

DIVISION 01 GENERAL REQUIREMENTS

Division 01 - General Comments

- 1 Information relates to DTIR General Requirements for the project including but not limited to payment procedures, administrative requirements, quality requirements, temporary facilities and controls, product requirements, execution requirements, facility operation, facility decommissioning, facility commissioning, and functional performance testing.
- 2 Co-ordinate Division 01 with DTIR General Conditions of the Contract.
- 3 Discuss content of DTIR Division 01 master documents with DTIR staff. For large scope projects additional long form NMS Division 01 sections will be required. Incorporate content and references from the DTIR Division 01 master documents provided by the DTIR staff into any additional long form NMS Division 01 sections as required.

Section 01 00 00 General Instructions

1. General
 - 1.1. The Department has developed a master document covering general requirements. While suitable for small projects, the document is appropriate as resource material for the Consultant retained for projects of a larger scale.
 - 1.2. Consultants are directed to use the current NMS long form sections where appropriate for projects of a larger scale and to coordinate with the required DTIR Agreement, General Conditions, Supplementary Conditions and additional DTIR provided Division 01 sections. The master 01 00 00 document contains minimum Departmental requirements for Project Identification Signage, Waste Management and Disposal, Unit Prices, Itemized Prices, Separate Prices, and Alternate Prices, etc.
 - 1.3. A copy of Section 01 00 00 General Instructions from the DTIR Master Document is available to Consultants.
 - 1.4. Scheduling of Work
 - 1.4.1. Activities which may result in odor or construction dust dispersal throughout occupied areas of the building should be scheduled during unoccupied times. Consider direction of prevailing winds, location of fans and air handling equipment to minimize odor and dust dispersal throughout the building. Execute work as quietly as possible in and around occupied building. Coordinate scheduling of noisy operations with the facility's administration to achieve least disturbance to occupants.

Section 01 14 00 Work Restrictions

1. General

1.1. Contractor's Use of Site

1.1.1. Contractor to carry out work with a minimum of inconvenience to adjacent landowners.

1.1.2. Contractor to coordinate work to not inconvenience building occupants or hinder use of buildings when performing alterations or additions within an existing occupied building.

1.1.3. The Contractor shall provide and maintain continuity of fire separations, and safe means of egress when performing work in existing and occupied buildings.

1.1.4. Construction site to be maintained in a clean and neat condition; provide removal of litter and construction waste from the job site on a regular basis.

1.1.5. All existing building and on-site materials for ducts, vents and diffusers to be sealed from dust and odors during construction.

Section 01 21 00 Allowances

1. General

1.1. The Department generally does not specify cash allowances for construction contracts. If cash allowances are desired, written approval from the DTIR Representative must be obtained.

Section 01 29 00 Payment Procedures - Schedule of Values

1. General

1.1. Within 10 days of the Award of Contract the successful contractor, shall submit a breakdown of their prices, using the latest edition of the DTIR Master DC250-09 - Schedule of Values Form, a sample of which is provided in master DTIR Section 01 29 00 Payment Procedures, unless directed otherwise by the DTIR project Design Team Leader.

1.2. The breakdown for Payment Applications will be on the form approved by the DTIR Representative, a sample of which is included at the end of Section 01 29 00 Payment Procedures, unless directed otherwise by DTIR staff.

Section 01 35 00 Special Procedures

1. General

- 1.1. Refer to Special Procedures sections such as Section 01 35 21 - LEED Requirements or Section 01 35 43- Environmental Procedures for required administrative, procedural, and submission requirements.

Section 01 35 29 Occupational Health and Safety Requirements

1. General

- 1.1. Use the latest edition of the DTIR Master Document Section 01 35 29 - Occupational Health and Safety Requirements, a copy of which is available to consultants through the DTIR Design Lead.

Section 01 41 00 Regulatory Requirements

1. General

- 1.1. Ensure all code and regulatory requirements are met and appropriately referenced throughout the Project Manual and Drawings.
- 1.2. Determine detailed requirements of jurisdictional authorities. Ensure the design and construction documents conform to all acts, laws, codes and regulations in force in the location of the project.
- 1.3. Ensure construction documents provide for giving necessary notices, obtaining permits, making payment for fees and inspections, and furnishing certificates as evidence that the work, as installed, conforms with the laws and regulations of governing authorities.
- 1.4. Permits: Ensure construction documents provide for acquisition of appropriate permits for site development, including but not limited to:
 - 1.4.1. all applicable Provincial Government Departments
 - 1.4.2. Office of the Fire Marshall's Authorities Having Jurisdiction
 - 1.4.3. Municipal Authorities
 - 1.4.4. Other jurisdictional authorities
 - 1.4.5. Municipal Building Permits are not required on some crown construction projects. The requirement for Municipal Building Permits will be confirmed by the Design Team Lead in writing.
- 1.5. Environment Act.
 - 1.5.1. Ensure the Contractor is familiar with the requirements of the Environment Act and the Regulations pursuant to the Act.

Section 01 50 00 Temporary Facilities and Controls

1. General

- 1.1. Where the project scope requires extensive temporary facilities ensure that long form NMS specifications sections 01 51 00 -Temporary Utilities and or 01 52 00 Construction Facilities are provided for all temporary facility requirements during construction.
- 1.2. Fire Separations
 - 1.2.1. Where fire separations are required in the project, provide a written description of the entire system being used to achieve fire separations with appropriate UL/ULC numbers.
 - 1.2.2. Show on architectural drawings, locations, extent and ratings of fire separations and protections. Additionally, identify such designated fire separations and protections on one complete set of electrical floor plan “power” drawings.
- 1.3. Dangerous Goods Management.
 - 1.3.1. Fuels and lubricants to be stored, transported and used according to provincial regulations.
 - 1.3.2. The Contractor is not permitted to construct machinery maintenance depots, refueling stations, storage yards, or any type of installation, that could possibly cause contamination to a watercourse through the disposal of human waste, oil, grease, or other deleterious material.
 - 1.3.3. Gasoline, waste oils and lubricants to be retained in a closed container and disposed of in conformance with provincial regulations.

Section 01 57 00 Temporary Controls

1. General

- 1.1. Where the projects scope requires temporary control measures including but not limited to traffic control, protection of public, protection of adjacent properties and the environment, provide the long form Temporary Controls NMS specifications and detail the required controls and procedures during construction.
- 1.2. Also refer to Part 1 Section 1 Site Planning and Division 2 sections for additional requirements.
- 1.3. Where the Work requires temporary Erosion and Sediment Control measures the Consultant is required to include with the Construction Drawings an Erosion and Sediment Control drawing identifying construction limits, access points, location and type of Control measure and details of required Erosion and Sediment Control measures.

- 1.4. Where the Work requires temporary Erosion and Sediment Control measures ensure that the following is specified in the construction documents.
 - 1.4.1. All sediment and erosion controls to be used on a specific project are in accordance with the “Erosion and Sedimentation Control Handbook for Construction Sites” (Latest Edition; DOEL) and Division 7 of the Standard Specification Highway Construction and Maintenance” (Latest Edition). The contractor to carry out regular inspections of all erosion and sediment controls ensuring proper installations are maintained, especially prior to and after major storm events.
 - 1.4.2. All projects involving site work where erosion may be an issue, will require the contractor to engage a full-time on site representative who has received the Certificate of Training for successful completion of the Erosion and Sediment Control workshop offered by the Centre for Water Resource Studies (CWRS), Dalhousie University and DTIR.
 - 1.4.3. The Contractor shall have an Erosion and Sediment Control Plan approved by DTIR prior to construction.
- 1.5. Watercourses/Culverts.
 - 1.5.1. All work to conform to the “Nova Scotia Watercourse Alteration Standard” (Latest Edition; DOE).
 - 1.5.2. Prior to work on culverts, a geotextile silt fence shall be installed on both sides of the watercourse at a location delineating the edge of the buffer zone.
 - 1.5.3. The buffer zone shall be determined by the Federal Department of Fisheries and Oceans (DFO) and is provided to prevent sediment from entering the watercourse.
 - 1.5.4. Design of culverts, extension of culverts or alteration of water courses affecting fish passage must follow the “Nova Scotia Watercourse Alteration Standard” and the Environment Act developed by the Nova Scotia Department of Environment. Design based on these documents shall be forwarded to the Department of Environment for review and approval.

Section 01 60 00 Product Requirements

1. General

- 1.1. Where project scope requires, ensure that long form NMS specifications are provided for all materials and equipment requirements.

Section 01 70 00 Contract Closeout

1. General

- 1.1. Use the latest edition of the DTIR Master Document Section 01 70 00 - Contract Closeout, a copy of which is available to consultants through the DTIR project Design Team Leader.
- 1.2. Commissioning and Functional Performance Testing (FPT)
 - 1.2.1. Functional Performance Testing is defined as the activities required, upon reaching Substantial Performance of the Work, to test and ensure correct operation of identified building systems based on the terms of the Contract.
 - 1.2.2. Specific commissioning and functional performance requirements are specified throughout the technical portions of the DC350 including but not limited to, Part 1 Section 2- FSS-G.
 - 1.2.3. Contract documents to specify all commissioning requirements including but not limited to the following:
 - 1.2.3.1. Provision of full Commissioning services for building systems
 - 1.2.3.2. Coordination with DTIR staff for their Functional Performance Testing (FPT).
 - 1.2.3.3. identification of required attendance by all pertinent parties, including consultants, contractor, sub-contractors and DTIR staff.
 - 1.2.3.4. identification of minimum time commitments required for each party identified to complete their roles and responsibilities.
 - 1.2.3.5. description of roles and responsibilities of each party
 - 1.2.3.6. LEED required specific commissioning procedures on LEED projects.
- 1.3. DTIR will commence a Functional Performance Testing (FPT) Program independent of other processes, upon receipt of written verification from the General Contractor that:
 - 1.3.1. All systems are complete and operational in all respects.
 - 1.3.2. All specified reports and documents have been submitted and approved.
 - 1.3.3. All tests, commissioning and start-up processes are complete.
 - 1.3.4. All demonstrations have been completed and documented.

- 1.4. All defects and deficiencies identified during the construction process and during the commissioning of all systems have been corrected.
- 1.5. Allow for 1 day for every 15,000 square feet or portion thereof.
- 1.6. Provide qualified tradespersons and all manufacturer's technical representatives as required by the owner. Make all arrangements and pay for all associated costs.
- 1.7. FPT shall be performed on all systems referenced in the contract documents which may include, but not be limited to, the following: all mechanical and electrical systems, architectural systems and site systems.
- 1.8. The correction of all deficiencies identified throughout the project associated with the Work shall be a condition of Substantial Performance application by the Contractor applying for Substantial Performance.
- 1.9. Submission of As-Built/Record Drawings
 - 1.9.1. Construction documents shall require the Contractor to submit one set of As-Built drawings to the Consultant, on completion of the work accurately showing deviations in the Work so that the Consultant is able to modify contract drawings for submission of Record Drawings under the Minister-Contract Agreement, or Standing Offer Agreement, as applicable.
- 1.10. Extended Warranties
 - 1.10.1. Ensure Extended Warranties are submitted for each of the following items:

1.10.1.1 Landscaping	Refer to Division 32
1.10.1.2 Pre-cast / tilt-up concrete	Refer to Sections 03 41 00, 03 45 00
1.10.1.3 Finish Carpentry & Architectural Wood	Refer to Sections 06 00 00, 06 46 00
1.10.1.4 Architectural Woodwork	Refer to Section 06 00 00
1.10.1.5 Roofing	
1.10.1.5.1 Steep Slope roofing	Refer to Section 07 30 00
1.10.1.5.2 Membrane (product)	Refer to Section 07 00 00
1.10.1.5.3 Workmanship	Refer to Section 07 00 00
1.10.1.6 Damp proofing	Refer to Section 07 00 00
1.10.1.7 Joint Protection	Refer to Section 07 90 00
1.10.1.8 Openings	Refer to Section 08 00 00
1.10.1.9 Wall Finishes	Refer to Section 09 00 00
1.10.1.10 Floor Finish	Refer to Section 09 00 00
1.10.1.11 Gymnasium Sports Floor (Performance & Structural Integrity)	Refer to Sections 09 64 00, 09 67 00
1.10.1.12 Visual Display Boards (Manufacturer's Warranty)	Refer to Section 10 11 00

1.10.1.13 Equipment (Food Storage)	Refer to Section 11 00 00
1.10.1.14 Elevators/Escalators	Refer to Section 14 00 00
1.10.1.15 Energy Recovery Wheels	Refer to Section 23 72 00
1.10.1.16 Humidity Control	Refer to Section 23 84 00
1.10.1.17 Generators	Refer to Section 26 32 00
1.10.1.18 Transfer Switches	Refer to Section 26 36 23
1.10.1.19 TVSS	Refer to Section 26 43 00
1.10.1.20 Emergency Lighting	Refer to Section 26 52 00
1.10.1.21 Exit Signs	Refer to Section 26 53 00
1.10.1.22 Structured Cabling	Refer to Div.27 and Structured Cabling

1.11. Refer to the division or section referenced above in the Part 1 of the DC350 for extended warranty years required.

1.12. Extended Warranties shall commence on the termination of the standard one-year warranty specified in GC 16 of the Department's General Conditions of Contract. Each extended warranty to be submitted on a standard Form of Warranty, a copy of which can be obtained from Department staff.

1.13. Specified Extended Warranties are to be provided at no additional future cost to the Province of Nova Scotia.

1.14. Waste Management and Disposal

1.14.1. Where the short form Section 01 00 00 DTIR master document does not adequately provide for the necessary requirements for cleaning, waste management and disposal provide a long form Section 01 74 00 - Cleaning and Waste Management section edited from an approved NMS master.

1.14.2. Provide on-site facilities for collection, handling and storage of anticipated quantities of reusable and recyclable materials.

1.14.3. Source separate materials to be re-used or recycled into specified sort areas.

1.14.4. Dispose of construction debris (unable to be reduced/reused/recycled) in separated waste streams as outlined by the local waste management program.

1.14.5. For LEED projects all construction waste, is to be tracked and documented in accordance with CaGBC LEED requirements.

1.15. Operation and Maintenance Manuals

1.15.1. Where Operation and Maintenance Manuals are required for project completion ensure that Manuals meet the requirements of the format outlined in the short form Section 01 00 00 DTIR master document.

1.15.2. Where project scope requires, including new facility construction, Operation and Maintenance Manuals shall be provided as part of a Building Management Manual (BMM) which shall be consistent with current Master Format 01 90 00 Lifecycle Activities subsections standard specifications or 'NMS Complete' Section 01 91 51 Building Management Manual (BMM) standard specifications. The Consultant shall ensure that the BMM explains:

1.15.2.1. what systems, equipment and components have been incorporated into the building

1.15.2.2. why these systems, equipment and components have been selected,

1.15.2.3. how the design and operating concepts of the sub-systems, systems, and integrated systems are accomplished, and

1.15.2.4. training materials, including but not limited to, digital recordings of all training sessions as specified throughout the Contract Documents.

1.15.3. For new construction or major retrofit, the Consultant shall ensure that specifications include the NMS long form latest version specification for 'Building Management Manuals (BMM)' appropriate to the project, and consistent with specific building information requirements as specified in individual sections of the DC350.

Section 01 78 00 Closeout Submittals

1. General

1.1. Refer also to DTIR Master Section 01 70 00 Contract Closeout for standard submission requirements. Supplement the requirements of 01 70 00 with long form NMS Section 01 78 00 specifications where appropriate, to meet the needs of the project scope (ex. LEED).

Section 01 80 00 Performance Requirements

1. General

1.1. Where the projects program requires, ensure that long form NMS specifications are provided for all Performance Requirements including but not limited to Sustainable Design Requirements such as requirements for LEED Certification.

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