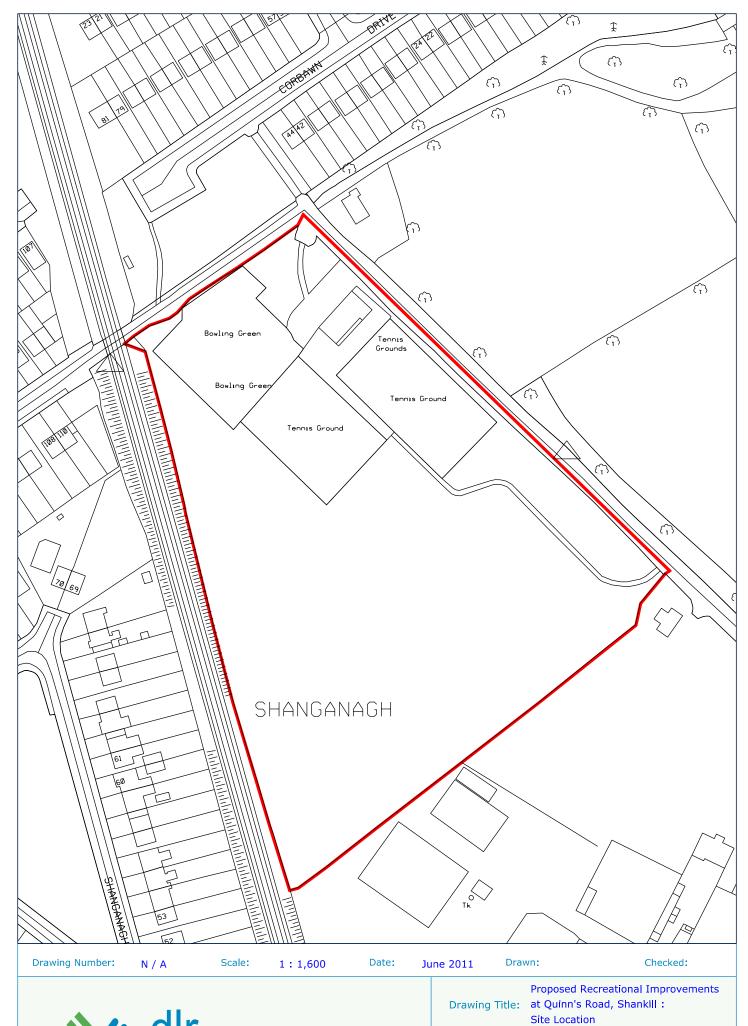
# PROPOSED RECREATIONAL IMPROVEMENTS AT QUINN'S ROAD, SHANKILL



June 2011





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### Introduction

The Parks & Landscape Services Department in Dun Laoghaire Rathdown County Council proposes to significantly improve recreational facilities on a site at Quinn's Road, Shankill in line with the policies and objectives of the 2010-2016 County Development Plan.

### Site Location

The subject site has an area of approximately 3.4 hectares, and is currently occupied by a public park and sports facilities. The public open space occupies the majority of the site. The sports facilities, tennis and bowling clubs, are located to the north and east of the site. The site is accessed from Quinn's road along the eastern boundary.

The subject site is bounded by Quinn's Road to the east and north, the DART line to the west and residential development to the south. Shankill village and Shankill DART station are within 900m walking distance of the site.

### Zoning Objective and Policies of the 2010-2016 County Development Plan

Under the 2010 – 2016 Dun Laoghaire Rathdown County Development Plan the subject site is zoned 'F' "To preserve and provide for open space with ancillary active recreational amenities".

The land uses 'Permitted in Principle' under the 'F' zoning objective include; open space, sports facility and community facility. Land uses that are 'Open for Consideration' include a car park.

Lands immediately to the east and to the south of the site, which consist of low density residential development, have a zoning objective 'GB' "To protect and enhance the open nature of lands between urban areas".

Lands to the north and west have a zoning objective 'A' "to protect and / or improve residential amenity". These areas comprise of established residential developments.

There are a number of policies within the 2010-2016 County Development Plan that support the proposed development. These include the following:

Policy LHB18: Parks, Coastline and Harbours states that it is Council policy to improve recreational and tourism-related amenities in its public parks along the coastline.

Policy OSR3: Future Improvements states that it is Council policy to continue to improve, landscape, plant and develop more intensive recreational and leisure facilities within its parks and open spaces insofar as resources will permit and that the development of appropriate complementary facilities does not detract from the overall amenities of the spaces.

Policy OSR9: Sports and Recreational Facilities states that it is Council policy to promote the provision and management of high quality sporting and recreational infrastructure throughout the County to ensure that the particular needs of different groups are incorporated into the planning and design of new facilities.

Policy OSR10: Protection of Sports Grounds/Facilities states that it is Council policy to ensure that adequate playing fields for formal active recreation are provided for in new development areas and that existing sports facilities and grounds within the established urban area are protected, retained and enhanced – all in accordance with the outputs and recommendations from the Green Space Strategy currently being prepared for the 2010-2016 County Development Plan.

Policy OSR11: Play Facilities states that it is Council policy to support the provision of structured and unstructured play areas with appropriate equipment and facilities throughout the County and to ensure the needs of all age groups – children, teenagers, adults and older people – are facilitated in the public parks of Dun Laoghaire-Rathdown.

The 2010-2016 County Development Plan states that it is important that facilities are located where they are of most value and accessible to the community being served and that sports facilities should provide a variety of both indoor and outdoor recreational facilities.

### **Existing Facilities**

The existing facilities include the following: a bowling green (see photograph below), cabins with an outdoor area (used as a temporary clubhouse by Shankill Bowling Club), Shankill Tennis Club clubhouse, seven outdoor tennis courts, floodlighting columns and 23 car parking spaces. The sports facilities are separated from the remainder of the park by 3m high fencing. The open space is surrounded by hedgerows and there is an existing copse of mature trees abutting Quinn's Road.



### **Proposed Development**

The proposed development consists of the following:

- 1. New clubhouse for Shankill Bowling Club;
- 2. An indoor tennis hall accommodating three new tennis courts;
- 3. Two outdoor mini tennis courts;
- 4. A hitting wall;
- 5. A children's playground;
- 6. Additional car parking in the exiting car park and along Quinn's Road;
- 7. Provision of two new vehicular entrances;
- 8. New floodlighting columns;
- 9. Landscaping (to include earth mounding in the open space) and new boundary treatment;
- 10. Site services.

### 1. New clubhouse for Shankill Bowling Club

It is proposed to construct a single-storey building, approximately 280sqm in area and which will act as a clubhouse for Shankill Bowling Club, beside the existing Bowling Green and car park to the north of the site. The building will have a pitched roof and timber cladding to the external elevations and will provide an indoor bowling hall, changing and toilet facilities, and a kitchen/dining area.

### 2. Indoor Tennis Hall

It is proposed to construct three tennis courts to the southeast of court number 4 and to cover them with a structure having translucent PVC coated polyester fabric roof (white). The rigid PVC external side walls (green) will have a height of approximately 5m and the PVC roof will be dome shaped with a maximum height of approximately 11.6m. The tennis courts will function as outdoor tennis courts until the structure is constructed over. Once constructed, the structure will accommodate three tennis courts, equipment storage space and toilet facilities.

It will be equipped with appropriate security equipment including CCTV which will be monitored from the existing Clubhouse.

### **Relocation of Tennis Courts**

Existing tennis court numbers 5, 6 and 7 will be relocated approximately 2.5m in a southwest direction in order to provide a wider pathway between them and tennis court numbers 1 - 4 to cater for access between the tennis clubhouse and the indoor hall. Existing floodlighting will be correspondingly relocated.

It is also proposed to resurface the existing tennis court numbers 1 - 4.

### 3. Outdoor Mini Tennis Courts

It is proposed to build two outdoor mini tennis courts to the south of existing court number 7. These courts will be used primarily for coaching and training. This area will be equipped with floodlights.

### 4. Hitting Wall

A hitting wall is proposed to the west of the proposed indoor tennis hall. This will be eight metres long and three metres high with a further 1 metre high ball restraint as shown in Appendix 6.

### 5. Children's Play Area

A children's play area, approximately 480sqm in area, will be constructed to the west of the mini tennis courts and hitting wall, outside of the perimeter fencing. This play area will include play equipment and a climbing wall, and will be similar in character to the one installed at Shanganagh Park. It will be permanently open to the public.

Apart from the boundary shared with tennis/bowling facilities, the children's playground will be surrounded by a mesh fence, approximately 1.2 metres high.

### 6. Car Parking

Public car park:

The existing car park has 23 car parking spaces which includes one disabled car parking space. It is proposed to amend the existing layout to the car park and to provide an additional 12 car parking spaces, which will result in a total of 35 car parking spaces and which will include 2 disabled car parking spaces.

### Parking on Quinn's Road:

It is proposed to provide 14 car parking spaces on Quinn's road; 8 spaces adjacent to the outdoor tennis courts and 6 spaces adjacent to the indoor tennis court hall.

This will require removal of the existing mounding beside the carriageway at Quinn's Road. Considering the rural character of Quinn's Road no footpath is proposed beside these parking spaces. The raised ditch with existing trees will be retained and augmented with additional tree planting as required.

### Cycle racks:

Twenty covered bicycle spaces will be provided in the public car park.

### 7. Vehicular Access

The existing masonry entrance at the northern corner of the open space will be removed. The existing vehicular access will be retained for access to the public car park, which is located further along in the northern corner of the site.

Two new vehicular accesses are proposed for service/emergency vehicles only. One entrance will provide access to the existing Tennis Club clubhouse and outdoor tennis courts and the second entrance will provide access to the new indoor tennis court hall. Both entrances will have dedicated pedestrian access.

### 8. Floodlighting to tennis courts

It is proposed to:

- Retain 15 existing floodlight columns on Courts 1,2 3 and 4
- Relocate and renew 12 existing floodlight columns on Courts 5, 6 and 7
- Erect 11 new floodlight columns on the new Courts 8, 9 and at the Hitting Wall.
- In the event that funding is not available for the indoor sports hall, erect 12 new floodlight columns on the new Courts 10, 11 and 12.

Note: Drawing 5 (Lux levels for proposed sports floodlighting) and Appendix 5 (Light Spill Report produced by Philips Lighting Ireland, Ltd.) reflect a worst case scenario where all these floodlighting columns are installed.

The new columns will be 10m high and will be located around the new tennis courts and the proposed hitting wall. Twelve additional columns may be installed around the indoor tennis courts if funding is not forthcoming for the indoor tennis court structure.

The scheme is designed to prevent nuisance and to keep light pollution (glare, overspill and upward light) of adjacent properties to a minimum. To achieve this, the lanterns will be carefully angled as shown on Table 5.2 (Luminare Positioning and Orientation) provided in the attached Spill Light Report, prepared by Philips Lighting Ireland (Appendix 5) Use of the floodlights will only be permitted between 8.00 a.m. and 10 p.m. daily.

### 9. Landscaping and Boundary Treatment:

The majority of the existing trees along Quinn's Road will be retained however the existing trees to the southeast of court number 4 will be removed to allow for the construction of the indoor tennis courts.

Additional planting, using appropriate natural species, will be provided in the remainder of the open space to compensate for the loss of trees.

New paths, 3m wide, will be provided around the perimeter of the existing open space to the south and west of the tennis court and bowling facilities. These paths will provide access to the proposed new children's playground and to the proposed new recreational facilities and will also facilitate vehicular access (for maintenance).

With regards to hard landscaping, the area in front of the proposed indoor tennis court hall will be paved and will connect with the existing tennis clubhouse by means of a paved pathway. A footpath, approximately 1.5 metres wide will be constructed around the perimeter of the indoor tennis hall.

The tennis facilities (clubhouse, courts, hitting wall and indoor hall) along with the bowling facilities (clubhouse and bowling green) will be surrounded by a 3m high mesh panel fence and, apart from the boundary shared with tennis/bowling facilities, the children's playground will be surrounded by a mesh fence, approximately 1.2m high. Gates will be provided to the pedestrian and vehicular access points. These will be designed to match the boundary fence.

An existing (redundant) vehicular access at the northern corner of the site will be removed and the boundary at this location will be altered to a 1.2m high mesh fence.

### 10. Services and Drainage:

Overhead electrical services on the site will be relocated and put underground.

The drainage system will be designed in accordance with the Greater Dublin Regional Code of Practice for Drainage Works. An attenuation area is proposed beneath the hard surfaced areas adjoining the indoor tennis hall and surface water from the roof of the indoor tennis hall will discharge into the attenuation area.

### Conclusion:

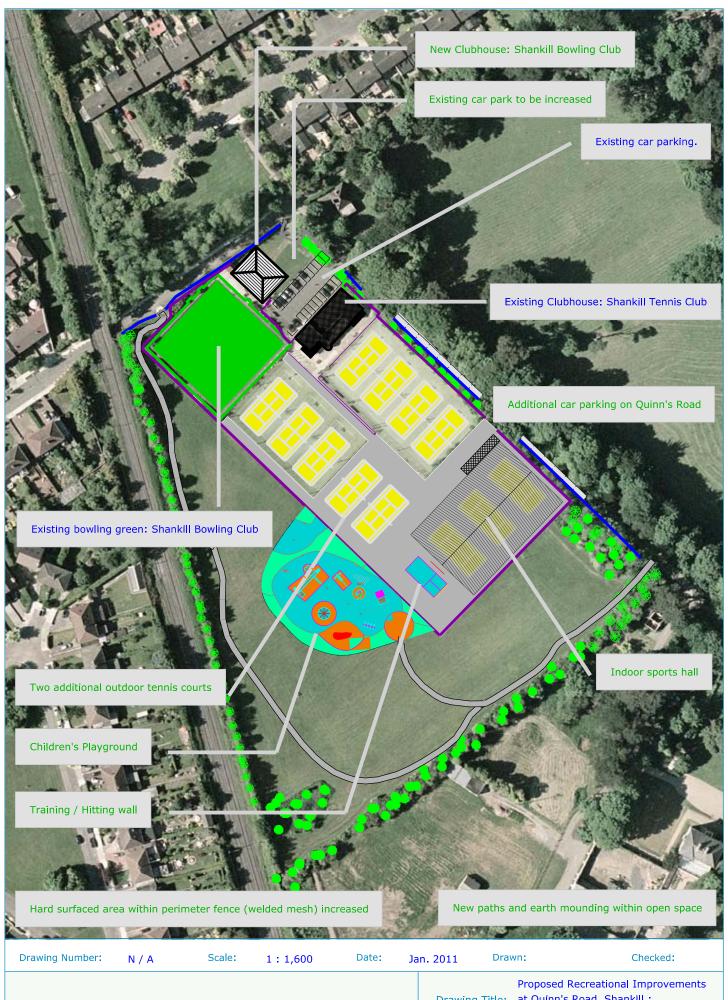
It is proposed to improve the existing sports facilities and to provide additional recreational facilities at the public open space adjoining Quinn's Road. The existing facilities cater for a wide number of residents in the local area, including schools, and it is proposed to improve and extend the facilities to cater for a wider range of age groups with the provision of a children's playground. The extended system of paths will also cater for passive recreation and walking..

The proposed development complies with the zoning objective for the site 'F' "to preserve and provide for open space with ancillary active recreational amenities" and the policies and objectives as outlined in the 2010-2016 County Development Plan.





Proposed Recreational Improvements
Drawing Title: at Quinn's Road, Shankill:
Existing position





Drawing Title: at Quinn's Road, Shankill:

Proposed developments

### APPENDIX 1. Construction Details

### **CONSTRUCTION DETAILS**

### **Bowling Club Clubhouse**

The interior of the building will be partitioned to give the following accommodation.

- A narrow reception corridor with a ladies and gents WC at each end;
- A kitchen/meeting area;
- Ladies changing room;
- Gents changing room;
- A large central hall suitable for indoor bowling.

The steel framed prefabricated building will be assembled over prepared level ground. Connections will be made to underground existing services (water, drainage, electricity, communications).

The roof will be pitched as shown on the accompanying drawings and fabricated from a Kingsspan KS1000 RW. This is a trapezoidal form roof system with a standard fastening method (a through fix) which is suitable for all building applications. External Walls will be timber clad with 114mm timber studs as shown. There will be 13 windows measuring 1800 x 1067mm and 8 windows measuring 450 x 450mm (high level) PVC double glazed units (colour: White) as shown.

### **Indoor Tennis Hall**

The Indoor Tennis Hall will be a clear span steel or aluminium structure approximately 54m x 36m in area and approximately 11.5m in height at the apex. It will be erected on a ringbeam foundation and will be designed in accordance with Building Regulations to withstand all appropriate wind and snow loadings. It will be equipped with mechanical ventilation to provide 2-3 air changes per hour and internal lighting to provide 500 lux. The exterior will be finished with steel or GRP security cladding to a height of 3m. The entire structure will be covered with a tensioned flame retardant translucent PVC membrane.

### **Tennis Court construction**

The tennis courts will be installed on a free draining sub base with a suitable open graded macadam surface. The installation of the synthetic surface will be such that the facility will provide a surface suitable for competition tennis. The whole facility will be built using proven methods of construction and proven materials to the highest standards of workmanship and quality, which will give a satisfactory level of performance for the normal life of the synthetic surface installed; this will normally be 10 years. The construction methods will take account of future maintenance requirements for the synthetic surface and in as far as possible make it possible to recycle materials used in its construction.

The tennis courts will be used in an intensive fashion. Therefore the artificial surface will be designed such that it can sustain this level of use and be warranted such.

The following particulars will apply:

Sub-Base: Prior to laying the sub-base, a layer of geotextile will be laid over the entire formation. The sub-base material shall be a non-frost susceptible crushed granular stone complying with the requirements of the Department of Transport Specification for Highway Works (3) for a Type 1 sub-base material. The stone must be porous when compacted therefore rounded and cleaned stone is required.

**Kerbs:** Precast concrete kerbs will be installed on all sides of the pitch on a graded ST1 concrete foundation at a depth of 200mm with appropriate haunching.

**Macadam Surface:** The base course will be open textured comprising of a 16, 18 or 20mm nominal stone. The base course shall be installed on the new pitch area and shall tie in with the existing macadam surface. The binder course shall be open textured comprising of a 8mm or 10mm nominal stone. The bituminous macadam base shall be transported, laid and compacted to BS 59 4987:2007

The outdoor mini tennis courts will be constructed to proper standards and will be finished in painted tarmacadam. They will be suitable to receive synthetic surfaces in the future.

The three new indoor/outdoor tennis courts will be full size and will be constructed to ITF competition standards. The courts will be surrounded by a ringbeam foundation designed to support an indoor hall structure. Until the indoor hall structure is erected the courts will function as outdoor tennis courts. The courts will be surfaced in an all weather acrylic artificial surface or synthetic grass carpet.

### FLOODLIGHTING TO TENNIS COURTS

Floodlighting will be provided by 82 lanterns (two types) mounted on 50 high-galvanised steel lighting columns (10 metres high), which will be set into concrete bases at ground level. The tennis courts will be floodlit to give a typical horizontal illumination at the tennis nets between 1323 and 589 LUX which is suitable for tennis.

The location of these lighting columns is shown on the accompanying plans and *Light Spill Report* prepared by Philips Ireland, where the following assumptions are made.

- Light spill over the existing courts (1, 2, 3, 4), which were upgraded in Autumn 2010, is included in the scheme to provide an accurate overview;
- Lux levels shown over courts 5, 6 and 7 are after these have been relocated;
- Lux levels shown are those where courts 10, 11 and 12 are floodlit and used as outdoor courts.

### The installation will involve the following works:

- Excavation and construction of concrete bases for lighting columns as shown.
- Retention of the following lighting columns which light courts 1, 2, 3 and 4:
   E01, E02, E03, E04, E05, E09, E10, E11, E12, E13, E17, E18, E19, E20, E21
- Relocation of the following lighting columns which light courts 5, 6 and 7:
   N25, N26, N27, N28, N36, N37, N38, N39, N44, N45, N46, N47
- Installation of eleven 10 metre high columns to light the mini-tennis courts (8 and 9) and the hitting wall N29, N30, N31, N40, N41, N42, N48, N49, N50, HW 35 AND HW43
- Possible installation of twelve 10 metre high columns to light the new courts 10, 11 and 12. In the event that funds are not available to construct the indoor sports hall over these courts, it is proposed to install conventional sports floodlighting on these courts as shown.
  - N06, N07, N08, N14, N15, N16, N22, N23, N24, N32, N33, N34
- All lighting columns will be complete with light fittings, ballast boxes and associated accessories;
- Trenching and installation of underground ducting for electrical cabling from the adjacent clubhouse will take place around the pitch, two number sidelines and one endline.
- The electrical supply shall run from the main clubhouse occupied by Shankill Tennis Club to this distributor pillar;
- The system shall be connected, lit, tested and certified.

### **Light Spill:**

A series of plan/illustrations of the expected surface LUX levels, produced by lighting advisor has been superimposed on the ordinance survey sheet of the locality to indicate the expected levels of light spillage from this configuration. See A1 Drawing 5 (Details of sports floodlighting). Note: This drawing shows LUX levels with all possible floodlights installed.

All external lighting will be shaded and directed away from any adjoining residential dwellings and the light spill will be less than 15 LUX measured at ground level, regardless of the existence of any vegetation or other physical impediments (ie. buildings). Typically, the lighting at the boundary of a residence in an urban street from street lighting would range from 5 to 30 LUX. The effect therefore on this residential boundary would be similar to the effect on a residential property in a standard urban street between adjacent street lights, and is therefore not considered to be very significant.

### CHILDREN'S PLAY UNITS:

The proposed children's play area will be partially installed on an earth mound, which will be formed in the open space from material removed during the construction of the additional tennis courts.

Play equipment and a climbing wall will be provided. To complement the rural character of Quinn's Road and Shanganagh Park, the playground will be constructed from rustic timber units, similar to that already provided at Shanganagh Park and will cater of a wide range of ages.

### ADDITIONAL PARKING ON ROAD:

It is proposed to remove the earth mound on the western side of Quinn's Road and provide 14 car parking spaces. The spaces will be finished in tarmacadam, will be identified as car parking spaces, and will not encroach on the existing road carriage.

The raised ditch with trees will be retained and augmented with additional tree planting as outlined (Appendix 2).

### **DETAILS OF THE BOUNDARY TREATMENT**

The fencing will be weld mesh galvanised and powder coated rebound type. The fence shall be constructed of galvanized welded mesh supplied in panel form. Posts shall be a minimum of 100 x 100 mm and set at a maximum of 3m centres in accordance with BS 1722. They will be designed to carry the fencing panels. These will be set in concrete pad foundations suitably designed to take account of the local soil conditions of each site. It is envisaged that the posts be constructed of RHS galvanized finish.

Two double leaf maintenance gates and one single leaf pedestrian gate are to be provided to the two new vehicular entrances. The gates will be designed to match the general construction and colour of the fence.

### **EARTHWORKS**

In the location of the mini tennis courts and indoor tennis hall, the topsoil will be stripped and temporarily stored in berms at a maximum height of 1.5m. The subsoil will then be re-graded mechanically to provide level surfaces, suitable for the construction of the proposed development and additional hard surfacing associated with these improvements.

Cutting and filling of the sub-grade will take place in order to have a level plane prior to laying the sub-base. The formation will be excavated to appropriate levels and materials will be used to build a mound on which the children's playground will be constructed as shown on the accompanying plans.

### **DRAINAGE**

### Tennis court drainage

The drainage system will be designed in accordance with the Greater Dublin Regional Code of Practice for Drainage Works. Surface drainage will be designed to allow for a 100-year rainfall event and it is expected that the synthetic tennis courts will remain free of surface water i.e. unsaturated in all weather conditions to permit play. The new drainage will be installed such that it will achieve a satisfactory discharge rate, which will cope with a 1 in 100 year rainfall event.

Flood attenuation measures shall be built into the underlying sub-base beneath the new tennis courts. This attenuation will consist of a 300 mm depth of even sizes angular stone (50mm particle size) as sub-base beneath the tennis courts and hard surfaced areas.

A main-drain not less than 160mm diameter will be installed around the perimeter of the tennis courts, which shall support the drainage from the lateral drains. This will discharge into an existing surface water manhole opposite tennis court number 3 (on the opposite side of Quinn's Road) as shown.

### Drainage off indoor tennis hall

Surface water from the roof of the indoor tennis hall will discharge into an attenuation area constructed beneath hard surfaced areas fronting the indoor tennis hall.

### Foul drainage

Foul drainage from the clubhouse will discharge into the existing 150 mm outfall serving the existing containers at that location. Foul drainage from the indoor tennis hall will discharge by gravity to a small pumping station adjacent to tennis court number 4 from which it will be pumped via a 110mm HDPE pipe into an existing foul manhole adjacent to the clubhouse.

## APPENDIX 2. Trees

### **Trees**

There are three areas where the proposed development will impact on existing trees as shown on the attached plan

### Group A:

The hedgerow between Quinn's Road the existing facilities (car park, clubhouse and tennis courts)

### Group B:

The hedgerow abutting Quinn's Road where new development is proposed (indoor sports hall, new hard surfaced areas and entrances).

### Group C:

The section of woodland directly effected by the development (approx. 1,000 sq.m.) which is 55 metres long with varying width (15 to 30 metres):

There is also an opportunities for additional woodland planting in the open space i.e.

### Group D:

An area suitable for woodland planting exists at the southern end of the open space, where a curve in the perimeter path is proposed and where earth mounding will occur.

### **Group A:**

This hedgerow abutting the existing tennis facilities is in fair condition but requires maintenance and replanting.

The existing species composition is broadly as follow, although this count does not include seedlings or smaller specimens in the hedgerow.

	Semi- mature	Early mature	Mature	Comment
Ash (Fraxinus excelcior)	3		7	1 (one) semi-mature Ash will be lost for new entrance,
Sycamore (Acer pseudoplatanus)	7	12	1	1 (one) semi-mature Sycamore will be lost for new entrance,
Field Maple (Acer campestre)	1			
Elm ( <i>Ulmus procera</i> )	1			
Hawthorn ( <i>Crataegus</i> <i>monogyna</i> )	5			2 (two) semi-mature Hawthorn will be lost for new entrance,
Elder (Sambucus nigra)		3		

As car parking spaces are propose on Quinn's Road, the hedgerow will be retained and upon completion of the work, **Group A (hedgerow)** will be augmented with the following additional tree planting

6 only	Ash (Fraxinus excelcior)	
6 only	Oak (Quercus petrea)	
6 only	Field Maple Acer campestre)	12 14 am (bassay standards)
6 only	Hawthorn (Crataegus monogyna)	12-14 cm (heavy standards)
6 only	Blackthorn ( <i>Prunus spinosa</i> )	
6 only	Gean (Prunus avium)	

### **Group B:**

This hedgerow abutting the proposed new indoor sports hall is currently sparse and also needs replanting.

The species composition is broadly as follows, although this count does not include seedlings or smaller specimens in the hedgerow.

	Early mature	Comment
Ash (Fraxinus excelcior)	2	1 (one) early-mature Ash will be lost to provide new entrance beside sports hall
Sycamore (Acer pseudoplatanus)	4	1 (one) large multi-stemmed early-mature Sycamore will be lost to provide new entrance beside sports hall

As car parking spaces are provided on Quinn's Road, the hedgerow will be retained and upon completion of the work, **Group B (hedgerow)** will be augmented with the following additional tree planting

6 only	Ash (Fraxinus excelcior)	
6 only	Oak (Quercus petrea)	
6 only	Field Maple Acer campestre)	12 14 cm (booky standards)
6 only	Hawthorn (Crataegus monogyna)	12-14 cm (heavy standards)
6 only	Blackthorn ( <i>Prunus spinosa</i> )	
6 only	Gean ( <i>Prunus avium</i> )	

### **Group C:**

The species composition of the area of woodland (approximately 1,000 sq. m.) directly affected by earth levelling works and construction of additional tennis courts and indoor sports hall is broadly as follows. This count does not include seedlings or smaller specimens in the woodland.

This woodland has a good understory of holly, brambles and ivy.

	Semi- mature	Early mature	Mature	Comment
Poplar (Populus spp)			17	Generally in poor condition or dead
Beech (Fagus sylvatica)	6	2		
Ash (Fraxinus excelcior)	3	8		
Sycamore (Acer pseudoplatanus)	7	14		
Field Maple (Acer campestre)	8			
Mountain Ash (Sorbus aucuparia	5			

### **Group D:**

An area (approx. 1,300 sq.m.) has been identified as suitable for woodland planting at the southern end of the open space, where a curve in the perimeter path is proposed and where earth mounding will occur.

As part of the redevelopment of the open space it is proposed to plant this woodland with the following mixed woodland species.

40	Ash (Fraxinus excelcior)		
160	Oak (Quercus petrea)		
40	Field Maple Acer campestre)		
40	Hawthorn (Crataegus monogyna)	120- 150 whips	
40	Blackthorn ( <i>Prunus spinosa</i> )		
80	Gean (Prunus avium)		
160	Castanea sativa		
10	Ash (Fraxinus excelcior)		
40	Oak (Quercus petrea)		
10	Field Maple Acer campestre)		
10	Hawthorn (Crataegus monogyna)	150-180 feathered	
10	Blackthorn ( <i>Prunus spinosa</i> )		
20	Gean (Prunus avium)		
40	Sweet Chestnut (Castanea sativa)		
100	Scots Pine (Pinus sylvestris)		
100	Monterey Piane ( <i>Pinus radiata</i> )	2 litre potted	
100	Larch ( <i>Larix decidua</i> )		



Drawing Number:

N/A

Scale:

1:1,600

Date:

May. 2011

Drawn:

Checked:

Drawing Title:

Proposed Recreational Improvements at Quinn's Road, Shankill:

Existing trees affected and proposed tree planting

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## APPENDIX 3. List of A1 drawing accompanying this report.

List of A1 drawings appended to PDF000125.pdf				
Drawing 1	Site Location Map			
Drawing 2	Existing recreational facilities			
Drawing 3	Overall Site Plan			
Drawing 4	Details of proposed indoor tennis courts			
Drawing 5	Lux levels for proposed sports floodlighting			
Drawing 6	Proposed elevations at Quinn's Road			
Drawing 7	Proposed fence details and earth mounding			
Drawing 8	Bowling Club: Proposed Floor Plan			
Drawing 9	Bowling Club: Proposed Elevations			

### APPENDIX 4. Definitions used to describe LUX levels.

### **Definitions:**

The following information is provided to assist in the interpretation of lux diagrams shown on the following pages

**LUX:** is a measure of illuminance weighted to the spectral sensitivity of the human eye. It is defined as 1 lux = 1 lumen/square meter.

Lux is a measure of light intensity. Roughly speaking, one lux corresponds to the light intensity produced by one candle at a distance of one metre.

**Horizontal illuminance:** is a measure of the lumens per unit area on a horizontal surface. Normally it is measured 1.0 metre above the playing surface.

The following are examples of lux values for:			
Bright Summer Day in Ireland:	50,000		
Clear spring morning, 30 minutes after sunrise:	10,000		
Well illuminated office:	400		
Average home:	100 to 50		
Street lighting	20 to 50		
Moonlight:	Less than 3		

Ty	Typical lux levels recommended for sports floodlighting				
GAA	Club Level Football	250 to 500			
GAA	Club Level Hurling	350 to 500			
GAA	Inter County Football/Hurling	500 to 750			
GAA	Inter County televised	750 to 1400			
SOCCER	Club level	250 to 500			
SOCCER	Premier League	500 to 1400			
RUGBY	Club Level	250 to 500			
RUGBY	Inter Provincal	500 to 1000			
HOCKEY	Club Level	350 to 500			
HOCKEY	National Level	500 to 100			
BASEBALL	Class 3	300 to 500			
BASKETBALL	Class 3	300			
GOLF DRIVING	Horizontal (at grade)	200			
RANGE					
TENNIS	Class 1	1250			
TENNIS	Class 2	750			
TENNIS	Class 3	500			

Tennis Class I: Top-level competitions, both national and international. There are usually large numbers of

spectators and long viewing distances.

Tennis Class II: Mid-level competition, matches at regional or local club level with medium-sized groups of

spectators and average viewing distances.

Tennis Class III: Low-level competition and recreational sport. This normally involves small numbers of

spectators and short viewing distances.

### How do the recommended lux figures compare with other activities?

Illuminating Engineering Society illuminance recommendations cover generic and specific tasks and fall into 9 illuminance categories.

Typical environment	Engineering Society illuminance category.	Example	Lux levels required when the activity occurs with low frequency	Lux levels required when the activity occurs with medium frequency	Lux levels required when the activity occurs with high frequency
Public spaces with dark surroundings	Α		20	30	50
Simple orientation for short temporary visits	В	Dining	50	75	100
Working spaces where visual tasks are only occasionally performed	С	Cleaning	100	150	200
Performance of visual tasks of high contrast or large size	D	Conference hall, Cashier	200	300	500
Performance of visual tasks of medium contrast or small size e.g. tennis ball	E	Reception desk, mail sorting, drafting	500	750	1,000
Performance of visual tasks of low contrast or very small size	F	Lecture room	1,000	1,500	2,000
Performance of visual tasks of low contrast or very small size over a prolonged time	G		2,000	3,000	5,000
Performance of very prolonged and exacting visual tasks	н		5,000	7,500	10,000
Performance of very special visual tasks of extremely low contrast	1		10,000	15,000	20,000

## APPENDIX 5. Light Spill Report, Produced by Philips Lighting Ireland, Ltd.

### **SHANKILL TENNIS CLUB**

### SPILL LIGHT REPORT

Date: 10-08-2010

Designer: PHILIPS LIGHTING IRELAND LTD.

Description: This document outlines horizontal light spill (Eh) levels

likely to be experienced based on full switching of all

floodlights as shown.

No obstacles have been taken into account, and figures

are based on even ground level (Z=0).

The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

### SPILL LIGHT REPORT

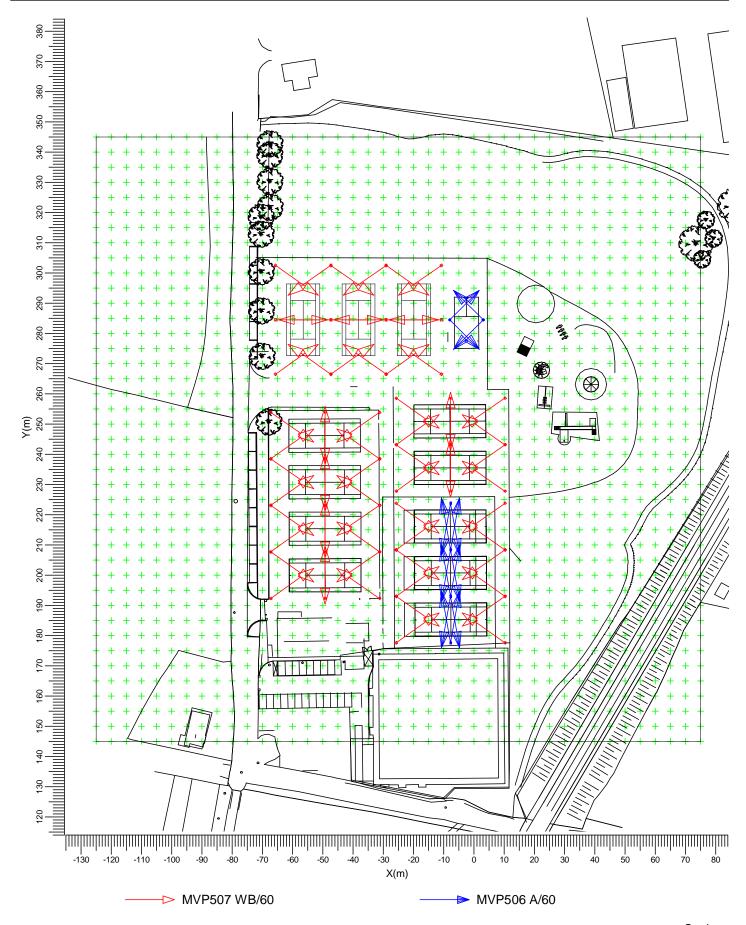
### **Table of Contents**

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Date: 10-08-2010

### 1. Project Description

### 1.1 Top Project Overview



### 2. Summary

### 2.1 General Information

The overall maintenance factor used for this project is 0.80.

### 2.2 Project Luminaires

Code	Qty Luminaire Type	Lamp Type	Power (W)	Flux (lm)
Α	66 MVP507 WB/60	1 * SON-T1000W/-	1065.0	1 * 130000
В	16 MVP506 A/60	1 * SON-TPP600W/-	647.0	1 * 90000

The total installed power: 80.64 (kWatt)

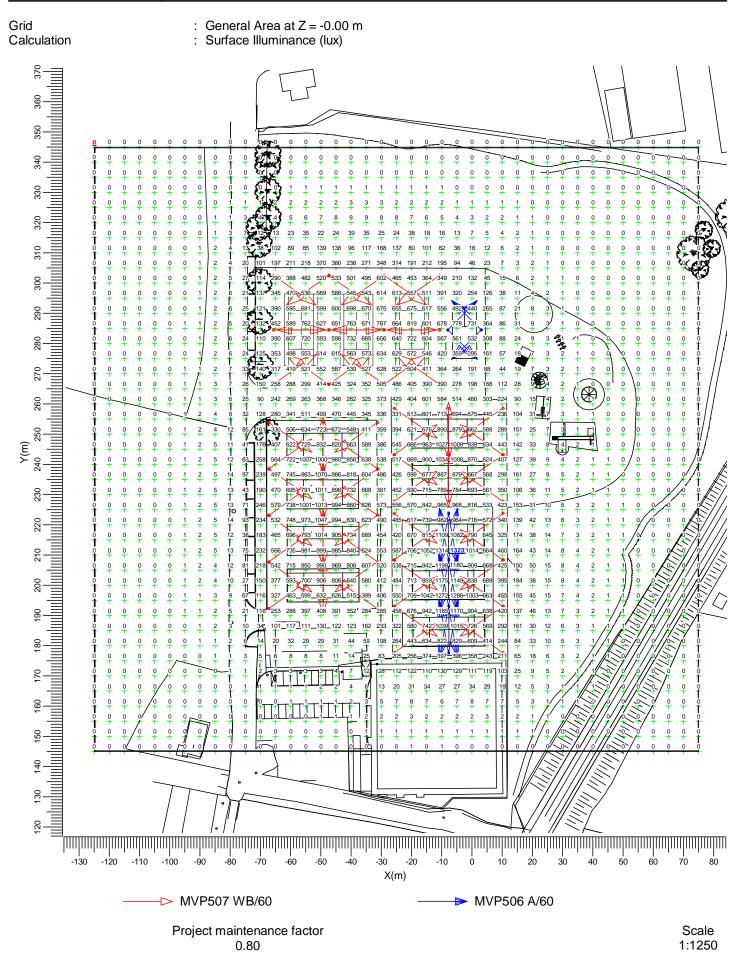
### 2.3 Calculation Results

(II)luminance Calculations:

CalculationTypeUnitGeneral AreaSurface Illuminancelux

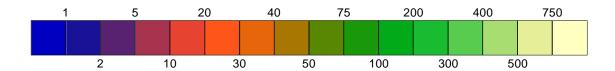
### 3. Calculation Results

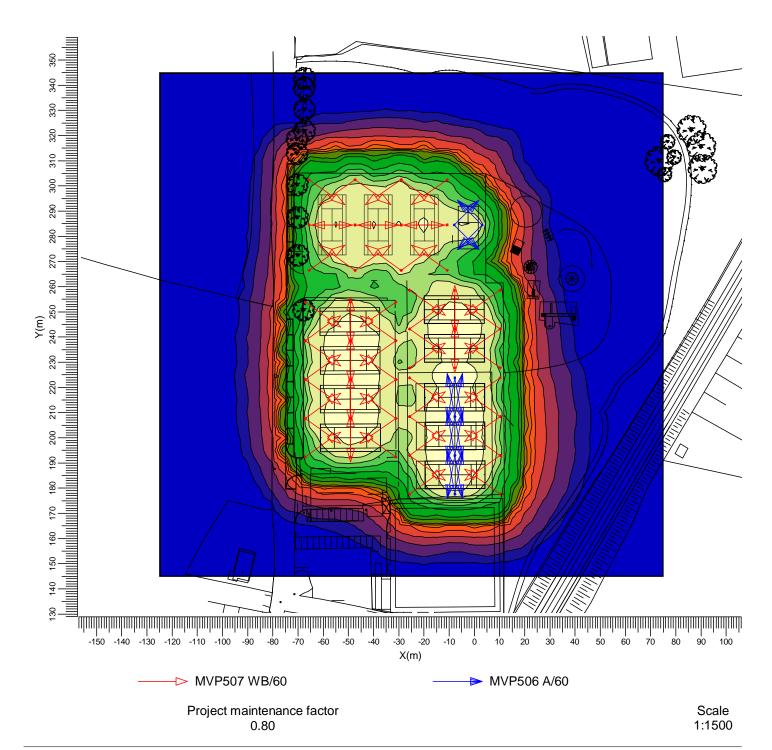
### 3.1 General Area: Graphical Table



### 3.2 General Area: Filled Iso Contour

Grid : General Area at Z = -0.00 m Calculation : Surface Illuminance (lux)





### 4. Luminaire Details

### 4.1 Project Luminaires

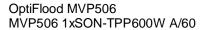
OptiVision MVP507 1xSON-T1000W WB/60



Light output ratios

DLOR : 0.78 ULOR : 0.00 TLOR : 0.78

Ballast : Conventional Lamp flux : 130000 lm Luminaire wattage : 1065.0 W Measurement code : LVMA114300

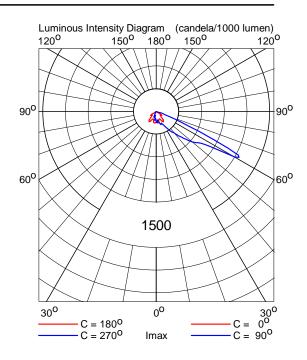


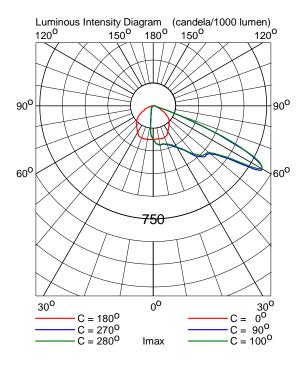


Light output ratios

DLOR : 0.78 ULOR : 0.00 TLOR : 0.78

Ballast : Conventional
Lamp flux : 90000 lm
Luminaire wattage : 647.0 W
Measurement code : LVMA423900





### 5. Installation Data

### 5.1 Legends

**Project Luminaires:** 

 Code
 Qty
 Luminaire Type
 Lamp Type
 Flux (lm)

 A
 66
 MVP507 WB/60
 1 \* SON-T1000W/ 1 \* 130000

 B
 16
 MVP506 A/60
 1 \* SON-TPP600W/ 1 \* 90000

### 5.2 Luminaire Positioning and Orientation

Qty and	Position			Aiming Angles		
Code	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0
1 * A 1 * A 1 * A 1 * A 1 * A	-67.20 -67.20 -67.20 -67.20	192.30 207.70 207.70 223.10 223.10	10.00 10.00 10.00 10.00 10.00	35.0 35.0 -35.0 35.0 -35.0	60.0 60.0 60.0 60.0 60.0	0.0 0.0 -0.0 0.0 -0.0
1 * A 1 * A 1 * A 1 * A 1 * A	-67.20 -67.20 -67.20 -65.65 -65.65	238.50 238.50 253.90 266.50 284.50	10.00 10.00 10.00 10.00 10.00	35.0 -35.0 -35.0 35.0 0.0	60.0 60.0 60.0 60.0	0.0 -0.0 -0.0 0.0 0.0
1 * A 1 * A 1 * A 1 * A 1 * A	-65.65 -49.20 -49.20 -49.20	302.50 192.30 207.70 207.70 223.10	10.00 10.00 10.00 10.00 10.00	-35.0 90.0 90.0 -90.0 90.0	60.0 60.0 60.0 60.0 60.0	-0.0 0.0 0.0 -0.0 0.0
1 * A	-49.20	223.10	10.00	-90.0	60.0	-0.0
1 * A	-49.20	238.50	10.00	90.0	60.0	0.0
1 * A	-49.20	238.50	10.00	-90.0	60.0	-0.0
1 * A	-49.20	253.90	10.00	-90.0	60.0	-0.0
1 * A	-47.35	266.50	10.00	145.0	60.0	-0.0
1 * A	-47.35	266.50	10.00	35.0	60.0	0.0
1 * A	-47.35	284.50	10.00	0.0	60.0	0.0
1 * A	-47.35	284.50	10.00	180.0	60.0	-0.0
1 * A	-47.35	302.50	10.00	-145.0	60.0	0.0
1 * A	-47.35	302.50	10.00	-35.0	60.0	-0.0
1 * A	-31.20	192.30	10.00	145.0	60.0	-0.0
1 * A	-31.20	207.70	10.00	145.0	60.0	-0.0
1 * A	-31.20	207.70	10.00	-145.0	60.0	0.0
1 * A	-31.20	223.10	10.00	145.0	60.0	-0.0
1 * A	-31.20	223.10	10.00	-145.0	60.0	0.0
1 * A	-31.20	238.50	10.00	145.0	60.0	-0.0
1 * A	-31.20	238.50	10.00	-145.0	60.0	0.0
1 * A	-31.20	253.90	10.00	-145.0	60.0	0.0
1 * A	-29.05	266.50	10.00	35.0	60.0	0.0
1 * A	-29.05	266.50	10.00	145.0	60.0	-0.0
1 * A	-29.05	284.50	10.00	0.0	60.0	0.0
1 * A	-29.05	284.50	10.00	180.0	60.0	-0.0
1 * A	-29.05	302.50	10.00	-35.0	60.0	-0.0
1 * A	-29.05	302.50	10.00	-145.0	60.0	0.0
1 * A	-25.70	177.60	10.00	35.0	60.0	0.0
1 * A	-25.70	193.00	10.00	35.0	60.0	0.0
1 * A	-25.70	193.00	10.00	-35.0	60.0	-0.0

Qty and _	Position			Aiming Angles			
Code	X (m)	Y (m)	Z (m)	Rot.	Tilt90	TiltO	
1 * A	-25.70	208.40	10.00	35.0	60.0	0.0	
1 * A	-25.70	208.40	10.00	-35.0	60.0	-0.0	
1 * A	-25.70	223.80	10.00	-35.0	60.0	-0.0	
1 * A	-25.70	227.78	10.00	35.0	60.0	0.0	
1 * A	-25.70	243.18	10.00	35.0	60.0	0.0	
1 * A	-25.70	243.18	10.00	-35.0	60.0	-0.0	
1 * A	-25.70	258.58	10.00	-35.0	60.0	-0.0	
1 * A	-10.75	266.50	10.00	145.0	60.0	-0.0	
1 * A	-10.75	284.50	10.00	180.0	60.0	-0.0	
1 * A	-10.75	302.50	10.00	-145.0	60.0	0.0	
1 * B	-8.00	284.50	8.00	45.0	60.0	0.0	
1 * B	-8.00	284.50	8.00	-45.0	60.0	-0.0	
1 * B	-7.70	177.60	10.00	80.0	60.0	0.0	
1 * B	-7.70	177.60	10.00	100.0	60.0	-0.0	
1 * B	-7.70	193.00	10.00	80.0	60.0	0.0	
1 * B	-7.70	193.00	10.00	100.0	60.0	-0.0	
1 * B	-7.70	193.00	10.00	-80.0	60.0	-0.0	
1 * B	-7.70	193.00	10.00	-100.0	60.0	0.0	
1 * B	-7.70	208.40	10.00	80.0	60.0	0.0	
1 * B	-7.70	208.40	10.00	100.0	60.0	-0.0	
1 * B	-7.70	208.40	10.00	-80.0	60.0	-0.0	
1 * B	-7.70	208.40	10.00	-100.0	60.0	0.0	
1 * B	-7.70	223.80	10.00	-80.0	60.0	-0.0	
1 * B	-7.70	223.80	10.00	-100.0	60.0	0.0	
1 * A	-7.70	227.78	10.00	90.0	60.0	0.0	
1 * A	-7.70	243.18	10.00	90.0	60.0	0.0	
1 * A	-7.70	243.18	10.00	-90.0	60.0	-0.0	
1 * A	-7.70	258.58	10.00	-90.0	60.0	-0.0	
1 * B	3.10	284.50	8.00	135.0	60.0	-0.0	
1 * B	3.10	284.50	8.00	-135.0	60.0	0.0	
1 * A	10.30	177.60	10.00	145.0	60.0	-0.0	
1 * A	10.30	193.00	10.00	145.0	60.0	-0.0	
1 * A	10.30	193.00	10.00	-145.0	60.0	0.0	
1 * A	10.30	208.40	10.00	145.0	60.0	-0.0	
1 * A	10.30	208.40	10.00	-145.0	60.0	0.0	
1 * A	10.30	223.80	10.00	-145.0	60.0	0.0	
1 * A	10.30	227.78	10.00	145.0	60.0	-0.0	
1 * A	10.30	243.18	10.00	145.0	60.0	-0.0	
1 * A	10.30	243.18	10.00	-145.0	60.0	0.0	
1 * A	10.30	258.58	10.00	-145.0	60.0	0.0	

# APPENDIX 6. Detail of proposed hitting wall.

## **Outdoor Tennis Practice Walls**

### made of weather resistant polymer concrete

#### Type I



Height = 3,00 (4,00) m; Width per element = 1,00 m

... Many hundreds of satisfied users – going back over 30 years – can attest to the superb performance of our tennis practice wall. SMASH BACK is virtually indestructible, promising many years of effective training.

#### **SMASH BACK**

- has a parabolic playing surface that ensures highly accurate ball rebound
- is very quiet
- has a uniformly coated green welding
- is absolutely weatherproof

#### Noise reduction

Additional sound-absorbing system for assemblies in residential areas.

The system had been proofed by sound level measurements.

#### **Ball catchers**

Optionally we can provide you with hot-dip galvanized top ball-catchers.



Height = 2,30(3,30) m; Width per element = 1,50 m

MADE IN GERMANY/



D-36341 Lauterbach-Frischborn Schlagmühlenweg 41 Tel. +49 (0) 66 41-9 67 8-0 Fax +49 (0) 66 41-6 19 87 info@maillith.de·www.maillith.de

## **Outdoor Tennis Practice Walls**

Colour: green, RAL 6002 Simulated net and aiming marks are indelibly poured in support columns, connecting bolts and anchor bolts are hot-dip galvanized.

Recommended court length in front of SMASH BACK: approx 10 m

Polymer concrete provides years of durability. It offers minimum three times the compressive strength of conventional concrete. It does not absorb any water, so it can withstand constant exposure to frost as well as sunlight. It is absolutely abraison and chemical resistant. So polymer concrete retains always a secure and smooth surface.



Rear view showing support columns, anti-vibration rips, sound-absorbing system and ball-catcher.



Installation in front of an existing wall.



Both sides playable version.

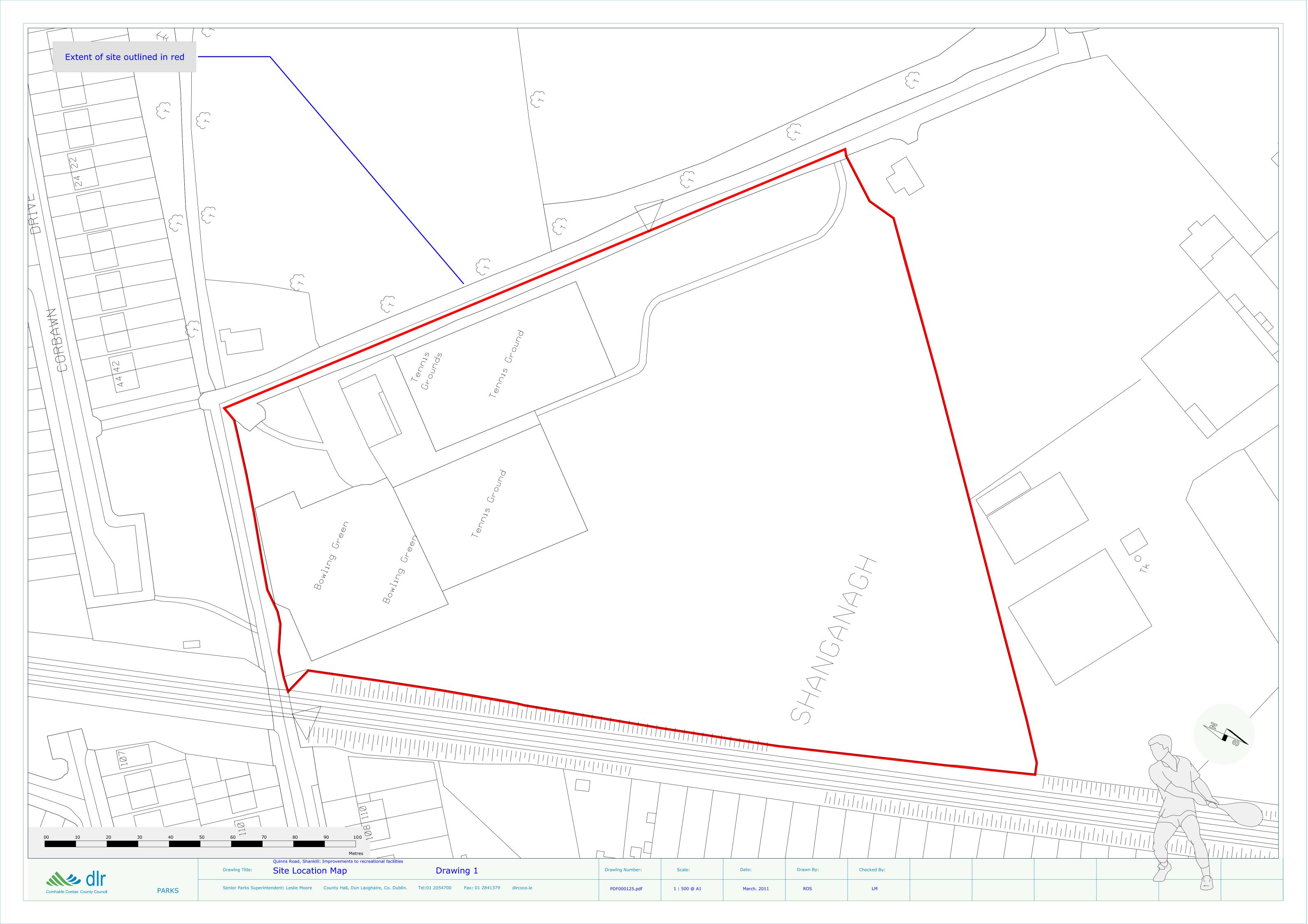
SMASH BACK tennis practise walls are bolted wind-safe onto a poured concrete strip foundation provided by the user.

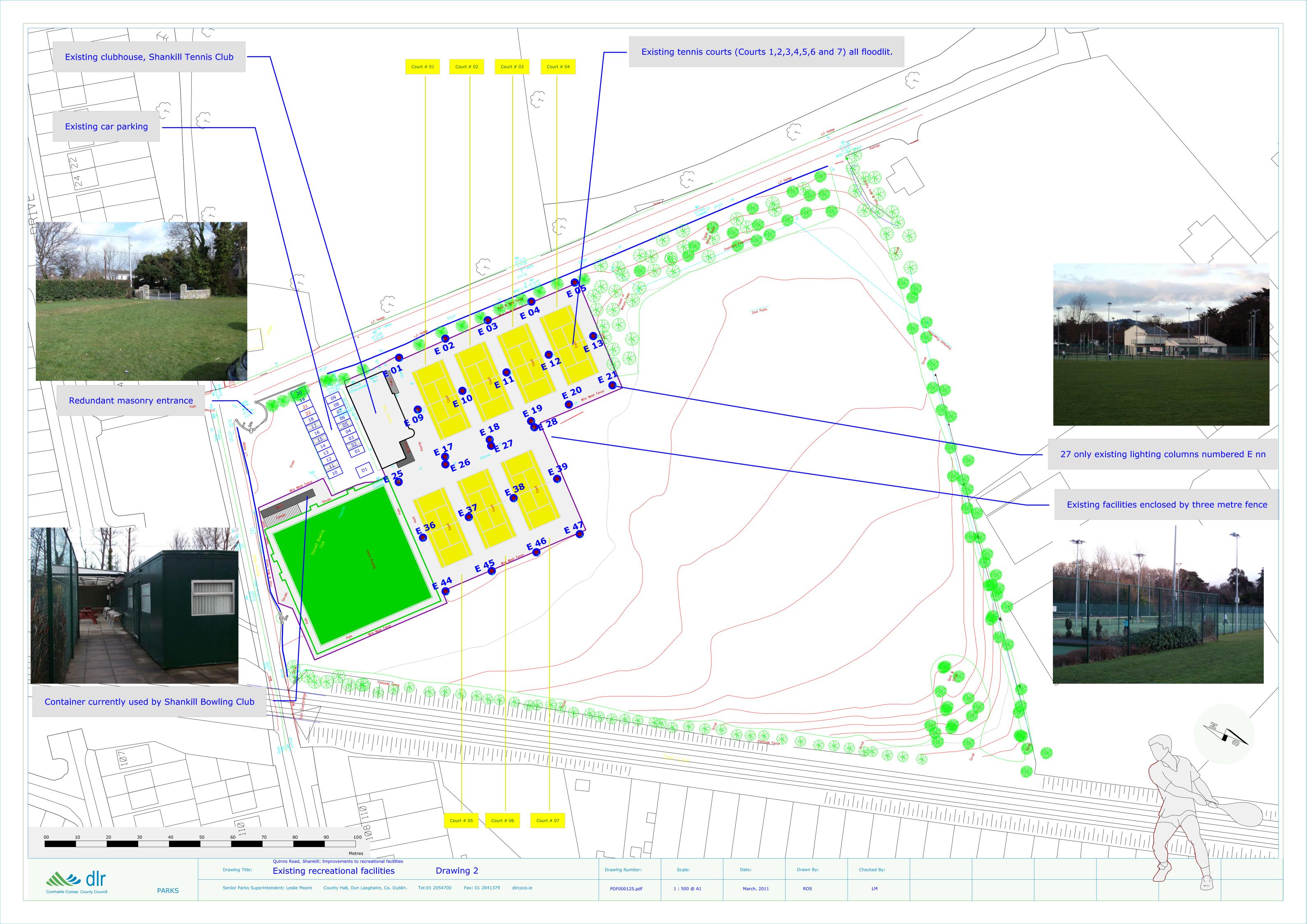
The wall can be disassembled, moved or lengthened without problem; all parts can be reused.

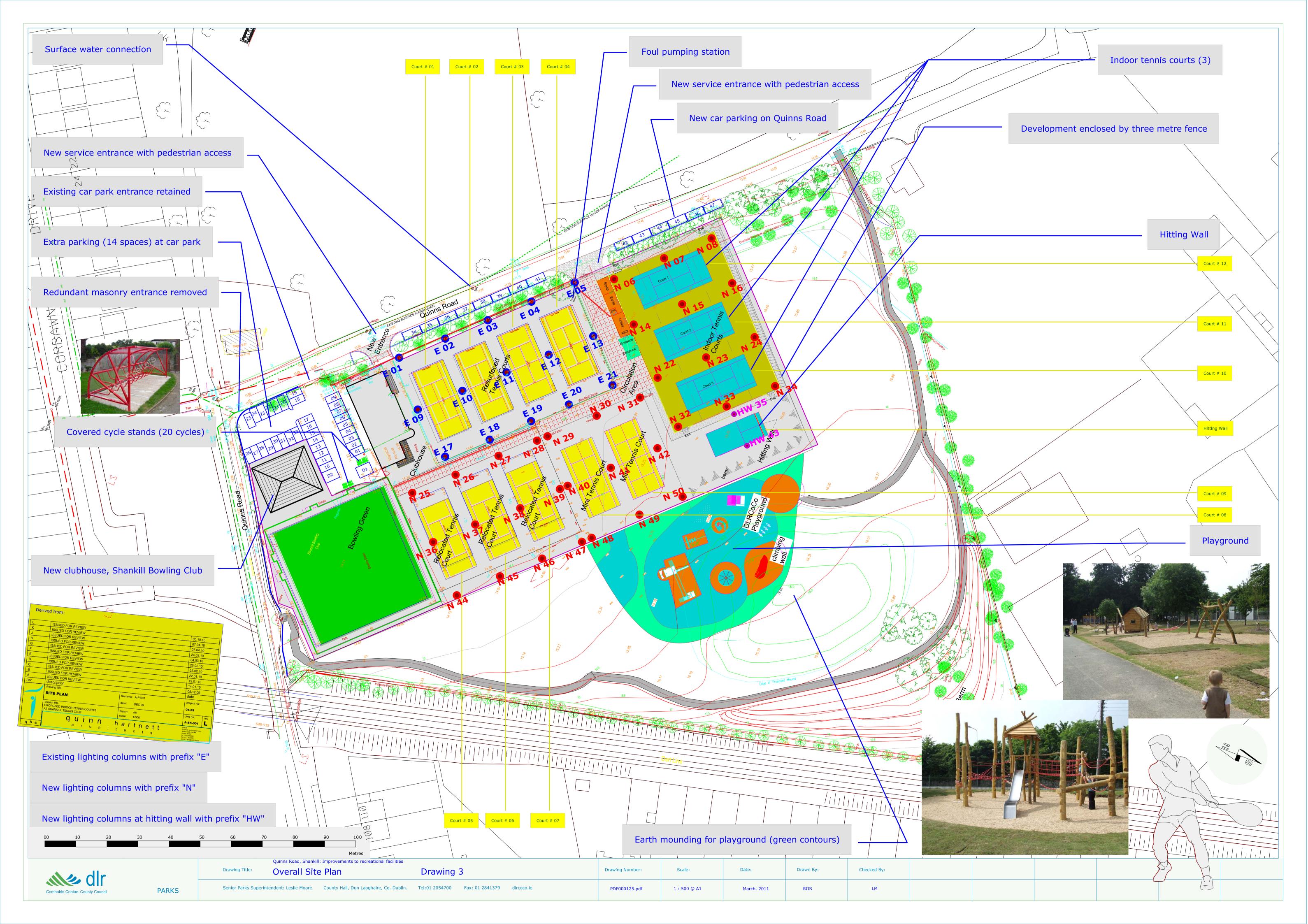
Especially cost-effective when installed in front of existing walls.

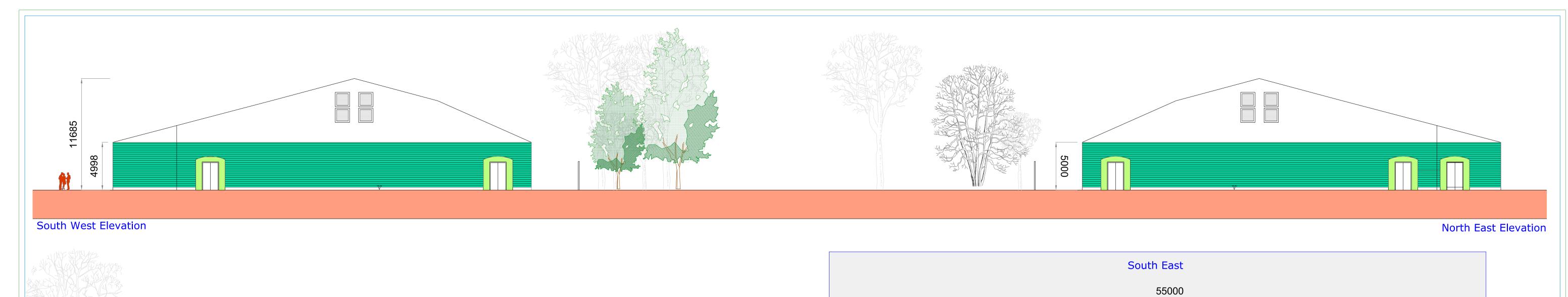
SMASH BACK can be manually installed without lifting equipment in just a few hours.

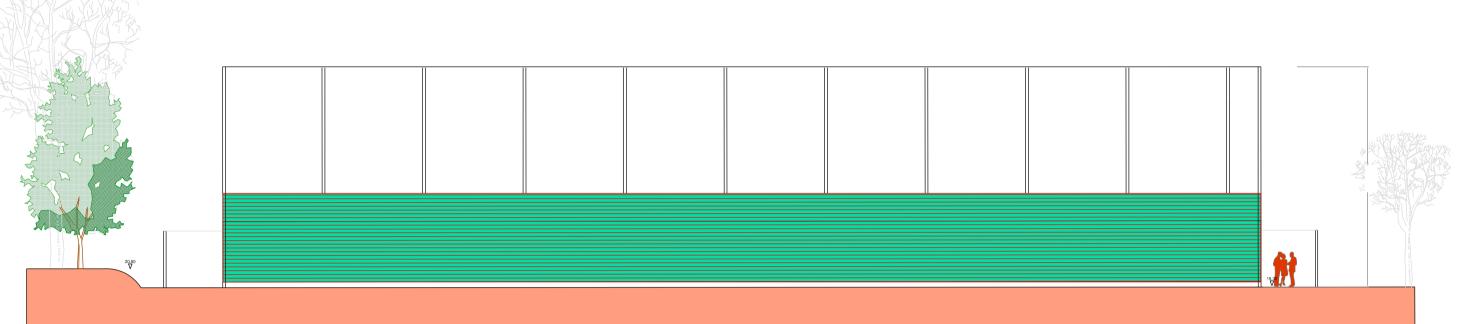
Old, straight tennis practice walls can easily and inexpensive be upgraded.











South East Elevation





## MATERIALS

ROOF PVC coated polyester fabric .

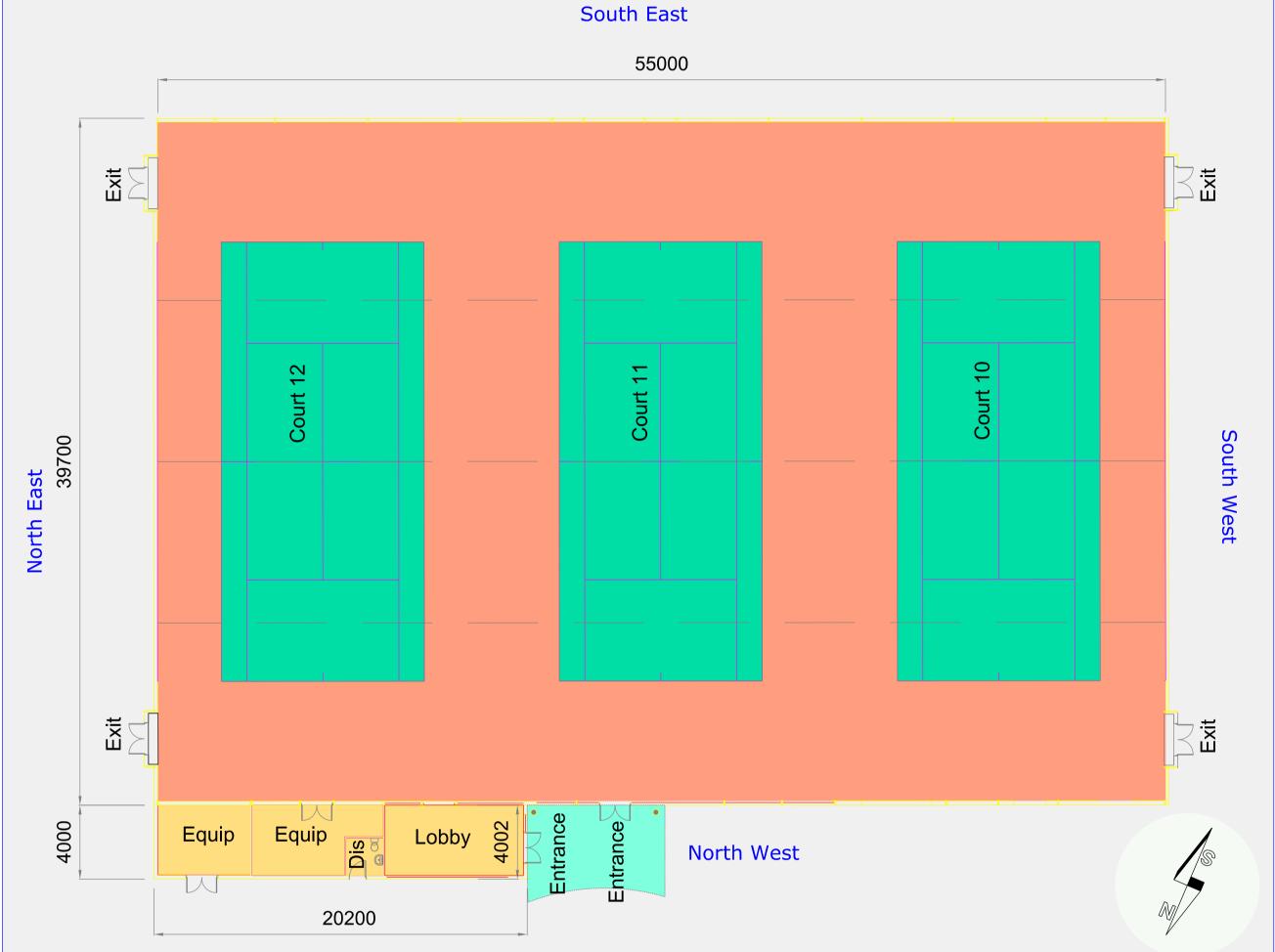
WALLS Rigid PVC sidewalls

COLOURS
Green Sidewalls and White Roof.

FENCING
3M Plastic Coated wire fencing on plastic coated steel posts @ 2.5M cts approx.

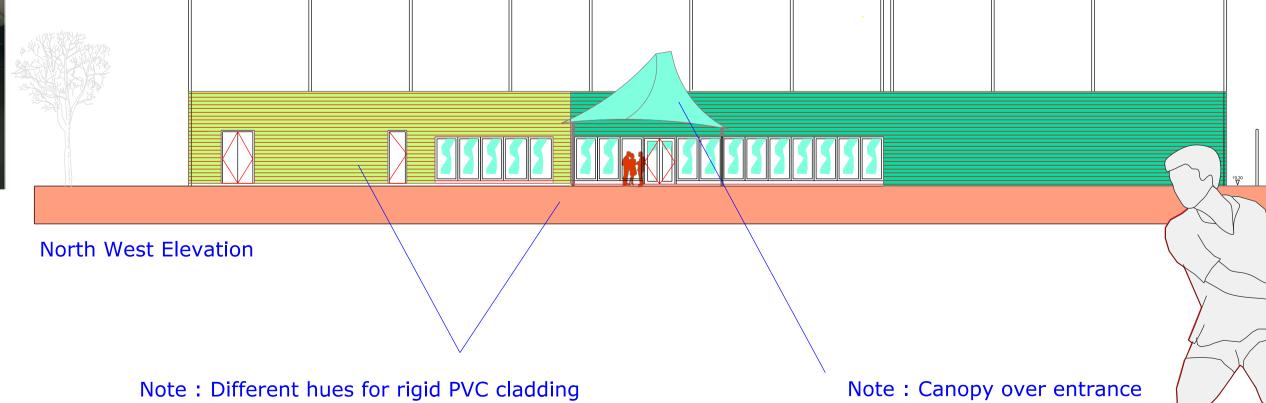


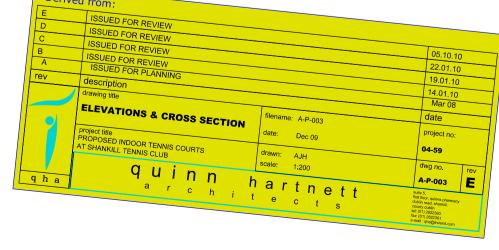






Images of similar structure at Albert College Park, Glasnevin, Co. Dublin



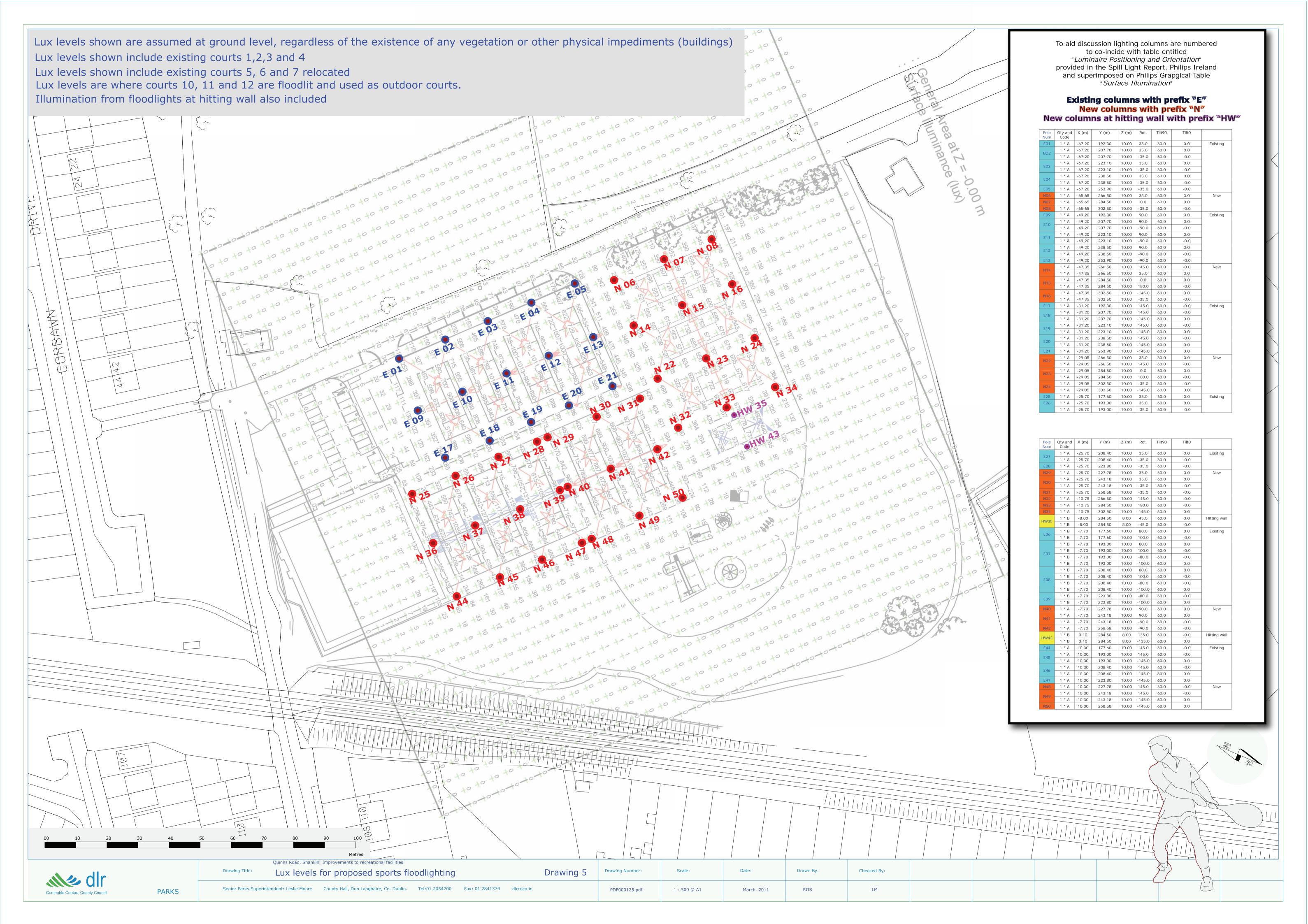


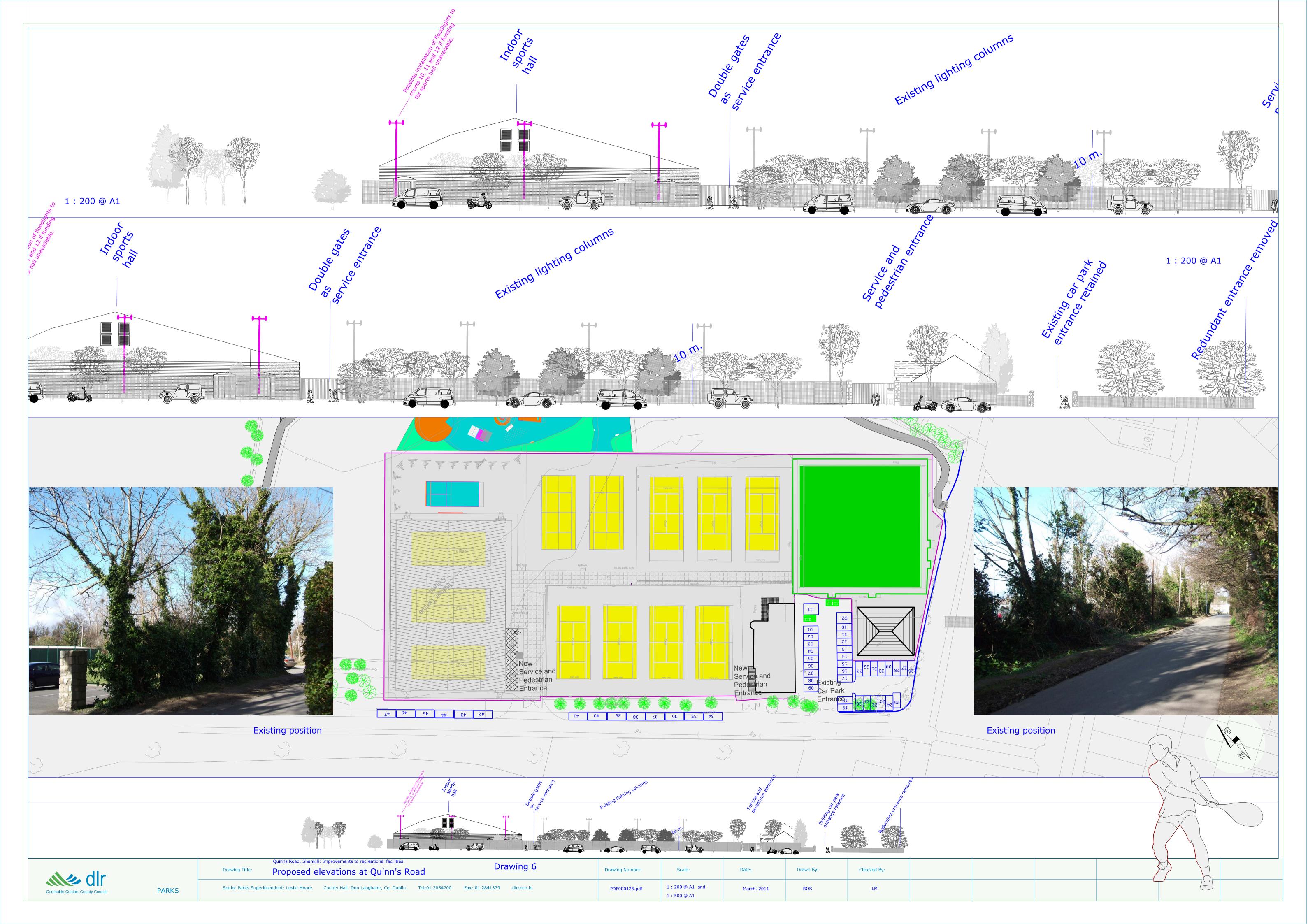
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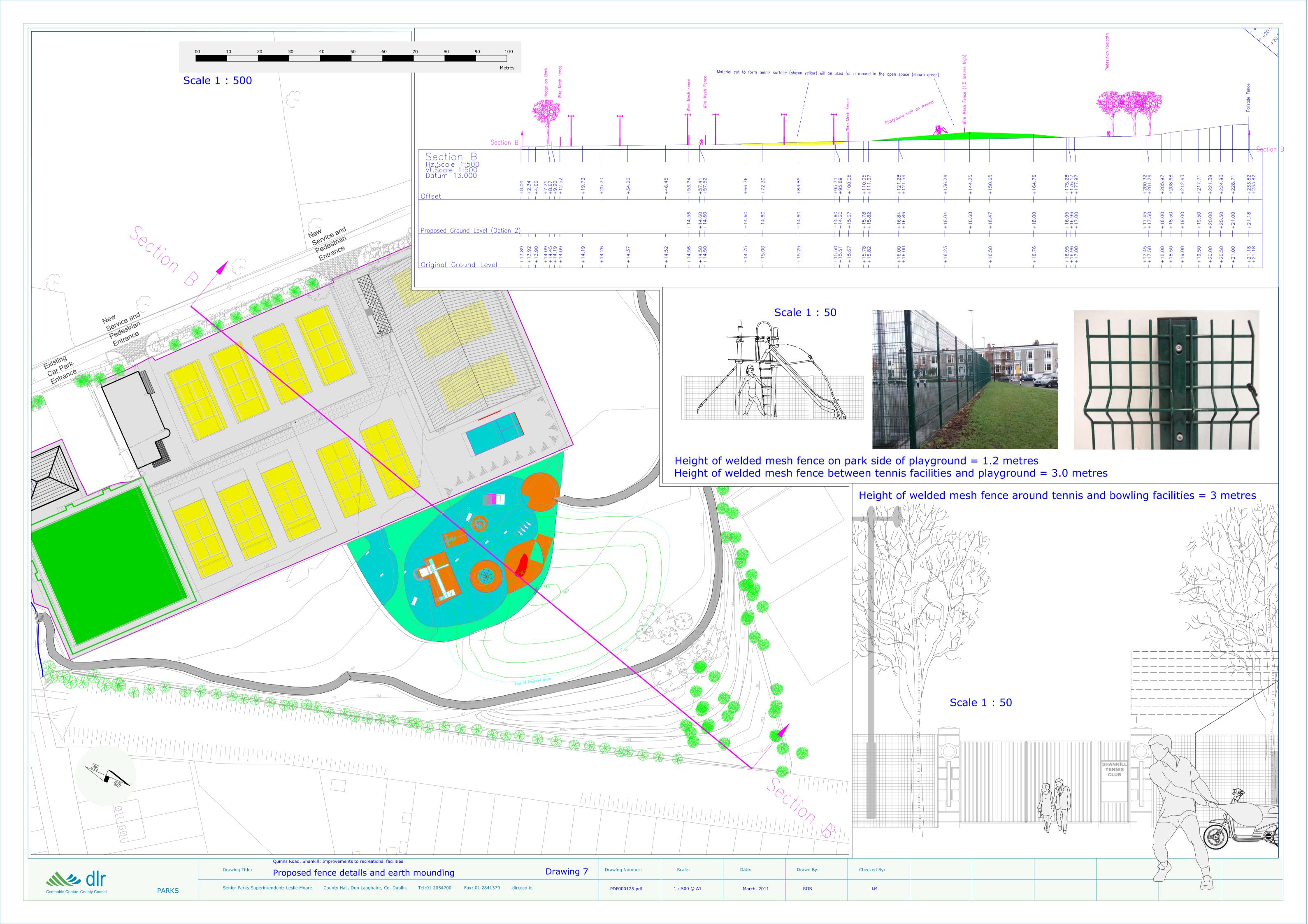
Comhairle Contae County Council

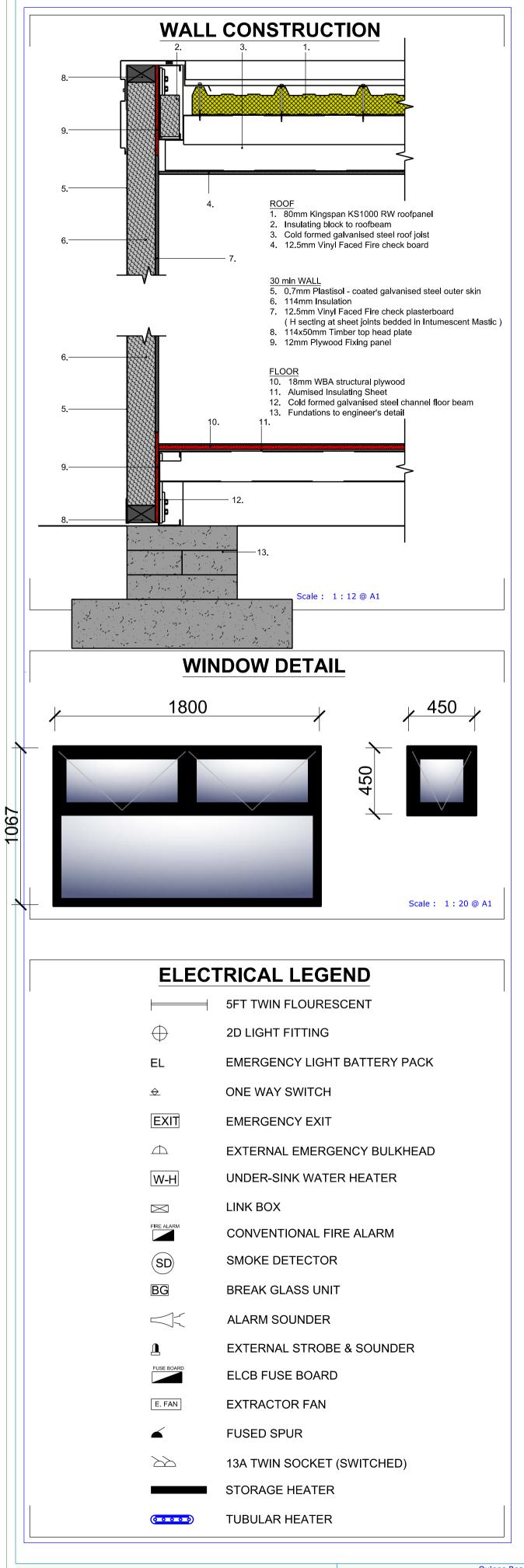
**PARKS** 

Quinns Road, Shankill: Improvements to recreational facilities  Details of proposed indoor tennis courts  Drawing Title:  Drawing 4	Drawing Number: Scale:	Date: Drawn By:	Checked By:	
Senior Parks Superintendent: Leslie Moore County Hall, Dun Laoghaire, Co. Dublin. Tel:01 2054700 Fax: 01 2841379 dlrcoco.ie	PDF000125.pdf 1 :200 @ A1	March. 2011 ROS	LM	

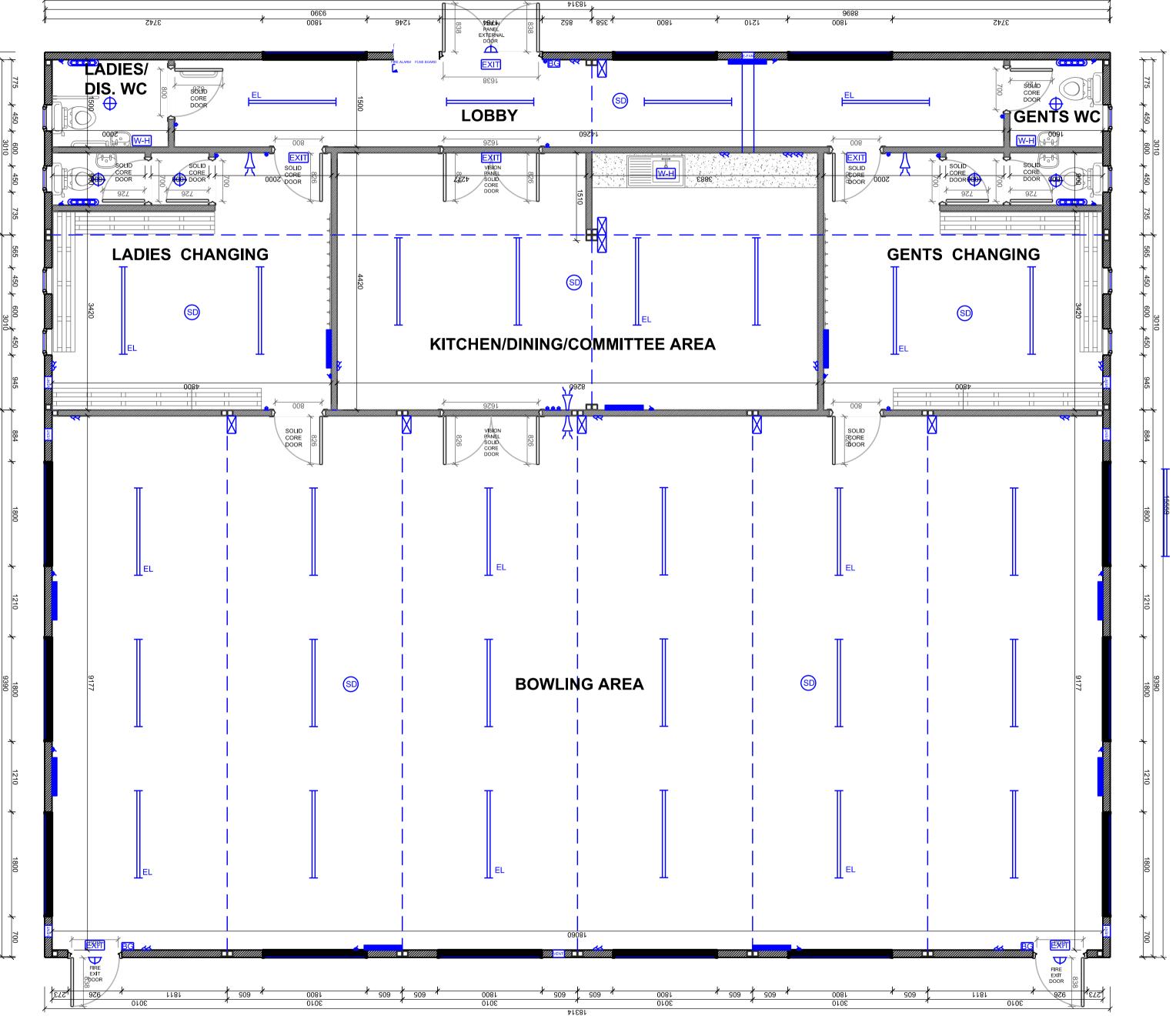


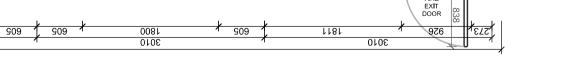


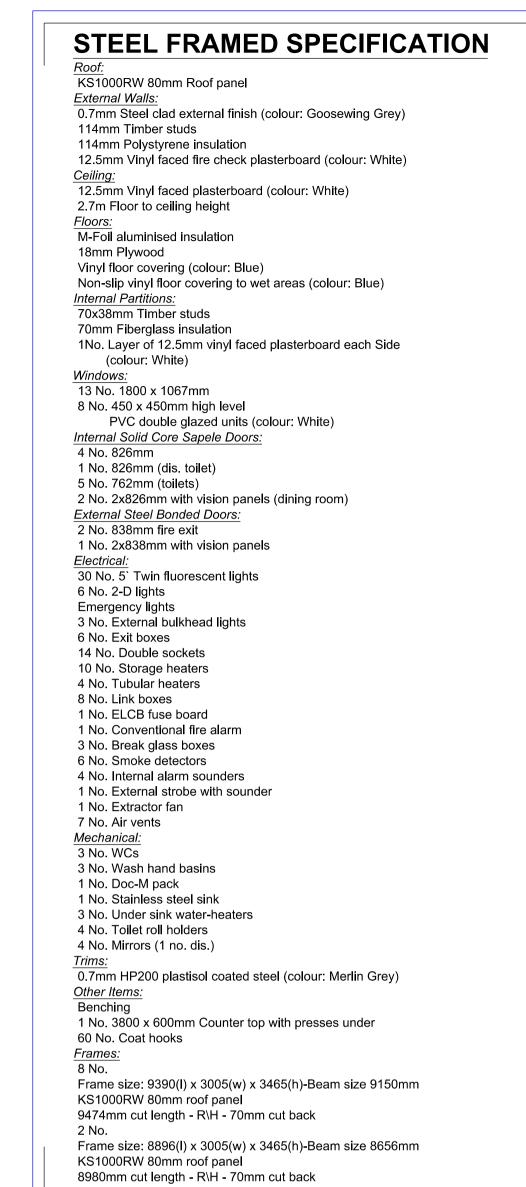




# Front



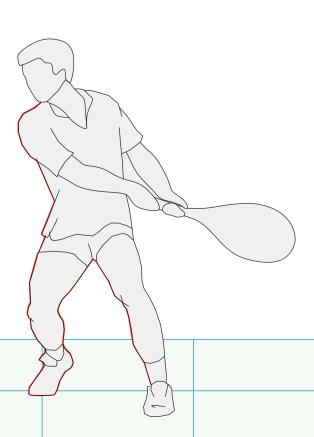


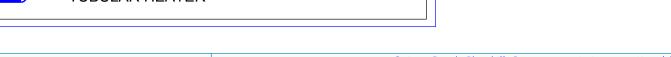






9





**PARKS** 

Comhairle Contae County Council

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S

Drawing Title:	Quinns Road, Shankill: Improvements to recreational facilities  Bowling Club: Proposed Floor Plan	Drawing 8	Drawing Number:	Scale:	Date:	Drawn By:	Checked By:	
Senior Parks Superir	intendent: Leslie Moore County Hall, Dun Laoghaire, Co. Dublin. Tel:01 2054700 Fax: 01 28	41379 dlrcoco.ie	PDF000125.pdf	1:50 @ A1	March. 2011	ROS	LM	

Rear

