

# [Housing development procedures](https://assignbuster.com/housing-development-procedures/)

A housing development requires ranges of design stages before beginning construction on a site. These include: the client’s requirements, construction development, specifications and scheduling and also research. Procedure, designs and changes do occur throughout projects, unavoidably, in this case communication, agreement and understanding.

Design/Planning

In turn for a project to develop into a success, communication, consideration and concurrence are necessary. Comprehensive consultations relating to requirements in terms of design, practicality and constructability are crucial. A closer look into the client’s personal needs and expectations will as well bear out fundamental to sustain success. However clients may not always be exact about specific characteristics of their requirements; therefore professional teams operate as advisors. As opinions change, plans are force to change to accommodate the new requirements.

Before a development can begin adequate planning and designs have to be taken. Planning in tells of the early assembly of information and data before a thorough design and construction process is exemplified. In this time the parties concerned in the development should specify any particular requests, talk about important issues, resolve any disagreements if any and allocate tasks amongst other desires. Before beginning the design and development, planning authorities must approve to the anticipated project after comprehensive evaluation. In some cases warrants have to be granted for building work to commence on a site, most contractors need this to tear down or build on a site (Civitelo 2007).

As the size and/or scale of a project increases expenses will eventually go up (Ashworth 2005), therefore cost saving solutions have to be implemented into the design of the project. This could mean having to sacrifice in terms of materials used; this will reduce expenses and permit the finances to be transferred in the direction of building a project of a larger magnitude. For this reason alone the stage for planning is extremely delicate as conclusions to how much space is in fact necessary for the development, insufficient and the project could be seen as a failure, too much and it could prove wasteful.

There are various standards and legislations in the construction industry; these are put in place for the advantage of the client utilising the development. Other legislations are aimed at protecting the environment and wildlife. The intention of legislation is to provide a regulatory body to guarantee the efficient build of safe places for work. A forthright view held by several is that legislation and standards add to expenses and are not much beneficial at all however these claims need to be cautiously dissected. Legislative needs are aimed at increasing safety and are approved by a professional body having conducted tests and analysis.

Projects, on the other hand small, are affected by an immense set of legislations; due to the fact efficient development is profoundly dependent on safe places of work and the safe handling of construction material and plants. This being the case projects will always consist of a large board together with clients, engineers, architects, contractors, government and regulating bodies and labourers (Ashworth 2005). Legal personnel are also a part of this board. When plans and ideas are drawn up for a project the persons involved are required to agree to contracts containing clauses in regards with the development in question. Content of the contract may comprise of articles with contemplation to the budget, time and materials amongst other issues. These require careful examination, as they can provide evidence as to becoming the reason for the downfall of a failed project.

During the design process planners and designers must outline the function and suitability of materials whilst taking into consideration economic and ecological consequences (Hinze 2010). Architects for example would be more hands on with the design considerations of a project, however as some parts of a plan cannot be looked at without first getting planning consent, because of this a significant amount of decisions cannot be considered.

When designing a project plans handed in must take into account the financial aspect as prices are persistently rising. Today, most projects involve an organization which is able to economically predict costs of not only primary costs but also costs of control services. The establishment also find the most cost-effective ways of ensuring that a development does not run over financial plan. Prior to plans being put forward, a check or review must be taken on the designs to ensure that the information can be implemented in relation to both construction techniques and materials. The aim of these checks or reviews ‘ Constructability Reviews’ is to minimize the amount of changes at a later stage, reduce delays and increasing costs (Palmer 2002).

Construction

As soon as construction is ready to begin, preliminary work is required to commence to allow initial works carried out. The clearing of the site, a survey to assess the ground conditions, setting up of sanitary facilities, water/power supplies, offices and storage areas are all included in the initial works carried out. Sufficient welfare facilities will need to be established on a site for the use of workers all through a development, this will need to be organised by the project manager in advance.

Facilities will include rest areas, toilets, storage rooms as well as changing rooms and washrooms. (Hinze 2010) These facilities supplied will be essential for the duration of a project to avoid interruption to a project. In some situation however, the project manager may not need some facilities and instead be able to utilise permanent services available on site. An example of this would be, the client may permit the construction team to use toilets already installed on the construction site. This will consequently minimise costs which could have been incurred if the welfare facilities were required. When welfare facilities are essential the project manager should endeavour to locate these in various locations and not a particular area, hence them being in one area can cause inconvenience. An example would be, if the site is quite large the project manager may discover that time will be wasted going to and from the welfare amenities instead of constructively using the time.

Once the preliminary works have finished, demolition on the site can begin. Since the site is situated on a 10 ha site of old forest 5 miles out of the town centre; appropriate access and transportation is required to be arranged in terms of plant/machinery. The outcome of the demolition will lead to the recycling of materials. The forest trees for example can be recycled for timber use during the construction process.

After the site has been cleared, excavation will be concluded to create the required ground conditions fitting the design specifications. In most cases the land in which a project is developed can prove difficult in terms of workability. Loose soil, frequently at a shallow depth, is an foreseeable problem that can be overcome using deep foundations. Nonetheless in this case, shallow foundations will be used as stated in the brief (Palmer 2002). The excavation phase will also prep the site for eventual service fittings and the construction of the substructure. Plants will be necessary during the construction process to enable the increase in production, reduce labour requirements, produce higher standards of constructions and possibly condense overall costs (Cooke 1997).

The substructure will have reinforced concrete foundations to permit sufficient support of the buildings by transporting the load to the ground. This will be fundamental for the community hall which will comprise of a steel frame and metal cladding roof. Services will also be required during the substructure stage for pipes/cable routes, drainage systems. Extensive work to the floors, walls and roofs will all be subject to the design specifications. Scaffolding will be necessary when working on raised platforms i. e. first floor levels, roofs etc, these will comprise of steel or aluminium alloy tubes. As the development will consist of a 200 home housing estate, the homes will be of identical layout and size, for this reason pre-fabricated timber roof trusses will be delivered and hoisted into position before being placed on the supporting walls. The floors and ceilings in the homes will be timber constructed where as the community centre will consist of a concrete floor and metal cladding roof. The walls in the homes will be brick and block masonry fully insulated cavity walls, these will be plastered inside.

Completion of both substructures and superstructures will allow the introduction of services to the buildings; these include drainage, pluming, gas and sanitary works. Some services will need installation below ground in particular the trenches. Service works generally cause widespread disturbance to the community, particularly to traffic because of road works. Significantly the impact should be lower however, seeing as the housing project is being developed on an old forest site, local authority permission must be granted before work commences. The inspection of works will be carried out and final tests will be conducted. The plumbing works, installed above ground, will gain from construction after the vital structural works have finish.

The finishes require extensive organisation to ensure they are completed accordingly as certain processes will not be able to start until others have been finished.

Due to this, workers should be hired to carry out the finishing works at the same time for faster completion of works.

Landscaping should not cut too much into the budget as the area for the project specified is an old forest, so trees and greenery should not to be too expensive to plant around the area. The roads and the footpaths will need to be carefully examined to make sure that the methods of circulation and travel are well planned out and do not obstruct each other. Security will need to be in placed in the community centre; this should be a priority as it will be provided for the local community, including children and the elderly. The project will be finalised when the site has been fully cleared and inspected. All left-over material and debris should be transported and disposed of according to the local health regulations or recycled. Plant machinery, temporary accommodation, and offices will need to be taken apart and cleared off the site. The site should be left in excellent condition and allowed to be inspected by the local authority to ensure the development is up to standard, and matches all the relevant health and safety codes. (Cooke 1997).

## Programme Of Works

## 3 Bedroom Home (Plan View)