

Hartfield Place, Swords Road, Whitehall, Dublin 9 Road Scheme

Quality Audit – Additional Information/Responses
from Designer

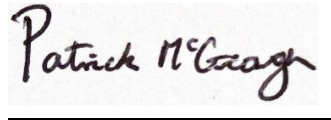
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Quality information

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1. Project Introduction

- 1.1 This Design Response Report relates to the Quality Audit Stage undertaken by ORS on the proposed Hartfield Place development, located off Swords Road, in Whitehall, Dublin 9, within the Greater Dublin Area.
- 1.2 The development is for 472 apartments and will have a sole vehicular entrance, which will be connected to the junction between Swords Road (N1) and Iveragh Road
- 1.3 AECOM have responded to the Roads Safety Audit the pro forma return requested by ORS and this is included in the Appendices of the Quality Audit.
- 1.4 However there are other points raised Quality Audit and this report elaborates, by way of explanation, some of the points in the Quality Audit in order to help Dublin City Council better understand the principles of the development.

Key Points to be Addressed

- 1.5 There were a number of issues identified in the Quality Audit and these are summarised as follows
 - Potential Issues Identified in the Access Audit. These include missing dimensions, pedestrians permeability and car parking spaces;
 - A non-motorised user audit was carried out to and this noted a number of points with respect to footpaths, pedestrian crossings and cycleways;
 - An audit on the visual quality of the development was undertaken. This related to landscape, finish materials etc.; and
 - A Roads Safety Audit was also undertaken.
- 1.6 The following sections review each of the above bullet points above. The potential problems identified by the Quality Audit have been set out along with a response to the points raised.

2. Designers Response to Quality Audit

2.1 Access Audit

The following issues (as referred to in the Access Audit) summarise some of the key issues found relating to the access to the site.

Issue 3.1: Bus Stops Near Proposed Development

The bus stops located to the south of the site entrance does not have the provision of shelters or benches and bus users have to wait along the footpath and a bus stop upgrade is not incorporated as part of the proposed works. It was also noted from the site visit that the bus cage markings show signs of wear and tear.

Designers Response:

It is anticipated that Bus Connects improvement will replace the current arrangements and therefore no works can be proposed.

Issue 3.2: Missing Dimensions

The audit team noted from the drawings provided that there are no dimensions of the parking spaces provided for the basement parking nor the width of the roadway in the basement. The audit team also noted that the motorbike parking spaces located at ground floor level do not have measurements provided.

Designers Response:

Car parking spaces are 4.8 x 2.4 m. The motorcycle spaces are 1.5 x 3.4m. The width of the roadway in the basement is 6m. In terms of the planning submission the dimension of spaces, etc are included in the Architects drawing HARTPL-CWO-SM-B1-DR-A-000504_Basement Plan.

Issue 3.3: Incorrect Traffic Sign

The proposed Hartfield Place will upgrade the junction between Swords Road (N1) and Iveragh Road and it is proposed to install arrow road markings on all approaches to the junction. However, at both Iveragh Road and the site access road, the design team is proposing to install an incorrect road marking, with arrows indicating all 3No. directions, which is not in accordance with the Chapter 7 Road Markings

Designers Response:

Updated road markings, in accordance with the Chapter 7 Road Markings will be shown in detailed design.

Issue 3.4: Lack of Traffic Signs Details

As part of the proposed development, it is intended to provide a pedestrian traffic island at the southern approach to the junction, along Swords Road. Traffic islands should be accompanied with 'Keep Left' traffic signs on both ends of the island and the signs aid to inform motorists of hazards ahead. The lack of traffic signs can cause driver confusion and lead to vehicle/pedestrian collision. Likewise, no information could be found regarding mounting height and distance from the carriageway on the drawings for the traffic lights. Road signs should be located at least 450mm away from the road edge in order to provide sufficient rod clearance

Designers Response:

All this information will be shown in the detailed design drawings.

Issue 3.5: Disabled Parking Spaces (RRM 015)

It is intended to install 18No. disabled parking spaces at basement level, however, some of the proposed disabled parking bays are not compliant with DMURS and/or the Traffic Signs Manual. Disabled parking spaces should measure 6m in length and 2.4m in width, along with buffer zones with 1.2m to either side of the parking bay.

Designers Response:

It was our view that all the spaces were designed as above. It is acknowledged that the buffer areas at the rear are also used for pedestrian movement but that this would not be an issue. For planning details are included in the Architects drawing HARTPL-CWO-SM-B1-DR-A-000504_Basement Plan but this matter can be reviewed during detailed design.

Issue 3.6: Insufficient Pedestrian Connectivity at the Basement Car Park

The proposals aim to include pedestrian paths connecting the basement car parks with the lifts and stairs; however, it could be noted that the proposals do not provide a clear pedestrian route with sufficient connectivity, which could pose a risk to pedestrians, especially vulnerable users.

Designers Response:

There are clear paths allowing routes for pedestrians to travel on. Accessible parking has been located close to lifts to facilitate vulnerable users. However, these matters can be reviewed during detailed design to include additional features such as different coloured paths, signing and marked pedestrian crossings

2.2 Non Motorised User Audit

The following items summarise some of the key issues found related to the walkability and cyclability of the site

Issue 3.7: Signalised Pedestrian Crossings

As part of the proposals, it is intended to install and upgrade pedestrian traffic lights at the junction between Swords Road (N1) and Iveragh Road. The drawings provided show yellow tactile paving blisters at the crossing on the northern approach of Swords Road and at the Iveragh Road approach, however, for signalised pedestrian crossings, tactile blister paving should be red according to the TII document DN-GEO-03084 and DMURS. There is also a lack of information regarding the width of the crossing at all proposed crossing points

Designers Response:

All this information will be shown in the detailed design drawings, tactile paving will be shown in red and widths (2.4m) will be shown.

Issue 3.8: Inconsistency of Documents Provided

The proposed junction upgrade shows signalised pedestrian crossings at 3No. of the 4No. approaches to the junctions, however, the junction modelling report provided using LinSig software relates to crossing points at all approaches to the junction. The design team should include in all drawings the proposed crossing point to the southern approach of Swords Road if intended to be constructed.

Designers Response:

The current junction layout shows one pedestrian crossing on Swords Road. It was intended to reflect this in the revised arrangements. The Linsig model has been checked to confirm that pedestrians cross on an all red and therefore does not have any impact upon the Linsig results presented, as these will present the same results with the design presented. Further checks have shown that the associated conflicts and intergreens are unchanged.

Issue 3.9: Width of Footways

It is noted from the drawings that the proposed footways within the site layout do not have width displayed. The minimum width for footpaths, according to DMURS, should be a minimum of 1.8 metres.

Designers Response:

In detailed design all dimensions of footways and crossing points within the proposal will be clearly marked in the drawings in accordance with relevant guidelines. The proposed signalised pedestrian crossing points will be reviewed in accordance with specifications in DMURS and the TII document DN-GEO-03084. For the purposes of the planning these can be seen in drawing PR379360-ACM-XX-XX-DR-CE-20-0003.

Issue 3.10: Shared Surface

The proposed Hartfield Place will implement shared surfaces along the site; however, the path was designed as a long stretch with no speed calming measures, which could lead to motorists driving at excessive speed which could increase the risk to non-motorized users travelling along the shared surface.

Designers Response:

The shared surface is designed to be DMURS compliant at 4.8m with a combination of horizontal alignment, on-street parking, surface materials and strategically placed landscaping along the entirety of the shared surface streetscape. In providing a narrow carriageway width combined with extensive on-street parking, cycle stands, trees, bollards with a mixture of block paving for parking areas and coloured surfacing on the running lanes provides an environment for low speeds and drivers to feel a real sense of here by invitation only.

The combination of lengths of approx. 40m of 90 degree parking bays encourages low speeds as vehicles travel slowly to find a parking space and interact with vehicles coming and going from the development. DMURS notes that the guidelines recognise that streets with a combination of the above measures will limit speeds without the need for vertical measures like speed ramps.

Issue 3.11: Overgrown Vegetation and Dry Leaves at end of Crossing Point

It was noted from the site visit that at the crossing point near the site entrance there is an accumulation of dry leaves, garbage and overgrown vegetation and the location is within the site boundary of the proposed development, however, there are no proposals to remove same as part of the proposed works. This can cause risks of slips and falls for pedestrians and cyclists, especially vulnerable road users.

Designers Response:

Dry leaves, garbage and overgrown vegetation would be removed as part of the construction by cognisance of this matter will be considered in detailed design.

2.3 Visual Quality Audit

An audit on the visual quality of the development was undertaken to ensure that the development ties in with the best practice recommendations for streetscapes as set out in DMURS.

Issue 3.12: Road Finish Surface

The surface of the proposed roads, the raised table and footways within the site have not been specified in the drawings, which can cause confusion among users when travelling throughout the site.

Designers Response:

The detailed design will provide information on the surface finishes for all surfaces along the proposed site

Issue 3.13: Public Lighting

There are no proposed lighting plans for the underground car park and the site layout. This may create conflicts where motorists may be unable to see other vehicles and vulnerable users which could lead to potential pedestrian-vehicle and vehicle-vehicle collisions which pose a risk of injury to all users.

Designers Response:

The design team should ensure sufficient lighting is provided within the proposed development and this information will be provided at detailed design stage.

2.4 Road Safety Audit

Problem No.01: Cycle Permeability

Location: R132/N1 Swords Road

The audit team note from the drawings provided that it is not clear how the proposed development will tie in with the existing cycle path network. Insufficient cycle permeability in the vicinity of the intersection may put cyclist at risk when channelled into the site access road without clear user right of way. Inadequate cycle paths may lead to cycle-vehicle conflicts resulting in resulting in injury

Designers Response:

Cyclists are allowed to cycle in the current citybound cycle lane and there is an existing cycle lane country bound. Pre Bus Connects use would be made of these facilities but we have Advance Stop Lines for cyclists on egressing the site to allow access to these facilities. However as part of detailed design we will review the site access road and intersection tie-in to ensure interconnectivity with all surrounding cycle paths by in line with DMURS guidelines and the National Cycle manual.

Problem No. 02: Signage & Road Markings

Location: Proposed Intersection and Internal Roads

The audit team note that there is a lack of signage and markings for the site access road and internal circulatory roads on the drawings provided. Signage and markings aid in informing road users of the presence of ramps, presence of vulnerable road users and stop/yield locations. Inadequate signage and road markings may lead road users not being alerted to the shared space which may result in vehicle-vehicle or vehicle-cycle conflicts causing injury.

Designers Response:

As part of the detailed design we will include more details relating to signage and markings at the intersection and on the internal shared roadways in line with DMURS guidelines, the National Cycle Manual and the applicable Road Traffic Sign Manual

Problem No.03: Shared Surface Demarcation

Location: Internal Road network

The audit team note from the drawings provided that there is a lack of information relating to the surface treatment for shared surfaces. Road users need to be made aware of the presence of vulnerable road users in the vicinity of shared surfaces my means of pavement colour treatment, textures and/or signage.

Designers Response:

The TTA has set out the detail of the shared surface and DMURS compliance and as part of the detailed design we will ensure that appropriate shared surface demarcation and signage provided for throughout the site to clearly distinguish the proposed use in accordance with DMURS guidelines.

Problem No.04: Pedestrian Disabled Access

Location: Raised Platform

The audit team note that drop kerbs and tactile paving is not identified at the internal junction. These facilities aid users with specific visual needs in particular and the omission of same at crossing locations may will require vulnerable road users to travel in the roadway putting them at risk with vehicle conflicts and injury.

Designers Response:

This is matter for detailed design and the design team will ensure that details and locations of 'drop kerbs' and tactile paving is provided at appropriate points given the majority of the internal network is shared surface.

Problem No.05: Bicycle Ramp Width**Location: Underground Carpark Access Ramp**

The audit team note from the drawings provided that there is a bidirectional cycle path specified next to the vehicle access ramp. It is not clear from the drawing if the width is sufficient to allow two bicycles to pass and if cyclists are required to dismount in order to safely merge with vehicle traffic on the shared surface.

Designers Response:

The ramp is 2m wide and 3m wide on the bend as it enters the basement. It is likely that cyclists will walk up the ramp with their bikes and then walk across raised table and mount their bikes on internal access road. Coming down the ramp there is the opportunity for cyclists to dismount at top of ramp or diverge on to ramp. This will be further elaborated on in the detailed design.

Problem No. 06: Signage & Road Markings**Location: Underground Car Park**

The audit team note that there is a lack of signage and markings for the underground car park circulatory roads on the drawings provided. Signage and markings aid in informing road users of the direction of travel, exit routes and stop/yield locations. Inadequate signage and markings may lead to confusion for road users which may result in vehicle-vehicle conflicts causing injury.

Designers Response:

As part of detailed design we will include signage and road markings for the underground car park in line with Design Recommendations for multi-storey and underground car parks.

Problem No.07: Landscaping**Location: Internal site layout**

The audit team noted from design layouts received that the proposed landscaping may impact on visibility at junctions and also obstruct disabled users and pedestrian movements. Trees, high bushes and shrubbery should be avoided in areas where visibility is to be maintained to ensure that drivers are clearly able to see approaching vehicles and pedestrians at junctions and designated pedestrian crossing locations. This could potentially lead to instances of vehicle-vehicle or pedestrian-vehicle collisions resulting in injury.

Designers Response:

Our initial assessment had indicated that no issues however this point is noted and the information will be passed onto other design team members and landscape team and cognisance of these matters to be taken on board during detailed design.

Problem No.08: Vehicle Swept Path Analysis**Location: Underground Carpark**

The audit team note from the drawings provided that no vehicle swept path analysis has been completed for the underground carpark area. Swept path analysis should be conducted with the appropriate design vehicles to confirm the circulatory road layout is suitable for design vehicle turning movements. The swept path analysis should confirm that vehicles are able to navigate the carpark with continuous forward movements. The analysis should also analyse all applicable vehicle maneuverers and turning movements to ensure sufficient dimensions for carriageways and passenger vehicle parking bays.

Designers Response:

The design team should analyse vehicle swept paths with industry standard software to assess vehicle wheel paths during turning movements to confirm the suitability of the road layout for intended vehicle purposes.

Problem No.09: Lighting**Location: Internal Site Layout and Site Access Junction**

The audit team have not received drawings detailing lighting for the development and the access junction and it is not clear if lighting will be specified for the development. Areas in low light conditions may result in slips trips and falls on pedestrian paths. Drivers may be unable to see pedestrians in the internal road network and at pedestrian crossings which has the potential to lead to pedestrian-vehicle collisions resulting in injury to pedestrians.

Designers Response:

Lighting is to be provided for the development and the lighting design and specification will be provided at the detailed design stage. This will include details and locations of all public lighting columns to ensure that positioning of columns does not cause any obstruction or hazard to vulnerable users.

Problem No.010: Drainage**Location: Internal Site Layout**

The audit team note from the drawings provided that there is no provision for drainage channels/ gullies positions for the proposed stormwater network throughout the proposed development. Inadequate gully positioning may lead to issues of ponding in areas of the development which poses a risk of slips, trips or falls to vulnerable road users.

Designer Response:

The drainage design has been developed and details and locations of all drainage gullies etc are provided for across the site and positioned strategically to avoid the risk of ponding across the site. This information can be provided at detailed design stage.

