

# SPECIFICATION ANALYSIS

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## Dunstable Park Recreation Centre South Bedfordshire

SPORTS COUNCIL  
INFORMATION  
CENTRE

Architects: Perrin Associates  
Quantity Surveyors: Dearle & Henderson  
Structural Consultants: Oscar Faber & Partners  
Mechanical Services and Electrical Consultants: Hoare, Lea  
& Partners  
Client: South Bedfordshire District Council (originally the  
Borough of Dunstable)

Situated on the edge of the town park, which is claimed locally to be one of the most beautiful in the country, Dunstable Park Recreation Centre is intended to provide leisure activities for families to enjoy together. The site was chosen for its proximity to the main shopping centre and the Queensway Hall opposite.

The single storey building (with basement and gallery) consists of three main units, a swimming centre, sports hall and bowls hall; with outdoor soccer pitches, "Redgra" floodlit training area, and an artificial ski slope and toboggan run planned for the future, utilising excavated chalk fill from the pool hall and plant room.

### CONSTRUCTION

Basically the structure consists of a steel frame, which was erected first. Cladding consists of cavity brick walls, and a flat roof comprising Woodcemair pre-screeded woodwool slabs and three layers of felt, and incorporating opal acrylic rooflights. The steel columns are encased in concrete and exposed proud of the face of the external brickwork.

The external brickwork is Redland's Crowhurst brown rustic facings, with perpendicular joints kept flush and horizontal joints slightly recessed. Tilcon coloured mortar was specified, the pointing to be darker than the colour of the bricks.

Fascias to the swimming pool, sports hall and target shooting gallery are of horizontal cedar boarding treated with Sadolin. Glass in a large feature window and

elsewhere in the pool hall is bronze Spectrafloat to reduce specular reflection on the water surface, and minimise solar heat gain in warm weather. The glass is set in anodised aluminium frames within Columbian pine main frames.

The raised plinth to the large pool hall window is in Ibstock dark brown paviers. Concrete paving slabs form a mowing edge around the remainder of the building.

### FACILITIES

The brief placed particular emphasis on the recreational use of the centre, in preference to competitive sport — a fact reflected in the free shape of the main 25m swimming pool and its associated computerised sunbathing area at the rear of the separate learner pool. Viewing is informal from either side of the pools, or from the first floor gallery from tables and chairs set under brightly coloured sunshades. Piped music is played throughout the day over the public address system. Both pools have a top deck water level system in common with most recently completed continental pools and increasingly popular in this country.

The 33m x 24m sports hall is large enough for six badminton courts, one tennis, basketball or netball court, or three volleyball courts (across the width). The hall is also used for five-a-side football, occasional dances, and civic events.

Associated with the sports hall are six squash courts, a self-contained target-shooting gallery, and multi-activity

andillary hall for cricket practice, trampolining and table tennis.

The bowls hall has six rinks and an L-shaped concourse area which houses 300 locker units and a mobile refreshment service. A secondary floor system is being devised to lay over the carpet in summer months, when bowls players prefer to be outdoors, in order to provide facilities for dry ice skating, exhibitions and conferences.

The two main concourse areas are carpeted and provided with seats and tables for refreshments served at first floor level. There is a separate dining room for receptions, Rotary lunches, etc, and a bar; and the whole building is licenced. An administration wing provides accommodation for the management team, which is also responsible for running the Queensway Hall opposite.

The Plant Room is at basement level under the two pools. A lift service is available for paraplegic users of the Centre.

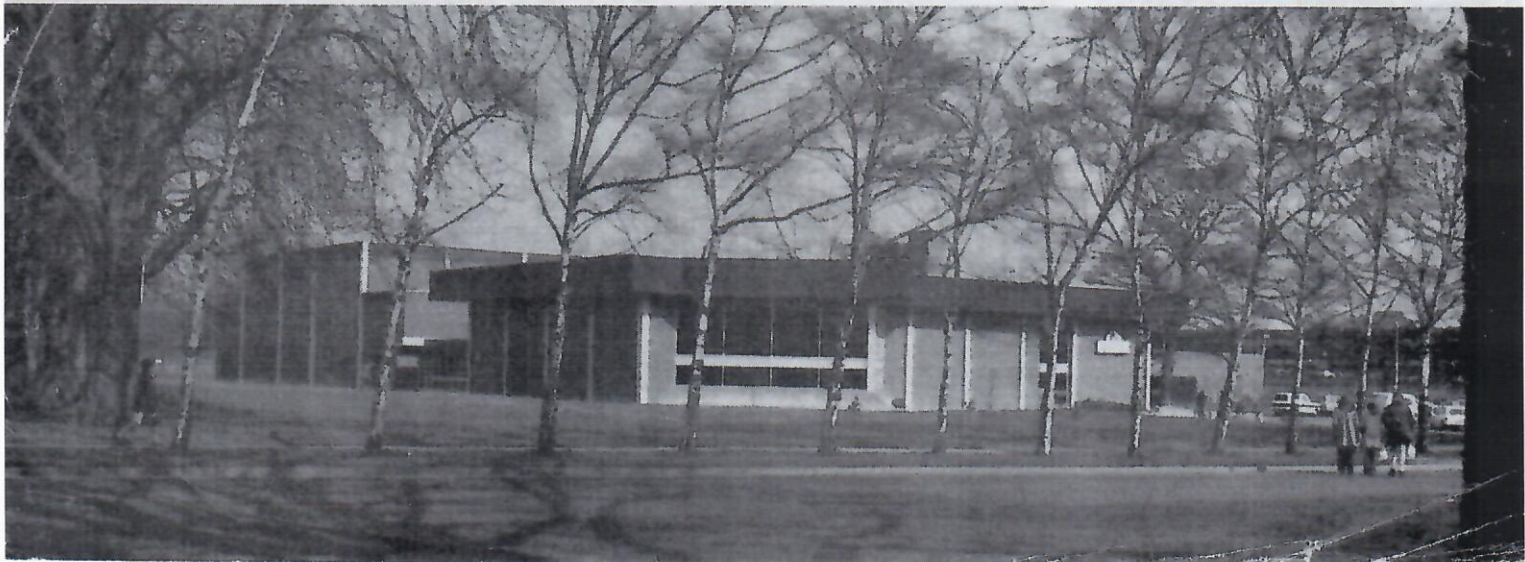
### INTERNAL FINISHES

#### Main Pool Hall

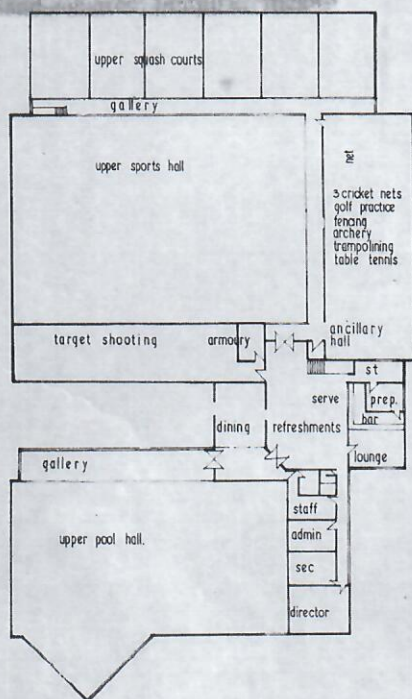
**FLOORING** — Taraflex Plage 2mm pvc matting on Tretolux membrane on screed laid to falls. The aim was to provide users with a non-slip hygienic floor finish, warmer and softer to walk on than ceramic tiling, and acoustically more satisfactory. (The basement under part of the pool hall necessitated the use of the waterproof membrane, otherwise the matting could have been laid direct on to the screed.)

**POOL EDGE DETAIL** — An overflow channel covered by an EMCO pvc overflow grating works in conjunction with the top-deck water system selected for both pools. This system was specified to be in line with common continental practice, where it is claimed it is easier for users to get in and out of the water (especially paraplegics). It is more hygienic than the more traditional scum channel treatment as the water is always in motion, pulling

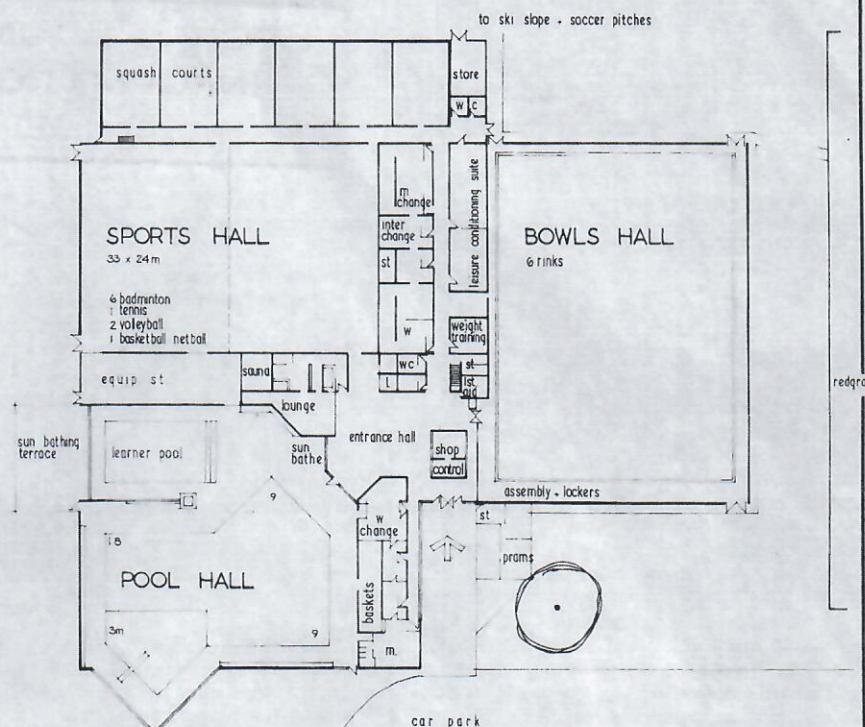
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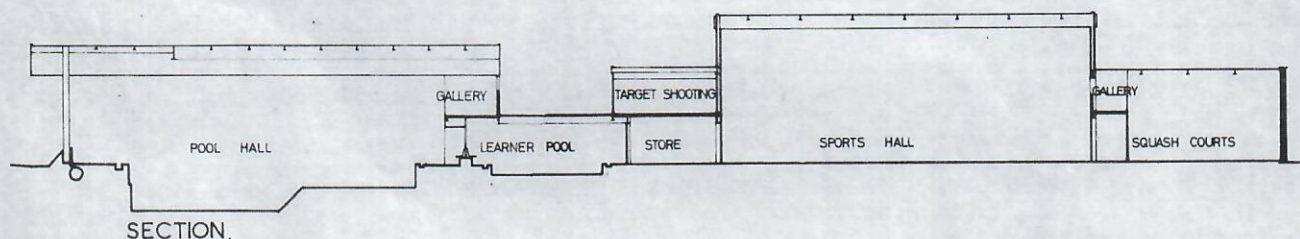


FIRST FLOOR

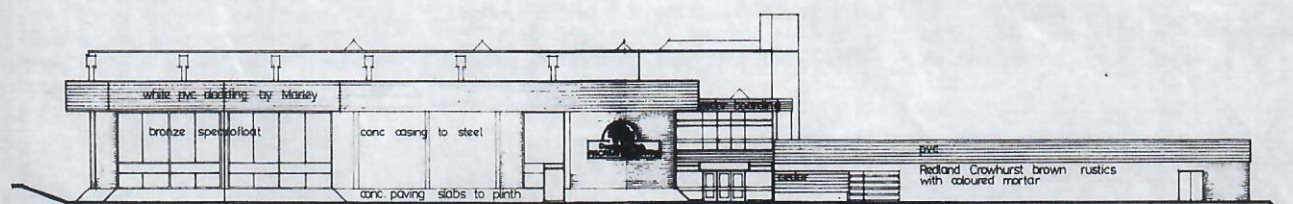


GROUND FLOOR

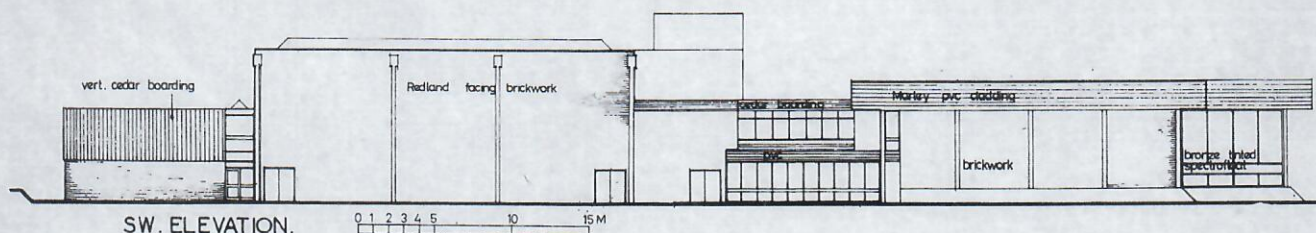
0 5 10 15 20 M



SECTION.



SE. (FRONT) ELEVATION.



SW. ELEVATION.

0 1 2 3 4 5 10 15 M



surface body artifacts to the perimeter overflow weirs, and with correct detailing is cheaper to construct than scum channel surrounds.

A band of black tiling was laid at the top of each pool to demarcate the water edge clearly. In the main pool deeper bands of pimpled black tiling have been used to aid competitive swimmers in turning and pushing off from end walls, since this pool can be used for the district and county standard events if required. In the learner pool, shallow steps have been placed at one end to enable the very young or non-swimmers to enter the water gradually.

**POOL WALLS** — Off-white ceramic tiling by Reed-Harris has been used throughout with matching pointing. A West German Steuler Keramik tile was selected for pool linings and pool edgings, and Rhein Dinas tiles for the pool hall walls. Dow Corning silicone rubber sealant was used throughout for expansion joint masking, and at junctions of wall and flooring.

**CEILING** — Dampa acoustic corrugated sheeting is used throughout with the corrugations running down the length of the pool as an aid to orientation for swimmers. Fluorescent light fittings are inlaid flush with the ceiling, as are floodlights and loudspeaker units.

Perimeter warm air heating and ventilation occurs at all main windows. Main heating, however, is via ducts below seating (which is also heated). Ceiling void steelwork is coated with bitumen and woodwool roofing slab clips are galvanised to prevent possible corrosion by chlorine.

**OTHER POOL HALL FEATURES** — Joinery is in Columbian pine throughout. Internal glazed screens to the first floor viewing area/lounge are in anodised aluminium by Crittal-Hope. The Sun-bathing area has been fitted out by Jomi International. It contains vibratory couches, each being connected to a coin operated "dial-a-tan" computer which controls sun-lamps to individual requirements.

### Sports Hall

**FLOOR** — A DLW-Contiwood semi-sprung floor was selected as being the closest to comply with international requirements as set down in DIN 18032 used by the International Working Group for Sport and Recreation in Cologne. As well as being resilient, the floor has to withstand very heavy use, including Roller-discos (roller-skating to high-decibel music to the uninitiated). The Contiwood Durabella Canterbury sports floor is a multi-purpose semi-sprung system consisting of foam-backed hardwood battens arranged to allow underfloor air movement, supporting 15mm Finply tongued and grooved sheets and covered with a 2mm pvc DLW Deliplan Royal topping with all joints hot-welded to give a monolithic finish throughout. Court markings are in pvc tape, sealed. No seal is required on the main floor itself which is therefore cheap to maintain. The floor was laid by Phoenix Floors Ltd on an area of approximately 800 sq m.

**WALLS** — Flintlime sand-coloured brickwork throughout. Selection was based upon environmental considerations such

as good background contrast for all major activities, pleasant warm colour, and comparative smoothness to minimise the possibility of abrasion at floor level during, say, five-a-side competitions.

Ryarsh Calcium Silicate bricks have been used extensively for the internal facing walls in the sports hall, bowls hall, ancillary hall, target shooting gallery and fitness room, a total of approximately 170,000 being supplied. F.50 Heather and F.62 Straw were used at Dunstable, left exposed to provide an attractive and natural decor. Additional colour has been added by flags and posters on end walls in the sports hall and at suitable points elsewhere.

**CEILING** — Spray paint-finished woodwool slabs and exposed castella steelwork throughout. The architects say this type of finish has been found to give ideal acoustic conditions for all sporting activities, and also for choral and orchestral concerts. Continuous bands of rooflights run across the hall between badminton courts (to prevent the possibility of glare), to provide good daylighting standards (400 lux). Fluorescent fittings and special wind-down badminton fittings are housed in the same plane for after dark use.

### Bowls Hall

**FLOOR** — The six-rink arena is sunk approximately 457mm below the surrounding walkway for better viewing. The carpet is Scapegrene, one of three recommended by the Indoor Bowls Association, laid on Duralay underlay, and chipboard on a self-levelling screed. The carpet is carried down into a perimeter channel and finishes on the underside of removable hardwood edging, should it require adjustment (tensioning). Surrounds are finished in 2mm pvc tiling.

**WALLS** — Off-white flint lime brickwork with matching pointing.

**CEILING** — Spray painted woodwool slabs and castella steel beams. Light fittings (fluorescent) run down the length of each green, and can be switched to provide lighting over the ends of greens only; or on alternate greens if, for example, only four courts are in use.

### Squash Courts

Junkers beech pre-sealed tongued and grooved woodstrip flooring on battens has been laid throughout by Phoenix Floors Ltd.

Walls are finished with Keenes hard white plaster finished with Fairfield squash court emulsion paint. The ceiling is of spray painted woodwool slabs.

### Ancillary Hall

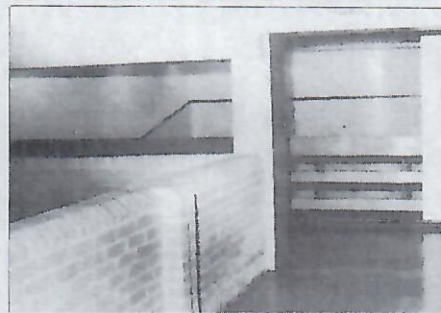
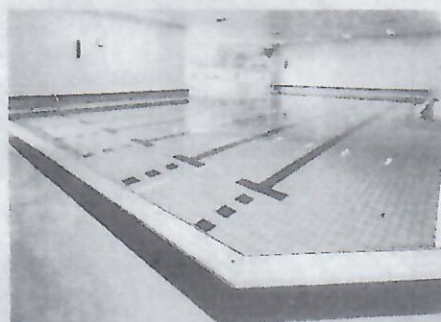
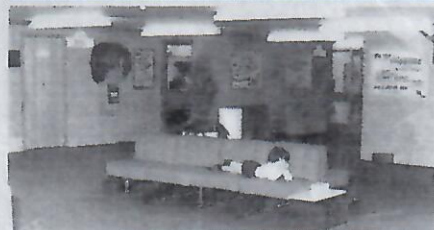
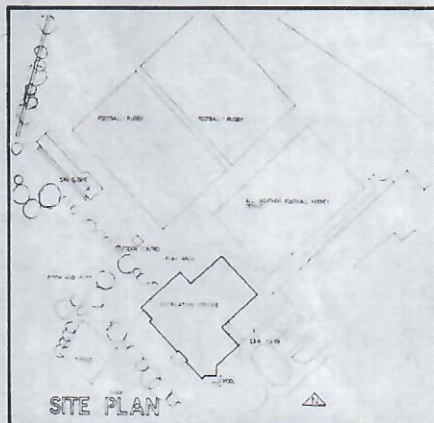
The floor of the ancillary hall is Tarkett Gymflor supplied by Hewetsons of Hull, hot-welded at joints, and laid on 50mm screed. Walls are off-white flintlime brickwork. The ceiling is spray painted woodwool slabs. Opal acrylic rooflights provide natural daylighting. Netting is installed for cricket practice and archery.

### Target Shooting Gallery

Finishes as in the ancillary hall.

### Fitness Room

Otherwise known as the "leisure conditioning suite" (modern jargon for body-building), and intended for use, for





# SPECIFICATION ANALYSIS continued

instance, by the tired executive, the fitness room has a floor covered with DLW Queen contract carpet on a 50mm screed. Sand-coloured flintlime brickwork with matching pointing forms the wall finish. Ceilings are finished with Treetex Glacier mineral fibre acoustic tiles.

## Sauna Suite

The lounge floor and sunbathing area in the sauna suite is finished in Heuga carpet tiles, and elsewhere in Woolscroft ceramic tiling. The sauna chamber was supplied and installed by Nordic Ltd. Ceilings are Treetex Glacier tiles. The sunbathing unit is by Jomi, as in the pool hall.

## Refreshment Lounge

FLOOR — DLW Queen contract carpet on 50mm screed.

WALLS — Ibstock facings. Feature wall in Latoplex by Treetex Acoustics Ltd.

CEILING — Profiplex panelling by Treetex Acoustics Ltd.

## Bar Lounge, Dining Room and Pool Viewing Lounge

FLOOR — Contract carpet by Mercia Weavers, architectural range.

WALLS — Hessian clad chipboard.

CEILING — Profiplex as in refreshment lounge.

OTHER FEATURES — Chairs, tables, sunshades, table covers, etc, supplied by Abacus Ltd. Curtaining, designed by the architects with the Centre's motif, manufactured and supplied by CFI Ltd of Baldock.

## Contract

The building was completed three months ahead of schedule and the Centre was opened by Mary Peters on January 18th, 1975. The construction cost was £772,000. RIBA Form of Contract, Local Authority edition.

## Sub-Contractors, Materials and Suppliers

Electrical Sub-Contractors: Holliday Hall Mechanical Services sub-contractors:

Marryat Jackson Norris Ltd

External facing brickwork: Redland Ltd

Spectrafloat glass: Pilkington Bros Ltd

Roofing: Milton Asphalt Ltd

Pre-screeded woodwool roofing slabs:

Woodcemair Ltd

Opal acrylic pyramid rooflights: Robin

Architectural Products

Internal flintlime brickwork: Ryarsh

Brick Co Ltd

Tilcon coloured mortar: Tilling

Construction Services Ltd

Pool hall and pool tiling: Reed-Harris Ltd

EMCO pvc overflow channel cover grids in

swimming pool: Reed-Harris Ltd

Contiwood Durabella Sports floor system:

Phoenix Floors Ltd

DLW Royal pvc carpet in sports hall:

DLW (Britain) Ltd

Scapagrene bowls hall carpet:

E.H. Bounds Ltd

Carpeting in refreshment areas and entrance hall, and Queen contract carpeting: DLW (Britain) Ltd

Dampa suspended ceiling in pool hall:

Dampa UK Ltd

Glacier ceiling tiles: Treetex Acoustics Ltd

Profiplex and Latoplex: Treetex

Acoustics Ltd

Sauna installation: Nordic Saunas Ltd

Satin anodised finish ironmongery:

Lockerbie & Wilkinson

Sanitary ware: Royal Doulton

Pool hall equipment: Contemporary

Industries Ltd

Sunbathing equipment: Jomi International

Sports hall equipment: Powersport

International

Redgra external all-weather training area:

supplied and laid by DOE Contracts

Combined cricket and archery netting:

Bridport Gundry Ltd

Sadolin timber treatment: Sadolins Ltd

Floodlighting standards: Christy Electrical

Stainless steel signs: Synchronol Ltd

## Enquiry numbers:

**Redland Bricks 785**

**Ryarsh bricks 786**

**Tilcon mortar 787**

**Nordic sauna 788**

**Pool tiling 789**

**DLW Royal carpet 790**

**DLW contract carpet 791**

**Contiwood sports**

**floor 792**

**Finply sheets 793**

**Dampa ceiling 794**

**Glacier ceiling tiles 795**

**Treetex Profiplex 796**

**Woodcemair slabs 797**

## ELEMENTAL COST ANALYSIS

Amount of Tender — £762,060

Gross Floor Area — 5,520 square metres

Element	Total Cost £	Cost per m <sup>2</sup> of floor area	% of whole
<b>SUBSTRUCTURE</b>			
Basement	61,863	11.21	8.12
Plant Room	24,461	4.43	3.21
<b>Sub-total</b>	<b>86,324</b>	<b>15.64</b>	<b>11.33</b>
<b>SUPERSTRUCTURE</b>			
Frame	35,318	6.40	4.64
Upper Floors	13,798	2.50	1.81
Roof	35,648	6.46	4.68
Stairs	2,618	0.47	0.34
External Walls	24,009	4.35	3.15
Windows, External Doors	14,888	2.70	1.95
Internal Walls, Partitions	25,408	4.60	3.33
Internal Doors	5,752	1.04	0.75
<b>Sub-total</b>	<b>157,439</b>	<b>28.52</b>	<b>20.65</b>
<b>INTERNAL FINISHES</b>			
Walls	17,442	3.16	2.29
Floors	31,440	5.70	4.13
Pool Finishes	10,365	1.88	1.36
Ceilings	14,240	2.58	1.87
<b>Sub-total</b>	<b>73,487</b>	<b>13.32</b>	<b>9.65</b>
<b>Fittings and Furniture</b>	<b>28,053</b>	<b>5.08</b>	<b>3.68</b>
<b>SERVICES</b>			
Sanitary Appliances	2,318	0.42	0.30
Disposal Installations	628	0.11	0.08
Heat Source			
Space Heating and Air Treatment	123,007	22.28	16.15
Ventilating System			
Electrical Installations	32,000	5.80	4.20
Builders work in connection with services	10,151	1.84	1.33
Builders Profit and Attendance on Services	2,937	0.53	0.39
<b>Sub-total</b>	<b>171,041</b>	<b>30.98</b>	<b>22.45</b>
<b>EXTERNAL WORKS</b>			
Site Work	36,216	6.56	4.76
Drainage	12,190	2.21	1.60
External Services	3,012	0.55	0.39
Minor Building Works	335	0.06	0.04
<b>Sub-total</b>	<b>51,753</b>	<b>9.38</b>	<b>6.79</b>
<b>Preliminaries</b>	<b>176,470</b>	<b>31.97</b>	<b>23.16</b>
<b>Contingencies</b>	<b>17,493</b>	<b>3.16</b>	<b>2.29</b>
<b>Grand total</b>	<b>762,060</b>	<b>138.05</b>	<b>100.00</b>