1.0 GENERAL

1.1 DOCUMENTS

.1 This section of the Specification forms part of the Contract Documents and is to be read, interpreted, and coordinated with all other parts.

1.2 SUMMARY

.1 Section Includes:

1.3 CONTRACTOR'S FOREMAN

.1 The Contractor shall designate a Foreman to remain on the job site from the time construction commences until final completion and acceptance of the Work

.2 The Foreman shall not be changed unless satisfactory reasons are given in writing to UBC Information Technology Representative.

1.4 PROJECT MEETINGS

.1 The Foreman shall attend all meetings with the General, Mechanical, and Electrical Contractors as requested, as well as meetings that may be requested by the Project Manager, Consulting Engineer, or UBC Information Technology Representative.

1.5 COORDINATION ON SITE

.1 The Contractor shall coordinate their work with the General, Mechanical, and Electrical Contractors to ensure that all required supporting structures such as (conduits and trays) are in place prior to commencing work.

.2 Any conduit, outlet boxes, or cable trays that are installed at locations that contradict instructions on the drawings, or in the specifications, shall be immediately identified and reported to the Consulting Engineer and UBC Information Technology Representative.

.3 The Contractor shall promptly advise-the Consulting Engineer and UBC Information Technology Representative of any specific equipment, materials or installation that are

non–conforming with or in violation of laws, by-laws or regulations of authorities having jurisdiction.

1.6 SEQUENCE AND SCHEDULING

.1 The Contractor shall meet the Construction Schedule as laid out by General Contractor for the installation of the structured cabling system and associated equipment. When no site schedule exists, the contractor will work with UBC IT to achieve the desired schedule outcome.

.2 The contractor will ensure that all reasonable efforts will be undertaken to achieve the identified construction schedule at no additional cost to UBC IT.

.3 The Contractor shall submit a separate time schedule with applicable cut-overs in areas where live services are in place.

1.7 PRICING

.1 The Contractor will provide pricing as per the UBC IT RFQ process unless otherwise specified by UBC IT.

1.8 PERMITS, FEES, TAXES, AND INSPECTIONS

.1 Contractor is fully responsible for compliance with Federal, Provincial and Municipal laws and regulations.

.2 The Contractor is responsible to obtain low voltage installation permit and, at the end of project, submit request for final inspection to the appropriate Inspection Authority.

.3 Technical Safety BC is responsible for issuing electrical permits at the University of British Columbia.

.4 The Contractor shall pay all associated permitting and inspection fees and any taxes.

.5 The Contractor shall be responsible and pay for any additional time and expense occurred if re-inspections are required for deficiencies which have not been corrected to the Owner's satisfaction.

.6 Contractor shall obtain and pay for all necessary key deposits, permits and licenses.

.7 Upon substantial performance and before final payment, the Contractor shall submit a confirmation copy of acceptance for all work by Technical Safety BC, to the consulting engineer and UBC Information Technology Representative.

1.9 COORDINATION, CLARIFICATION AND ADDENDA

.1 Questions about the meaning and intent of this document that may require clarification shall be submitted to the UBC Information Technology Representative.

1.10 INSPECTIONS

.1 The Contractor shall request, and coordinate representation from the Consulting Engineer and UBC Information Technology Representative for inspection of cabling system during, but not limited to the following stages of construction:

.1 Cable rough-in

.2 Communications room construction

.3 Testing

.4 Completion.

2.0 SUBMITTALS

.1 The Contractor shall submit the following items to the UBC Information Technology Representative:

.1 Immediately identify any long lead-time items that might jeopardize the construction schedule.

.2 Complete test results of all structured cabling elements, UTP/STP cables, fibre optic horizontal and backbone cables. Test methodology and result formats are noted in 27-08-00.

.3 Completed electronic UBC IT CCT spreadsheet as per sample provided.

2.1 INFORMATION TECHNOLOGY REVIEW AND APPROVAL

.1 The UBC Information Technology Representative's approval of the Contractor's shop drawings, product data, and samples submitted shall not relieve the Contractor of responsibility for errors, omissions, or deviations from requirements of the Contract Documents, unless the Contractor has specifically informed the UBC Information Technology Representative in writing of such deviation at time of submittal, and the UBC Information Technology Representative has given written approval of the specific deviation.

.2 The UBC Information Technology Representative's review and approval, of shop drawings, product data, and samples, is for the limited purpose of checking for conformance with information given and design concept expressed in the Contract Documents.

.3 The UBC Information Technology Representative's review of Contractor's submittals is not conducted for the purpose of determining accuracy and completeness of details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor.

.4 The UBC Information Technology Representative's review shall not constitute approval of safety precautions or of construction means, methods techniques, sequences or procedures.

.5 The UBC Information Technology Representative's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

2.2 DRAWINGS AND SPECIFICATIONS

.1 The Contract drawings and specifications form an integral part of the contract documents. Neither the drawings nor the specifications shall be used alone. Work omitted from the

drawings but mentioned or reasonably implied in the specifications, or vice versa, shall be considered as properly and sufficiently specified and shall be provided.

.2 Misinterpretation of any requirements on drawings, or specifications shall not relieve the Contractor of his, or her responsibility of properly completing the Contract.

.3 Where conflict exists between drawings and specifications, the Contractor shall make allowance for provision of the component, system, or installation process in a manner which will provide UBC with the highest monetary cost components, systems, or installation process.

.4 Drawings are generally diagrammatic and are intended to indicate the scope and general arrangement of the Work. The Contractor shall not scale the drawings, but rather take field measurements in existing buildings particularly where equipment and material dimensions are dependent on building dimensions.

.5 The Contractor shall obtain information from the Consultant and or UBC IT where exact locations are not indicated.

.6 The UBC Information Technology Representative has the option of changing the location of Electrical and Communication outlets to within 1 m of designed location prior to rough-in stage at no extra cost to UBC.

2.3 CONSTRUCTION DOCUMENTATION

.1 The Contractor shall submit to the UBC Information Technology Representative for approval:

.1 Product data (including cut sheets and catalogue information) for products not on the approved product list

.2 Samples required by the Contract Documents

.2 All above submittals must be forwarded promptly and, in such sequence, as to cause no delay in the work or in the activities of the other trades.

.3 The UBC Information Technology Representative shall indicate approval of product data, and samples submitted in writing.

.4 Submittals shall be signed by the Contractor, imprinted with the date submitted, and shall bear the Contractor's legitimate Company name.

.5 By submitting product data, and samples, the Contractor signifies that he, or she has carefully reviewed and verified materials, quantities, field measurements, and related field construction criteria. It also signifies the Contractor has checked, coordinated, and verified that all information contained with product data, and samples conforms to the requirements of the Work and of the Contract Documents.

.6 The Contractor shall perform no portion of the Work requiring submittal and review of product data, or samples until the UBC Information Technology Representative has approved the respective submittal.

.7 The Consultant shall submit the following to the UBC Information Technology Representative at the conclusion of the project and within (2) weeks of forwarding notification that Substantial Performance has been achieved:

.1 (1) electronic set of As-Built drawings to UBC Information Technology Representative

.2 (1) full size set of As-Built drawings to Campus & Community Planning

NOTE:

.1 As-Built drawings shall confirm location and identification of all:

.1 Communication Outlets

.2 Communication Rooms

.3 Backbone Cable Runs

.4 Critical Zone pathways transition points e.g. – riser pipes that are not located in a comm room

.2 As-Built drawings shall be drawn utilizing industry standard platforms such as AutoCAD (preferred), and be in an editable format for future updates by UBC IT.

2.4 SUBSTANTIAL PERFORMANCE

.1 The Contractor shall advise the UBC Information Technology Representative in writing when Substantial Performance has been achieved and shall request at the same time a Deficiencies Inspection be made.

.2 The UBC Information Technology Representative may request to be present during actual live testing of the cable system.

.3 The Contractor shall not issue a Substantial Performance Deficiencies Inspection request until the following work has been completed and specified documentation forwarded to the UBC Information Technology Representative:

.1 Verification of new fire alarm demarcation jack has been completed.

.2 All deficiencies noted during job inspection have been completed.

.3 Warranty certificates have been provided.

.4 All systems have been tested and passed and are ready for operation.

.5 Completed test results for the structured cabling system have been provided in a readily readable format such as PDF. Cable tester manufacturer proprietary file formats are not acceptable for submission to UBC IT.

.6 Site cleanup is finished and all contractor surplus materials and equipment has been removed from site.

.7 All inspection certificates have been furnished including final low voltage and or electrical inspection certificates.

2.5 FIELD QUALITY CONTROL

.1 Fire-stop installation shall be performed as per Fire-stop Section 27 05 07.

.2 Manufacturer's certificate or letter shall be provided to confirm that the entire installation is installed according to manufacturer's instructions.

.3 At UBC IT's option, tests shall be carried out in presence of UBC Information Technology Representative.

.4 Instruments, meters, equipment and personnel shall be provided to conduct tests during and at conclusion of the project.

.5 Test results shall be submitted to for UBC Information Technology Representatives for review.

2.6 CERTIFICATION OF A COMMUNICATIONS SYSTEM

.1 The Contractor shall ensure that the cabling system installed and the Contractor's Employees working on this project are Certified and Warranted by the Cable Manufacturer.

.2 The Contractor shall only use Certified Personnel who are trained and equipped to properly install a structured cabling system, including but not limited to supporting pathways, cable, termination hardware, bonding and grounding systems, equipment cabinets or equivalent, and associated Communications equipment, in order to obtain system acceptance.

END OF SECTION 27 05 02