



# CHARTERED ARCHITECT

Feasibility Study  
Wet Weather Facility

Isle of Mull Rugby Club, Garmony, Isle of Mull  
Prepared by: AGL Architect Ltd. Revised June 2018



**BEST BUILDING 2016**

**BEST USE OF GLASS  
IN AN EXTENSION 2018**

# Introduction

**A Feasibility Study is the process of obtaining all the relevant information needed to determine whether or not a particular project/development will work for our clients. The study is not a way for proving the project will succeed but it will explore various options available to the client and determine the best course of action for the site in question.**

AGL Architect Ltd have been approached by the Isle of Mull Rugby Club to prepare a Feasibility Study for a new wet weather indoor arena within the grounds of the existing club house at Garmony.

The sports facilities at Garmony have been used by various sports including rugby, football, shinty, athletics, hockey and school sports. The club house itself has also been used for club meetings and weddings.

The existing club house was opened in November 2011 and it has become apparent that additional accommodation is required to ensure not only the growth and success of the club but also to provide all year round sports facilities for the island.

The hall accommodates various classes and events open to the public and includes the following accommodation: Changing Rooms and Showers, Club Shop, kitchen, toilets, bar and Multi-functional Community Room. There is currently no gymnasium or indoor games area where training and games can be played during the winter months and inclement weather.

The Garmony sports facilities site is located to the West of the A849 Craignure to Salen Road just north of Craignure.



# Existing Site

The existing site (bounded in red) accommodates 2 full size rugby pitches, club house, parking and open landscape / hard standing areas. By re-using the existing site parameters means the existing services connections can be utilised without the need for introducing new connections etc.

The proposed site and hall are located to the West of Garmony overlooking the pitches and out beyond to the Sound of Mull to the East. The main access into the complex is off the A849 Craignure to Salen road which is located to the South of the pitches. Immediately behind the clubhouse, to the West is the existing car park which is bounded by a rock outcrop running South to North. To the North of the pitches, there is open ground which has been identified as a potential site for a third pitch.

During the study we investigated locations for the new arena and due to the tight constraints of the site it was agreed that the hard standing area immediately to the North of the club house, where the marquee is erected for the sevens tournament, was the ideal position in relation to location of existing services, viewpoints and ground works.

As part of the works, it may be that discussions with the Forestry Commission, adjacent landowners, are carried out with a view to agreeing re-routing of the old Craignure to Salen road used by the Commission.



## Site Context:

The context of the site is explored by the utilising Site Analysis. This enables the understanding of the various elements within and beyond the site boundary and is carried out by a physical appraisal of the site.

The following site appraisals have been carried out:

- Site Analysis: Analysis of the development site on an immediate level which includes exploration of Microclimate, Focal Points, Views to and from the site and the topography of the site. The site analysis helps determine location of areas suitable for development to allow the buildings to sit comfortably within the existing site boundary.
- Building Appraisal: Analysis of hierarchy of spaces within the proposed building.



## Public Utilities:

Mains water, electricity and telecoms currently serve the existing hall and will be used as part of the new proposals. The drainage is treated by a private septic tank located to the South of the existing club house. Existing electrical over head services transverse the site which will require to be re-routed as part of the proposals.

# Existing Site

## Site Analysis

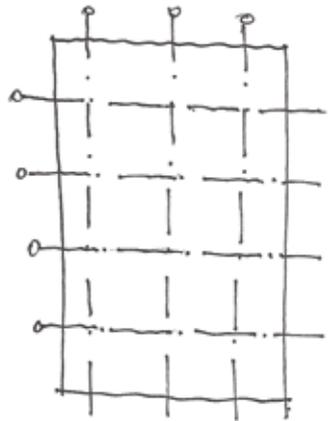
### Legend:

- Views into Site
- Main Access into Site
- Vehicle / Pedestrian Movement
- Open Vistas from Site
- Existing Contours / slopes
- 33kv overhead electrical lines
- Prevailing Wind Direction
- Natural Area for Development
- Area of Rock Outcrop

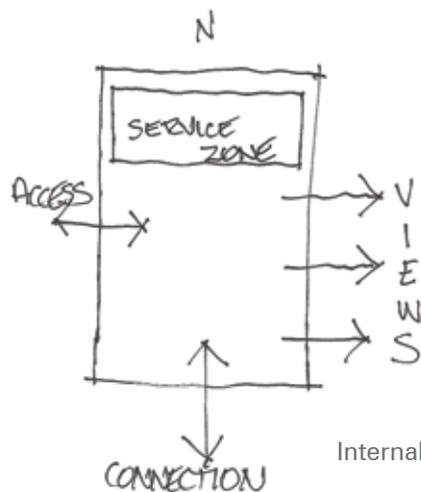


# Design Concept

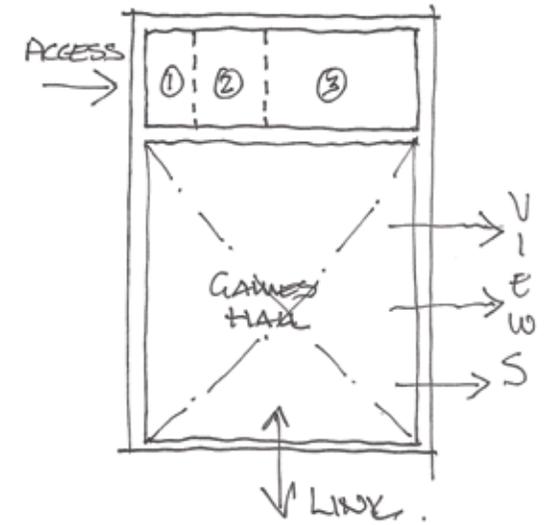
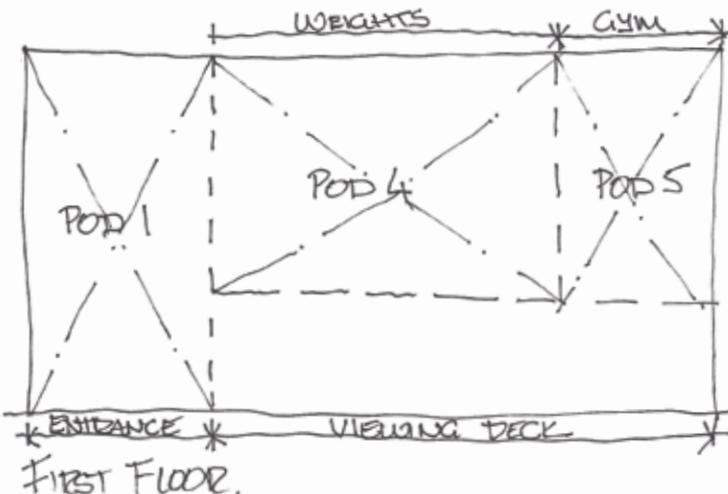
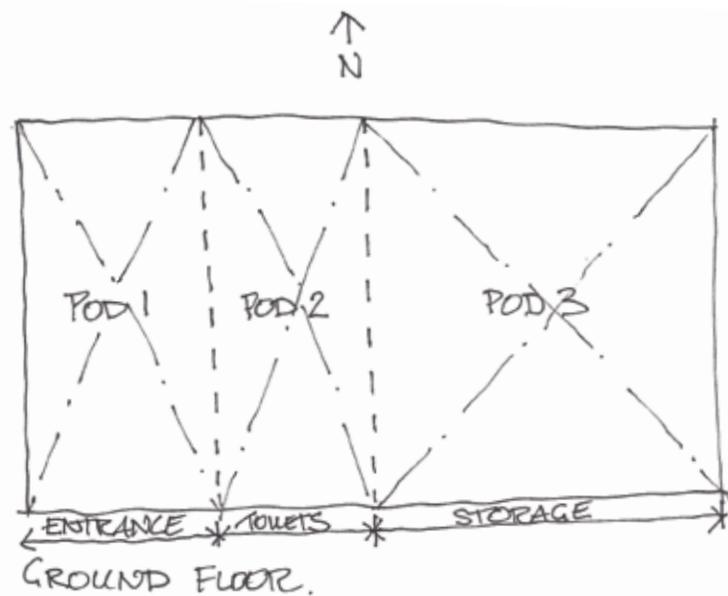
## Space Analysis



Portal frame to provide large clear spans



Internal zones/division



Service zone sub division.

Phased construction (pods)

Pod 1: Entrance protected enclosure

Pod 2: WC/Shower block

Pod 3: Storage

Pod 4: Weights room

Pod 5: Gymnasium

# Proposed Site Layout

**The proposed site layout has been determined by the findings of the site analysis and the discussions with the club committee. There are also existing site restrictions/limitations which have influenced the design.**

From the analysis The site plan proposed locates the building on a level hard standing area to the North of the existing club house. The elevated position allows users to overlook the rugby pitches and will influence the design of the building.

The design and location of the new building enables the building to have a visual connection with the games field while having a physical connection with the existing club house. This arrangement allow the existing changing rooms to be accessed from the new games hall.

The pitch side location replicates that of the existing club house. The proposals include the extension of the viewing deck acting as a secondary connection with the clubhouse.

The arena has been designed to fit into the existing context of the site and its linear form provides and maintains access to the existing Forestry Commission track. The track has been realigned within the club's boundaries to accommodate the new building.

As part of the proposals parking provision has been relocated to the North of the pitches and will be accessed off the realigned access track. The parking has been designed so as not to compromise the potential future development of a third pitch. Indeed the new parking could



provide access to a smaller club pavilion serving the third playing field in the future.

To accommodate the new arena areas of the rocky outcrop will require to be excavated and the material will be used as fill in other areas of the site as part of the ground works element of the build.



# Design Proposals

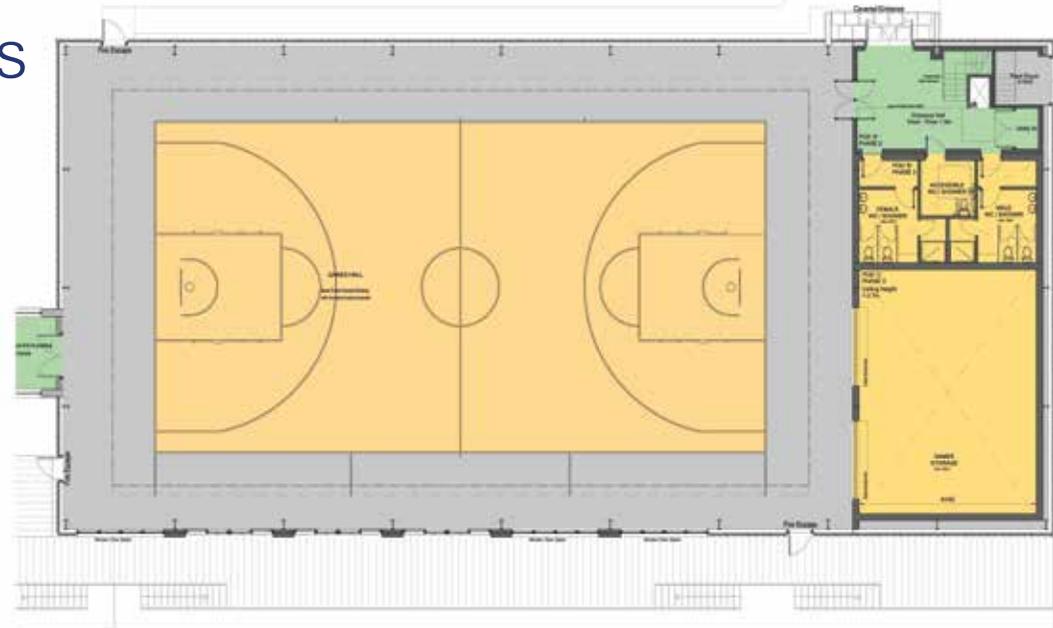
**With changing weather patterns weeks of consistent wet weather, during the winter months, is a regular occurrence on Mull. This often halts traditional outdoor sporting fixtures and severely impacts on regular community activities such as team training and school sports. This is frustrating and demoralising for local users as this is the very time of year that such activities are of most value.**

The brief from the client is for a large indoor facility to accommodate as many user activities as possible. This approach would also address the lack of a games hall on Mull and Iona. For example Mull and Iona have no full sized basketball court and are thus discriminated against joining mainland leagues. With only five members in a team basketball would be an idea sports activity for the Island.

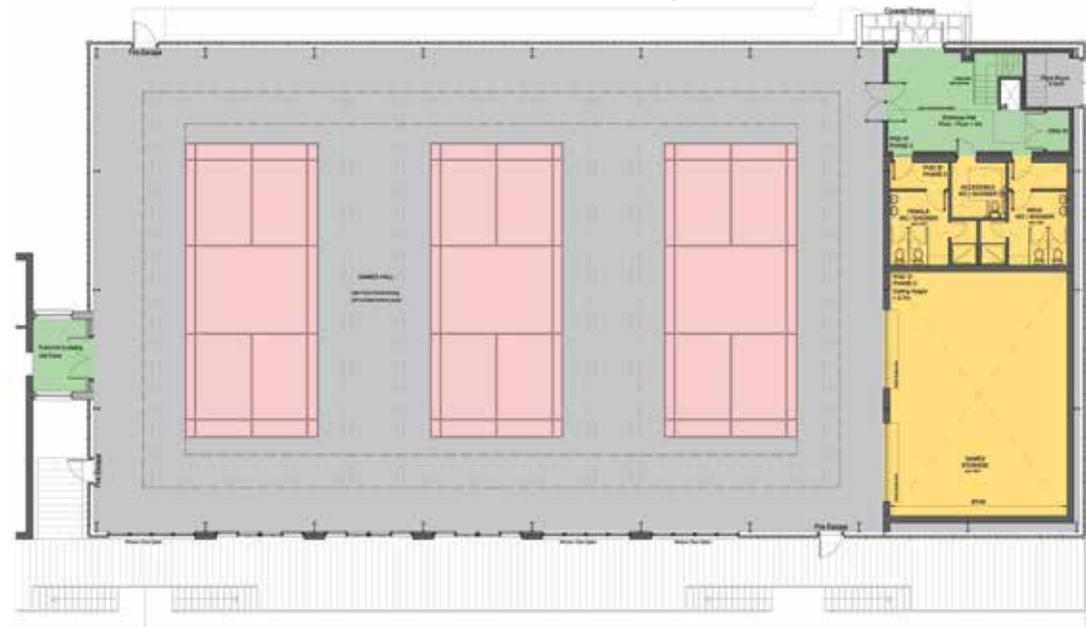
There was a desire from the client to make use of the shape and form of existing large agricultural structures that are commonly seen around the islands. Thus the development is in keeping with the rural nature of the site.

This facility will accommodate:  
Basketball, indoor athletics, rugby training, football training, shinty training, hockey, badminton, indoor football, sports development and much more.

Basketball court layout



Badminton court layout



The design comprises a simple rectangular plan covering 945m<sup>2</sup> contained within a timber clad steel portal frame building connected to the existing club house by a small link located on the South gable. The structure and basic specification proposed for the building has been chosen to provide the most cost effective building system for this type of structure.

The service core or pods are located to the North side of the plan thus leaving the remainder of the footprint with a clear open space for the games hall. The pods are designed and built independently of the shell building and are proposed to be constructed of SIPS panels suitable for supporting its own weight. The pods become a building within a building.

If and when funding is in place the proposed elevation design will be updated to be contemporary in nature and clad in composite panels, coloured to reflect the club colours. The proposed materials are:

- Metal composite panels to the roof and walls
- Aluminium doors and windows
- Stained timber cladding to some areas

The building will be fully insulated and air tight to achieve current building standards and will potentially be provided with the following renewables:

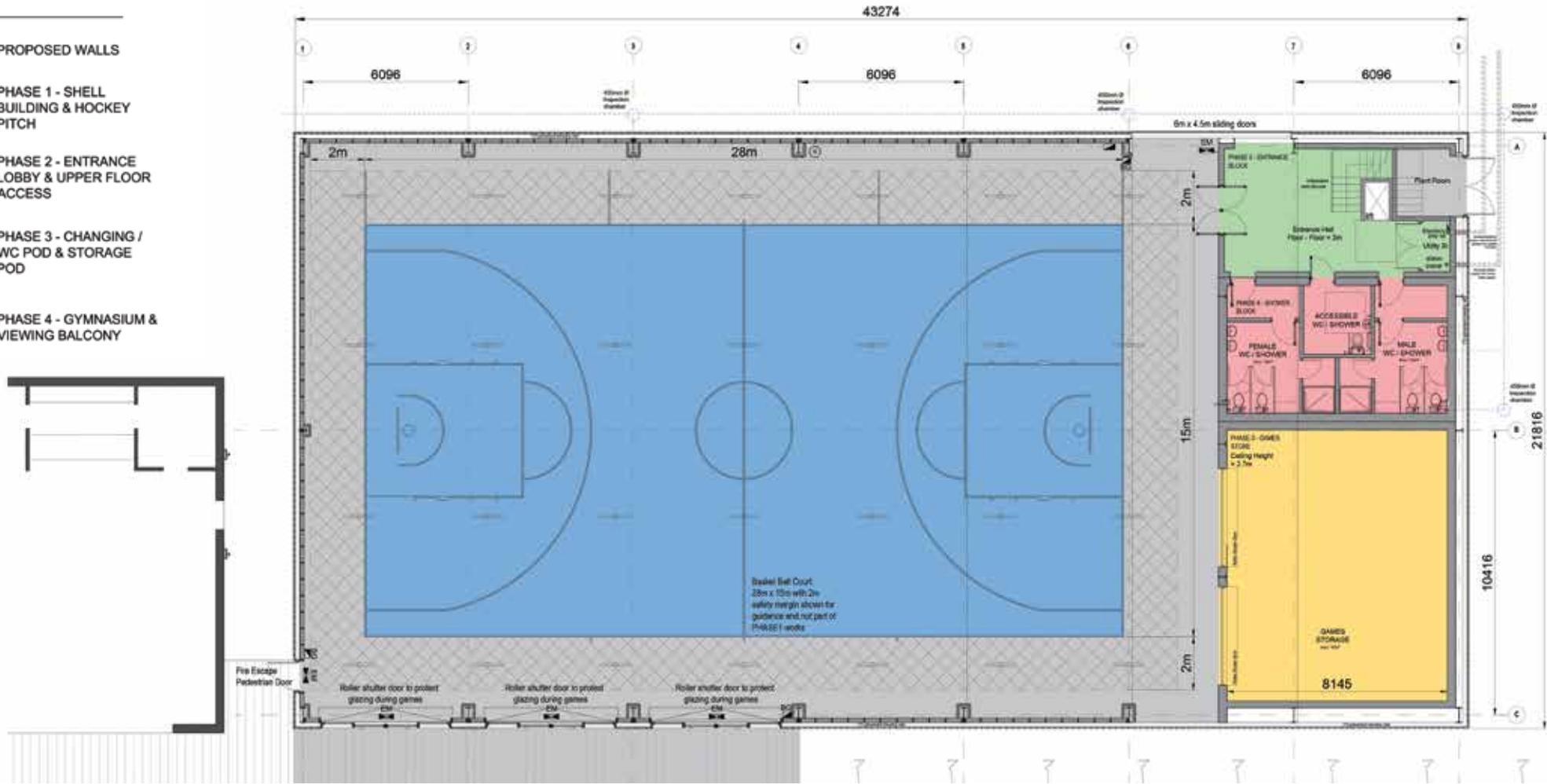
- Air source heat pump
- Mechanical Ventilation Heat Recovery System (MVHR)

# Design Proposals

## Proposed Ground Floor Plan

**LEGEND:**

- PROPOSED WALLS
- PHASE 1 - SHELL BUILDING & HOCKEY PITCH
- PHASE 2 - ENTRANCE LOBBY & UPPER FLOOR ACCESS
- PHASE 3 - CHANGING / WC POD & STORAGE POD
- PHASE 4 - GYMNASIUM & VIEWING BALCONY

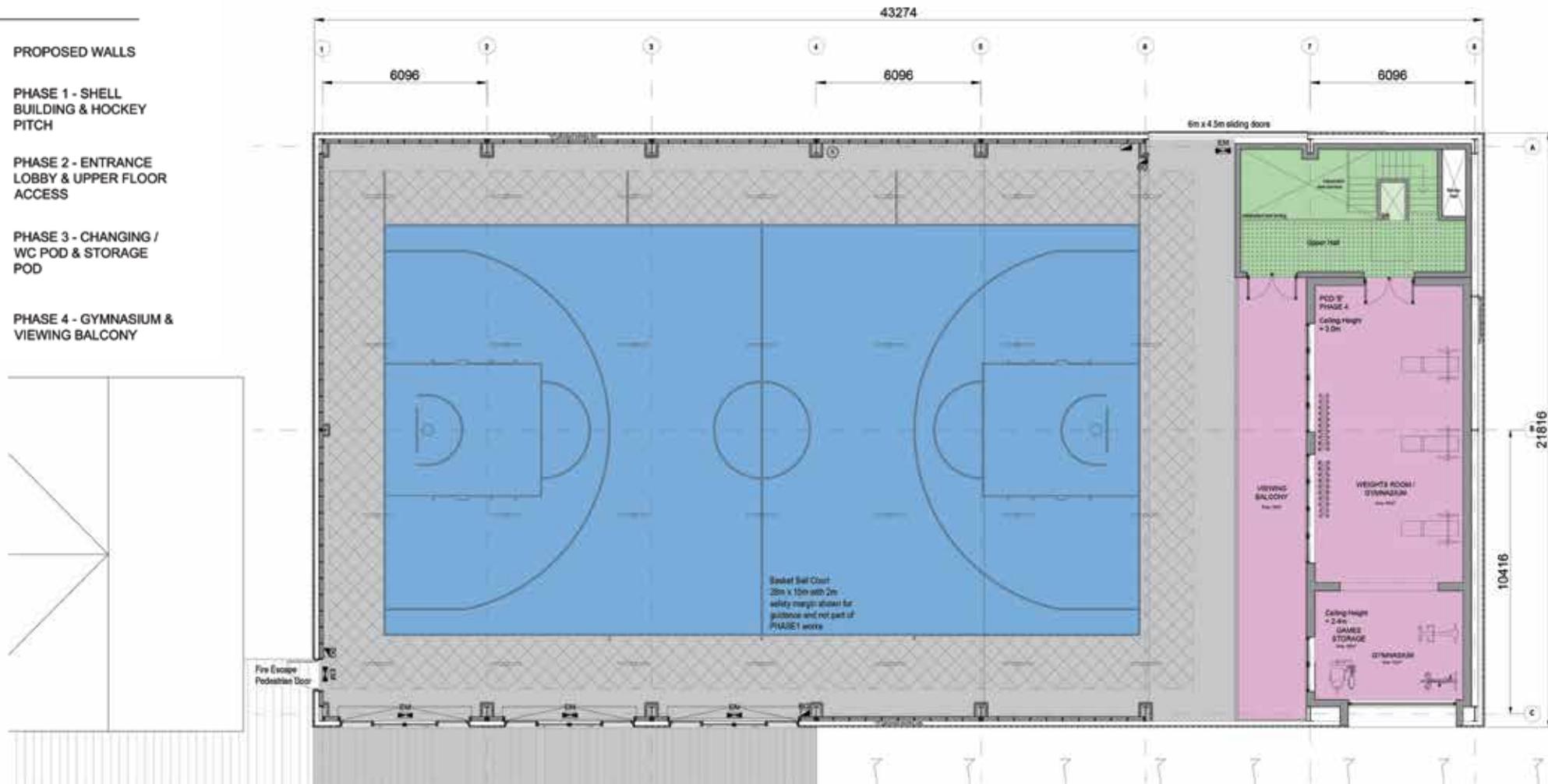


# Design Proposals

## Proposed First Floor Plan

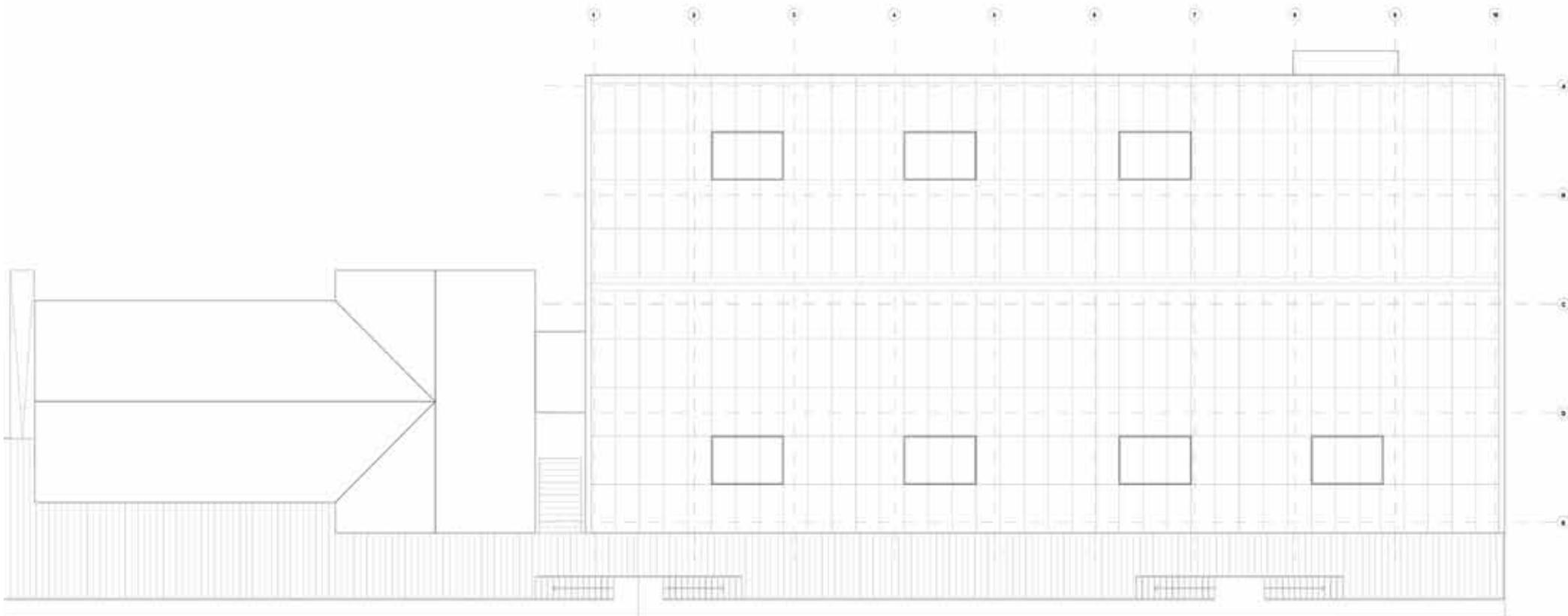
**LEGEND:**

- PROPOSED WALLS
- PHASE 1 - SHELL BUILDING & HOCKEY PITCH
- PHASE 2 - ENTRANCE LOBBY & UPPER FLOOR ACCESS
- PHASE 3 - CHANGING / WC POD & STORAGE POD
- PHASE 4 - GYMNASIUM & VIEWING BALCONY

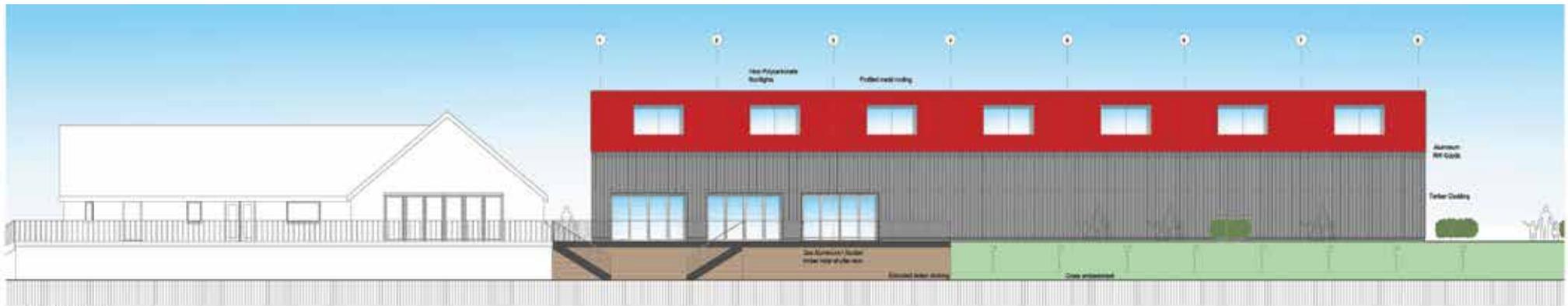


# Design Proposals

## Proposed Roof Plan



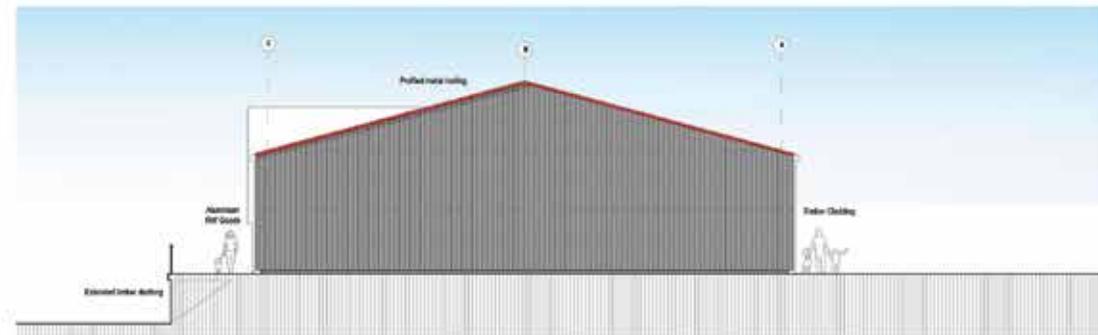
# Design Proposals



East Elevation



North Elevation



South Elevation



West Elevation



# Brief Specification

The following specification is subject to change and dependant on costing exercise.

## Substructure

- Excavate to reduce levels and reuse on site.
- Excavate to form external and internal reinforced concrete strip foundation with concrete blockwork to floor level.
- Excavate to form reinforced concrete footings to steelwork portal columns.
- Excavate and form reinforced concrete ground floor construction with cement screed finish.
- Under floor drainage and duct work.

## Superstructure

- Steel portal framing to main building with side elevation fenestration.
- External wall cladding to comprise composite panels tied back to steel horizontal purlins.
- Roof covering of double skin, profiled metal sheeting and accessories on roof purlins and steel beams.
- Areas of External timber framed single skin walling with larch cladding externally and plasterboard internally.
- Prefinished high performance double glazed timber windows and doors.
- Internal accommodation provided by timber SIPS panels with timber cladding to games hall side and lined internally with plasterboard finish.
- Upper floor comprises steel framework with timber posi joist infill to enable services to pass through the joists at 400mm centres.
- Timber framed plasterboarded internal partitions.
- Solid core internal doors for paint finish.
- Internal finishings, facings, skirtings etc all softwood for paint finish.

## Services

- Under floor heating system with ASHP source; pressurised domestic water installation with hot storage; standard white sanitary ware; uPVC and ABS soil and waste systems.
- Lighting and power installation with distribution board, smoke and heat detection.
- MVHR System to Internal Pods.
- Low energy LED light fittings with PIR automatic shut off.

## Finishes

- Polished concrete floor to hall and entrance, rubber flooring to gymnasium and contract non slip vinyl elsewhere.
- Minimal ceramic wall tiling in toilets with hygienic cleanable finish to ceiling.

## Decoration

- Emulsion to walls and ceilings; prime, undercoat and gloss to all woodwork.

## Externals

- Formation of new entrance plat, gravel margins around perimeter of building and type 1 pathways.
- A provisional sum is allowed for soft works.
- Builder's underground drainage (existing septic tank reused; rainwater drainage connected to new rainwater soak away).

## Utilities

- Existing incoming water and electrics supplies to be amended and altered to suit. Electricity, existing loadings on nearby Transformer to be confirmed in case new incoming supply required.

# Phasing

The design of the building allows a phased approach to the construction of a new arena. By staging the build it enables the financial restraints to be contained within achievable portions.

The proposed phases are as follows:

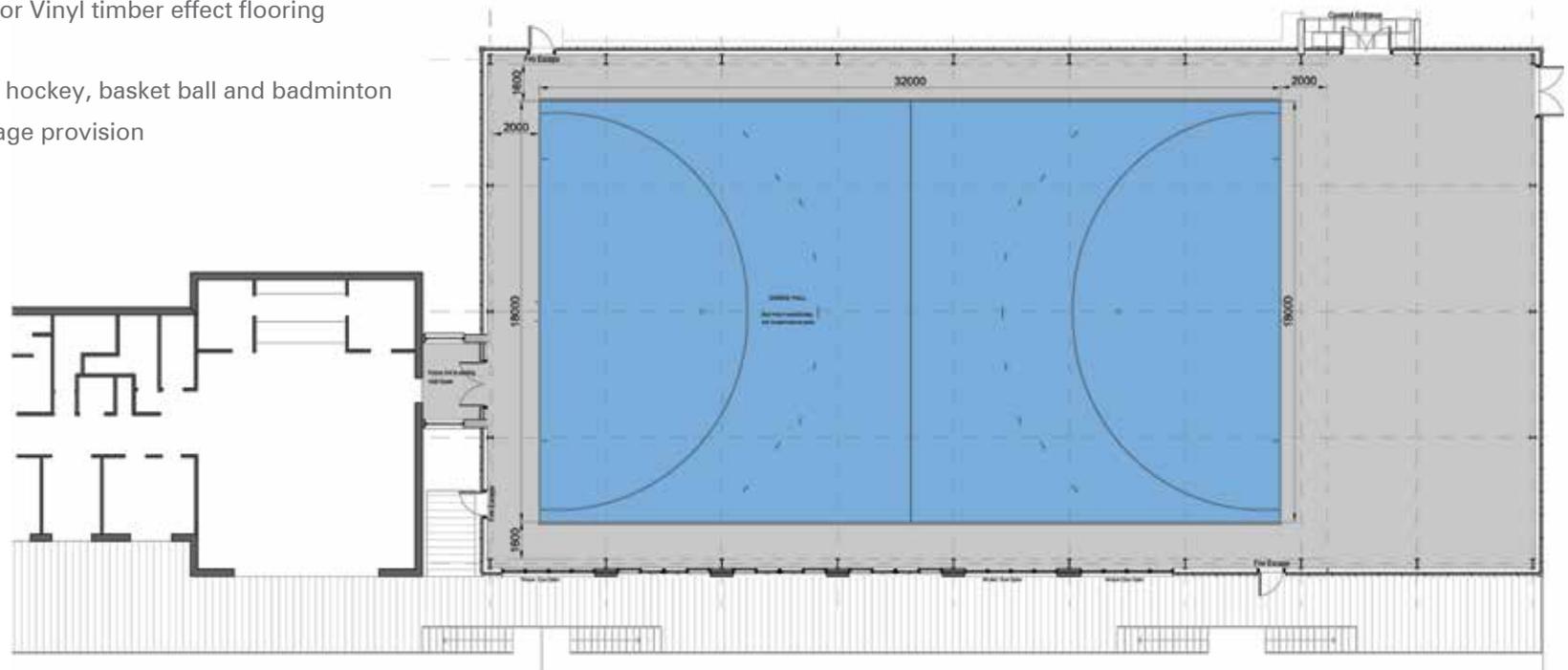
## Phase 1. Shell building, plant room and flooring.

This phase is the most onerous in terms of construction work and costs due to the associated external works and ground works required to accommodate the building. On completion of phase 1 the building will comprise:

- Timber clad walls and roof on a steel portal frame
- Concrete floor slab and Gerflor Vinyl timber effect flooring
- External viewing deck
- Games hall to accommodate hockey, basket ball and badminton
- Incoming services and drainage provision

### LEGEND:

-  PROPOSED WALLS
-  PHASE 1 - SHELL BUILDING & HOCKEY PITCH
-  PHASE 2 - ENTRANCE LOBBY & UPPER FLOOR ACCESS
-  PHASE 3 - CHANGING / WC POD & STORAGE POD
-  PHASE 4 - GYMNASIUM & VIEWING BALCONY

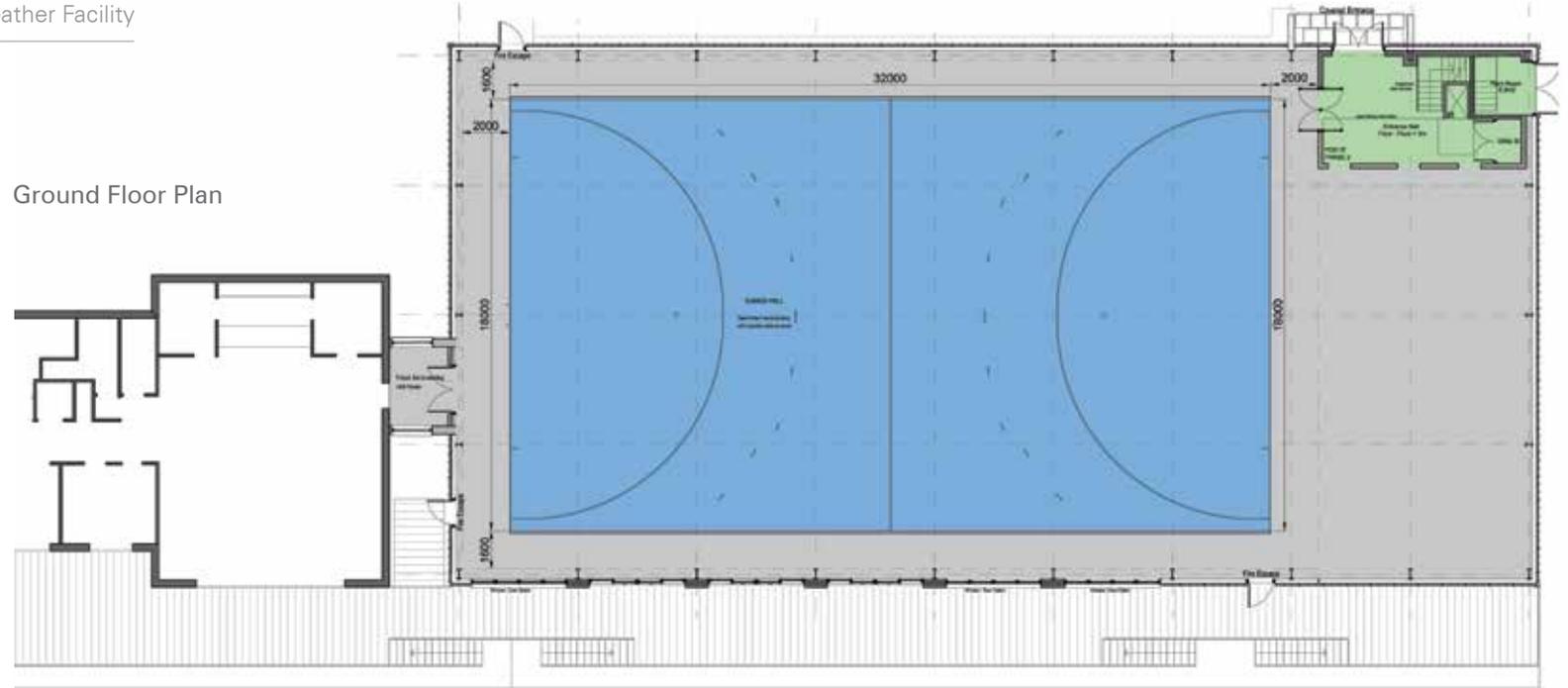


# Phasing

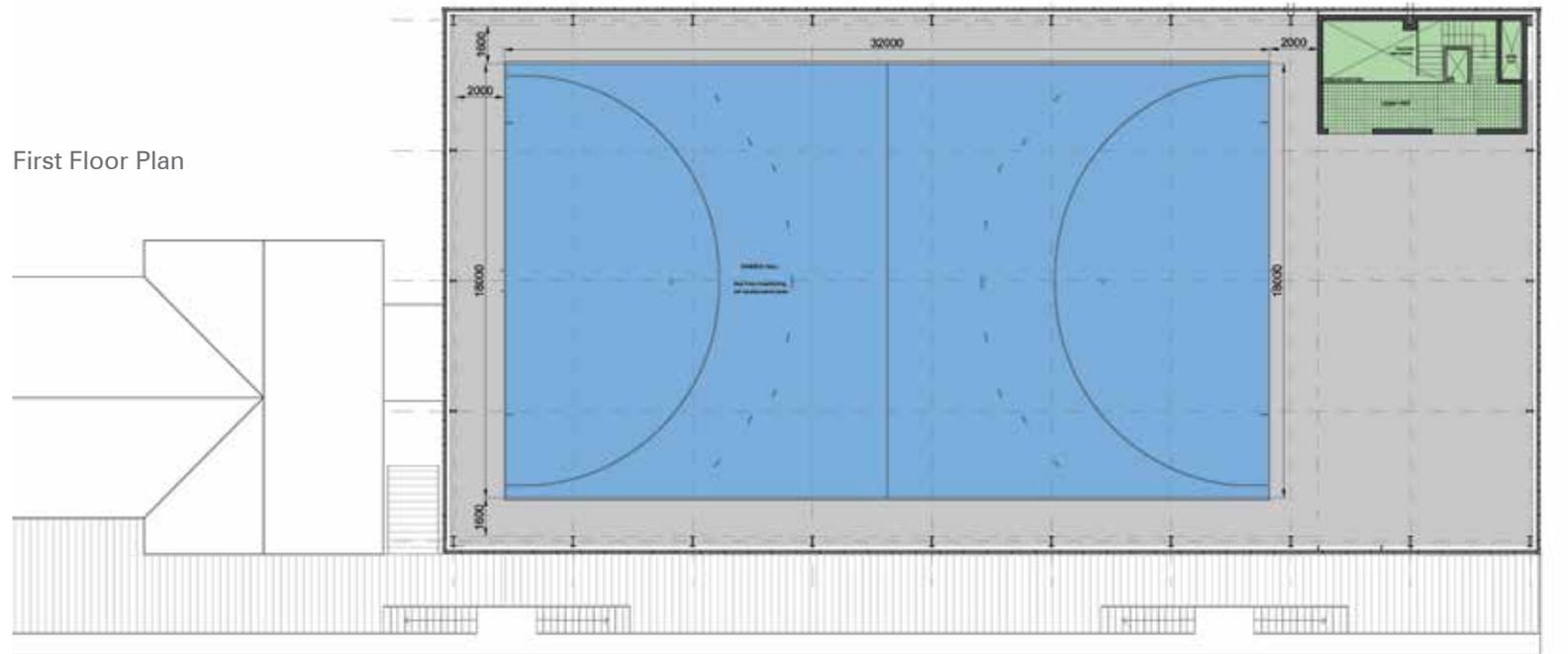
## Phase 2

Provides the first of the internal accommodation and includes the erection of the entrance lobby and protective enclosure core. This will provide future access to the first floor accommodation.

Ground Floor Plan



First Floor Plan



**LEGEND:**

- PROPOSED WALLS
- PHASE 1 - SHELL BUILDING & HOCKEY PITCH
- PHASE 2 - ENTRANCE LOBBY & UPPER FLOOR ACCESS
- PHASE 3 - CHANGING / WC POD & STORAGE POD
- PHASE 4 - GYMNASIUM & VIEWING BALCONY

# Phasing

## Phase 3

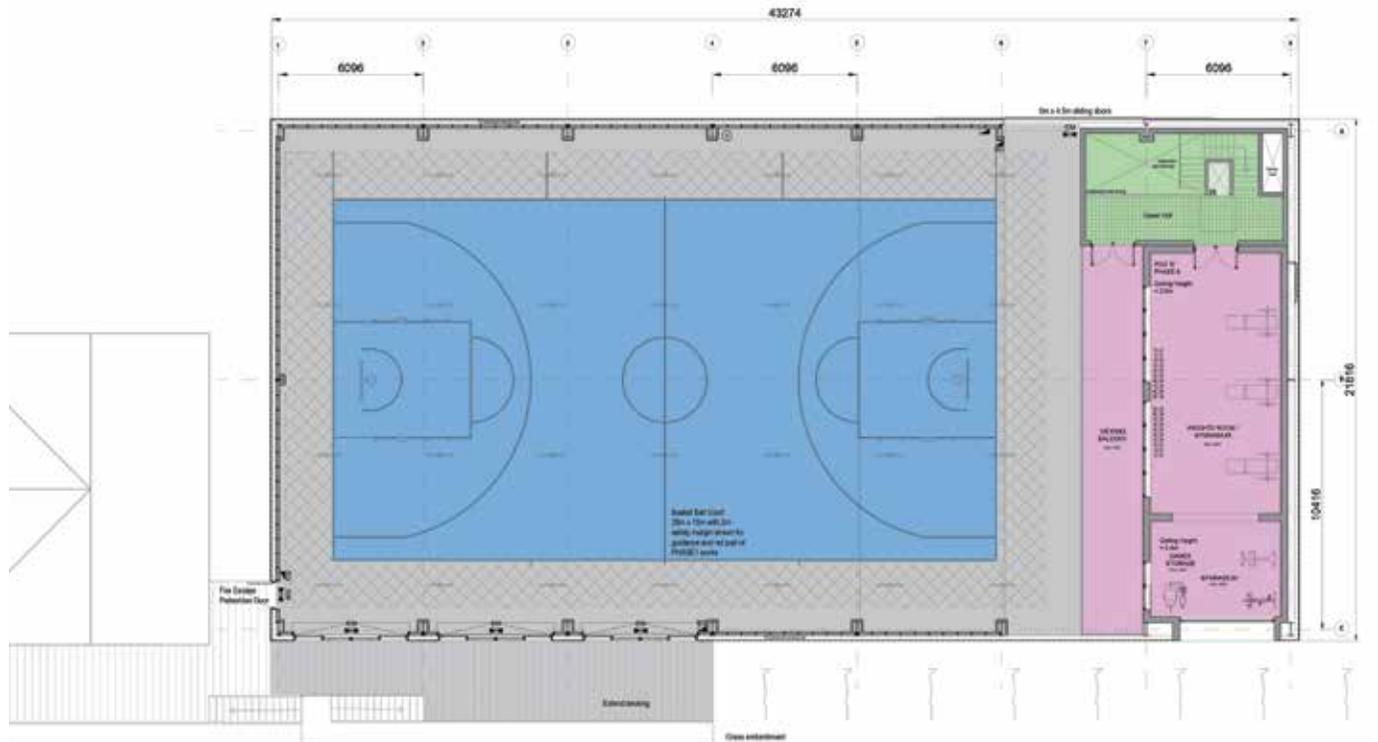
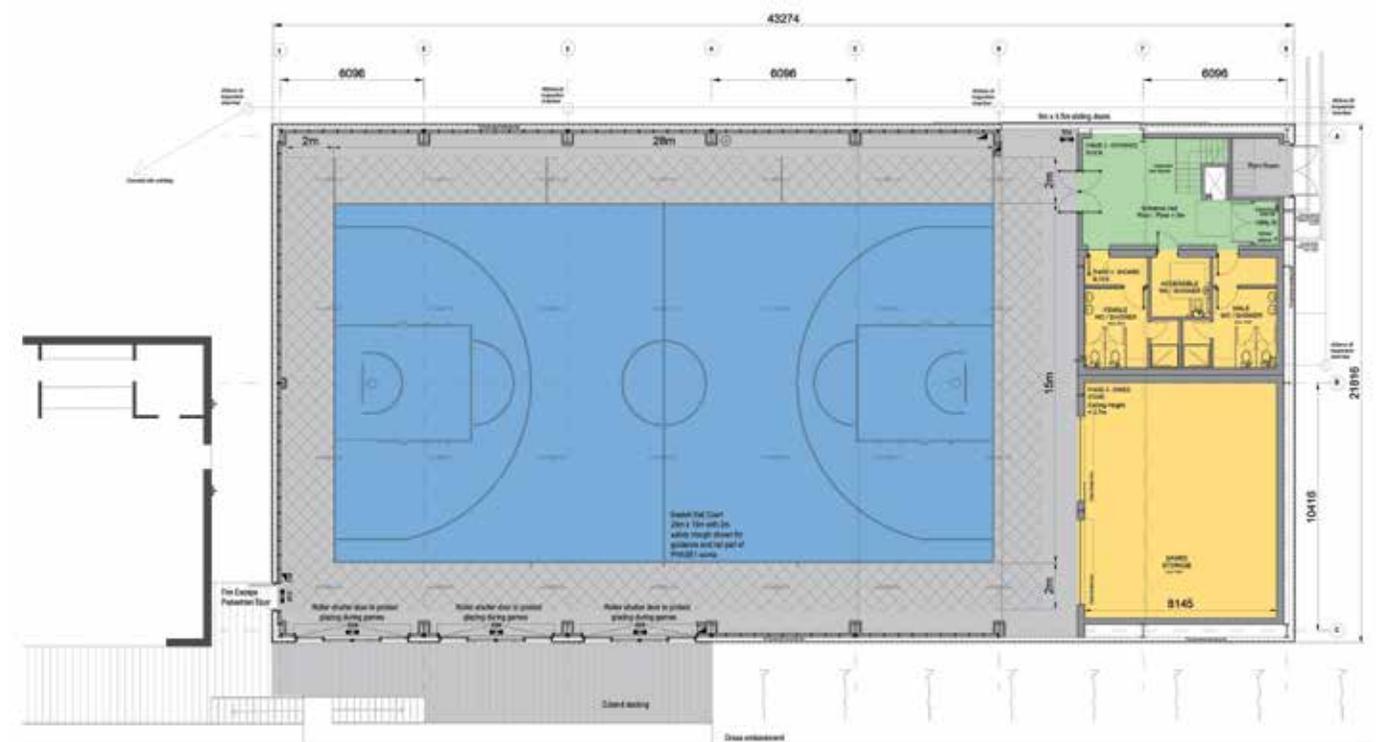
This is another milestone. This is the formation of the WC and storage pods on the ground floor. The pods can be manufactured off site and assembled within the shell building. They will be fully insulated and heated and provided with a MVHR system for ventilation. Externally the wall will be clad in natural timber and lined internally with plasterboard lining.

## Phase 4

Phase 4 completes the total build and included the erection of the gymnasium pods at first floor level. These will be to the same spec as the pods in Phase 3.

### LEGEND:

-  PROPOSED WALLS
-  PHASE 1 - SHELL BUILDING & HOCKEY PITCH
-  PHASE 2 - ENTRANCE LOBBY & UPPER FLOOR ACCESS
-  PHASE 3 - CHANGING / WC POD & STORAGE POD
-  PHASE 4 - GYMNASIUM & VIEWING BALCONY



# Consultants / Design Team Structure

**To assist with the successful delivery of the project the client will require to appoint the following consultants for the project:**

- Architect
- Principle Designer
- Quantity Surveyor
- Structural Engineer
- Environmental Consultant
- Principle Contractor

**As part of the planning process, the following consultants may also need to be appointed:**

- Landscape Architect
- Topographical Surveyor



# Conclusion & Recommendations

**The research contained within the study has highlighted that the proposed site location can accommodate a new wet weather facility at Garmony. The proposals would sustain the life of the club and the island community. Whether the project is built in phases or as a single contract the quality of the facility will benefit the island as a whole. Such a facility would be the only one of its kind on the island.**

The total construction cost may well be higher than anticipated however this should be measured against the future benefits the facility would bring to the community. The proposals have been designed with a phased programme of works in mind allows capital funding to be sought in relatively manageable stages.

Should the committee agree to progress the project we would recommend further detailed site investigations be carried out including:

- **Topographical Survey**  
(locates all vegetation, buildings, walls etc)
- **Services Survey**  
(locates all existing underground services within the site)
- **Ground Condition Survey**  
(simple survey to determine existing ground conditions within the site)

## Feasibility Costs

The design team recommends that the feasibility study and accompanying information be presented to grant funders for potential grant funding opportunities.

The feasibility study was prepared by the following consultants:

- Mr Sandy Lees, AGL Architect Ltd
- Mr Tom Nelson, Mull Rugby Club
- Mr Duncan Swinbanks, Secretary, Mull Rugby Club
- Mr Fergus White, Senior XV Coach, Mull Rugby Club



Design by The Write People for Design Ltd  
Tel: 01786 445022  
[www.thewritepeople.co.uk](http://www.thewritepeople.co.uk)

THE WRITE  
PEOPLE  
FOR DESIGN