DALHOUSIE UNIVERSITY

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BIM Specifications

BIM REQUIREMENTS SPECIFICATION

summit BIM

PREPARED BY:
Summit BIM Consulting
1111 West Georgia St., 16th Floor
Vancouver, BC V6E 4G2

Contact us at:
604 568 8325
summitbim.com

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1 OVERVIEW STATEMENT

Please Note: This document is aligned with the ISO 19650 Framework and the relevant ISO section is provided at the Overview, Introduction, Design and Construction and Closeout Sections of this document, as shown below:

- ISO 19650 5.1 ASSESMENT & NEED.
- ISO 19650 DOCS: OIR, PIR, AI,R EIR.

Dalhousie University (The University) is implementing a Building Information Management (BIM) process, based around the ISO 19650 framework, Sections 5.1 Assement & Need, to support the generation of accurate 3D models containing structured and consistent digital data. The overall goal is to mitigate risks associated with Capital Planning, Design and Construction, as noted below, and provide the University with data and information that supports Facilities Management throughout the entire life cycle of their facilities.

This digital policy, process, and technology, commonly referred to as BIM, will be used to manage risk and improve quality, throughout the entire design, construction, and handover of capital projects.

The following are the main risks that the current version of the BIM Specification is targeting, as Dalhousie University transitions to utilizing a BIM process and can be summarized as follows:

- Risks Associated with poor communication:
  - Lack of full access to design models and model data, resulting in disconnection between project participants that limits clarity and inhibits mutual understanding of project progression.
  - Lack of access to information via interfaces that support frequent reviews and allow identification of coordination issues while the project is digital, leading to costly errors and omissions.
  - Lack of digital tools and processes to track issues, assign responsibilities and manage construction changes, adversely affecting the quality and completeness of record models.

- Risks associated with inefficient workflows:
  - Lack of easy access to consistent, complete, and current information in a digital environment, leading to absence of sufficient design, construction, and commissioning outputs in the Handover process.

- Risks associated with inadequate Quality Control:
  - Inability to manage project outcomes by formalizing processes to review the correctness of design, using tools to facilitate review and monitor progress, ensuring alignment to facility programs and the completeness of deliverables.
  - Lack of QA/QC protocols to minimize design-related coordination rework.
  - Lack of a common data environment to collect and collate construction data and documentation to allow for progress and frequent reviews, supporting the generation of commissioning and preventative maintenance guides, as well as enabling the digital transfer of information into CMMS software solutions.

Dalhousie is also keen to take advantage of the following benefits which become available when an integrated BIM process is followed:

- Higher quality project management through improved coordination and communication during design, construction, and facility operations.

- Improved risk assessment and mitigation when working with existing facilities.
- Improved design quality and accuracy with frequent QA/QC and program compliance checks.
- Robust environmental and energy analysis to support sustainable design.
- Reduced change orders through management of virtual coordination process
- Preservation of required equipment clearances for maintenance and operations and asset replacement.
- Generation of accurate record models and drawings (as-built).
- Early identification of asset parent/child relationships and system.
- Collection and early access to asset information for maintenance and operations.
- Reduced handover timeline and improved data exchange for CMMS/CAFM and BAS.

Please Note: All participants responding to an RFP from Dalhousie University with a BIM deliverable are required to document, in their RFP response, the strategies they have used on previous projects to address:

- Managing duplication across models
- Managing phasing/existing conditions
- Tagging tracked assets across models
- Managing parent/child relationships
- Managing required clearances for maintenance and replacement

Please Note: Those proponents without experience should document in their response their proposed strategy to support their participation within this BIM process.

2 INTRODUCTION

The relevant ISO sections are as follows:

- ISO 19650 5.1 ASSESMENT & NEED.
- ISO 19650 DOCS: OIR, PIR, AI,R EIR.

2.1 Definitions

A list of acronyms and a glossary with the definitions of the main BIM terms mentioned in the BIM Specification can be found in **Appendix A** and **Appendix B**.

The following colour scheme is utilized in the BIM Specification to help identify work effort required during the design phase, construction phase and by substantial completion.

DESIGN	CONSTRUCTION	SUBSTANTIAL COMPLETION

The following highlighted box is used to indicate critical information:

Please note: Important information is within yellow text boxes.

2.2 BIM Specification

The BIM Specification establishes the requirements that must be achieved for BIM projects. It defines what, and when, critical required information must be available within the model data set, by each participant team/firm from design to handover. The participating team/firm must define within the Project Execution Plan how these requirements will be met. The BIM Specification Document Set is comprised of two (2) interrelated documents as noted below:

- BIM Specification – this document sets technical requirements and workflows that support the generation of design models that can be used as containers for data and document collection during construction and as record models during the operation of the facilities. It includes, in **Appendix E**, topics that must be addressed in the Project Execution Plan (PEP). This living document is required to capture project information, modeling strategies, workflows, and any amendments or exclusions to the BIM Specification.

- BIM DGS/DCS/Rooms – An Excel file, (provided as a PDF in **Appendix F**), that details in different tabs, the following items:
  - Data and Geometry Specification (DGS) – A spreadsheet that includes a master list of all asset types, tracked assets, that must be modeled by the Design Team if they are part of the design. Each asset type has a classification, a minimum geometric level and a list of parameters that must be included in the design models to facilitate The University's compliance checks, design analysis and facilities, maintenance, and operations.
  - Data Collection Specification (DCS) – A spreadsheet that shows what information must be collected against different asset types, tracked assets, during construction and later transferred to a FMO CMMS/CAFM/IWMS solution. The DGS/DCS will be provided during the RFP process to support definition of requirements for document upload.
  - Room Specification – A spreadsheet that defines, relative to different room types, the classification system and data fields required along the project timeline to support facilities.

Please Note:

The above spreadsheets are combined onto a single Excel file to facilitate management. The editable version of this file will be shared with the Team after project award.

The Data and Geometry Specification and the Data Collection Specification are identified on the same tab, utilizing the specified colours.

2.3 BIM Project Participant Roles

This document uses the terms Design Team and Construction Team to refer to work effort required, relative to BIM processes, during Design and during Construction, irrespective of the contract type being used.

Appendix H contains a summary of BIM scopes of work and deliverables by Team and project phase.

2.3.1 Team

This document uses the term Team to refer to work effort required, relative to BIM processes, during Design and during Construction, irrespective of the contract type being used.

- Design Team
  Work effort required in relation to Design as defined in the Project Agreement, Construction Management Agreement, Design Build Agreement, etc., as applicable. The Construction Manager/Design Builder, as applicable, will determine which firms or individuals form part of the Design Team.
  The Design Team is responsible for the overall development and delivery of the Design Building Information Models, all processes and deliverables as defined in this document.
- Construction Team

Work effort required in relation to Construction as defined in the Project Agreement, Construction Management Agreement, Design Build Agreement, etc., as applicable. This role is defined as the 'Construction Team'. The Construction Manager/Design Builder, as applicable will determine which Trades (firms) or individuals form part of the Construction Team for each project and will be responsible for ensuring their compliance with these requirements.
The Construction Team is responsible for development of trade models, upload of required information and all processes and deliverables as defined in this document.

2.3.2 Participation

For the purposes of The University's BIM process, all participants involved in 'Design' and 'Construction' are required to conform to the BIM requirements set out in this document.

It is the responsibility of the Design Team and Construction Team project participants to define within the BIM Project Execution Plan (PEP) the responsible parties, workflows, processes, and protocols they intend to utilize to address specific issues and achieve the stated goals.

Appendix E: BIM Project Execution Plan (PEP) – Outline Requirements – Design Team and Construction Team outlines the specific criteria that must be addressed.

2.3.3 Dalhousie University (The University)

The document uses the term Dalhousie University (The University) to define and encompass all of the University's various stakeholder groups who will undertake the following:

- Distribute the BIM Specification, standards, and information to support the established BIM goals.
- Approve the PEP, including any requested exemptions.
- Review and comment on submitted deliverables, i.e. design models, asset information and data upload.
- Sign off on the Asset Registry.
- Sign off on construction data and documents uploaded by trades.

2.3.4 Dalhousie University's BIM Consultant (The University BIM Consultant)

The University will retain an independent BIM consultant to undertake BIM Compliance Audits, to ensure compliance with these requirements and check that the data generated can support the proposed goals and uses and mitigate the defined risks.

The University or the University's BIM Consultant will be responsible for providing the external database environment, or alternate solution, for the collection and collation of required data and documents for Facilities Maintenance and Operations (FMO)

Other responsibilities include the following:

- Provide advice and recommendations to the Design Team and Construction Team.
- Audit the PEP to ensure strategies and workflows defined in the PEP are aligned with the BIM requirements and being adhered to within the model dataset.
- Audit the design model data to ensure BIM requirements are being met.
- Monitor BIM process and protocols to ensure agreed processes are being followed.
- Generate the design model Asset Registry.

- Support the work effort of other project consultants and all parties approved by the University, in accessing the cloud based external data base.
- Prepare, host, and monitor the cloud-based environment for asset information upload.
- Generate progress reports on the data and document upload progress.
- Compile the data for transfer to Computer Maintenance Management System (CMMS).

2.4 Ownership

The ownership and responsibility for each individual digital model resides with the party that generated it. Only the responsible Design / Trade Team shall enter information into their model. However, The University must be granted full access to, and use of, all models generated during the project for the lifecycle of the facility.

Models are to be shared with all parties as required by the University, and as agreed and defined in the PEP, however the University reserves the right to request additional model submissions.

Models must be uploaded to the University's Autodesk Construction Cloud on a regular basis, to be agreed and defined in the PEP. The frequency of model upload may vary depending on the project phase, however teams should assume a frequency of between two to four weeks.

Please note:

Models must be provided in their native state, retaining all links, attachments, and sheets applicable for all submission and required model exchanges. Models should be purged of unnecessary families and extraneous objects.

The printed and digital 2D paper (PDF/DWF) drawings derived from the models, not the models themselves, will still constitute the legal contract documents.

The use of the models and the inherent data will be entirely at the risk of the user. Models will be provided for information, to help reduce risk, support a better understanding of the project and to support further development of fabrication models.

3 DESIGN PHASE REQUIREMENTS

The relevant ISO sections are as follows:

- ISO 19650 5.4 APPOINTMENT PROCESS, 5.6 COLLABORATIVE INFORMATION PRODUCTION.
- ISO 19650 DOCS: BEP DESIGN, RESPONSABILITY MATRIX, TIDP, RACI.

3.1 General Information:

The Team should consider and record in the PEP their strategy for managing the following:

3.1.1 Risk Mitigation

The relevant ISO sections are as follows:

- Risk Assessment (ISO 19650 5.3.6 Risk Register) – Identify hazards and risk factors that have the potential to cause harm within the process.

The Design Team must generate a Risk Assessment matrics, to identify and manage issues and risks that they feel might impact their ability to meet the requirements of the BIM Specification as detailed within this document. An outline matrix is provided in **Appendix P**.

3.1.2 File Sharing Platform

An accessible file sharing platform, for common access of all BIM Models should be established. Project teams should update the BIM Models on the file sharing platform on a regular basis as specified by the University. Versioning of models is required and must be detailed in the PEP. The University's preferred platform is Autodesk Construction Cloud Unified Platform, and approval must be granted for an alternate solution.

The Design Team is to include in the PEP the workflows they propose to follow. Example workflows are included in **Appendix Q.**

3.2 Design Authoring Software

Autodesk Revit will be the University's BIM authoring software. Exceptions will be accepted for Civil Engineering and Landscape consultants upon request.

- Civil Engineering must use a 3-Dimensional (3D) Computer Aided Design (CAD) platform such as Autodesk Civil 3D
- A strategy must be included for integration with the Landscape consultant's software, including management of tracked assets, included within the landscape scope of services.
- A strategy must be included in the PEP to establish a process for coordination with the Civil and Landscape consultants.

Additional consultants (e.g. kitchen, elevator, specialist equipment) must generate models capable of exporting Industry Foundation Classes (.ifc) format to support coordination and data collection/extraction.

3.2.1 Software Versioning

Versioning of software shall be managed by the BIM teams throughout the project lifecycle. The version number of any software to be used including collaboration software (e.g., Revit, Navisworks, etc.) must be announced at the start of the project and must be maintained throughout the project close-out, unless the team as a whole agrees to upgrade to a newer version. The versioning of software must be identified in the PEP.

A strategy to manage potential upgrade issues is to be included in the PEP.

Please Note: Depending upon the duration of the project, Revit version updates may be required. The model provided at handover, is to be no older than one version back from current.

3.2.2 Geo-Reference, Levels, Grids and Units

The University uses the following reference system:

- Horizontal: North American Datum of 1983 (NAD83 CSRS)
- Vertical: Canadian Geodetic Vertical Datum 2013 (CGVD2013)

The Design Consultants must establish a strategy for management of the following:

- Spatial coordinates, which must be accurately geo-reference in all models, including Civil, and agreed with the University.
- Levels and Grids to be used across the entire Team, including fabrication models.

The University requires all projects use Imperial units. Should Metric units be required on a specific project the Design Team will be responsible for the conversion.

The proposed strategies for managing these are to be clearly defined in the PEP, at the beginning of the project.

Please Note: All objects in models are to be modeled at true scale and at true elevation above sea level in accordance with the established above.

3.3 BIM Design Kick-off

The BIM 'Design' Kick-off meeting should occur soon after project award, so that modeling strategies can be agreed before modeling efforts are too far advanced.

Please Note:

The first submission of the Design PEP is to be provided 10 days before the BIM Design Kick-off meeting.

This meeting should include a representative from the University, the University BIM Consultant, and the entire Design team, including but not limited to, Architectural, Mechanical, Electrical, Plumbing, Civil and Structural.

At the BIM Design Kick-off Meeting:

- The University's BIM Consultant will respond to workflow strategies, information exchanges, etc. as documented in the PEP.
- The University's BIM Consultant will clarify questions raised, explain the compliance review process and be available to respond, as required, to issues and propose acceptable solutions for agreement.

3.4 Project Execution Plan (Design PEP)

A BIM project inherently requires a collaborative approach from all participants. The Design PEP is a document developed and managed by the Design Team, to record the agreement between all the parties involved in the project: who is responsible for doing what, in which model and at what point in time. It provides an opportunity to document model practices that are to be used, strategies, processes and protocols to be followed and must define any areas of agreed non-compliance with these requirements. **Appendix E** identifies issues that must be addressed in the PEP by the Design Team, if applicable to the project.

In addition, the Design PEP provides clarity to those outside the project team as to the specifics of how the models have been assembled and what strategy is being utilized to cope with the various known challenges associated with working collaboratively in teams, with multiple models.

The PEP is a critical living document that must to be maintained and keep current throughout the duration of the project. It will be used by The University to provide understanding as to how to maintain and update the models after project handover. An updated PEP must be included, along with all Design models, as part of each audit submission.

3.5 Modeling and Data Requirements

One of the main risks targeted by this process is to reduce the data loss, delay and quality of handover documentation.

As such BIM Compliance audits will target the data and document collection, focusing on whether the models are sufficiently robust to support the collection and collation of additional information against those assets

that are tracked by the University, and which will be transferred into their Computer Maintenance Management Software (CMMS).

The design models shall be created to include all geometry, physical characteristics, and product data needed to describe the required scope of the project. All drawings and schedules required for assessment, review, bidding, and construction shall be derived directly from the models.

Appendix D establishes the modeling and data requirements against which models and documents will be audited. For ease of use, the model and document requirements are broken into the following groupings:

- **Document Deliverables:** Updated PEP, risk assessment matrix, virtual coordination matrix
- **Model Consistency -** Alignment between the BIM requirements and the PEP, PEP readability/clarity, alignment with models, phasing consistency, cleanup, duplications/placeholder objects.
- **Model Coordination -** Modeling precision, clearances, virtual coordination.
- **Assets Extraction -** Modeled objects, geometry level, scope clarification, in-place families, asset granularity.
- **Assets Location -** Model alignment, room bounding, existing rooms, associated room, level, room type and multiple repetitive rooms/floors.
- **Assets Classification -** UniFormat 2010 classification, consistent category, descriptive names, system naming.
- **Data Clarity -** Built-in parameters, object relationship, views and schedule data usage.

The Design Team is required to provide in the PEP, for approval by the BIM Consultant, the strategies, workflows, process, and protocols that they are proposing to use to meet these requirements. BIM compliance reviews will be conducted relative to these agreed requirements.

3.6 Tracked Assets Requirements

The Data and Geometry Specification (DGS) in **Appendix F**, identifies assets that must be modeled when part of the design. These assets, defined as 'Tracked Assets', are of critical importance for Facilities Management (FM) and will serve as containers for additional data and documents to be collected, on the external data base during the construction phase of the project.

Each responsible party is required to validate and ensure that all the data fields as defined are provided with the appropriate and correct information for each asset listed in the DGS prior to IFC submission.

Please note: The Design Team is required to review and refine the DGS by identifying which asset types they anticipate will be part of the project, assign responsibility to a consultant team, and indicate any variations they would like to submit for approval. The goal of this process is to align expectations and accommodate any reasonable adjustments to the BIM Specification on a project-by-project basis.

3.6.1 Minimum Geometric Level

The DGS defines the minimum Geometric Level (G0, G1, G2, G3) required at different stages of the design phase for each tracked asset type when part of the design. Tracked assets must be modeled as Revit Families and associated with a consistent category. 2D symbols or 2D lines as the only form of representation will not be accepted.

The following table provided for general guidance sets out the expectation for each level. Full details defining all geometry expectations is defined in the Notes, tab on the DGS/DCS spreadsheet.

Classification	Description	Requirements

G0	Conceptual Elements	Approximate Geometry (LOD 200)
G1	Accurate Elements	Accurate Geometry (LOD 300)
G2	Data Rich Elements	Plus accurate Family, Type, System, Mark, and Type Mark data if applicable**
G3	Data Rich Elements +	G2 requirements plus Parent-Child relationship data if applicable**

3.6.2 Asset Type Classification System

To remove the requirement for a stringent naming schema, the University has selected UniFormat 2010 as the classification management system for organization, sorting, and retrieval of asset information for all tracked assets.

In the DGS, each asset type is associated with a corresponding UniFormat number and title. This classification must be used by the Design Team to identify tracked asset types in the models. The Design Team must describe in the PEP the process they will use to assign this information to model elements and their proposed QC process to check for accuracy.

3.6.3 Required Parameters

Specific required parameters relative to tracked assets are defined in the DGS along with the project phase by which the information should be present in the data set. As the inherent data within the Design models is going to be used to drive downstream processes, it is required that critical information be provided consistently in 'built-in' parameters. It is of critical importance that design teams adhere to the parameters identified in the DGS, in order to successfully extract the specified data for each tracked asset required for the University's CMMS system. If there are deviations from the identified parameters, they should be noted in the PEP.

A typical workflow involves extraction of the data from the model elements into an external database. To be of value for oward migration to the University's CMMS system, and to mitigate the risk of disconnected, incomplete information for FMO, the accuracy and consistency of the data is critical. A workflow describing the importance of data rich model elements during data extraction is described in **Appendix M**.

3.6.3.1 Tags

'Mark' and 'Type Mark', when applicable, must be used when placing tags on sheets and generating the various schedules. The DGS, **Appendix F**, identifies assets that must be tagged at the type level (the ones that require 'Type Mark') and at the instance level (the ones that require 'Mark') at each milestone.

3.6.3.2 Parent/Child Relationship

It is critical for The University that tags also communicate parent/child relationship between assets. To achieve this goal, the Design Team is required to adopt one of the following methods:

1. **Method 1 - System Name**

The method of using the 'System Name' parameter is acceptable if all of the following conditions are met:

- The naming is consistent in formatting for all 'System Name' parameters in the project and abides by DAL's naming requirements.
- The parameter 'System Name' must only be used for parent-child relationships. If the software automatically populates the 'System Name' parameter or there are null 'System Name' parameters present in the project, they should not be in the same format used for parent-child relationships.
- The parameter 'System Name' will be used for parent-child relationships for all tracked mechanical assets that require a parent-child relationship.
- The parameter 'System Name' will be used for parent-child relationships for all tracked plumbing assets that require a parent-child relationship.
- If the mechanical and electrical models are separate models, the mechanical and electrical components that share a parent-child relationship will have an electrical element in the electrical model that will be used to represent the mechanical element in the mechanical model that will be associated with it. Project Teams must include in the PEP which parameter will be used to show the connection between electrical model elements and mechanical model elements.
- If the mechanical and electrical models constitute parts of the same model, the built-in Revit parameters can be used to establish mechanical and electrical element relationships.
- All 'System Name' parameters will have a system identifier as the first parameter in the name (i.e. SA3-VAV1 for Supply Air 3). It is up to the Project Teams to include their methodology in the PEP.
- All tracked assets that require a parent-child relationship must be easily identifiable by using the 'System Name', 'Panel', or 'Panel Name' parameters as to which asset is the parent or child once all the data has been extracted from the models and the models are no longer in use.
- A description of acronyms needs to be provided in the PEP for system naming (i.e. SA3 for Supply Air 3) for FMO purposes.

2. Method 2 – Shared Parameter

Use a shared parameter to place the parent's tag and use the parameter 'Mark' to capture the asset tag. The same shared parameter must be used across models.

Please note: Some electrical categories have built-in parameters within Revit that automatically capture this required parent information and therefore are excluded from this requirement. The Design Team must identify in the DGS which tracked assets fall under this exemption.

3.6.3.3 System

The DGS also defines which asset types require System information. The Design Team must use the prefix and nomenclature defined in **Appendix C** for systems.

3.7 Room Requirements

The Room Specifications, **Appendix F**, defines the data that must be present in the models for different room types along the project timeline. It also defines the **Council of Ontario Universities (COU)** classification system to be used by the Design Team to number and tag architectural rooms, including shafts and interstitial floors, as a way to facilitate compliance checks and campus planning processes.

Rooms must be placed to capture assets outside the building, ie, room equipment, tracked assets on external walls, assets within landscaping, i.e. parking ticket machies, charge stations, emergency call points)

3.8 Area Plans

The Design team is required to generate area plans and the schedules to capture the following information:

- Gross area of the building by level which is to include the overall building total gross area.

3.9 FF&E

The University will be collecting information relative to fixed furniture, finishes, and equipment. The Design Team must record in the PEP the method they plan to use to capture:

- Floor and ceiling finish material and colour.
- Equipment, all installed equipment i.e. kitchen appliances and bathroom fixture.

3.10 Estimating

The University will be using the models to help support Class D, C + B estimating. The goal to undertake more frequent estimates to help ensure the design stays in alignment with project funding.

As such the University requires design teams to follow the DGS in order to support the generation of high quality data during design. It is of critical importance for all elements in the model to be representative of the design intent in terms of type and size even when not listed in the DGS as a tracked asset (i.e., pipes, ducts, cable tray, walls etc.).

The Design Team must record in the PEP any elements that will not be modeled to support this goal.

3.11 Energy Analysis / Sustainability

The models, irrespective of software, will be used to help support The University's energy analysis / environmental and sustainability goals and as such the following should be considered.

- Site and building location, with a focus on ensuring the correct orientation to true north along with the site / building elevation relative to a reference datum.
- Building storey's, usage and if requested 3D geometry of adjacent buildings that would impact the site.
- Classification, construction type and the material of building elements needs to be provided for: Walls (interior / exterior), curtain walls, roof, floors/slabs, ceilings, windows/skylights, doors, and shading devices.
- Ceiling heights and space objects, including those defined by virtual space boundaries.

3.12 Existing Facilities: Renovations/Extensions

3.12.1 Relocated/Modified Elements

The expectation is that, where feasible, all work shall be undertaken using a BIM process. The Design Team is required to detail in the PEP any areas where a CAD workflow is proposed and their anticipated process for the capture of new tracked asset information located within this area.

All existing elements that are modeled must reflect their real geometry and location. Should a new MEP tracked asset be added to an existing room, the Architect must place a room object to capture this information. The room may be generated using room separation lines but must contain an accurate room name and number.

If an existing element needs to be relocated or modified due to the proposed design, then it should be treated as a design model element and must comply with all the requirements set out in the BIM Specification.

The PEP should be used to record any requested exceptions.

3.12.2 Risk Mitigation

Working with existing facilities, with historic drawing records adds an additional risk to the process and as such the Design Team must develop a strategy and workflow to mitigate this risk. An example workflow is included in **Appendix P.**

The goal is to provide The University, along with the project team, an opportunity to assess the risk by considering factors that might help reduce the risk against the cost of additional investigation to ensure that the model reflects the actual facility.

The risk assessment should consider:

- Perceived reliability of the existing 'record drawings'.
- Conventional or laser scan survey to be undertaken or a combination of both.
- Degree of modeling required.
- Verification of loads and capacity of existing systems.

These factors are considered against:

- Facilities age.
- Extent of renovation.
- Degree of required interference checking, back into the existing facility.
- Project schedules.
- Accessibility of systems, structure for validation i.e. is destructive investigation required.

This is not an exhaustive list; it is indicative of those issues that should be considered prior to commencing any modeling effort.

Please note: As-built or record drawings alone should not be relied on as accurate information. They may be a starting point for the generation of a model that is subsequently refined when verification activities take place. A verification strategy and risk assessment must be documented in the PEP. If, at any time in the project, an as-built drawing is found to be incorrect or inaccurate, the responsible party must record the inconsistency in a redline markup, and formally notify the University.

3.13 Virtual Coordination

Virtual Coordination is a key process in helping to mitigate risk for the project. The Design Team must use the minimum Geometric Level (G1, G2, G3) defined in the DGS (**Appendix F**) to ensure assets are accurately created and placed in the models. Without reliable 3D models, the risk of downstream coordination issues and

delays during the construction phase increases, often generating long-term issues for effective maintenance of the facility.

The aim of virtual coordination during the design stage is to mitigate major design issues before the construction phase.

The Design Team must document in the PEP how they propose to conduct virtual coordination, using **Appendix K** as a reference. The following items must be addressed:

- **Coordination Software** - Which virtual coordination software will be used. This software must have the ability to automate the clash review process based on customizable settings using the model geometry and underlying component information. It must also have the ability to uniquely track issues, assign responsibility, save views of issues and maintain a record of the eventual resolution of coordination issues.
- **Schedule -** What is the proposed frequency of reviews/meetings.
- **Clash Coordination -** How hard and soft clash checks will be done and who will be responsible for creating the federated model, running clash tests, reviewing, and grouping the results.
- Hard clashes - physical conflicts between two objects
- Soft clashes - objects impinging on required clearances for code, maintenance or replacement needs. Clearances for maintenance must include the required access column to reach equipment
- **Building Review -** How visual checks will be done to resolve potential constructability or design issues not highlighted by either a soft or hard clash.
- **Colour Coding -** Which colours will be used to distinguish model elements/systems/disciplines.
- **Issue Tracking Strategy -** How issues will be tracked, prioritized, assigned, and shared across the Team and with The University. Virtual coordination reports should include a unique identifier of the issue, date, location, level, disciplines involved, graphical representation of the issue, status field, severity/risk, assignment of responsibility and timeline for resolution.

Please note: Access to a free 3D viewer along with access to the selected virtual coordination and issue tracking software must be provided to the University and their BIM Consultant.

3.14 BIM Compliance Reviews

The BIM Consultant will conduct BIM compliance reviews focused on ensuring compliance with the BIM Specifications as described in **Appendix I**. *M*odel and data requirements will be reviewed for each design model using the PEP as reference for any agreed exclusion. A report will be generated and shared with the Team and the University, indicating the modeling, data and workflow issues that must be addressed prior to the next review.

Please note: The BIM compliance reviews, conducted by The University's BIM Consultant are focused on issues and requirements defined in this document, they do not address any design compliance issues with the facility program, codes or constructability. That is the sole responsibility of the Design Team.

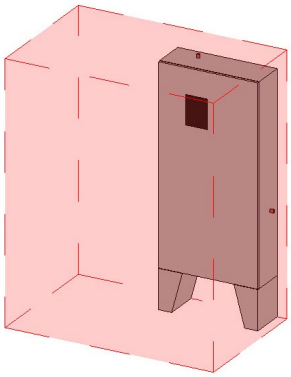
The following image provides a diagram of the issues that the BIM Consultant will focus on during an audit. The Design Team must ensure that all the required information is accessible and available in the models by IFC submission and is in full compliance with the BIM requirements.

CATEGORIZATION

Family/type name descriptive and consistent?
Uniformat II classification?
Asset type?
Tracked by the owner (DGS)?

SCOPE

Existing, future, demolished?
NIC?
Tender package?



COORDINATION

Placeholder?
Duplicate asset?
Coordinated?
Required clearances?

INFORMATION

Location (level/room/unit)?
Asset tag?
Parent's tag?
System?

BIM Consultant focus issues for submissions

Please note: BIM Compliance Reviews will align with the project Milestone Submissions and should not be more than three months apart.

3.15 Record Model Update

It is of critical importance to The University that the design models provided at substantial completion be an accurate geometric representation inclusive of the design rationale of what has been constructed.

To achieve this, the Team must record in the Design BIM PEP the process proposed to capture, within the design models, the geometry and design rationale changes that have occurred during construction. **Appendix L** has a recommended workflow and should be used as reference. The proposed process should define the timeline, milestone checks for update, along with the accuracy that is to be applied to the design rationale, systems, and assets.

Please note: There is **no** requirement to replace original design rationale data with installed asset information.

It is the Construction Team responsibility to ensure that changes are conveyed to the Design Team. This update must occur during and not after construction. The BIM Consultants will be checking to ensure that this process is occurring.

Please note: Fabrication models are not acceptable as an alternative to updated Design Models.

Appendix G contains a recommended Accuracy Table for model updates. The Team is expected to review and provide and updated version of this table.

3.16 Design BIM Deliverables

BIM deliverables	Design Team	BIM Consultant	Dalhousie University

Updated PEP	x		
Design models – All disciplines	x		
Source software files – Civil, landscape, specialist sub-consultants	x		
Consolidated PDF sheets – By discipline, including civil, landscape and specialty consultants	x		
Federated model NWC and NWF – All disciplines including civil and landscape	x		
Risk Assessment Matrix	x		
Risk Analysis Plan – For Existing Facilities	x		
Virtual coordination report – For all CD submissions	x		
BIM compliance review report		x	
Reviewed PEP		x	
Updated PEP	x		
Sheet sets per tender package	x		
Design models – All disciplines	x		
Source software files – Civil, landscape, specialist sub-consultants	x		
Asset Registry per tender package		x	
Access to Data Collection Environment		x	
Asset Registry sign off			x
Updated PEP	x		
Fully coordinated design models – All disciplines	x		
Source software files – Civil, landscape, specialist sub-consultants	x		
Sheet sets (all disciplines)	x		
Source software files – Civil, landscape, specialist sub-consultants, single line diagrams, existing facilities and other approved exceptions.	x		
Design specifications (.pdf)	x		
Asset Registries		x	
Access to Data Collection Environment		x	
Asset Registry sign off			x

Please Note: In a tender package submission, design models provided by the Design Team are not going to be audited. The BIM Consultant will only use those models to create an Asset Registry.

4 CONSTRUCTION PHASE REQUIREMENTS

The relevant ISO 19650 sections are as follows:

- ISO 19650 5.7 INFORMATION DELIVERY MODEL.
- ISO 19650 DOCS: BEP CONSTRUCTION, EIR.

4.1 BIM Construction Kick-off

The BIM 'Construction' Kick-off meeting, to be held soon after issuance of the IFC documents, is an essential step to open lines of communication. The University's BIM Consultant will provide a general review of the BIM

requirements, identify areas of focus for the project and clarify any issues. It is required for all the trades involved in the project to have a qualified BIM representative attend the meeting as the specifics of the BIM processes will be discussed.

Please note: Issues raised during the meeting must be addressed and resolved in the PEP.

The Construction Team should table a draft Construction PEP and be prepared to discuss:

- Workflow strategies and information exchanges.
- Project timeline (simplified to better visualize BIM requirements in the context of the construction of the project).
- Asset Registry and Data and Document collection requirements.
- Virtual coordination strategies, utilizing design and trade models.
- Record model strategy

4.2 Project Execution Plan (Construction PEP)

The Construction Team must continue to develop and maintain the Project Execution Plan (PEP) started during the Design Phase of the project. The Construction Team should plan to have an updated and complete version of the Construction PEP prior to the Construction Phase BIM Kick-off Meeting.

Appendix E contains an outline of the issues that must be addressed in the PEP. The main requirements are related to specific workflows and strategies regarding Virtual Coordination, Design Model Update and Change Management.

Please note: An updated version of the Construction PEP must be provided when changes occur. The University's BIM Consultant will then review and flag issues.

4.3 Data Collection Requirements

The Data Collection Specification (DCS), **Appendix F**, defines the data and documents required to be collected during construction relative to each tracked asset, when part of the project.

Please note: The collection parameters listed in the DCS will be created and managed in an external database by the University BIM Consultant. These parameters will not be included in the design models.

The DCS contains the following information:

- Master list of tracked asset types organized by groups.
- Data/documents required relative to each asset type, if part of the design, to be collected during construction, such as approved shop drawings, serial number, manufacturer, warranty certificate, etc.
- Number of parameters required for data collection for each asset type.

4.4 Asset Registry

The BIM Consultant will generate a project specific Asset Registry based on the consultant's models around the issuance of 95% CD to IFC, or after each IFT submission. This document will list all tracked assets that are part of the project against which additional data and documents must be collected during construction.

The Team must be available to provide clarifications to the BIM Consultant, to ensure the Asset Registry is accurate and includes all tracked assets that are part of the construction scope. The University will be responsible for the Asset Registry sign off.

4.5 Data/Document Collection Environment

Unless otherwise noted, it is the responsibility of the University or their designated BIM Consultant to provide, for the duration of the project, a Data Collection Environment (external database). This environment will be an external database that supports the association of data and documents to the design model elements such as approved shop drawings, warranty certificates and other installed information.

Please note: The Design Team is **not** required to adjust any of the design information to reflect the installed product, within the design Revit models. All additional data and documents will be handled in the external database.

The Construction Team is required to work with the BIM Consultant to assign responsibility for all tracked assets to the specific responsible trade. The Construction Team is responsible for ensuring that the trade complies and uploads all the required data and documents, as defined in the Document Collection Specification (DCS), to the Data/Document Collection Environment.

The BIM Consultant will be responsible for:

- Extracting information from the design models and generating the Asset Registry.
- Managing the External Data base and providing the interface.
- Working with the Construction Team to undertake a QC review for alignment between asset registry and trade scope.
- Working in collaboration with the Construction Team, the BIM Consultant will assign responsibility, in the external database, to the agreed applicable trade, in accordance with their defined scopes.
- Generating accounts so that project participants can access and review information.
- Providing training and support to the appointed responsible party to facilitate the collection of the information.
- Providing periodic upload progress reports.
- Transferring uploaded information to The University's CMMS solution at substantial completion.
- Providing a structured digital report that presents data and documents collected in a structured, integrated, and easy to navigate format.

The Construction Team will:

- Work with the BIM Consultant to define trade scope and responsibility.
- Provide contact information within four (4) weeks of each trade contract award (company, name, email, scope of work)
- Provide and upload both metadata (text, dates) and documents to the Data Collection Environment.
- Flag any design data inconsistency that impairs the upload process.
- Address issues flagged or concerns raised about upload progress.
- Advise of any tracked assets within a trade's scope which are not included in the Asset Registry.
- Undertake a QA/QC process on uploaded information to ensure that the data required for FMO is accurate, associated to the correct element, and reflecting the installed asset information. This process must be documented in the PEP.

The University will:

- Undertake QA/QC reviews of the uploaded data and documents using the digital report provided by the BIM Consultant or the Data Collection Environment.

4.6 Data /document Upload

The BIM Consultant will organize the external database so that each party responsible for providing upload information will only see the assets that they are required to provide information against. **Appendix J** defines the data collection workflow.

Trades will be required to participate in the data and document upload, providing the required information as noted in the DCS. Requirements are specific to the different asset types. Shop drawing approval is the trigger for the trades to begin uploading information that is now fixed, e.g. shop drawings, life expectancy, manufacturer, model, type, vendor, etc.

The expectation, unless agreed otherwise and recorded in the PEP, is as follows:

- The Construction Team will provide to the University / University BIM Consultant and keep up to date a schedule for anticipated shop drawing approval.
- All required information defined in the DCS, which becomes fixed on approval of shop drawings, will be provided within 4 weeks.
- Manufacturers' instruction manuals will be uploaded to the cloud database as soon as they become available, to support development of critical preventative maintenance programs.
- Each PDF file will be specific to the asset type and no PDF file will be uploaded containing multiple asset types. For example, Light Fixture – shop drawings: should be by type, and not include all types of fixtures on the project.
- All uploaded PDF's, including stamped approved shop drawings provided by trades, will be submitted as software-generated PDF's. No scanned documents will be accepted.

The required timeline for the data and document collection is to be defined in the PEP. All required data and documents must have been uploaded and reviewed prior to substantial completion. Collected information will be transferred to The University's CMMS system at handover.

4.7 Constructability Analysis

Independent of contract type, once the contractor is involved and part of the project, the Construction Team will participate actively in the BIM process, reviewing the design for constructability issues, maximizing the efficiency of the construction schedule, and evaluating opportunities for prefabrication.

Design models will be shared with the Construction Team and must be used to generate a federated model for enhanced virtual coordination with sub-trade fabrication models, construction sequencing/optimization and other activities.

Please note: The use of the design models is at the risk of the user. The Construction Team will be responsible to validate any models they use before basing decisions on their content.

Where fabrication models are developed, they must be listed in the PEP and must be included as part of the project handover requirements.

4.8 Construction Sequencing

It is expected that the Construction Team use the models and associated construction documents to optimize the construction sequencing by establishing optimal means and methods regarding construction. The strategy for construction sequencing must be defined by the Construction Team and described in the PEP.

4.9 Virtual Coordination

The expectation is that the design phase models will be used, in conjunction with fabrication models, to mitigate risk and maximize efficiency. The fabrication models must be created by the trades and linked into a federated model in which virtual coordination and clash detection processes will occur in order to mitigate risks and maximize efficiency.

Once in the construction phase of the project, the fabrication models must be used for virtual coordination and the trades must ensure that all clashes are resolved in a specific area in the model before construction is set to commence in that same specific area of the building.

A recommended workflow for virtual coordination can be found in **Appendix L**. The Construction Team must document in the PEP the process, participants, fabrication software and coordination software that they propose to use to manage this process. The following information should be considered:

- **Design review -** Resolution of any remaining design phase issues.
- **Clash coordination -** Hard and soft clashes check. Hard clashes are physical conflicts between two objects. Soft clashes are objects impinging on required clearances for code, maintenance, or replacement needs. Clearances for maintenance must include the required access column to reach equipment.
- **Fabrication models -** List of trades providing fabrication models and the systems being represented. Coordination of fabrication level models, which should include hangers, seismic restraints, supports, accessories, etc. that have not been modeled during the design phase.

Please note: Trades are required to generate fabrication models to support the virtual coordination workflow and mitigate risk. Any exemption must be recorded in the PEP, with the rational and be approved.

- **Software -** Software must have the ability to automate the clash review process based on customizable settings using the model geometry and underlying component information. It must also uniquely track issues, assign responsibility, save views of issues and maintain a record of the eventual resolution of coordination issues.
- **Schedule -** Frequency of reviews/meetings.
- **Issue Tracking Strategy -** How issues will be tracked, prioritized, assigned, and shared across the Team and with The University. Virtual coordination reports should include a unique identifier of the issue, date, location, level, disciplines involved, graphical representation of the issue, status field, severity/risk, assignment of responsibility and timeline for resolution.
- **Change Management -** Method for capturing changes that require feedback and updates in the Design Models, tracking and reporting any changes to tracked asset, location, orientation, or access requirements for maintenance.

4.10 Record Model Update

Of critical importance to The University is that the design models provided at substantial completion are an accurate representation of the actual built facility. To that end, the Construction Team is required to provide in the PEP their timeline and workflow for providing the Design Team with the information they require to

update their models to reflect changes. This includes schematics, single line diagrams and panel schedules to reflect the equipment controlled.

The PEP should also record the accuracy of the information being relayed to the Design Team relative to different systems/assets, rooms, underground services, etc. The following changes should be considered:

- Size and routings (pipe/ducts).
- Count/number (added/removed elements).
- Location (level, room, x, y).
- Elevation (z).

The Design Team must update the design models during construction so that the external database is kept current and, at substantial completion, the models reflect the built facility. Changes that impact tracked assets must be recorded and reported to the BIM Consultant so that, if required, the external database can be updated.

Appendix G: contains a recommended Accuracy Table establishing the accuracy requirements for model updates. The Team is expected to review and provide any requested changes for sign off.

Appendix L: has a recommended workflow for record model update. It assumes that the Construction Team will define focus areas in the building (e.g. a level, a room, a zone) before starting the development of fabrication models. These models will then be used for virtual coordination sessions.

Specific meetings involving the Design Team will be required to address unresolved or newly found design issues, discuss locations where fabrication models have deviated from design models and when services protrude into public spaces or below clearances. These meetings will be triggered by the Accuracy Table. When a focus area has no coordination issues, the area must be signed off by the Team.

After an area sign off, trades can proceed to install systems and equipment. Final updates to the fabrication models during this process may be required to reflect as-built conditions. Updated fabrication models, if available, must be shared by the Construction Team with the Design Team along with a 'Design Deviation Area Report', a document that highlights changes that triggered the Accuracy Table and that indicate where an update is required in the design models.

4.11 Laser Scanning

Laser scanning is highly recommended for critical areas of the building as it provides a high degree of accuracy for incorporating into the Record Model. These scans are also needed for virtual coordination in existing areas that are part of the new construction phase. The Construction Team must record in the PEP the areas to be scanned for sign off by The University, as additional areas may be required on a project-by-project basis. All laser scans, as point clouds, are to be provided as part of substantial completion deliverables.

During construction, the Team may encounter existing conditions that are different from those reflected in the design drawings. If the difference results in a change in design, additional Laser scanning surveys will be performed by the Construction Team.

4.12 BIM Progress Review

The BIM Consultant will perform BIM progress reviews to ensure that the required processes, as defined by the Construction Team in the PEP, meet the outcomes defined in the BIM Specifications.

The Construction Team and The University will define in the PEP the frequency and schedule for the BIM Progress Reviews. Issues flagged by trades in the Data Collection Environment will be reviewed and may trigger changes in the asset registry or requests for design model updates.

Following each review, a data and document upload progress report will be generated by the BIM Consultant and shared with the Construction Team. This report will summarize main pending issues and give details about the upload performance of each trade.

4.13 Substantial Completion BIM Deliverables

The following requirements are specific to BIM deliverables and are to be available at substantial completion of the facility.

BIM deliverables	Design Team	Construction Team	Trades	BIM Consultant	Dalhousie University
SUBSTANTIAL COMPLETION					
Completed Project PEP	x	x			
Record Design Models (.rvt) updated to the version agreed in the PEP	x				
2D CAD (non-Revit, i.e. civil, landscape, single line diagrams, existing facilities and agreed exceptions	x				
Final consolidated Record drawings set (.pdf)	x				
Design specifications (.pdf)	x				
Laser scan point clouds (if requested)		x			
Federated fabrication models (if generated)		x	x		
Data transfer templates for CMMS					x
Project information extracted from the external database, as a consolidated digital building				x	
Structured digital report that presents data and documents collected in a structured, integrated, and easy to navigate format				x	
Data/document collection sign off					x
Tracked asset information and associated data and documents, exported in a format to be agreed, for import into The University's CMMS				x	
Lessons learned report				x	

5 CLOSEOUT

The relevant ISO 19650 section is as follows:

- ISO 19650 5.8 PROJECT CLOSEOUT

The concept is described in ISO 19650 as an approach to support a smooth transition into the operational phase of a project. This is charactized by a strategic plan and gradual handover which occurs throughout the projects life, from inception to completion and beyond, into the lifecycle of the building.

This concept has been adapted to align with the North Americian market and aligns with the structured workflows defined within this document, where information is collected irratively, from early design onwards through construction to enable the development of preventative maintenance plans, support commissioning efforts, support QA/AC, provide clarity around maintenance reqirements and enable the data transfer into CMMS. The process aligns with the traditional roles, responsibilities and work effort. **See Appendix N**.

6 APPENDIX

6.1 Appendix A - Acronyms

Acronym	Description
3D	Three Dimensions (x,y,z)
2D	Two Dimensions (x,y)
BAS	Building Automation Systems
BIM	Building Information Management / Modeling
CAD	Computer Aided Design
CAFM	Computer-aided Facility Management
CD	Construction Document (project phase)
CMMS	Computerized Maintenance Management System
CO	Change Order
COU	Council of Ontario Universities
the University	Dalhousie University
DCS	Data Collection Specification (Construction)
DGS	Data and Geometry Specification (Design)
DWF	Design Web Format (file format)
FMO	Facility Maintenance and Operations
G#	Minimum Geometric Level of a tracked asset
HVAC	Heating Ventilation and Air Conditioning
IFC	Issued for Construction (project phase)
IFT	Issued for Tender (project phase)
MEP	Mechanical, electrical and plumbing
NIC	Not in Contract
NWC	Navisworks Cache (file format)
NWF	Navisworks Document (file format)
PDF	Portable Document Format (file format)
PEP	Project Execution Plan
PLC	Placeholder
QA/QC	Quality Assurance / Quality Control
RFI	Request for Information
RFP	Request for Proposals
SI	Site Instruction
VDC	Virtual Design and Construction

6.2 Appendix B – Glossary

Term	Definition
Accuracy Table	Sets out the degree of accuracy required between the 'Record Model' and the actual as-built condition for different assets, assemblies and building components. The Team is expected to review and provide and updated version of this table.
Asset Registry	A list of every asset present in a project's design models which will have data and documents collected against it. The DCS will specify the parameters required relative to each asset type.
BIM Compliance Review	The project's BIM Consultant will be responsible of evaluating compliance of the Design Team models with the established BIM Requirements. While full compliance is not expected early in a project, the BIM Consultant will issue a report periodically to assist the Project Team in prioritizing compliance to ensure Dalhousie University (the University) receives the full benefit of a BIM process. Submissions must work towards full compliance by their 95% CD milestone.
BIM Progress Review	The project's BIM Consultant will be responsible for ensuring that the required processes defined by the Construction Team in the PEP meet the outcomes defined in these requirements. BIM Progress Reports will be issued periodically with comments about the upload progress and construction workflows compliance.
Building Information Management/ Modeling (BIM)	BIM is a process for creating and managing information on a construction project throughout its whole life cycle. As part of this process, a coordinated digital description of every aspect of the built asset is developed, using a set of appropriate technology. It is likely that this digital description includes a combination of information-rich 3D models and associated structured data such as product, execution, and handover information. (NBS UK).
Clash Review Process	A virtual coordination activity that utilizes software rules and automation for the purpose of identification of physical and clearance (hard and soft) clashes.
Consolidated Digital Building	Augmented database that ties all required data and documents generated and collected during the project to the relevant 'Record Model' objects. Also includes new stakeholder custom views along with any 'Federated Models' used during the project.
Construction Model	A model (Revit) optionally developed and managed by the Construction Team for internal purposes such as enhanced virtual coordination, constructability and sequencing optimization.
Data and Geometry Specification (DGS)	The DGS is a spreadsheet which includes a master list of all assets that must be modeled, if they are part of the design, along with the data parameters that the Design Team must include during the Design Phase. Each asset type is associated with an Uniformat 2010 Title and Number to be used in the Design Models to identify FMO assets.
Data Collection Specification (DCS)	The Data Collection Specification (DCS) provides a master list of Model Elements (element types) that are tracked by the FMO Team. It is meant to be provided at the RFP stage to the Construction Phase Team for the purpose of communicating expectations, the types of data and document requirements associated with elements types, if they are part of the project. The BIM Consultant will normally produce an Asset Registry once an IFC or IFT submission is generated for the purpose of facilitating Data collection. The BIM Consultant may generate a preliminary Asset Registry earlier than IFC to allow

Term	Definition
	Trades to have a better idea of what data collection requirements will be for a specific project. Data collection will occur using the Data Collection Environment provided by the BIM Consultant.
Data Collection Environment	The Data Collection Environment is the platform to be used during the Construction Phase to link files and information to the database extract from the design models. The Data Collection Environment is an intermediate step to aid in the collection of installed asset information extracted and transferred to the facilities maintenance and operations (FMO) Computerized Maintenance Management System (CMMS) system.
Design Deviation Area Report	A document developed by the Construction Team that highlights construction changes triggered by the Accuracy Table. The Design Team is expected to use this document to generate record models that reflect as-built conditions.
Design Models	Individual models (Revit) that are created and maintained exclusively by members of the Design Team and are used to produce construction documents. These models are kept current throughout construction incorporating construction changes.
Design Model Update	Refers to any and all issues during the construction phase with respect to deviations from IFC Design documents, i.e. via an RFI, SI, CO, Field Notice/Directive, other documented process or verbal clarification, whether or not associated with cost, which must be updated within the Record Model.
Digital Building Review Process	A virtual coordination process used in design to explore the design by walking through the Federated Model in a virtual environment to track and note issues. Normally involves the colour coding of different building systems and captures design issues that are not necessarily physical conflicts (for example, a column directly in front of a window).
Fabrication Model	A fabrication model is a geometrically rich and detailed 3D model that may be generated by a trade (Revit or non-Revit) to enable prefabrication and enhanced Virtual coordination prior to construction. For example, while a 'design model' for HVAC ductwork will include duct sizes at various elevations, the 'fabrication model' will additionally include necessary weld gaps, hangers, additional valves relating to design specifications, controls and other design tolerances necessary for building, assembling and operating the final product. Fabrication models will be used by the Construction Team, if generated, for virtual coordination during construction, not for association of data for FMO purposes.
Federated Model	A consolidated model (non-Revit) that is comprised of multiple models from various sources whose identity or integrity cannot be modified. Normally, a federated model is used to bring together 'design model', 'site/civil model' and 'fabrication models' into a single environment for the purpose of virtual coordination during Design and Construction phases.
Focus Coordination Area	Area of the building in which coordination efforts will be concentrated. Typically, a level, room or zone, depending on the size of the building and construction phasing.
Geometric Level	A code that communicates the *geometric* level of a model element (G0, G1, G2, G3) as defined in this document.
Model Element	A 3D virtual representation of an object. May be at varying geometric levels.

Term	Definition
Project Execution Plan (PEP)	The Project Execution Plan (PEP) is an editable "living document" which is to be maintained and updated by the project lead throughout the project's life. It is meant to capture project information, modeling and workflow strategies that are specific to a given project. The updated document must be included in all submissions.
Record Model	Final updated 'design models' (Revit), including updates to reflect the agreed as-built condition. The models must contain all views, rooms, sheets, auxiliary 2D/3D links and schedules used to generate 2D construction documents.
Site Model	A 3D civil engineering model (non-Revit), containing underground services. This model is to be aggregated into a 'federated model' to ensure virtual coordination with incoming services has occurred.
Shop Drawings (Approved)	Shop drawings in electronic PDF, software-generated document (not scanned) with necessary approval stamps, dates, and equipment selection clearly identified. Document should be uploaded by element type and must be text-searchable. No password or printing restrictions should be applied.
Tracked Asset	A model element of interest to Dalhousie University (the University) which will be maintained post-handover with additional data and document collection requirements as outlined in the Data Collection Specification (DCS). Model elements must be placed in the models (as a component family) if the asset is part of the design.
Viewer/External Database	The Viewer/External Database is the environment/software used to distribute information for the purpose of access and review during design and construction of a project. The Viewer/External Database may also be the Data Collection Environment.
Virtual Coordination	Refers to the BIM workflow associated with both the Digital Building Review Process and the Clash Review Process used to capture issues and assign responsibility for resolution of such issues throughout a project's Design and Construction phases. *Hard clashes* are clashes that occur due to the physical conflict of two objects not being able to occupy the same space. Emphasis will be placed in areas of high congestion of ductwork, piping or equipment. *Soft clashes* are additional clashes set up to account for known clearance requirements that could limit or inhibit the adequate construction, maintenance servicing or operation of equipment.
Virtual Coordination Report	A report to be generated by the Team for the purpose of documenting and demonstrating that virtual coordination is occurring, and that issues are being assigned and resolved.

6.3 Appendix C - Mechanical and Electrical System Prefixes

6.3.1 Piping Systems

System Name Prefix	Description
BFW	Boiler Feedwater
BP	Boiler Purge

System Name Prefix	Description
HGLCDWS	Hydronic Glycol Condenser Water Supply
IRR	Irrigation

BR	Breeching
CHWR	Chilled Water Return
CHWS	Chilled Water Supply
CDD	Condenser Drain
CR	Condenser Water Return
CS	Condenser Water Supply
CHTR	Constant High Temperature Return
CHTS	Constant High Temperature Supply
CRV	Corrosion Resistant
DE	Diesel Exhaust
DHUM	Dehumidification System
DCW	Domestic Cold Water
DHW	Domestic Hot Water
DHWR	Domestic Hot Water Recirculation
FOF	Fuel Oil Fill
FORA	Fuel Oil Return Above Grade
FORB	Fuel Oil Return Below Grade
FOSA	Fuel Oil Supply Above Grade
FOSB	Fuel Oil Supply Below Grade
FOV	Fuel Oil Vent
FPO	Fire Protection Other
FPPA	Fire Protection-Pre-Action
FPD	Fire Protection Dry
FPW	Fire Protection Wet
FTG	Footing Drain
GC	Gravity Condensate
GLR	Glycol Return
GLS	Glycol Supply
HPC	High Pressure Condensate
HPD	High Pressure Drip
HPS	High Pressure Steam
HPHWR	Heat Pump Hot Water Return
HPHWS	Heat Pump Hot Water Supply
HWR	Heating Water Return
HWS	Heating Water Supply
H	Humidification
HCDWR	Hydronic Condenser Water Return
HCDWS	Hydronic Condenser Water Supply
HGLCDWR	Hydronic Glycol Condenser Water Return

G	Natural Gas
LPC	Low Pressure Condensate
LPG	Low Pressure Propane
LPS	Low Pressure Steam
LTWR	Low Temperature Water Return
LTWS	Low Temperature Water Supply
NG	Natural Gas
P15W40	Process 15W-40
P5W30	Process 5W-30
PC	Pumped Condensate
PCWR	Process Chilled Water Return
PCWS	Process Chilled Water Supply
PATF	Process ATF
PHYD	Process Hydraul56
PNUT	Process Nuto32
PPC	Process Piping Coolant
PSANA	Process Sanitary Above Grade
PSANB	Process Sanitary Below Grade
PST	Pumped Storm
PVEN	Process Ventilation
PDI	Process Water Deionized
PW	Process Water
REF(L)	Refrigeration - Liquid
REF(V)	Refrigerant - Vapour
RW	Rainwater
LPS	(Pressure noted in kPa) Steam Low-Medium Pressure
HPS	(Pressure noted in kPa) Steam High Pressure
SANA	Sanitary Drainage Above Grade
SANB	Sanitary Drainage Below Grade
SANP	Sanitary Drainage Pumped
STM	Storm
ST	Standpipe
STRA	Storm Drainage Above Grade
STRB	Storm Drainage Below Grade
STRP	Storm Drainage Pumped
SRV	Steam Vent
TW	Tempered Water
V	Vent
WT	Weeping Tile

6.3.2 Duct Systems

System Name Prefix	Description
EA	Exhaust Air
OA	Outdoor Air
RA	Return Air
SA	Supply Air

6.4 Appendix D – Modeling and Data Requirements

DESIGN PHASE: Modeling and Data Requirements			
	Title/Topic		**Description**
0	**Required Deliverables for each BIM Compliance Audit**		
	1	Models	○ All design models, including any CAD or Civil 3D files in their native format
	2	Documents	○ Current version of the PEP, risk assessment matrix, virtual coordination log / report
1	**Model Consistency**		
	1	PEP Reliability	○ Workflows and definitions approved in the PEP must be reflected in the models. ○ Attention must be given to model breakdown strategy, project file names, standard levels, phasing strategy and worksets strategy.
	2	Phasing Consistency	○ Phasing strategy proposed in the PEP must be followed, and consistency is expected, i.e. no 'Comments' parameter reading 'existing' and Revit phase set to 'New Construction'.
	3	Cleanup	○ CD and IFC submission models should not contain abandoned designs, testing models, empty worksets, personal views, 'design options' or unnecessary AutoCAD files. ○ All families not part of the project should be purged.
	4	Duplications/ Placeholder Objects	○ To ensure clarity and that only the intended element is used, all duplicate/placeholder objects must be tagged as such (e.g. 'PLC' acronym inside 'Mark'). Provide a clear strategy in the PEP for duplications, which model is the host and which the placeholder. The responsibility of tracked assets in each model should be clear. For example if there are several Architectural models, what assets should be in each model? If there are duplicates which model is the host and which the placeholder? Which model has valid rooms? etc. ○ All placeholder must be removed from the data set by 95% CD submission.
2	**Model Coordination**		
	1	Modeling Precision	○ To support effective virtual coordination, the expectation is that elements will be model to represent their correct size and location in space, including slopes and insulations if applicable. The Team should record in the PEP any elements that will not meet this fundamental requirement. ○ To support energy analysis, consistent materials are expected to be used in all assemblies that compose the building envelope. ○ Use of the out of the box "Basic Ceiling" is not allowed. The use of this element with no thickness, is a known and documented issue that causes problems downstream.
	2	Clearances	○ Mechanical and electrical equipment must comply with clearance requirements for code, maintenance, or replacement. ○ A strategy to ensure proper clearances must be described by the Team in the PEP (e.g. Model a solid geometry as a 'Generic Model' within the Revit Family Editor and assign to the subcategory 'Clearance').

	3	Virtual Coordination	○ Virtual coordination is expected to occur throughout Design. The expectation is that by the end of this phase the models will be virtually clash free. ○ Strategies for managing clearances for non modeled systems/objects must be recorded in the PEP.
3	**Assets Extraction**		
	1	Modeled Objects	○ All elements identified in the DGS are tracked assets that must be modeled if part of the project. Any exception must be documented in the PEP for review/approval.
	2	Geometry (G0/G1/G2/G3)	○ It is a fundamental requirement that objects shown/tagged in sheets are modeled (not lines, filled regions or symbols). ○ All tracked assets must have the 'G level' required in the DGS. ○ Image files representing drawings is prohibited. ○ 2D representation can only be used for elements that do not impact virtual coordination and are not tracked assets. However, these elements must be modeled as families.
	3	Scope Clarification	○ The strategy for identifying assets as existing or future elements, or those that are not included in the contract (NIC) or purchased by the client and installed by others, must be consistently used across all models and recorded in the PEP. ○ If using sequential tendering, all tracked assets must contain their tender package association in a parameter.
	4	In-place Families	○ In-place families cannot be used for tracked assets.
	5	Asset Granularity	○ In some cases, assets can be split up unnecessarily in multiple instances or several assets can be combined into one object (e.g. skids). The breakdown of tracked assets into component parts should be in alignment with the DGS. Exceptions must be recorded in the PEP.
4	**Assets Location**		
	1	Model Alignment	○ All federated models, including civil files and laser scans, must be assembled utilizing the established Revit model origin datum to ensure accurate project geo referencing. ○ Grids and levels must be consistently named and located across all models.
	2	Room Bounding	○ Architectural rooms will be used to categorize tracked assets in the models. To achieve adequate quantification of components inside a room, room objects must use level offsets from the structural floor elevation in the associated level to the underside of the next structural floor/slab/deck above. ○ Ceilings, floors, and wall finishes must not be "Room Bounding'.
	3	Existing Rooms	○ For areas where tracked assets (including other disciplines) are being added or modified in existing areas, those rooms must be modeled using separation lines if necessary, to ensure objects can be properly assigned to the correct room.
	4	Associated Room	○ Each tracked asset must be associated to one specific room. ○ There should be no unplaced, redundant, or overlapping rooms present in any model. ○ Exterior and roof 'rooms' must be modeled using room separation lines and placed with the correct height, to capture elements outside the building envelope. ○ Exterior/Roof rooms must be identified with a prefix.

	5	Associated Level	○ Tracked assets must be associated to the correct level, i.e. the level they are immediately above. ○ Special care must be taken when copying elements inside a model. ○ Modeling across multiple levels must be avoided.
	6	Associated Unit Type	○ The relationships amongst tracked assets, rooms and unit types must be captured for FMO purposes. A strategy to provide this information must be described in the PEP if applicable.
	7	Multiple Repetitive Floors	○ All tracked assets must be modeled on all levels. ○ Each unique floor plate must be modeled in its entirety. ○ Each room must have a parameter that identifies the Unit Type it belongs to. ○ Unit Type variations must be uniquely labeled, i.e. mirrored or flipped versions. ○ A strategy to provide this information must be described in the PEP if applicable.
5	**Assets Classification**		
	1	UniFormat Classification	○ UniFormat 2010 – Level 3 must be used to identify all modeled tracked assets. UniFormat numbers for each asset type are defined in the DGS.
	2	Room Classification	○ Room types must be defined using the Council of Ontario Universities (COU) classification system, as defined in the Room Specification spreadsheet.
	3	Consistent Category	○ Built-in Revit categories must be used to place tracked assets. ○ 'Generic Models' and 'Specialty Equipment' categories should not be used to model tracked assets. ○ Any requested exemption must be recorded in the PEP.
	4	Descriptive Names	○ The use of 'standard', 'default', 'company initials' prefix, or the use of number alone is prohibited. ○ 'Family Name' and 'Type Name' must follow a consistent theme of naming general to specific as these will be used to identify objects during the construction phase.
	5	System Naming	○ The Team must use the 'prefix' in **Appendix C** to identify systems within the model dataset. ○ The DGS defines which asset types require system information.
6	**Data Clarity**		
	1	Built-in Parameters	○ Built-in parameters must be used when present unless an approved process is recorded in the PEP. Using these parameters ensures that the data is where it is expected to be and that it can be consistently used. ○ Custom or shared parameters should only be used if a 'Built-in' parameter is not available. ○ Built-in parameters should not be duplicated.
	2	Object tag and relationships	○ 'Mark' and 'Type Mark' must be used to tag tracked assets as defined in the DGS. ○ A strategy to capture parent/child relationships of MEP equipment must be proposed by the Design Team.
	3	Views and Schedules Data Usage	○ 2D text notes will not be accepted to tag tracked assets. Any notes or descriptions shown in documentation must be reflected in the modeled object parameters. ○ All project views and schedules must be generated directly from the model and its underlying data. Exceptions to this rule are limited to

			schematic diagrams, wiring diagrams, point to point diagrams, riser diagrams, details and 2D CAD details when approved
END OF DESIGN PHASE: Modeling and Data Requirements			

6.5 Appendix E – BIM Project Execution Plan (PEP)

DESIGN PHASE: PEP			
	Title/Topic		**Description**
1	**Project Information**		ID, name, description, address, contract type, BIM Specification version, standard units, number and name of buildings
2	**Building Information**		ID, name, project type (new/existing/renovation), target occupancy date
3	**Schedules and Frequencies**		
	1	Project Timeline	Project schedule, list of submittals with proposed dates, list of Tender packages with milestone submission dates
	2	BIM Activities	BIM kick-off meeting date, frequency of BIM meetings, virtual coordination sessions and cost estimates
	3	BIM Exchanges	Frequency of model exchanges
4	**Team Definition**		BIM related participants with role, organization, name, email, phone, time zone
5	**Software**		
	1	Platforms and versions	Design authoring, design analysis (structural, lighting, power, energy, cost), issue tracking, specifications, virtual coordination, collaboration, communications, file/document exchange and management.
6	**Standards**		
	1	Naming structure	Disciplines, models, links, levels, worksets
	2	Sheets	Sheet sizes, text styles, numbering structure
7	**Model Information**		
	1	Files	Discipline/content, name, authoring company
	2	External Links (.dwg, .ifc)	Discipline/content, name, authoring company
	3	Levels	Name, project elevation, site elevation, description
	4	Phases	Name, description
	5	Worksets	Name, description, default visibility (on/off)
Strategies and Workflows			
1	**Modeling Strategies**		
	1	Model Breakdown	Required for larger projects to keep model size manageable
	2	Model Alignment	Define project origin, coordinate system and true north orientation
	3	Phasing Strategy	Required to be consistent across all models
	4	Clearances	Define how required clearances will be modeled and managed
	5	Typical Floors / Units	Modeling strategy to work with repetitive elements, floors, rooms, and room tags
	6	FF&E	Define strategy for management of fixed furniture, finishes (material and colour), and equipment.
2	**Workflow Issues Strategies**		
	1	Multiple Models	Process for managing multiple models within a discipline
	2	Non-Revit Models	Describe the process to coordinate across different software types

	3	Revit version update	Describe strategy to be used to update all models
	4	Object duplication	Strategy for managing duplication across all models (e.g. openings, housekeeping pads, plumbing fixtures, lighting fixtures, stairs, ceilings etc.)
	5	Parent Child Relationship	Strategy for managing this requirement amongst tracked assets.
	6	Room Association	Strategy for developing the relationship between rooms and their unit type + number
3	**Virtual Coordination Strategies**		
	1	Clash Detection	Proposed process to find issues (hard and soft clashes)
	2	Issue Tracking	Proposed process for assigning, and resolving issues
	3	Risk Mitigation	Describe the process for mitigating the risk for running virtual coordination with systems that have not been modeled, i.e. sprinkler system.
4	**Data Quality Strategies**		
	1	UniFormat	Describe process to populate UniFormat 2010 number and the QC process to check for accuracy.
	2	Systems	Describe process to be used to ensure that all mechanical and electrical assets are associated with consistent systems.
	3	Mark and Type Mark	Define the QA/QC process to ensure consistent use across all models
	4	Relationships	Strategy to ensure accuracy of parent/child and equipment power source relationships between tracked assets within the same model and across models (e.g. card reader/door#; pump/system)
5	**Existing Conditions Strategies**		
	1	Risk Assessment	Develop risk assessment/analysis template
	2	Record Drawings	Detail strategy for mitigating risk relative to record drawings
	3	Existing Facility	Define extent of modeling to be undertaken
	4	Interface between New and Old	Define strategy for modeling the interface between new and existing
	5	New Elements within Existing Facility	Define strategy for modeling existing elements to be relocated, new tracked assets located in existing rooms and/or connected to existing systems.
6	**Cost Estimates Strategies**		Proposed process for generating cost estimates from the design models
7	**Project Specific Amendments and Exclusions**		Provide list of, and reasons for, any requested exemptions to the BIM Specifications. All requested exemptions require approval.
END OF DESIGN PHASE: PEP			

CONSTRUCTION PHASE: PEP			
	Title/Topic		**Description**
1	**Team Definition**		BIM related participants with role, organization, name, email, phone, time zone
2	**Trade Information**		List of trades responsible for data and document upload and their scope of work
3	**Virtual Coordination**		
	1	Design Model Sign off	Process for sign off on use of design models (if required)
	2	Fabrication Models	List fabrication models (if provided)
	3	Software	Types and versions
	4	Timeline	Coordination session schedule, required participants
	5	Strategy + Workflows	Sharing strategy, resolution process, feedback, management of process for maintenance of service access and replacement paths
4	**Construction Sequencing**		Define strategy and workflows to optimize construction sequencing – list models that will be used
5	**Design Model Update**		
	1	Update Strategy	Define strategy, workflows and frequency for model updates
	2	Laser Scanning	If part of the strategy, define frequency, areas, timeline, accuracy and QC process
6	**Data and Document Upload**		Define strategy for managing participation and checking quality of the data and documents uploaded
7	**Project Schedule**		Provide updated project schedule, including substantial completion timelines
END OF CONSTRUCTION PHASE: PEP			

6.6 Appendix F:

6.6.1 Data and Geometry Specification (DGS) and Data Collection Specification (DCS): Notes

6.6.2 Data and Geometry Specification (DGS): Minimum Requirements

6.6.3 Room Specification

(shown on the next 17 pages for clarity)

This document provides the specifics around the requirements relative to assets and rooms tracked by Dalhousie University, and must be utilized in conjunction with Dalhousie University – BIM Requirements. It is comprised of a number of tabs:

1. **Notes tab:** this tab – provides an explanation of how to use the document and the information of each of the columns used.
2. **DGS-DCS tab:** a master list of all assets of interest to Dalhousie University organized around Uniformat II. This spreadsheet is separated in 3 coloured areas:
   - **Project Information (Yellow) -** Project specific information to be provided by the Design Team at the beginning of a project. It will indicate which assets from the master list are part of the project, assign responsibilities and faciliate communication between the Design Team and the BIM Consultant regarding specific asset types, the categories where the assets will be placed in the models.
   - **Data and Geometry Specification - DGS (Pink) -** This area specifies the minimum data and geometry requirements relative to each asset type in Design along with the project phase by which the information should be present in the data set. It also provides suggested acronyms to be used in tags and Uniformat classification to be included in modelled elements. In projects where there is sequential tendering, all tracked assets must contain their tender package association parameter (column **Z**).
   - **Data Collection Specification - DCS (Blue) -** This area specifies data and document upload requirements relative to asset type during Construction.
   - **Additional Parameters (Column AP) -** This column gives designers and/or contractor-trades additional information of parameters expected to be part of either the designers or in the documentation uploaded by the trades
3. **Room Specification tab:** a master list of room types organized around Council of Ontario Universities (COU) classification system. This spreadsheet is separated in 2 coloured areas:
   - **Project Information (Yellow) -** Project specific information to be provided by the Design Team at the beginning of a project. It will indicate which room types from the master list are part of the project.
   - **Room Specification (Pink on row 3, columns A-G** which provides the data and **K-X** which provides the timeline/milestones when the data must be included in the models**) -** This area defines the data that must be present in the models for different room types along the project timeline.

***Minimum Data and Geometry Requirements**

Classification	Description	Requirements
G0	Conceptual Elements	Approximate Geometry (LOD 200)
G1	Accurate Elements	Accurate Geometry (LOD 300)
G2	Data Rich Elements	Plus accurate Family, Type, System, Mark, and Type Mark data if applicable**
G3	Data Rich Elements +	G2 requirements Plus Parent-Child relationship data if applicable**

** When G2 or G3 is prescribed for a Model Category, all of the mentioned parameters are expected to be part of the model element, but there may be instances where a certain asset does not require one or more of the parameters in the requirements, at which point it is up to the Design Team to review the Owner's requirements and the DGS-DCS when inputting the information for the element as to what is appropriate for that asset (i.e. Door asset classified as G2 but does not require the parameter 'System', or Mechanical Equipment asset classified as G3 but does not have a Parent-Child relationship).

Minimum Modelling Requirements

All model elements must be associated with the correct **Level** and **Room**.

All model elements must be on the correct **Workset**.

All Design Teams must follow the DGS in terms of their modelling responsibilities.

The DGS-DCS tab takes precendense over the DGS Modelling tab. Use the DGS Modelling panel for overall reference only.

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Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information	PROJECT INFO	PROJECT INFORMATION: Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments	DESIGN	DATA AND GEOMETRY SPECIFICATION (DGS): Asset Classification: Acronyms	Minimum Geometric Level: Schematic Design	CD 33%	CD 66%	CD 100%	Design Required Data: Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)	CONSTRUCTION	DATA COLLECTION SPECIFICATION (DCS): Collection Parameters: Collection level	Shop Drawings (Aproved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	Additional DCS Parameters TBC / Additional notes
A	**Substructure**																																						
	A40	Slabs on Grade	A40.40	Pits			Pit-sewage [name]	Sewage Pit			TBD	TBD	TBD				SPIT	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
							Pit-rainwater [name]	Rainwater Pit			TBD	TBD	TBD				RWPIT	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
							Pit-steam	Steam Chamber			TBD	TBD	TBD				STCH	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
							Trench	Trench Drain			TBD	TBD	TBD				TDR	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
	A60	**Water and Gas Mitigation**	A60.10	Building Subdrainage	A60.10.10	Foundation Drainage		Perimeter foundation drainag	PVC perforated, other		TBD	TBD	TBD				FDR	G0	G1	G3	G3	*na*	*na*	*na*	TBD	*na*	CD 33%		T	Y									1	
					A60.10.20	Underslab Drainage		Under building drainage	PVC perforated, other		TBD	TBD	TBD				USDR	G0	G1	G3	G3	*na*	*na*	*na*	TBD	*na*	CD 33%		T	Y									1	
B	**Shell**																																						
	B10	**Superstructure**																																					
	B20	**Exterior Vertical Enclosure**	B20.10	Exterior Walls	B20.10.10	Exterior Wall Veneer	Wall-exterior		Including: Exterior Wall Veneer, Interior Skin, Fabricated Exterior Wall Assemblies, Parapets. Note: Any atypical framing		TBD	TBD	TBD				EXTW	G1	G2	G2	G2	*na*	CD 33%	*na*	TBD	*na*	*na*		T	Y									1	
			B20.20	Exterior Windows		Exterior Window			Including: Exterior Operating Windows, Exterior Fixed Windows, Curtainwall, Windowwall		TBD	TBD	TBD				EXTWIN	G0	G2	G2	G2	*na*	CD 33%	*na*	TBD	*na*	*na*		T	Y									1	Documents uploaded must contain the following information: Performance Class & Grade, Wind load capacity, Thermal resistance, Solar heat gain coefficient, visible light transmittance,
			B20.50	Exterior Doors&Grilles		Exterior Doors			Including: Entrance Systems, utility doors, Card Access Entry points		TBD	TBD	TBD				EXTDR	G0	G2	G2	G2	*na*	CD 33%	CD 66%	TBD	*na*	*na*		T	Y	Y								2	All exterior doors to be tied to Access Control. Single point of entry with door contacts on all others.
	B30	**Exterior Horizontal Enclosures**	B30.10	Roofing	B30.10.50	Steep and Low Slope Roofing	Roof		Type of vapour barrier, insulation (sloped?) thickness, membrane type (Mod Bit, PVC, EPDM, Asphalt Shingle, Built-up, stainless		TBD	TBD	TBD				ROOF	G0	G1	G2	G2	*na*	CD 33%	CD 66%	TBD	*na*	*na*		I	Y	Y					Y	Y	Y	5	
			B30.20	Roof Appurtenanc	B.30.20.70	Rainwater Management			Gutters, downspouts, scuppers		TBD	TBD	TBD				RNWTR	G0	G0	G1	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y			Y	Y	Y	7	
			B30.60	Horizontal Openir	B30.60.10	Roof Windows and Skylights			skylights, roof hatch, roof window		TBD	TBD	TBD				SKYL	G0	G0	G1	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y			Y	Y	Y	7	
C	**Interiors**																																						
	C10	**Interior Construction**	C10.10	Interior Partitions	C10.10.10	Interior Fixed Partitions					TBD	TBD	TBD				IFP	G0	G1	G2	G2	CD 66%	CD 66%	*na*	TBD	CD 66%	*na*		T	Y									1	
			C10.30	Interior Doors	C10.30.10	Interior Swinging Doors	Fire Rated Doors only				TBD	TBD	TBD				ISD	G0	G1	G2	G2	CD 66%	CD 66%	CD 66%	TBD	*na*	*na*		T	Y	Y	Y				Y	Y	Y	6	
			C10.70	Suspended Ceiling	C10.70.10	Acoustic Suspended Ceiling	Tile type				TBD	TBD	TBD				ASC	G0	G1	G2	G2	CD 66%	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
	C20		C20.30	Flooring			Floor Type		ceramic tile, vct, wood, terrazzo, carpet, concrete, epoxy, etc		TBD	TBD	TBD				FLR	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y									1	
	Services																																						
	D10	**Conveying**	D10.10	Vertical Conveying Systems	D10.10.10	Elevator	Elevator-(passenger/freight/hanidap/dumb waiter)-[elevator name]		Including: Freight Elevator, Accessibility elevator, Traction Gearless Passenger Elevators, Hydraulic Passanger Elevator		TBD	TBD	TBD				ELEV	G0	G1	G2	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: INSTALL #, FA#, TYPE, SERV COMPANY, PHONE #, SERVICE LOG #, CAPACITY
					D20.10.20	Domestic Water Equipment	Pump-(domesticwaterbooster)-[pump name]	Domestic Water Booster Pumps			TBD	TBD	TBD				PBP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, MOTOR MODEL, HERTZ, CONSTRUCTION, IMPELLER DIA, HEAD, CAT #, BEARING SIZE, PUMP BEARINGS, PUMP MODEL #, PUMP SER #, CAP,
							Pump - dom hot water recirc - (DHWRECIRC)-[pump name]	Domestic Hot Water Recirc Pumps			TBD	TBD	TBD				PBP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, MOTOR MODEL, HERTZ, CONSTRUCTION, IMPELLER DIA, HEAD, CAT #, BEARING SIZE, PUMP BEARINGS, PUMP MODEL #, PUMP SER #, CAP,
							Backflowpreventor-(domestic/dyetank/dispensing)-[backflow name]	Backflow Preventor	Including: Dye Tank, Domestic, Dispensing, Reduced Pressure Backflow Preventer (RPBP)		TBD	TBD	TBD				BFP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: SIZE, SERIAL #, MODEL, SET PSI, MISC, MAKE, TYPES
							Tank-(hwelectric/hwsteam/hwcombination/hwlabwater)-[tank name]	Domestic Hot Water Electric Tank			TBD	TBD	TBD				DHWT	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CRN#, SIZE, PRESSURE, TEMP, MODEL, MAKE, VOLTAGE, CAPACITY, SH, HEAD, SERIAL #, AMPS, PHASE, ELEMENTS, DEPT LABOR #, MISC, HEATING SYSTEM, DOMESTIC HOTWATER, MWP HEATING, MWP DOMESTIC HW
							Heatexchanger-domestichotwater-[heat exchanger name]	Heat Exchanger	Including: Domestic Water Heat Exchangers		TBD	TBD	TBD				HEX	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CRN #, CONSTRUCTION TYPE, TUBE MATERIAL, SIZE (CAPACITY), TYPE, CODE, SHELL PSI, SHELL TEMP, TUBE PSI, TUBE TEMP, TUBE MAWP: PSI at F, TUBE MDMT: F at PSI , T S, MAKE, , SHELL MAWP: PSI at °F, SHELL MDMT: °F at PSI, MISC
					D20.10.40	Domestic Water Piping	PRV-DW	Pressure Relief Valve			TBD	TBD	TBD				PRV	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
							PREDV-DW	Pressure Reducing Valve (dom water)			TBD	TBD	TBD				PREDV	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
					D20.10.60	Plumbing Fixtures	Fixture - Trim	Flushometer, faucet, shower control, etc			TBD	TBD	TBD				-	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T										0	
							Fountain/bottle filling station	Drinking Fountain	Including: Water Coolers/Filter		TBD	TBD	TBD				FOUNT	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	Documents uploaded must contain the following information: MAXIMUM RPM, MOTOR MAKE, MOTOR MODEL, MOTOR HP, MOTOR VOLTAGE, MOTOR AMPS, # OF BELTS, BELT SIZE, MOTOR CAT #, MOTOR FRAME, SERIAL PUMP, HERTZ, DESIGN, DRIVER, EU, SIZE, COMPRESSOR RPM, BEARINGS, MODEL #, SERIAL #, PHASE, CODE,
							Emergency shower	Emergency Shower and water tempering equipment			TBD	TBD	TBD				ES	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	Documents uploaded must contain the following information: STYLE
							Emergency eyewash	Emergency Eyewash and water tempering equipment			TBD	TBD	TBD				EE	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	

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												PROJECT INFO	PROJECT INFORMATION					DESIGN	DATA AND GEOMETRY SPECIFICATION (DGS)											CONSTRUCTION	DATA COLLECTION SPECIFICATION (DCS)											
																			Asset Classification	Minimum Geometric Level				Design Required Data										Collection Parameters									
Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information		Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments		Acronyms	Schematic Design	CD 33%	CD 66%	CD 100%	Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)		Collection level	Shop Drawings (Aprioved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	Additional DCS Parameters TBC / Additional notes
	D20	Plumbing	D20.20	Sanitary Drainage	D20.10.90	Domestic Water Distribution Supplementary Components	Meter-water-[meter name]	Water Meter			TBD	TBD	TBD				M	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y				Y	Y	6	Documents uploaded must contain the following information: SIZE, HRM SER #, PAT #, TYPE
					D20.20.10	Sanitary Sewerage E	Pump-(sump)-[pump name]	Sanitary Sump Pump	Includes all sump pumps which discharge sanitary liquids		TBD	TBD	TBD				SSP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y			Y	Y	Y	Y	7	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, SIZE, HERTZ, VAC, MOTOR MODEL, CAT #, DESIGN HEAD
					D20.20.90	Sanitary Drainage Supplementary Components	Grease trap	Grease Traps / Grease Interceptor			TBD	TBD	TBD				GI	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
							Plaster trap	Plaster Trap			TBD	TBD	TBD				PLATRAP	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
							TRAPPRIMER--[name]	Trap Primer			TBD	TBD	TBD				TRAPPRIM	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y			Y	Y	Y	Y	7	Documents uploaded must contain the following information: LOCATION, MAKE, MODEL #, SIZE (GPM), NAMING STANDARD, LOCATION
							sediment trap	Sediment Trap			TBD	TBD	TBD				SEDTRAP	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
			D20.30	Building Support Plumbing Systems	D20.30.10	Stormwater Drainage Equipment	Pump-(sump/circulating non-potable)-[pump name]	Storm Sump Pump	Includes all sump pumps which discharge storm water, ground water or grey water, circulating non potable		TBD	TBD	TBD				STSP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y		Y			Y	Y	Y	Y	6	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, DISCHARGE, SIZE, HERTZ, VAC, MOTOR MODEL, CAT #, DESIGN HEAD
					D20.30.20	Stormwater Drainage Piping	MNHL	Manhhole	Collect info on Inverts		TBD	TBD	TBD				MNHL	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y				Y			4	
					D20.30.30	Facility Stormwater Drains	Drain	Roof drain, area drains, trench drains on facility			TBD	TBD	TBD				D	G0	G1	G2	G2	*na*	*na*	*na*	TBD	*na*	*na*		T	Y									1	
					D20.30.60	Gray Water Systems (FOR NON POTABLE SUPPLY)	Cistern-[cistern name]	Rainwater Tank / Cistern			TBD	TBD	TBD				RWT	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: TANK VOLUME (USGal)
							UVreactor-[uv #]	UV reactor, Including controller			TBD	TBD	TBD				UV	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Filter-vortisand/rainwater-[filter name]	Sand filters			TBD	TBD	TBD				SF	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	Documents uploaded must contain the following information: SIZE
					D20.30.90	Building Support Plumbing System Supplementary Components	Softener-(boilerwater/chilledwater)-[softener system name]	Water Softener Equipment	Including: Boiler water and chilled water		TBD	TBD	TBD				WSS	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
			D20.50	General Compressed Air	D20.50.10		Aircompressor-(reciprocating/rotary)-[compressor name]	Instrument Air compressor			TBD	TBD	TBD				IAC	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CAP, INLET AIR, MWP, HP, VOLTAGE, REFRIG TYPE, AMPS, MODEL #, SERIAL #, HERTZ, PH, EQ #, HYD TEST P, DESIGN P, ELEMENT CODE, INT VOLUME, DATE, DESIGN CODE, MAX DESIGN TEMP, AVERAGE TEMP, HEAD TEMP, LOCATION, OIL TYPE, LOW SIDE REFRIG
							Airdryer-(aircooled)-[airdryer name]	Air Dryer			TBD	TBD	TBD				AD	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: VOLTAGE, PHASES, FLA, KW, PSI, ORIFICE, GPM, HP
			D20.60	Process Support Plumbing Systems	D20.60.10	Compressed-Air Syst	aircompressor-(reciprocating/rotary)-[compressor name]	Laboratory compressed air (medical, dental, etc)			TBD	TBD	TBD				LAC	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D20.60.20	Vacuum Systems	VAC	Medical, Dental Vacuum equipment			TBD	TBD	TBD				VAC	G0	G1	G3	G3	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y									1	
					D20.60.30	Gas Systems	CMPRGAS	CO, He, N, NO, O medical gases (excluding Propane) Tanks	Include Tanks size		TBD	TBD	TBD				CMPRGAS	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Tank Size
					D20.60.50	Processed Water Systems	Acid neutralization tank - [Tank #]	Acid Neutralization Tank			TBD	TBD	TBD				ANT	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Filter-reverseosmosis-[filter name]	Reverse Osmosis Unit			TBD	TBD	TBD				ROU	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Size, type, filter information
			D30.10	Facility Fuel Systems	D30.10.10		PROPTANK	Propane TANK	SIZE		TBD	TBD	TBD				PROPTANK	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Tank Size
							NGMETER	Natural Gas Meter	SIZE		TBD	TBD	TBD				NGMETER	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Meter Size
					D30.10.30	Fuel Pumps	Pump - heavyfueloil				TBD	TBD	TBD				P	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D30.10.50	Fuel Storage Tanks	Tank	Oil Tanks for Boilers			TBD	TBD	TBD				T	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: TANK VOLUME (USGal)
							Tank	Fuel Oil Tank -other			TBD	TBD	TBD				T	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: TANK VOLUME (USGal)
							Tank	Propane Storage			TBD	TBD	TBD				T	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
			D30.20	Heating Systems	D30.20.10	Heat Generation	Boiler-(commercial/domestic/centralheatingplant)-[boiler name]	Boiler			TBD	TBD	TBD				BO	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Burner-(commercial/domestic/centralheatingplant)-[burner name]				TBD	TBD	TBD				BU	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Biomass Boiler				TBD	TBD	TBD				BB	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Dearator-(boiler)-[dearator name]				TBD	TBD	TBD				DA	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Pump - boilerfeedwater	boiler feedwater pump			TBD	TBD	TBD				PBFW	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Chemicalpot				TBD	TBD	TBD				CP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Strainer-heating				TBD	TBD	TBD				STRN	G0	G1	G2	G2	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	
							Furnace-(warmair)-[furnace name]	Furnaces			TBD	TBD	TBD				FURN	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: BTU/HR, CRN, PSI, TEMP
							Expansionjoint-steam-[expansion joint name]				*na*	*na*	*na*	*na*	*na*			*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*		*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	*na*	0	Required for fabrication models, Mark required for identification
							Sootblower-(boiler)-[sootblower name]				TBD	TBD	TBD				SOOT	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	
							Fan-(forcedraft)-[boiler name]	Fan - Cooling/Heating			TBD	TBD	TBD				F	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: SIZE, CLASS, ORDER, TYPE, CFM, MOTOR HP, MOTOR RPM, MOTOR VOLTAGE, MOTOR CYCLES, MOTOR MODEL, MOTOR MAKE, MOTOR FRAME, PHASE, SERIAL #, TYPE
							Controls-(boiler/burner)-[boiler name]	Boiler Control Panels			TBD	TBD	TBD				BCP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y		Y	Y	Y	8	
							Stack-(boiler)-[boiler name]	Boiler			TBD	TBD	TBD				B	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	

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										PROJECT INFORMATION					DATA AND GEOMETRY SPECIFICATION (DGS)											DATA COLLECTION SPECIFICATION (DCS)											
															Asset Classification	Minimum Geometric Level				Design Required Data							Collection Parameters										
Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information	Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments	Acronyms	Schematic Design	CD 33%	CD 66%	CD 100%	Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)	Collection level	Shop Drawings (Aproved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	Additional DCS Parameters TBC / Additional notes
D	D30	Heating, Ventilation, and Air Conditioning (HVAC)					Heatexchanger-(perimeterheat/terminalreheat/heatrecovery/snowmelt/ahu/infloorheat/heatpumploop)-[heat exchanger name]	Steam (or Hot Water) to Hot Water Heat Exchanger		TBD	TBD	TBD			DWHEX	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CRN #, CONSTRUCTION TYPE, TUBE MATERIAL, SIZE (CAPACITY), TUBE MAWP: PSI at F, TUBE MDMT: F at PSI, SHELL MAWP: PSI at F, SHELL MDMT: F at PSI , MISC
					D30.20.70	Decentralized Heating Equipment	Forceflowheater-(steam/water/electric)-[forceflow name]	Forced Flow Heater		TBD	TBD	TBD			FFH	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CFM, BTU/HR, MOTOR HP, MOTOR VOLTAGE, MOTOR AMPS, LEGEND, MBH, GPM, RPM, MOTOR MAKE, MOTOR SER #, MOTOR MODEL #, MISC, PHASE, LOCATION
							Unitheater(steam/water/electric)-[unit heater name]	Electric Unit Heater	Including: Force Flow Cabinet Unit Heater	TBD	TBD	TBD			EUH	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CFM, BTU/HR, MOTOR HP, MOTOR VOLTAGE, MOTOR AMPS, INLET, OUTLET, SIZE, PH, COIL MAX PRES, COIL MAX TEMP, MAKE, MODEL #, RPM, TYPE, FRAME, MISC, CAT#, SER #, FLA, LOCATION
					D30.20.90	Heating System Supplementary Components	Meter-(steam/condensate/btu)-[meter name]			TBD	TBD	TBD			M	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
			D30.30	Cooling Systems	D30.30.10	Central Cooling	Chiller-(absorption/centrifugal/reciprocating)-[chiller name]	Chiller		TBD	TBD	TBD			CH	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CAPACITY (TONNES), VOLTAGE, HERTZ, PHASES, HIGH PRESSURE, LOW PRESSURE, REFRIGERANT TYPE, FLOW RATE, STEAM INPUT, START PANEL, CONTROL PANEL,
							Coolingtower-(chilledwater)-[cooling tower name]	Cooling Tower		TBD	TBD	TBD			CTW	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: REFRIGERANT, VOLTS, AMPS, WEIGHT, HI SIDE PRESS, LO SIDE PRESS, BTU/HR, MAKE, MODEL, MP, CAT #, PHASE, MISC, SER #, MOTOR GC
							Drycooler-(fluid)-[drycooler name]	HVAC Cooler		TBD	TBD	TBD			COOL	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: REFRIGERANT, VOLTS, AMPS, WEIGHT, HI SIDE PRESS, LO SIDE PRESS, BTU/HR, MAKE, MODEL, MP, CAT #, PHASE, MISC, SER #, MOTOR GC
							Pump-(circulating/spray)-[pump name]	Chiller Condensor Pump		TBD	TBD	TBD			CCP	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, CAT#, MOTOR MODEL, SER #, HERTZ, CODE, BOTTOM
							cooler-(cold room/walk in growth room/growth chamber)[cooler name]	Walk-in Refrigeration Unit		TBD	TBD	TBD			WFRDG	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: MBH CAPACITY, CFM, HP, GPM, VOLTAGE, PHASES, HERTZ, RPM, FILTER, AMPS, FLA, #BELTS, BELT SIZE, PA-UNT#, COMPRESSOR MTR RLA, COMPRESSOR MTR LRA, COMPRSSR MTR PHASES, BLOWER MOTOR FLA, BLOWER MOTOR HP, BLOWER MOTOR PHASE, FILTER SIZE, # OF FILTERS, SP, REFRIGERANT CHARGE, REF CHARGE HIGH SIDE, REF CHARGE LOW SIDE
							compressor-(refrigerant)-[ac unit name]	Refrigerant Compressor		TBD	TBD	TBD			COMP	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
								Refrigerant Condensor		TBD	TBD	TBD			COND	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
								Packaged Compressor and Condensor Unit		TBD	TBD	TBD			COMP	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D30.30.70	Decentralized Cooling	Split system condenser-(refrigerant)-[condenser name] -	Split DX System		TBD	TBD	TBD			SDX	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, CAT#, MOTOR MODEL, SER #, HERTZ, CODE, BOTTOM BEARING, TOP BEARING, HEAD, CONST, MISC, # BELTS, BELT SIZE, CLASS, PRESSURE, FLANGE
							Heatpump-[heat pump name]	Heat Pump		TBD	TBD	TBD			HP		G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: PA-UNT#, VOLTAGE, PHASES, HERTZ, COMPRESSOR MTR RLA, COMPRESSOR MTR LRA, COMPRSSR MTR PHASES, BLOWER MOTOR FLA, BLOWER MOTOR HP, BLOWER MOTOR PHASE, FILTER SIZE, # OF FILTERS, CFM, SP, REFRIGERANT CHARGE, REF CHARGE HIGH SIDE, REF CHARGE LOW SIDE
							Fancoil-[fan coil name]	Fan Coil		TBD	TBD	TBD			FCU	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y		Y	Y	Y	Y	8	Documents uploaded must contain the following information: MBH CAPACITY, CFM, HP, GPM, VOLTAGE, PHASES, HERTZ, RPM, FILTER, AMPS, FLA, #BELTS, BELT SIZE, PA-UNT#, COMPRESSOR MTR RLA, COMPRESSOR MTR LRA, COMPRSSR MTR PHASES, BLOWER MOTOR FLA, BLOWER MOTOR HP, BLOWER MOTOR PHASE, FILTER SIZE, # OF FILTERS, SP, REFRIGERANT CHARGE, REF CHARGE HIGH SIDE, REF CHARGE LOW SIDE
								AC Units (Packaged Terminal A/C, Room A/C, Self contained A/C, Computer Room A/C)		TBD	TBD	TBD			AC	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Chilled Beam - [chilled beam name]	Chillbeam		TBD	TBD	TBD			CB	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Acunit-(watercooled)-[ac unit name]			TBD	TBD	TBD			AC	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D30.30.90	Cooling System Supplementary Components	Meter-(chilledwater/btu/glycol_water)-[meter name]			TBD	TBD	TBD			M	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
			D30.50	Facility HVAC Distribution Systems	D30.50.10	Facility Hydronic Distribution	Pump - [insert fluid type]	Hydronic Pump		TBD	TBD	TBD			P	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Tank-(expansion/glycolstorage/buffer/airseparator)-[tank name]	Expansion/glycol storage/buffer/air separator		TBD	TBD	TBD			CONDT	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CRN#, SIZE, PRESSURE, TEMPERATURE
					D30.50.30	Facility Steam Distribution	Tank-(condensate/flash)-[tank name]	Condensate/flash		TBD	TBD	TBD			CONDT	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CRN#, SIZE, PRESSURE, TEMPERATURE
							Pump-(condensate)-[pump name]	Condensate Pump		TBD	TBD	TBD			PCT	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, CAT#, MOTOR MODEL, SER #, HERTZ, CODE, BOTTOM BEARING, TOP BEARING, HEAD, CONST, MISC, # BELTS, BELT SIZE, CLASS, PRESSURE, FLANGE
							Steamtrap-(highpressure/lowpressure)-[steam trap name]	Steam Trap		TBD	TBD	TBD			ST	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%	T	Y	Y	Y	Y		Y	Y	Y	Y	9	Documents uploaded must contain the following information: SIZE, ELEVATION, PRESSURE, APPLICATION, LIFT, CHECK VALVE, VALVE IN, STRAINER, VALVE OUT, DIRECTION, STEAM SUPPLY, MTHS IN OPER, SURVEY #, MAKE, MISC INFO, CAPACITY
							Reliefvalve-(steam)-[relief valve name]	Safety Valve		TBD	TBD	TBD			SV	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%	T	Y	Y	Y	Y		Y				5	
							Prv-(steam)-[prv name]	Pressure Reducing Valve		TBD	TBD	TBD			PRV	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%	T	Y	Y	Y	Y						4	
							COIL-(hotdeck/face&bypass/heatrecovery/reheat/preheat)-[unit name]	Glycol Heating and Water Cooling Coils		TBD	TBD	TBD			CCG, CCW	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y		Y	Y	Y	Y	8	
							Coil-cooling (chilledwater/refrigerant)-[unit name]	AHU Cooling Coil		TBD	TBD	TBD			FCU	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%	I	Y	Y	Y	Y		Y	Y	Y	Y	8	

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											PROJECT INFORMATION						DATA AND GEOMETRY SPECIFICATION (DGS)												DATA COLLECTION SPECIFICATION (DCS)											
																	Asset Classification	Minimum Geometric Level				Design Required Data								Collection Parameters										
Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information	PROJECT INFO	Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments	DESIGN	Acronyms	Schematic Design	CD 33%	CD 66%	CD 100%	Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)	CONSTRUCTION	Collection level	Shop Drawings (Aproved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	Additional DCS Parameters TBC / Additional notes
					D30.50.50	HVAC Air Distribution	AHU-(dualductoutsideair/dualductmixedair/vavoutsideair/constantvolumemixedair/constantvolumeoutsideair/vavmixedair)-[ahu name]	AHU			TBD	TBD	TBD				AHU	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	Documents uploaded must contain the following information: CFM, MOTOR HP, MOTOR RPM, MOTOR MAKE, MOTOR MODEL, MOTOR SERIAL #, MOTOR VOLTAGE, MOTOR AMPS, MOTOR FRAME, # OF BELTS, BELT SIZE, MOTOR PULLEY, BLWR PULLEY, SYSTEM #, HERTZ, PHASE, FAN TYPE, FAN SIZE, CAT #, FAN SPEED, BEARINGS, BOW, MISC, BTU, FUEL, MOTOR PHASES, FAN HP, MOTOR BEARINGS, CPN, CODE, MOTOR MFG #, TYPE, BOT, MOUNT, SF #, FAN RPM, FAN VOLTS
							Damp -	Damper			TBD	TBD	TBD				DAMP	G0	G1	G2	G2	na	CD 66%	na	TBD	na	CD 33%		T	Y									1	
							HRV-[hrv name]	Heat Recovery Unit			TBD	TBD	TBD				HRU	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Humidifiersingleahu-(directsteam/steamtosteam/electric/water)-[humidifier name]	Humidifier			TBD	TBD	TBD				HUMG	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: VOLTAGE, PHASES, FLA, KW, PSI, ORIFICE, GPM, HP
							Humidifiercentral-(reboiler steam/immersion electric)-[humidifier name]	Humidifier			TBD	TBD	TBD				HUMG	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: MOTOR HP, MOTOR AMPS, FAN AMPS, FAN HP, PHASES
							Dehumidifier-(arena)-[dehumidifier name]	Dehumidifier			TBD	TBD	TBD				DHUM	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: MOTOR HP, MOTOR AMPS, FAN AMPS, FAN HP, PHASES
			D30.60	Ventilation	D30.60.10	Supply Air	Supplyfan-[supply fan name]	Fan - Supply			TBD	TBD	TBD				FS/FR	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CFM, MOTOR HP, MOTOR RPM, MOTOR MAKE, MOTOR MODEL, MOTOR SERIAL #, MOTOR VOLTAGE, MOTOR AMPS, MOTOR FRAME, # OF BELTS, BELT SIZE, MOTOR PULLEY, BLWR PULLEY, SYSTEM #, HERTZ, PHASE, FAN TYPE, FAN SIZE, CAT #, FAN SPEED, BEARINGS, BOW, MISC, BTU, FUEL, MOTOR PHASES, FAN HP, MOTOR BEARINGS, CPN, CODE, MOTOR MFG #, TYPE, BOT, MOUNT, SF #, FAN RPM, FAN VOLTS
							Dualductmixingbox	Mixing Box			TBD	TBD	TBD				MB	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y									1	
							VAVBox	Variable Air Volume Box			TBD	TBD	TBD				VAV	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Make up airvalve - [air valve name]	MAV			TBD	TBD	TBD				MAV	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Damp - F	Fire Damper			TBD	TBD	TBD				DAMPF	G0	G1	G1	G2	na	CD 33%	na	TBD	na	CD 33%		T										0	
							Grille SA	Supply Air Grille			TBD	TBD	TBD				GRILLE	G0	G1	G1	G2	na	CD 33%	na	TBD	na	CD 33%		T										0	
					D30.60.20	Return Air	Returnfan-[return fan]	Fan - Return			TBD	TBD	TBD				FS/FR	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CFM, MOTOR HP, MOTOR RPM, MOTOR MAKE, MOTOR MODEL, MOTOR SERIAL, MOTOR VOLTAGE, MOTOR AMPS, MOTOR PHASES, MOTOR FRAME, # OF BELTS, BELT SIZE, MOTOR MFG #, HERTZ, CAT #, TYPE, BOT, MOUNT, SF #, FAN RPM, FAN VOLTS, FAN SPEED, FAN HP, MOTOR BEARINGS, CPN, CODE, FAN SIZE, MISC
							Damp - F	Fire Damper			TBD	TBD	TBD				DAMPF	G0	G1	G1	G2	na	CD 33%	na	TBD	na	CD 33%		T										0	
							Gille RA	Return Air Grill			TBD	TBD	TBD				GRILLE	G0	G1	G1	G2	na	CD 33%	na	TBD	na	CD 33%		T	Y									1	
					D30.60.30	Exhaust Air	Exhaustfan-(washroom/parkade/general/kitchen/paint/welding/carpentry/atrium/stairwell/equipment)-[exhaust fan name]	Fan - Exhaust	Including: Power Ventilator, Toilet Exhaust, Kitchen Exhaust, Radiological Exhaust, Isolation Room Exhaust, Smoke Exhaust, Exhaust Hoods		TBD	TBD	TBD				FE	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CFM, MOTOR HP, MOTOR RPM, MOTOR MAKE, MOTOR MODEL, MOTOR VOLTAGE, MOTOR AMPS, MOTOR PHASES, MOTOR FRAME, # OF BELTS, BELT SIZE, FAN RPM, CAT #, BEARINGS, CODE, TYPE, SPEC, SER, FAN BEARINGS, HERTZ, FAN STATIC PRESSURE, FAN VOLUME, FAN HP, FAN VOLTS, FAN AMPS
							Fumehood airvalve - [air valve name]	FHV			TBD	TBD	TBD				FHV	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
							General exhaust airvalve - [air valve name]	GEX			TBD	TBD	TBD				GEX	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
							Fumehoodfan-[fumehood fan name]	FumeHDFan			TBD	TBD	TBD				FHEF	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							Dustcollector-[dust collector name]	Dust Collectors	Dust collector Stern Vent, Dust Extraction System		TBD	TBD	TBD				DC	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
								Paint Spray Booth					TBD				PSB		G1	G3	G3	na	CD 33%	CD 66%	TBD	na			I	Y	Y	Y	Y	Y	Y	Y	Y	Y		
							Grille EX	Exhaust Grille			TBD	TBD	TBD				GRILLE	G0	G1	G1	G1	na			TBD	na			T	Y									1	
			D30.70		D30.70.10	Snow Melting	Snowmelt-(ahu/roof/ingound)-[snow melt name]				TBD	TBD	TBD				SNOWM	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na			I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
	D40	**Fire Protection**	D40.10	Fire Suppression	D40.10.10	Water-Based Fire-Suppression	Pump-(fire/jockey/excesspressure)-[pump name]	Fire Water Pump	Pump		TBD	TBD	TBD				FPWP	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: HP, RPM, VOLTAGE, FLA, SF, SFA, FR, TYPE, AMPS, MOTOR SERIAL #, PHASES, STYLE, MOTOR MAKE, GPM, FRAME, CAT#, MOTOR MODEL, SER #, HERTZ, CODE, BOTTOM BEARING, TOP BEARING, HEAD, CONST, MISC, # BELTS, BELT SIZE, CLASS, PRESSURE, FLANGE
							Aircompressor-(drysystem)-[system name]	Dry -Air Compressor	Including: Fire Sprinkler Compressor		TBD	TBD	TBD				DAC	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: CAT #, CRN #, MOTOR MODEL, MOTOR HP, MOTOR RPM, MOTOR HERTZ, VOLTS, PH, AMPS
							Backflowpreventor-(firesystem)-[backflow name]	Backflow Preventor	Including: Double Check Valve		TBD	TBD	TBD				BFP	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: SIZE, TYPES, MAKE, MODEL #, SERIAL #, LOCATION
							Connection-(siamese/pumper)-[connection name]	Siamese Connection			TBD	TBD	TBD				FDC	G0	G2	G2	G2	na			TBD	na			T	Y	Y	Y			Y	Y	Y	Y	7	Documents uploaded must contain the following information: SIZE
							Hydrant-fire	Fire Hydrant	Including: Non-Potable, Wet Barrel Fire Hydrants, Wall Hydrant, Dry Barrel Fire Hydrant		TBD	TBD	TBD				FHYD	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y			Y	Y	Y	Y	7	Documents uploaded must contain the following information: ULC, DATE MANUF., OUTLET #, OUTLET SIZE, WATER PRES., LOCATED, COMMENT
								Control Valve for sprinkler			TBD	TBD	TBD				FASZV	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
								Pressure Reducing Valve for sprinkler			TBD	TBD	TBD				V	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
								Pre-action valve for dry system			TBD	TBD	TBD				V	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
								Backflow Preventor for Fire Suppression			TBD	TBD	TBD				BFL	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
			D40.30	Fire Protection Specialties	D40.30.10	Fire Protection Cabinets					TBD	TBD	TBD				-	G0	G1	G1	G2	na	CD 66%	na	TBD	na	na		T	Y	Y	Y				Y	Y	Y	6	
					D40.30.30	Fire Extinguishers	Fireextinguisher	Fire Extinguisher			TBD	TBD	TBD				FEXT	G0	G1	G1	G2	na	CD 66%	na	TBD	na	na		T	Y					Y	Y			3	
					D50.10.10	Packaged Generator Assemblies	Generator	Generator			TBD	TBD	TBD				GEN	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D50.10.20	Battery Equipment	Battery Storage for PV Panels				TBD	TBD	TBD				BPV	G0	G1	G2	G2	na	CD 66%	CD 100%	TBD	na	CD 33%		T	Y									1	

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Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information	PROJECT INFO	PROJECT INFORMATION: Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments	DESIGN	DATA AND GEOMETRY SPECIFICATION (DGS): Asset Classification	Minimum Geometric Level				Design Required Data						CONSTRUCTION	DATA COLLECTION SPECIFICATION (DCS)											Additional DCS Parameters TBC / Additional notes
																	Acronyms	Schematic Design	CD 33%	CD 66%	CD 100%	Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)		Collection level	Collection Parameters: Shop Drawings (Aprroved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	
							UPS-(Voltage)-[System Name]				TBD	TBD	TBD				UPS	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
					D50.10.30	Photovoltaic Collectors		PV Panels roof mount			TBD	TBD	TBD				PV	G0	G1	G2	G2	*na*	CD 66%	CD 100%	TBD	*na*	CD 33%		T	Y	Y				Y	Y	Y	Y	6	
			D50.10	Facility Power Generation	D50.10.60	Power Filtering and Conditioning	Capacitor-volts-C#	Capacitor			TBD	TBD	TBD				CAP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	
							ControlPanel-Capacitor-C#	Control Panel Power Factor Correction equipment			TBD	TBD	TBD				CPCAP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y			Y	Y	Y		
					D50.10.70	Transfer Switches	Automatictransferswitch-voltsamps-SW#	Automatic Transfer Switch			TBD	TBD	TBD				ATS	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: TYPE, VOLTS, MAKE, MODEL NUMBER, MAX AMPS, ELECTRICAL CIRCUIT OR MCC, LOCATION
							Transformer-highsidevolts-T#	Transformer			TBD	TBD	TBD				T	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: % IMPEDANCE, BIL RATING, TAP RANGE %, TAP CHANGER (Y/N), WEIGHT, COOLANT TYPE, COOLANT CAPACITY, FAN EQUIPPED (Y/N), PUMP EQUIPPED (Y/N), CATALOGUE #, ORDER #, DRAWING #, SERIAL #, TYPE, STYLE
					D50.20.10	Electrical Service	Breaker-voltsamps-BRK#	Main Circuit Breaker			TBD	TBD	TBD				MCB	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: MAX VOLTS, MAX AMPS, TRIP AMPS, MAX INTERUPT AMPS, MAX THRGH FAULT AMPS, BIL RATING, AUX POWER (VOLTS)
			D50.20	Electrical Service and Distribution			Meter-(KVA & KW)-MET#	Electrical Meter			TBD	TBD	TBD				EM	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		T	Y	Y	Y	Y		Y	Y	Y	Y	8	Documents uploaded must contain the following information: METER TYPE/FORM/CLAS, CT RATIO, PT RATIO, METER CONNECTION, METER MULTIPLIER, MODEL
							MCC-volts-MCC#	Motor Control Center (MCC)			TBD	TBD	TBD				MCC	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: MAX VOLTS, MAX LOAD AMPS, MAX FAULT AMPS, BUSS CONNECTION, SHOP ORDER
					D50.20.30	Power Distribution	Variablespeeddrive-type-VSD#	Variable Speed Drive			TBD	TBD	TBD				VSD	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	Documents uploaded must contain the following information: TYPE, VOLTS, MAKE, MODEL NUMBER, MAX AMPS, ELECTRICAL CIRCUIT OR MCC, LOCATION
							Relay-type-equipment protected	High Voltage Protective Relay			TBD	TBD	TBD				HVPR	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
							Lightingcontrolnetworkdevice-xxx-#	LTGCONTNET			TBD	TBD	TBD				LTGCONTNET	G0	G1	G1	G2	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y									1	
					D50.40.10	Lighting Control	Lightingcontrolrelaypanel-xxx-#	LTGCONTRLY			TBD	TBD	TBD				LTGCONTRLY	G0	G1	G1	G2	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y		5	
								Occupancy Sensor			TBD	TBD	TBD				OS	G0	G1	G1	G2	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y		5	
			D50.40	Lighting				Light level sensor			TBD	TBD	TBD				LLS	G0	G1	G1	G2	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y		5	
					D50.40.20	Branch Wiring for Lighting	Distributionpanel (lighting/power/emergency/ups)-volts	Distribution Panel			TBD	TBD	TBD				DP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y						Y			2	
					D50.40.50	Lighting Fixtures		Light Fixtures			TBD	TBD	TBD				L	G0	G1	G2	G2	*na*	CD 33%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y		5	
D60	**Communications**						**VACANT**																															
							D70 - Electronic Safety and Security																																	
							Access system MasterPanel-SAC#	Either Genetec or Heartland or Fusion			TBD	TBD	TBD				ASMP	G0	G1	G1	G2	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		T	Y						Y			2	
							Controlpanel-sac#				TBD	TBD	TBD				CP	G0	G1	G1	G2	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		T	Y						Y			2	
							Access Control Turnstiles	Access Control Turnstiles			TBD	TBD	TBD				ACT	G0	G1	G1	G2	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		T	Y									1	
			D70.10	Access Control and Intrusion Detection	D70.10.10	Access Control	Automatic Door Controls and Operators	Besam, Stanley, Gyrotech,etc Card Access Doors	Card Key Door Locking Hardware, Electrical Door Locking Control, Electromagnetic Door Holders, Sensors for Automatic Doors		TBD	TBD	TBD				ADC	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y	Y	Y	Y		Y	Y	Y	Y	8	
					D70.10.50	Intrusion Detection	Intrusion alarm system-iac#	Intrusion Alarm System	Panel Type Instance		TBD	TBD	TBD				PNL		G0	G1	G2	*na*	CD 66%	CD 66%	TBD	*na*	CD 66%		I										0	Panel Size
			D70.30	Electronic Surveillance	D70.30.10	Video Surveillance		Camera	Closed circuit television equipment and systems including cameras and recording		TBD	TBD	TBD				C	G0	G1	G1	G2	*na*	CD 33%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y		Y	Y	Y	Y	8	
					D70.50.10	Fire Detection and Alarm	Controlpanel-fa#		Including: Fire Alarm Node, Individual Addressable Module (IAM), Zone Addressable Module (ZAM)		TBD	TBD	TBD				AP	G0	G1	G3	G3	*na*	CD 33%	CD 66%	TBD	*na*	CD 33%		I	Y						Y			2	
							FAFS	Fire Alarm Flow Switch	Including: Fire Tamper Switches, Pressure Fire Alarm Water Flow Switches, Paddle Fire Alarm Water Flow Switches		TBD	TBD	TBD				FAMAG	G0	G0	G0	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y		Y	Y	Y	Y	8	
							FAMDH	Fire Alarm Magnetic Door Holder			TBD	TBD	TBD				DSD	G0	G0	G0	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y		Y	Y	Y	Y	8	
D70	**Electronic Safety and Security**						DSD	Duct Smoke Detector	Duct Photoelectric Smoke Detector, Duct Ionization Smoke Detector, Fire Alarm Duct Smoke Relay		TBD	TBD	TBD				FAAN	G0	G0	G0	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y	Y		Y	Y	Y	Y	8	Documents uploaded must contain the following information: CONTROL PNL LOCATION, ANNUN PNL LOCATION
			D70.50	Detection and Alarm			FAA	Fire Alarm Annunciator	Including: Audible Fire Alarm Annunicator Panels, Visible Fire Alarm Annunicator Panels, Combination Fire Alarm		TBD	TBD	TBD				FAA	G0	G0	G0	G2	*na*	CD 66%	*na*	TBD	*na*	*na*		T	Y	Y	Y				Y	Y	Y	6	
							FDD	Fire Dampers in Ductwork			TBD	TBD	TBD				FDD	G0	G0	G1	G3	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y									1	
					D70.50.20	Radiation Detection and Alarm					TBD	TBD	TBD				RDA	G0	G0	G1	G3	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
					D70.50.30	Fuel-Gas Detection and Alarm	GD	Gas Detection			TBD	TBD	TBD				GD	G0	G0	G1	G3	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
					D70.50.40	Fuel-Oil Detection and Alarm	OD	Oil Detection			TBD	TBD	TBD				OD	G0	G0	G1	G3	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
					D70.50.50	Refrigeration Detection and Alarm	RD	Refrigeration Detection			TBD	TBD	TBD				RDA	G0	G0	G1	G3	*na*	CD 66%	*na*	TBD	*na*	CD 33%		T	Y	Y	Y				Y	Y	Y	6	
D80	**D80 - Integrated Automation**							**D80 - Integrated Automation**																														
Sitework																																					

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Asset Category	Asset Group CODE	Asset Group Name	LEVEL 3 CODE	LEVEL 3 NAME	Level 4 CODE	LEVEL 4 NAME	Equipment Name in FAMIS	Asset Type	Additional information	PROJECT INFO	PROJECT INFORMATION: Part of the project? (Y/N/TBD)	Responsible discipline	Placement Category	Design Team comments	BIM Consultant comments	DESIGN	DATA AND GEOMETRY SPECIFICATION (DGS): Asset Classification	Minimum Geometric Level				Design Required Data						CONSTRUCTION	DATA COLLECTION SPECIFICATION (DCS)											Additional DCS Parameters TBC / Additional notes
																												Collection Parameters											
																	Acronyms	Schematic Design	CD 33%	CD 66%	CD 100%	Fire Rating	Type Mark	Mark	Tender Package Number	Sound Transmission	System Information (Name, Classification, Abbreviation)		Collection level	Shop Drawings (Aproved)	Vendor / Supplier	Manufacturer	Model	Serial No.	Manufacturers Instruction Manuals	Installation/Substantial Completion Date	Warranty End Date	Warranty Certificate	# of parameters	
G	G20	Site Improvements	G2010	Roadways	G2010.70	Roadway Lighting			Include Dal owned Roadway lights		TBD	TBD	TBD				LROAD	G0	G1	G2	G2	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	
			G2020	Parking Lots	G2020.70	Parking Lot Lighting			Include Dal owned Parking lot lights		TBD	TBD	TBD				LPARK	G0	G1	G2	G2	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	
					G2020.80	Exterior Parking Control Equipment			Pay and Display		TBD	TBD	TBD				PCE	G0	G1	G2	G2	na	CD 33%	na	TBD	na	CD 33%		T	Y	Y	Y	Y			Y	Y	Y	7	
			G2060	Site Development	G2060.30	Exterior Signage					TBD	TBD	TBD				SIGN	G0	G1	G2	G2	na	CD 33%	na	TBD	na	na		T	Y	Y	Y	Y			Y	Y	Y	7	
	G30	Liquid and Gas Site Utilities	G3050	Site Energy Distribution	G3050.10	Site Hydronic Heating Distribution	EXPANSIONJOINT[expansion joint name]		Relate this equipment to specific tunnel segment		na	na	na	na	na			na	na	na	na	na	na	na	na	na	na		na	na	na	na	na	na	na	na	na	na	0	Required for fabrication models, Mark required for identification
							Valve Iso		Isolation Valve		TBD	TBD	TBD				V	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y				Y	Y	Y		
					G3050.20	Site Steam Energy Distribution	STEAMTRAP-(HIGHPRESSURE/LOWPRESSURE)-[steam trap name]		Relate this equipment to specific tunnel segment		TBD	TBD	TBD				STEAMTRAP	G0	G1	G3	G3	na	CD 33%	na	TBD	na	CD 33%		T	Y									1	
							EXPANSIONJOINT-STEAM-[expansion joint name]		Relate this equipment to specific tunnel segment		na	na	na	na	na			na	na	na	na	na	na	na	na	na	na		na	na	na	na	na	na	na	na	na	na	0	Required for fabrication models, Mark required for identification
							PRV-(STEAM)-[prv name]		Relate this equipment to specific tunnel segment		TBD	TBD	TBD				PRV-STEAM	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y				Y	Y	Y	6	
							Valve Iso		Isolation Valve		TBD	TBD	TBD				V	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y				Y	Y	Y	6	
					G3050.40	Site Hydronic Cooling Distribution	EXPANSIONJOINT[expansion joint name]		Relate this equipment to specific tunnel segment		na	na	na	na	na			na	na	na	na	na	na	na	na	na	na		na	na	na	na	na	na	na	na	na	na	0	Required for fabrication models, Mark required for identification
							Valve Iso		Isolation Valve		TBD	TBD	TBD				V	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	CD 33%		I	Y	Y	Y				Y	Y	Y	6	
	G90	Miscellaneous Site Construction	G9010	Tunnels	G9010.40	Service Tunnels	Tunnel segment				TBD	TBD	TBD				TUN	G0	G1	G3	G3	na	CD 33%	CD 66%	TBD	na	na		I	Y	Y	Y				Y	Y	Y	6	

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COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION																Notes/ Comments
										Revit built in parameters			Shared parameters													
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
1	010	CLASSROOM	011	CLASSROOM FACILITIES	0101101	LECTURE RM-CLASSRM FACILI (>25)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101102	SEMINAR RM-CLASSRM FACILI (<25)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101105	STUDIO-CLASSRM FACILITIES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101107	AUDITORIUM-CLASSRM FACILI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101108	SEMINAR/COMP-CLASSRM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101110	BREAKOUT ROOM-CLASSRM		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101111	CASEROOM-CLASSRM		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101112	STAGE-CLASSRM FAC AND SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1			012	CLASSROOM FACILITIES SERV	0101201	PROJECT RM-CLASRM FAC SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101202	AV&EQUIP RM-CLSRM FAC SER (projection room)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101204	STORAGE-CLASSRM FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
1					0101208	PREP RM -CLASSRM FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
5			013	GENERAL STUDENT STUDY SPA	0101301	STUDY SPACE-GEN STUDENT S		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
5					0101302	GRAD STUDY-GEN STUDENT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
5					0101303	RESOUR CTR-GEN STUD STUDY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
5					0101304	MUSIC/PRACTICE-GEN STUD STUDY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2	020	LABORATORY	021	INSTRUCTIONAL LABORATORY	0202101	LAB-INSTRUCTIONAL LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202103	GROSS ANATOMY - INSTRUCT.		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202104	COMPUTER LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202105	FURNACE ROOM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202106	CHEMISTRY-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202107	ELECTRON MICRO-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202108	FOOD ENGIN-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202109	GEOLOGY-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202112	MINERALS PROCESS-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202114	ROCK MECHANICS-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202116	CLASSROOM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202118	CONSTRUCT MATRL-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202121	ELECTRICAL MACH-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202122	ELECTRONICS-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202125	FOUNDATION-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202127	HIGHWAYS LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202128	HYDRAULICS-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202132	MATERIAL TEST-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202133	MICROWAVE-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202135	PROCESS CNTRL-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202137	SOILS-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202140	UNIT OP-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202141	EQUIPMENT ROOM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202142	CIVIL ENG. LAB - INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202143	CONTROL ROOM - INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202145	AQUA LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202147	OBSERVN RM -INSTRUC LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202149	DEMONSTRATION-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202150	GRAPHICS LAB-INSTRUC LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202151	DENT CUBIC-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202152	MUSIC/PRACTICE-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202153	CLINICAL TEST RM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202154	INTERVIEW RM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202155	SOLAR LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202156	VIBRATIONS LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202157	SKILLS LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202158	GENE PROBE-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202159	STUDIO-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202160	WIND TUNNEL LAB-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202161	EXAM ROOM-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202162	OPERATORY-INST LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2				INSTRUCTIONAL LAB SERVICE	0202201	PREP ROOM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202204	XRAY RM-INSTRUCT LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202205	BALANCE RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202206	DARKROOM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202207	ENGINE RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202208	MIN PROCESS-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION																Notes/ Comments
										Revit built in parameters			Shared parameters													
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
2					0202210	ENVIRO-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202211	DARK RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202212	PHOTO OFF-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202213	STORAGE-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202215	WORKSHOP-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202216	COMP SERVRRM-INST LABSERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202217	ANIMAL SUPL-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202218	MAMMAL HOLD-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202219	RECEIVING - INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2			022		0202220	GREENHOUSE-INSTR LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202221	STERILIZN-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202222	EQUIP RM - INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202224	CLOSET-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202225	WELDING SHOP-INST LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202226	COUNSEL RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202227	DYEING ROOM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202228	FITTING ROOM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202229	LAUNDRY-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202230	PROJECT RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202231	PHOTO LAB-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202232	OFFICE/TECH-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202233	SICK RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202234	DRESSING RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
2					0202235	RECOVERY RM-INST LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3				GRADUATE/FACULTY RES LAB	0202301	RESEARCH LAB-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202305	CRYOGNCS-GRAD/FAC RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202307	REACTOR-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202309	GENE PROBE-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202310	SURGERY - RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202311	LAB/OFFICE - RESCH LAB (No longer used)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202312	TISSUE CULTURE-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202316	COMB CHAM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202317	COMP RM-RESCH LAB (Dry Lab)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202318	CNTL RM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202319	BIO GAS-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202320	BIOTECH-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202321	CAVIT-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202322	CHEM PRO-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202324	GASIFIC-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202325	GLASS BL-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202326	INSTRUMENT ROOM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202327	PETRO-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202328	SOIL/WAT-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202329	X-RAY-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202330	CERAM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202331	CLEAN RM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202334	CONC STR-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202335	ELECTRICA-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202336	ENTRY-RESCH LAB (Anti Room to entry to Lab)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202337	FIBRE OPTIC-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202339	HVY STRUC-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202342	FURN RM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202343	MARINE OILS - RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202344	MOISTURE-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202346	P FISH PL-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202348	WAT CHEM-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		
3					0202349	WATER SAN-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%		

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
3			023		0202350	WORKSHOP-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202351	PILOT PL-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202352	MOISTURE CNTRL-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202354	RHEOLOGY - RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202355	FISH LAB-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202356	WKSHP LAB-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202358	WIRELESS LAB-RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202359	STEEL STRUCTURES-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202360	KINETICS LAB-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202361	HIGH TEMPERATURE-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202362	ELECTROPROCESSING-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202363	ANIMAL RM-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202364	POST MORTEM-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202366	AQUA RES-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202367	INSECT RES-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202368	SEAL TANK-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202369	POOL TANK-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202370	FLUME ROOM-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202371	SWIM TUNNEL-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202372	IMMUNOHISTOCHEM-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202373	ANIMAL SURGERY-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202374	TESTING RM-RESEARCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202375	GRAD STUDENTS - RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202376	ATM SWITCH LAB -RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202377	ERGO/ MANU LAB -RESCH LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202378	USABILITY LAB-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202379	PLAYGROUND-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202381	OBSERVN RM-RES LAB (Quiet room ?)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202382	GRAD STUD LAB/OFFICE-RES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202383	INCUBATOR-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202384	AIR QUALITY LAB-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202385	BIO ENERGY LAB-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202386	DENT CUBIC-GRAD/ FAC RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202387	HISTOLOGY RES LAB-GRAD/FAC RES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202463	HISTOLOGY WORKSHOP-RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3				GRADUATE/FAC RES LAB SERV	0202401	PREP ROOM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202403	CNTRL ENVIR-RES LAB SERV (Biosafety lab)		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202404	ANIM STOR-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202405	COLD ROOM - RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202406	WARM ROOM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202407	SHIELD RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202409	WASH UP RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202410	CAGE WASH-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202411	LAB SUPPLY-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202412	RADIO CHEM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202413	EQUIP RM-RESCH LAB SERVI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202414	CHEM STOR-RESCH LAB SERVI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	also used for waste chemicals
3					0202415	SOLVENTSTOR-RESCH LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202416	CONTROL RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202417	BALANCE RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202418	ROCK CRUSH-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202420	RAINFALL-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202421	HEAT TRTMENT-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202422	PUMP RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202423	DARK RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
3					0202424	PHOTO RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202425	WORKSHOP-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202426	STORAGE-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202427	TOOL RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202428	CAGEWSH-DIRTY-RES LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202429	CAGEWSH-CLEAN-RES LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202430	CHANGE RM-FEM-RES LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202431	ISOLATION RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202432	SCRUB RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3			024		0202433	AQUA HOLD-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202434	ELECTRON MICRO-RES SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202435	GLASS BLOW-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202436	ELECTRONICS-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202437	RES WRKSHP-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202438	COMPUTER RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202439	STER.CULTURE-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202440	MICROSCOPE RM-RES LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202441	ANIMAL SUPPL-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202442	MAMMAL HOLD-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202443	MORGUE-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202444	STORES-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202445	XRAY RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202446	TOWER TANK - RES LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202447	GREENHOUSE-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Also used for "Header house"
3					0202449	OPERATORY-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202450	STERILIZATION-RES LAB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Auto Clave room
3					0202451	MECHANICAL-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202452	MACHINE RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202453	WAITING RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202454	MEETING RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202455	RADIOL.PROC-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202456	DIVE LOCKER RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202457	DEMONSTRAT-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202458	MACHINE SHOP-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202459	BIO ENERGY TEST-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202460	RECOVERY-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202461	RECEIVING-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
3					0202462	HISTOLOGY COLD RM-RES LAB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19				OTHER LABORATORIES	0202516	STORAGE - OTHER LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5			025		0202518	MUS/LISTEN RM-OTHER LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					0202524	EXAM RM-OTHER LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					0202525	DENTAL LAB-OTHER LAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5	030	LIBRARY		LIBRARY STACK SPACE	0303111	BOOKS STACKS - LIBSTACK		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303113	RES CENTER-LIBSTACK		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5			031		0303114	MAP ROOM - LIB STACK		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303115	ARCHIVES - LIBSTACK		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303116	SPEC COLL - LIB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5				STUDY SPACE	0303210	MEETING RM-LIB STUDY SPAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303212	LIB STACK MEZ-STUD SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303213	STUDY SPACE-LIB STUDY SPC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5			032		0303214	STACK/STUDY-LIB STUDY SPC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303215	STUD OFFICE-LIB STUDY SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303216	COMP RM-LIB STUDY SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303217	LIBRARY/SEMINAR-LIBRARY STUDY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5				LIBRARY SERVICE	0303301	CONFERENCE-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
5				SPACE	0303302	DARKROOM-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303303	STORAGE - LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303304	OFFICE-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303305	CIRCULATION-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303306	BOOK PROCESS-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303307	INFORMATION DESK-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303308	EQUIP RM-LIBRARY SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303309	CIRCULATION DESK-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303310	BOOK STORAGE-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5			033		0303311	LOUNGE-LIB SERVICE SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303312	RECEPTION - LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303314	KITCHENETTE-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303315	MEETING RM-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303318	OFFICE-SHARED-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303319	VAULT-LIBR SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303320	DOCUMENT DELIVERY-LIB SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303321	WORKROOM-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303322	ARCHIVES/STOR-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0303323	STUDENT WORKSTATION-LIB SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4	040	ACADEMIC & ADMIN OFFICES		ACADEMIC OFFICES	0404113	OFFICE-ACADEMIC OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404114	GRAD OFF-ACADEMIC OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404115	RECEPTION-ACADEMIC OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404116	STUDIO-ACADEMIC STUDIO		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404117	STUD OFFICE-ACAD OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4			041		0404118	OFFICE/PT/SES/SHARE-ACAD		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404119	OFFICE/CHAIR-ACAD OFF		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404120	OFFICE/DEPT-ACAD OFF		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404121	OFFICE/TA/TUTORIAL-ACAD O		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404122	GRAD STUD COMP RM-ACAD OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404123	GRAD STUDIO-ACAD OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4				ACADEMIC OFFICE SERVICE	0404205	STATIONERY-ACAD OFFI SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404207	BOARDROOM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404208	FILE RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404209	STAFF RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404210	MEET RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404211	PHOTOCOPY-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404212	AUDIO VIS-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404213	STORAGE - ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404214	COMPUTER RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404216	LOUNGE-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404217	CONFER RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404219	INTERVIEW-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404220	LOCKER RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404222	LIBRARY-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404225	VAULT-ACAD OFFICE SERVICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4			042		0404226	WAITING RM-ACAD OFF SERVI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404227	WORKSHOP - ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404228	KITCHENETT -ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404230	HSE KITCHEN-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404231	CLOSET - ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404233	CHANGE RM - ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404236	MAIL-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404238	EXAM RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404239	SOUND RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404241	WORKROOM-ACAD OFF SERVICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
4					0404242	RESOURCE CTR-ACAD OFF SERVICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404243	RENTAL COSTUME STORAGE-ACAD OF		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404244	WASHROOM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404246	STUDIO-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404247	CONF/PROJECT RM-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
4					0404248	ASSIGNMENT BOXES-ACAD OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10			043	ADMINISTRATIVE OFFICES	0404301	OFFICE-ADMIN OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404302	RECEPTION-ADMIN OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404303	STUDENT OFF-ADMIN OFF		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404304	OFFICE-PT/SHARED-ADMIN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					0404305	HEALTH OFFICE-ADMIN OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					0404306	HEALTH RECEPTION-ADMIN OFFICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10				ADMINISTRATIVE OFFICE SER	0404402	FILE STRG-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404403	INTERVW RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404404	LOUNGE-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404407	PHOTOCOPY-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404409	PRINT RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404410	MEETING RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404411	STORAGE-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404413	GOWN ROOM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404415	LOCKER RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404416	MICRO READ-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404418	PHONATH RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404419	TESTING RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404420	VAULT-ADMIN OFFICE SERVIC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404421	WAITING RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10			044		0404422	CONFER RM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404423	LIBRARY - ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404424	KITCHENETT -ADMN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404425	HSE KIT - ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404426	BLDG KTCHN -ADMN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404427	CHANGE RM -ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404429	WORKROOM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404430	COMPUTER RM-ADMIN OFF SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404431	ARCHIVES/STORAGE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404433	RESOURCE CTR-ADMIN OFF SE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404434	STUDENT WORKSTATION-ADMIN OFF		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404435	WASHROOM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404436	SOUND ROOM-ADMIN OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
10					0404437	STUDIO-ADMIN OFFICE SERVICES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					0404438	HEALTH LOUNGE-ADMIN OFFICE SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					0404439	HEALTH KITCHENETTE-ADMIN OFFIC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14	050	STUDENT ACTIVITY SPACE		STUDENT OFF & SERVICE SPA	0505105	OFFICE-STUD OFF/OFF SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14			051		0505107	CLOSET - STUD OFF&SER SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505108	RECORD LIB.-STUD OFF/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505110	SPRAY ROOM-STUD ACTIVITY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14				STUDENT ACT FACIL & SERVI	0505201	U.G. LNGE-STUD ACTIVITY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505202	GRAD LNGE-STUD ACTIV SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505203	UG&G LNGE-STUD ACTIV SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505204	GEN LNGE-STUD ACTIV SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505207	GAME RM-STUD ACTIV SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505209	LOCKERS -STUD ACTIV SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14			052		0505210	LOUNGE-STUD ACTIVITY SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505211	STOR - STUD ACT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505212	KITCHENET-STUD ACTIV/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
14					0505213	MEETING-STUD ACTIV/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505214	STUDIO-STUD ACTIV/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Society related
14					0505215	RESOURCE CTR-STUDNT ACTIV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
14					0505216	PRAYER RM-STUD ACTIVITY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	see 0404242
12	060	COMPUTING FACILITIES	061	COMPUTER FACILITIES & SER	0606104	COMPUTER RM-COMP FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					0606108	COMP MACH RM-COMP FAC&SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					0606109	HELP DESK-COMP FAC & OPER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5			062	GENERAL STUDENT COMPUT RM	0606205	COMPUTER RM-GEN STUD COMP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0606207	WORKSTATION-GEN STUD COMP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0606208	PRINTER - GEN STUD COMP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0606209	PHOTOCOPY - GEN STUD COMP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
5					0606210	COMP/LANG LAB-GEN STUDENT COMP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6	070	ATHLETIC FAC.& SERV SPACE	070	ATHL FACIL & SERVICE SPAC	0707001	WEIGHT ROOM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707002	DRY ROOM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707003	LOCKER ROOM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707006	SHOWER RM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707007	FIELDHOUSE-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707008	GYMNASIUM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707010	LAUNDRY ROOM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707011	ICE RINK-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707012	MULTI-PURP-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707013	BLEACHERS-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707014	GOLF-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707015	INDOOR TRACK-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707016	POOL FACIL-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707017	POOL DECK-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707018	SQUASH-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707019	RAQUETBALL-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707020	FREEWEIGHT-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707021	CYBEX - ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707022	TEAM ROOMS-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707023	SAUNA-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707024	TEAM BENCH-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707025	PENALTY BENCH-ATH FAC SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707026	OFF BENCH-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707027	EQUP CTRL CTR-ATH FAC SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707029	TRAINING RM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707030	STORAGE-ATHLETIC FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707035	CHANGE RM -ATH FAC&SER SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707036	EQUIP RM -ATH FAC&SERV SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707037	WRESTLING RM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707038	CARDIO RM - ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707039	EXAM RM - ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707040	SOUND RM-ATHLETIC FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707041	DANCE ROOM-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
6					0707042	ROCK COURT-ATH FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15	080	ASSEMBLY&EXHIBITION FACIL		ASSEMBLY FACIL & SERVICES	0808101	THEATRE-ASSEMBLY FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808102	AUDITORIUM-ASSEMB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808103	MULTI-PURP-ASSEMB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808106	COMMON-ASSMB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808107	STAGE-ASSMB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808108	STORAGE-ASSMB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808109	VIP LOUNGE-ASSEMB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808110	DRESSING RM-ASSEM FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808111	SOUND RM-ASSEMB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
15					0808112	STAGE-ASSEMBLY FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808114	TICKET BOOTH-ASSEM FAC/SE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15			081		0808115	ORCHESTRA PIT-ASSEM FAC/S		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808116	GREEN ROOM-ASSEMB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808117	PROPS STOR-ASSEM FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808118	LIGHT BOOTH-ASSEM FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808119	WRKSHP - ASSEM FAC SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808120	DARK ROOM-ASSEMB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808121	LAUNDRY RM-ASSEMB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808122	REHEARSAL-ASSEMBLY FACIL/SERVI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808123	DANCE RM-ASSEMBLY FAC&SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808124	STUDIO-ASSEMBLY FACIL& SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808125	MUSIC/PRACTICE-ASSEMBLY FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808126	WORKSHOP-ASSEMBLY FACIL&SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15				EXHIBITION FACIL & SERVIC	0808207	EXHIBIT RM-EXHIB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808209	STOR RM-EXHIB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808210	MUSEUM-EXHIBIT'N FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808211	ART GALLERY-EXHIBIT FAC/S		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15			082		0808212	ARTIFACTS-EXHIBIT'N FAC/S		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808213	RESOURC CTR-EXHIB FAC/SER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808214	WORKROOM - EXHIB FAC/SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
15					0808215	PLANETARIUM-EXHIBITION FACIL &		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9	090	FACILITIES MANAGEMENT		FACILITIES MANAGEMENT	0909001	CARPENTRY SHOP-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909002	FIRE ALARM ROOM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					0909003	CUSTODIAL STOR-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909004	LOCKER RM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909006	LUNCH ROOM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909007	MAIL ROOM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909008	MAINTENANCE RM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909009	STORES/RECEIV-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909010	JANITOR SUPPLY-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909012	PENTHOUSE-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909013	MEN'S LOCKER-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9			090		0909014	WOMEN'S WASHROOM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909015	MENS WASHROOM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909017	CARPENTRY-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909018	PAINT SHOP-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909019	TOXCHEM-FM MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909021	STORAGE-FAC MAN/MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909022	WKSHP - FAC MANG & MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909023	KITCHENETT -FAC MG & MAIN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909024	VEHIC STOR-FAC MGMT&MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909025	EQUIP RM - FM & MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909026	LOUNGE-FACIL MAN/MAINT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
9					0909027	WELDING SHOP-FM MAINTENAN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12	100	OTHER CENTRAL CERVICES		OTHER GENERAL SERVICES	1000005	MAIL ROOM-OTH CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					1000006	PRINT SHOP-OTH CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
11					1000007	GRAPHICS-OTH CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					1001002	DUPLIC CNTR-OTH CTRL SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
11					1001003	STUDIO-OTH CTRL SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					1001004	STORES-OTHER CENTRAL SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					1001005	STORAGE - OTH CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13			100		1001006	EXAM RM-OTHR CENTRAL SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
12					1001007	PHOTOCOPY-OTHR CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					1001008	PLAYROOM-OTHR CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
11					1001009	DARK ROOM-OTH CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
11					1001010	WORKSHOP-OTHER CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
11					1001011	STUDIO/OFFICE-OTHER CENT SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
13					1001013	HEALTH SERVICE STORAGE-OTHER C		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
11					1001014	MEDIA STORAGE-OTHER CENTRAL SE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7	110	FOOD SERVICES	110	FOOD SERVICES	1101101	FACULTY CLUB BAR-FD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					1101102	DINING RECEP RM-FD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Sheriff and howe
7					1101103	KITCHEN-FOOD SERVICES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	food preparation
7					1101105	STORAGE-FOOD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					1101106	CAFE-FOOD SERVICES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Front services
7					1101107	REFRIGERATOR-FOOD SERVICE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	coolers and freezers
7					1101112	CAFE SERV - FOOD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					1101113	CAFE KITCHEN -FOOD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					1101114	LIQUOR STO - FOOD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Booze storage
7					1101115	CANTEEN - FOOD SERV		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Vending Machines
8	120	COMMERCIAL FACILITIES	120	COMMERCIAL FACILITIES	1201201	BOOKSTORE-COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201202	BOOKSTORE STRG-COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201203	BAR FACIL-COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201204	PAYPHONE-COMMERCIAL FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201205	PANTRY-COMMERCIAL FACILIT		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201206	COMPUTER STORE-COMMER FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201207	STORAGE-COMMERC FACILITY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201208	CONVENIENCE STORE-COMM FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201209	DAYCARE - COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201210	LAUNDRY RM - COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201212	POOL RM-COMMERCIAL FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201213	KITCHEN-COMMERCIAL FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201214	WASHROOM-COMM FAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1201215	SLEEPING ROOM		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202305	STAGE-COMMERCIAL FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202306	ATM-COMMER FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202307	VENDING MACHINES-COMMER FACIL		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202308	INFORMATION DESK-COMMERCIAL FA		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202309	SPORTS STORE-COMMERCIAL FACILI		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
8					1202310	OFFICE-COMMERCIAL FACILITY		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16	200	NON-ASSIGNABLE AREAS		NON ASSIGNABLE AREAS	2002001	BOILER ROOM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002002	SERV CHASE-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002004	CONVERTOR R-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002005	CORRIDOR-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002007	ELECT ROOM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002009	TRANS VAULT-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002010	ELECTRICAL-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002011	ELEVAT MACH-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002012	ENTRANCE-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002013	FOYER-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002014	FURNACE RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002015	GARBAGE-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002016	HALLWAY-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002017	LOBBY-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002019	MACHINE RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002020	MECH RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002021	AIR BAL RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002022	FAN ROOM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002023	PUMP ROOM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002024	OIL TANK RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
16			200		2002025	SERVICE RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002026	ELEV SHAFT-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002027	SPRINK RM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002028	STAIRWAY-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002029	STORAGE-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002030	TELEPHONE WIRE-NON ASSIGN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002031	VENTILATION-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002032	VESTIBULE-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002033	WASHROOM-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	unisex/ non gender specific
16					2002034	WASHRM-MALE-NONASSIGNABLE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002035	WASHRM-FEMALE-NONASSIGNAB		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002036	EMERGE EXIT-NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002037	MECH MEZZ-NON ASSIGN SPAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002038	WHLCHR RMP-NON ASSIGNABLE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002039	WHLCHR WASHRM-NON ASSIGNA		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	has an adult change table
16					2002040	COMMUNICATIONS-NON ASSIGN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002041	BATHROOM - NON ASSIGN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	Toilet/Sink/Shower and or tub
16					2002043	SHOWER RM - NON ASSN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	only shower
16					2002044	RECEIVING - NON ASSN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002045	CATWALK - NON ASSN SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002049	CLOSET - NON ASSN AREA		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002050	LOCKER RM - NON ASSN SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002052	SUMP RM-NON ASSN SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002053	TRANSFORMER-NON ASSN SPAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002054	ATRIUM-NON ASSIGN SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					2002055	LIGHT WELL-NON ASSIGNABLE SPAC		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17	300	OTHER SPACE		OTHER SPACE	3003001	STORAGE/RESIDENCE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003002	LAUNDRY-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
16					3003003	ATTIC-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003004	DOUBLE DORM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003005	SINGLE DORM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003006	DORM ROOM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003009	COLD RCV RM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003010	COLD STORAGE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003011	DISHWASHER-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003012	DINING RM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003013	EMPTY ROOM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003014	FREEZER-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003015	FRIDGE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003016	KITCHEN-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003017	LOUNGE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003018	MAIL ROOM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003019	OFFICE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003020	MEETING ROOM-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003021	RECEIVING-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003022	SUPER SINGLE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003023	BACHELOR-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003024	CRAWL SPACE-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003025	DISPENSARY-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003027	SUITE(1)-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003028	SUITE(2)-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003029	SUITE(3)-OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003030	UNDER CONSTRUCTION-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

DALHOUSIE UNIVERSITY

COU	Space Category ID	Space Category Desc	Space Sub Category Id	Space Sub Category Desc	Space Classification Id	Space Classification	PROJECT INFORMATION	Part of the project? (Y/N/TBD)	DESIGN PHASE (DGS)	ROOM SPECIFICATION															Notes/ Comments
										Revit built in parameters			Shared parameters												
										Name	Number (Level + ??? + Consecutive number)	Capacity	Site Name	Building Description	Building (Building #)	COU (Column A)	COU Description (COU_MPHEC File)	Space Sub Category Id (Column B)	Space Category Desc (Column C)	Space Sub Category Id (Column D)	Space Sub Category Desc (Column E)	Space Classification Id (Column F)	Space Classification (Column G)	
17					3003031	BEDROOM - SINGLE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003032	BEDROOM - DOUBLE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003033	RECEPTION-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003034	MULTI PUR - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003035	STUDY SPACE - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					3003036	CAFE - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003037	HOUSE KITCHEN - OTHER SP		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7			300		3003038	CAFE KITCHEN -OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
7					3003039	CAFE SERV -OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003040	BEDROOM - QUEEN		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003041	CLOSET - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003042	LIVING RM - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003044	POOL ROOM - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003045	CHANGE RM - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003046	LIQUOR STO - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003047	CANTEEN - OTHER SPACE		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003048	SHELLED SPACE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003049	PARKING-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003050	DENT CUBIC-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003051	RECOVERY-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003052	OPERATORY-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003053	STERILIZATION-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003054	DRESSING RM-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
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19					3003056	PAVED COURTYARD-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003057	BREAKOUT RM-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003058	SEMINAR-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003060	CLINIC RECEPTION-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003061	STORAGE/MISC.-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003062	BEDROOM BARRIER FREE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003063	BEDROOM RESIDENT ASSISTANT-OTH		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003064	WAITING-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003065	WASHROOM-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
17					3003066	WORKSHOP-OTHER/RES		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003067	CASEROOM-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003068	PROJECTION ROOM-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003069	OFFICE/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003070	RECEPTION/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003071	KITCHEN/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003072	RESEARCH LAB/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003073	MEETING/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	
19					3003074	LOUNGE/LEASE-OTHER		TBD		SD	DD 100%	CD 30%	DD 100%	DD 100%	DD 100%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	CD 60%	

6.7 Appendix G – Accuracy Table

The goal of the accuracy table is to ensure that the record model handed over to the Uiversity at the end of construction is an accurate representation of the built facility. Of specific importance are all tracked assets, along with their associated systems, as defined generally in the DCS and specifically in the project asset registry. The Construction Team is responsible for managing, recording, and providing all required information to allow the update of construction changes in the design models by the design consultants.

MAXIMUM DEVIATION ALLOWED						
	Asset Group	**Examples**	**Location** (X + Y)	**Elevation Accuracy** (Z)	**Slope**	**Count** (number of assets)
1	Tracked assets as defined by the DCS	**Mech:** Valves, Pumps, AHU, Equipment clearances **Elec:** Panels, Transformers, Lighting	100mm	100mm		Exact
2	All systems associated with the required tracked assets	**Mech:** Gravity fed piping, Duct work, Domestic hot water, Gas lines, Hydraulic systems	100mm	100mm	+/- 5%	
		Elec: Conduits when grouped, Cable trays	100mm	100mm		
3	Model elements directly associated with a tracked asset	**Mech:** Grilles, Louvers, Vents, Dampers, Access Panels, Drains	100mm	100mm		Exact
		Elec: Fire Alarms, Receptacles, Switches, Sensors	300mm	300mm		
4	Non tracked assets - room bounding model elements	**Arch:** Walls, Roofs, Floors, Windows, Doors, Ceilings,	100mm	100mm	+/- 5%	Exact
		Strt: Floors, Columns, Beams, Walls	100mm	100mm	+/- 5%	Exact
5	Non tracked asset - general model elements	House Keeping Pads, Cable trays, Washroom fixtures	WCT*	WCT*		Exact
6	Fixed furnishing/equipment	Casework, Fire hose cabinets, Fire extinguishers, Kitchen cabinets, Bathroom vanities	100mm	100mm		Exact
7	Underground services	Drains, Catch basins, Incoming services - gas, water	50mm	50mm	+/- 5%	Exact

* WCT – Within Construction Tolerences

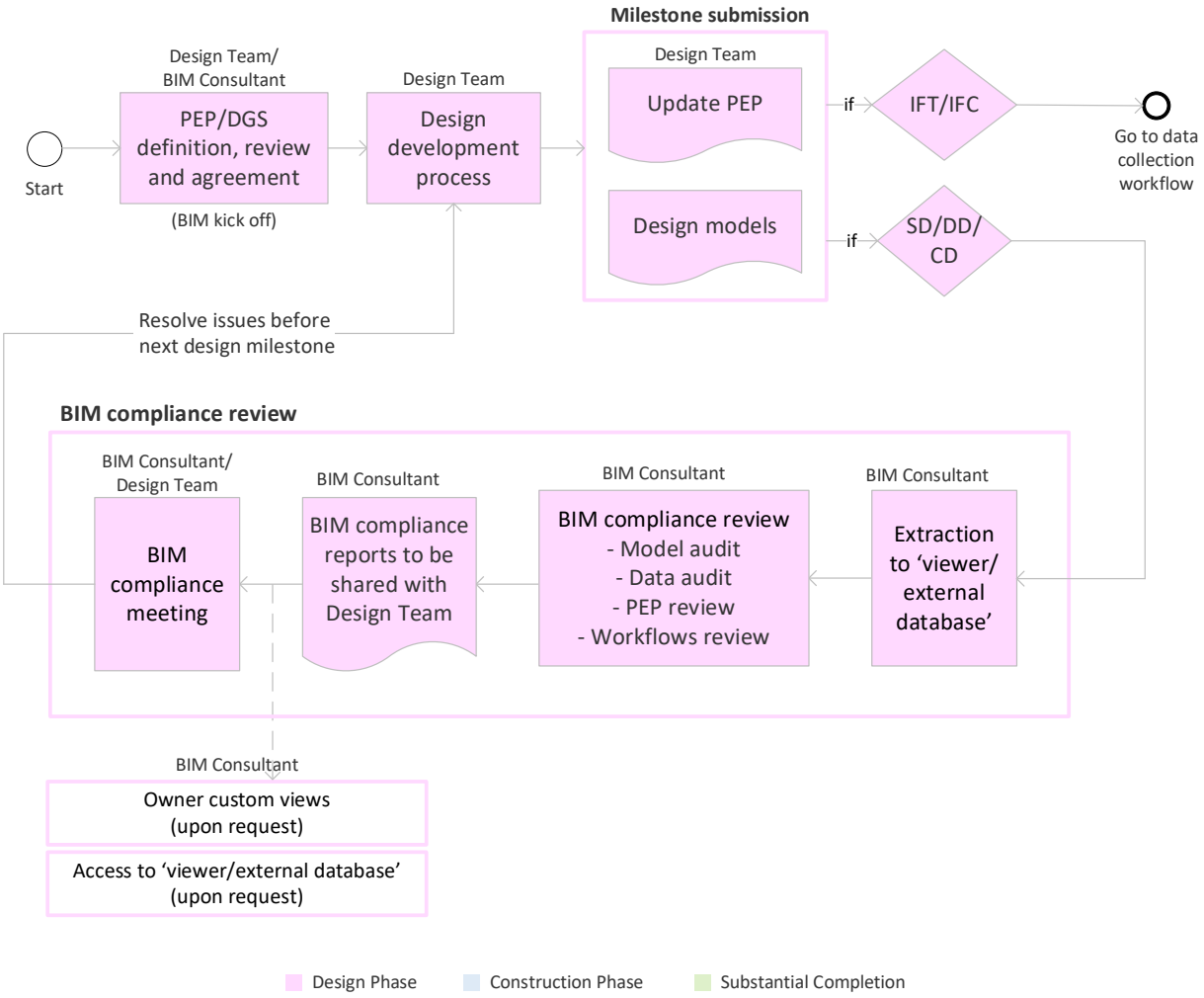
6.8 Appendix H – BIM Scope of Work

Task	Team			The University Team	
	Design Team	Construction Team	Trades	BIM Consultant	Dalhousie University
DESIGN					
Generate and update Design PEP	x				
Create design models based on DGS geometric level	x				
Add DGS data in model elements	x				
Manage design process	x				
Share design models with team	x				
Perform building requirements compliance review					x
QA/QC of design data required for FMO	x			x	x
Perform virtual coordination	x				
Find, track, and solve clash coordination issues	x				
Generate stakeholder custom views				x	
Perform BIM requirements compliance review				x	
Monitor compliance of workflows defined in the PEP				x	
Extract data from design models for Viewer/External Database				x	
Generate asset registry				x	
Provide clarifications regarding modeled elements and scope	x				x
Provide asset registry sign off					x
CONSTRUCTION					
Generate and update construction PEP		x			
Perform construction analysis		x			
Perform construction sequencing		x			
Generate fabrication models			x		
Perform virtual coordination with construction federated models		x			
Resolve coordination issues generated by fabrication models	x	x	x		
Provide laser scanning		x			
Redline mark ups sharing for record model update		x			
Update design models to reflect construction changes	x				
Share updated design models with team	x				
Extract updated design models in case of critical changes in tracked assets				x	
Review agreed processes and protocols defined in the PEP				x	
Provide the Data Collection Environment and training				x	
Setup and management of Data Collection Environment				x	
Trades scope assignment		x		x	
Generate data/document upload progress report				x	

Task	Team			The University Team	
	Design Team	Construction Team	Trades	BIM Consultant	Dalhousie University
Generate stakeholder custom views				x	
SUBSTANTIAL COMPLETION					
Provide building documentation of installed tracked assets		x	x		
Generate structured digital data collection reports				x	
Validate data/documents provided by trades		x			x
Provide consolidated digital building handover				x	
Provide data transfer templates to CMMS system					x
Transfer data to CMMS system				x	x

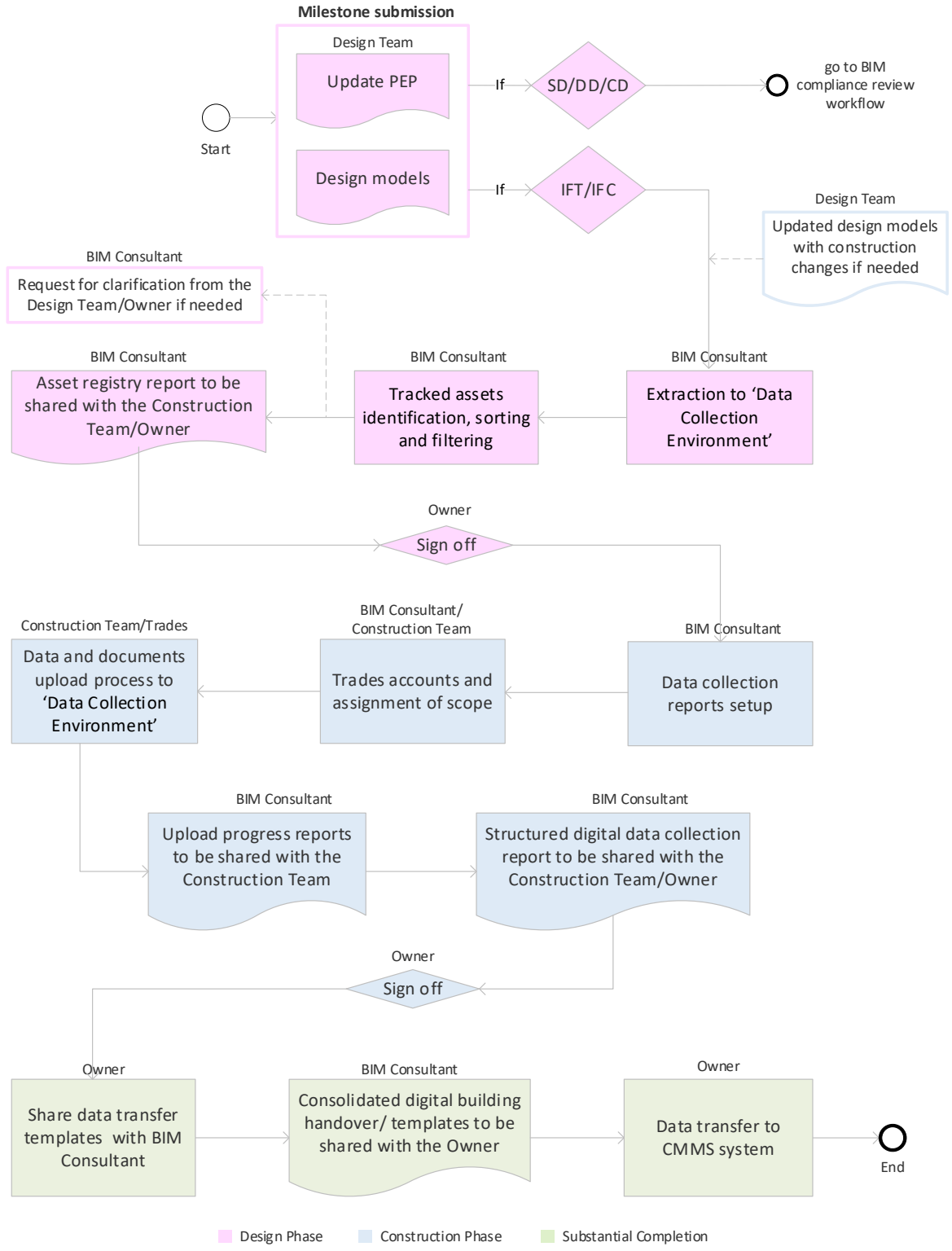
6.9 Appendix I – BIM Compliance Review Workflow

- (ISO 19650 5.6 Collaborative information production)



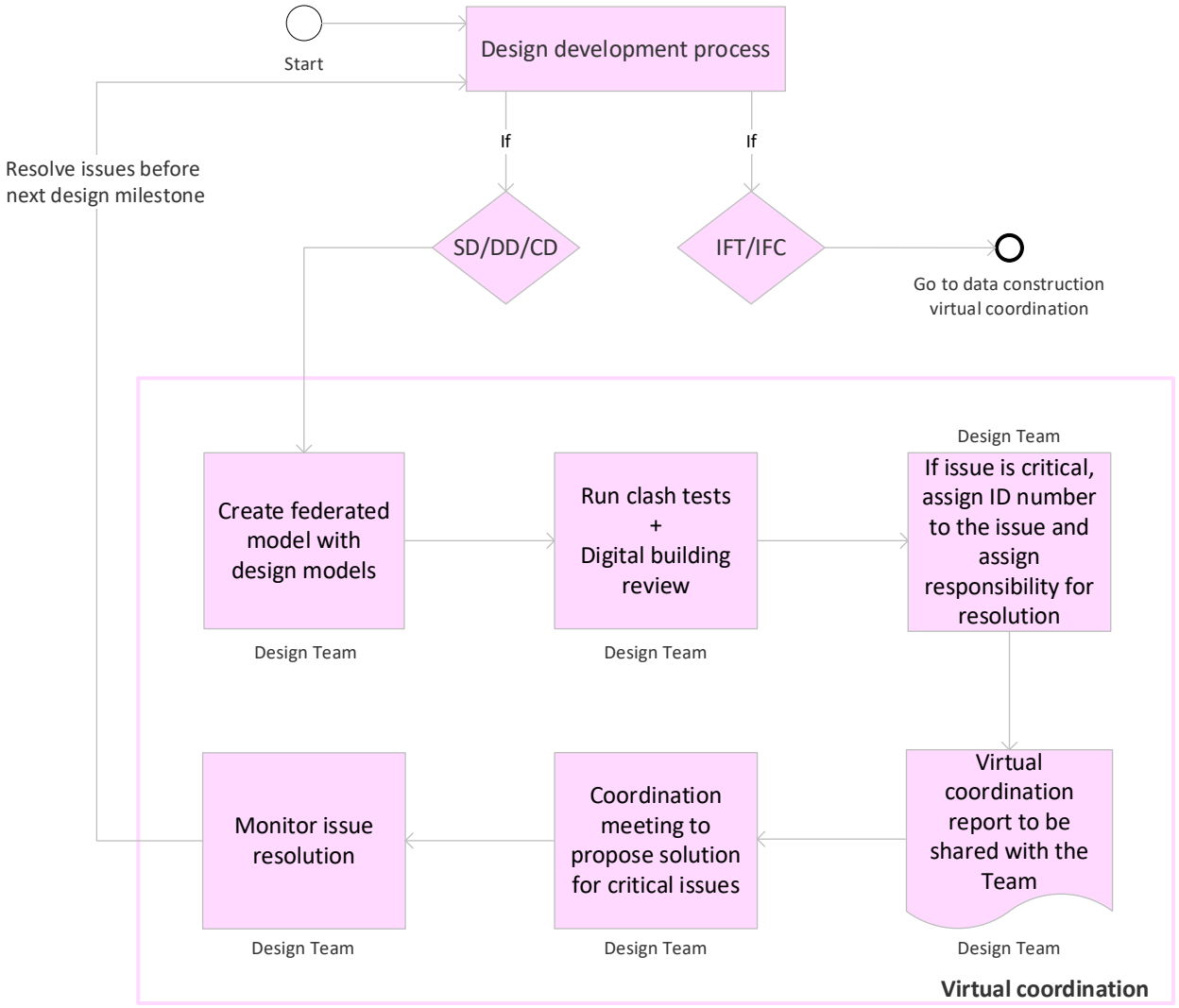
6.10 Appendix J – Data Collection Workflow

- (ISO 19650 5.7 Information Delivery Model)

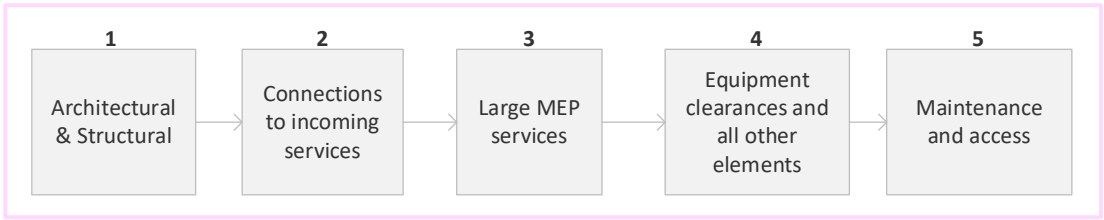


6.11 Appendix K – Virtual Coordination Workflow (Design)

- (ISO 19650 5.4 Appointment process & 5.6 Collaborative information production)

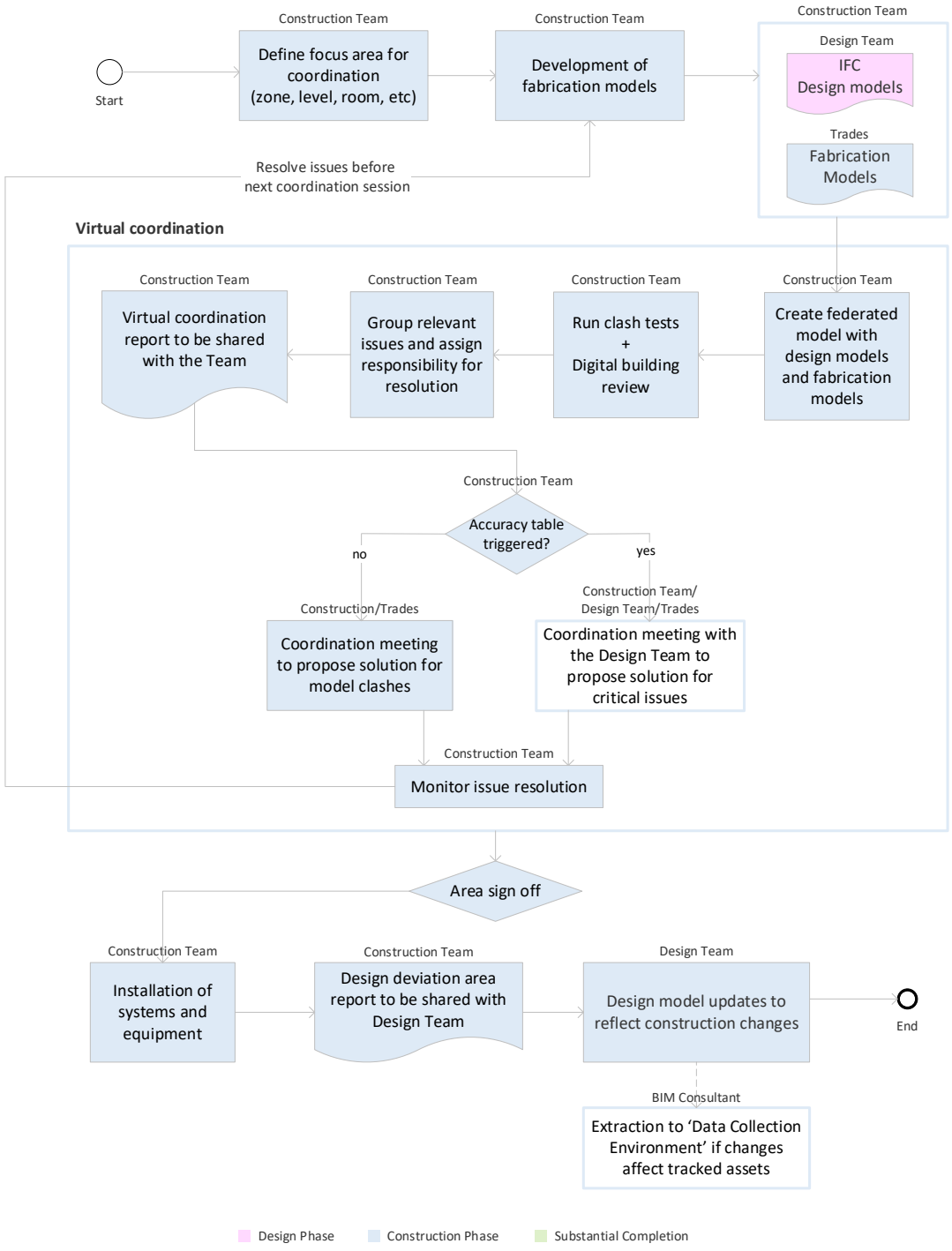


Recommended hierarchy of clashes



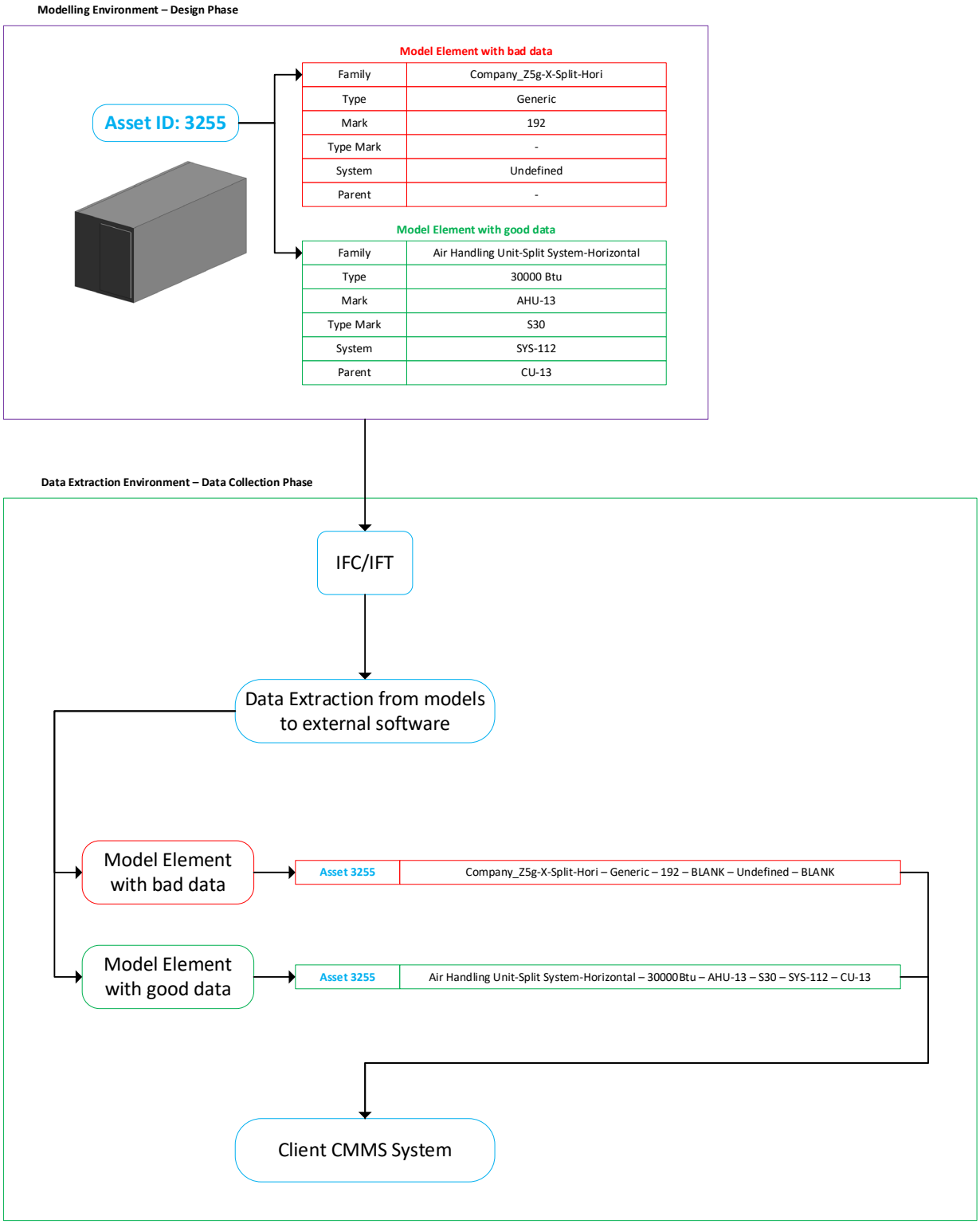
6.12 Appendix L – Virtual Coordination/Record Model Update Workflow (Construction)

- (ISO 19650 5.4 Appointment process & 5.6 Collaborative information production)


Start
Construction Team
Define focus area for coordination (zone, level, room, etc)
Construction Team
Development of fabrication models
Construction Team
Design Team
IFC Design models
Trades
Fabrication Models
Resolve issues before next coordination session
Virtual coordination
Construction Team
Create federated model with design models and fabrication models
Construction Team
Run clash tests + Digital building review
Construction Team
Group relevant issues and assign responsibility for resolution
Construction Team
Virtual coordination report to be shared with the Team
Construction Team
Accuracy table triggered?
no
yes
Construction/Trades
Coordination meeting to propose solution for model clashes
Construction Team/ Design Team/Trades
Coordination meeting with the Design Team to propose solution for critical issues
Construction Team
Monitor issue resolution
Area sign off
Construction Team
Installation of systems and equipment
Construction Team
Design deviation area report to be shared with Design Team
Design Team
Design model updates to reflect construction changes
End
BIM Consultant
Extraction to 'Data Collection Environment' if changes affect tracked assets
Design Phase
Construction Phase
Substantial Completion

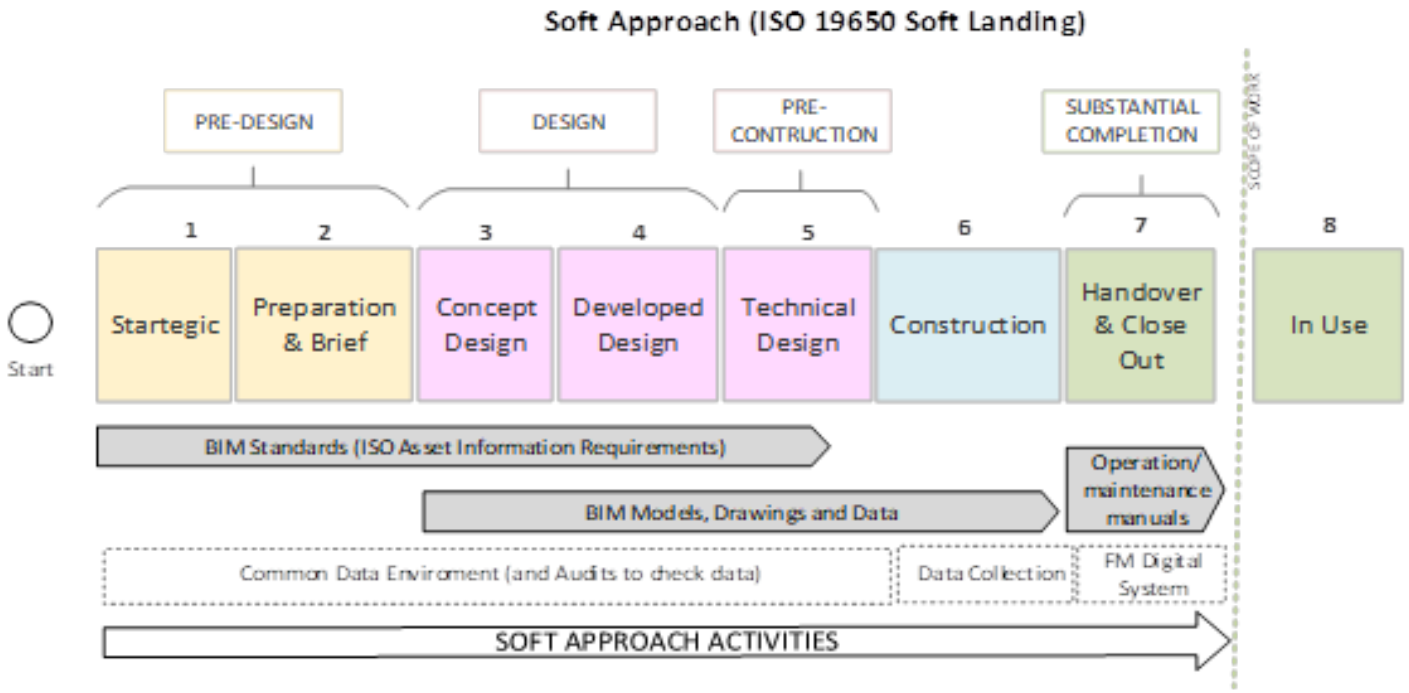
6.13 Appendix M – Modelling Environment – Data Requirements

- (ISO 19650 AIR Asset Information Requirements)

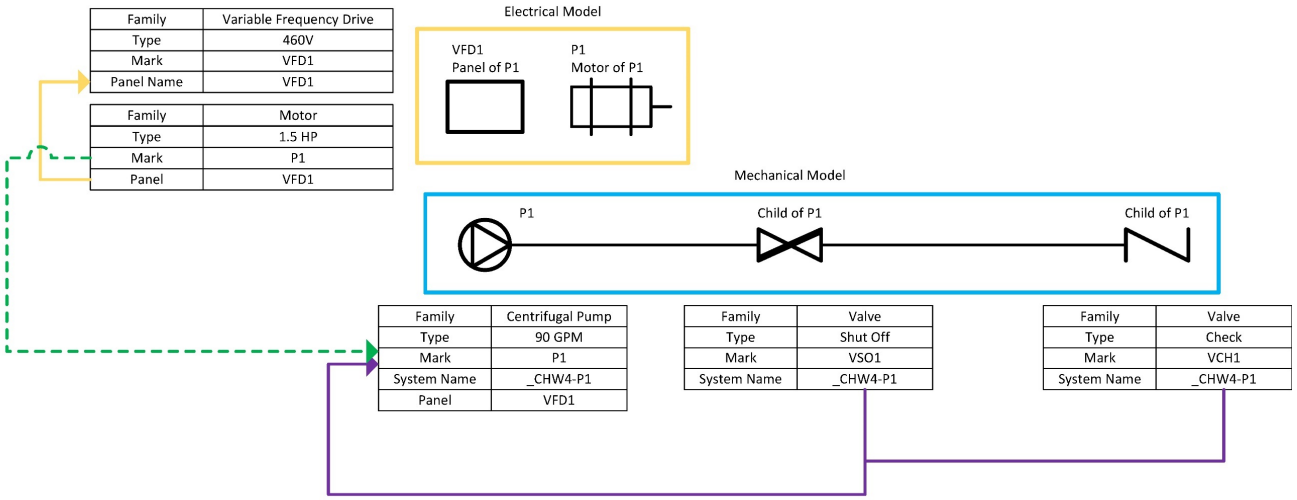


6.14 **Appendix** N **– Soft Approach**

- (ISO 19650 5.1 Assessment & Need,
  - 5.6 Collaborative Information Production,
  - 5.7 Information Delivery Model,
  - 5.8 Project Closeout)



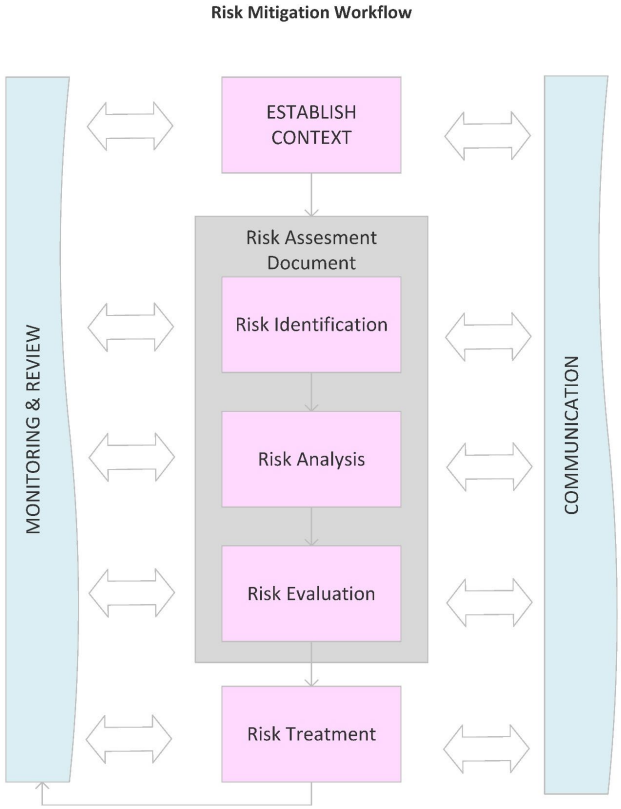
6.15 Appendix O – Parent-Child Relationship Workflow



<Mechanical Equipment Schedule>

A	B	C	D	E
Family	Type	Mark	System Name	Panel
Outdoor AHU - Horizontal	6 Square Feet of Coil	AHU1	_SA1-1-AHU1	EP1
VAV Unit - Parallel Fan Powered	Size 2 - 10 inch Inlet	VAV1	_SA1-1-AHU1,_SA1-2-VAV1	
Coil - Hot Water	Standard	RH1	_SA1-2-VAV1,_SA1-3-RH1	

6.16 Appendix P - Risk Assessment Matrix



6.17 Appendix Q – File Sharing Workflow

BIM360 Collaboration Workflow
PEP Worflow