

Client Letter

Dear Swansea Council,

I have been requested to draft a BIM Execution Plan (BEP) which is appended to this letter. The BEP goes over the requirements and standards that need to be adhered to in order to achieve the BIM Level 2 compliance as requested.

The Project, Ysgol Bae Abertawe, consists of a 1 form entry infant school for approximately 90 pupils.

The Overarching BIM Objective is to provide to Swansea County Council a delivery to fulfil the Welsh Assembly's mandate that "BIM is to used on all projects by 2016."

BIM is widely used as the acronym for 'Building Information Modelling' which is commonly defined using the Construction Project Information Committee (CPIC) definition as:

'...digital representation of physical and functional characteristics of a facility creating a shared knowledge resource for information about

it forming a reliable basis for decisions during its lifecycle, from earliest conception to demolition.'

To successfully implement BIM on the project, I have developed this BEP outline to define uses for BIM on the project (e.g. design authoring, design co-ordination etc.), along with a detailed design of the process for executing BIM throughout the project life cycle.

The purpose of this BEP is primarily to outline the implementation of BIM uses which are of interest to Swansea County Council such as:-

- Project Information
- Management
- Planning & Documentation
- Standards, Methods & Procedures
- IT Solutions

BIM EXECUTION PLAN (BEP)

Contents

- 1.0 BIM PROJECT EXECUTION PLAN OVERVIEW**
- 2.0 PROJECT INFORMATION**
 - 2.1 Project Owner**
 - 2.2 Project Name**
 - 2.3 Project Location and Address**
 - 2.4 Contract Type / Delivery**
 - 2.5 Brief Project Description**
 - 2.6 Project Scope**
 - 2.7 Unique Project Challenges**
- 3.0 KEY PROJECT CONTACTS**
 - 3.1 Project Stakeholders**
 - 3.2 BIM Personnel**
- 4.0 PROJECT GOALS & OBJECTIVES**
 - 4.1 BIM Goals and Objectives**
- 5.0 COLLABORATIVE WORKING AND MODELLING STANDARDS**
 - 5.1 Collaborative Strategy**
 - 5.2 Common Data Environment**
 - 5.3 Meetings and Communication**
 - 5.4 Modelling Standards**
 - 5.5 Level of Detail**
 - 5.6 Information Exchange**
 - 5.7 Model Accuracy and Tolerances**
 - 5.8 Quality Control**
 - 5.9 Project Resources and IT Requirements**
 - 5.10 Data Protection Policy**
 - 5.11 File Naming Structure**
 - 5.12 Key Performance Indicators**
- 6.0 BIM OUTPUTS AND DELIVERABLES**
 - 6.1 Work Stage Drawings**
 - 6.2 COBie (Construction Operations Building Information Exchange)**
 - 6.3 Digital O & M Manual**

APPENDICES

- 7.0 REFERENCES**

- 8.0 BIBLIOGRAPHY**

1. BIM PROJECT EXECUTION PLAN OVERVIEW

The Overarching BIM Objective is to provide to Swansea County Council a delivery to fulfil the Welsh Assembly's mandate that "BIM is to used on all projects by 2016."

BIM is widely used as the acronym for 'Building Information Modelling' which is commonly defined using the Construction Project Information Committee (CPIC) definition as:

'...digital representation of physical and functional characteristics of a facility creating a shared knowledge resource for information about it forming a reliable basis for decisions during its lifecycle, from earliest conception to demolition.'

- (CPIC,2021)

To successfully implement BIM on the project, the project team has developed this Pre-Contract BIM execution plan (BEP). The BEP defines uses for BIM on the project (e.g. design authoring, design co-ordination etc.), along with a detailed design of the process for executing BIM throughout the project life cycle.

The purpose of this BEP is primarily to outline the implementation of BIM uses which are of interest to Swansea County Council such as:-

- Design / Buildability reviews
- Spacial Planning
- Clash detection
- 3D coordination
- Site Planning
- Phase Planning
- Record Modelling

2.0 PROJECT INFORMATION

2.1 Project Owner Swansea County Council

2.2 Project Name Ysgol Bae Abertawe

2.3 Project Location & Address

Site adjacent to NCP Carpark & Swansea Observatory; The Slipway, Maritime Quarter, Swansea, SA1 1YB

2.4 Contract Type / Delivery TBC

2.5 Brief Project Description

Design and construction of a new school - Ysgol Bae Abertawe of 1 form entry infant school for 90 pupils

2.6 Project Scope

Key dates:-

Project timescale - TBC

Building contract commencement – TBC

Occupation of new build – TBC

Contract completion – TBC

Designers' appointment is to be confirmed and the concept design will be taken through design development and technical design to reach construction stage, the date is to be confirmed. Planning Consent must be facilitated by someone chosen by the client (Swansea County Council) with a Building Regulation Application to be submitted and a conditional approval issued prior to the construction start date.

Technical design will include incorporating information from suppliers and sub - contractors to enable a BIM to be handed to the Client for Operating and Maintenance purposes.

2.7 Unique Project Challenges

Within and around the site there are historical artistic landmarks that will need checking if they are listed or untouchable. Constraints may need to be in place before to allow their preservation.

In addition to this, the site is near a popular walkway and accommodation. As such, various measures need to be put in place including site access, close liaison with the public, maintaining live services, reduction of noise and dust transfer (such measures are detailed further in the Project Method Statement / Methodology).

3.0 Key Project Contacts

3.1 Project Stakeholders

Role	Name	Organisation
Client	TBC	Swansea County Council
Client Representative and Principal Designer (Pre RIBA Stage 4)	TBC	Swansea County Council
Project Manager	TBC	Swansea County Council
Liaison Officer	TBC	Swansea County Council
Cost Control QS	TBC	Swansea County Council
Property Risk Officer	TBC	Swansea County Council

Project Director	TBC	TBC
Health, Safety & Environmental Officer	TBC	TBC
Project Planner	TBC	TBC
Pre-Construction Manager	TBC	TBC
BRE Site Sustainability Manager	TBC	TBC
Principal Designer (Post RIBA Stage 4)	TBC	TBC
Project Manager – Site Operations	TBC	TBC
Project Manager - Commercial	TBC	TBC
Assistant Project Manager - Commercial	TBC	TBC
Site Manager	TBC	TBC
Site Engineer	TBC	TBC
Lead Architectural Design / BIM Manager	TBC	TBC
Architectural & BIM Technologist	TBC	TBC
Structural / Civil Engineer	TBC	TBC
Services Consultant	TBC	TBC
Energy Consultant	TBC	TBC
Acoustic Consultant	TBC	TBC
Planning Consultant	TBC	TBC

3.2 BIM Personnel

Company	Personnel	Email address	Telephone
Client/ Swansea CC	TBC	TBC	TBC
End User	TBC	TBC	TBC
BIM Manager	TBC	TBC	TBC
BIM Technologist	TBC	TBC	TBC
Note: BIM Manager to be supported by BIM Technologist			
Architectural	TBC	TBC	TBC
Consultant	TBC	TBC	TBC
Consultant	TBC	TBC	TBC

4.0 Project Goals and BIM Uses

4.1 BIM Goals & Objectives

PRIORITY (High / Medium / Low)	DESCRIPTION	BIM USES
Medium	Increased Site Productivity	Design & Buildability Reviews / 3D Coordination
High	Early Clash Detection between disciplines	3D design coordination
High	Incorporate data for future facilities	Record Modelling / Digital Fabrication
Low	Assessment of sustainable energy options	Energy analysis
High	Access strategy for future maintenance	Design & Buildability Reviews / 3D Coordination / Record Modelling (SiteDesk)
High	Health & Safety – Identification and recording	Design & Buildability Reviews / 3D Coordination
High	Assessment of Design Performance	Design Reviews / 3D Modelling
High	Accurate 3D Record Model for Facilities Management	Record Model (SiteDesk) / 3D Modelling
Med	Reduction in overall maintenance costs	Record Model (SiteDesk)

5.0 COLLABORATIVE WORKING AND MODELLING STANDARDS

5.1 Collaborative Strategy

In order to ensure a fully collaborative and coordinated team the design and development process will occur through fortnightly meetings to be attended by representatives of each design team discipline.

In the interim, all design and coordination queries are to be circulated via email, distributed via the Design and BIM Manager.

A single combined read-only federated review model will be maintained by the Contractor. The model will contain pertinent 'intelligent' information and realistic visualisation properties. The model will be interrogated using free or low-cost viewing interfaces with features that enable the viewer to virtually walk through the building.

The model will provide co-ordination of the building geometry between design disciplines.

5.2 Common Data Environment

As the exchange of information between all Stakeholders is a key factor in the execution of a successful BIM Project, a Project Extranet will be managed through programmes like 4Projects. The cloud based site will be managed and administered by the Client.

Through all the phases of BIM development, there will always exist separate Project Information Models (PIM) for each of the following disciplines:-

- Architectural (this model will also include Interior Design information)
- Structural Engineering
- Mechanical, Electrical and Plumbing installation
- Civil Engineering
- Landscape Architecture

The proposed Design Team should have past and current experience in the use of 4Projects or similar with Swansea County Council but any additional training in the use of the system can be provided by the Client as necessary

5.3 Meetings & Communication

The following meetings will be scheduled:-

Meeting type	Project Stage	Frequency	Participants	Location
BIM requirements kick-off	Commencement	Once	Client; Design Team, Principle Contractor	TBC
BIM Execution Plan	First month	Fortnightly	Client; Design Team, Principle Contractor	TBC
Design Co-ordination	First month	Fortnightly	Client; End User, Design Team, Principle Contractors	TBC
Progress reviews; KPI's	Monthly		Client; End User, Design Team, Principle Contractors	TBC
Meetings with multiple parties	As required		As required	Betws
Executive review	Monthly		Client; Design Team, Principle Contractor	TBC

5.4 Modelling Standards

The common modelling standards will be established between all Stakeholders with consideration for:-

- Modelling methodologies (3D, placeholders etc.)
- Level of Development
- Level of Detail
- Incorporation of Metadata
- Use of material properties
- Use of in place families
- Standards for calculations

5.5 Level of Detail

5.5.1 RIBA Stage 1, Brief – the graphical model will not exist

5.5.2 RIBA Stage 2, Concept Design – the graphical design may only show a massing diagram or specify a symbol in 2D to represent a generic element

5.5.3 RIBA Stage 3, Developed Design – the objects shall be represented in 3D with a specification attached.

5.5.4 RIBA Stage 4, Technical Design – the objects shall be based upon a generic

representation of the objects.

- 5.5.5 RIBA Stage 5, Construction – all generic objects to be replaced with the object procured from the manufacturer. Any essential information to be retained shall be re-attached or re-linked to the replacement object
- 5.5.6 RIBA Stage 6, Handover & Close Out – all necessary information about the product shall be included in the handover document and attached to the commissioning and handover documentation. The as constructed model shall represent the as constructed project in content and dimensional accuracy. This shall include all of the manufacturer’s maintenance and operational documentation, commissioning records, health and safety requirements, the final COBie information exchange (if required – note use of SiteDesk proposed, refer to section 6.3 of this BEP), and as built models in native format.
- (RIBA,2021)

5.6 Information Exchange

The list of Information Exchange Worksheet is attached in Appendix 1 of this document.

The common software to be used in this project is listed below:-

- AutoDesk Revit 2018 (Architecture / MEP / Structure modelling)
- AutoDesk Navisworks Manage 2018 (Clash detection)
- Tekla (Steelwork fabrication design)
- SiteDesk (Digital O&Ms)

Information Exchange	Originator	Receiver	Frequency	Model Software	Native File Type	File Exchange Type
Architectural Design	BIM Manager	4Projects	Fortnightly	Revit 2018	.rvt .pdf	.rvt .ifc .pdf
Structural Design	Consultants	4Projects	Fortnightly	Revit 2018	.rvt .pdf	.rvt .ifc .pdf
M&E Design	Consultants	4Projects	Fortnightly	Revit 2018	.rvt .pdf	.rvt .ifc .pdf
3D Coordination Model	BIM Manager	4Projects	Monthly	NavisWorks Manage 2018 / Revit 2018	.nwd .rvt	.nwd .ifc .rvt
Digital O&M	Principle Contractor	4Projects	On Completion	SiteDesk	-	.ifc

5.7 Model Accuracy and Tolerances

The accuracy of the models is to be to the greatest degree of accuracy possible with tolerances being based upon the expertise and experience of the team.

5.8 Quality Control

Checks	Definition	Responsibility	Software	Frequency
Visual Check	Ensure there are no unintended model components and the design intent has been followed	Principle Contractor / Design Team	Revit / Navisworks	Prior to first issue of model to Client
Interference Check	Detect problems in the model where building components are clashing	BIM Manager / Technician	Navisworks	Prior to first issue of model to Client
Standards Check	Ensure that BIM and CAD standards have been followed	BIM Technician	Navisworks / Revit	Prior to first issue of model to Client
Model integrity checks	Ensure that there are no undefined, incorrectly defined or duplicated model elements	BIM Manager	Navisworks / Revit	Continuous to production of digital O&Ms

5.9 Project Resources & IT Requirements

It is essential that the Stakeholders BIM software skills and experience match the required BIM deliverables.

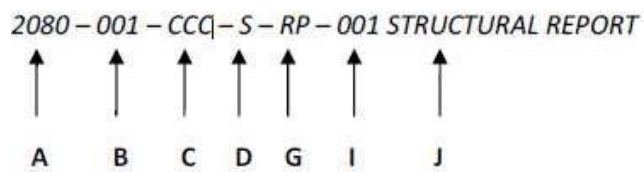
The proposed design team would have completed BIM IT Assessment forms and BIM Resource Assessment Forms and we consider them to have sufficient hardware and software to undertake the design works to the required standard.

An example of our BIM IT Assessment form and BIM Resource Assessment form can be seen in Appendix 2 and Appendix 3.

5.10 File Naming Structure

All models and drawings are to follow the naming convention set out in PAS1192 and as outlined in Swansea County Council's Naming Protocol document issued as part of the tender documents.

e.g.



A – UPRN (Unique Property Reference Number)

B – Job Number

C – Originator

D – Roles

E – Block No.

F – Level

G – Type

H – Element

I – Drawing / Document No.

J – Description

In addition to the above, room and door numbering protocol is to comply with Swansea County Council's Corporate Protocol.

5.11 Key Performance Indicators

Key Performance Indicators (KPIs) are ways to periodically assess the performance and effectiveness of the project delivery as well as individual Stakeholders.

In order to quantify the performance of the project delivery, the following KPIs will be used:-

- Delivery timescales
- Costs
- Resources
- Number of clash detections
- Number of construction clashes

6.0 BIM Outputs and Deliverables

6.1 Work Stage drawings

At the appropriate times appropriate to the master programme, each discipline's drawings will be uploaded to the CDE (4Projects) for approval / sign off by the Client.

Issued drawings will be uploaded in .pdf format with the appropriate drawing issue register and the WIP model.

Relevant stages will be Tender, Concept Design, Developed Design, Technical Design, Construction and Handover & Close Out.

6.2 COBie (Construction Operations Building Information Exchange)

If required by the Client, asset information will be generated prior to the completion of each plan of work stage with COBie data drops provided individually from the PIM of each Design discipline and collated by the principle contractor for issue.

DROP 1 (Based upon Client issue model)

- Model represents “requirements and constraints”
- Consistent with output at RIBA Stage 2 (Concept design)
- Purpose – to ensure that the design & specifications are consistent with the Client's requirements
- Room data sheets to be generated to include functionality of the space, environmental conditions required, performance of finishes.

DROP 2 (Based upon Client issue model)

- Model represents “outline solution”
- Consistent with output at RIBA Stage 3 (Developed design)
- Fixtures and fittings etc. remain generic
- Room data sheets will now also include list of furniture and equipment requirements for each room and various schedules (doors, windows etc.) can be produced from the model
- Model now represents a technical solution

DROP 3

- Model represents “Construction Information”
- Consistent with output at RIBA Stage 4 (Technical design)
- Model is now a fully co-ordinated technical solution developed from drop 2
- Fixtures and fittings etc. are now actual products from manufacturers
- Model can now be used for construction purposes
- Fully coordinated technical drawings can be generated for construction
- Full schedules can be generated for construction and procurement (windows, doors, fittings etc.)

DROP 4

- Model represents “operation & maintenance information”
- Consistent with output at RIBA Stage 6 (Handover & Close Out)
- Data collected is the operational and detailed functional information supplied by the product manufacturers
- Model represents the building “as built” and contains all information provided by the various sub-contractors to maintain it
- Information can be extracted that is relevant for facilities management
- Fixtures and fittings etc. are now “as installed”

The process for COBie output shall be:-

- Export from the native BIM platform to IFC using filters appropriate to the required data drop.
- Convert the IFC file into a COBie-UK 2012 spreadsheet using proprietary conversion software.
- Compare the newly generated COBie output with the previous output to ascertain compliance.

6.3 Digital O & M Manual

On previous projects, I have used Sitedesk for the implementation of digital O & M manual / as built model. Sitedesk is a hosted system that makes it simple for Clients to use all of their BIM data.

Designed with non-technical users in mind, all information in the model, all of the documents, all of the maintenance schedules (set up as tasks with reminders), useful caretaker information such as how to switch things off in an emergency and RAL codes for paint on various surfaces can all be displayed at the touch of a button, thus allowing the Client to unlock their BIM data without the risk of COBie.

Any problems during the after care period can be communicated electronically using digital forms. Content such as photos, video, in fact any format can be embedded into a form and automatically transmitted. This removes the need for the Client/caretaker to wait for a contractor to come just to have a look at the problem thus saving time and money as issues can be addressed before they become problems.

Use of Sitedesk through RIBA Stage 7, In Use, provides the Client with a “super-set” of data allowing them to capture and learn the performance and experience of the data available, paving the way towards delivery of projects to BIM Level 3.

If however the Client chooses not to take up this option, then the information held on the system can be exported into an O&M manual entirely (hosted on Sitedesk and hard copy) and exported as COBie data.

- (Sitedesk, 2021)

Appendix 1 – Information Exchange Worksheet

Information Exchange Requirements				Title:		
File Format						
Model Elements Using CSI Uniformat II				Information	Grouping	Responsible Party
A	Substructure	A10 Foundations	A1010 Standard Foundations			
			A1020 Special Foundations			
			A1030 Slab on Grade			
A20	Basement Construction	A2010 Basement Excavation				
		A2020 Basement Walls				
B	Shell	B10 Superstructure	B1010 Floor Construction			
			B1020 Roof Construction			
			B1030 Exterior Walls			
B20	Exterior Enclosure	B2020 Exterior Windows				
		B2030 Exterior Doors				
B30	Roofing	B3010 Roof Coverings				
		B3020 Roof Openings				
C	Interiors	C10 Interior Construction	C1010 Partitions			
			C1020 Interior Doors			
			C1030 Fittings			
C20	Stairs	C2010 Stair Construction				
		C2020 Stair Finishes				
C30	Interior Finishes	C3010 Wall Finishes				
		C3020 Floor Finishes				
		C3030 Ceiling Finishes				
D	Services	D10 Conveying	D1010 Elevators & Lifts			
			D1020 Escalators & Moving Walks			
			D1030 Other Conveying Systems			
D20	Plumbing	D2010 Plumbing Fixtures				
		D2020 Domestic Water Distribution				
		D2030 Sanitary Waste				
D30	HVAC	D3010 Rain Water Drainage				
		D3020 Other Plumbing Systems				
		D3030 Energy Supply				
D40	Fire Protection	D4010 Heat Generating Systems				
		D4020 Cooling Generating Systems				
		D4030 Distribution Systems				
D50	Electrical	D5010 Terminal & Package Units				
		D5020 Controls & Instrumentation				
		D5030 Systems Testing & Balancing				
E	Equipment & Furnishings	E10 Equipment	E1010 Commercial Equipment			
			E1020 Institutional Equipment			
			E1030 Vehicular Equipment			
F	Special Constr. & Demo	F10 Special Construction	F1010 Other Equipment			
			F1020 Fixed Furnishings			
			F1030 Movable furnishings			
G	Building Sitework	G10 Site Preparation	G1010 Special Structures			
			G1020 Integrated Construction			
			G1030 Special Construction Systems			
H	Special Constr. & Demo	H10 Selective Bldg Demo	H1010 Special Facilities			
			H1020 Special Controls & Instrumentation			
			H1030 Building Elements Demolition			
I	Building Sitework	I10 Site Preparation	I1010 Hazardous Abatement			
			I1020 Site Clearing			
			I1030 Hazardous Waste Remediation			
J	Site Improvements	J10 Site Improvements	J1010 Roadways			
			J1020 Parking Lots			
			J1030 Pedestrian Paving			
K	Site Civil/ Mech. Utilities	K10 Site Civil/ Mech. Utilities	K1010 Site Development			
			K1020 Landscaping			
			K1030 Water Supply & Distribution			
L	Site Electrical Utilities	L10 Site Electrical Utilities	L1010 Other Civil/ Mechanical			
			L1020 Utilities			
			L1030 Electrical Distribution			
M	Other Site Construction	M10 Other Site Construction	M1010 Site Lighting			
			M1020 Site Communications & Security			
			M1030 Other Electrical Utilities			
N	Construction Equipment Systems	N10 Construction Equipment Systems	N1010 Service Tunnels			
			N1020 Other Site Systems & Equipment			
			N1030 Construction Equipment			
O	Space	O10 Facility Space	O1010 Construction Activity Space			
			O1020 Analysis Space			
			O1030 Construction Information			
P	Information	P10 Information	P1010 Engineering Information			
			P1020 Record Information			
			P1030			

Legend	
Information	Responsible Party
A Geometry, approximate location	A Architect
B Geometry, precise location	E Engineer
C Cost	C General Contractor/Construction Manager
D Schedule	TC Trade Contractor
E Element property information	O Owner

Appendix 2 –BIM IT Assessment Form

BIM I.T. ASSESSMENT FORM

Part 1 - General Information and Company Policies on Information Exchange

Part 1 of this questionnaire covers general policy issues on the exchange of electronic information within the firm.

1.1 - General Information

Please provide the following general information on your firm and your role on the project (if applicable) together with details of key personnel who are likely to be involved in information exchange.

1.1.1 - General and Project Information

Project Name	
Company Name	
Role on Project	
Your reference No for this project	

1.1.2 - Organisation and Team Information

Team Member Position	Name	Telephone	Email
Project Leader / Partner in Charge			
CAD Manager			
IT Manager			
Other Roles (specify)			
Other Roles (specify)			
Other Roles (specify)			

1.2 - Project Information Production & Distribution Policies

Please indicate in the table below the information that you normally produce or are expecting to produce on the project. Also list the types and formats of information that you are prepared to share electronically with other project team members.

[illegible]

[illegible]

1.3 - Drawing & CAD Management

Please indicate the drawing and CAD modelling approaches that are used in your organisation. Give a rough indication as to the proportion of your outputs that use each method in a typical year.

1.3.1	Please indicate the drawing and CAD modelling approaches that are used in your organisation. Give a rough indication as to the proportion of your outputs that use each method in a typical year.	<i>Modelling Method</i> Hand drawn paper drawings Simple 2D CAD (single line elements usually) Advanced 2D CAD (with predefined objects & blocks) 3D CAD Object based modelling	Y/N	% of Output
1.3.2	Are your BIM/CAD models produced as 1:1 real world with accurate dimensions or do you draw to approximate size and adjust dimensions to suit?	☐ 1:1 & accurate dimensions ☐ Approximate with adjusted dimensions		
1.3.3	Are standards used to produce your CAD /BIM models?	Yes No		
1.3.4	If so, what standard is used? Please describe briefly and attach a copy for reference purposes.			
1.3.5	Would it be acceptable for your organisation to adopt project specific CAD / BIM standards that are different from your current standards? Note any reservations that may apply.	Yes No		
1.3.6	Describe briefly how you resource the production of your CAD models.			

1.3.7	Describe briefly how your CAD operator skills are kept up to date.	
1.3.8	Do you use CAD for spatial and design coordination purposes?	Yes (please describe) No (please describe)
1.3.9	Describe briefly your drawing issue process and statuses and revisions for drawing issues normally used.	
1.3.10	Describe briefly your file and document numbering systems for your drawings and CAD models.	
1.3.11	Is your organisation willing to use project standard title blocks which are different to your in-house standard?	Yes No

1.4 - Document Numbering Systems

Please give details of your in-house document numbering systems. If you have a suitable reference document please attach it.

1.5 - Experience with Web-Based Project Tools

Please indicate your experience with web-based project tools such as extranets or web enabled document management systems.

Which project collaboration or web enabled document management tools have you worked with? Please list.

If so, what is your preferred project collaboration or web enabled document management systems? Please give any technical or commercial reasons to support your choice.

1.6 - Professional Indemnity Limitations

Please describe any limitations placed on your ability to exchange electronic information by your PI insurers, eg a requirement to send parallel paper copies of electronic document. If you have a policy statement, please attach it for reference.

1.7 - Email Distribution Policies

Do you have any policies regarding email usage on projects to ensure that all communications via email are controlled to reduce risk? If you have, please describe how this operates.

When using email on projects, do you have facilities to ensure that urgent emails are re-routed when project personnel are on holiday for example? If so, please describe.

1.8 - Policies on Internet Usage

Please describe any policies your organisation has on limiting Internet usage. If you have a policy document, please attach for future reference.

Part 2 – Technical Information on Software and Systems

Part 2 of this questionnaire covers technical information. If you are the manager or partner responsible for the project you may wish to hand this part onto your technical expert or IT Department for completion of the information collation.

2.1 - IT Infrastructure

Infrastructure Item	Description
Computer Local Area Network	
Wide Area Network	
Internet connection type and speed for main office. Advise number of users accessing connection.	
Internet connection type & speed for regional office (if applicable). Advise number of users accessing connection.	
Internet connection type and speed for local office (if applicable). Advise number of users accessing connection.	
Mobile access to Internet – describe	
Email System	

Wide format scanning, including A3 and colour scanning	
Wide format printing, including A3 and colour printing	
Narrow format colour printing	
Narrow format (A4)	
Infrastructure Item	Description
Colour/black and white scanning	
Video conferencing	
Presentation facilities including LCD projector (advise lumens and resolution)	
Guest computer hosting facilities, including wireless internet access for guest users	
Website	
Intranet	
Extranet	

2.2 - Operating Systems & Software Applications

Describe your operating systems and software applications as set out below. Include any software not listed for which you are likely to need export to other team members.

Operating System/Software Application	Software Vendor	Package	Version
Network Server Operating system			
PC Operating System			
Word Processing			
Spreadsheet			
Presentation			
Database			
Desktop Publishing			
Graphics			
Process Mapping			
2D CAD			
3D CAD			
Drawing Management Software			
PDF Writer			
PDF Reader			
Document management			
Internet Browser			
OCR			
Scanning			
Antivirus			
Firewall			
CAD Viewers and Model Browsers			
Analysis Software			
Design Software			

Operating System/Software Application	Software Vendor	Package	Version
Other (Specify)			
Other (Specify)			
Other (Specify)			
Other (Specify)			

2.3 - Information Transport Capabilities

Describe your capabilities to transport and receive information transported to you in different formats. Add any transport formats that you use that are not listed below.

Transport Media	Write or Send		Read or Receive		Transport Media Description		Maximum File Size and Other Limitations
	Y	N	Y	N	Vendor	Package	
Email							
FTP							
CD							
CDRW							
DVD (Specify Type)							
Portable Hard Disc Drives (specify)							
USB Drives (specify)							
ZIP 100 Drives							
Zip 250 Drives							
Tape Drives							
Flash Memory Cards / Sticks							
Other Transport Media (specify)							
Other Transport Media (specify)							

2.4 - Disaster Recovery Systems & Procedures

Briefly Describe your disaster recovery systems and procedures

2.5 - Archiving Systems & Procedures

Briefly Describe your archiving systems and procedures

2.6 - Security Systems

Describe your data security systems and arrangements.

Do you have an anti virus system that continuously monitors all your incoming and outgoing traffic?

Yes:

No:

If no, how do you currently protect your organisation against virus attack?

How often do you update your anti virus software?

Do you have systems for protecting against spyware and other covert activity logging systems?

Yes:

No:

Appendix 3 – BIM Resource Assessment Form

BIM RESOURCE ASSESSMENT FORM

1 - General Information

Please provide the following general information on your firm and your role on the project (if applicable) together with details of key personnel who are likely to be involved in information exchange.

1.1 - General and Project Information

Project Name	
Company Name	
Role on Project	
Your reference No for this project	

1.2 - Organisation and Team Information

Team Member Position	Name	Telephone	Email
Project Leader / Partner in Charge			
Information Manager			
IT Manager			
CAD Manager			
Other Roles (specify)			
Other Roles (specify)			
Other Roles (specify)			

1.3 – Resource Information

Please indicate in the table the resource available to the project to produce the deliverable data at each stage of the plan of work. Indicate resource by profession, training, academic achievement and years of experience.

The supplier resources for the project should be stated by completing the Table below. Resources are to be mapped against the BIM Roles as defined in Table 2 PAS 1192-2:2013.

Supplier Resource Assessment Form

Please ensure that by providing this information all data protection principles are adhered to.

Supplier	Primary BIM Role	Secondary BIM Role (where applicable)	Levels of competence (qualifications)	Years of Experience	Names of individuals
<<name 1>>	Lead Designer				
	Project Delivery Manager				
	Project Information Manager				
	Task Team Manager				
	Task Team Information Manager				
	Task Team Interface Manager				
	Task Team BIM Authors				

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