

JS Construction
1 Kings Rd, Swansea
SA1 8PH
8th March 2022

Swansea Council
Civic Centre, Oystermouth Rd,
Maritime Quarter, Swansea
SA1 3SN

Dear Whom it concerns,

After viewing the requirements and standards you would like for the state of the art primary school to have, we are satisfied that we will meet all of them and produce a high standard for the project. We will be using the appropriate guidelines and building regulations for the build, these will include BB99 for schools and ISO 19650. As we have discovered the specification level you would like, we will start by completing a 2D and 3D drawing on the software Revit, this will help give you a realistic vision of what the school will look like.

The site location is based on slipway road at SA1 Swansea next to the Observatory, this primary school is going to be based for 90 pupils and 48PT reception pupils. Due to the amount of pupils in the school this will require that the premises consists of three class rooms to accommodate the number of pupils it will also have 2 pupil toilets with at least 8 cubicles in each to fit the BB99 hygiene requirements (*BB99, 2022*). There will also be one reception class with toilet facilities close by, this is to help with the younger classes needs and habits. The project will also have a two-story hall with the space for an inside and outside sports storage area and hard and soft playground area outside, the play areas will also hold sheltered areas to protect the children in the sunny periods of the year. There will be one main entry form to the premises with two other doors one for deliveries into the kitchen and the other to the hall, this could benefit the school as when they hold concerts for the parents this will be their form of entry on event evenings or after school pick up.

The school will fit the regulations of the BB99 and ISO 19650, BB99 is a guideline on building schools, this document is to help the Local Education Authorities (LEA) with the creation of the schools project brief of the work needed and ensure the schools fit the needs and requirements of the users (*ISO, 2022*). The BB99 will help guide the projects room sizes and what will be required in the primary, as the guidelines state that each school is required to have certain features and rooms being at least a certain size to hold a certain amount of pupils per class. Following the information in the guidelines will ensure that the project will fit the requirements and work can start promptly and be competed to start using by the academic year starting 2023 (*BB99, 2022*).it also shows the information to ensure that all health and safety features will be looked at for the children's benefit after the project is completed, this could be by them having an adequate place for their food to be prepared or the personal high hygiene e.g toilets (*BB99, 2022*). By using the ISO 19650 will ensure that Ysgol Bae Abertawe will meet the recommended international standards, the ISO will help through the projects life cycle to support the management and production information. Another suitable standard that can

be used is BS 1192, this document also holds information on management but also includes the “best practice for the collaboration product information” (*BS 1192, 2019*).

This project will meet the BIM maturity Level 2 will require appropriate naming conventions and all roles of stakeholders will be outlined and made clear. The level 2 means that the drawings will be able to be viewed as 3D and 2D drawings of the project, this will include majority of the projects areas coming together to create a drawing that will be ready to take straight to the construction phase and should have no clashes or issues to prevent the build or delay the works in anyway. The drawings will be shown through Revit, the drawings will have room titles and dimensions, this is to show that the building will fit the requirements needed for the build and are in a line with the BB99 (*BIM Maturity, 2014*). The drawing will have the structural and architectural information to help benefit multiple teams in the project and to prevent having multiple drawings to piece together. To access this project you will need to have the Revit 2022 software, otherwise when opening the project it will not be viewed with all the up to date edits and will not be able to be viewed in its entirety, this could lead to important information missing from the model. All the communications through this project will be shared over Revit drawings, emails, PDF files and in person meetings to discuss and finalise any queries that either sides may have or any changes that need to take place to the build.

If there is any queries in the mean time based on the projects works, please contact the project manager Nick Thomas.

Yours sincerely,
JS Construction

BIM Execution Plan

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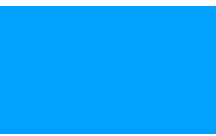


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1.0 - BIM Execution Plan

Preface

This BIM execution plan has been prepared by JS Constructions in response to Swansea Council, to exchange information on how the works of Ysgol Bae Abertawe will be carried out.

This BIM execution plan will be updated and edited throughout the RIBA Stages.

1.1 - Project Information

Project Reference Number	5001
Project Name	Ysgol Bae Abertawe
Address	slipway road at SA1 Swansea
BIM Level	Level 2
Client Name	Swansea Council
Appointed Contractors	JS Contractors

Important information on Ysgol Bae Abertawe: School must be fit to accommodate 90 pupils, 48PT nursery pupils, have a hard and soft playground area, drop off/ collection point and 5 parking spaces 2 of which is disabled access.

The school will consist of one main way of entry with 2 other doors, one accessing straight into the kitchen area for deliveries and one straight into the hall. There will be three class rooms for the junior aged group and one nursery class room with toilet facilities connected immediately to the class. The nursery will also have a door straight to the play area, there will be three junior room as this school will have 90 pupils and to fit the standards it will require three rooms with 30 students per room, each of these classes will have access to the playground as well as storage units for supplies. The playground will also have a hard and soft landscape play area with areas designated for shelter for the sunny periods. At the front of the school will have five parking bays with two being disabled bays, there is also a designated area for pupil and deliveries drop off points working with a one way systems of the plot.

1.2 - Management

Below is the contact details of the main people involved in the project, including name, email and their role in the project.

Role	Name	Contact/ Email
Client	Swansea council	education@swansea.gov.uk
Project Manager	Nick Thomas	NickThomas@JSconstruction.com
Design Manager	Louise Philips	louisephilips@JSconstruction.com
Digital Engineer	William Taylor	williamtaylor@jsconstruction.com

Site Manager	Tom Jones	tomjones@jsconstruction.com
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Health and Safety

All staff involved should follow the Construction (Design and Management) Regulations 2015 (CDM). This regulation will help plan the works appropriately to manage any potential risks during the project's life cycle, ensure that the correct people are on the project at the right time, to have the right information on potential risks and consult with anyone who may be affected by the potential risk (CDM, 2015). The Health and Safety at Work Act 1974 should also be taken into account during the project's life cycle, this should be through all the RIBA Stages. This act will look at employee side more, for example it will ensure that they have safe working equipment and that they should have had the correct training to operate the equipment. It will also make sure that all the correct risk assessments have been completed for Ysgol Bae Abertawe (*Health and Safety Act, 2021*). This will allow us to take the best care of the employees and ensure their safety throughout the project's life cycle.

1.3 - Planning and Documentation

The Project Implementation Process (PIP) will be completed first to determine who is in charge for what roles and responsibilities through the project. The next stage to start planning and preparing for is the different stages in the "Royal Institute of British Architects (RIBA) Plan of Work 2020" (RIBA, 2020). It will follow the stages from 0-7 as a basic guide line to help all involved on the project. This plan will help set the works into the eight different stages, allowing each member to follow the works and to know if the work is up to date. This will also allow each member to follow the works easier and be able to complete their tasks on time (RIBA, 2020). Through the stages there will be set schedules to ensure that the supply chain will not be compromised or delay any works from starting or being completed on time. At the end of every task completion the employer who completed it will inform the rest of the team, this is to help ensure that each task is done to the deadlines to complete the overall project on time.

To help the planning of the project different regulation and standards will be used, the main one will be ISO 19650, BB99 and BS 1192. BB99 focuses on the building of schools while the other two focus on the management standard and the collaboration of information. BS 1192 takes a larger focus into common data environment (CDE). CDE is a cloud space where the project's information will be stored, it is an easy accessible space where anyone involved can gather information to do with the works (CDE, 2022).

Project Milestone

Milestone Dates		
RIBA Stages	Start Date	End Date
Stage 0 - Definition	14/03/2022	18/03/2022
Stage 1 - Brief	17/03/2022	04/04/2022
Stage 2 - Design	28/03/2022	TBC
Stage 3 - Coordination	TBC	TBC

Stage 4 - Technical Design	TBC	TBC
Stage 5 - Construction	TBC	TBC
Stage 6 - Handover	31/08/2023	

(Dates to be changed and fitted as the project progresses)

To help improve coordination and clashes in the project, the models will have a two-week cycle where they will be monitored and reviewed for any issues or clashes that may occur during the build or prevent any works from happening.

1.4 - Standards, Methods and Procedures

This project will have the correct naming conventions to the project, this will include appropriate title blocks and saved files name. The file name will also follow the guidance provided by ISO 19650 and BS 1192, each model drawing will have the appropriate title blocks using the BIM name conventions. It will be in the order of:

Project	Originator	System	Level	Type	Role	Number	Description	Status	Revision
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Everyone will follow the same naming convention to ensure that there is no confusion and that the same professional standard is achieved across the board (*BIM Naming Conventions, 2019*).

BS 1192 main focus is the common data environment (CDE), this will be the main standards to follow when completing the naming of files, folders and any layers. ISO 19650 will also provide the appropriate information to make sure that the project is reach BIM maturity level 2,

1.5 - IT Solutions

Throughout the project the information will be managed by JS Construction, it will be shared through the company systems and stored through the common data environment cloud base. Each new edit to designs or drawings will be saved as a new version to show the different variations and changes to the project. While the work continues to be developed and added to while the works continue, the following files will be shared in these formats:

Software Formats

Sharing Formats			
	Revit	CAD	PDF
Drawings		X	X
Models	X		
Schedules			X

Reports			X
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The software format for the models will only be shared by Revit 2022, this will mean that all will need access to this version of the software as it will not be able to be viewed in another software or an older version of the software.

2.0 - References

(BIM Maturity, 2014), *The NBS*, <https://www.thenbs.com/knowledge/bim-levels-explained> Web page accessed on 22nd March 2022

(ISO, 2022), *BSI Standards*, <https://www.bsigroup.com/en-GB/iso-19650-BIM/> accessed on 23rd March 2022

(ISO 19650-2, p, 2018), *ISO 19650*, Downloaded file from Teams Bim downloaded on 17th March 2022

(RIBA, 2020), *Urbanist Architectural*, <https://urbanistarchitecture.co.uk/riba-plan-of-work-stages/> Web page accessed on 19th March 2022

(BB99, 2022), *Education England*, <http://www.educationengland.org.uk/documents/pdfs/2004-building-bulletin-99-pri.pdf> Web page accessed on 19th March 2022

(CDM, 2015), *Health and Safety Executive*, <https://www.hse.gov.uk/construction/cdm/2015/index.htm> Web page accessed on 20th March 2022

(BIM Naming Conventions, 2019), *Building Information Modelling*, <https://bimportal.scottishfuturetrust.org.uk/level1/stage/8/task/47> Web page accessed on 20th March 2022

(BS 1192, 2019), *Operam*, <https://www.operam.co.uk/bs-1192/> Web page accessed on 21st March 2022

(CDE, 2022), *Oracle*, <https://www.oracle.com/uk/industries/construction-engineering/what-is-cde-and-bim/> Web page accessed on 21st March 2022

(Health and Safety Act, 2021), *Ideagen*, <https://www.ideagen.com/thought-leadership/blog/the-6-essential-points-of-the-health-and-safety-at-work-act> Web page accessed on 22nd March 2022