



# Greenfaulds High School

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Technical Department



## British Standards & Location Drawings

Curriculum for Excellence  
National 4/5  
Graphic Communication

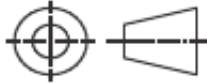


## Drawing types

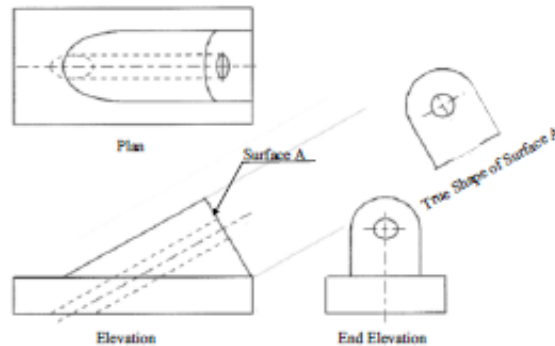
There are two main groups of drawings - Orthographic and Pictorial.

### Orthographic Views

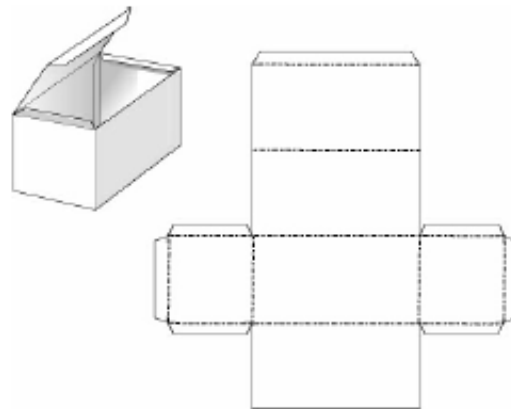
These drawings are commonly used as production drawings. They contain exact dimensions and are drawn to an exact scale. They are easily recognisable by the third angle symbol.



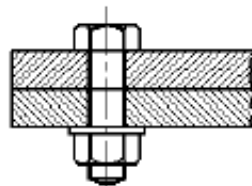
**Orthographic Projection :**  
(Elevation, Plan, End Elevation, True Shape).



**Surface Developments (Nets) :**  
This type of orthographic is very common. Developments are needed when an object is to be folded up to create a hollow form (like a box). Remember to add fold lines to show how the development folds!

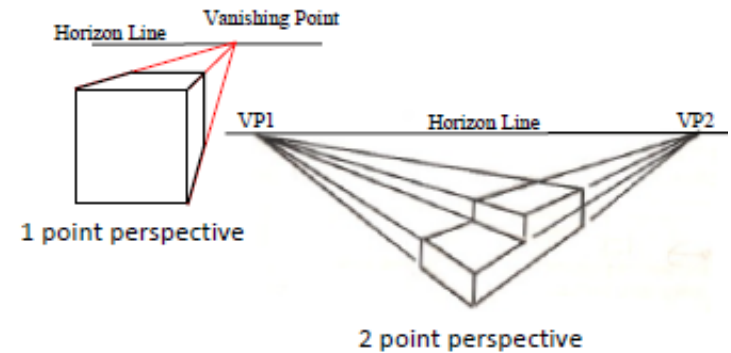


**Sectional Orthographics :**  
A sectional view shows the inside of an object. They can show how components join together.

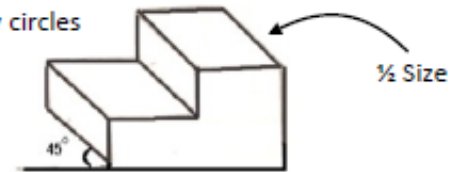


## Pictorial Views

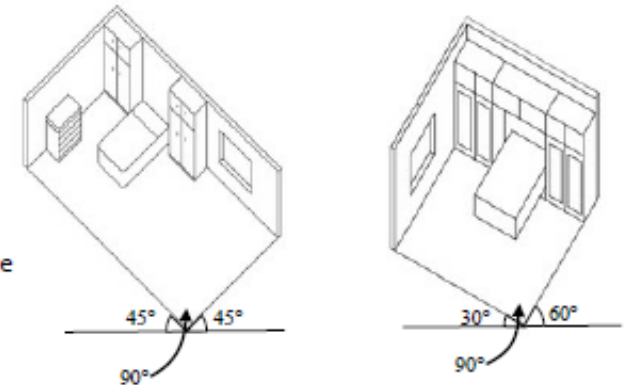
**Perspective :**  
There are two types of perspective views. They give a 'realistic' view of an object or building. Often used to promote or advertise an item.



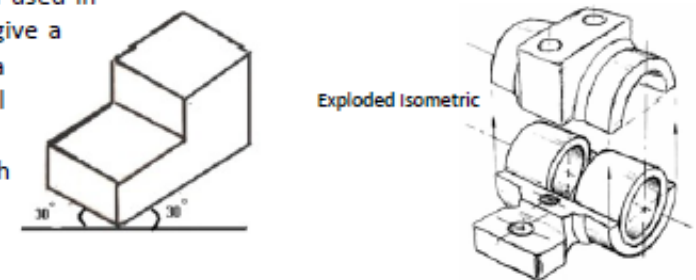
**Oblique :**  
The main advantage of an oblique view is that the initial drawing is 2d. This allows us to easily draw circles before extending the shape back to give a depth. All depth sizes are drawn half size to ensure the drawing looks more realistic.



**Planometric :**  
The internal angle of planometric drawings is 90°. There are two types of planometric view. They are mainly used to show the inside arrangement of rooms.



**Isometric :**  
Isometric views are often used in engineering as they can give a very clear view of how a component or object will look. This is especially so with exploded views which help show how several components are assembled together.



## Location / Building Drawings

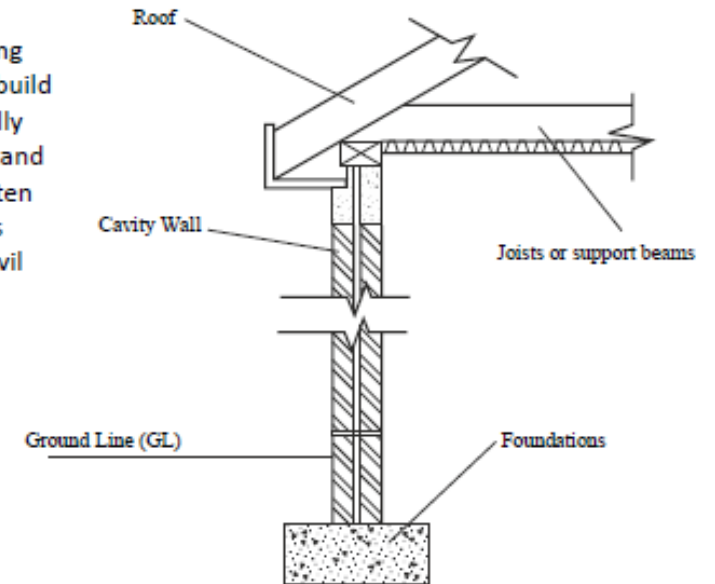
### Promotional Drawings :

This type of drawing is used to advertise and promote a property. Usually a perspective drawing (like the one shown below). Sometimes drawn by hand although computers are being used more often as the software technology advances to produce realistic views.



### Sectional Views :

A sectional view of a building shows the materials used to build the building. They are usually orthographic sectional views and building plans (blueprints) often have several sectional views drawn by the architect or civil engineer to aid construction.



Scales are used a great deal in building drawings. They are used in three main areas, Floor plans, Site plans and Location plans. Each of the three types of drawings have preferred scales.

Type of Drawing	Floor Plans	Site Plans	Location Plans (Block Plans)
Preferred Scales	1:50 or 1:100	1:200 or 1:500	1:1250 or 1:2500

### Elevations :

These are orthographic views to show how a building will look from the front (like the one shown) or, either side or, the back.



### Location Plans (Block Plans) :

A *Site Location Drawing* or *Block Plan* shows where the site is located within the local area. It shows roads, outlines of buildings, site/plot boundaries, and often show land contour lines.

The block plan below shows where a bungalow is to be situated within the surrounding area. It is normally drawn to a scale of 1:1250.

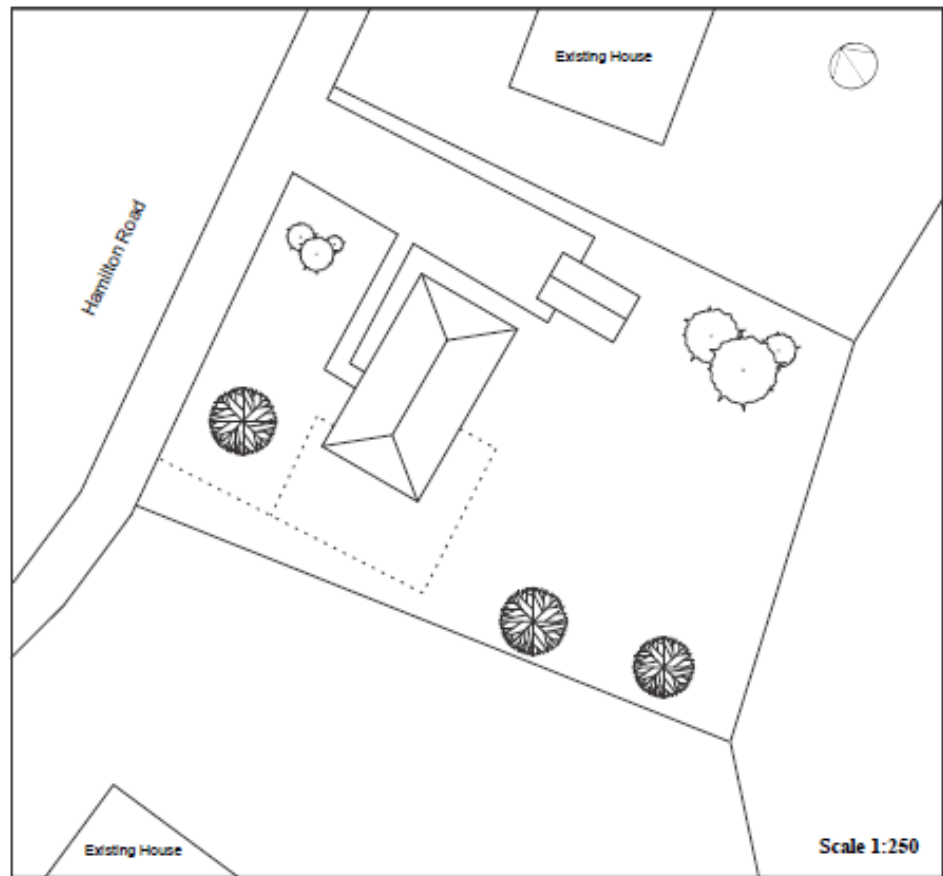


North Point indicator and scale.

### Site Plans :

This type of drawing is concerned with one or more buildings which are within the same area and shows these buildings within their own site (or plot) boundary.

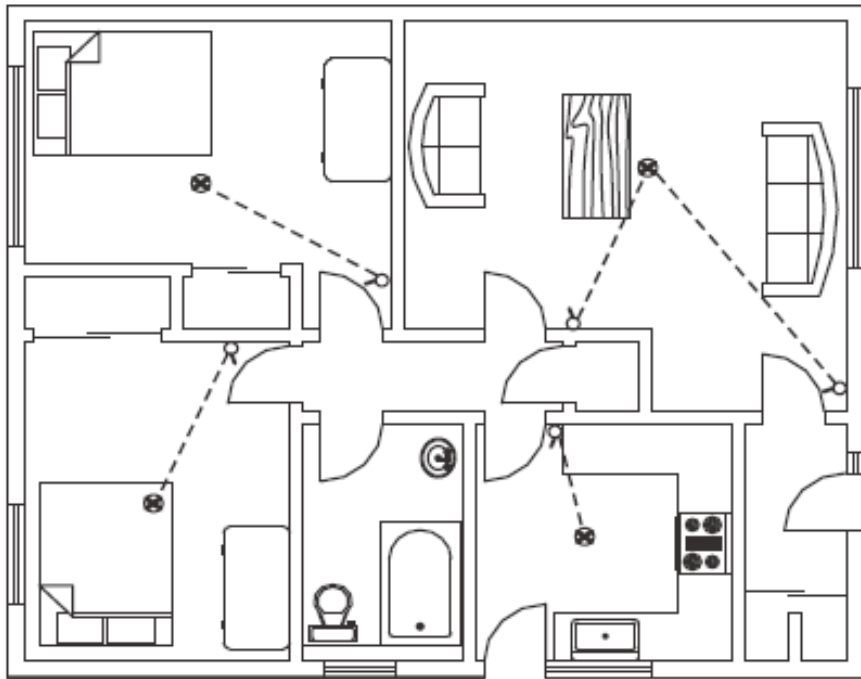
The buildings are shown as outlines and boundaries are marked slightly darker. The scale and the north point are both indicated on the drawing. The site is numbered (usually as plots). Waste pipe runs, manholes and trees are also indicated. Important dimensions are shown.



## Floor Plans :

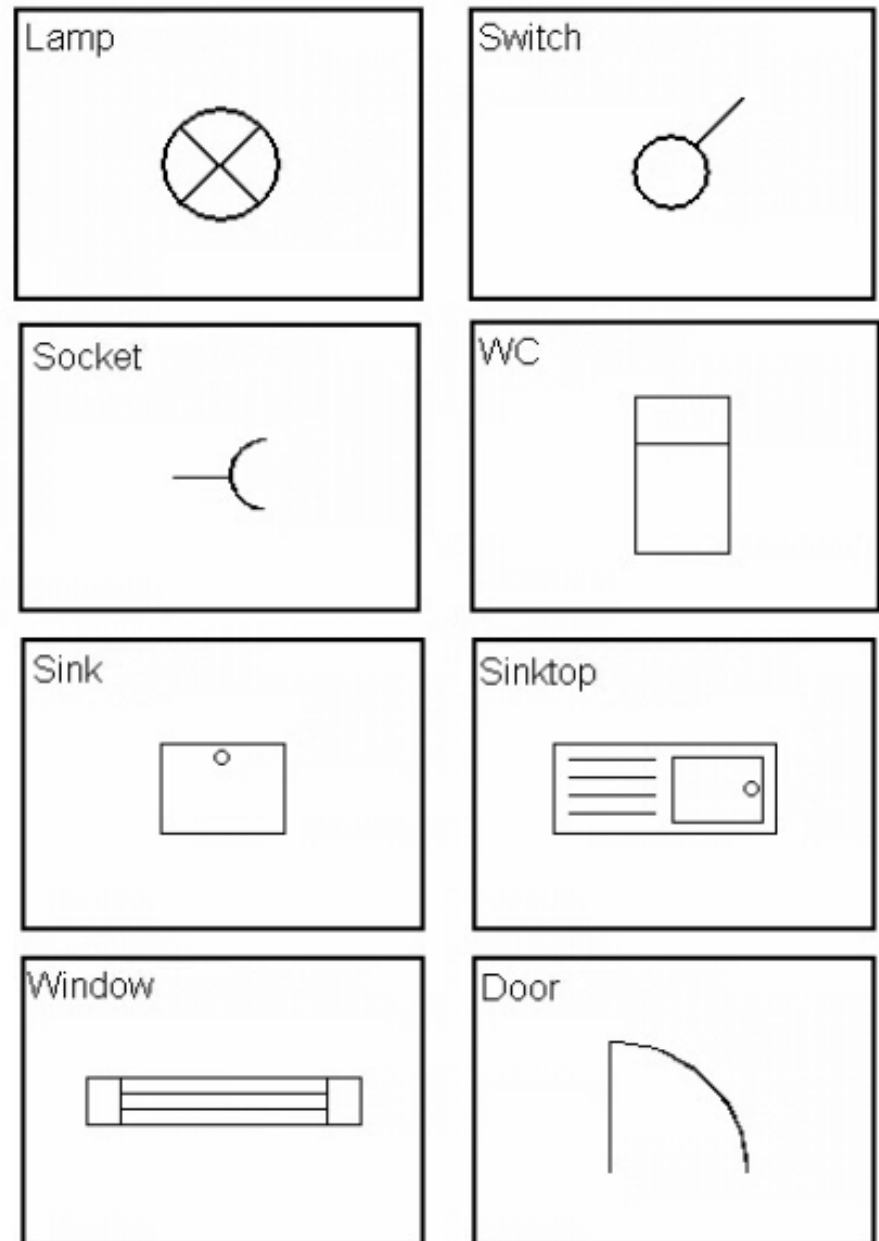
This type of drawing shows the layout of the rooms inside the building and the position of the doors, windows and important fittings like a bath, sink and toilet.

Architects drawings usually have several *layers* to show different types of fixtures and fittings. Such as plumbing, electrical wiring etc....

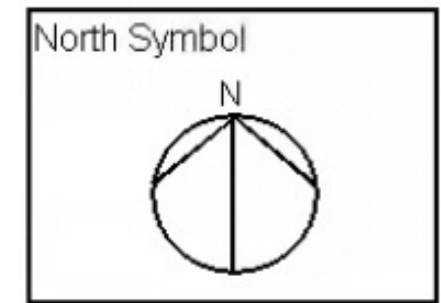
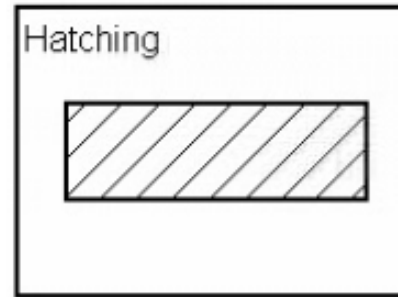
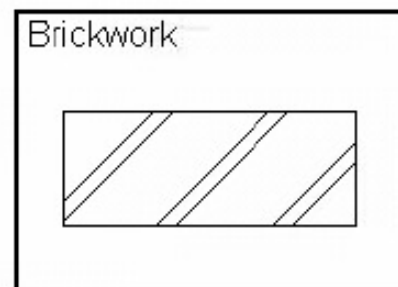
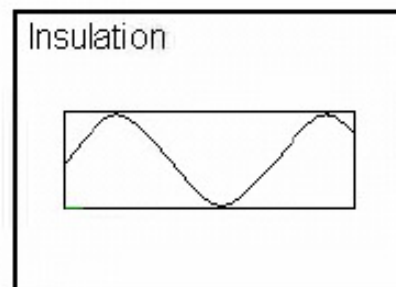
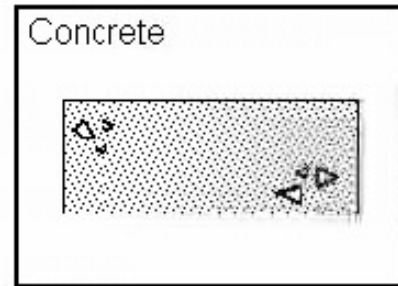
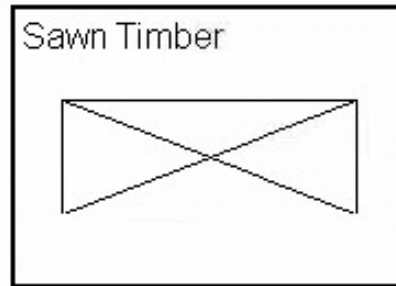
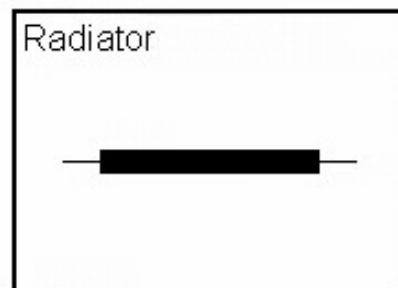
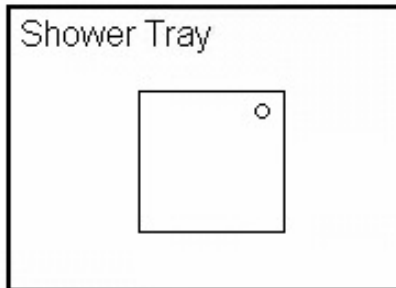
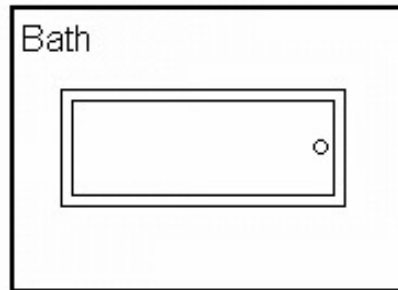
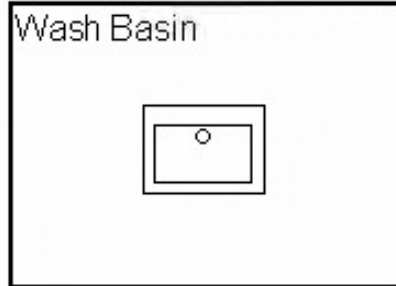


Drawn by: David Sommerville  
Earrock High School

## Common BSI Symbols



## BSI Symbols - Continued



Hazard/Warning  
(Black border & Yellow background)



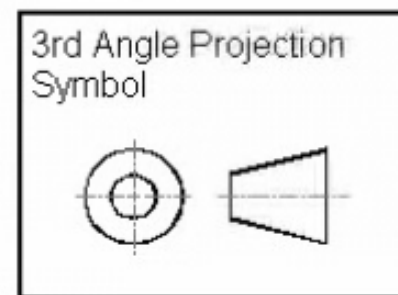
Safe Conditions  
(White writing & Green background)



Mandatory  
(Blue background & White writing)



Prohibitory  
(Red border and slash & White background)



Kite mark  
British Standards Institute