAX NUMBER:
GST REGISTRATION NUMBER:		
AUTHORIZED SIGNATURE:		DATE:
PRINT SIGNATURE AND TITLE:		

PRIME CONSULTANT SERVICES FOR COMMONWEALTH STADIUM FIELD LIGHTING REPLACEMENT EDMONTON, ALBERTA

This RFP will **not** be publicly opened and read

REQUEST FOR PROPOSAL INVITATION:

- 1. Invitation.** The City of Edmonton (the "City") hereby invites the submission of Proposals for Commonwealth Stadium Field Lighting Replacement as more specifically outlined in the attached Description of Work (the "Services").
- 2. Closing Date.** Proposals must be submitted to the following office no later than the time and date noted above (the "Closing Date").

NOTE: Submissions by E Mail and Fax will NOT be accepted.

The City of Edmonton
Corporate Services Department
Materials Management
Room 800, Chancery Hall
3 Sir Winston Churchill Square
Edmonton, Alberta, Canada T5J 2C3

3. **Questions or Inquiries.** Questions or inquiries regarding this Request for Proposal will be considered if received not later than 4:00 p.m. M.S.T., August 24, 2009 (the "Close of Questions Deadline"). Questions to be submitted to the contact person(s) listed below:

Related to Technical Content – MUST be submitted in writing:

Paul Hardy, P.Eng.- Project Engineer
Fax: 780-496-6618

Related to Request for Proposal Process:

June Elgert, C.P.P. Senior Buyer
Email: june.elgert@edmonton.ca
Fax: 780-496-5015

All questions or inquiries shall be written in English, the City will not respond to any questions or inquiries not written in English.

4. **Pre-proposal Site Walkthrough.** Proponents may request access to the project site to gather information for Proposals. Attendance at a pre-proposal site walkthrough is not a mandatory requirement of this Request for Proposal. Requests for a site walk-through will be considered if received not later than 4:00 p.m. M.S.T., August 19, 2009. Requests to be submitted to the contact person(s) listed below:

Paul Hardy, P.Eng.- Project Engineer
Fax: 780-496-6618

5. **Request for Proposal Documents.** The Request for Proposal Documents shall be the basis upon which Proposals shall be submitted, and shall consist of the following:

- Request for Proposal Invitation including Instructions to Proponents, and Proposal Requirements (This Document)
- Professional Services Agreement:
 - Agreement Form (Draft)
 - Description of Work (Draft)
 - Terms of Payment (Draft)
 - General Terms
 - Cad Standards and Consultant Deliverables Manual
 - Executive Summary and Table of Contents from Schematic Design Report, "Sports Lighting System Assessment, Commonwealth Stadium, Edmonton AB", dated July 17, 2009



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6. **Request for Proposal Schedule.** The following schedule represents the City's expected schedule for this Request For Proposal:

Activity	Date
Proposal Closing Date:	September 1, 2009
Anticipated Award Date:	September 8, 2009
Project Completion:	June 1, 2010

INSTRUCTIONS TO PROPONENTS

1. **Originals and copies.** Proponents are required to submit one original and 2 copies [plus 1 electronic version on CD] of their complete Proposals. In case of discrepancies between the original and a copy, the original shall govern. Proposals should be submitted in a sealed package clearly marked with the Proponent's name, address, and the Request for Proposal number specified above.
2. **Proposal Validity.** Proposals shall be valid for a period of [90] days from the Closing Date or such other period as may be agreed by the Proponent and the City (the "Proposal Validity Period").
3. **Irrevocable Proposals.** Submission of a Proposal by the Proponent gives the City an irrevocable right to, by providing written notice to the Proponent during the Proposal Validity Period, accept the Proposal and require the Proponent to enter into a Professional Services Agreement in the form attached and perform the Services as outlined in the Description of Work and its Proposal.
4. **Conflict of Interest.** Unless otherwise indicated in the Proposal, the Proponent represents and warrants that:
 - 4.1 Neither the Mayor, nor a City Councillor, nor a City employee has any financial interest, either directly or as a shareholder, director, officer or partner, in the Proponent
 - 4.2 No spouse, child, parent, or parent of the spouse of either the Mayor, a City Councillor or a City employee has any financial interest, either directly or as a shareholder, director, officer or partner, in the Proponent; and
 - 4.3 The Proposal is submitted without collusion of any other person who may have submitted a Proposal for this RFP and the Proponent has not compared figures with any other party that may be submitting a Proposal nor made an agreement with any other party whereby that party has agreed not to submit a Proposal.

5. **City's Discretion.** The City may accept any Proposal, and not necessarily the lowest cost Proposal. The City may accept the Proposal most favorable to the interests of the City or the City may decide not to accept any Proposal.
6. **Oral Representations.** Proponents shall not rely upon any oral information provided to it by the City or its representatives.
7. **RFP Clarifications.** Proponents shall carefully examine the RFP Documents and report any errors, omissions, discrepancies, clauses requiring clarification, or any qualifications.
8. **Addenda.** Where necessary, the City shall respond to questions and clarifications by way of Addenda to report any changes to the RFP Documents. Addenda will be posted to the Alberta Purchasing Connection site for this Request for Proposal. Any Addenda issued prior to the closing date will form part of the RFP Documents.
9. **Rejection of Proposals.** The City shall not be obligated to accept Proposals that are unsigned, incomplete, conditional, illegal, unbalanced, obscure, or contain irregularities of any kind.
10. **Dispute Policy.** The City has a policy that deals with contracting with parties who are in dispute with the City that may require resolution through litigation or arbitration with the City. The City may reject a Proposal submitted by a Proponent or an affiliate or associate of a Proponent, who is in a dispute with the City that may require resolution through litigation or arbitration. For the purpose of this Article and Article 9, an affiliate or associate shall have the same meaning as defined in the *Business Corporations Act*, R.S.A. 2000, c. B-9.
11. **Proposal Confidentiality.** All documents submitted to the City will be subject to the protection and disclosure provisions of the *Freedom of Information and Protection of Privacy Act*, R.S.A. 2000, c. F-25 ("FOIP"). Proponents are encouraged to identify what portions of their Proposals are confidential and what harm could reasonably be expected from its disclosure. However, the City cannot assure Proponents that any portion of a Proposal can be kept confidential under FOIP.
12. **Information.** The Proponent is fully responsible for obtaining all information required for the preparation of its Proposal. The City shall not be responsible for any costs, expenses, losses, damages or liability incurred by Proponents in responding to this RFP.
13. **Proposal Clarifications.** After the Closing Date, the City reserves the right, in its sole discretion, to seek further information or clarifications with respect to a Proposal from a Proponent without becoming obligated to seek further information or clarifications from any or all other Proponents. However, Proponents are cautioned that any clarifications sought will not be an opportunity either to correct errors or to change their Proposal in any substantive manner.
14. **Insufficient Response.** If the City receives no Proposals that are satisfactory to the City or if the City receives an insufficient number of Proposals to allow the City to make comparisons between multiple Proponents, the City may cancel this Request for Proposal.
15. **RFP Cancellation.** If the City cancels this RFP, the City may negotiate an agreement with one or more Proponents to provide all or part of the Services but the City shall not be

obligated to offer to negotiate with all Proponents. The City may also issue another RFP for all or part of the Services.

16. **Budget Funding.** The City may cancel this RFP or decide not to enter into an agreement pursuant to this RFP if appropriate budget funding approval is not available.
17. **Negotiations.** If the Proposal pricing submitted in the best evaluated Proposal exceeds the amount budgeted for the Services and the City negotiates with the Proponent who submitted the best evaluated Proposal:
 - All statements made by either side in the course of negotiation are without prejudice and confidential;
 - In particular, the City's attempt to negotiate with the Proponent does not constitute a rejection of that Proposal;
 - The City will not attempt to obtain a lower price for the same Services described in the original RFP but may attempt to obtain a lower price for an altered scope of work. In no event will the City be obligated to disclose the amount budgeted for the Services.
18. **Team Approach.** The City recognizes that the Proponent could be made up of more than 1 entity in some form of "team" Proposal. If the Proponent is such a team, the Proponent must appoint an entity to be the representative for the Proposal. If the successful Proposal is based on a team approach, then the City will consider the entity identified as the representative as the Consultant and the other entities forming the team as subcontractors. The Consultant will be fully accountable to the City for the performance of the Services and to resolve issues with subcontractors or with any 3rd party product vendors (as applicable).
19. **Changes to General Terms.** The General Terms form a part of the Professional Services Agreement. Proponents who are unwilling to perform the Services subject to the terms contained in the General Terms must, before the Close of Questions Deadline, state in writing which terms are unacceptable and must specify the exact wording of any alternate or additional terms. The City reserves the right to accept, or not to accept any requested change or additional terms.
20. **Agreement Extension.** The City may at its discretion request additional services from the successful Proponent in support of future phases of the City's project. The hourly rates proposed pursuant to this RFP will be the maximum payable for any additional services performed by the Consultant's specified resources as requested by the City.
21. **Evaluation of Proposals.** Proposals will be evaluated as follows:
 - 21.1 Mandatory Requirements. In order to be considered, Proposals must meet the mandatory requirements outlined in the Proposal Requirements and Proponent Qualifications Sections.
 - 21.2 Weighted Evaluation. The City will evaluate Proposals using a weighted evaluation scoring method and will assign pre-determined scores at the sole discretion of the Evaluation Committee based on pre-determined weighted evaluation values for each

particular item or question within the criteria. The total score for the Proposal will be determined and will be the basis for ranking Proposals.

	Criteria	Weight
1.	Consultant Firm Experience 1. Relevant Project Experience. Include project description and indicate role firm performed 2. Relevant Projects completed for the City of Edmonton within the last 5 years and construction dollar amount	25
2.	Consultant Staff Experience 1. Key Staff that will be working on this project 2. Relevant Project Experience of Key Staff. Include description of project and role performed	15
3.	Work Plan / Methodology: 1. Firm Philosophy of Design 2. Proposed project approach / organization 3. Commitment and ability to have contract documents complete by dates indicated in the Terms of Reference	10
4.	Fee Proposal: 1. Provide breakdown for Fee Proposal as per attached sample agreement; and 2. Estimated value of disbursements. The City will print the tender documents with originals supplied by the Consultant	20

21.3 Interviews. Upon completion of the preliminary evaluation, the City may invite Proponents who submitted the top scoring Proposals for interviews. Scores will then be revised based on the results of any such interviews.

22. Successful Proponent. The City will advise the successful Proponent by written confirmation of acceptance of their Proposal from Materials Management on behalf of the City. The successful Proponent will be required to execute a Professional Services Agreement in the form attached and return same to Materials Management with evidence of the required insurance and WCB account (if applicable) before commencing any of the Services.



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PROPOSAL REQUIREMENTS AND PROPONENT QUALIFICATIONS

- 1. Mandatory Proposal Requirements.** Proposals must comply with the following requirements in order to be considered by the City. The City will not review any submissions that do not meet all of the mandatory criteria.

Proponents **MUST** submit the following with their Proposals:

1. Certificate of Insurance that meets the requirements listed.
 2. Proof of APEGGA Membership - required sub-consultant engineering firms must have a valid permit to practice in Alberta and engineers of record must be licensed members of APEGGA.
- 2. Proposal Format.** Proposals should be organized in format and sequenced that correspond to the above evaluation criteria, item 21 Instructions to Proponents. Proposals require all necessary information to respond to the evaluation criteria complete with table of contents and executive summary to ensure each proposal receives full consideration.

(DRAFT)
AGREEMENT FORM

Page 1 of 2

THIS AGREEMENT is dated the _____ day of _____ 200__ Number _____

BETWEEN:

THE CITY OF EDMONTON

A Municipal Corporation
(the "City")

- and -

NAME OF CONSULTANT

(the "Consultant")

Whereas the City issued Request for Proposal # 915921 in order to retain the services of a consultant on the following project:

- **Commonwealth Stadium Field Lighting Replacement** (the "Project");

And Whereas the Consultant responded to the City's Request for Proposal and submitted a Proposal (the "Proposal") which was accepted by the City;

The City and the Consultant mutually covenant and agree as follows:

1. The following documents outline the terms of this Agreement:

- (a) Agreement Form
- (b) Description of Work
- (c) Payment Terms
- (d) General Terms
- (e) Cad Standards and Consultant Deliverables Manual
- (f) Executive Summary and Table of Contents from Schematic Design Report, "Sports Lighting System Assessment, Commonwealth Stadium, Edmonton AB", dated July 17, 2009.

2. The Consultant shall provide the services and complete the work described in the Description of Work (the "Services").

3. The Consultant shall commence the Services no later than September 8, 2009 and complete the Services by June 1, 2010 subject to any warranty period as stipulated in the Description of Work.

4. The City shall pay to the Consultant, for the performance of the Services and in accordance with the Payment Terms, a sum not to exceed _____ plus GST of _____ for a total not to exceed the amount of _____ all in Canadian Funds.

(DRAFT)
AGREEMENT FORM

Page 1 of 2

5. The Designated Representatives for the Agreement shall be:

for the City: Paul Hardy, P.Eng.

for the Consultant:

6. Notices or other correspondence shall be addressed and delivered to the parties as follows:

(a) To the City at: Paul Hardy, P.Eng.
Technical Services Section
Buildings Design and Construction Branch
Capital Construction Department
18th Floor Century Place 9803 – 102 A Avenue
Edmonton, AB T5J 3A3

(b) To the Consultant at:

The City and the Consultant sign and seal this Agreement as follows:

Signed for the Consultant:

NAME OF CONSULTANT

Per: _____

(affix seal over signature)

Date: _____

Signed for the City:

CITY OF EDMONTON

Approval for the City of Edmonton:

As to form: _____

Law Branch

As to content: _____

Project Manager

Per: _____

As represented by Dan Lajeunesse, CPP,
MBA, Manager, Materials Management
Branch, Corporate Services Department

Date: _____

1.0 GENERAL DESCRIPTION OF PROJECT

- 1.1 This Project involves the complete replacement of the field lighting to Commonwealth Stadium. The existing field lighting is at the end of its economic life. Replacement parts are difficult to obtain and current light levels do not meet the needs of the facility tenants and broadcasters. Activities that the stadium is used for include, but are not limited to, professional football, soccer, track & field, and concert events.
- 1.2 The Consultant shall design the new field lighting for Commonwealth Stadium to include:
- (a) New, state of the art, professional sports lighting luminaires designed to meet the specific light level and uniformity requirements of the various sports and entertainment activities that take place in Commonwealth Stadium. The Consultant shall prepare a separate tender package the City will use to competitively tender the sports lighting luminaires prior to tendering the construction package, complete with recommended evaluation criteria and relative weighting. The Consultant shall participate in the evaluation and selection of the lighting luminaires;
 - (b) New catwalk wiring, distribution equipment and controls to operate the new field lighting. The Consultant shall prepare the design to allow multi-level switching of blocks of field luminaires to accommodate different types of events. Existing distribution on the main concourse and cables feeding the field lighting distribution panels on the catwalk are to remain. The Consultant shall design distribution and controls to operate the specific luminaires selected in 1.2(a) above;
 - (c) Removal of all existing field lighting, distribution and associated equipment on the catwalks. The Consultant acknowledges that the design and contract documents must be prepared in a manner that will keep field lighting operational during all stadium events, and clearly define responsibility for operation and maintenance/repair until construction completion should this become necessary;
 - (d) Fully specified commissioning requirements to ensure the system operates as designed.
- 1.3 The Consultant shall review all statutes, regulations, codes and by-laws applicable to the design.
- 1.4 The Consultant shall coordinate contract administration of the project in accordance with the approved budget and approved schedule.
- 1.5 The Consultant acknowledges that the City's procurement practices are carried out in accordance with the Agreement on Internal Trade. Where practicable, all construction procurement will be advertised using a national electronic bidding service.
- 1.6 The Consultant shall prepare all cost estimates as described in Article 5.0 Project Estimates.

- 1.7 The Consultant acknowledges that the construction must be completed by June 1, 2009 to accommodate prior commitments in the facility. The design schedule will be compressed to allow for adequate time to ensure the project is tendered and material is ordered in time to ensure a successful project. Refer to Section 3.0 – Schedule of Services for key milestone project dates.
- 1.8 The Consultant acknowledges that this project will require the Consultant's physical presence at the project site within 8 hours of a request from the City, seven days a week.

2.0 CONSULTANT SERVICES

- 2.1 The Consultant shall be the Prime Consultant and be responsible for all architectural, structural, mechanical, electrical, and other works required to provide new field lighting for Commonwealth Stadium. Although other responsibilities may be agreed to by the City and the Consultant, the Consultants' specific responsibilities include the following:

2.11 Schematic Design

- (a) The Consultant shall review the existing Commonwealth Stadium sports lighting system, and the Sports Lighting System Assessment, Commonwealth Stadium, Edmonton AB prepared by Stantec Consulting, dated July 17, 2009. The Consultant shall generally verify the recommendations and project approach, and confirm by letter to the City.

2.1.2 Design Development

- (a) The Consultant shall prepare to the satisfaction of the City design development documents consisting of drawings and other documents appropriate to the size of the Project to fix and describe the size and character of the entire Project as to the architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. The Consultant shall base the design development documents on the approved schematic design report and approved estimate of Construction Cost.
- (b) The Consultant shall obey all applicable statutes, regulations, codes and bylaws in performing the Services.
- (c) The Consultant shall confirm the project design and tender sequence, recognizing that there may be more than one viable project approach. Provide the City with a recommended project approach, cost estimate and schedule based on the design development documents.

2.1.3 Field Lighting Unit Equipment Procurement

- (a) The Consultant shall prepare to the satisfaction of the City, contract documents to tender the field lighting luminaires separately from the construction contract. Contract documents shall:
- i) consist of all drawings and technical specifications pertaining to the procurement of the field lighting luminaires;

- ii) set forth in detail the architectural, structural, mechanical and electrical requirements for the provision of the field lighting luminaires.
 - iii) set forth in detail the criteria by which the received tenders shall be evaluated. Criteria may include, but not be limited to, price, delivery schedule and the ability to meet specific design requirements.
- (b) The Consultant shall prepare specifications which:
 - i) are complete, clear and concise;
 - ii) include a statement setting forth the general scope of work followed by a description of the various classes of work segregated under the proper sections;
 - iii) include an appropriate heading for each section;
 - iv) include a table of contents listing the section headings and page numbers;
 - v) when describing products and processes, use terms that are standard in the industry and consistent with the terms used in the drawings;
 - vi) conform to the format used by the City in its own specifications.
- (c) The Consultant shall, in preparing the specifications address, at minimum, the following subjects:
 - i) scope of work;
 - ii) products;
 - iii) submittal requirements;
 - iv) quality control requirements;
 - v) workmanship and fabrication;
 - vi) tolerances;
 - vii) inspection and testing;
 - viii) warranties
- (d) The Consultant shall advise the City of any adjustments to previous estimates of Construction Cost and schedule indicated by changes in requirements or general market conditions.
- (e) The Consultant shall review all statutes, regulations, codes and by-laws applicable to the design with the authority having jurisdiction. The Consultant shall apply for and obtain all consents, approvals, licences and permits necessary for the Project.

- (f) The Consultant shall obtain contract document sign-off by the City prior to the contract documents being issued for Tender.
- (g) The Consultant shall provide the City with one set of original technical specifications and one set of reproducible drawings for tendering purposes. The Consultant shall provide the City with an electronic copy of the technical specifications and drawings in pdf format, with files arranged and bookmarked as directed by the City, for purposes of posting the Tender electronically. The City will print and distribute the Tender documents.
- (h) The Consultant shall provide services to the City during the bidding process for the procurement of field lighting unit equipment as described in section 2.1.5. This work shall be in addition to bidding services required for the construction contract. Tender bids shall be evaluated based on the criteria outlined in section 2.1.3.a.iii above.
- (i) The Consultant shall provide contract administration services for the procurement of field lighting unit equipment. The services shall include:
 - (i) The Consultant shall advise the field lighting supplier on the interpretation of the contract documents and issue supplementary details and instructions during the manufacturing period as required.
 - (ii) The Consultant shall review shop drawings, product data and samples for conformity with the general design concept of the work indicated in the contract documents.
 - (iii) The Consultant shall review and recommend to the City, alternative methods and products proposed by the field lighting supplier.
 - (iv) The Consultant shall prepare for approval by the City, Contemplated Change Orders and Change Orders.
 - (v) The Consultant shall verify the field lighting supplier's invoices and issue progress certificates for the City's acceptance.
 - (vi) The Consultant shall review charges for additions or deletions and draft applicable change orders for the City's approval.
 - (vii) The Consultant shall maintain records related to the contract documents.
 - (viii) The Consultant shall provide the City with copies of all correspondence affecting the Project.
 - (ix) The Consultant shall attend Project meetings
 - (x) The Consultant shall recommend to the City, the withholding of payment for faulty or incomplete work.

- (xi) The Consultant shall receive the written warranties and related documents from the field lighting supplier and forward to the City for the City's review and approval.

2.1.4 Detailed Design

- (a) The Consultant shall prepare, to the satisfaction of the City, contract documents which:
 - i) consist of all drawings and technical specifications;
 - ii) are in accordance with the standards of the City;
 - iii) are based on the approved design development, the field lighting luminaires purchased as outlined in section 2.1.3 above, and the approved estimate of construction cost; and
 - iv) set forth in detail the architectural, structural, mechanical and electrical requirements for the construction of the Project.
- (b) The Consultant shall ensure that all drawings are complete, clear and in CAD format. The Consultant shall prepare the drawings on AO sheet size if specifically approved by the City in advance. Otherwise the Consultant shall prepare the drawings only on A1 sheet size.
- (c) The Consultant shall prepare specifications which:
 - i) are complete, clear and concise;
 - ii) include a statement setting forth the general scope of work followed by a description of the various classes of work segregated under the proper sections;
 - iii) include an appropriate heading for each section;
 - iv) include a table of contents listing the section headings and page numbers;
 - v) when describing products and processes, use terms that are standard in the industry and consistent with the terms used in the drawings;
 - vi) conform to the format used by the City in its own specifications.
- (d) The Consultant shall, in preparing the specifications address, at minimum, the following subjects:
 - i) scope of work;
 - ii) products;
 - iii) submittal requirements;

- iv) quality control requirements;
 - v) workmanship and fabrication;
 - vi) tolerances;
 - vii) criteria for temporary works;
 - viii) erection criteria;
 - ix) field review of construction;
 - x) inspection and testing;
 - xi) provision for the construction contractor to provide notification prior to commencing significant segments of the work; and
 - xii) warranties
- (e) The Consultant shall advise the City of any adjustments to previous estimates of Construction Cost and schedule indicated by changes in requirements or general market conditions.
- (f) The Consultant shall review all statutes, regulations, codes and by-laws applicable to the design with the authority having jurisdiction. The Consultant shall apply for and obtain all consents, approvals, licences and permits necessary for the Project.
- (g) The Consultant shall ensure that all disciplines sign, seal and date all drawings and the specification title page prior to the contract documents being issued for Tender.
- (h) The Consultant shall obtain contract document sign-off by the City prior to the contract documents being issued for Tender.
- (i) The Consultant shall provide the City with one set of original technical specifications and one set of reproducible drawings for tendering purposes. The Consultant shall provide the City with an electronic copy of the technical specifications and drawings in pdf format, with files arranged and bookmarked as directed by the City, for purposes of posting the Tender electronically. The City will print and distribute the Tender documents.
- (j) The Consultant shall provide the City with a revised or final construction cost estimate of the work.

2.1.5 Bidding

- (a) The Consultant shall participate in pre-bid meetings, including pre-bid site meeting and answer questions during bidding.
- (b) The Consultant shall, with the City's review, provide any addenda required to clarify pre-bid discrepancies.

- (c) The Consultant shall provide advice to the City during bidding, including bid evaluation and recommendation for award.
- (d) The Consultant shall provide the City with all conditions governing unit prices, alternative prices and separate prices that are to be submitted by the bidders.

2.1.6 Contract Administration

- (a) The Consultant's assignment of the role of prime contractor shall cease on the date a chosen construction contractor becomes prime contractor for the Project. The City will advise the Consultant in writing of this date.
- (b) The Consultant shall review for approval by the City, the construction schedule proposed by the construction contractor and comment on the procedures, methods and sequence of work.
- (c) The Consultant shall advise the construction contractor on the interpretation of the contract documents and issue supplementary details and instructions during the construction period as required.
- (d) The Consultant shall review shop drawings, product data and samples for conformity with the general design concept of the work indicated in the contract documents.
- (e) The Consultant shall review and recommend to the City, alternative methods and products proposed by the construction contractor.
- (f) The Consultant shall prepare for approval by the City, Contemplated Change Orders and Change Orders.
- (g) The Consultant shall verify the construction contractor's progress claims and final construction contractor's invoices and issue progress certificates for the City's acceptance.
- (h) The Consultant shall review charges for additions or deletions and draft applicable change orders for the City's approval.
- (i) The Consultant shall maintain records related to the contract documents.
- (j) The Consultant shall provide the City with copies of all correspondence affecting the Project.
- (k) The Consultant shall conduct site inspections with sufficient frequency during construction to ascertain that the work is being executed in compliance with drawings and specifications; submit inspection reports on site activities including progress, quality of work, defects/deficiencies, noted problems, any instructions issued and resolutions in the format as provided by the City.
- (l) The Consultant shall, upon prior approval by the City, arrange for the testing and inspection of products and work by an authorized inspection and testing company where the construction calls for such testing.

- (m) The Consultant shall attend Project meetings
- (n) The Consultant shall recommend to the City, the withholding of payment for faulty or incomplete work.
- (o) The Consultant shall undertake the following inspections, and prepare the necessary certificates complete with supporting documents as per specifications and requirements:
 - Substantial Completion Inspections
 - Construction Completion Inspection
- (p) The Consultant shall review operating and maintenance manuals and record drawings for acceptance by the City.
- (q) The Consultant shall receive the written warranties and related documents from the construction contractor and forward to the City for the City's review and approval.
- (r) The Consultant shall recommend the date when the construction contract is completed.

2.1.7 Commissioning Services

- (a) The Consultant shall prepare a complete commissioning program, in consultation with the field lighting manufacturer selected in section 2.1.3 above, consisting of procedures, checklists and all associated items necessary to confirm the final, installed project complies with all design and broadcast requirements.
- (b) The Consultant shall include commissioning requirements in the tender specification.
- (c) The Consultant shall include an allowance of \$30,000 to perform commissioning activities. The commissioning fee shall be negotiated after the field lighting manufacturer has been selected.

2.1.8 Post Construction Services

- (a) Within one month of the receipt of record drawings from the construction contractor, the Consultant shall submit to the City one complete set of electronic 'as-built' drawings on compact disk. The City will review the submission for compliance with the Buildings Design and Construction Branch CAD Standards. The Consultant shall make any necessary corrections and submit one complete set of reproducible 'as-built' on two mil blackline mylar and one (1) complete set of electronic 'as-built' drawings in City Standard Autocad DWG format on compact disk. The Consultant shall submit the mylar 'as-built' drawings on A1 or A0 sheet size to match the tender drawings.
- (b) The Consultant shall ensure correction of warranty items to the City's satisfaction.

- (c) The Consultant shall perform the final acceptance inspection and submit a detailed report to the City on all deficiencies, providing recommendations for City's action. The Inspection and report submission shall occur before the end of one year after the date of Construction Completion.
- (d) The Consultant shall provide compliance certificates for all disciplines as required by the authority having jurisdiction.

2.1.9 Construction Cost

- (a) The Consultant shall prepare estimates of Construction Cost as previously set out in this Agreement, and as described in Article 5.0 Project Estimates.

3.0 SCHEDULE OF SERVICES

- 3.1 Based on confirmation of the appointment of the Consultant by September 8, 2009, the Consultant shall make reasonable efforts to ensure the Project proceeds according to the following schedule.

Task	Latest Completion Date
Schematic Design	September 25, 2009
Design Development	October 9, 2009
Design Development approval by the City	October 16, 2009
Field Lighting Procurement – 99% Complete	October 30, 2009
Field Lighting Procurement approval by the City	November 6, 2009
Field Lighting Tender Issue	November 12, 2009
Field Lighting Tender Closing	December 1, 2009
Field Lighting Tender Evaluation and Award	December 11, 2009
Contract Documents 99% Complete	December 17, 2009
Contract Documents approval by the City	December 21, 2010
Contract Documents Final Changes and Printing	December 24, 2009
Tender Closing	January 26, 2010
Tender Evaluation and Award	January 28, 2010
Construction Begins	March 15, 2010
Commissioning Begins	May 15, 2010
Project Completion	June 1, 2010

- 3.2 The Consultant acknowledges that ability to meet the scheduled completion dates for the Consultant's services is a fundamental requirement of this Agreement. Project completion cannot be delayed past the beginning of scheduled events at the stadium in June, 2010.

4.0 PROGRESS REPORTS AND MEETINGS

- 4.1 The Consultant shall record and distribute minutes of Design meetings (including meetings with sub-consultants, user groups, utility companies and the City) and provide a copy to the City.
- 4.2 The Consultant shall submit reports on site activities including progress, noted problems and solutions, in the format provided by the City. Progress reports will be submitted on a bi-weekly basis.
- 4.3 The Consultant shall attend site meetings, or as otherwise designated, to ascertain that the work is being executed in reasonable conformity with the contract documents.
- 4.4 The Consultant and prime sub-consultants shall visit the project site as necessary to gain familiarity with the location of the work and the facility operating environment, and as necessary to ensure that the design anticipates and accommodates existing conditions. The Consultant and prime sub-consultants shall visit the project site as necessary during construction to ensure that construction is progressing in general conformance with the Contract Documents. Allow minimum weekly site visits during construction, as well as site visits for construction start-up, substantial completion inspection, construction completion inspection, and final acceptance inspection (at the end of the warranty period). In addition the Consultant and prime sub-consultants shall attend a minimum of three design review meetings in Edmonton.

5.0 PROJECT ESTIMATES

- 5.1 The Consultant is required to provide the estimates stated below:

Concept/Pre-Design: A broad vision with minimal on-site investigation of actual conditions. Based on a theoretical approach that uses existing information available. It is generally at this stage that the budget estimate is submitted to City Council through the Capital Priorities Plan (CPP) process.

Schematic Design: Uses some site investigation in conjunction with more detailed calculations and a closer look at the options available. All of the Project participants are involved at this stage, and any public consultation will have taken place. At the end of this stage the final budget for the Project is approved.

Design Development: The approved schematic design is more fully developed to fix and describe the size and character of the entire Project architectural, structural, mechanical and electrical systems, elements, and materials.

Detailed Design: Detailed calculations undertaken and all detailed drawings and specifications prepared. This estimate is sometimes referred to as the pre-tender estimate.

Award: Prepared after the acceptance of the construction contractor's bid to include the accepted bid plus any additional costs, for example supervision costs and utility charges, not included in the tender.

A detailed description of the work included in each phase of the Project is provided in the Description of Work.

- 5.2 The Consultant is required to provide estimates stated in the Table below to the accuracy's shown:

Project Phase	New Construction	Renovations
Concept/Pre-Design	-30% To +50% (Class 4)	-50% To +50% (Class 4)
Schematic Design	-15% To +30% (Class 3)	-20% To +35% (Class 3)
Design Development	-15% To +20% (Class 2)	-15% To +25% (Class 2)
Detailed Design (Pre-Tender)	-10% To +10% (Class 1)	-10% To +10% (Class 1)
Award	-5% To +10% (Class 1)	-5% To +10% (Class 1)

- 5.3 All estimates will be checked against the final Project costs whenever possible and the accuracy obtained noted on the consultant evaluation form. This evaluation will also note any unforeseeable circumstances that may have affected the final outcome and be outside of the Consultant's control. Inaccurate estimates provided over a number of projects may lead to a Consultant being denied future work.
- 5.4 If the tender period has not commenced within three months of submission of the contract documents by the Consultant to the City then the pre-tender estimate will be subject to adjustment to reflect any change in the general level of prices in the construction industry.
- 5.5 The latest of the approved estimates will be checked against the lowest bona fide bid or negotiated proposal and the following actions will be taken:
- 5.5.1 If the lowest bona fide bid or lowest negotiated proposal exceeds the latest approved estimate of construction cost by more than 10%, the City shall:
- (a) Give written approval of an increase in the construction budget, or
 - (b) Co-operate in revising the scope or quality of the work as necessary to reduce the construction cost, or
 - (c) Authorize rebidding or renegotiating of the contract, or

(d) Terminate if the Project is abandoned.

- 5.5.2 If the lowest bona fide bid exceeds the latest approved estimate of construction cost by more than 10%, unless there has been an increase in the construction budget or the Project has been abandoned or terminated, the Consultant shall modify at no additional fee, the drawings and specifications, or undertake extra services necessary to reduce the construction cost to within 10% of the latest approved estimate. The provision of these services shall be the limit of the Consultant's responsibility for inaccurate estimates and having completed the required tasks the Consultant shall be entitled to compensation for all other services performed in accordance with the Agreement, whether or not the Project is constructed.

6.0 CITY RESPONSIBILITIES

- 6.1 The City shall provide full information regarding requirements for the Project which shall set forth the City's design objectives, criteria and constraints.
- 6.2 The City shall provide a construction budget.
- 6.3 The City shall provide for the Consultant's use; one (1) copy of the City's Division 0 and Division 1 specification in hard copy format; and (1) copy of the City standard drawing sheet in electronic format.
- 6.4 The City shall furnish information as set out below:
- (a) Existing Floor Plans of the Facility (not Record Drawings)
 - (b) Assist the Consultant as required in obtaining all necessary consents and approvals from authorities having jurisdiction.
- 6.5 The City shall, through use of the Materials Management Branch of the Corporate Services Department and at the City's sole expense, advertise Tenders in the media, clarify bid procedures to contractors, and receive and open bids.

7.0 SUPPLY OF INFORMATION BY THE CITY

- 7.1 The City agrees to provide the Consultant with all information relevant to the performance of the Consultant's Services as may be requested by the Consultant. Such information will be provided within reasonable time after request. All information, data and material of any type whatsoever shall be immediately returned to the City upon demand by the City or upon completion of the Consultant's Services.
- 7.2 The Consultant acknowledges receipt of the documents issued by the City of Edmonton for the Proposal Call entitled, "Prime Consultant Services for Commonwealth Stadium Field Lighting Replacement". The following documents issued for the above noted Proposal Call, are incorporated herein by reference and form part of this Agreement:
- (a) "CAD Standards & Consultant Deliverables Manual" – Issue date September 2005.

- (b) Executive Summary and Table of Contents from Schematic Design Report, "Sports Lighting System Assessment, Commonwealth Stadium, Edmonton AB", dated July 17, 2009.

8.0 SUPERVISION OF SERVICES

- 8.1 The Consultant's Services shall be supervised at all times by a member in good standing of the professional association relating to the Services to be provided.

9.0 ELECTRONIC POSTING

- 9.1 The City's procurement practices require that Tender Documents be posted electronically in portable document file (pdf) format with the Edmonton Construction Association, for viewing only. The Consultant shall provide specifications and drawings in both paper and pdf format for Tendering purposes.

This is a sample "Payment Terms" the terms for the Agreement may vary depending on the agreement that has been discussed with the Successful Proponent.

1.0 PAYMENT

- 1.1 The City agrees to pay the Consultant for fees and disbursements as outlined below. The maximum amount payable by the City to the Consultant shall not exceed the total amount specified in Article 4 of the Agreement Form.

2.0 CONSULTANT FEES

- 2.1 The Consultant fees are based on the completion of the following phases of the Services or the provision of the following deliverables apportioned as follows (GST exclusive):

Phase/Deliverable	Percentage	Fee
Schematic Design	5%	\$
Design Development	20%	\$
Field Lighting Procurement Package	25%	\$
Detailed Design/Contract Documents	25%	\$
Bidding and Negotiations	5%	\$
Contract Administration	15%	\$
Commissioning		\$ 30,000
Submission of Record Drawings	5%	\$ _____
Sub Total		\$ _____
Disbursements		\$ _____
Total		\$ _____

- 2.2 In event of termination, the fees for the design, contract administration and commissioning services shall be apportioned as follows:

At Schematic Design Phase	percent of work complete	plus	\$2,500.00
	termination expenses		
At Design Development Phase	percent of work complete	plus	\$2,500.00
	termination expenses		
At Detailed Design Phase	percent of work complete	plus	\$2,500.00
	termination expenses		

At Any Subsequent Phase percent of work complete plus \$2,500.00
termination expenses

2.3 The breakdown of hourly rates is as follows:

Partners (Principals)	\$
Project Director	\$
Contract Administrator	\$
Senior Specification Writer	\$
Senior Designer	\$
Job Captain/Senior Draftsman	\$
Senior Contract Administrator	\$
Administrative Support	\$

3.0 DISBURSEMENTS

3.1 Disbursements are the actual expenditures of the Consultant's employees, and the sub-Consultants in the interest of the Project. They include **ONLY** the following items and copies of disbursement receipts must be submitted:

- (a) Long distance charge for telephone calls;
- (b) Long distance charge for fax transmissions;
- (c) Courier services;
- (d) Development Permit fees;
- (e) Printing of Contract Documents if required in Description of Work of this Agreement; and
- (f) Additional material testing, coring, and surveying which are not part of the original scope of work, but which are requested by the City.

3.2 Production of electronic plots are considered part of normal service and will not be reimbursable as a "disbursement".

3.3 Notwithstanding Article 3.1, disbursements shall not exceed the sum of \$ _____ (GST exclusive) without the prior written approval of the City.

4.0 APPLICATION FOR PAYMENT

4.1 The Consultant may apply for payment monthly, as the Services progress, for the value of Services performed to a date agreed to between the Consultant and the City.

4.2 With each application for payment the Consultant shall include:

- (a) A reference to the purchase order number;
 - (b) A statement of amounts claimed based on the terms of payment, including authorized change, with Goods and Services Tax shown as a separate amount;
 - (c) Such evidence as the City may direct showing the Consultant's entitlement to the payment claimed.
- 4.3 The City shall, within fifteen (15) working days of receiving an application for payment, certify the account for payment, or advise the Consultant promptly in writing why the account is amended or not approved.
- 4.4 Each application for payment shall become due and payable by the City within ten (10) working days of certification.
- 4.5 In respect of each application for payment, the amount certified for payment shall be no greater than the value of the Services performed by the Consultant under this Agreement to the date of the application for payment less the holdback amount as, hereinafter defined, and less the aggregate of previous payments under this Agreement.
- 4.6 If any Builders' Liens or liens are filed in respect to or arising out of the service or performance under this Agreement, no payment shall be made to the Consultant until the lien is removed.

5.0 HOLDBACKS AND DEDUCTIONS

- 5.1 The Builders' Lien holdback is not a requirement of this Agreement.
- 5.2 The City may retain a specified holdback to the extent necessary to protect the City from loss on account of one or more of the following:
- (a) The Consultant, in the opinion of the City, not making satisfactory progress,
 - (b) Defective work not remedied,
 - (c) Claims filed, or reasonable evidence in the opinion of the City indicating probable filing of claims,
 - (d) Evidence of failure of the Consultant to make payment to subConsultants or for product or for labour, and
 - (e) Damage to another Consultant.
- 5.3 In the event of any discrepancy in the Consultant's invoice, or should doubt arise as to the validity of any item, or should such similar need for checking or explanation be apparent, then the amount in question shall be temporarily deleted from the invoice and the remainder of the invoice paid. The discrepancy shall be investigated and the matter resolved before the issuance of the next invoice.

6.0 CONSULTANT COMPLETION CERTIFICATE

- 6.1 Upon completion of deficiencies, the City will issue a Consultant Completion Certificate to the Consultant.

- 6.2 The acceptance by the Consultant of the Consultant Completion Certificate, or the payment thereunder, shall constitute a waiver of all claims against the City under this Agreement.

7.0 COMPENSATION FOR CHANGE IN PLANS, ETC.

- 7.1 If, after any part of the work is completed in accordance with the City's previous decisions, it should become necessary for the Consultant to make unforeseen revisions for reasons over which he has no control, or if the Consultant is put to labour and expense by the delinquency or insolvency of the City's construction contractor or subcontractor, or as a result of suspension of work or damage to the work in progress by fire or otherwise, the Consultant shall be equitably paid for such extra work on a "Time Basis", plus any out-of-pocket expenses provided that the Consultant has advised the City of the need for the extra work and that the City has approved the extra work in advance. In any such case, the situation shall be called to the attention of the City prior to starting the unforeseen additional work and separate cost records shall be kept by the Consultant.

8.0 SPECIAL SERVICES

- 8.1 Should the Consultant be authorized by the City in advance to do additional work over and above that contemplated in this Agreement, such as quantity surveys, detailed cost estimates involving labour and material costs, checking and approval of contractor's expenditures and costs when contracts are not on fixed-sum basis, investigations and reports on special systems or apparatus which are not included in the work, special shop, mill, laboratory or field testing and inspecting of materials, topographic or any other work that does not directly relate to the preparation of plans and specifications and supervision of the work, the Consultant shall be additionally compensated.
- 8.2 If particular problems arise which the Consultant considers will require engaging a specialist, the specialist's fees and out-of-pocket expenses shall be paid by the City, provided the City has authorized its engagement in advance.
- 8.3 Nothing in any Agreement between the City and the Consultant shall be construed to obligate the Consultant to prepare for or appear in litigation on behalf of the City, unless the Consultant is equitably compensated for such services on a "Time-Basis".

9.0 TIME BASIS

- 9.1 Time Basis shall mean the hourly rates previously specified.

1.0 SERVICES

- 1.1 The Consultant shall comply with all reasonable requirements established by the City for the performance of the Services including, but not limited to, environmental, security, safety and emergency procedures and access.
- 1.2 The Consultant shall exercise the degree of care, skill and diligence normally provided in the performance of services in respect of projects of a similar nature to the Project.
- 1.3 The City and the Consultant, by agreement in writing, may make changes to the Services by altering, adding to, or deducting from the Services set out in the Description of Work. The time for completion shall be adjusted accordingly.

2.0 CONFLICT OF INTEREST

- 2.1 The Consultant represents and warrants that it has provided written disclosure to the City of any and all interests that a City employee or a City employee's spouse, children, parents, or spouse's parents may have in the Consultant or this Agreement, either directly or as a shareholder, director or officer of the Consultant.
- 2.2 The Consultant acknowledges and confirms that no corporation, partnership or sole proprietorship in which the Consultant, its managers, shareholders, or directors have any interest, direct or indirect, will offer its services or submit a bid in the capacity of a contractor, subcontractor or supplier for any future contracts that may ensue from the work arising from this Project. For the purpose of this section, "interest, direct or indirect," shall mean any interest as a shareholder, partner, or director. Notwithstanding this Article 2.2, the Consultant is not precluded from entering into additional professional services agreements with the City that may arise and be required as a result of this Project.
- 2.3 If the Consultant enters a contract with the City in breach of Article 2.1 or 2.2, the City may terminate that contract and seek damages or indemnity from the Consultant.

3.0 PAYMENT

- 3.1 The City shall pay the Consultant in accordance with the provisions of the Payment Terms, upon the performance of the Services to the satisfaction of the City.
- 3.2 Before paying the Consultant, the City shall determine if a non-resident withholding tax is applicable. If required, the City may withhold and remit the withholding tax to the relevant government authority. This remission is considered payment in accordance with the Payment Terms and the amount of the withholding tax remitted will constitute a payment to the Consultant.
- 3.3 Subject to Article 3.4, below, the City shall not pay any amount exceeding the sum stated in the Agreement Form unless the Consultant has obtained prior written authorization from the City.
- 3.4 When changes have been made to the Services in accordance with Article 1.3, the City and the Consultant may adjust the Payment Terms accordingly. If the City and the Consultant cannot agree to the terms of the adjustment, then the dispute shall be submitted to the Alternate Dispute Resolution process as set out in this Agreement. The City and the

Consultant shall have no other claim against each other for any adjustment to the Payment Terms as a result of any change to the Services, except as set out within this section.

- 3.5 No certificate, payment, nor any partial or entire use of the Project by the City shall constitute an acceptance of any portion of the Project that is not in accordance with the terms of this Agreement. Notwithstanding that the City has approved a schedule, report, design, or method, such approval is to the content only and in no way relieves the Consultant of liability or responsibility for the document or consequence of that document.
- 3.6 The City may review its records with respect to business licensing, taxation and assessment and other accounts receivables prior to making any payment to the Consultant. The City may set off any overdue accounts owed by the Consultant to the City against any amounts otherwise payable to the Consultant pursuant to this Agreement.
- 3.7 If any builder's lien is filed in accordance with the *Builders' Lien Act*, R.S.A 2000, c. B-7 or any successor legislation, in respect to or arising out of any of the Services performed or products being furnished under this Agreement, no payment shall be made to the Consultant until the lien is removed.

4.0 REPORTING

- 4.1 The Consultant shall submit to the City regular progress reports as set out in the Description of Work with respect to the Services provided by the Consultant. If the City determines that additional progress reports are necessary, the Consultant shall submit all additional progress reports requested by the City at no additional charge to the City.
- 4.2 The Consultant shall meet with the City as outlined in the Description of Work to review the progress of the Project and the performance of the Services. The Designated Representatives of the City and the Consultant are set out in the Agreement Form. If the City, acting reasonably, deems additional meetings necessary, the Consultant shall attend those meetings.

5.0 SUSPENSION OF SERVICES

- 5.1 The City may temporarily suspend the Services by giving the Consultant 14 days advance notice in writing of the temporary suspension.
- 5.2 The City shall not be responsible for any fees incurred by the Consultant during the period of any suspension unless the Consultant satisfies the City that they are necessary fees by providing supporting documentation before incurring any such fees.
- 5.3 The Consultant shall resume and complete the Services in accordance with the terms of this Agreement upon receiving written notice from the City to do so. The City shall make an equitable adjustment to the terms of this Agreement which are affected by the suspension including time requirements and payment. Any dispute as to what constitutes an equitable adjustment may be decided by the Alternate Dispute Resolution Terms.

6.0 TERMINATION OF AGREEMENT

- 6.1 The City may terminate this Agreement immediately by giving the Consultant notice in writing, if the Consultant:

- a) in the opinion of the City, fails to complete the Services or any portion thereof within the time stated in this Agreement for such completion, or
 - b) becomes insolvent, or
 - c) commits an act of bankruptcy, or
 - d) abandons the Project, or
 - e) assigns this Agreement without the required written consent, or
 - f) fails to observe or perform any of the provisions of this Agreement, or
 - g) has any conflict of interest, which may, in the opinion of the City, have an adverse effect on the Project.
- 6.2 The City may terminate this Agreement by giving the Consultant 14 days advance notice in writing of the date on which the Agreement is terminated if funds are not available for completion of the Services or if the City abandons the Project.
- 6.3 If the Agreement is terminated for any of the reasons set out in Article 6.1, the Consultant shall pay the City upon demand an amount equal to all loss or damage suffered, both directly and indirectly by the City as a result of the non-completion of the Services by the Consultant. If the Consultant fails to pay the City for any such loss or damage on demand, the City shall be entitled to deduct the same from any payments due and payable to the Consultant as well as exercise any other remedies available to the City.
- 6.4 Subject to Article 6.3, the City shall, in the event of termination of this Agreement, pay to the Consultant all reasonable fees and disbursements incurred by the Consultant in accordance with this Agreement up to the date of termination. The City shall have no further liability of any nature whatsoever to the Consultant for any loss of profit or any other losses suffered, either directly or indirectly, by the Consultant as a result of the termination of this Agreement.
- 6.5 The Consultant agrees that termination or suspension of this Agreement or a change to the Services to be provided under this Agreement in accordance with Article 1.3 does not operate so as to relieve or discharge the Consultant from any obligation under this Agreement or imposed upon the Consultant by law in respect to the Services or any portion of the Services that the Consultant has completed.

7.0 INDEMNITY AND INSURANCE

- 7.1 The Consultant agrees to indemnify and hold harmless the City and its agents and employees from and against any and all losses, claims, demands, payments, suits, judgments, charges, expenses, actions, causes of action and costs arising out of or in consequence of:
- a) the willful actions of the Consultant including, but not limited to, trespass or nuisance; and
 - b) the negligent performance of the Consultant's services.

- 7.2 The City may set off any sums owed by the Consultant to the City pursuant to this indemnity from any sums due to the Consultant. This right of set-off is in addition to any other remedies available to the City under the laws of Alberta.
- 7.3 In the event that any action, suit, claim or demand is brought or made against the City or any of its servants, agents, or employees, as set out in Article 7.1, the City shall give the Consultant a written notice and the Consultant shall have the option of contesting the validity of the action, suit, claim or demand by appropriate legal proceedings. If the Consultant elects to contest, it shall give written notice to the City within seven days of receipt of the notice from the City. On final determination of such action, suit, claim or demand, the Consultant shall immediately pay any judgment awarded against the City or any of its servants, agents or employees, together with all proper costs and charges.
- 7.4 In the event that the Consultant shall not elect, within the period of seven days to contest any action, suit, claim or demand, the City may commence any such action, suit, claim or demand at the sole discretion of the City. The Consultant shall immediately pay to the City any sums paid by the City, together with any sum as shall represent the reasonable costs of the City in defending or settling any action, suit, claim or demand.
- 7.5 Without restricting the generality of the foregoing, for the purposes of Articles 7.3 and 7.4 costs shall mean party costs, and solicitor and his/her own client costs, whether the City retains in house or external Counsel.
- 7.6 The obligations of the Consultant under the articles of this Section 7.0, shall not extend to the liability of the City, its employees, agents, officers or servants where liability arises from the negligent act or omission of the City.
- 7.7 During the term of this Agreement, the Consultant shall carry the following:
- a) Comprehensive General Liability Insurance covering the services and operations of the Consultant for bodily injury and/or property damage with policy limits of not less than Two Million Dollars (\$2,000,000.00) per occurrence; and
 - b) Professional Liability Insurance covering the services provided by the Consultant with policy limits of not less than Five Hundred Thousand Dollars (\$500,000.00) per claim.
- 7.8 The insurance shall be in a form and with insurers acceptable to the City's Director of Risk Management. Certified copies of the policies shall be provided to the City by the Consultant or the Consultant's broker upon request and evidence of renewal shall be provided to the City not less than thirty days prior to the expiry dates of the policies.
- 7.9 The Consultant shall be responsible for the payment of all premium and deductible amounts relating to the insurance policies, and the Consultant shall maintain the insurance from the date of this Agreement until the completion of the project.

8.0 SUBCONTRACTORS

- 8.1 The Consultant may, upon first obtaining the written approval of the City, retain the services of a subcontractor as may be required to perform the Services.
- 8.2 The Consultant shall be responsible for the performance of the Services under this Agreement even if the subcontractors retained are approved by the City pursuant to Article 8.1.

- 8.3 For subcontractors retained by the Consultant and approved by the City, the Consultant shall bind the subcontractors to an agreement containing terms and conditions which are consistent with the terms of this Agreement.

9.0 COMPLIANCE WITH LAWS

- 9.1 The Consultant shall ensure that the Services comply with all relevant federal, provincial and municipal legislation, codes, bylaws and regulations as well as City policies and procedures. Where there are two or more laws, bylaws, regulations or codes applicable to the Services, the more restrictive shall apply.
- 9.2 The Consultant shall obtain and pay for all necessary permits or licences required for the execution of the Services.
- 9.3 Without restricting the generality of Article 9.1, in performing the Services, the Consultant shall comply with all the provisions of the following legislation and any successor legislation: *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12; *Labour Relations Code*, R.S.A. 2000, c. L-1; *Workers' Compensation Act*, R.S.A. 2000, c. W-15; *Employment Standards Code*, R.S.A. 2000, c. E-9, and *Occupational Health and Safety Act*, R.S.A. 2000, c. O-2.
- 9.4 Unless stipulated otherwise in this Agreement, the Consultant shall be assigned the role of prime contractor for the worksite and is responsible for ensuring compliance with the *Occupational Health and Safety Act* and all safety regulations for all employees and employers on the worksite. The Consultant shall bring to the attention of all subcontractors the provisions of the *Occupational Health and Safety Act* and regulations thereunder.
- 9.5 If the Consultant performs the Services contrary to any laws, bylaws, regulations, codes and orders of any authority having jurisdiction, the Consultant shall be responsible for and shall correct any violations thereof and shall bear all resulting costs, expenses, penalties and damages. If the City is required to do anything or take any steps or pay any sums to rectify such non-compliance, the City may subtract the cost of such rectifications from any monies owed to the Consultant. Such action shall not be deemed a waiver of any action that the City may pursue to collect any monies paid that exceed the monies owed to the Consultant.

10.0 WORKERS COMPENSATION

- 10.1 The Consultant shall provide to the City evidence satisfactory to the City of compliance with the *Workers' Compensation Act*, R.S.A. 2000, c. W-15 (the "WC Act") within two (2) days of receiving notice by the City to provide such information.

11.0 ASSIGNMENT

- 11.1 The Consultant shall not, without the prior written consent of the City, assign the benefit or in any way transfer the obligations of this Agreement or any part thereof.

12.0 NOTICES

- 12.1 Any notices or other correspondence required to be given to either party shall be deemed to be adequately given if sent by prepaid certified mail, courier or fax to the addresses provided in the Agreement Form.

- 12.2 Notice given as aforesaid, if mailed in Alberta, shall conclusively be deemed to have been given on the fifth working day following the date on which such notice is mailed.

13.0 INTERPRETATION

- 13.1 This Agreement shall be deemed to have been made in and shall be construed in accordance with the laws of the Province of Alberta, and for the purposes of all legal proceedings this Agreement shall be deemed to have been performed in the said Province. Nothing herein shall restrict the right of the City to bring action against the Consultant in any Court of competent jurisdiction.
- 13.2 Words importing the singular or masculine only also include the plural or feminine or body corporate where the context requires.
- 13.3 The headings in the Agreement shall not be deemed to be part of this Agreement or to be taken into consideration in interpretation of the Agreement.
- 13.4 Should any provision of this Agreement be illegal or unenforceable for any reason whatsoever, it shall be considered separate and severable from the remaining provisions of this Agreement, which shall remain in force and be binding as though such provision had not been included.
- 13.5 Whenever a clause gives a party the right or obligation to exercise its discretion or judgment, that party shall act reasonably.

14.0 SUCCESSORS

- 14.1 This Agreement shall enure to the benefit of and be binding upon the parties to the Agreement and, except as otherwise provided, the successors and assigns thereof.

15.0 JOINT AND SEVERAL LIABILITY

- 15.1 If two or more persons are liable to the City under the terms and conditions in this Agreement, their obligations shall be both joint and several. The City shall not be obligated to exhaust its remedies against either person and may pursue one or both of them as and when the City may elect.

16.0 INTELLECTUAL PROPERTY RIGHTS

- 16.1 The Consultant agrees that all base materials, research results, computer programs, drawings, documents and notes or materials of any type whatsoever developed or prepared by the Consultant (the "Documents") in performance of the Consultant's services shall vest in and become the absolute property of the City, including assignment of all copyright.
- 16.2 Upon completion of the Services or termination of this Agreement, the Consultant shall deliver all of the Documents to the City on demand by the City. The Consultant may keep copies of the Documents. Once the City has possession of the Documents, the City is solely responsible for the use that the City makes of the Documents in other projects.
- 16.3 Without prejudice to any rights which may exist in the City by virtue of any prerogative rights and powers or by virtue of the *Copyright Act*, R.S.C. 1985, c. C-42, the Consultant agrees that

all present and future rights in the copyright in the Documents will vest absolutely and immediately in the City.

- 16.4 The Consultant warrants that the Consultant is the only person who has or will have moral rights in the Documents and the Consultant waives in favour of the City, all of the Consultant's moral rights, as provided for in the law of copyright, in the Documents.
- 16.5 The Consultant agrees to confirm Articles 16.3 and 16.4 by executing a written assignment and waiver in any form requested by the City and delivering the assignment and waiver to the City on or before the end of the term of this Agreement.

17.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

- 17.1 The Consultant agrees that all data, information and material provided to the Consultant by the City will be confidential, both during and after the term of this Agreement. The Consultant acknowledges that this is a fundamental term of this Agreement.
- 17.2 The Consultant acknowledges that, in adherence to the *Freedom of Information and Protection of Privacy Act*, R.S.A. 2000, c. F-25 ("FOIP"), the Consultant is required to comply with the provisions of FOIP pertaining to all information and records relating to, obtained, generated, collected or provided under or pursuant to this Agreement.
- 17.3 With respect to this Agreement, "record" means a record of information in any form, including books, documents, maps, drawings, photographs, letters, vouchers and papers and any other information that is written, photographed, recorded or stored in any manner, but does not include software or any mechanism that produces records.
- 17.4 With respect to this Agreement, a "transitory record" is a record that is either a duplicate record, temporary information that has only immediate or short-term value, or draft documents and working materials.
- 17.5 The Consultant must (except for a transitory record):
- a) notify the City that a record is about to be destroyed;
 - b) receive written authorization from the City prior to actually destroying the record; and
 - c) notify the City that the destruction has taken place.
- 17.6 The Consultant will provide to the City, at the Consultant's expense, any records required to be created, obtained and maintained pursuant to this Agreement within 7 calendar days of notification by the City.
- 17.7 If the Consultant retains a copy of the records created under this Agreement after the date on which the City has destroyed its copies of the records (pursuant to its records retention and destruction guidelines) the Consultant will provide the City with a copy of the records within 7 days of the City requesting those records as a result of a request for information under FOIP. This Article 17.7 shall survive the termination of this Agreement.

18.0 NEGOTIATION AND MEDIATION

- 18.1 The Consultant and the City agree to use their best efforts to resolve any disputes arising between them as efficiently and cost effectively as possible.

18.2 At all relevant times, the City and the Consultant shall:

- a) Make bona fide efforts to resolve all disputes by amicable negotiations, and
- b) Provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate those negotiations.

18.3 The Consultant and the City agree that any efforts to resolve their dispute by amicable negotiation or with the assistance of a mediator, at any time during or after the performance of the Services, does not suspend the expiration of any time limitation for taking any act under the Agreement unless the parties have specifically agreed in writing to waive or vary that time requirement.

18.4 Unless otherwise instructed by the City in writing, the Consultant shall continue to perform the Services and maintain its schedule during any proceedings under Sections 18.0 to 21.0.

19.0 NOTICE OF DISPUTE

19.1 If the City makes any decision:

- a) Required under a provision of the Agreement, or
- b) In order to resolve a dispute between the City and the Consultant which could not be settled by negotiation,

the City shall provide such decision in writing with reasons. The Consultant shall be conclusively deemed to have accepted the City's decision as final and binding unless the Consultant gives a written notice of dispute to the City within ten working days of receipt of the City's written decision.

19.2 If the Consultant has given notice of a dispute to the City under Article 19.1 in respect of any decision of the City, the Consultant and the City shall appoint a Referee for review of the City's decision according to Section 20.0. The City and the Consultant agree to enter into the City's standard "Referee Services Agreement" with a Referee agreeable to both parties.

20.0 REFEREE'S REVIEW

20.1 Within five working days after the Referee provides notice to the City and the Consultant that the Referee is prepared to commence the review, the Consultant shall deliver to the Referee and the City:

- a) a written summary of the facts, information and arguments, and
- b) copies of all the documents on which the Consultant intends to rely.

20.2 Within five working days after the City receives the Consultant's submissions referred to in Article 20.1, the City shall deliver to the Referee and the Consultant:

- c) a written summary of the facts, information and arguments, and
- d) copies of all the documents on which the City intends to rely.

20.3 After receipt of the City's documentation, the Consultant shall have a five-day review period to retract the Consultant's referral to the Referee prior to the Referee giving a decision on the

matter. Even if the Consultant retracts its referral, the Consultant may be responsible for costs and expenses incurred, which decision is at the Referee's discretion.

20.4 The Referee may:

- a) require the parties to supply the Referee with any further written explanations or documentation the Referee considers necessary, giving each party an opportunity to respond;
- b) on written application made before the Referee makes its decision, allow a party to submit additional written information or documentation which was not available when the original submission was made under Article 20.1 and 20.2, giving the other party an opportunity to respond; or
- c) on written application, extend the time for making a submission under Article 20.1 or 20.2 in circumstances the Referee considers appropriate.

20.5 The Referee shall conduct a review, without an oral hearing of the disputed decision of the City, taking into account:

- a) The City's written decision and reasons given,
- b) the submissions of the parties pursuant to Articles 20.1 and 20.2
- c) any information obtained under Article 20.4, and the terms of the Agreement

20.6 Not later than 20 working days after receipt of the last documentary submission under Article 20.4, the Referee shall make a written decision, with reasons, which may confirm or vary the decision of the City or substitute another decision. The Referee's decision is final and binding on the parties unless the decision is referred to arbitration within the time permitted in Article 20.10.

20.7 If the City has made a decision which affects the schedule or time within which various parts of the Project are to be completed, and the Referee determines that the Consultant ought to have been provided with more time, the Referee shall not make a decision varying or substituting the City's decision respecting the schedule or time but may make a decision respecting reasonable compensation required to be paid to the Consultant under the Agreement.

20.8 The City shall bear the costs of naming and retaining the Referee.

20.9 The Referee's decision may require that the City or the Consultant pay for all or a portion of the costs and expenses of the Referee review. Such costs and expenses shall include, but are not limited to, the costs of the City and the Consultant in preparing their submissions for the Referee. Unless the Referee orders otherwise, the City and the Consultant shall bear equally the costs and expenses of any review by the Referee under Section 20.0.

20.10 By giving written notice to the other party not later than five working days after the Referee has given a decision to the parties, either party may refer the decision of the Referee to arbitration under Article 21.0.

21.0 ARBITRATION

- 21.1 All disputes arising out of or in connection with the Agreement or in respect of any defined legal relationship associated with it or derived from it, shall be referred to and finally resolved under the Rules of Arbitral Procedure in accordance with the City's standard practice.
- 21.2 Unless otherwise agreed by the parties, all disputes under the Agreement referred to arbitration under Article 21.1 shall be:
- a) held in abeyance until
 - i. the Services have been completed;
 - ii. the Agreement has been terminated, or
 - iii. the Consultant has abandoned the work, whichever is earlier, and
 - b) consolidated into a single arbitration before a single arbitrator under the rules referred to in Article 21.1.
- 21.3 An arbitral award rendered under Section 21.0 is final and binding on the parties and there shall be no appeal of the decision to the courts.

22.0 CITY'S RIGHT TO AUDIT

- 22.1 The City may audit all financial and related records associated with the terms of this Agreement including timesheets, reimbursable out of pocket expenses, materials, goods, and equipment claimed by the Consultant.
- 22.2 The Consultant shall at all times during the term of the Agreement and for a period of six years after the end of the Agreement, keep and maintain records of the work performed pursuant to this Agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Consultant. All such records shall be maintained in accordance with generally accepted accounting principles. The Consultant shall at its own expense make such records available for inspection and audit (including copies and extracts of records as required) by the City at all reasonable times and without prior notice.
- 22.3 The obligations of this Section shall be explicitly included in any subcontracts or agreements formed between the Consultant and any Subcontractors or suppliers of goods or services to the extent that those subcontracts or agreements relate to fulfilment of the Consultant's obligations to the City.
- 22.4 Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the City unless the audit identifies significant findings that would benefit the City. The Consultant shall reimburse the City for the total costs of an audit that identifies significant findings that would benefit the City.
- 22.5 This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the City may have by Federal, Provincial, or Municipal law, whether those rights, powers, or obligations are express or implied.

AFFIDAVIT OF EXECUTION

TO WIT
CANADA
PROVINCE OF _____

I, _____, of
the
[Name of witness who saw person sign agreement]
_____ of _____, in the
[City or Town where witness lives]
Province of _____,

MAKE OATH AND SAY:

1. THAT I was personally present and did see _____ named in the
[Name of Person who signed agreement]
within Professional Services Agreement who is personally known to me to be the person named therein,
duly sign and execute the same for the purposes named therein;
2. THAT the same was executed at the _____ of _____, in the Province of
_____ and that I am subscribing witness thereto;
3. THAT I know the said _____ and he/she is in my belief the full age of
eighteen years. [Name of Person who signed agreement]

SWORN BEFORE ME at the _____
of _____, in the Province
of _____, this _____ day of
_____, 200__.

A Commissioner for Oaths in and
for the Province of _____.

Signature of witness

AFFIDAVIT VERIFYING SIGNING AUTHORITY

The Affidavit Verifying Signing
Authority is only required for a
Partnership or Corporation

CANADA
PROVINCE OF _____
TO WIT

I, _____, of
the
[Name of person who signed agreement]
_____ of _____, in the
[City or Town where person lives]
Province of _____.

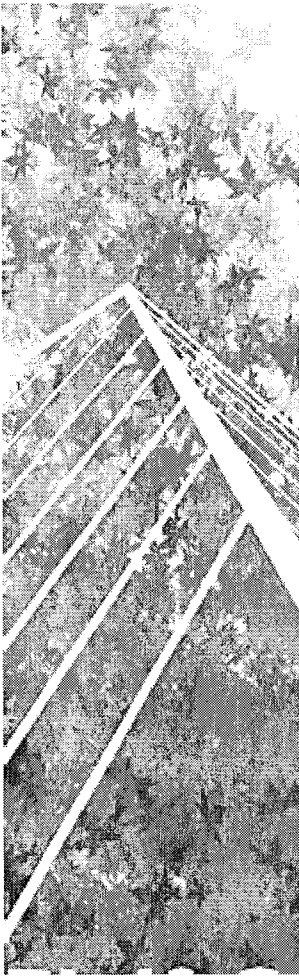
MAKE OATH AND SAY:

1. That I am the Duly Authorized Agent for _____ (the
"Partnership/Corporation"). [Name of Partnership/Corporation]
2. That I am authorized by the Partnership/Corporation to execute the attached Professional Services
Agreement.

SWORN BEFORE ME at the _____
of _____, in the Province
of _____, this _____ day of
_____, 200__.

A Commissioner for Oaths in and
for the Province of _____.

Signature of Person who signed agreement



**Capital Construction
Building Design and Construction**

Cad Standards and Consultant Deliverables Manual

18th Floor Century Place
9803 - 102A Avenue
Edmonton, Alberta
T5J 3A3

Date of Issue: December 2008

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Revised September, 2005

1.0 INTRODUCTION

1.1 Purpose and Use of this Manual

1.1.1 Purpose

The purpose of this Manual is to establish standards for CAD drawings and other related submissions for the design and construction of City of Edmonton building projects. Consultant agreements for architectural and engineering projects typically require the production and submission of deliverables in the form of drawings, specifications, reports schedules, etc. The City has recognized the need to establish standards for these project documents, since they are an important source of information for the on-going management of its facilities. Standardized project documents are a critical source of information for the automated Facility Management (FM) system, which the City has implemented to effectively manage its large inventory of facilities.

1.1.2 Use

Part 2 - Standards for Consultant Deliverables

These standards describe the hard copy and software formats in which consultant deliverables for building projects are to be submitted to the City. These are subject to change as new software releases come out and are put into use by the City. Consultants are expected to comply with the latest revision of this Standard.

Part 3 - CAD Drawing Standards

This manual provides specific instructions to consultants for the preparation of CAD design and record drawings for building projects. This section establishes basic drawing practices Consultants must follow when submitting CAD drawings.

Part 4 – CAD Layering Standards

These standards establish a common and consistent approach to organizing and naming CAD drawing layers. They are based on the CAD layers and layering format in 'CAD Layering Guidelines (Computer-Aided Design Management Techniques for Architecture, Engineering and Facility Management) Second Edition: published by the American Institute of Architects Press.

2.0 STANDARDS FOR CONSULTANT DELIVERABLES

2.1 Formats for Consultant Deliverables

The following table outlines the acceptable formats of deliverables to be provided by consultants for projects completed for the City.

Deliverables	Electronic Format and Version	CD Disc Required	Hard Copy Format
Drawings			
Working Drawings as required	AutoCAD (dwg) Adobe Acrobat (pdf)		
Record Drawings	AutoCAD (dwg)	Yes	2 mil black line mylar printed from electronic version
Specifications			
- Specification Text	Microsoft Word and Adobe Acrobat (pdf)		
- Detail drawings, forms, schedules etc.	Adobe Acrobat (pdf)		
- Project specific details drawings, schedules, etc	AutoCAD (dwg) and Adobe Acrobat (pdf)		
Tender Documents	Adobe Acrobat (pdf).	Yes	
Standards & Guidelines	Microsoft Word and Adobe Acrobat (pdf)		
Correspondence and Reports	Microsoft Word and Adobe Acrobat (pdf)		
Project Addenda			
Addenda text	Microsoft Word and Adobe Acrobat (pdf)		
Revised drawings or sketches	AutoCAD (dwg) Adobe Acrobat (pdf)		
Cost Information			
Interim Cost Reports	Microsoft Excel		
Final Cost Reports	Adobe Acrobat(pdf)		
Pretender Cost Reports	Microsoft Word		

2.2 Software Versions Used by the City of Edmonton

The following table indicates the software used by the City of Edmonton for Building project related work, as of the date of this CAD Standard.

Application Type	Preferred File Format	Acceptable File Format
CAD	AutoCAD 2004	AutoCAD 2002
Word Processing	Microsoft Word 2002	Microsoft Word 98
Spread Sheet	Microsoft Excel 2002	Microsoft Excel 98
Viewer for Portable Document Files (pdf)	Adobe Reader 6.0	Adobe Reader 6.0
Creating Portable Document Files (pdf)	Adobe Acrobat 6.0	Adobe Acrobat 6.0

3.0 CAD DRAWING STANDARDS

3.1 CAD Drawing Instructions

3.1.1 CAD Drawing Formats

As noted in section 2.1 the City requires a complete set of record drawings for all disciplines in AutoCAD 2002 or later on a CD disc format as well as a hard copy 2 mil black line mylar printed from the electronic submission at completion of the building project. As a minimum, these record drawings shall identify who stamped the tender documents and the date of the stamp.

3.1.2 CAD File Naming

To completely identify a project and to facilitate electronic storage and retrieval of documents all files must be labelled in accordance with the file naming conventions specified in section 3.2

3.1.3. Project Number and CAD File Number

The assigned project officer will provide a project number and CAD file number at the start of each project. This number must be included in the designated area in the title block on each drawing.

3.1.4 Bind and Purge

Bind all modelspace and paperspace Xrefs in final version of drawing submitted in electronic form. Purge all unused blocks, dimstyles, layers, styles, linetypes and shapes from final version of all drawings.

3.1.5 Drawing Measurements and Scale

All drawings shall be created using metric units using the millimetre as the standard unit of measurement (that is, 1 drawing unit = 1 mm). Draw all objects 1 to 1 scale. (e.g. If a wall is to be 3m long, the corresponding CAD lines will also be 3m long).

3.1.6 Drawing File Format

All drawings must be provided as AutoCAD.DWG format. If drawings are translated from other CAD software then the Consultant must confirm the accuracy of the final AutoCAD files. Following is the format CAD documents must be submitted.

3.1.7 Symbols and Blocks

Consultants may use their own standards for other blocks and symbols. No nested blocks shall be used. **Create new blocks in layer zero ONLY.** Predefined symbols and blocks must be inserted on the proper layer. All blocks must be uniformly scaled.

3.1.8 Fonts and Text Height

Only standard AutoCAD font styles are to be used for all drawings. **NO third party fonts may be used.** Text height should be 2 to 3mm for the final plot.

3.1.9 Key Plan

A key plan is required for any partial floor plan.

3.1.10 Model Space and Paper Space

The City requires that all drawing items and related text be created and edited in Model Space. Use the layout tabs or paper space for composing your drawing sheet and defining views. Title blocks, general notes, schedules, charts and other non-graphic information is better suited to paper space. **All viewports in paper space should be locked.**

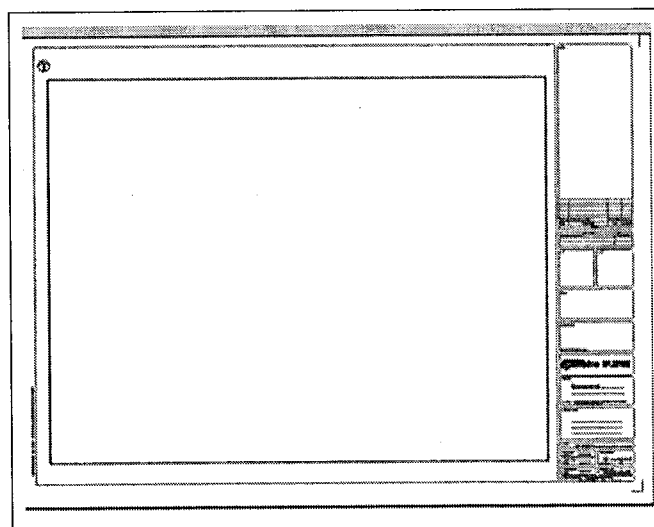
3.1.11 Drawing Sizes

The following standard drawing sizes may be used.

Sheet Size	Dimensions	Prototype Drawing
A0	1189 x 841 mm	Can be adjusted
A1	841 x 594 mm	Available
ANSI B	11 x 17 in (432 x 279 mm)	Available

3.1.12 Title Block and Layering

A prototype drawing containing the City of Edmonton title block and the basic layering outlined in Part 3 of this Manual is available with this manual. This drawing has been developed to facilitate the use of these CAD standards by design consultants.



3.2 CAD File Naming

The file naming convention for all project drawings is as follows (using an example):
CEN101(MN)-02-A00.DWG with coding as follows:

CEN101	is the City of Edmonton code designation for the building or integrated site.
MN	is the floor number (FD) foundation, (SB) sub-basement, (BM) basement, (MN) main floor, (02) second floor, (MZ) mezzanine floor, (RF) roof, (L1) lower level 1, (P1) parking level 1, (XX) indicates a drawing without a designated floor.
02	is the year of the project (2002)
A	is the drawing discipline based on the following: - C Civil (site) - A Architectural - S Structural - M Mechanical - E Electrical - L Landscape Architecture (may be included in Civil) - P Plumbing (may be included in Mechanical) - F Fire Protection (may be included in Mechanical) - SH Shop Drawings
00	is the drawing number in the set.
.DWG	is the AutoCAD file extension

location : (List Municipal Address only, not 'Edmonton')	
drawing title _____ _____ _____	
scale AS SHOWN all dimensions are in millimeters	
drawn by _____ date _____	drawing no. A00 (A01, see end standards) sheet no. 1 of 20
checked by _____ date _____	project no. (As determined by City)
reviewed by _____ date _____	
CAD file name: CEN101(MN)-02-A00	

3.3 Consultant's As built/Record Drawing Check List

Project Name:

Project Number:

CD – Electronic As Builts

- ☐ The drawings are submitted as AutoCAD files.
- ☐ The drawings are submitted on a Compact Disc (CD)
- ☐ The files are saved using the CAD file name and drawing title.
- ☐ There are no variations on the electronic drawings as to the mylars (see the Mylar list).
- ☐ A complete set of electronic drawings has been submitted. The electronic drawings include all required disciplines.
- ☐ There is only one sheet layout per drawing.
- ☐ The drawings are legible.
- ☐ The layers comply with the guideline in the CAD Standards manual.
- ☐ The xrefs are loaded/attached/bound.
- ☐ The images are inserted as OLE objects
- ☐ Purge all non-applicable information (File-Drawing Utilities-Purge)

Mylars

- ☐ Drawings are plotted from reviewed/accepted CADD asbuilts
- ☐ Drawings are produced on 2 mil mylar.
- ☐ A complete set of drawings has been submitted. The set includes all required disciplines.
- ☐ The consultant has used the *The City of Edmonton, Capital Construction* title block.
- ☐ The drawing has been trimmed according to the CAD standards manual.
- ☐ There is an 'As Built' or 'Record Drawing' date.
- ☐ The CAD file name is present and it complies with the standards.
- ☐ The consultant's logo(s) is present.
- ☐ The work description is identified.
- ☐ The project address included.
- ☐ The drawing titles correspond with the drawing content.
- ☐ The drawing is legible

4.0 CAD LAYERING STANDARD

4.1. Purpose

This layering standard has been designed to:

- organize graphical information so that it can be effectively grouped and manipulated for display, editing and plotting purposes.
- ensure that all CAD based design drawings completed for all City facilities are structured and formatted on a consistent basis for archival and retrieval purposes.
- organize drawing information in layers that can be used for both initial project development and on-going facility management purposes.

4.2 Design of the Layering Standard

This standard has been designed in accordance with the CAD layers and layering format in 'CAD Layering Guidelines (Computer-Aided Design Management Techniques for Architecture, Engineering and Facility Management) Second Edition: published by the American Institute of Architects Press.

This layering standard is based on the following concepts in the CAD LAYER GUIDELINES:

4.2.1 Layer Formats

Format as follows:

X – YYYY – ZZZZ

MAJOR GROUP – MINOR GROUP - MODIFIERS

I. Major Groups (X) - The CAD LAYER GUIDELINES recommends the use of eight (8) major groups of layers as follows:

- | | |
|---|---|
| C | Civil Engineering and Site Work |
| A | Architecture, Interiors and Facilities |
| S | Structural |
| M | Mechanical (HVAC) |
| E | Electrical and Electrical Auxiliary Systems, including Telecommunications |
| L | Landscape Architecture (optional) |
| P | Plumbing (optional) |
| F | Fire protection (optional) |

II. Minor Groups (YYYY) - This group comprises 4 characters and is used to subdivide the major groups on the basis of construction components or building contents (e.g., walls, doors, ceilings, furniture, equipment, etc.). Layers that are designated by a major

and minor group only are referred to as “master layers” and are shown in **bold type** in the layering standard.

III. Modifiers (ZZZZ) - These 4 characters may be used to further differentiate minor groups such as full height from part height walls. The use of a modifier is optional and is not required if the major and minor group designations for a layer are sufficient.

As an example of this layer format, the layer name A-DOOR-FULL would designate a layer in the architectural group with graphical information on doors which are full height.

4.2.3 Information Layers - The layer names for each major group are further divided into two categories for CAD layer management purposes.

I. Building Information layers - generally represent physical aspects of the site and buildings such as walls, doors, site improvements, diffusers, etc. Identification labels such as room numbers are also included in this category. This type of information is often shared between drawings.

II. Drawing Information layers - comprise notes, dimensions, title blocks and similar information. This type of information is usually associated with a specific drawing. Other speciality requirements such as riser diagrams and schematic diagrams are also included in this category.

4.2.4 Special Groups –

I. The designations ELEV, SECT and DETL are used as either minor groups or modifiers to identify elevations, sections and details. These special groups may be used by consultants as required for design and construction drawings.

II. The “Read-me” layer (x-RDME) may be used with all major groups to provide reference information on file organisation. This layer is for user reference only and is not plotted.

4.3 Use of the Layering Standard

4.3.1 The layering standard has been designed for use for all types of projects in the entire inventory of City facilities, including site development and utility services. Therefore, consultants should focus on the requirements for their design discipline and on the layers applicable to their specific project.

4.3.2 This layering standard is based on the minimum requirements of the City. Consultants may use their own standards for requirements that exceed those specified herein. Consultants may only use layers of their own discipline, e.g.: Architects must put plumbing fixtures on an A-layer for reference.

4.3.3 This layering standard is organized in accordance with the major groups in the traditional ASMEC order of architecture, structural, mechanical, electrical and civil (site). However, in the AutoCAD layering control command, the layers may be organized alphabetically as ACEMS.

4.3.4 The following standard modifiers may be added to any applicable layers:

I. Building Information Layers

*_****- IDEN	identification data
*_****- PATT	cross hatching pattern
*_****- DEMO	existing to be demolished (hidden linetype, colour 9)
*_****- NEW	new or proposed work (colour 10)

II. Drawing Information Layers

*_****- NOTE	notes (WHITE)
*_****- TEXT	general information and specifications (BLUE)
*_****- SYMB	symbols, bubbles, etc. (WHITE)
*_****- DIMS	dimensions (RED)
*_****- PATT	cross-hatching pattern (colour 13)
*_****- NPLT	Nonplot information and construction lines (defpoint layer)
*_****- PLOT	Plotting targets and windows (defpoint layer)

For example, A-WALL-DEMO would designate walls, which are to be demolished.
A-FURN-TEXT would be used for specifications for furniture components.

4.3.5 The layering standard includes layers which may not be required initially (e.g., mechanical layers for brine systems) but may be required in the future.

4.4 Layering Standard

4.4.1 Group 1 - Architectural, Interiors and Facilities

Layer Name	Description	Colour	Linetype
A-WALL	Walls		
A-WALL-FULL	Full height walls	4 (Cyan)	continuous
A-WALL-HEAD	Door and glazing headers	0 to 15	continuous
A-WALL-JAMB	Door and window jambs	0 to 15	continuous
A-WALL-PRHT	Part height walls and fixed screens	0 to 15	continuous
A-WALL-MOVE	Movable walls & partitions	0 to 15	continuous
A-DOOR	Doors		
A-DOOR-FULL	Full height doors include swing	3 (Green)	continuous
A-DOOR-PRHT	Part height doors include swing	3 (Green)	continuous
A-DOOR-OVHD	Overhead door swing	8 (Dark Grey)	hidden
A-GLAZ	Windows, glazing, curtain walls		
A-GLAZ-EXTR	Exterior windows and glazing	0 to 15	continuous
A-GLAZ-FULL	Full height interior glazing	0 to 15	continuous
A-GLAZ-PRHT	Part height interior glazing	0 to 15	continuous
A-FLOR	Floor information		
A-FLOR-OTLN	Floor or building outline	0 to 15	continuous
A-FLOR-PLAT	Floor Plate of a building	15	continuous
A-FLOR-STRS	Stair risers, escalators, ladders	0 to 15	continuous
A-FLOR-EVTR	Elevator cars & equipment	0 to 15	continuous
A-FLOR-TPTN	Toilet partitions	0 to 15	continuous
A-FLOR-LEVL	Level changes, pits, depressions	8 (Dark Gray)	continuous
A-FLOR-MLWK	Millwork, built in cabinets	8 (Dark Gray)	continuous
A-FLOR-OVHD	Skylights & overhangs	8 (Dark Gray)	hidden
A-FLOR-RAIS	Raised floors	8 (Dark Gray)	continuous
A-FLOR-SIGN	Interior signage	0 to 15	continuous
A-FLOR-IDEN	Room numbers	0 to 15	continuous
A-FLOR-NAME	Room names	0 to 15	continuous
A-FLOR-LABL	Floor Label	1 (Red)	continuous
A-EQPM	Equipment		
A-EQPM-FIXD	Fixed equipment & appliances	8 (Dark Gray)	continuous
A-EQPM-MOVE	Movable equipment & appliances	8 (Dark Gray)	continuous
A-EQPM-SEAT	Fixed seating	0 to 15	continuous
A-FURN	Furniture		
A-FURN-FREE	Movable furniture	0 to 15	continuous
A-FURN-SYST	System furniture	0 to 15	continuous
A-FURN-SCRN	Movable screens	11	continuous

Group 1 - Architectural, Interiors and Facilities (continued)

Layer Name	Description	Colour	Linetype
A-CLNG	Ceilings		
A-CLNG-GRID	Ceiling grid	0 to 15	hidden
A-CLNG-OPEN	Ceiling & roof penetrations	0 to 15	continuous
A-CLNG-TBAR	T-bar ceiling assembly	0 to 15	continuous
A-CLNG-FIXED	Fixed Ceiling	0 to 15	continuous
A-ROOF	Roof		
A-ROOF-OTLN	Roof outline	0 to 15	hidden
A-FENC-CHAIN	Chain link fence	0 to 15	continuous
A-PMFN	Materials & finish plan	White	continuous
A-FIRE-OTLN	Fire separations	0 to 15	continuous
	Drawing Information Layers		
A-SHBD	Sheet border & title block lines	Red	continuous
A-SHBD-TTLB	Project title block & name	Red	continuous
A-SHBD-LOGO	City of Edmonton logo	Blue	continuous
A-SHBD-TEXT	Misc. text in title block	Green	continuous
A-SCHD	Schedules	White	continuous
A-LEGN	Legend of symbols	White	continuous
	CAFM Layers		
B-AREA-AS	Floor area polyline	1 (Red)	
B-AREA-AS-TXT	Floor area label	1 (Red)	
B-AREA-ASRM	Room area polyline	1 (Red)	
B-AREA-ASRM-TXT	Room area label	1 (Red)	continuous
B-AREA-BCRM	Building common area	5 (Blue)	continuous
B-AREA-BCRM-TXT	Building common label	6 (Magenta)	continuous
B-AREA-CONSTGR	Construction gross polyline	4 (Cyan)	continuous
B-AREA-FCRM	Floor common polyline	2 (Yellow)	continuous
B-AREA-FCRM-TXT	Floor common label	6 (Magenta)	continuous
B-AREA-FLGR	Floor gross polyline	3 (Green)	continuous
B-AREA-FLGR-TXT	Floor gross label	3 (Green)	
B-AREA-SHRM	Floor vertical polyline	3 (Green)	
B-AREA-SHRM-TXT	Floor vertical label	6 (Magenta)	
B-HATCH	Organizational Hatch	15-252	
B-ORG-PRSNL-TXT	Personnel Label	3 (Green)	
B-ORG-TXT	Organizational Text	2 (Yellow)	

4.4.2 Group 2 - Structural

Layer Name	Description	Colour	Linetype
S-GRID	Column grid		
S-GRID-EXTR	Column grid outside building	0 to 15	continuous
S-GRID-DIMS	Column grid dimensions	0 to 15	continuous
S-GRID-IDEN	Column grid tags	0 to 15	continuous
S-FNDN	Foundation piles, piers & reinforcing		
S-FNDN	Foundation piles, piers & reinforcing	0 to 15	continuous
S-SLAB	Concrete slab		
S-SLAB-EDGE	Edge of concrete slab	0 to 15	continuous
S-ABLT	Anchor bolts		
S-ABLT	Anchor bolts	0 to 15	continuous
S-COLS	Columns		
S-COLS	Columns	0 to 15	continuous
S-WALLS	Structural bearing and shear walls		
S-WALLS	Structural bearing and shear walls	0 to 15	continuous
S-METL	Miscellaneous metal		
S-METL	Miscellaneous metal	0 to 15	continuous
S-FRAM	Framing (beams, joints)		
S-FRAM-DECK	Structural decking	0 to 15	continuous

4.4.3 Group 3 - Mechanical including HVAC, Refrigeration, Plumbing and Fire Protection

Layer Name	Description	Colour	Linetype
	I.) HVAC, REFRIGERATION & GENERAL		
M-BRIN	Brine systems		
M-BRIN-EQPM	Brine systems equipment	0 to 15	continuous
M-BRIN-PIPE	Brine systems piping, valves, etc.	0 to 15	continuous
M-CMPA	Instrument compressed air systems		
M-CMPA-EQPM	Instrument compressed air equipment	0 to 15	continuous
M-CMPA-PIPE	Instrument compressed air piping	0 to 15	continuous
M-CONT	Controls & instrumentation		
M-CONT-STAT	Thermostats	0 to 15	continuous
M-CONT-WIRE	Low voltage wiring	0 to 15	dashed
M-DUST	Dust & fume collection systems		
M-DUST-EQPM	Dust & fume equipment	0 to 15	continuous
M-DUST-DUCT	Dust & fume ductwork	0 to 15	continuous
M-ELHT	Electrical heat equipment		
M-ELHT	Electrical heat equipment	0 to 15	continuous
M-ENER	Energy management systems		
M-ENER	Energy management systems	0 to 15	continuous
M-EXHS	Exhaust systems		
M-EXHS-EQPM	Exhaust systems equipment	0 to 15	continuous
M-EXHS-DUCT	Exhaust system ductwork	0 to 15	continuous
M-EXHS-ROOF	Rooftop exhaust equipment	0 to 15	continuous
M-FUEL	Fuel systems (excluding natural gas)		
M-FUEL-EQPM	Fuel systems equipment	0 to 15	continuous
M-FUEL-PIPE	Fuel systems piping	0 to 15	continuous
M-HVAC	HVAC systems		
M-HVAC-CDFF	HVAC ceiling outlets	0 to 15	continuous
M-HVAC-ODFF	HVAC other outlets	0 to 15	continuous
M-HVAC-DUCT	HVAC ductwork	0 to 15	continuous
M-HVAC-EQPM	HVAC equipment	0 to 15	continuous

Group 3 - Mechanical (continued)

Layer Name	Description	Colour	Linetype
M-HOTW	Hot water heating system		
M-HOTW-EQPM	Hot water equipment	0 to 15	continuous
M-HOTW-PIPE	Hot water piping	0 to 15	continuous
M-CWTR	Chilled water system		
M-CWTR-EQPM	Chilled water equipment	0 to 15	continuous
M-CWTR-PIPE	Chilled water piping	0 to 15	continuous
M-MDGS	Medical gas systems		
M-MDGS	Medical gas systems	0 to 15	continuous
M-NGAS	Natural gas systems		
M-NGAS-EQPM	Natural gas systems equipment	0 to 15	continuous
M-NGAS-PIPE	Natural gas systems piping	0 to 15	continuous
M-PROC	Process systems		
M-PROC	Process systems	0 to 15	continuous
M-REFG	Refrigeration systems		
M-REFG-EQPM	Refrigeration systems equipment	0 to 15	continuous
M-REFG-PIPE	Refrigeration systems piping	0 to 15	continuous
M-STEM	Steam systems		
M-STEM-EQPM	Steam systems equipment	0 to 15	continuous
M-STEM-PIPE	Steam systems piping	0 to 15	continuous
M-STEM-COND	Condensate piping	0 to 15	continuous
M-OTHR	Other mechanical systems		
M-OTHR	Other mechanical systems	0 to 15	continuous
	II.) PLUMBING		
M-DOMW	Domestic water systems		
M-DOMW-EQPM	Domestic water systems equipment	0 to 15	continuous
M-DOMW-PIPE	Domestic water systems piping	0 to 15	continuous
M-SANR	Sanitary drainage		
M-SANR-FIXT	Plumbing fixtures	0 to 15	continuous
M-SANR-PIPE	Sanitary piping	0 to 15	continuous
M-SANR-FLDR	Sanitary floor drains	0 to 15	continuous

Group 3 - Mechanical (continued)

Layer Name	Description	Colour	Linetype
M-STRM	Storm drainage		
M-STRM-PIPE	Storm drainage piping	0 to 15	continuous
M-STRM-ROOF	Roof drains	0 to 15	continuous
M-EQPM	Misc. plumbing equipment		
M-EQPM	Misc. plumbing equipment	0 to 15	continuous
	C) FIRE PROTECTION		
M-CO2S	CO2 system		
M-CO2S-EQPM	CO2 system equipment	0 to 15	continuous
M-CO2S-PIPE	CO2 system piping	0 to 15	continuous
M-HALN	Halon system		
M-HALN-EQPM	Halon system equipment	0 to 15	continuous
M-HALN-PIPE	Halon system piping	0 to 15	continuous
M-SPRN	Fire sprinkler system		
M-SPRN-CLHD	Sprinkler heads, ceiling mounted	0 to 15	continuous
M-SPRN-EQPM	Sprinkler system pumps & equipment	0 to 15	continuous
M-SPRN-OTHR	Sprinkler heads, other	0 to 15	continuous
M-SPRN-PIPE	Sprinkler piping	0 to 15	continuous
M-STAN	Standpipe system		
M-STAN-EQPM	Fire hose cabinets, pumps & equipment	1 (Red)	continuous
M-STAN-PIPE	Standpipe piping	1 (Red)	continuous

4.4.4 Group 4 - Electrical and Auxiliary Systems

Layer Name	Description	Colour	Linetype
E-LITE	Lighting		
E-LITE-EMER	Emergency lighting	0 to 15	continuous
E-LITE-EXIT	Exit lighting	0 to 15	continuous
E-LITE-CLNG	Ceiling mounted lighting	0 to 15	continuous
E-LITE-WALL	Wall mounted lighting	0 to 15	continuous
E-LITE-NUMB	Lighting circuit numbers	0 to 15	continuous
E-LITE-SWCH	Lighting switches	0 to 15	continuous
E-LITE-CIRC	Lighting circuits	0 to 15	dashed
E-LITE-ROOF	Roof lighting	0 to 15	continuous
E-POWR	Electrical power		
E-POWR-WALL	Wall outlets	0 to 15	continuous
E-POWR-CLNG	Ceiling outlets	0 to 15	continuous
E-POWR-PANL	Power panels	0 to 15	continuous
E-POWR-EQPM	Power equipment	0 to 15	continuous
E-POWR-CIRC	Power circuits	0 to 15	dashed
E-POWR-NUMB	Power circuit numbers	0 to 15	continuous
E-PROT	Fire Protection Systems		
E-PROT-ALRM	Fire alarms	0 to 15	continuous
E-PROT-HEAT	Heat detectors	0 to 15	continuous
E-PROT-SMOK	Smoke detectors	0 to 15	continuous
E-PROT-EQPM	Fire extinguishers	0 to 15	continuous
E-CTRL	Electrical control systems		
E-CTRL	Electrical control systems	0 to 15	continuous
E-GRND	Ground systems		
E-GRND	Ground systems	0 to 15	continuous
E-CCTV	Closed circuit television systems		
E-CCTV	Closed circuit television systems	0 to 15	dashed
E-VOIC	Voice communication connections		
E-VOIC	Voice communication connections	0 to 15	continuous
E-DATA	Data communication connections		
E-DATA	Data communication connections	0 to 15	continuous
E-SERT	Security systems		
E-SERT	Security systems	0 to 15	continuous

Group 4 – Electrical and Auxiliary Systems (continued)

Layer Name	Description	Colour	Linetype
E-SOUN	Sound and public address systems		
E-SOUN	Sound and public address systems	0 to 15	continuous
E-AUXL	Other electrical systems		
E-AUXL	Other electrical systems	0 to 15	continuous

4.4.5 Group 5 - Civil Engineering, Landscaping and Site Work

	I.) CIVIL ENGINEERING		
C-PROP	Property lines, easements, right of way		
C-PROP	Property lines, easements, right of way	0 to 15	continuous
C-TOPO	Contour lines & elevations		
C-TOPO	Contour lines & elevations	0 to 15	continuous
C-BLDG	Building footprint		
C-BLDG	Building footprint	0 to 15	continuous
C-PKNG	Surface parking lots		
C-PKNG	Surface parking lots	0 to 15	continuous
C-ROAD	Roads including lines & curbs		
C-ROAD	Roads including lines & curbs	0 to 15	continuous
C-STRM	Storm drainage site services		
C-STRM-EQPM	Storm drain catch basins & manholes	0 to 15	continuous
C-STRM-UNDR	Underground storm piping	0 to 15	continuous
C-ELTR	Electrical site services		
C-ELTR-EQPM	Electrical substations & poles	0 to 15	Continuous
C-ELTR-LITE	Site lighting	0 to 15	Continuous
C-ELTR-UNDR	Underground electrical lines	0 to 15	Continuous
C-ELTR-OVHD	Overhead electrical lines	0 to 15	Continuous
C-COMM	Communications site services		
C-COMM-EQPM	Communication systems equipment	0 to 15	Continuous
C-COMM-UNDR	Underground communication lines	0 to 15	Continuous
C-WATR	Domestic water site services		
C-WATR-EQPM	Domestic water valves, tanks, pumps, etc.	0 to 15	Continuous
C-WATR-UNDR	Underground domestic water piping	0 to 15	Continuous
C-FIRE	Fire protection site services		
C-FIRE-EQPM	Fire hydrants, valves, etc.	0 to 15	Continuous
C-FIRE-UNDR	Underground fire system piping	0 to 15	Continuous
C-NGAS	Natural gas site services		
C-NGAS-EQPM	Natural gas valves, meters, tanks, etc.	0 to 15	Continuous
C-NGAS-UNDR	Underground natural gas piping	0 to 15	Continuous

[illegible]

APPENDIX "A"

Form for Feedback from Design Consultants

Design consultants should use this form to provide feedback on the use of the CAD standards.
Upon completion, fax or email this form to:

The City of Edmonton: Project Management & Construction Branch

Attention: Ferdinand Sobernig Phone: (780) 496-6599

Fax: (780) 496-6618

Email: ferdinand.sobernig@edmonton.ca

Comments provided by:

..... Name	 Date
..... Company	 Position
..... Telephone Number	 Fax Number

Comments: Refer to the section number in the manual and provide specific suggestions for improvements. Attach additional pages as required.

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Executive Summary

Stantec Consulting has been retained to undertake a detailed assessment of the existing sports lighting system and the associated power distribution system and controls at Commonwealth Stadium in Edmonton, Alberta.

Stantec representatives have attended the site and met with facility operations and maintenance personnel. The existing lighting system and the related power distribution and control system was reviewed. System concerns regarding operation, maintenance, lighting system performance and system reliability were also discussed.

The sports lighting requirements for the facility were confirmed with respect to the lighting system use (sport and event), type of sport and event, level of play, and television broadcast both Standard Definition (SD) and High Definition (HD) broadcast. A key component of this assignment was to review the latest technology available for major sports facility field of play lighting.

The fact that the existing lighting system requires upgrading does not appear to be at issue here. The questions here are “what the best approach for the lighting upgrade” and “what is the most acceptable solution – the solution that results in a sports lighting system that meets the minimum needs of broadcast, spectators and sport while minimizing risk to Facility Owners during the remediation stages (demolition, system replacement and commissioning).

In assessing of the operational and performance related concerns of the existing sports lighting system, we have considered the following three solutions:

- **Option 1 - Upgrade/refurbish the existing fixtures – NOT RECOMMENDED**

At first glance the easiest and most economical solution but one that does not fully address the main problems with this lighting system:

1. Substandard lighting levels for broadcast including low and non-uniform overall field illumination levels and end zone camera vertical illumination. Fixture remediation will improve lighting levels, though not to the point desired by broadcast. Replacement of failing components such as the existing oil-filled ballasts above the spectators that are starting to leak and, in some cases, failing catastrophically will somewhat improve fixture reliability but in the end all you have are old fixtures with old system wiring that has some new components. The fixtures are only as reliable as their weakest component. Replacement of the existing reflectors would take the cost to a point where it becomes logical to purchase new fixtures;
2. The Owners desire that they have an easily maintainable lighting system that operates with a high level of confidence. Again, the chain is only as strong as the weakest link. While a major refurbish of the existing fixtures (new ballasts, new

lamps, clean reflectors and lens, re-aim fixtures) will bring lighting performance back to original design levels, the system will still have the original and aging mounting brackets, power distribution system and limited control capability. The higher lighting performance and power use efficiencies brought by a “current technology” lighting system would not be inherent in an upgraded system.

- **Option 2 – Replace existing lighting system with new “current technology” fixtures, catwalk distribution and control system – RECOMMENDED**

A very reasonable solution that addresses the majority of owners and broadcast concerns. Recommended illumination levels for professional sport (football, soccer and track and field) are met and the lighting requirements for all HD camera locations except the end zone cameras are met or exceeded. The end zone camera illumination levels produced are close to requirements and, while expected to be acceptable for regular season play, actual field testing by broadcast will determine whether or not temporary auxiliary lighting will be required for the high profile events (ie 2010 Grey Cup). This option would include new distribution wiring and panels on the catwalks and a new control system.

- **Option 3 - Install a complete new lighting system as in Option 2 but including new end zone lighting poles – NOT RECOMMENDED**

This is the most complete and most costly solution. All lighting system requirements of ownership and broadcast are achieved. The added end zone poles and fixtures will resolve the most stringent broadcast concerns related to illumination for end zone HD cameras used in certain high profile events. We feel that weighing the significant added cost for the end zone poles vs the few occasions that they are required is not good value.

This report is intended to summarize the investigative results of this assessment and make recommendations for upgrade or replacement of the lighting system. Order of magnitude construction costs have been prepared for the most for the various options for lighting system remediation. A recommended design and construction schedule for the implementation of the recommended option is included. All schedules target completion of the recommended upgrades in time for the 2010 Grey Cup, with allowance made for possible schedule impediments (delayed equipment deliveries, foul weather impact, exigencies encountered during the design or installation phases).

Design/construction schedules have not been prepared for the other options as, regardless of which option is selected for implementation, the potential risks and the time required for completion will be shorter or approximately the same.

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CERTIFICATE OF INSURANCENAME AND ADDRESS OF
NAMED INSURED:

NATURE OF WORK

CONTRACT / P.O. #:

Schedule of Coverage

	INSURANCE COMPANY	POLICY NO.	EXPIRY DATE
A. General Liability:			
B. Automobile Liability:			
C. Excess/Umbrella: Liability			

Particulars of Coverage

A. GENERAL LIABILITY - the following coverage features are included:		LIMITS OF LIABILITY
☐ Occurrence Form	☐ Excavation, Collapse, Shoring and Underpinning	\$_____ Inclusive Limits
☐ Claims Made Form	☐ Non-Owned Automobile	\$_____ Aggregate
☐ Employees as Additional Insureds	☐ Cross Liability	(if applicable)
☐ Products and Completed	☐ Personal Injury	
☐ Independent Contractor	☐ Occurrence Property Damage	\$_____ Aggregate Products
☐ Broad Form Property Damage	☐ Employers Liability	/Comp. Operations
☐ Tenants Legal Liability Limits		
\$_____		
Deductible or Retention Level \$_____	☐ Other (specify)	
B. AUTOMOBILE (Owned/Leased) LIABILITY	\$_____	Inclusive Limits
C. EXCESS/UMBRELLA LIABILITY	\$_____	Excess of coverages shown above
D. PROFESSIONAL LIABILITY	\$_____	Inclusive Limits
Deductible or Retention Level	\$_____	Aggregate each policy period
E. GARAGE LIABILITY	\$_____	Inclusive Limits
F. ALL RISK PROPERTY	\$_____	

The Undersigned hereby represents to the CITY OF EDMONTON that the above policies are accurately described and have been issued to the Named Insured. The Undersigned further represents that these policies are endorsed to provide thirty (30) days written notice of cancellation or material change to the CITY OF EDMONTON at the following address:

The City of Edmonton
Risk Management and Corporate Security
10th Floor, Chancery Hall
#3 Sir Winston Churchill Square
Edmonton, Alberta, CANADA
T5J 2C3

This certificate is executed and signed by the Insurer, or authorized Agent/Broker.

Authorized Representative - signature

Insurance Company or Agent Broker

Name of Representative - please print

Telephone

Date