

Part 1 General

1.1 PRECEDENCE

- .1 For Federal Government projects, Division 1 Sections take precedence over technical specification sections in other Divisions of this Project Manual.

1.2 DEFINITIONS

- .1 Activity: An element of Work performed during course of Project. An activity normally has an expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart). A graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: Original approved plan (for Project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 Duration: Number of work periods (not including holidays or other nonworking periods) required to complete an activity or other Project element. Usually expressed as workdays or workweeks.
- .6 Master Plan: A summary-level schedule that identifies major activities and key milestones.
- .7 Milestone: A significant event in Project, usually completion of major deliverable.
- .8 Project Schedule: The planned dates for performing activities and the planned dates for meeting milestones. A dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 Project Planning, Monitoring and Control System: Overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

1.3 REQUIREMENTS

- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.

- .3 Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting.
- .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

1.4 SUBMITTALS

- .1 Submit to Departmental Representative within 10 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
- .2 Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.

1.5 MASTER PLAN

- .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
- .2 Departmental Representative will review and return revised schedules within 5 working days.
- .3 Revise impractical schedule and resubmit within 5 working days.
- .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.

1.6 PROJECT SCHEDULE

- .1 Develop detailed Project Schedule derived from Master Plan.
- .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Award.
 - .2 Shop Drawings, Samples.
 - .3 Permits.
 - .4 Mobilization.
 - .5 Construction.
 - .6 Testing and Commissioning.
 - .7 Substantial Completion
 - .8 Final Cleanup

1.7 PROJECT SCHEDULE REPORTING

- .1 Update Project Schedule on monthly basis reflecting activity changes and completions, as well as activities in progress.
- .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.

1.8 PROJECT MEETINGS

- .1 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .2 Weather related delays with their remedial measures will be discussed and negotiated.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract includes the installation of a new water supply main and replacement of existing asbestos cement distribution mains at the RCMP 'Depot' Division, 6101 Dewdney Avenue, Regina. The Contract includes the installation of watermains and gate valves as well as the connection of existing services and hydrants to the new water supply and distribution mains.

1.2 CONTRACT METHOD

- .1 Construct the Work under a unit price contract.

1.3 WORK BY OTHERS

- .1 Several other projects are currently underway at the RCMP Training Academy.
- .2 The Contractor shall cooperate with other contractors and the RCMP to maintain access to work areas adjacent to the Work.

1.4 OWNERS OCCUPANCY

- .1 The RCMP will occupy premises during entire construction period for execution of normal operations.
- .2 Co-operate with the RCMP in scheduling operations to minimize conflict and to facilitate operations.

1.5 WORK SCHEDULE

- .1 Construction of the water mains must be carefully planned as interruption of water supply to all buildings and hydrants must be kept to a minimum. To minimize disruption, the contractor may consider commissioning the watermains prior to connecting services and hydrants to the new distribution system. If necessary during construction, the contractor shall provide temporary water service to buildings allowing time for construction, commissioning and connection of services.

1.6 CONTRACTOR USE OF PREMISES

- .1 Contractor shall limit use of premises for Work and storage to areas indicated on the drawings or as otherwise approved by the RCMP.

Part 2 **Products**

 NOT USED

Part 3 **Execution**

 NOT USED

END OF SECTION

Part 1 General

1.1 EXISTING SERVICES

- .1 Notify RCMP/PWGSC and utility companies of intended interruption of services and obtain required permission.
- .2 Where work involves breaking into or connecting to existing services, give RCMP/PWGSC 7 days of notice for necessary interruption of water service throughout course of work. Keep duration of interruptions to a minimum. Carry out interruptions after normal working hours of occupants (16:30 hours) and preferably on weekends. If interruption of the water service is planned for longer than 4 hours, provide temporary water service in accordance with Section 01 51 00 Temporary Utilities
- .1 During interruption of water service, the contractor shall provide temporary washroom facilities in accordance with Section 01 51 00 Temporary Utilities
- .2 Ensure that Contractor personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
- .3 Access of Contractor vehicles into Depot controlled areas is limited to the gate entrance off McCarthy Blvd & Dewdney Avenue. For access to non-Depot controlled areas, use 13th Avenue and Campbell Street. All Contractor employees must park in the designated area and travel together in a common site vehicle.
- .4 Noisy construction activities shall avoid conflict with RCMP classroom and parade times as directed by Departmental Representatives.

1.2 SECURITY CLEARANCES

- .1 Personnel employed on this project will be subject to security check. Obtain clearance in accordance with Section 01 54 70.

1.3 SECURITY ESCORT

- .1 Personnel engaged in work outside normal working hours must be escorted by designated RCMP personnel. Submit an escort request to the Departmental Representative at least 72 hours before service is needed.
- .2 Personnel must be escorted while working in non-public areas during normal working hours. Submit an escort request to the Departmental Representative at least 48 hours before service is needed.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 APPLICATIONS FOR PROGRESS PAYMENT

- .1 Submit to Departmental Representative, at the end of each month, a summary of quantities of products supplied and installed. The summary of quantities will be reviewed by the Departmental Representative in conjunction with the unit price breakdown included in the Bid Form. The review by the Departmental Representative will form the basis for the progress payments.
- .2 Support claims for products delivered to the Place of Work but not yet incorporated into Work by such evidence as Departmental Representative may reasonably required to establish value and delivery of products.

1.2 MEASUREMENT AND PAYMENT PROCEDURES

- .1 General Requirements:
 - .1 Payment for General Requirements will be made at the lump sum price shown in the Bid Form.
 - .2 Measurement for General Requirements will be paid based on the estimated percentage of General Requirements completed.
 - .3 This price is to include all general overhead costs including but not limited to bonding, insurance, permits, approvals, security clearance, meetings, shop drawings, operations and maintenance manuals, record drawings, mobilization, demobilization, supply and maintenance of temporary washroom facilities for RCMP personnel during service interruptions, temporary washroom facilities for Contractor, waste disposal, site office, storage sheds, traffic accommodation and all work incidental thereto.
- .2 PVC Water Mains – Open Trench
 - .1 Payment for PVC water mains, installed by open trench methods will be made at the unit price per lineal meter for each size and type of pipe installed as shown in the Bid Form. No consideration will be made for variations of trench depth.
 - .2 Measurement will be made horizontally, through valves and fittings to the limits specified on the drawings.
 - .3 The unit price shall include supply and installation of water main pipe, topsoil stripping and replacement, excavation, trenching and backfilling, dewatering, backfill compaction testing, bracing and sheeting imported bedding material, supply and installation of tracer wire, landscaping, asphalt and concrete restoration, cleanup and all work incidental thereto.
 - .4 This price to also include couplings used at the discretion of the Contractor but otherwise not shown on the drawings.

.3 HDPE Water Mains – Open Trench

- .1 Payment for HDPE water mains, installed by open trench methods will be made at the unit price per lineal meter for each size and type of pipe installed as shown in the Bid Form. No consideration will be made for variations of trench depth.
- .2 Measurement will be made horizontally, through valves and fittings to the limits specified on the drawings.
- .3 The unit price shall include supply and installation of water main pipe, fittings and flange assemblies, topsoil stripping and replacement, excavation, trenching and backfilling, dewatering, backfill compaction testing, bracing and sheeting imported bedding material, supply and installation of tracer wire, landscaping, asphalt and concrete restoration, cleanup and all work incidental thereto.
- .4 This price to also include couplings, and flanges used at the discretion of the Contractor but otherwise not shown on the drawings.

.4 PVC Water Mains – Horizontal Directional Drilling (HDD)

- .1 Payment for water mains installed by horizontal directional drilling will be made at the unit price per lineal meter for each size and type of pipe installed as shown in the Bid Form.
- .2 Measurement will be made horizontally, through valves and fittings to the limits specified on the drawings.
- .3 The unit price shall include supply and installation of pipe, directional drilling, directional drilling procedure, supply and installation of "breakaway" connector (or an approved stress recording device), end caps, supply and disposal of drilling fluid, topsoil stripping and replacement, entry/exit pit excavation and backfill, backfill compaction testing, dewatering, bracing and sheeting, supply and installation of tracer wire, landscaping, asphalt and concrete restoration, cleanup and all other work incidental thereto.
- .4 This price to also include couplings, used at the discretion of the Contractor but otherwise not shown on the drawings.

.5 Fittings for PVC Water Mains:

- .1 Fittings for PVC water mains will be made at the unit price per fitting for the types and sizes shown in the Bid Form.
- .2 This price shall include the supply and installation of the fitting including gaskets and couplers, thrust blocking, anodes, jointing to adjacent piping, and all work incidental thereto.

.6 Connection to Existing Underground Mains - 100 mm to 250 mm

- .1 Payment for connecting to existing water mains 100 mm to 250 mm in diameter will be made at the unit price for each connection completed as shown in the Bid Form.
- .2 This price to include all materials, labour and work required to complete the connection including couplings, thrust blocks, excavation, dewatering, pipe cutting, jointing, demolition, capping or grouting the ends of the existing main to be abandoned, placement of pipes and fittings, backfilling, compaction of backfill, landscaping, asphalt and concrete restoration, cleanup, temporary water supply as required to maintain water service to buildings and all work incidental thereto.

- .7 Reconnection of Underground Water Services - 75 mm and smaller
 - .1 Payment for reconnection of underground water services 75 mm in diameter and smaller will be paid as a unit for each building water service connection completed as shown in the Bid Form.
 - .2 The unit price shall include all material and work between the water main and the existing service, including piping, saddles, unions, corporation stops, curb stops, valves, box and rods, excavation, trenching and backfilling, backfill compaction testing, demolition, removal and capping of the existing water services or portions of the existing water main as required, tracer wire, temporary water supply as required to maintain water service to buildings, landscaping, asphalt and concrete restoration, cleanup and all work incidental thereto.
- .8 Hydrant Reconnection
 - .1 Payment for hydrant reconnection will be made at the unit price for each hydrant reconnected as shown in the Bid Form.
 - .2 The unit price shall include the cost for excavation and backfilling, demolition of concrete thrust blocks and portions of hydrant leads as required, grouting or capping the existing hydrant lead, removal and replacement or reorientation of hydrants complete with mechanical restraints or thrust blocks, reconnection of anodes, granular bedding and pipe surround and all work incidental thereto.
 - .3 Payment for new pipe fittings, couplings and valves required for hydrant reconnection will be made per unit price described within this section.
- .9 Hot-Tap Connection to Existing 750 mm Main
 - .1 Payment for the hot-tap connection to the existing 750 mm diameter main on Courtney Street will be made at the Lump Sum Price shown in the Bid Form.
 - .2 Price shall include all materials and labour to complete the connection including excavation and backfill, dewatering, bracing and sheeting, tapping saddle, tapping equipment and all work incidental thereto.
- .10 Gate Valves - 100 mm and larger
 - .1 Payment for gate valves will be made at the unit price per gate valve for the various sizes shown in the Bid Form.
 - .2 This price shall include materials, installation of the valve and valve box, valve box extensions, spindle extensions, valve operators, excavation and backfilling, anodes and protective tape, supports, flange assemblies on mating pipe and all other work incidental thereto.
 - .3 Metering vault bypass and isolation valves with position indicator posts will be paid under the Lump Sum Price for the Metering Vault.

.11 Utility Crossings

- .1 Payment for utility crossing including but not limited to SaskEnergy, SaskPower, SaskTel, sanitary sewer, storm sewer, or private RCMP utilities (irrigation main line 100 mm diameter and larger, natural gas, etc.) will be made at the unit price for each utility crossed as shown in the Bid form. Where more than one utility are in a common trench or trenches are less than 1.0 m apart horizontally, this will be considered as one crossing.
- .2 This price to include all labour and equipment required to locate, safely expose, excavate, provide temporary support, backfill and compact the area of crossing of the underground utility exposed regardless of depth. Contractor responsible for obtaining approval from utility agencies.

.12 Tracer Wire Surface Splice Boxes

- .1 Payment for tracer wire surface splice boxes will be made at the unit price per box as shown in the Bid Form.
- .2 This price shall include materials, installation of the splice box, tracer wire leads, wire connectors and all work incidental thereto.

.13 Disinfection, Testing and Commissioning

- .1 Measurement and payment for disinfection, hydrostatic testing, bacteriological testing, flushing, de-chlorination, commissioning and all work incidental thereto will be made at the lump sum price shown in the Bid Form.

.14 Metering Vault

- .1 Payment for the metering vault will be made at the Lump Sum Price shown in the Bid Form.
- .2 Price to include all labour and materials required for the installation of the metering vault including precast box sections and risers, access hatch, insulation, pipe and fittings, pipe supports, isolation and bypass valves with position indicator posts, sump pump, sump pump, sump pump discharge piping and valves, excavation, backfill, backfill compaction testing, dewatering, granular bedding material, cleanup, landscape restoration, and all work incidental thereto.
- .3 Price for metering vault is to include HDPE bypass pipe.
- .4 Price for metering vault is not to include supply and installation of the flow meter which will be supplied by the City of Regina

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 Related Requirements Specified Elsewhere

- .1 Particular requirements for inspection and testing to be carried out by testing laboratory designated by the Departmental Representative are specified under various sections.

1.2 Appointment and Payment

- .1 Contractor will pay for services of an independent testing laboratory that will be approved by the Departmental Representative.
- .2 Where tests or inspections by designated testing laboratory reveal Work not in accordance with contract requirements, the Contractor shall pay costs for additional tests or inspections as required by Departmental Representative to verify acceptability of corrected work.

1.3 Contractor's Responsibilities

- .1 Provide labour, equipment and facilities to:
 - .1 Provide access to work for inspection and testing.
 - .2 Facilitate inspections and tests.
 - .3 Make good work disturbed by inspection and test.
 - .4 Provide storage on site for laboratory's exclusive use to store equipment and cure test samples.
- .2 Notify testing laboratory sufficiently in advance of operations to allow for assignment of laboratory personnel and scheduling of test.
- .3 Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.
- .4 Pay costs for uncovering and making good Work that is covered before required inspection or testing is completed and approved by Departmental Representative.
- .5 Forward test results to the Departmental Representative.

Part 2 Products

Not Used

Part 3 Execution

Not Used

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE

- .1 During course of Work, Department Representative will schedule and administer project meetings, preside and assume responsibility for setting times and recording and distributing minutes.
- .2 Representative of Contractor, Subcontractor and suppliers attending meetings will be qualified and authorized to act on behalf of party each represents.

1.2 PRECONSTRUCTION MEETING

- .1 Within 15 days after award of Contract, attend a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities. Senior representatives of Departmental Representative, Contractor, major Subcontractors, will be in attendance.
- .2 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .3 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Schedule of Work
 - .3 Schedule of submission of shop drawings, samples. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
 - .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 - Construction Facilities.
 - .5 Delivery schedule of specified products.
 - .6 Site security in accordance with Section 01 56 00 - Temporary Barriers and Enclosures
 - .7 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
 - .8 Record drawings in accordance with Section 01 33 00 - Submittal Procedures.
 - .9 Maintenance manuals in accordance with Section 01 78 00 - Closeout Submittals.
 - .10 Take-over procedures, acceptance, warranties in accordance with Section 01 78 00 - Closeout Submittals.
 - .11 Monthly progress claims, administrative procedures, photographs, hold backs.
 - .12 Appointment of inspection and testing agencies or firms.
 - .13 Insurances, transcript of policies.
 - .14 Review of site specific safety plan.

1.3 PROGRESS MEETINGS

- .1 Attend progress meetings to be held biweekly at a location to be determined on the RCMP Training Academy.
- .2 Contractor, major Subcontractors involved in Work, and Departmental Representative are to be in attendance.
- .3 Notify parties minimum (5) days prior to meetings.
- .4 Departmental Representative to record minutes of meetings and circulate to attending parties and affected parties not in attendance within (7) days after meeting.
- .5 Agenda to include the following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of Work progress since previous meeting.
 - .3 Field observations, problems, conflicts.
 - .4 Problems which impede construction schedule.
 - .5 Review of off-site fabrication delivery schedules.
 - .6 Corrective measures and procedures to regain projected schedule.
 - .7 Revision to construction schedule.
 - .8 Progress schedule, during succeeding work period.
 - .9 Review submittal schedules: expedite as required.
 - .10 Maintenance of quality standards and review of test results.
 - .11 Review proposed changes for affect on construction schedule and on completion date.
 - .12 Review site Safety and Security Issues.
 - .13 Other business.

1.4 DAILY PLANNING MEETINGS

- .1 Attend daily planning meetings during the course of construction. Departmental representatives and members of RCMP will also be in attendance. These meetings will be held somewhere on site each morning. The purpose of these meetings is to discuss the plan for the day's construction.
- .2 As part of the Daily Planning, the contractor will be requested to fill out and provide a form to assist with planning of upcoming work. This form will be provided at the preconstruction meeting.

Part 2 **Products**

 NOT USED

Part 3 **Execution**

 NOT USED

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE

- .1 Submit to Departmental Representative, submittals listed for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Work affected by submittal shall not proceed until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups in metric units.
- .4 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .5 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .6 Verify field measurements and affected adjacent Work are coordinated.
- .7 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .8 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .9 Keep one reviewed copy of each submission on site.

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .3 Allow 7 days for Departmental Representative's review of each submission.
- .4 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.

- .5 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of any revisions other than those requested.
- .6 Accompany submissions with transmittal letter containing:
 - .1 Date
 - .2 Project title and number
 - .3 Contractor's name and address
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data
- .7 Submissions shall include:
 - .1 Date and revision dates
 - .2 Project title and number
 - .3 Name and address of:
 - .1 Subcontractor
 - .2 Supplier
 - .3 Manufacturer
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances
 - .3 Setting or erection details
 - .4 Capacities
 - .5 Performance characteristics
 - .6 Standards
 - .7 Operating weight
 - .8 Wiring diagrams
 - .9 Single line and schematic diagrams
 - .10 Relationship to adjacent work
- .8 After Departmental Representative's review, distribute copies.
- .9 Submit one digital copy of shop drawings in PDF format for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .10 Submit one digital copy of product data sheets or brochures in PDF format for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .11 Delete information not applicable to project.
- .12 Supplement standard information to provide details applicable to project.

- .13 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.
- .14 The review of shop drawings by Public Works and Government Services Canada (PWGSC) is for sole purpose of ascertaining conformance with general concept. This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of all sub-trades.

Part 2 **Products**

NOT USED

Part 3 **Execution**

NOT USED

END OF SECTION

Part 1 General

1.1 FIRES

- .1 Fires and burning of rubbish on site is not permitted.

1.2 DISPOSAL OF WASTES

- .1 Do not bury rubbish and waste materials on site.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- .3 Dispose of all waste in approved manner and at licensed sanitary landfills.

1.3 DRAINAGE

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .3 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.4 SITE CLEARING AND PLANT PROTECTION

- .1 Protect trees and plants on site and adjacent properties where indicated.
- .2 Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
- .3 Restrict tree removal to areas indicated or designated by Departmental Representative.

1.5 POLLUTION CONTROL

- .1 Maintain temporary erosion and pollution control features installed under this contract.
- .2 Control emissions from equipment and plant to local authorities' emission requirements.
- .3 Prevent sandblasting and other extraneous materials from contaminating air and waterways beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

1.6 DUST CONTROL

- .1 Cover or wet down dry materials and rubbish to prevent blowing dust and debris.

1.7 TEMPORARY EROSION AND SEDIMENTATION CONTROLS

- .1 Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
- .2 Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- .3 Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 REFERENCES AND CODES

- .1 Perform Work in accordance with the latest edition of the National Building Code of Canada (NBC) including amendments up to tender closing date and other codes of provincial or local application provided that in case of conflict or discrepancy, more stringent requirements apply.
- .2 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.
 - .3 Saskatchewan Occupational Health and Safety Act and Regulations.
 - .4 Saskatchewan Builders' Lien Act and Regulations.
 - .5 All other Saskatchewan Acts and Regulations shall apply as appropriate and the Contractor shall comply with the requirements thereof as though they had been specifically named in these specifications.

1.2 HAZARDOUS MATERIAL DISCOVERY

- .1 Asbestos: demolition of spray or trowel-applied asbestos is hazardous to health. Stop work immediately when material resembling spray or trowel-applied asbestos is encountered during demolition work. Notify Departmental Representative. Refer to Section 02 82 00.01 - Asbestos Abatement - Minimum Precautions.
- .2 PCB: Polychlorinated Biphenyl: stop work immediately when material resembling Polychlorinated Biphenyl is encountered during demolition work. Notify Departmental Representative.
- .3 Mould: stop work immediately when material resembling mould is encountered during demolition work. Notify Departmental Representative.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 INSPECTION

- .1 Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative instructions, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Departmental Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction.

1.2 PROCEDURES

- .1 Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.3 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Departmental Representative may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by Departmental Representative.

1.4 REPORTS

- .1 Submit one digital copy of inspection and test reports in PDF format to Departmental Representative.

- .2 Provide copies to Subcontractor of work being inspected or tested.

1.5 TESTS

- .1 Furnish test results as may be requested.

1.6 EQUIPMENT AND SYSTEMS

- .1 Submit adjustment reports for mechanical, electrical and building equipment systems.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide temporary utilities controls in order to execute work expeditiously. After use, remove from site.

1.2 TEMPORARY WATER AND WASHROOM FACILITIES

- .1 If interruption of the water service is planned for longer than 4 hours, provide temporary water service to the facility via an alternate source.
- .1 During interruption of water service, the contractor shall provide temporary washroom facilities. The contractor is responsible for coordinating washroom requirements with RCMP representatives as well as scheduling and administering supply and maintenance of facilities. Temporary washrooms shall consist of temporary men's and women's facilities, flush toilets, sinks, air-conditioning and heat. Temporary washroom facilities shall be supplied by All About Comfort, phone (306)347-2320.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide construction facilities in order to execute work expeditiously.
- .2 Remove from site all such work after use.

1.2 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with a weight or force that will endanger the Work.

1.3 CONSTRUCTION PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work. Location will be determined at a Project Start-Up Meeting.
- .2 Provide and maintain adequate access to project site.
- .3 If authorized to use existing roads for access to project site, maintain such roads for duration of Contract and make good damage resulting from Contractors' use of roads.

1.4 SECURITY

- .1 Security is provided by RCMP personnel, at no cost to the Contractor.

1.5 OFFICES

- .1 Provide office heated to 22 degrees °C, lighted 750 lx and ventilated, of sufficient size to accommodate site meetings and furnished with drawing laydown table.
- .2 Provide marked and fully stocked first-aid case in a readily available location.
- .3 Subcontractors to provide their own offices as necessary. Direct location of these offices.

1.6 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in a clean and orderly condition. Storage in area agreed to by PWGSC/RCMP for tools, equipment and materials.

1.7 SANITARY FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Keep area and premises in sanitary condition.

1.8 PROTECTION AND MAINTENANCE OF TRAFFIC

- .1 Provide access and temporary relocated roads as necessary to maintain traffic.
- .2 Maintain and protect traffic on affected roads during construction period except as otherwise specifically directed by Departmental Representative.
- .3 Provide measures for protection and diversion of traffic, including provision of watch-persons and flag-persons, erection of barricades, placing of lights around and in front of equipment and work, and erection and maintenance of adequate warning, danger, and direction signs
- .4 Protect travelling public from damage to person and property.
- .5 Contractor's traffic on roads selected for hauling material to and from site to interfere as little as possible with public traffic.
- .6 Verify adequacy of existing roads and allowable load limit on these roads.
Contractor: responsible for repair of damage to roads caused by construction operations.
- .7 Construct access and haul roads necessary.
- .8 Haul roads: constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided.
- .9 Provide necessary lighting, signs, barricades, and distinctive markings for safe movement of traffic.
- .10 Dust control: adequate to ensure safe operation at all times.
- .11 Location, grade, width, and alignment of construction and hauling roads: subject to approval by Departmental Representative.
- .12 Lighting: to assure full and clear visibility for full width of haul road and work areas during night work operations.
- .13 Provide snow removal during period of Work.
- .14 Remove, upon completion of work, haul roads designated by Departmental Representative.

1.9 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.
- .3 Store materials resulting from demolition activities that are salvageable.
- .4 Stack stored new or salvaged material not in construction facilities.

Part 2 **Products**

 NOT USED

Part 3 **Execution**

 NOT USED

END OF SECTION

1 General

1.1 DEPOT ACCESS SECURITY CLEARANCE REQUIREMENTS

- .1 All personnel employed on this project will be subject to the RCMP Depot Access security clearance requirements by the RCMP.
- .2 All personnel engaged in the execution of the work on the exterior of an RCMP occupied and/or unoccupied building or outside on the grounds, shall have the requisite RCMP Depot Access security clearance prior to the commencement of the on-site activities.
- .3 Immediately upon award of the contract, the Contractor shall prepare and submit the attached requisite forms, provided by the Departmental Representative (or failing that the RCMP Project Manager), for each employee and sub-contractor employee to be engaged in the work on the exterior of an occupied RCMP building or outside on the grounds. The Contractor's employees and sub-contractor employees shall mobilize on site, only once the RCMP Depot Access security clearance has been granted.
- .4 The Contractor should batch the fully completed submissions, based on priority work on site and allow for a minimum five (5) working day processing time in the project schedule for the review to occur. The inability to submit the fully completed requisite form will not be reason for an extension to the project schedule or additional compensation.
- .5 The Contractor shall give the Departmental Representative 72 hours notice for work to be carried out during periods outside of the normal working hours of Monday to Friday, from 06:00 to 18:00 hours.
- .6 At the request of the Departmental Representative (or failing that the RCMP Project Manager), Contractor's employees and sub-contractor employees may be requested to undertake additional security requirements, to obtain the RCMP Facility Access security clearance. Additional security requirements would include completion and submission of one additional form (TBS330-60E) and submission of driver's license/photo identification and birth certificate, for each employee and sub-contractor employee. The Contractor's employees and sub-contractor employees shall mobilize on site, only once the RCMP Facility Access security clearance has been granted.

1.2 FACILITY ACCESS SECURITY CLEARANCE REQUIREMENTS

- .1 All personnel employed on this project will be subject to the RCMP Facility Access security clearance requirements by the RCMP.
- .2 All personnel engaged in the execution of the work in an occupied RCMP building shall have the requisite RCMP Facility Access security clearance prior to the commencement of the on-site activities.
- .3 Immediately upon award of the contract, the Contractor shall prepare and submit the attached forms, provided by the Departmental Representative (or failing that the RCMP Project Manager), and requested documents (driver's license/photo identification and birth certificate), for each employee and sub-contractor employee to be engaged in the work in a RCMP occupied building. The Contractor's employees and sub-contractor employees shall mobilize on site, only once the RCMP Facility Access security clearance has been granted.
- .4 The Contractor should batch the fully completed submissions, based on priority work on site and allow for a minimum ten (10) working days processing time in the project schedule for the review to occur. The inability to submit the fully completed requisite

forms and documents will not be reason for an extension to the project schedule or additional compensation.

- .5 The Contractor's employees and subcontractor employees must be escorted at all times by a designate of the RCMP. This designate will be at no cost to the Contractor.
- .6 The Contractor shall give the Departmental Representative 72 hours notice for work to be carried out during periods outside of the normal working hours of Monday to Friday, from 06:00 to 18:00 hours.
- .7 At the request of the Departmental Representative (or failing that the RCMP Project Manager), Contractor's employees and sub-contractor employees may be requested to undertake additional security requirements, to obtain the RCMP Reliability Status security clearance. Additional security requirements would include submission of fingerprints for verification purposes (at no cost to the Contractor) and undertaking of a reliability/security interview. This would enable the Contractor's employees or sub-contractor employees, whom have been granted the RCMP Reliability Status security clearance, unescorted access to some occupied RCMP buildings.

1.3 RCMP RELIABILITY STATUS SECURITY CLEARANCE REQUIREMENTS

- .1 All personnel employed on this project will be subject to the RCMP Reliability Status security clearance requirements by the RCMP.
- .2 All personnel engaged in the execution of the work in an occupied RCMP building shall have the requisite RCMP Reliability Status security clearance prior to the commencement of the on-site activities.
- .3 Immediately upon award of the contract, the Contractor shall prepare and submit the attached forms, provided by the Departmental Representative (or failing that the RCMP Project Manager), for each employee and sub-contractor employee to be engaged in the work in a RCMP occupied building. As part of the Reliability Status security clearance process, Contractor's employees and subcontractor employees shall also submit a clear photocopy of their driver's license and birth certificate (both front and back). They must also undergo a reliability/security interview. Fingerprints will also be taken for verification purposes. The Contractor's employees and subcontractor employees shall mobilize on site, only once the RCMP Reliability Status security clearance has been granted.
- .4 The Contractor should batch the fully completed submissions, based on priority work on site and allow for a minimum fifteen (15) working day processing time in the project schedule for the review to occur. The inability to submit the fully completed requisite forms and documents will not be reason for an extension to the project schedule or additional compensation.
- .5 The Contractor shall give the Departmental Representative 72 hours notice for work to be carried out during periods outside of the normal working hours of Monday to Friday, from 06:00 to 18:00 hours.

2 Products
NOT USED

3 Execution
NOT USED

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide temporary controls in order to execute Work expeditiously.
- .2 Remove from site all such work after use.

1.2 ACCESS TO SITE

- .1 Provide and maintain access roads as may be required for access to Work.

1.3 SAFETY FENCING

- .1 Erect temporary site fencing around excavations remaining open overnight. Use high snow fence wired to rolled steel "T" bar fence posts spaced at 2.4 m on centre. Maintain fence in good repair.
- .2 Provide barriers around trees and plants designated to remain. Protect from damage by equipment and construction procedures.

1.4 ACCESS TO SITE

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.

1.5 PUBLIC TRAFFIC FLOW

- .1 Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect public.

1.6 FIRE ROUTES

- .1 Maintain access to property including overhead clearances for use by emergency response vehicles.

1.7 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- .1 Protect surrounding property from damage during performance of Work. Be responsible for damage incurred.

1.8 PROTECTION OF BUILDING FINISHES

- .1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.
- .2 Provide necessary screens, covers, and hoardings.
- .3 Confirm with Departmental Representative locations and installation schedule, three (3) days prior to installation.
- .4 Be responsible for damage incurred due to lack of or improper protection.

Part 2 **Products**

 NOT USED

Part 3 **Execution**

 NOT USED

END OF SECTION

Part 1 General

1.1 REFERENCE STANDARDS

- .1 Within text of each specifications section, reference may be made to reference standards.
- .2 Conform to reference standards in whole or in part as specifically requested in specifications.
- .3 If there is question as to whether any product or system is in conformance with applicable standards, Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
- .4 Cost for such testing will be born by Departmental Representative in event of conformance with Contract Documents or by Contractor in event of non-conformance.
- .5 Conform to latest date of issue of referenced standards in effect on date of submission of Tenders, except where specific date or issue is specifically noted.

1.2 QUALITY

- .1 Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in Work shall be new, not damaged or defective, and of best quality (compatible with specifications) for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 Defective products, whenever identified prior to completion of Work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3 Should any dispute arise as to quality of products, decision rests strictly with Departmental Representative based upon requirements of Contract Documents.
- .4 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
- .5 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

1.3 AVAILABILITY

- .1 Immediately upon signing Contract, review product delivery requirements and anticipate foreseeable supply delays for any items. If delays in supply of products are foreseeable, notify Departmental Representative of such, in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of Work.

- .2 In event of failure to notify Departmental Representative at commencement of Work and should it subsequently appear that Work may be delayed for such reason, Departmental Representative reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

1.4 STORAGE, HANDLING AND PROTECTION

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
- .3 Remove and replace damaged products at own expense and to satisfaction of Departmental Representative.
- .4 Touch-up damaged factory finished surfaces to Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

1.5 TRANSPORTATION

- .1 Pay costs of transportation of products required in performance of Work.

1.6 MANUFACTURER'S INSTRUCTIONS

- .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify Departmental Representative in writing of conflicts between specifications and manufacturer's instructions, so that Departmental Representative may establish course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes Departmental Representative to require removal and re-installation at no increase in Contract Price or Contract Time.

1.7 QUALITY OF WORK

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Departmental Representative if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Departmental Representative reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Departmental Representative, whose decision is final.

1.8 COORDINATION

- .1 Ensure cooperation of workers in laying out Work. Maintain efficient/continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

1.9 CONCEALMENT

- .1 In finished areas, conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.
- .2 Before installation, inform Departmental Representative if there is interference. Install as directed by Departmental Representative.

1.10 REMEDIAL WORK

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Coordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

1.11 FASTENINGS

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use non-corrosive hot-dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in affected Spec. Section.
- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood, or any other organic material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

1.12 FASTENINGS - EQUIPMENT

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.

- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

1.13 PROTECTION OF WORK IN PROGRESS

- .1 Prevent overloading of any part of building. Do not cut, drill or sleeve any load bearing structural member, unless specifically indicated without written approval of Departmental Representative.

1.14 EXISTING UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, and/or building occupants.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 EXISTING SERVICES

- .1 Before commencing work, establish location and extent of utility lines in area of Work and notify Departmental Representative of findings.

1.2 LOCATION OF EXISTING UTILITIES AND STRUCTURES

- .1 Location of utilities and structures on drawings are considered as approximate.
- .2 Expose underground utilities prior to excavation by hydro-excavation methods.
- .3 Inform Departmental Representative of impending installation and obtain approval for actual location.
- .4 Submit field drawings to indicate relative position of various services when required by Departmental Representative.

1.3 RECORDS

- .1 Maintain record of the size, material and location of water mains, services and appurtenances installed. Document location in relation to existing reference points or surface features. Also document estimated depth of water mains and services at access pits, tunnel crossings and every 25 m of open excavation.
- .2 Record measured location and depth of existing utilities that are hydro-excavated or discovered during excavation.
- .3 The resident engineer is not responsible for maintaining record.

1.4 SUBMITTALS

- .1 On request of Departmental Representative, submit documentation to verify accuracy of field engineering work.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 SUBMITTALS

- .1 Submit written request in advance of cutting or alteration which affects:
 - .1 Structural integrity of any element of Project
 - .2 Integrity of weather-exposed or moisture-resistant elements
 - .3 Efficiency, maintenance, or safety of any operational element
 - .4 Visual qualities of sight-exposed elements
 - .5 Work of Departmental Representative or separate contractor
- .2 Include in request:
 - .1 Identification of Project
 - .2 Location and description of affected Work
 - .3 Statement on necessity for cutting or alteration
 - .4 Description of proposed Work, and products to be used
 - .5 Alternatives to cutting and patching
 - .6 Effect on Work of Departmental Representative or separate contractor
 - .7 Written permission of affected separate contractor
 - .8 Date and time work will be executed

1.2 MATERIALS

- .1 Required for original installation.
- .2 Change in Materials: Submit request for substitution in accordance with Section 01 33 00 - Submittal Procedures.

1.3 PREPARATION

- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2 After uncovering, inspect conditions affecting performance of Work.
- .3 Beginning of cutting or patching means acceptance of existing conditions.
- .4 Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
- .5 Provide protection from elements for areas which may be exposed by uncovering work; maintain excavations free of water.

1.4 EXECUTION

- .1 Execute cutting, fitting, and patching to complete Work.
- .2 Fit several parts together, to integrate with other Work.

- .3 Uncover Work to install ill-timed Work.
- .4 Remove and replace defective and non-conforming Work.
- .5 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .6 Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- .7 Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements, and sight-exposed surfaces.
- .8 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed on masonry work without prior approval.
- .9 Restore work with new products in accordance with requirements of Contract Documents.
- .10 Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .11 At penetration of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-stopping material, full thickness of the construction element.
- .12 Refinish surfaces to match adjacent finishes: For continuous surfaces refinish to nearest intersection; for an assembly, refinish entire unit.
- .13 Conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.

Part 2 **Products**

NOT USED

Part 3 **Execution**

NOT USED

END OF SECTION

Part 1 General

1.1 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, excluding that from other construction contracts.
- .2 Remove waste materials from site at regularly scheduled times. Do not burn waste materials on site.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Clear snow and ice from access to building, where Contractor access is provided to building.
- .5 Provide on-site containers for collection of waste materials and debris.
- .6 Remove waste material and debris and deposit in waste container at end of each working day.
- .7 Dispose of waste materials and debris off site.
- .8 Clean interior areas prior to start of finish work, and maintain areas free of dust and other contaminants during finishing operations.
- .9 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .10 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .11 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .12 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall nor contaminate building systems.

1.2 FINAL CLEANING

- .1 When Work is Substantially Performed, remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris and leave Work clean and suitable for occupancy.
- .3 Prior to final review, remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris other than that caused by Departmental Representative or other construction contracts.

- .5 Remove waste materials from site at regularly scheduled times. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Remove debris and surplus materials from work areas.

Part 2 Products
NOT USED

Part 3 Execution
NOT USED

END OF SECTION

Part 1 General

1.1 STORAGE, HANDLING AND PROTECTION

- .1 Store and Handle demolished or removed asbestos cement pipe according to standards for asbestos cement removal.
- .2 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .3 Unless specified otherwise, materials for removal do not become Contractor's property.
- .4 Protect, stockpile, store and catalogue salvaged items.
- .5 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .6 Protect structural components not removed for demolition from movement or damage.
- .7 Support affected structures. If safety of building is endangered, cease operations and immediately notify Departmental Representative.
- .8 Protect surface drainage, mechanical and electrical from damage and blockage.
- .9 Separate and store materials produced during dismantling of structures in designated areas.
- .10 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.

1.2 WASTE PROCESSING SITES

- .1 Name: City of Regina Landfill – telephone: (306) 777-7000.

1.3 DISPOSAL OF WASTES

- .1 Dispose of demolished and removed asbestos cement pipe according to standards for asbestos cement disposal.
- .2 Do not bury rubbish or waste materials.
- .3 Do not dispose of waste, volatile materials, mineral spirits, oil, paint thinner, etc. into waterways, storm, or sanitary sewers.
- .4 Keep records of construction waste including:
 - .1 Number and size of bins
 - .2 Waste type of each bin
 - .3 Total tonnage generated

- .5 Remove materials from deconstruction as deconstruction/disassembly Work progresses.

1.4 USE OF SITE AND FACILITIES

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Maintain security measures established by existing facility.

1.5 SCHEDULING

- .1 Coordinate Work with other activities at site to ensure timely and orderly progress of Work.

Part 2 Products

NOT USED

Part 3 Execution

3.1 APPLICATION

- .1 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

3.2 CLEANING

- .1 Remove tools and waste materials on completion of Work, and leave work area in clean and orderly condition.
- .2 Clean-up work area as work progresses.
- .3 Source separate materials to be reused/recycled into specified sort areas.

3.3 SELECTED WASTE DIVERSION RESOURCES

- .1 Contractor is responsible for research and location of waste diversion resources and information.

END OF SECTION

Part 1 General

1.1 INSPECTION AND DECLARATION

- .1 Contractor's Inspection: Contractor and all Subcontractors shall conduct an inspection of Work, identify deficiencies/defects, and repair as required to conform to Contract Documents.
 - .1 Notify Departmental Representative in writing of satisfactory completion of Contractor's Inspection and that corrections have been made.
 - .2 Request Departmental Representative's Inspection.
- .2 Departmental Representative's Inspection: Departmental Representative and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Contractor shall correct Work accordingly.
- .3 Completion: submit written certificate that following have been performed:
 - .1 Work has been completed and inspected for compliance with Contract Documents.
 - .2 Defects have been corrected and deficiencies have been completed.
 - .3 Equipment and systems have been tested, adjusted and are fully operational.
 - .4 Certificates required by Boiler Inspection Branch, Fire Commissioner, Utility companies have been submitted.
 - .5 Operation of systems have been demonstrated to Departmental Representative's personnel.
 - .6 Work is complete and ready for Final Inspection.
- .4 Final Inspection: when items noted above are completed, request final inspection of Work by Departmental Representative and Contractor. If Work is deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.
- .5 Declaration of Substantial Performance: when Departmental Representative considers deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for certificate of Substantial Performance.
- .6 Commencement of Lien and Warranty Periods: date of Owner's acceptance of submitted declaration of Substantial Performance shall be date for commencement for warranty period and commencement of lien period unless required otherwise by lien statute of Place of Work.
- .7 Final Payment: when Departmental Representative consider final deficiencies and defects have been corrected and it appears requirements of Contract have been totally performed, make application for final payment. Refer to General Conditions. If Work is deemed incomplete by Departmental Representative, complete outstanding items and request reinspection.
- .8 Payment of Holdback: after issuance of certificate of Substantial Performance of Work, submit an application for payment of holdback amount in accordance with General Conditions.

1.2 CLEANING

- .1 In accordance with Section 01 74 11 - Cleaning.
- .2 Remove waste and surplus materials, rubbish and construction facilities from the site in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION

Part 1 General

1.1 OPERATION AND MAINTENANCE MANUALS

- .1 Prepare instructions and data using personnel experienced in maintenance and operation of described products.
- .2 Copy will be returned after final inspection, with Departmental Representative's comments.
- .3 Revise content of documents as required prior to final submittal.
- .4 Two weeks prior to Substantial Performance of the Work, submit to the Departmental Representative, one digital copy in PDF format or one (1) hard copy of Operation and Maintenance Manuals for review by Departmental Representative. Following review and modifications, provide one (1) digital PDF copy and two (2) hard copies.
- .5 Ensure spare parts, maintenance materials and special tools provided are new, undamaged or defective, and of same quality and manufacture as products provided in Work.
- .6 If requested, furnish evidence as to type, source and quality of products provided.
- .7 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- .8 Format
 - .1 Organize data in the form of an instructional manual.
 - .2 Binders: vinyl, hard covered, three (3) D-ring, loose leaf, with spine and face pockets.
 - .3 When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine.
 - .4 Cover: Identify each binder with type or printed title 'Project Record Documents'; list title of project and identify subject matter of contents.
 - .5 Arrange content using Section numbers and sequence of Table of Contents.
 - .6 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
 - .7 Text: manufacturer's printed data, or typewritten data.
 - .8 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- .9 Contents – Each Volume
 - .1 Table of Contents:
 - .1 title of project;
 - .2 date of submission;
 - .3 names, addresses, and telephone numbers of Departmental Representative and Contractor with name of responsible parties;
 - .4 schedule of products and systems, indexed to content of volume.

- .2 For each product or system:
 - .1 List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product Data: mark each sheet to clearly identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: as required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 45 00 - Quality Control.

1.2 RECORD DRAWINGS

- .1 In addition to requirements in General Conditions, maintain at the site for Departmental Representative, one (1) record copy of:
 - .1 Contract Drawings
 - .2 Specifications
 - .3 Addenda
 - .4 Change Orders and other modifications to the Contract
 - .5 Reviewed shop drawings, product data, and samples
 - .6 Field test records
 - .7 Inspection certificates
 - .8 Manufacturer's certificates
- .2 Store record documents in field office apart from documents used for construction. Provide files, racks, and secure storage.
- .3 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- .4 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- .5 Keep record documents and samples available for inspection by Departmental Representative.
- .6 Recording Actual Site Conditions
 - .1 Record information on set of black-line opaque drawings, provided by Departmental Representative.
 - .2 Provide felt tip marking pens, maintaining separate colours for each major system, for recording information.
 - .3 Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
 - .4 Contract Drawings and shop drawings: legibly mark each item to record actual construction, including:

- .1 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
- .2 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
- .3 Field changes of dimension and detail.
- .4 Changes made by change orders.
- .5 Details not on original Contract Drawings.
- .6 References to related shop drawings and modifications.
- .5 Specifications: legibly mark each item to record actual construction, including:
 - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
 - .2 Changes made by Addenda and change orders.
- .6 Other Documents: maintain manufacturer's certifications, inspection certifications, field test records, etc. as required by individual specifications sections.

1.3 WARRANTIES AND BONDS

- .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
- .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work.
- .4 Except for items put into use with Departmental Representative's permission, leave date of beginning of time of warranty until the Date of Substantial Performance is determined.
- .5 Verify that documents are in proper form, contain full information, and are notarized.
- .6 Co-execute submittals when required.
- .7 Retain warranties and bonds until time specified for submittal.

Part 2 Products

NOT USED

Part 3 Execution

NOT USED

END OF SECTION