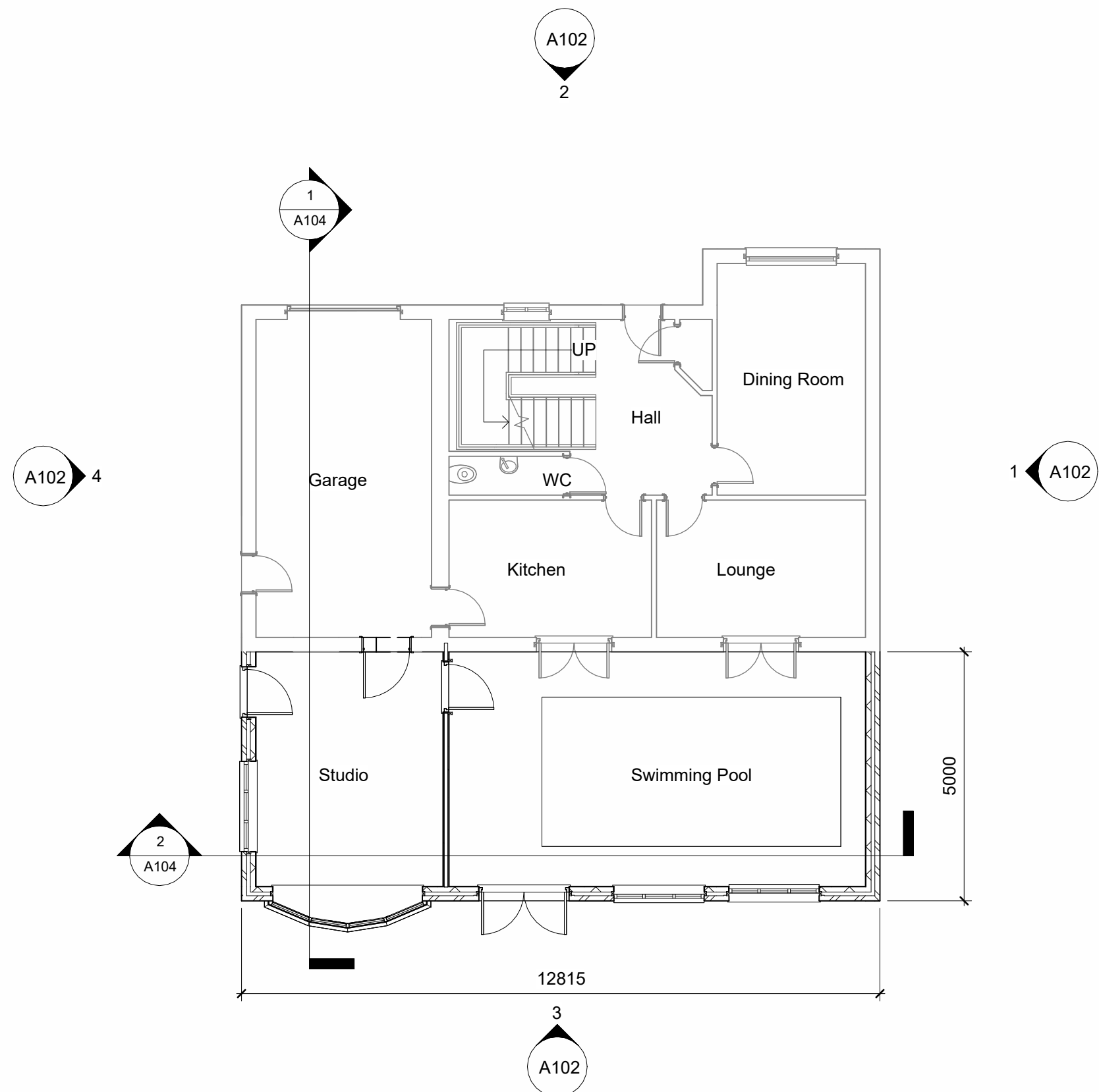
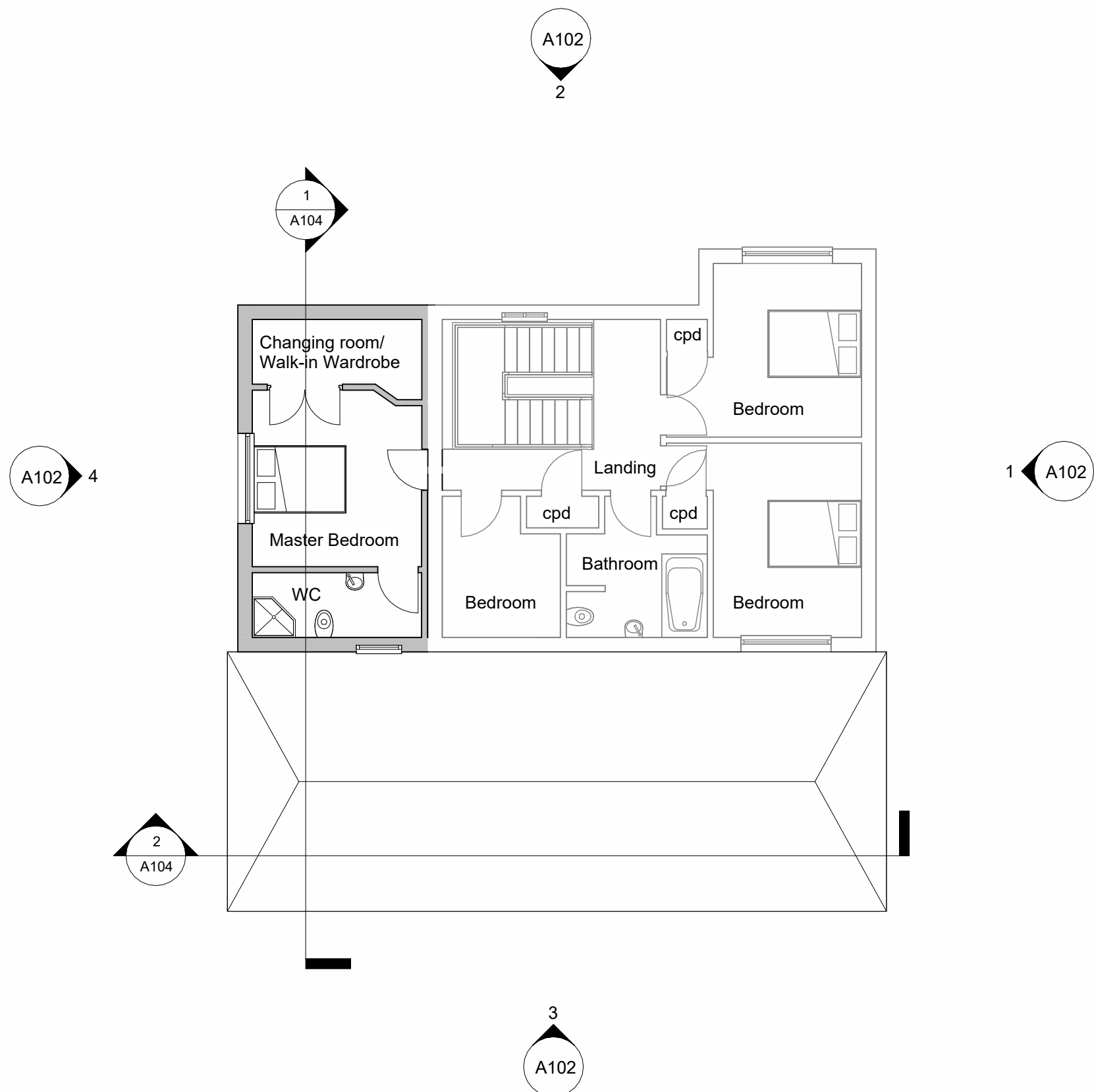
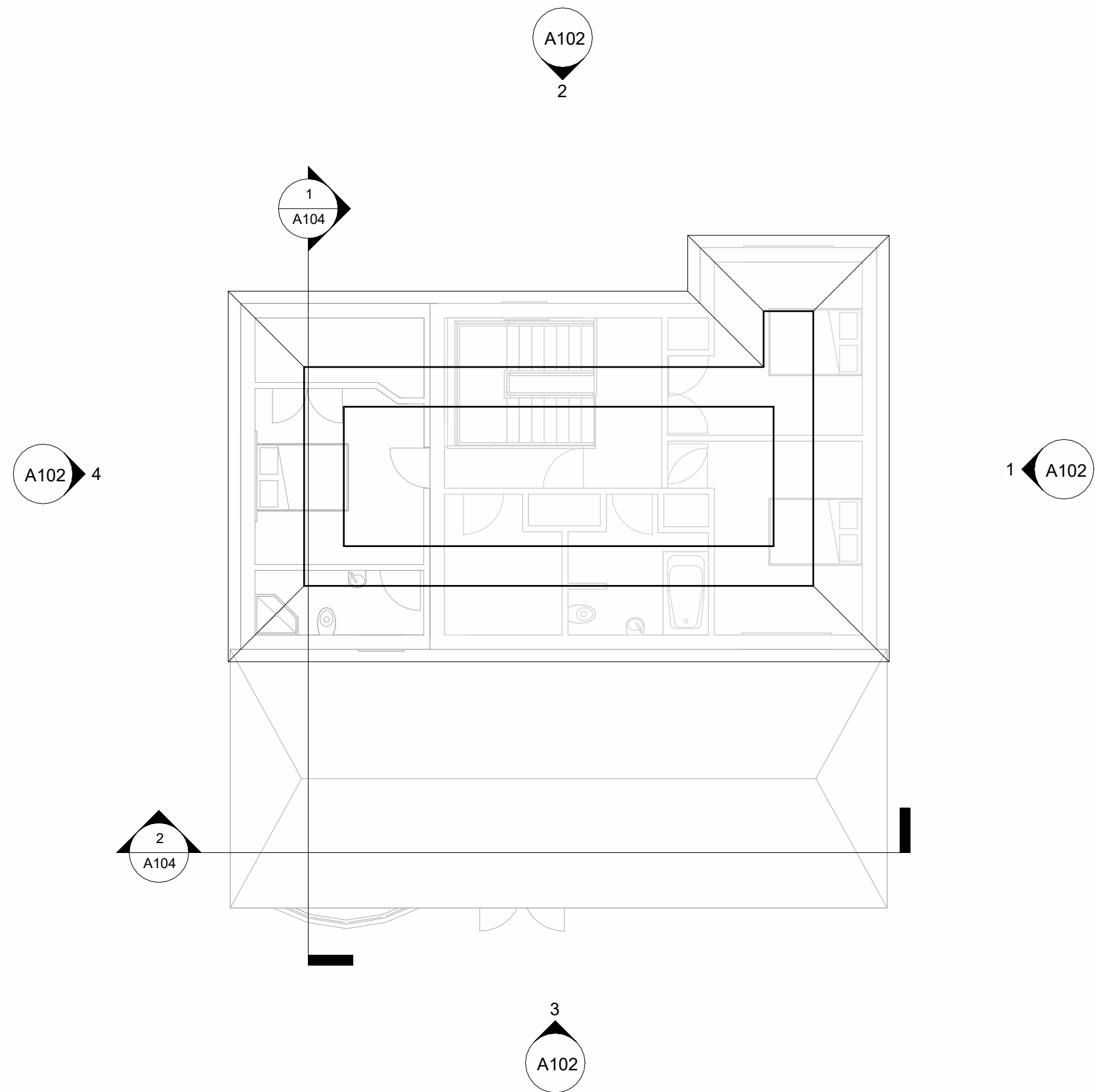




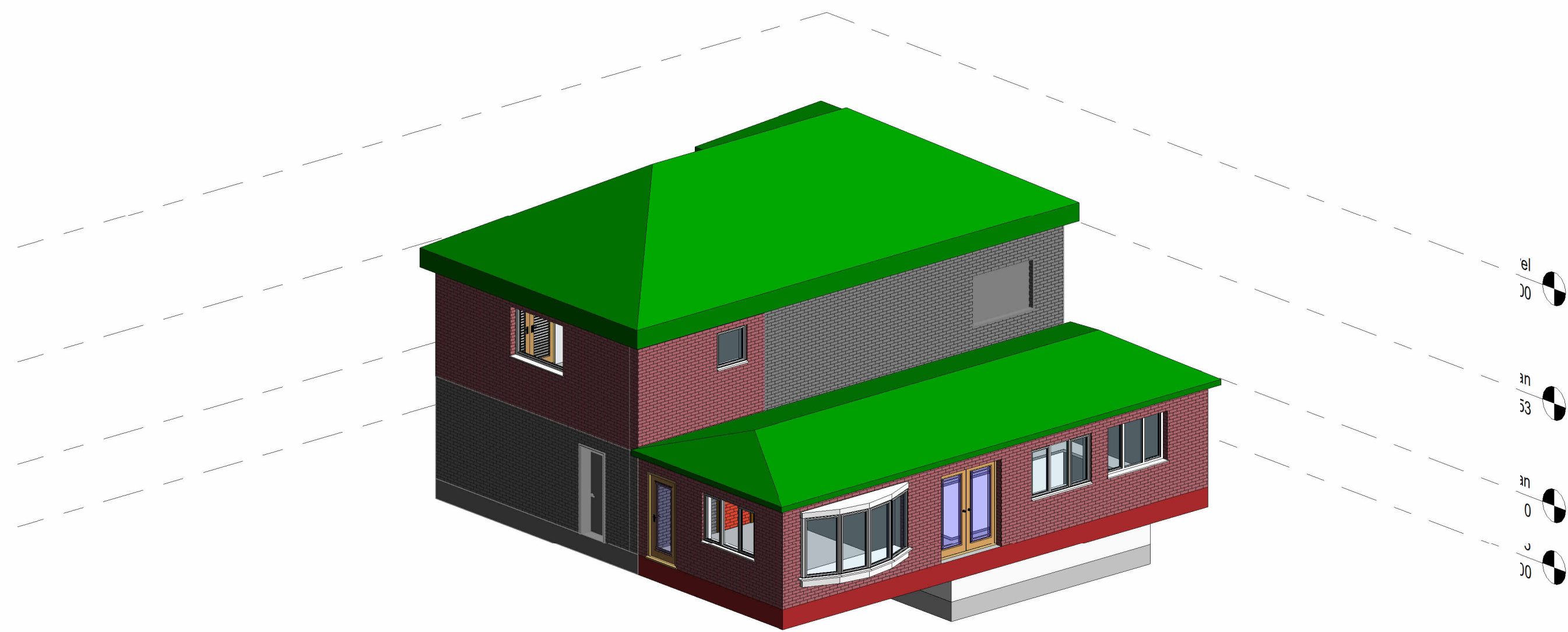
1 0 - Ground Floor Plan
1 : 100



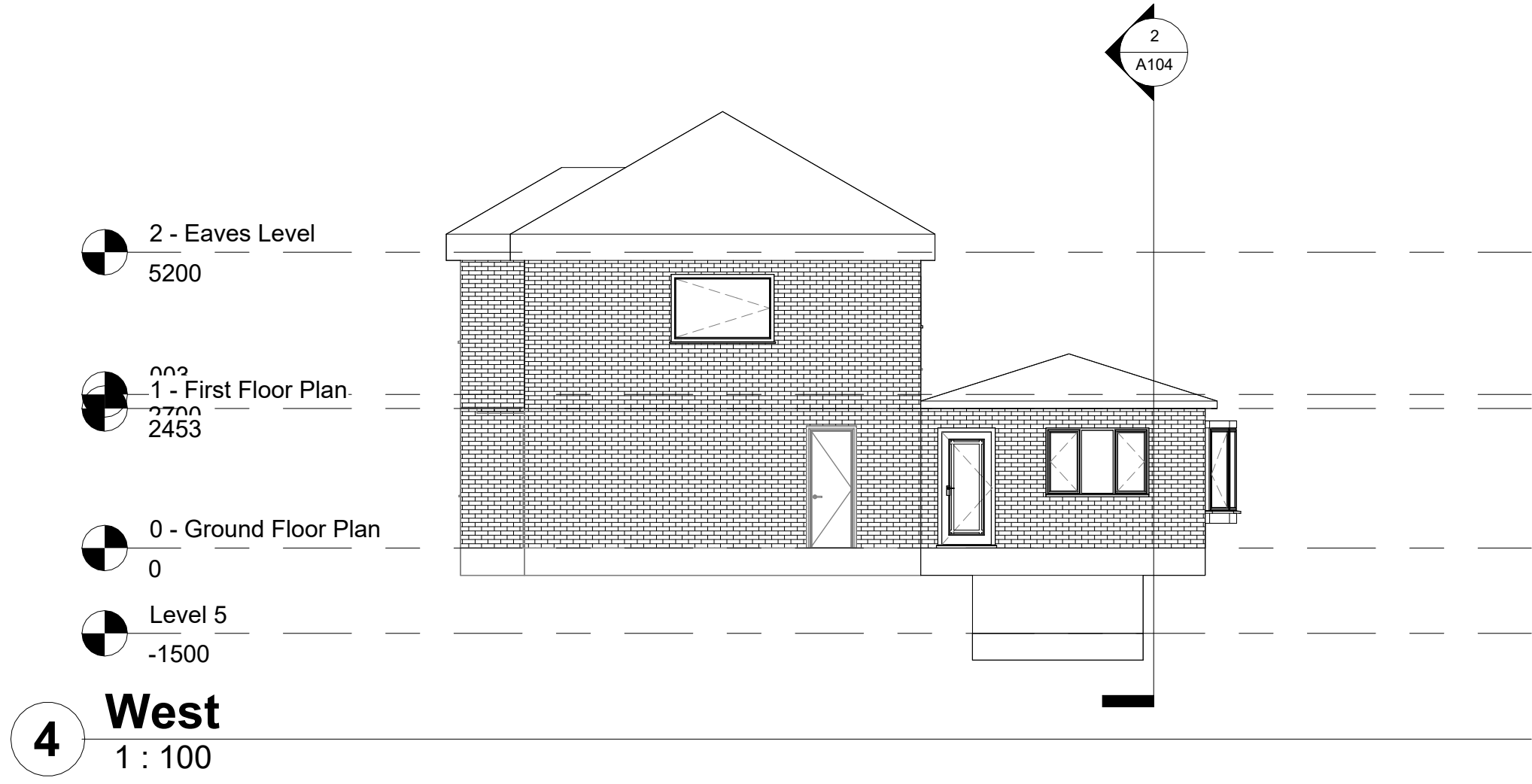
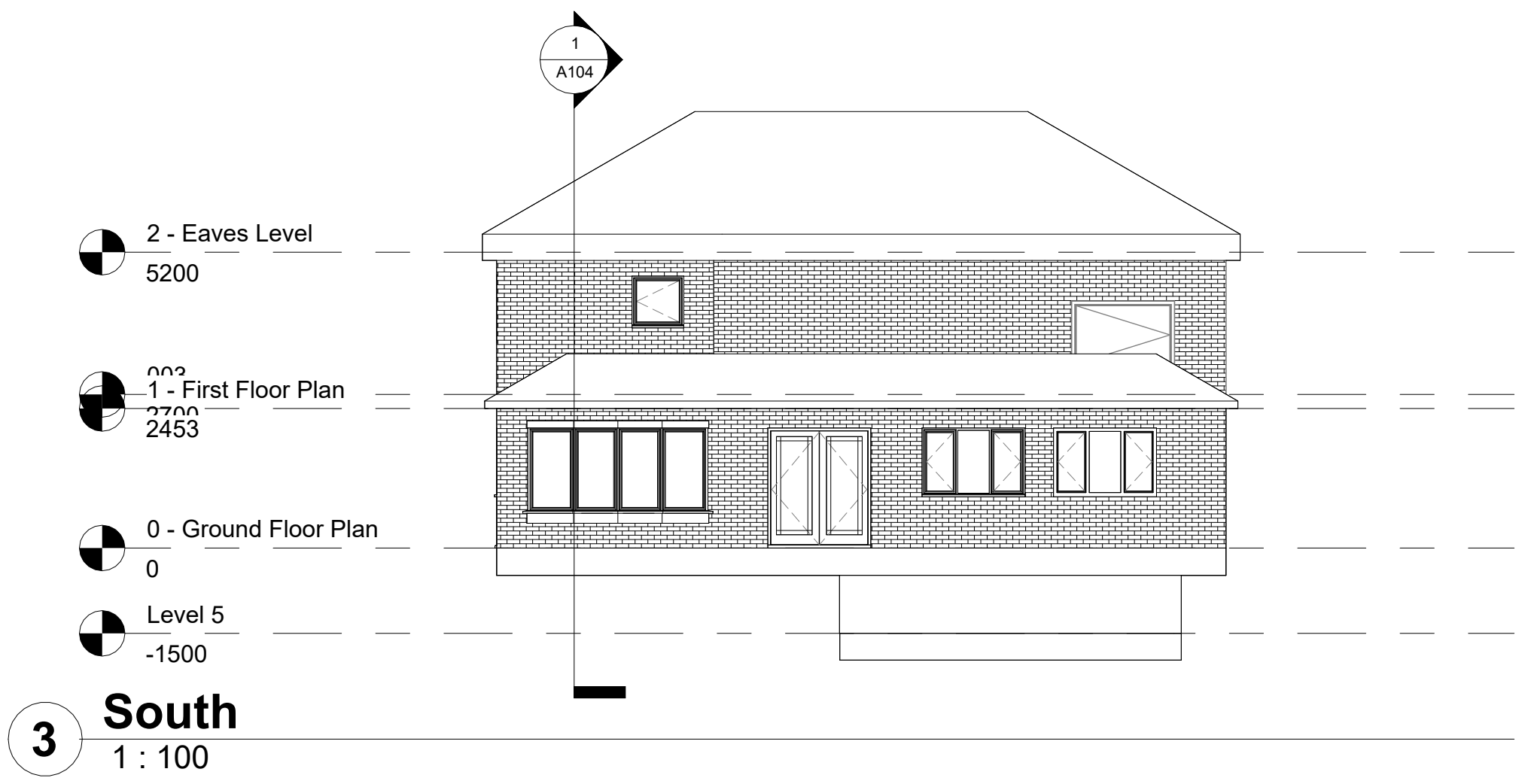
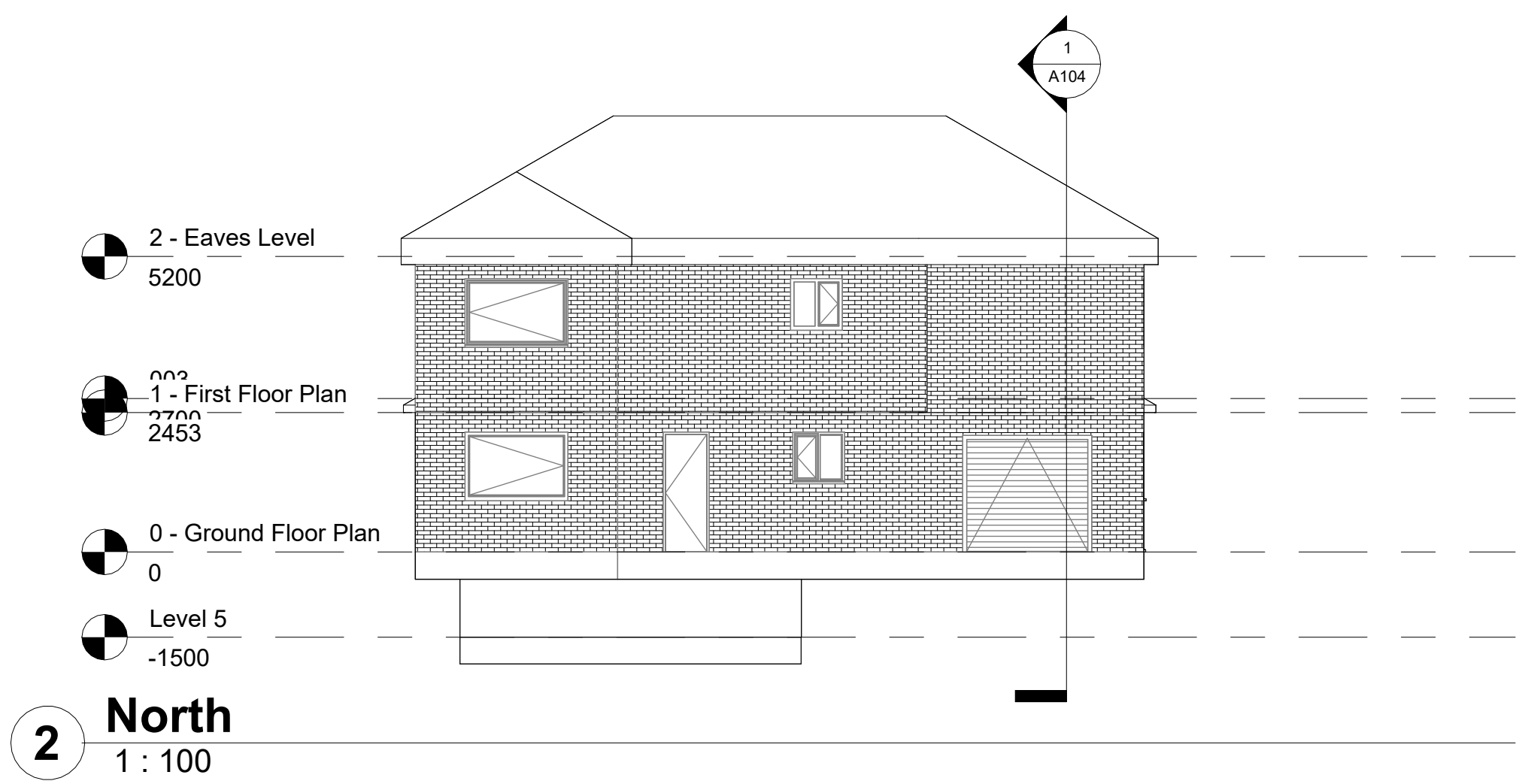
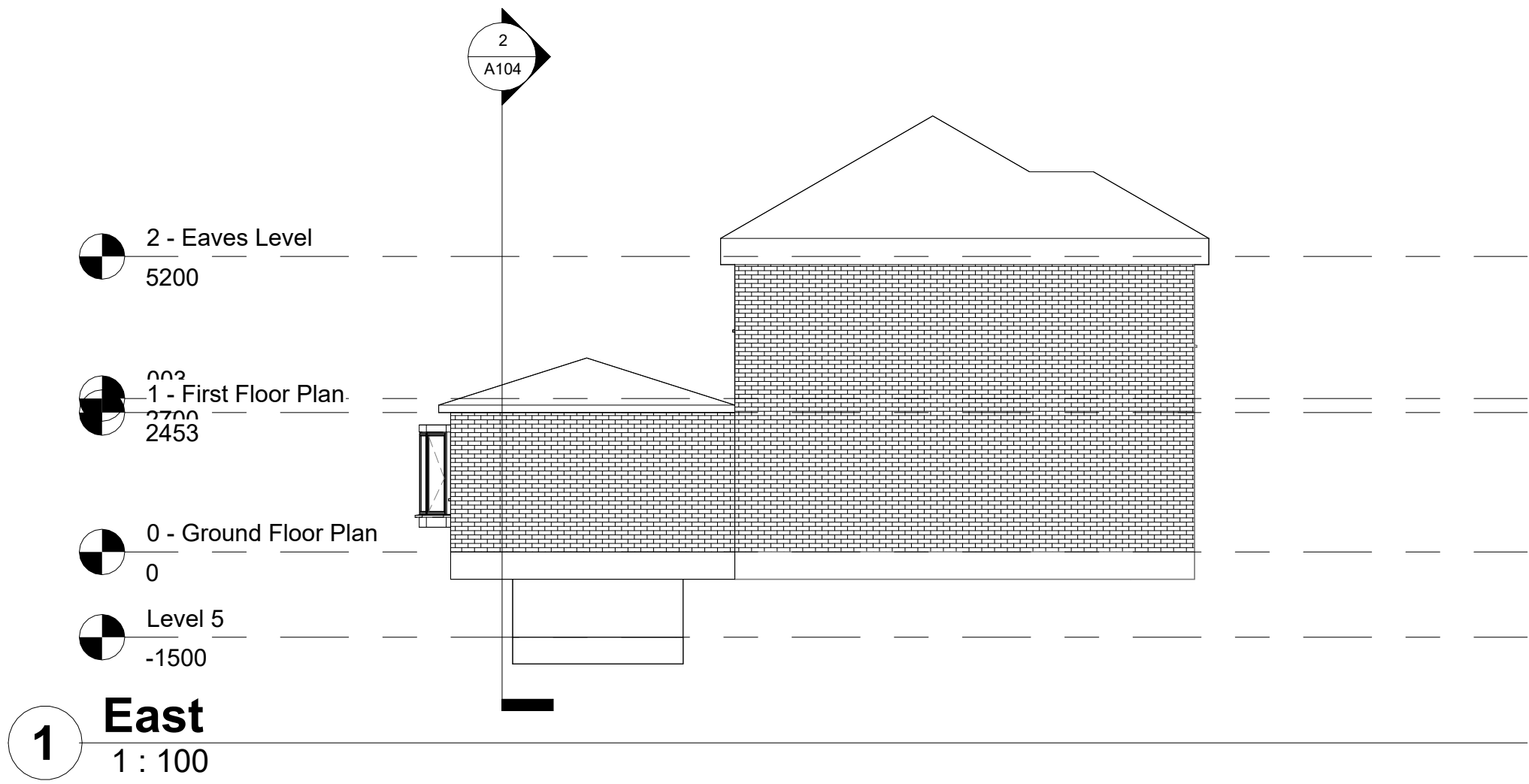
2 1 - First Floor Plan
1 : 100

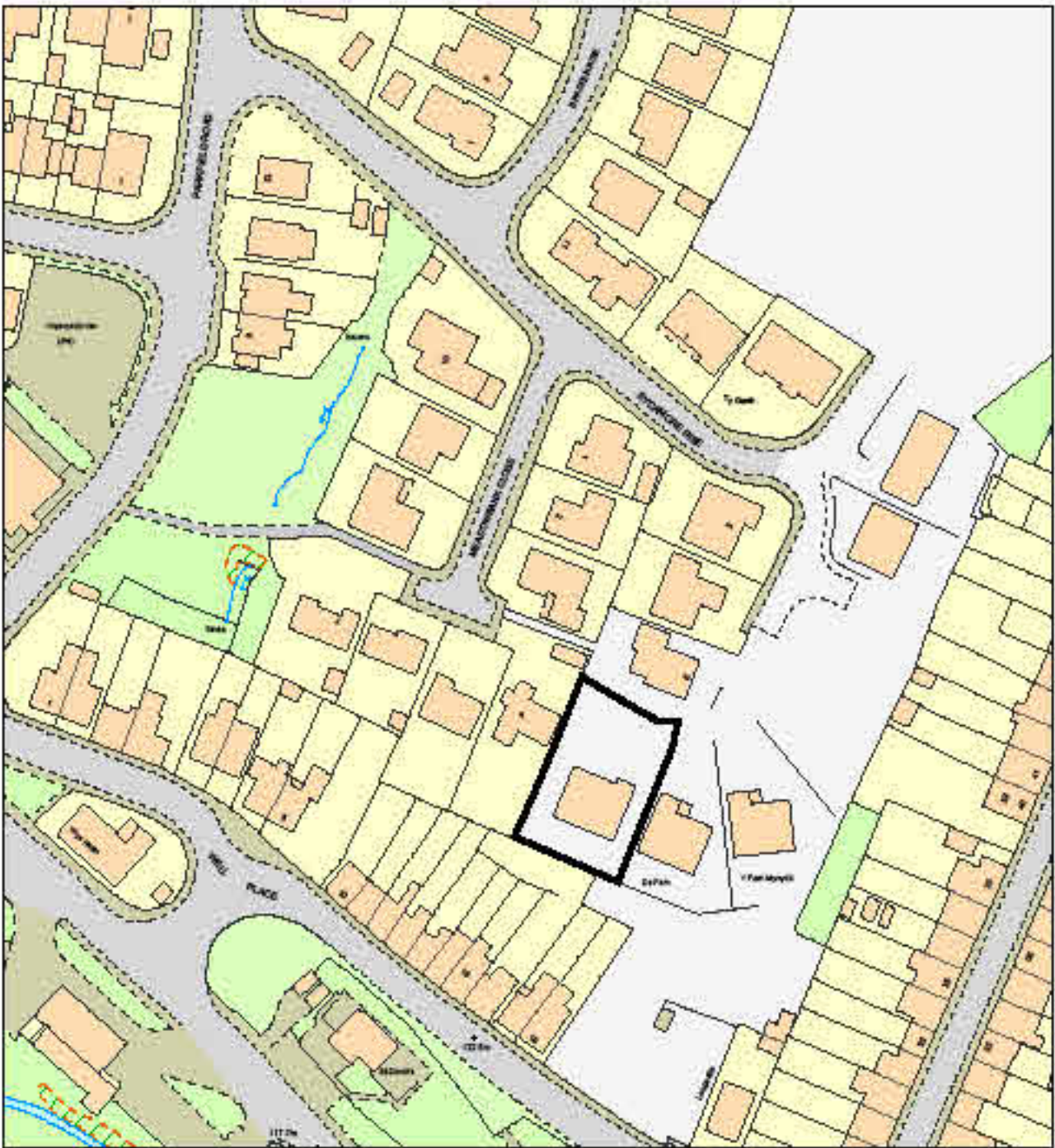


3 2 - Eaves Level
1 : 100



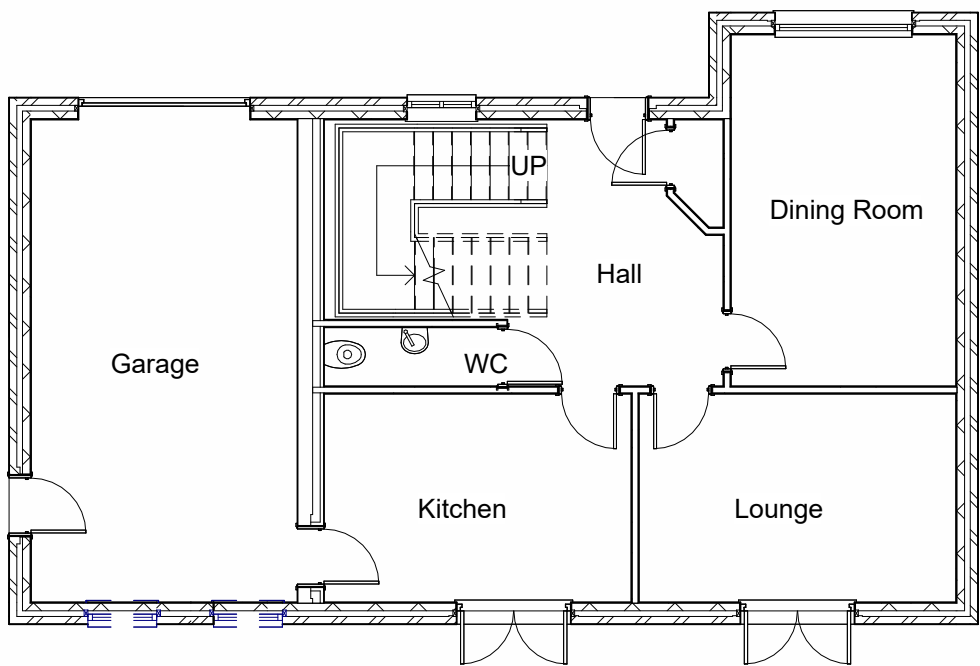
4 {3D}





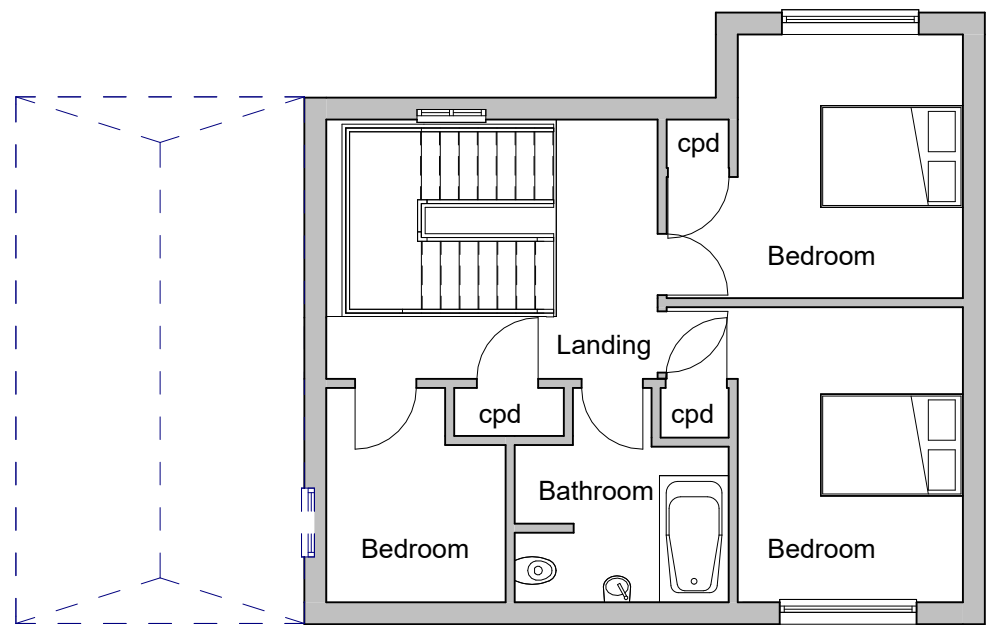
Site Location Plan

1:1250



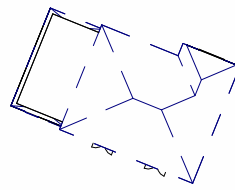
0 - Ground Floor Plan EXISTING

1 : 100



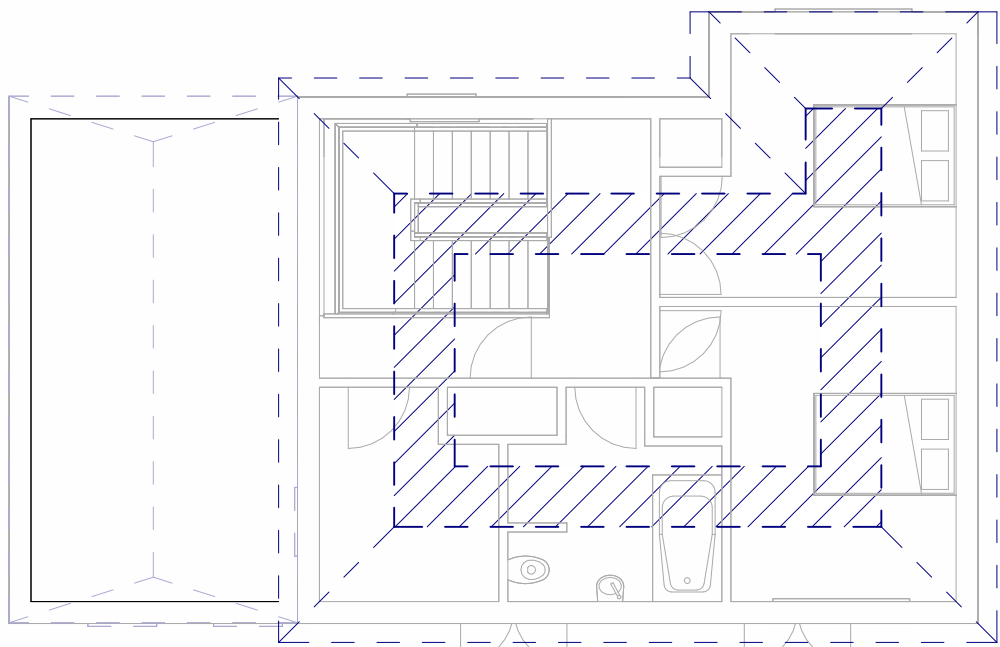
1 - First Floor Plan EXISTING

1 : 100



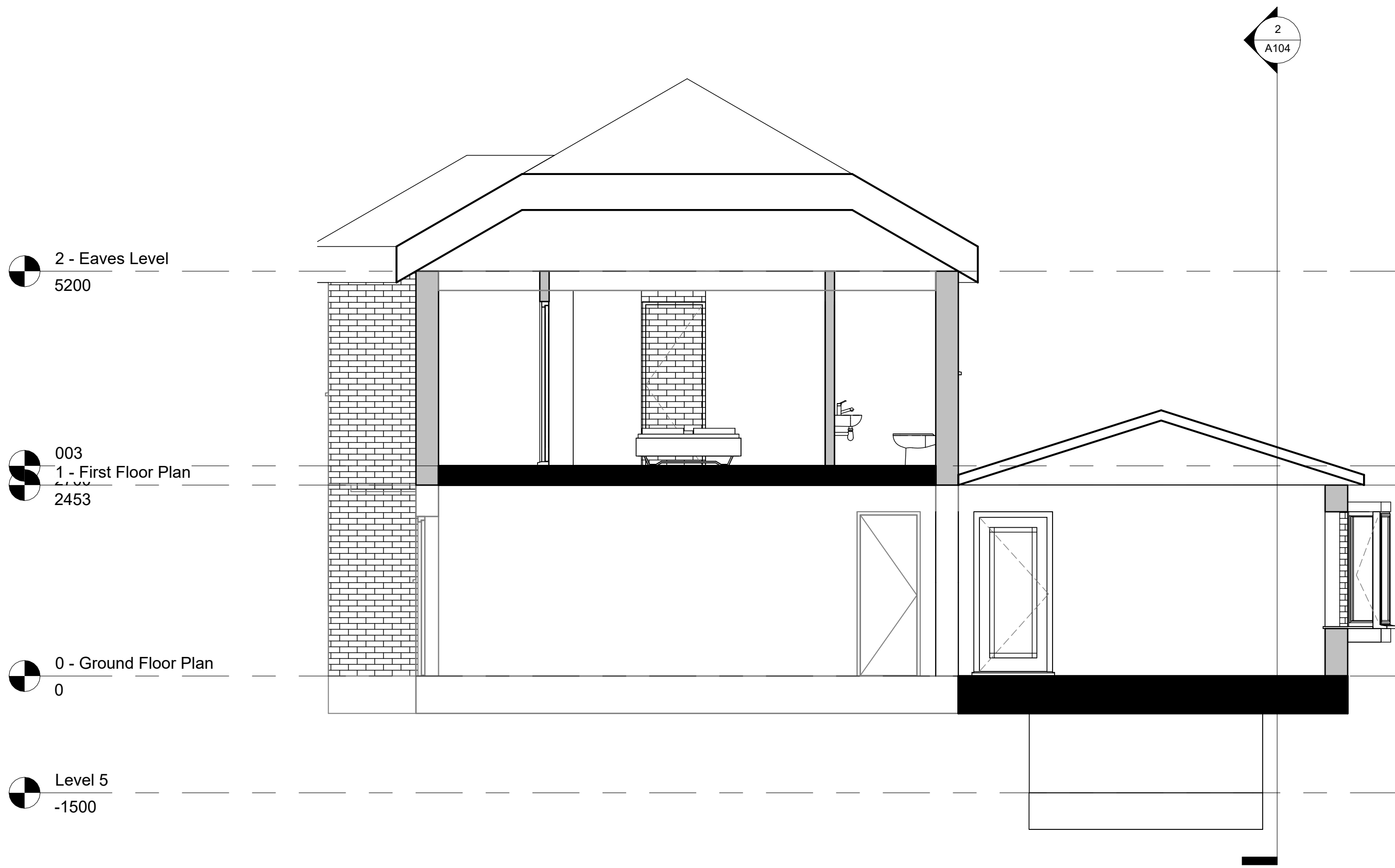
4 Site

1 : 500

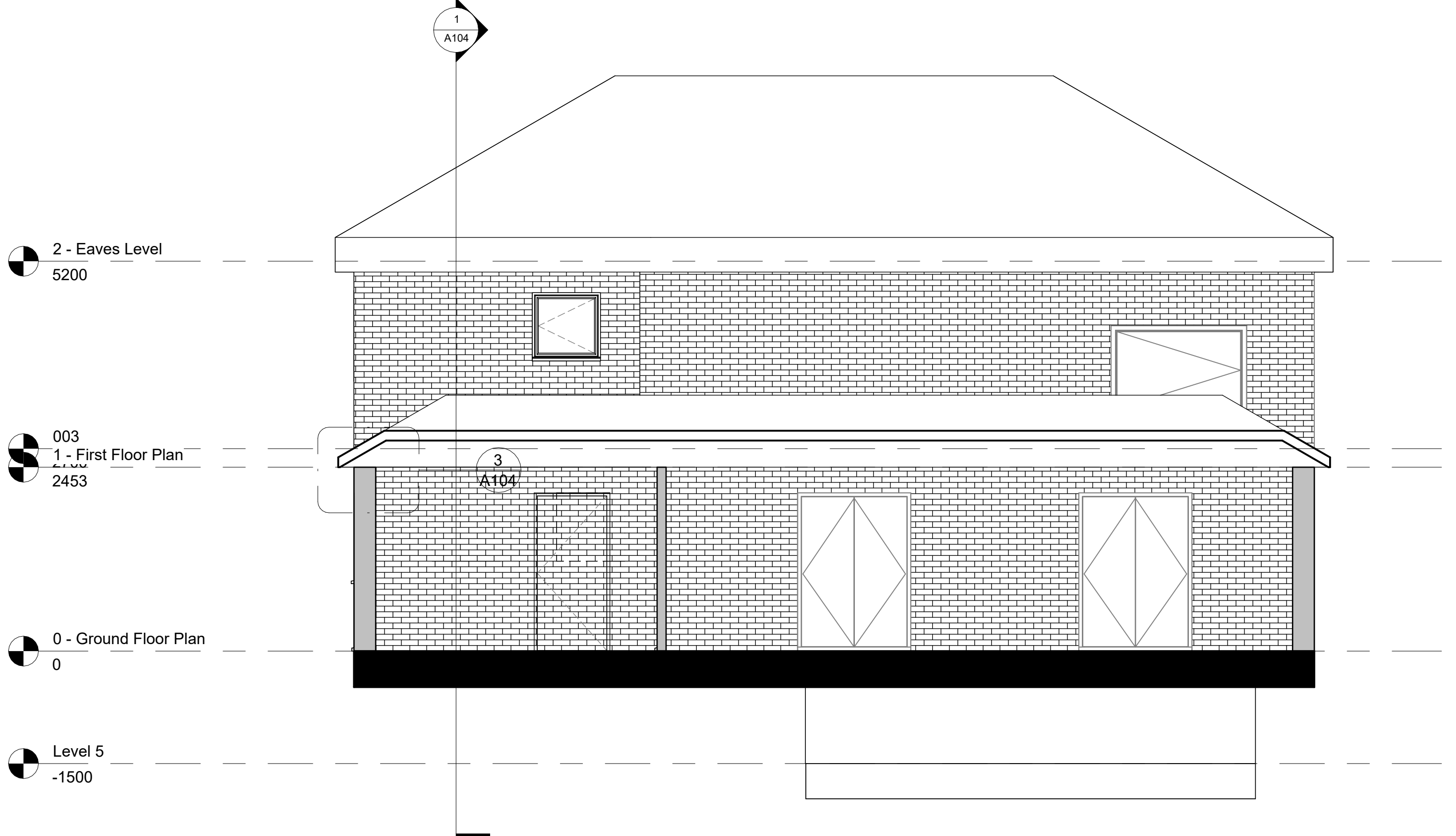


2 - Eaves Level EXISTING

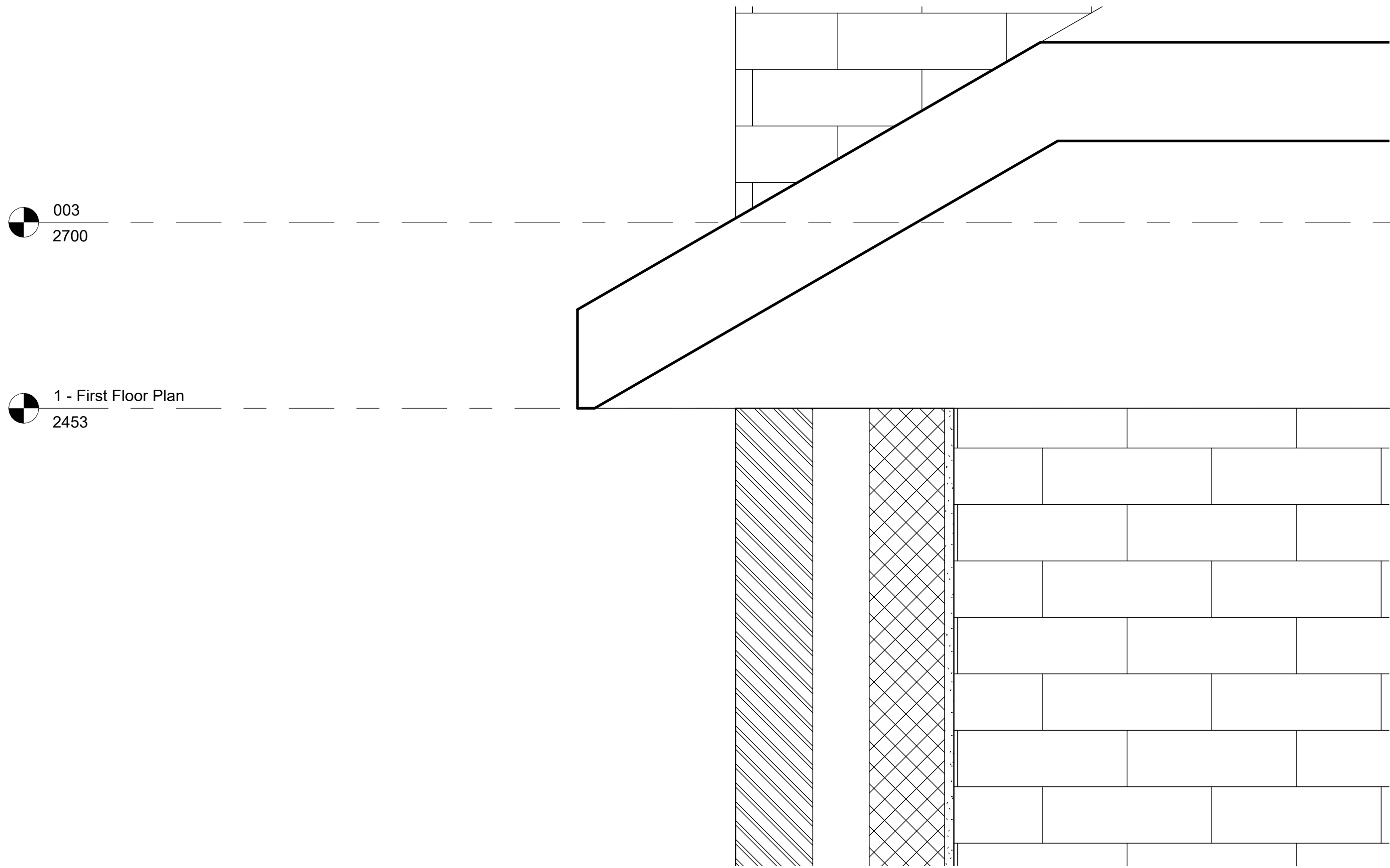
1 : 100



1 Short Section West 1.50
1 : 50



2 Long Section South 1.50
1 : 50



3 Long Section South 1.50 - Callout 1
1 : 5

Common Data Environment & BIM

The Building Information Modelling (BIM) process, allows information to be shared in a centralised format that may be used within different systems, as opposed to exchanging information through 2D documents to different locations, creating the potential for errors and loss of data, frequently creating additional work and greater costs.

British Standards Institution, in Q1 of 2019 published BS EN ISO 19650-1:2018, with updates on existing standards surrounding building information modelling, including concepts, principles of BIM, and recommendations on how such are managed. – BSI (2019)
ISO 19650 provides a framework for any involved in the process of delivering built assets, including design, construction, operations and maintenance, applying to the whole lifecycle of the assets.

The BIM process allows for the structured use of a common data environment, where all members of the design team can work within the same parameters following an agreed approach.

A common data environment is set up by the client through an independent information manager. The information manager is used for the purpose of assuring the project data in the common data environment is compliant with the agreed protocols within the project. – Designbuildings (2024)
The use of a common data environment is explained in BS 1192-2007. The standards exist due to the understanding that poor management of coordinated information in construction is a major cause of expense, delay and conflicts.
Superseded by BS 1192:2007+A2:2016, the code of practice for “Collaborative production of architectural, engineering and construction information ” – BSI (2024) was amended.
BSI group state that the amendments included in this revised standard are: Management processes supporting collaborative working, and controlled naming applied to files, directories, layers and models. The amendments also included compatibility with other British and International standards including BS EN 82045-2:2005 and ISO 82045-5 (Document management), BS ISO 12006-2:2015 (Building construction) and BS EN ISO 13567-2:2017 (Technical product documentation).

The BIM process is a simplified description for modern methods used in the construction industry across multiple disciplines, with a focus of creating digital 3D models using industry standard software such as Autodesk’s Revit and Civil 3D.
The BIM process uses an intelligent 3D model of the asset, accessible through cloud platforms by each involved discipline throughout the asset’s lifecycle. The intelligent model can by utilised by architects and civil engineers during the planning phases through to operational and maintenance procedures following construction – Autodesk (2024)

Some of the benefits of the multi-discipline BIM process include:

Clash detection: Traditional project management systems can often result in overlaps in designed assets like structures or utilities. This will typically result in significant delays to an already time constrained project and a further increase in costs. Clash detection tools used in the BIM process can bring models together and identify where any design components interfere with one another. This also suggests that the need for organising site meetings between all sectors are minimised when planning the integration of assets.

Feasibility options: The ability to produce models digitally allows for testing of multiple design options and experimentation with different concepts, without having to invest as much time and cost following a traditional approach in doing so. Options can be shared through cloud systems where any of the project team can review and throughout any stage of the process.

Simplicity: A digital representation of assets, stored at a single location, allows the data in a project to be managed by each user in the team. Traditionally where integration of assets would be arranged through site meetings, and 2D drawings prepared individually by each project member. The BIM process, through a common data environment, all plans and arrangements for asset integration can be communicated and visualised within an intelligent model and digital data.

Autodesk (2024) *Building information modelling*
Available at:
<https://www.autodesk.com/solutions/aec/bim>
(Accessed: 18/04/2024)

BSI (2024) *BS 1192:2007+A2:2016 Collaborative production of architectural, engineering and construction information. Code of practice*
Available at:
<https://knowledge.bsigroup.com/products/collaborative-production-of-architectural-engineering-and-construction-information-code-of-practice?version=standard&tab=preview>
(Accessed: 20/04/2024)

BSI (2019) *BS EN ISO 19650-1:2018 Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM). Information management using building information modelling – Concepts and principles.*
Available at:
<https://knowledge.bsigroup.com/products/organization-and-digitization-of-information-about-buildings-and-civil-engineering-works-including-building-information-modelling-bim-information-management-using-building-information-modelling-concepts-and-principles?version=standard>
(Accessed: 18/04/2024)

DesignBuildings (2024) *Common data environment CDE*
Available at:
https://www.designingbuildings.co.uk/wiki/Common_data_environment_CDE
(Accessed: 18/04/2024)

Mordue. S, Swaddle. P, Philp. D. (2016).
Building Information Modeling for Dummies. 1st edn. John Wiley & Sons, Ltd.