## Winnipeg Sewage Treatment Program Integrated Management System





# **Contract Administration Manual**

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## 1. INTRODUCTION

This manual has been created to aid the Contract Administrator in delivering contract administration duties.

The Contract Administrator is the city's representative throughout the duration of the contract and has the authority to act on behalf of the city to the extent expressly provided for in the contract.

The Contract Administrator will interpret or clarify the contract or any part thereof which appears indefinite, not clear or contradictory to the contractor.

Note: these procedures are modeled on the City of Winnipeg's general conditions. The Contract Administrator must also review the supplemental conditions of the respective contract. These may alter applicable clauses within the general conditions.

## 2. CONTRACT ADMINISTRATION SERVICES

In general, Contract Administration Services shall follow the City's definition of professional consulting services for contract administration or as may be modified by the scope of work defined in the RFP for Consulting Services.

Notwithstanding the generality of the foregoing, the Contract Administrator shall utilize, processes, procedures, forms and templates contained within this manual to deliver the duties of the Contract Administrator

## 3. DEFINITIONS

City	means City of Winnipeg or City designated Project Manager
Contract Administrator	means entity contracted by City of Winnipeg to deliver contract administration services
Consultant	means entity contracted by City to provide engineering services for the project
Contractor	means entity contracted by the City to provide goods and services
General Conditions	means City of Winnipeg general conditions for construction contracts dated 2000 -11- 09
RFP	means Request for Proposals Issued by the City
ITP	means Inspection and Test Plan
CCN	means Contemplated Change Notice
ACC	means Authorized Contract Change
FWA	means Field Work Authorization
PE	means Progress Estimate
FI	means Field Instruction
DCR	means Daily Construction Report
CRR	means Construction Review Record

## 4. RECORDS, REPORTING AND FILING

#### 4.1 Introduction

This section identifies the process the Contract Administrator will follow for all records pertaining to the Contract, what reporting will be conducted throughout the duration of the Project and how the information will be filed. The Contract Administrator shall ensure copies of all forms and records are transmitted to the

City within 48 hours of their creation.

4.2 Forms And Records

The Contract Administrator shall generate as required the following site records throughout the course of the contract.

## 4.2.1 Meetings

The Contract Administrator shall record minutes of all regular and special contractor meetings, coordination meetings and conference calls.

## 4.2.2 Change Management

The Contract Administrator Shall Coordinate, compile and prepare Change Management Documentation including contemplated Change Notices, Authorized Contract Changes, Field Work Authorizations and Contractor Claims.

## 4.2.3 Clarification and Directives

The Contract Administrator shall collect and disseminate additional Information requested by or provided to the Contractor including Requests for Information and Field Instructions.

#### 4.2.4 Quality Assurance

The Contract Administrator shall coordinate inspections, collect and file documents and monitor remedial works including Construction Review Records, Test Records and Non Conformance Reports

#### 4.2.5 Daily Progress Reporting

The Contract Administrator shall prepare or cause to be prepared Daily Construction Reports containing, inspections completed, manpower on site, equipment on site, problems encountered, activities started, completed and planned, site conditions, work stoppages, unusual events and verbal instructions given to contractor.

#### 4.3 Reporting

4.3.1 Monthly Construction Status Report

The Contract Administrator shall compile and submit to the City, Monthly Construction Status Reports. The reports shall contain the following:

(a) Executive Summary

A Written Summary Of The Current And Cumulative Progress Of The Contract Identifying Major Activities Completed During The Period, Major Activities Planned For Next Period And Any Areas Of Concern;

(b) Safety And Security

Provide an overview of Contractors safety performance including Record of Incidents, Investigations, Permits, Trainings, Inspections, Hazard Reviews, Notifications and Safety Committee Meetings held; (c) Cost Reporting

A commitment based cost report reflecting costs committed to date, invoiced to date, percent complete, forecast to complete, estimate at completion and variance;

A Detailed Contract Status report listing all approved ACC's to date, all outstanding CCN's, FWA's, Detailed Progress Estimate Listing reflecting Holdbacks retained, MRST included or self-assessed, amounts paid to contractor, dates paid and holdback releases;

(d) Construction Progress

A construction schedule presenting actual vs. planned progress shall be updated to reflect performance to date. The schedule can take the form of Gantt Charts, S-curves and histograms to demonstrate the progress of the Contract against the baseline; and

(e) Quality Assurance

This section of the report will provide a listing of Inspections, Reviews and testing completed during the previous period as well as status reports of all NCR's.

## 4.4 Project Filing System

The Contract Administrator shall file all documentation generated from contract administration services into the following electronic project file structure. In circumstances where more than one contractor is engaged on the Project, this file structure shall be established for each Contract.

## **Bid Op/Contract Number #1 Project Electronic File Structure**

- 1.0 Contractual Documents
  - 1.1 Letter of Intent/PO
  - 1.2 Insurance
  - 1.3 Bonding
  - 1.4 Permits
  - 1.5 Contract Drawings and Specifications
- 2.0 Meeting Minutes
  - 2.1 Pre-Construction
  - 2.2 Weekly Contractor
  - 2.3 Special Meetings/Conference Calls
  - 2.4 Coordination
- 3.0 Contract Changes
  - 3.1 Contemplated Change Notices
  - 3.2 Authorized Contract Changes
  - 3.3 Field Work Authorizations
  - 3.4 Contractor Claims
- 4.0 Clarifications
  - 4.1 Field instructions
  - 4.2 Requests for Information

- 5.0 Progress
  - 5.1 Work Schedules
  - 5.2 Progress Estimates
  - 5.3 Daily Construction Reports
  - 5.4 Monthly Progress Reports
  - 5.5 Progress Photographs
- 6.0 Quality Assurance
  - 6.1 Inspection and Test Plans
  - 6.2 Construction Review Records
  - 6.3 Test Records
  - 6.4 Non- conformance Reports
  - 6.5 Deficiency Lists
  - 6.6 Performance Verification Records
- 7.0 Submittals
  - 7.1 Shop Drawings
  - 7.2 O&M Manuals
  - 7.3 Redline As-built Markups
  - 7.4 Warranties
  - 7.5 Training Plans
  - 7.6 Commissioning Procedures
  - 7.7 Completion Certificates
- 8.0 Safety Health and Environment
  - 8.1 Safe Work Plans
  - 8.2 Incidents and Investigations
  - 8.3 Daily Safety Reports
  - 8.4 Statistics

## Emails

Emails shall be filed relative to their pertinence to one of the project file system subfolder categories. All Emails shall have the date entered at the beginning of the email subject line in the following format Bid Op # followed by YYMMDD and subject key words (e.g. 125-2012-120924-Boiler Training Plan).

## 5. MEETINGS

5.1 General

The Contract Administrator shall arrange and chair all contractor site meetings including preparation, distribution and filing of minutes within 3 business days of the meeting date.

5.2 Pre-Construction Meeting

The Contract Administrator shall convene a preconstruction meeting and include representatives of management from the various parties who have the authority to make decisions, so as to resolve any problems that may arise. The preconstruction meeting should be held in conjunction with a site inspection to verify site conditions and the need for preparatory works. A template of a typical Preconstruction Meeting agenda is available in <u>Form # CD-PM-TO-01</u> and shall be utilized to record minutes of the meeting. The minutes should be distributed to all attendees and to other persons having key input into the project.

#### 5.3 Site Meetings

Depending on the scope and nature of the project, the Contract Administrator shall convene weekly or bi-weekly meetings with the Contractor and record minutes of such meetings. Regular contractor site meetings shall address the following:

- (a) To review progress to date;
- (b) Review contractor site safety;
- (c) To discuss expected progress;
- (d) Review contractor submittals;
- (e) Review outstanding RFI's and CCN's;
- (f) To review contract schedule;
- (g) To identify coordination needs of Contract Administrator;
- (h) To identify and resolve any problems occurring during construction; and
- (i) Other items pertaining to the contract.

## 5.4 Site Coordination Meetings

On projects were multiple contracts are awarded, to complete the work, the Contract Administrator shall arrange regular coordination meetings to facilitate logical sequencing of the work. Minutes of the meetings shall be prepared by the Contract Administrator. The minutes shall record agreed upon dates, timeframes and actions by respective parties

#### 5.5 Special Meetings And Conference Calls

The Contract Administrator shall convene special meetings or conference calls as may be required to resolve issues with a smaller focused group or to disseminate special materials pertinent to the progress of the work. The Contract Administrator shall chair and record minutes of such meetings and or conference calls.

#### 6. CONTRACTOR SUBMITTALS

6.1 Introduction

This section describes the duties of the Contract Administrator with regard to contractor submittals throughout the duration of the Contract. The Contract Administrator shall obtain a listing of submittals from Contractor c/w a submission schedule.

The Contract Administrator shall obtain the city's approval for any substitutions, alternates or equivalents proposed by the contractor during the course of the work.

#### 6.2 Shop Drawings And Product Data

The Contract Administrator or designated representative will receive contractor shop drawings, log drawings into the <u>CD-PM-TO-11 Submittal Log Form</u> and transmit the shop drawings to respective design disciplines, for review. Unless

agreed otherwise the shop drawing review period shall be no longer than 10 working days. The respective design disciplines shall return the reviewed shop drawings to the Contract Administrator for recording the review status in the shop drawing log and transmission of the Reviewed, Reviewed as Noted or Revise and Resubmit shop drawings to the Contractor. Only Reviewed or Reviewed as Noted shop drawings shall be used for the work. Shop drawings stamped Revised and Resubmit are to be acted upon accordingly by the Contractor. The Contract Administrator shall place copies of the reviewed or reviewed as noted shop drawings in the Project File.

On instances were multiple contracts have been awarded on the project, the Contract Administrator shall review the shop drawings with respect to work of other contracts and transmit copies of the reviewed shop drawings to the other Contractors for coordination with their works.(e.g.: anchor bolt layouts from an equipment vendor to the concrete contractor for embedment).

## 6.3 Samples

All samples submitted by the contractor will be logged by the Contract Administrator in the Submittal Log, identifying the Date of Submission, origin, intended use in the work and any deviation from the requirements set out in the Contract Documents. The samples shall be reviewed by the appropriate reviewer and comments recorded on the submittal log. The Contract Administrator shall advise the contractor regarding Acceptance or Rejection of the sample and record same in the submittal log.

## 6.4 Inspection and Test Plans (ITP)

The Contract Administrator shall obtain or prepare a detailed Inspection and Test Plan based on the design specifications for construction of the Project. The process is likely to be, a construction activity, element of work, trade work or equipment manufacturing section. An Inspection and Test Plan identifies the items of materials and work to be inspected or tested, by whom and at what stage or frequency, as well as Hold and Witness Points, references to relevant standards, acceptance criteria and the records to be maintained. Inspection and Test Plans, when properly implemented, help ensure that, and verify whether, work has been undertaken to the required standard and requirements, and that records are kept.

The Contract Administrator shall expedite and receive ITP's from City Supplied Equipment Vendors. The Contract Administrator in conjunction with the City shall determine the need for Factory Acceptance Tests witnessing and inspections. The Contract Administrator shall coordinate and arrange for appropriate inspectors to visit the manufacturing facilities at the appropriate hold points identified in the vendors' ITP.

The Contract Administrator shall place ITPs' and associated inspection reports in the Project File's designated subfolder and copies of the inspection reports shall be forwarded to the responsible design discipline for their review and acceptance.

#### 6.5 Operations and Maintenance Manuals

Upon receipt of O&M manuals from the Contractor, the Contract Administrator shall review the manuals for compliance with the Contract documents. The Contract Administrator will send the O&M manuals to the respective design disciplines and the City for their review and approval. The Contract Administrator will compile the

review comments from the reviewers and return the compiled comments to the Contractor for incorporation into the final O&M manual submission.

The Contract Administrator shall ensure the O&M manuals (first draft) are submitted and available for Pre-commissioning prior to issuance of Certificate of Substantial Performance.

## 6.6 Training Materials

The Contract Administrator shall receive track and review lesson plans and other training materials. The Contract Administrator shall forward training materials to the City for review and comment. All submittals shall be recorded in the submittal log c/w their status identified.

#### 6.7 Spare Parts

The Contract Administrator shall coordinate receipt of, inspection, tracking and storage of all spare parts in a location designated by the City. The Contract Administrator shall create a listing of spare parts including description, specification reference and relative equipment tag numbers.

## 7. PROGRESS MONITORING AND CONTROL

## 7.1 Schedule of Work

The Contractor shall submit a Detailed Construction Schedule, incorporating the schedule requirements and constraints set out in the Supplementary General Condition of the Contract, for the Contract Administrators review. The Contract Administrator shall forward the schedule along with a recommendation of agreement to the City for their approval. This Schedule becomes one of the tools by which the Contract Administrator will monitor and control the works of the project and forms the Contract Time baseline.

The Detailed Construction Schedule must be submitted prior to commencing the work. The agreed upon schedule becomes a crucial measure for any subsequent delay claims that may arise between the City and the Contractor. The Detailed Construction Schedule becomes an enforceable obligation of the Contract, like every other aspect of the contract, and thus, a party causing delay which results in increased costs is likely to be liable for additional costs resulting from the delay.

Progress reviews shall be carried out on a regular basis, typically at the regularly scheduled site meetings. Activities which are behind schedule are identified, and corrective action to bring the activity back on schedule is determined. Progress reviews may be augmented by having special/additional meetings to discuss critical activities which are behind schedule.

If the Schedule must change, it may only be revised with the prior written consent of the Contract Administrator, and only to reflect valid changes in the work or delays beyond the control of the Contractor.

Should the Contractor fail to meet the Critical Stage and Completion Dates defined in the Supplemental General Conditions, the Contract Administrator in conjunction with the City can assess liquidated damages as provided for in the Supplemental Conditions of the Contract, should Critical Stages not be achieved.

7.2 Delays in Completing Work

Construction delays fall into different categories. as follows:

- (a) Compensable;
- (b) Non-Excusable;
- (c) Excusable.

Compensable delays are typically delays caused by the City. These types of delays are compensable in that they may be corrected by extending the Contract Time and/or by providing additional compensation or damages. Examples of these types of delay include late award of the Contract, impeded access to the site, and late delivery of City-supplied equipment or materials.

Non-Excusable delays are those caused by the Contractor, such as his own inability to complete the Work on schedule or delays caused by Sub-contractors.

Excusable delays involve delays beyond the control of the City or Contractor (Force Majeure). These may include strikes, lock-outs (including lock-outs decreed by a recognized contractor's association for its members of which the Contractor is a member), an act of God, or any other cause which the Contractor satisfies the Contract Administrator to be totally beyond his control or any cause within the Contractor's control which the Contract Administrator has determined is an excusable delay. In these cases, the Contract Time shall be extended for a period of time equal to the time lost due to such delays. Extensions in Contract Time shall be recorded via CD-PM-TO-04 Authorized Contract Change Form.

## 7.3 Critical Stages

Critical Stages are typically used on multiple contract projects and provide a means of identifying the dates, for which the logical sequence of works for one contract is complete to facilitate aspects of another contract tie-in or start point. The Critical Stage dates often have liquidated damages associated with them, to set off delay claims that may appear if the work of another contract is delayed.

## 7.4 Progress Monitoring/Recording

The Contract Administrator shall issue or cause to be issued <u>Daily Construction</u> <u>Reports (DCR) CD-PM-TO-08</u> and forward to the City by 9:00am the following day. The DCR provides a chronological record of Contractors progress including manpower and equipment being utilized, safety records, activity reporting/ forecasting, inspections and tests taken. Recording of daily construction issues raised and verbal directions given to the contractor should also be recorded in the DCR. The Contract Administrator shall place DCR's in the Project File's appropriate subfolder.

## 7.5 Request for Information (RFI)

A RFI is the form established by the City for the contractor to request information and/or clarification related to the plans, specifications or contract requirements. RFI's are also issued to request minor deviations from the contract requirements that do not have cost or schedule impacts and to obtain direction on how to proceed when there are conflicting contract requirement. The Contractor shall use the City's standard <u>CD-PM-TO-06 RFI Form</u> Request for Information (RFI) to submit questions.

The Contract Administrator shall receive the RFI from the contractor, log the

receipt and forward the RFI to the applicable design discipline for response. The Contract Administrator shall log the response date and return the RFI to the Contractor for his action. If the RFI will have cost or schedule implications the Contract Administrator shall obtain a Project Record Index PRI number from the City and undertake the Change Management processes in Section 10.

## 7.6 Substantial Performance

The Contract Administrator shall determine if and when Substantial Performance is achieved and shall certify the date thereof.

When the Contractor is of the opinion the work of his Contract has been substantially performed, he shall notify the Contract Administrator requesting arrangement of an inspection of the work. The Contract Administrator shall arrange an inspection with the applicable engineering discipline inspectors, City representative and Contractor. The Contract Administrator shall review the outcome of the inspection in context with the Builders' Liens Act and certify whether Substantial Performance of the contract has been achieved.

In cases where correction of deficiencies is restricted by climatic/seasonal conditions, the Contract Administrator can issue Substantial Performance of the work. In these instances the start of the Warranty Period on the completed works only, will begin 30 days following the Date of Substantial Performance. Documentation to this effect must be stored in the Project file.

When the Contract Administrator determines the conditions of Substantial Performance have been achieved he shall complete a <u>Certificate of Substantial</u> <u>Performance, Form CD-PM-TO-18</u> in triplicate and obtain the noted signatures. The Contract Administrator shall forward a copy of the signed Certificate of Substantial Performance to the Contractor to prominently display at the contract work site as notice to subcontractors and suppliers of the Contract Completion status. Copies shall also be forwarded to the City and Project File.

Substantial Performance is defined under the Builders' Liens Act as follows the Contract Administrator should review the most current copy of the Builders Lien Act.

For the purposes of this Act, a contract or sub-contract shall be conclusively deemed to be substantially performed when:

- (a) the structure to be constructed under the contract or sub-contract of a substantial part thereof is ready for use or is being used for the purpose intended or, where the contract or sub-contract relates solely to improving land, the improved land or a substantial part thereof is ready for use or is being used for the purpose intended; and
- (b) the work to be done under the contract or sub-contract is capable of completion or correction at a cost of not more than;
- (i) 3% of the first \$250,000. of the contract price;
- (ii) 2% of the next \$250,000. of the contract price; and
- (iii) 1% of the balance of the contract price.

Generally, the Works must be ready to use and 97 percent or more complete. The Builders' Lien Act contains sections whereby holdbacks can be released and paid on sub-contracts that are complete. Contract Administrators must be familiar with the terms of the Manitoba Builders Lien Act.

## 7.7 Total Performance

Total Performance means that the entire work, except those items arising from the provision of Warranty items, have been performed in accordance with the Contract. Removal of all temporary services for construction including but not limited to site trailers, storage facilities, restoration of laydown areas and debris removal are complete. There can be no deficiencies or defects in the works apparent at Total Performance.

Total Performance Date initiates start of (1) year Warranty Period, but may have extended durations as further specified in the Supplemental Conditions and / or Contract Specifications. The Contract Administrator with the City and Contractor shall complete a final inspection to certify the Date of Total Performance.

The Contract Administrator shall prepare a <u>Certificate of Total Performance Form</u> <u>CD-PM-TO-19</u> in triplicate formalizing Total Performance certification. Copies of the completed Certificate of Total performance shall be sent to the City, Contractor and Project file system

Total Performance is also of importance in the Builders' Lien Act, in that it triggers another 40 day lien expiry period for holdbacks on work done post Substantial Performance. Total Performance also triggers the end of the period for Contract Changes. No Contract Changes are permitted after Total Performance.

## 7.8 Acceptance And Warranty Works

Unless specifically stated otherwise in the Supplemental Conditions of the Contract, the Warranty Period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless specifically stated otherwise.

Prior to expiry of the Warranty Period the Contract Administrator shall arrange an Acceptance inspection with the Contractor and City representatives to identify any outstanding warranty issues

The Contract Administrator shall notify the Contractor in writing of any observed defects or deficiencies which are categorized as warranty items. The Contractor shall remedy all defects or deficiencies identified on the notice to the satisfaction of the Contract Administrator within the time period specified on the notice.

The Contract Administrator shall prepare a <u>Certificate of Acceptance Form CD-PM-</u> <u>TO-20</u> in triplicate, for signature of the City and Contractor. Copiers of the completed Certificate shall be sent to the City, Contractor and Project File.

Certification of Acceptance of the work shall not, however, relieve the Contractor from his responsibilities for any breach of Contract including but not limited to, defective or deficient work appearing after the date of Acceptance.

## 8. PROGRESS PAYMENTS

8.1 Introduction

This section describes the responsibilities of the Contract Administrator respecting Progress payments made to the contractor during the course of the Contract. It is the Contract Administrators responsibility to certify progress of the work for Contracts.

8.2 Progress Payments

By the fourteenth Calendar Day after the end of each month, or as soon thereafter as possible, the Contract Administrator shall, subject to having received all necessary information from the Contractor by the seventh Calendar Day after the end of the month, prepare a Progress Estimate certifying the value of the work performed during the preceding month. Progress Estimates shall be summarized and reflected in accordance with <u>CD-PM-TO-40 Form- Standard Progress Estimate</u> <u>Summary.</u>

The Contract Administrator shall forward three hard copies and one .pdf of each Progress Estimate to the Project manager

The Contract Administrator shall obtain the Project Managers approval on the presentation and content reporting of supporting documentation for the Standard Progress Estimate Summary. All approved ACC's shall be listed on the supporting Progress Estimate documentation c/w applicable progress valuation. The Contract Administrator shall attach copies of all ACC's that are being progressed during the period. All Standard Progress Estimates Summaries must reflect Statutory Holdbacks, Holdbacks to Date and Holdback Releases including associated MRST and GST retained.

A requirement to report the value of Manitoba Retail Sales Tax included in the Progress Estimate may apply for manufactured goods within the Province of Manitoba. The Contract Administrator shall ensure the Contractor identifies applicable MRST on the Progress Estimate supporting documentation. An example of MRST identification and reporting can be reviewed on <u>CD-PM-TO-09 Form.</u> MRST reporting requirements are as set out on the City of Winnipeg's Materials Management website.

In the case were the Contractor is an Equipment Supplier that is not registered as a Manitoba Vendor, the Contract Administrator shall self- assess the MRST value and indicate same on the Standard Progress Estimate Summary.

#### 8.3 Holdbacks and Retention

The Contract Administrator shall apply Statutory Holdbacks to all Interim Progress Payments in the amount stipulated in the Manitoba Builders Lien Act. The Contract Administrator shall also ensure reasonable amounts are withheld to offset uncompleted work. Lien Holdbacks cannot be utilized to set off the cost of deficiency corrective measures should the Contractor abandon the work.

Once Substantial Performance has been achieved as defined in 7.6 above, the Contract Administrator shall prepare a Release of Holdback Progress Estimate identifying the payable date, as the end of the (40 day Lien expiry period).

Retentions that set off deficiency works can be paid out to the Contractor when the corrective measures have been reviewed and accepted by the Contract Administrator.

The Contract Administrator shall also retain Lien Holdbacks on Progress Estimates submitted during the period between Substantial Performance and Total Performance. The release of these holdbacks shall be triggered on the Date of Total Performance and paid at the expiry of another 40 day Lien Period.

## 9. CONSTRUCTION INSPECTION AND TESTING

9.1 Introduction

This section describes the responsibilities of the Contract Administrator with respect to construction review and testing in conjunction with the Consultant's Inspection and Test Plan.

9.2 Construction Inspection

The Contract Administrator shall perform or cause to be performed construction reviews throughout the duration of the project. The Contract Administrator shall coordinate inspections performed by discipline specific individuals as required to ensure the work conforms to the drawings, specifications and relevant codes. The Contract Administrator shall also notify the City of the planned Construction Review facilitating the City's option to attend the Construction Review.

A Construction Review Record (CRR) <u>CD-PM-TO-12 Form</u> shall be completed by the reviewer. Copies of the CRR shall be filed in the appropriate file and a copy forwarded to the Contractor. Should any non-conformances be identified during the construction review the Contract Administrator shall record the items on a) <u>CD-PM-TO-021 Non Conformance Report (NCR)</u> and transmit the NCR to the Contractor for action. The Contract Administrator shall log the NCR in the NCR Log for tracking, monitoring and disposition. The NCR Log shall be reviewed and updated at Weekly Contractor Site Meetings.

## 9.3 Testing

The Contract Administrator or his designate shall coordinate 3<sup>rd</sup> party materials testing firms with progress of the work, receive and interpret test results, request contractor to propose corrective measures and review contractor proposed corrective measures for acceptance. The Contract Administrator shall file all test reports in the project file system.

The Contract Administrator shall compile or cause to be compiled, Equipment and Instrumentation lists. The Contract Administrator shall utilize these lists to track the status of pre-commissioning tests. The Contract Administrator shall witness or cause to be witnessed all Contractor performed pressure tests, water retaining structure leak tests and other tests identified in the specifications or codes. The Contract Administrator shall obtain copies of all test reports from the Contractor and file in the project file system.

## 10. CONTRACT CHANGES

#### 10.1 Introduction

This section describes the procedures to be utilized by the Contract Administrator for management of Change in the Work. All Changes must be fully documented including the reason the change is necessary, estimate of the cost and schedule impact of the Change, relevant documents detailing the change, contractor pricing, Contract Administrators recommendation for accepting the Change and an Authorized Contract Change signed by Contractor, Contract Administrator and City.

## 10.2 Project Record Index (PRI)

A Project Record Index is utilized by the City to track and monitor changes in the work. As soon as the Contract Administrator becomes aware of an issue which has the potential to cause amendment to the original contract price, the Contract

Administrator shall notify the City of the potential change in work. The PRI number is a unique number that associates all subsequent and associated change management documentation, including the reason a change in work is necessary. These reasons for change can take various forms, such as RFI's, Claims, Owner requests, Consultant Errors and Omissions, Regulatory changes, Field Instructions and extraordinary events. If the City is in agreement with the potential change, the City shall provide the Contract Administrator with the PRI# for inclusion on subsequent related actions including CCN's, ACC's, FWA's and associated Contractor correspondence.

## 10.3 Contemplated Change Notice (CCN)

When a Change in the Work is contemplated and the City has provided the Contract Administrator with a PRI number. The Contract Administrator shall compile all technical details supporting the contemplated change and create a <u>CD-PM-TO-03 Contemplated Change Notice (CCN)</u>, Form The Contract Administrator shall include the PRI# on the CCN form. Prior to issue of the CCN to the Contractor, the Contract Administrator shall review the contents of the CCN with the City. If the City is in agreement, the CCN shall be forwarded to the Contractor for his action.

The Contractor will review the contents of the CCN and will respond with a written quotation identifying the increase, decrease or no change in amount on the Contract Price as well as any schedule impact the contemplated Change in the Work will have on Contract Time. A reasonable period of time (typically 10 days) for the Contractor to respond to the CCN should be stated on the CCN as well as the method for valuation of the contemplated change (refer to GC's). The Contract Administrator shall maintain a log of all CCN's and their status.

When receipt of the Contractors response is in hand the Contract Administrator shall record the date of the response and the amount in the CCN Log. The Contract Administrator shall promptly review the cost proposed by the Contractor and if not acceptable shall request the Contractor to provide further substantiation of the costs. If the proposed costs are acceptable to the Contract Administrator, the Contract Administrator will obtain approval from the City to initiate an Authorized Contract Change.

## 10.4 Authorized Contract Changes

Once the Contract Administrator has received the City's' authorization to proceed, the Contract Administrator shall prepare an <u>CD-PM-TO-04 Authorized Contract</u> <u>Change Form</u> including references to the PRI number, the CCN number, date of Contractors written quotation, value of change and impact on Contract Time.

The Contract Administrator will obtain the contractors signature confirming contractors agreement to the Change in the Work and affix the Contract Administrators signature recommending the ACC approval. The Contract Administrator will then forward three (3) copies to the City for signature and acceptance of an Authorized Contract Change.

The City shall retain one copy of the fully signed ACC and forward the remaining two copies to the Contract Administrator for recording and distribution to the Contractor. The Contract Administrator shall record the Authorized Contract Change in the ACC log.

The Contract Administrator will also include a copy of respective ACC's with the applicable Progress Estimates (see Section 8).

10.5 Field Work Authorizations

In cases where there is insufficient time, to develop a CCN, the Contract Administrator shall obtain a PRI number from the City and issue a <u>CD-PM-TO-05</u> <u>Field Work Authorization (FWA) Form</u> to authorize the Contractor to proceed immediately. The Contract Administrator shall complete the FWA form identifying the PRI#, a Not to Exceed value, a duration for which the Contractor must submit a final price for conversion into a formal ACC, completion date for the FWA works and the method for valuation of the FWA.

The Contract Administrator shall forward one copy of the FWA to the Contractor, one copy to the City and one copy for the Project files.

## 10.6 Cost Control

The premise of cost control is to know the complete financial status of all Contracts on a project at any given point in time during progress of the works. Cost Control is a commitment based strategy that provides the City with early indication of estimated final costs for the Project prior to final job cost accounting. A commitment based system means that no costs will be charged against a Contract unless there is a corresponding commitment authorization, in other words invoicing cannot exceed the committed value of a Contract.

The Contract Administrator shall prepare a Monthly Forecast Cost Report, The Monthly Forecast Cost Report will include a summary of all commitments including the Initial Contract Price, Authorized Contract Changes to date by contract and Progress Estimates to date by contract. A Forecast to Complete and Estimated Final Contract Price shall also be presented in the report.

The Forecast to Complete is an estimate of Known Unknowns (Outstanding CCN's, FWA's and pending claims) as well as a sum for Unknown Unknowns (Contingency).

The Forecast Cost Report will be included in the Monthly Project Status Report and include a variance report explaining changes to total contract cost that have occurred during the reporting period.

10.7 Over-Expenditure Analysis

When requested by the City, the Contract Administrator shall provide analysis and documentation supporting Changes in the Work. The analysis and documentation will be utilized by the City as part of the Contract Over-Expenditure Report as required by City of Winnipeg Administrative Directive No. FM-002.

## 11. CLAIMS AND DAMAGES

11.1 Introduction

This section illustrates the process for addressing Contractor claims during the course of the Contract, identifying the duties of the Contract Administrator and the routing of the associated documentation.

11.2 Claims

Upon receipt of a claim from a contractor, the Contract Administrator shall examine the justification for the claim, evaluate the merit of the claim within the context of the contract documents, develop a recommended course of action and inform the City of the claim. The Contract Administrator shall notify the City within 24 hours of receipt of a Contractors Claim. The City shall create the PRI # and advise the Contract Administrator to include the PRI number on all further claim associated documentation.

The following steps will be undertaken by the Contract Administrator:

- (a) The Contract Administrator will gather pertinent information to verify the existence of a basis for the claim within the scope of the contract. Specifically the circumstances that gave rise to the claim and the principles on which the claim can be contractually considered.
- (b) The Contract Administrator will evaluate the Contractor's assessment of his loss and/or delay. The Contract Administrator will also evaluate the criticality of the affected tasks on the Project Critical Path.
- (c) The Contract Administrator will assess the causality of the claim. Integral to this shall be a review of any actions that could be reasonably expected that the Contractor should have undertaken to mitigate his losses.

## 11.3 Damages

If the Contract Administrator makes a determination in favor of the Contractor's claim for damages he shall provide his recommendation to the City, upon receiving authorization from the City, the Contract Administrator shall prepare a ACC reflecting the claim criteria and price and forward the ACC c/w the Contract Administrators recommendation to the City for formal authorization. If the Contract Administrator determines the claim has no merit, the Contract Administrator shall issue a Field Instruction (FI) notifying the Contractor of the rejection of his claim c/w the basis for such rejection. If the Contractor can appeal the determination as provided for in the General Conditions.

## 11.4 Liquidated Damages

In cases when Liquidated Damages are stipulated in the Supplemental Conditions of the Contract. The Contract Administrator shall obtain the Project Managers approval prior to application of Liquidated Damages against the Contract.

## 12. COMMISSIONING

#### 12.1 General

The Contract Administrator shall be responsible for coordinating implementation of the Commissioning Plan developed by the Consultant. The Contract Administrator will coordinate Contractors' commissioning efforts in relation to the Commissioning Plan. The Contract Administrator shall place all pre-commissioning tests and documentation completed by Contractor in the Project File.

## 13. TRAINING

13.1 General

The Contract Administrator is responsible for coordinating the training at the job site. The Contract Administrator will receive and review lesson plans submitted by the Contractors and will forward them to the City for review and comment. The submittals shall be tracked via the submittal procedure.

The Contract Administrator in concert with the City, Contractors and Equipment Vendors will develop the training schedules for both classroom and field level training.

The Contract Administrator shall prepare a Training Session Log of all training sessions. A Certificate of Satisfactory Classroom Training, Form T-1 # CD-PM-TO-23 identifying the component training and sign-offs signifying completion and acceptance for each session will be prepared by the Contract Administrator and recorded on the Training Session Log. A Certificate of Satisfactory Field Training, Form T-2 # CD-PM-TO-24 identifying field training and sign-offs will also be recorded on the Training Session Log.

When required by the City the Contract Administrator shall coordinate video recording of the training sessions by City designated videographers.

## 14. WARRANTY

14.1 General

The Contract Administrator shall ensure all warranty documentation as specified in the Contract Documents has been provided and filed in the Project files.

## 15. SAFETY HEALTH AND ENVIRONMENT

15.1 Introduction

The following section outlines the Contract Administrator's duties in relation to Safety, Health and Environment. The minimum standard for all construction work at the Project shall be City of Winnipeg Safe Work Plans, Workplace Safety and Health Act W210 and Regulation MR 217/2006 and Contractor Safety Management Plan. In the event of a conflict of standards the most stringent standard shall apply.

15.2 Safety

## 15.2.1 General

Prior to project mobilization, the Contractor shall submit the name and credentials of their proposed health and safety representative for approval by the Contract Administrator. The Contractor shall provide a full time competent safety person to supervise the safety aspects of their work on the project when their total workforce, including sub-contractors, supervisors and administrative personnel, is greater than 25 people or whenever hazardous work of a critical nature is being performed, regardless of the size of the workforce.

The Contract Administrator shall review Contractors' Health and Safety Management plan and Safe Work Plans in conjunction with the City, for conformity with the Contract Documents, facility specifics and other project specific safety requirements. The Contract Administrator shall monitor the Contractors safety performance with respect to Contractors responsibilities as stipulated in the General Conditions and Contractors Health and Safety Management Plan and Safe Work plans. The Contract Administrator shall review Contractors safety performance and status at weekly contractor meetings.

With instances were multiple contractors are working concurrently on the same Project, the City shall identify the Contractor with Prime Contractor responsibilities as referenced in WHSA W210.

#### 15.2.2 Plant Orientations

All Contractor personnel engaged to work on a Wastewater Treatment Plant must undergo City of Winnipeg specific Wastewater Treatment Plant Safety orientation. For more information regarding safety orientations refer to <u>CD-PM-PC-03 - Contractor Safety Health and Environment Orientation Plan</u>

#### 15.2.3 Notifications

The Contract Administrator shall notify the City of any serious incidents within 1 hour of the incident occurrence. The Contract Administrator shall ensure the Contractors Chief Executive Officer has been summoned and will arrive at the site within 24 hours of the incident.

Serious accidents that require the on-site presence of the Contractor's chief executive officer include but not limited to:

- (a) Any accident resulting in death or those of a critical nature with a serious risk of death.
- (b) Any accident involving a major structural collapse or failure of a building or structure.
- (c) Any spill or release of a toxic or hazardous substance.
- (d) Any accident that, by regulation, shall be reported to the Minister or person appointed or designated by the Minister.
- (e) Any accident that caused damage to any piece of equipment or machinery and thereby caused it to become dangerous (e.g. upset of a crane).

The purpose of this visit is for that person to explain to the Contract Administrator what precipitated the accident, what action has been taken to date, and what changes will be made to prevent recurrence.

#### 15.2.4 Reporting

The Contract Administrator shall include in the Monthly Status Report a listing of all recordable incidents that occurred during the reporting period.

#### 15.2.5 Investigations

The scene shall not be disturbed until permission is given by the Contract Administrator City and by Manitoba Workplace Health and Safety. Investigation of the incident will be performed by Contractor, Prime Contractor's CSO if applicable. The Contract Administrator shall obtain the resultant investigation documentation. The Contract Administrator shall file the generated safety documentation in the Project File's for record purposes.

#### 15.3 Access Control

#### 15.3.1 General

The Contract Administrator shall review the Prime Contractors access control plan. The Prime Contractor shall conduct site orientations for all personnel requiring access to the project site.

#### 15.3.2 Visitors

The Contract Administrator shall obtain prior approval from the City, for Consultants visits of non-resident personnel to the site. The Contract Administrator shall provide the city a list of non-resident personnel c/w the date of visit, reason for their visit and the expected duration of the visit. Time charges for non-resident consultant personnel visiting the site will not be permitted without prior City approval. Non Resident inspectors do not require city approval but must complete an Inspection Report supporting the visit and provide the Contract Administrator a copy for the Project file.

Unscheduled media representatives, journalists and others shall not have access to the site. The Contract Administrator shall refer them to City of Winnipeg Media Relations Bureau as well as immediately notify the City Project Manager of the access request.

#### 15.3.3 Plant Access

Plant access shall be as stipulated during Contractor Site Orientation.as detailed in <u>CD-PM-PC-03- Contractor Safety Health and Environment</u> <u>Orientation Plan</u>

#### 15.3.4 Security

The Contract Administrator shall review the Contractors' security plan for the site.

## 15.3.5 Permitting

The Contract Administrator shall ensure the following Permits are completed by the Contractor for work to occur within an operating plant.

- (a) Lockout Tag Out Permit;
- (b) Hot Work Permit; and

The foregoing permits require Plant Operator in Charge sign off.

The Contract Administrator shall ensure the following permits are produced by the Contractor for work adjacent to an Operating Plant.. Permits for this work do not require Plant Operator in Charge sign off.

- (a) Confined Space Permit;
- (b) Critical Lift Permit;
- (c) Lockout Tag Out Permit; and
- (d) Pressure Test Permit.

The foregoing permit process applies to major projects only. In the case of minor projects the Contract Administrator shall review work requirements with the City and establish safety protocols accordingly.

#### 15.4 Environmental

The Worksite is part of the City of Winnipeg Wastewater System. Safe handling and storage of fuel, oils, and chemicals shall be of the highest priority and care. Any mishap shall be immediately reported to the Contract Administrator.

The Contract Administrator shall immediately notify the City of such spills and act in accordance with established City of Winnipeg Environmental Preservation and Compliance protocols and monitor the Contractors containment and remediation actions. The Contract Administrator shall obtain copies of Contractors incident report and investigation and file in the Project File's.

## 16. OWNER SUPPLIED EQUIPMENT

#### 16.1 Introduction

The City may pre-purchase equipment with long delivery times or when detailed equipment information is required to complete the detailed design works. The following outlines the Contract Administrators responsibilities with respect to Vendor submittals, Factory Acceptance Testing, Receipt of Goods, installation, testing and commissioning of all owner supplied equipment.

#### 16.2 Vendor Submittals

The Contract Administrator shall receive, review and process and log submittals from City Supplied Equipment Vendors. Typical Submittals include manufacturer Shop Drawings, Inspection and Test Plans (ITP) and Operations and Maintenance Manuals. The Contract Administrator shall forward copies of the shop drawings to the installation contractors.

#### 16.3 Factory Acceptance Testing

The Contract Administrator shall review ITP's and coordinate Factory inspection and tests whether they are performed by third party agencies or by the design consultant. The Contract Administrator shall estimate the costs associated with all factory inspections and submit to the city for approval prior to arranging the inspections / tests. The Contract Administrator shall obtain and review all FAT results and incorporate into the Project File's

#### 16.4 Delivery and Receipt of Goods

The Contract Administrator shall coordinate the shipping and receipt of City Supplied Equipment with the Contractor. Once the Goods have arrived to the Contract Administrator, Contractor and Manufacturer shall inspect the goods and complete Form <u>CD-PM-TO-13 100-Equipment Delivery, Form</u> which transfers the Care and Custody of the Goods to the Contractor. Any deficiencies noted during the inspection shall be listed on the Form. A completed Form 100 shall be provided to the Contract Administrator prior to the Manufacturer leaving the site.

#### 16.5 Installation

Prior to installation of the goods the Manufacturer and Contractor shall complete

Form <u>CD-PM-TO-14 101</u> Readiness to Install, Form signifying the Contractor has received adequate instruction relative to installation of the Goods. The Manufacturer shall provide the Contract Administrator with a fully signed copy of the Form prior to leaving the site. The Contract Administrator shall incorporate the signed forms into the Project file.

Once the Contractor has completed installation of the Goods, the Contractor shall notify the Contract Administrator that the Installation of the Goods is ready for inspection by the Manufacturer. The Contract Administrator shall coordinate the <u>CD-PM-TO-15 Manufacturers inspection and have form 102-Satisfactory</u> <u>Installation</u> Form completed and signed. Any deficiencies in the installation shall be noted on the form. The fully signed form shall be delivered to the Contract Administrator prior to the Manufacturer's representative leaving the site. The Contract Administrator shall incorporate the signed forms into the Project file system.

## 16.6 Pre-Commissioning

The Contract Administrator shall coordinate the Manufacturer and Contractor to undertake Pre-Commissioning of the Goods. No Pre-commissioning activity shall take place on the goods prior to receipt and review of the O&M Manuals. Once all pre-commissioning checks, run tests, operating checks have been successfully completed the Contractor and Manufacturer shall complete Form <u>CD-PM-TO-16</u> <u>103 Satisfactory Performance, Form</u> and submit to the Contract Administrator. The Contract Administrator shall file the Form in the Project File system. Once Form 104 has been signed-off the Contract Administrator will prepare a Certificate of Substantial Performance for the City Supplied Equipment Contract, initiating the Lien Holdback release period.

#### 16.7 Commissioning

The Contract Administrator shall coordinate the presence of the Manufacturer's representative during Process Commissioning. Once process commissioning of the goods has been completed and accepted. The Manufacturer shall complete Form <u>CD-PM-TO-17 104-Satisfactory Process Performance, Form</u>. A fully signed copy of Form 104 shall be submitted to the Contract Administrator. Receipt by the Contract Administrator shall signify Total Performance of the City Supplied Equipment contract and initiates the start of the Warranty Period. The Contract Administrator shall complete a Certificate of Total Performance and incorporate the signed forms into the Project files.

## 17. LIST OF FORMS

- CD-PM-TO-01 Agenda Preconstruction Meeting
- CD-PM-TO-40 Standard Progress Estimate Summary
- CD-PM-TO-03 Contemplated Change Notice
- CD-PM-TO-04 Approved Contract Change
- CD-PM-TO-05 Field Work Authorization
- CD-PM-TO-06 Request for Information
  - CD-PM-TO-07 Field Instruction
  - CD-PM-TO-08 Daily Construction Report
  - CD-PM-TO-09 Progress Estimate Mixed Tax Sample
    - CD-PM-TO-10 RFI Log
    - CD-PM-TO-11 Submittal Log
  - CD-PM-TO-12 Construction Review Record
    - CD-PM-TO-13 Equipment Delivery (Form 100)
  - CD-PM-TO-14 Readiness to Install (Form 101)
  - CD-PM-TO-15 Satisfactory Installation (Form 102)
  - CD-PM-TO-16 Satisfactory Performance (Form 103)
  - CD-PM-TO-17 Satisfactory Process Performance (Form 104)
  - CD-PM-TO-18 Certificate of Substantial Performance
    - CD-PM-TO-19 Certificate of Total Performance
    - CD-PM-TO-20 Certificate of Acceptance
    - CD-PM-TO-21 Non Conformance Report
    - CD-PM-TO-23 Training Form T-1
    - CD-PM-TO-24 Training Form T-2